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PUC Docket No. 37448

SOA H Docket No. 473-10-1097

APPLICATION OF LCRA	§	PUBLIC UTILITY COMMISSION
TRANSMISSION SERVICES	§	
CORPORATION TO AMEND ITS	§	
CERTIFICATE OF CONVENIENCE AND	§	
NECESSITY FOR THE GILLESPIE TO	§	OF
NEWTON 345-KV CREZ	§	
TRANSMISSION LINE IN GILLESPIE,	§	
LLANO, SAN SABA, BURNET, AND	§	
LAMPASAS COUNTIES, TEXAS	§	TEXAS
	§	

**COMMISSION STAFF'S EXCEPTIONS TO PROPOSAL FOR DECISION**

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**PUC DOCKET NO. 37448  
SOAH DOCKET NO. 473-10-1097**

<b>APPLICATION OF LCRA TRANSMISSION SERVICES CORPORATION TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE GILLESPIE TO NEWTON 345-KV CREZ TRANSMISSION LINE IN GILLESPIE, LLANO, SAN SABA, BURNET, AND LAMPASAS COUNTIES, TEXAS</b>	<b>§ § § § § § § § § §</b>	<b>PUBLIC UTILITY COMMISSION    OF   TEXAS</b>
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**COMMISSION STAFF'S EXCEPTIONS TO PROPOSAL FOR DECISION**

**I. SUMMARY OF CASE AND RECOMMENDATION**

COMES NOW Staff (Staff) of the Public Utility Commission of Texas (Commission), representing the public interest, and files its Exceptions to the Proposal for Decision (PFD). As directed by the Commission Advising and Docket Management's Memorandum' inviting submission of exceptions to the proposal for decision (PFD), Staff's Exceptions follow the outline of the PFD.<sup>1</sup>

The PFD recommends that LCRA Transmission Services Corporation's (LCRA TSC or Applicant) Certificate of Convenience and Necessity (CCN) be amended to construct a new 345 kilovolt (kV) double-circuit Competitive Renewable Energy Zones (CREZ) transmission line from the Gillespie Substation to the Newton Substation along Route GN6, using Alternate Link C3, and requiring that LCRA TSC use monopoles along Alternate Link C3, along portions of Link C17, along Link C29, and anywhere the line runs within 200 feet of a habitable structure.<sup>2</sup>

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<sup>1</sup> Proposal for Decision (March 18, 2010).

<sup>2</sup> Route GN6 is comprised of Links C1-C3-C5-C9-C11-C12-C14-C17-C18-C27-C29-C31a.

#### **A. Southern Routes are Preferable to Northern Routes**

Staff agrees that the major point of contention is whether the approved route should run south or north of Lake Buchanan. The primary basis of comparison is the conflict between two important points of consideration by the commission: 1) the use<sup>3</sup> of existing right of way (ROW) and 2) the policy of prudent avoidance as implemented by the avoidance of habitable structures. Staff disagrees, however that the southern route is the better choice when considering all the relevant factors of PURA and the Commission's rules. This is particularly true given that the ALJ has recommended the use of monopoles which would significantly increase the costs of the southern route, as discussed in Section IV.F.8.

#### **B. Comparison of Routes GN6, GN10M, and GN11**

Generally, Staff agrees with the ALJ's description of the three primary routes that were the focus of the hearing and the PFD. The ALJ's declaration that Routes GN 6 and GN 11 are the best routes, however, fails to adequately account for positive attributes of Route GN10M. Compared to GN 11, GN10M parallels 6.4 more miles than GN11, has 7 fewer habitable structures, has at least 1 less mile of ROW through upland woodland and bottomland/riparian woodland, and has 8 miles less length of ROW within foreground visual zone of U.S. and State highways.<sup>4</sup> Part of the benefit of using Route GN10M is that it avoids, in part, the habitat of the endangered species that are of concern to many intervenors in the case.

With a nominal increase in cost over GN11 or GN6, GN10M reduces the number of habitable structures that would be impacted by construction of the line. While the estimated cost of Route GN6 is in the same range as that of GN11 and GN10M, the use of monopoles will significantly increase the costs of utilizing Route GN6. If the Commission does choose GN6 and elects to use monopoles, as recommended by the ALJ, Staff believes that monopoles should be used on link 14 as well. Links 14 & 17 impact 63% of the total habitable structures impacted by Route GN6.

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<sup>3</sup> For the purposes of these exceptions, the term "use of existing ROW" includes both rebuilding transmission lines that are lower than 345-kV and constructing a 345-kV line in a ROW adjacent to an existing ROW, but not overlapping it.

<sup>4</sup> Direct Testimony of T. Brian Almon, P.U.C. Staff Exhibit 1, at 49.

Regardless of which route is selected, Staff agrees with the PFD that to the extent routing deviations can be made by LCRA TSC to reduce the number of structures that are ultimately found to be in the ROW, without affecting unnoticed landowners, LCRA TSC should make those deviations.<sup>5</sup>

Staff's strongest exception to the conclusions of the PFD is that, though all the routes presented by LCRA TSC's application are *adequate* routes, they do not equally implement the policy of prudent avoidance by minimizing, to the extent possible, the number of habitable structures impacted. Route GN6 has 164 habitable structures whereas Routes 10M and 11 have 42 and 48 respectively. GN10M best meets the totality of the requirements that the Commission must consider in selecting a route. Route GN6 affects too many habitable structures compared to the other filed routes to be selected, particularly if the PFD's recommendation of monopoles is implemented, resulting in significantly increased costs.

## **II. PROCEDURAL HISTORY, JURISDICTION, AND NOTICE**

No Exceptions.

## **III. THE PARTICIPANTS**

No Exceptions.

## **IV. 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?**

No Exceptions.

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<sup>5</sup> Proposal for Decision at 6 (March 18, 2010).

**B. Preliminary Order Issue No. 2: Did the notice provided by LCRA TSC comply with P.U.C. PROC. R. 22.52(a)?**

Staff agrees with the PFD that Rule 22.52(a) has been complied with. Staff has previously filed recommendations that LCRA TSC has fulfilled the notice requirements<sup>6</sup> and has filed legal arguments regarding the appeal of Order No. 17 in this docket.<sup>7</sup>

**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)?**

No Exceptions.

**D. Preliminary Order Issue No. 4: Did LCRA TSC submit the Application in compliance with the Orders in Docket Nos. 35665<sup>8</sup> and 36801<sup>9</sup> 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. SUBST. R. 25.216(f)(1)?**

No Exceptions.

**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 priority project designated as "Gillespie to Newton" in the CREZ Transmission Plan and ordered by the Commission in Docket Nos. 35665 and 36801?**

No Exceptions.

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<sup>6</sup> Staff's Comments on Applicants Compliance with Notice Requirements (November 20, 2009).

<sup>7</sup> Staff's Response to Oakhurst Properties, LLC Appeal of Order No. 17 (March 5, 2010) and Staff's Response to Oakhurst Properties, LLC Reply to LCRA TSC's and Commission Staff's Response (March 19, 2010).

<sup>8</sup> *Commission Staff's Petition for Selection of Entities Responsible for Transmission Improvements Necessary to Deliver Renewable Energy from Competitive Renewable-Energy Zones*, Docket No. 35665 (Mar. 30, 2009). On February 4, 2010, the Commission severed the Priority CREZ projects from Docket No. 35665 into another docket, Priority Projects Severed from Docket No. 37902 (Remand of Docket No. 35665) *Commission Staff's Petition for Selection of Entities Responsible for Transmission Improvements Necessary to Deliver Renewable Energy from Competitive Renewable Energy Zones*, Docket No. 37928 (pending).

<sup>9</sup> *Proceeding to Sequence Certificate of Convenience and Necessity Applications for the Priority Projects for the Competitive Renewable Energy Zones*, Docket No. 36801 (July 8, 2009).

**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)?**

Staff disagrees with the PFD's determination that Route GN6 is the best alternative. After considering all the applicable factors, the best alternative is Route GN10M.

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

No Exceptions.

**2. Community Values**

While the environmental assessment (EA) does specify a list of community values, it is a generalized list. It does not necessarily reflect the actual values of the communities affected by this project. The major factors of importance to those communities were identified by LCRA TSC as: 1) the distance from residences, 2) the use or paralleling of existing transmission line ROW or other existing compatible ROW's, and 3) minimizing the visibility of the lines.<sup>10</sup> Overall the communities of Lampasas, Fredericksburg, Comfort, Burnet, and Llano highlighted the avoidance of habitable structures and the use of existing ROW as the primary concerns.

**a. Habitable Structures**

Staff agrees with the PFD's conclusion that "[t]here is no way for the route to avoid residences while at the same time maximizing the amount of existing ROW used."<sup>11</sup> It is important, however, to review all the community feedback regarding these issues, not just Llano and Burnet Counties. Below is a summary of the ranking of importance of habitable structures in comparison to the ranking of the use of existing ROW.<sup>12</sup>

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<sup>10</sup> LCRA TSC Application, LCRA TSC Exhibit 1 at 19.

<sup>11</sup> Proposal for Decision at 15 (March 18, 2010).

<sup>12</sup> TCRA TSC Exhibit No. 1, Environmental Assessment at 6-15 through 6-17.

<b>Open House</b>	<b>Routing Factors</b>	<b>Percentage.</b>
<b>Lampasas</b>	Maximize Distance from Residences	58%
	Use/Parallel of existing Electric Transmission ROW	59%
	Use/Parallel of Existing Compatible ROW	52%
<b>Burnet</b>	Use/Parallel of Existing Electric Transmission ROW	73%
	Use/Parallel of Existing Compatible ROW	59%
	Maximize Distance from Residences	55%
<b>Llano</b>	Use/Parallel of Existing Electric Transmission ROW	61%
	Maximize Distance from Residences	55%
	Use/Parallel of Existing Compatible ROW	47%
<b>Fredericksburg</b>	Maximize Distance from Residences	67%
	Use/Parallel of Existing Electric Transmission ROW	62%
	Use/Parallel of Existing Compatible ROW	51%
<b>Comfort</b>	Maximize Distance from Residences	71%
	Use/Parallel of Existing Electric Transmission ROW	71%
	Use/Parallel of Existing Compatible ROW	68%

Most of the communities reflect a close percentage as to the importance of the use of existing ROW and maximizing distances from habitable structures. Most indicated a slight preference for maximizing distances from residences. Only Burnet showed a marked preference for the use of existing transmission line ROW over protecting habitable structures.<sup>13</sup>

#### **b. City Limits**

The PFD considers the possibility of condemning a number of structures.<sup>14</sup> Staff believes that to adequately evaluate the routes it is important to understand the scope of the

<sup>13</sup> Questionnaires sent to LCRA TSC by individuals who did not attend an open house also reflected a preference for using/paralleling exiting ROW though it was not as marked as Burnet's preferences. 77% chose Use/Parallel Existing Electric Transmission ROW, 70% chose maximized distances from residences and 68% chose use/parallel existing compatible ROW. TCRA TSC Exhibit No. 1 at 6-15 through 6-17.

<sup>14</sup> Proposal for Decision at 17 (March 18, 2010).

impact of this transmission line project on the communities to the south and east of Buchanan Dam. The record firmly establishes that GN6 affects a substantially greater number of habitable structures than routes GN10 (modified or not) or GN11.<sup>15</sup> It is also evident from reviewing the record that, depending on the necessary ROW<sup>16</sup> for the structures used by LCRA TSC on links C14 and C17, between 7 and 12 habitable structures would likely face condemnation.<sup>17</sup> No route has a more significant impact on habitable structures. Route GN 10M, in fact, has 122 fewer habitable structures than GN6 and is likely to result in the condemnation of only 2 habitable structures.<sup>18</sup> Community values and property rights are protected to the greatest extent possible by selecting any route other than GN 6.

### **c. Rural Residential Subdivisions**

The PFD observes that homes, businesses, and other habitable structures were built after the construction of numerous transmission lines in the area of Buchanan Dam.<sup>19</sup> While true, the majority of lines present in the area are 69 kV lines and three lines are 138 kV.<sup>20</sup> None of the lines are 345 kV. There is a significant difference between a 345 kV transmission line and 69 kV and 138 kV lines. P.U.C. SUBST. R. 25.101(c)(5)(B) states that the upgrade of a transmission line to above 230- kV cannot be treated as a routine activity and a utility must obtain a CCN to make such an upgrade. Mr. Almon also emphasized in his testimony that there is a significant difference between a 69kV line and a 345 kV line.<sup>21</sup>

A 345 kV line must be placed on a significantly larger structure than a 69 kV or a 138 kV line. The line which GN6 will replace is a 69 kV line which uses H-frame structures which have

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<sup>15</sup> TCRA TSC Exhibit No. 13, Rebuttal Testimony of Robert R. Reid at 6-46, starting at item 48 through 6-48, ending at item 158.

<sup>16</sup> The ROW required has been estimated to be up to 140 ft. LCRA witnesses testified in hearing that in some areas it may be higher.

<sup>17</sup> *See id.*

<sup>18</sup> TCRA TSC Exhibit No. 13, Rebuttal Testimony of Robert R. Reid, Exhibit RRR-4R, Table 6-1, at 15-20 and 30-31.

<sup>19</sup> Proposal for Decision at 19 (March 18, 2010).

<sup>20</sup> TCRA TSC Exhibit No. 1, 1 at 6-15 through 6-17

<sup>21</sup> Tr. Vol. 5 at 1349, line 14 through 24 (February 10, 2010)

two wood poles that are spaced at approximately 10 ½ to 14 ½ feet.<sup>22</sup> If lattice towers are used to replace the 69 kV with a 345 kV line the base will be a minimum of 20-24 feet wide.<sup>23</sup> If monopoles are used for the 345 kV line the base will range from 5 ½ to 10 feet wide and could be larger.<sup>24</sup> The ALJ indicates that the use of “monopoles through the Buchanan Dam community will lessen the impact of the line.”<sup>25</sup> The use of monopoles will lessen the impact as compared to the use of a lattice tower. At the present time, however, the 69 kV line on GN6 has two small wood poles that are spaced at approximately 10 ½ to 14 ½ feet. If the H frame is replaced by a single monopole structure the base could be, in its entirety, as wide as the distance between the H frame poles that are currently there. The lattice towers are also significantly taller than the H frame poles. That is still a significant impact on the residents of Buchanan Dam.

**d. Lakes and Reservoirs**

No Exceptions.

**e. Airports, Airstrips and Heliports**

Staff disagrees that based on the community values, GN6 presents a better route than the other proposed routes. GN10M, has significantly fewer habitable structures and, as further explained below, better addresses the other factors that the Commission must consider.

**3. Recreational and Park Areas**

The PFD states that Post Oak Falls is a significant recreational feature<sup>26</sup>, and recommends Route GN6 because it has a moderating impact on Recreational and Park areas. GN6 is clearly visible from Inks Lake State Park. GN10M does not encroach upon Inks Lake State Park, Enchanted Rock State Natural Area, Post Oak Falls, or Colorado Bend State Park and impacts 122 fewer habitable structures than GN6. Route GN10M best protects the study area's

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<sup>22</sup> Vol. 3 at 642 line 19 through 643, line 3 (February 8, 2010)

<sup>23</sup> Id.

<sup>24</sup> Id.

<sup>25</sup> Proposal for Decision at 17 (March 18, 2010).

<sup>26</sup> Proposal for Decision at 21 (March 18, 2010).

recreational and park areas.

The PFD suggests that using Link C29 would reduce the impacts of GN 6 on habitable structures and, it is implied, the impact on the recreational value of Mesquite Creek.<sup>27</sup> If the Commission wishes to adopt GN 6 and make use of monopoles to address the impact on the habitable structures and recreational value along Link C29 the impact on the cost of GN 6 must be considered. Staff will address those costs in Section IV.F.8.

#### **4. Historical and Aesthetic Values**

All of the proposed routes impact historical sites and areas. GN10 has nine (9) sites identified within 1,000 feet of the ROW centerline.<sup>28</sup> Although GN10 and GN10M *may* have unidentified sites, that is possible for any route proposed in this case, regardless of the presence of preexisting transmission lines. More sites may be identified for Route GN6 as a result of the construction of previous transmission lines. This is not a basis, however, to conclude that the GN6 area is “extensively studied for the impacts on cultural and historical sites”<sup>29</sup> and thus is a better route than the others. It is also important to observe that LCRA TSC’s summary of community preferences does not rank the consideration of historical sites or areas very highly. Less than 50% of LCRA TSC’s completed questionnaires identified historical sites as a primary concern.<sup>30</sup>

Mr. Almon testified that the aesthetic factors in this case relate to the visual impacts of the transmission structures and the cleared ROW on local area residents and persons traveling through the area of the proposed transmission facilities juxtaposed with the existing surroundings including the local terrain and scenery of the Edwards Plateau.<sup>31</sup> Mr. Almon stated that all of the proposed alternative routes would result in a negative impact throughout the study area to aesthetic values, some more than others depending on the visibility from homes, public

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<sup>27</sup> Proposal for Decision at 13 (March 18, 2010).

<sup>28</sup> LCRA TSC Exhibit 13, Rebuttal Testimony of Reid at Exhibit RRR-2R.

<sup>29</sup> Proposal for Decision at 62 (March 18, 2010).

<sup>30</sup> Lampassas 42%, Burnet 46%, Llano 42%, Fredericksburg 43%, Comfort 47%, Persons Who Did Not Attend an Open House 50%. TCRA TSC Exhibit No. 1 at 6-3 through 6-17.

<sup>31</sup> Direct Testimony of T. Brian Almon, P.U.C. Staff Exhibit 1 at 25.

roadways, and recreational areas.<sup>32</sup> The length of modified GN10 within the foreground visual zone of U.S. and State highways is 11.09 miles which is lower than most of the routes, including the preferred route at 11.31 miles and GN 6 which is 19.09 miles. The aesthetic impact of GN 6 is no better than any other route and modified Route GN 10 would be no worse.

## **5. Environmental Integrity**

The impact of the proposed routes on the environmental integrity of the study area was a significant focus of concern for many intervenors. Mr. Almon determined that construction on each of the alternative routes could present a potential negative impact on the local environment.<sup>33</sup> One of the important factors in evaluating the environmental integrity of the routes is the impact of each route on woodland habitat.<sup>34</sup> Mr. Almon testified that minimizing the amount of potential woodland habitat within transmission line ROW lessens environmental impact.<sup>35</sup> GN 6 affects 17.52 miles of woodland habitat whereas GN 11 affects 16.50 miles and GN10 affects the least at 14.99 miles.<sup>36</sup> Mr. Almon recommended that GN 10 be modified by replacing Link 20 with Link 21, which had been studied by LCRA TSC but not included in its filed application. Crossing the Colorado River along Link C22 further minimizes environmental impacts because it crosses at an already fragmented location and is already compromised biologically.<sup>37</sup> In addition, LCRA TSC witnesses Mr. Reid,<sup>38</sup> and Mr. Palafox,<sup>39</sup> as well as Mr. Keith, the property owner upon which link 21 would be located,<sup>40</sup> testified that Link 21 crosses over rangeland or prairie, not woodland. Mr. Reid verified in testimony that in aerial photos the pipeline ROW does not appear to be heavily wooded.<sup>41</sup> Consequently, the modification of GN

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<sup>32</sup> Direct Testimony of T. Brian Almon, P.U.C. Staff Exhibit 1 at 25 and 26.

<sup>33</sup> Proposal for Decision at 28 (March 18, 2010).

<sup>34</sup> Tr. Vol. 5 at 1277 (February 10, 2010).

<sup>35</sup> Tr. Vol. 5 at 1277, lines 17-22. (February 10, 2010).

<sup>36</sup> Direct Testimony of T. Brian Almon, P.U.C. Staff Exhibit 1 at 49.

<sup>37</sup> Deposition of Dr. Karen H. Clary, Chanas Exhibit 2 at 250.

<sup>38</sup> Rebuttal Testimony of Rob R. Reid, LCRA TSC Exhibit 13 at 53.

<sup>39</sup> Tr. Vol. 5 at 1214 through 1215 (February 10, 2010).

<sup>40</sup> Tr. Vol. 5 at 1396 (February 10, 2010).

<sup>41</sup> Tr. Vol. 4 at 948 (February 9, 1020)

10 by the inclusion of Link 21 results in a further reduction of the amount of woodland and thus endangered species affected by Route GN 10M. Route GN10M best protects the environmental integrity of the area by minimizing the impacts on woodland habitat and, based on this factor, should be the route selected.

Texas Parks and Wildlife (TPWD) did identify route GN6 as its preferred route. TPWD did not, however, have an opportunity to review and provide comments on the modification to GN10 which was presented to and adopted by Staff. In addition, at deposition TPWD witness Dr. Clary specified that she was not concerned with any of the other factors that the Commission must consider. Consequently, though the selection of route GN6 may be more protective of the habitat of two species of endangered songbirds and the whooping crane, TPWD's analysis of the route did not consider its impact on *human* habitat or concerns. Route GN10M strikes a far better balance than GN6 of protecting environmental integrity while preserving habitable structures, minimizing visual impacts on homes and businesses, and respecting the values of the community that will be impacted by the transmission line.

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

No Exceptions.

**7. Engineering Constraints**

No Exceptions

**8. Costs**

In past transmission line CCN cases, monopoles have been ordered within city limits and the extraterritorial jurisdiction of cities<sup>42</sup> In this case, none of the areas for which the PFD

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<sup>42</sup> Application of Lower Colorado River Authority Transmission Services Corporation to Amend its Certificate of Convenience and Necessity for a 345kV Transmission line in Caldwell, Guadalupe, Hays, Travis and Williamson Counties, Texas (October 10, 2008).

recommends monopoles falls within any city limit or its extraterritorial jurisdiction.<sup>43</sup> Given the PFD's proposal to use monopoles on links Alternate 3, 17, 29 and within 200 feet of a habitable structure on GN6, it is imperative to evaluate what impacts that would have on the cost. As stated previously, if the Commission chooses to use monopoles in the Buchannan Dam community, it should use monopoles on Link 14 as well as Link17 because the reason for the use of monopoles applies to both Links.

Staff estimates that the total cost of using monopoles at above listed locations would cost a minimum of \$1.4 million to as much as \$4.5 million.<sup>44</sup> The record indicates that the terrain in this area is mostly limestone and granite.<sup>45</sup> So, it is fair to extrapolate that the minimum costs, which is based on the assumption that the entire route will be composed of sandy terrain, would not be an accurate estimate of the costs of using monopoles on Route GN6. The facts indicate that the costs will probably be a minimum of \$3 million. The actual costs of Route GN 6 would be \$165.4 to \$166.9 million, depending on the terrain. The \$164.8 million that it will cost to build GN10M is lower than the estimated cost of building GN 6 with the addition of monopoles. Route GN10M is more cost effective and, based on this factor, is the best route.

**a. ROW Costs**

No Exceptions.

**b. Habitat Mitigation Costs**

The habitat mitigation costs of GN10M do not account for the reduced costs of crossing over habitat that has already been fragmented. Nor do the costs estimates reflect the fact that Link 22 crosses over prairie land rather than woodland thus further reducing the habitat mitigation costs of the route. GN10M is one of the four least expensive routes exclusive of cost savings associated with reduced impacts on woodland habitat. Given the reduced impacts that GN10M will have on woodland habitat, and thus endangered species, GN10M should be the route selected.

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<sup>43</sup> LCRA TSC Application, LCRA TSC Exhibit 1 at Figure 3-1c.

<sup>44</sup> Attachment A, Cost Comparison between Lattice Towers and Monopoles on Route GN 6.

<sup>45</sup> Direct Testimony of Curtis D. Symank, LCRA TSC Exhibit 1 at 12 -13.

**9. Utilizing Existing Compatible ROW Including the Use of Vacant Positions on Existing Multiple-Circuit Transmission Lines, Paralleling Existing Compatible ROW, and Paralleling Other Features**

Staff generally agrees with the PFD's summary of the use of ROW by GN10, GN10M, GN11 and GN6. However, the PFD fails to address the amount of ROW used by Route GN10M. Route GN10 uses or parallels 43.62 miles of ROW. Route GN10M utilizes more compatible ROW, adding 2.05 of ROW to GN10's ROW totaling 45.67 miles. Thus, a total of 51% of the length of GN10M utilizes existing ROW.

Staff disagrees with the PFD's determination that the absence of visible structures on a compatible ROW corridor, such as a pipeline, makes it less attractive for purposes of paralleling than following other types of existing ROW. Pipeline ROW is fully compatible ROW with a transmission line ROW as the land is already cleared, cannot be used unrestricted by the land owner, and has already fragmented the habitat for any species that live in the study area.

The PFD also states that Routes GN10 and 10M go out of the way of the direct path to the Newton Substation for several miles to pick up a few miles of pipeline.<sup>46</sup> This analysis is incorrect. Staff recommended GN10M because, given the many factors the Commission must consider, the route is the best route. One of the best attributes of the route specifically includes the fact that has a lower number of habitable structures than GN11 and GN6.

**10. Prudent Avoidance**

**a. Number of Habitable Structures**

Staff agrees with the PFD's summary of the habitable structures. Staff would offer to complete the chart the PFD offers in summary of the impact of the routes on habitable structures. The habitable structures on Route 10M within the 160-foot ROW would be the same as those listed for GN 10. Both routes have two habitable structures within their ROWs<sup>47</sup>, though it is not clear from the evidence in the record that either route would require habitable structures to be condemned.

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<sup>46</sup> Tr., at 395-399.

<sup>47</sup> This assumes a 140 ft. ROW as explained in footnote 16..

**b. Newly Affected Habitable Structures**

The PFD references to the use of monopoles to reduce the impact of GN6 on habitable structures.<sup>48</sup> Staff believes that habitable structures will still be impacted as discussed previously in section IV.F.2.a.

The PFD explains that it “is an important consideration that the houses and structures along Route GN6 were built close to an existing transmission line because new corridors will not have to be created.”<sup>49</sup> It is important to note that 1) LCRA TSC is not entirely sure in its testimony about the width of the existing ROW in the Buchanan Dam area so it is not clear whether LCRA TSC will have to expand the existing corridor and 2) new corridor will be required along portions of Route GN6 including Link 3, 19, 28, 29 and 30. It also must be observed that the term “previously affected” habitable structures does not appear in PURA, the Commission’s rules, or anywhere else and must therefore be disregarded. The PFD is based entirely on conjecture on this issue and should be rejected. The only reasonable standard by which LCRA TSC’s proposed routes can be evaluated is by PURA and the Commission’s rules. Those authorities state only that “habitable structures” must be considered, and the evidence regarding habitable structures is not controverted or challenged in this case. Route GN6 impacts 122 more habitable structures than routes GN10 or GN10M. For this reason primarily, along with the fact that following the PFD’s advice that monopoles be used in substantial lengths of the route, Route GN6 must be rejected in favor of Route GN10, Route GN10M, or even Route GN11 which, although Staff does not recommend it, is superior to Route GN6.

Staff feels that it is important for the Commission to understand its request to order LCRA TSC to comply with Commission rules regarding prudent avoidance. Mr. Symank stated that minor route adjustments could be incorporated by LCRA only if such an adjustment was cost neutral to ERCOT transmission customers.<sup>50</sup> He stated that ‘cost neutral’ means that you don’t add costs to the project.<sup>51</sup> On cross examination, Mr. Symank stated that the “cost neutral”

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<sup>48</sup> Proposal for Decision at 39 (March 18, 2010).

<sup>49</sup> Proposal for Decision at 39 (March 18, 2010).

<sup>50</sup> Tr. Vol. 3 at 648, lines 18-23 (February 8, 2010).

<sup>51</sup> Tr. Vol. 3 at 648, lines 24 through 659, line 5 (February 8, 2010)

standard is not a firm policy but provided no guidance as to how LCRA TSC would determine what would be a reasonable cost for a minor route adjustment except to say that it is a case-by-case determination.<sup>52</sup> Staff agrees that the determination of what constitutes a reasonable cost should be on a case-by-case basis but disagrees, however, with LCRA TSC's theory that an adjustment must be 'cost neutral'. Based on the definition of prudent avoidance,<sup>53</sup> Staff believes that transmission service providers (TSPs) are required to make minor route adjustments where, with *reasonable* investments of money and effort, exposure can be limited. Staff recommends that LCRA TSC be ordered to make minor route deviations proposed by landowners or others if the costs are reasonable.

- G. Preliminary Order Issues No. 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?**

No Exceptions.

**1. The Gillespie Substation Intervenors**

**a. Alternate Link C3**

No Exceptions.

**b. Monopoles on Alternate Link C3**

No exceptions other than those raised elsewhere in this pleading regarding the costs of proposed Route GN6 as modified and altered by the PFD.

**2. Link 21**

Staff recommended the use of Link 21 as was proposed by the landowner because it was

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<sup>52</sup> *Id.*

<sup>53</sup> P.U.C. SUBST. R. 25.101(a)(4).

a reasonable request by the landowner. More importantly, however, the modification also decreased the environmental impacts of the originally proposed GN10 by avoiding the Link 22 crossing, following existing compatible ROW and impacting less woodland habitat.

**3. Link C28A**

No Exceptions.

**4. Betty Simon Adjustment**

No Exceptions.

**5. Modification of Route GN6**

The modifications to Route GN6 do not reduce the number of habitable structures sufficiently to justify a selection of GN6.

- 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 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?**

No Exceptions.

- 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?**

No Exceptions.

**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?**

No Exceptions.

**1. What modifications, if any, should be made to the Project as a result of any recommendations or comments?**

No exceptions.

**2. What conditions or limitations, if any, should be included in the final order in this docket as a result of any recommendations or comments?**

The mitigation measures recommended by Staff (and typically included in the Commission's final order for CCN proceedings) should be included in the final order. These requirements are reasonable measures for a utility to undertake when constructing a transmission line. Additionally, LCRA TSC has agreed to install bird diverters on the Colorado, Lampasas, and Llano river crossings to reduce the risk of avian collisions.<sup>54</sup> The bird diverters should be required regardless of the route ultimately chosen and ordered by the Commission.

**3. What other disposition, if any, should be made of any recommendations or comments?**

Other than what is addressed above, no disposition should be made of any of TPWD's recommendations or comments.

**4. If any recommendation or comment should not be incorporated in this project or the final order, or should not be acted upon, or is otherwise inappropriate or incorrect in light of the specific facts and circumstances presented by this Application or the law applicable to contested cases, please explain why that is the case?**

No Exceptions.

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<sup>54</sup> LCRA TSC Ex. 9 (Palafox Reb.) at 25.

**K. Additional Issues**

**1. Ordering Paragraphs**

**a. Cultural Resources and the Texas Historical Commission**

No Exception.

**b. Re-vegetation with native species**

No Exceptions.

**c. Returning land to original contours**

No Exceptions.

**d. Minor route deviations**

No Exceptions.

**L. CREZ Reporting Requirements.**

LCRA TSC should be ordered to file in Project No. 37858 information pursuant to P.U.C. SUBST. R. 25.216(f) and the Order on Rehearing in Docket No. 35665.

**V. CONCLUSION**

Staff respectfully recommends modified Route GN 10M. . Modified Route GN10 uses more ROW than the route preferred by LCRA TSC, GN 11. Modified Route GN 10 impacts fewer habitable structures than GN 11 and impacts dramatically fewer habitable structures than does GN6 Route GN10M has less ROW through upland woodland and bottomland/riparian woodland than both GN6 and GN11, and has less estimated length of ROW within foreground

visual zone of U.S. or State highways than GN6 and GN 11.<sup>55</sup> Route GN10M parallels more ROW than GN11. Route GN 6 uses significantly more ROW than any other route but also impacts *significantly* more habitable structures than any other route. Route GN 6 also impacts more woodland and has more miles in the foreground visual zone of highways than GN 10. When all factors are considered, it is Staff's recommendation that modified Route GN 10 best meets the criteria of PURA and the Commission's rules.

## **VI. FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDERING PARAGRAPHS**

### **A. Findings of Fact**

#### ***Introduction***

1. LCRA Transmission Services Corporation (LCRA TSC or Applicant) is a non-profit corporation providing service under Certificate of Convenience and Necessity (CCN) No. 30110.
2. On October 28, 2009, LCRA TSC filed an application to amend its CCN (Application) to include the Gillespie to Newton Competitive Renewable Energy Zone (CREZ) 345-kV transmission line project (Project). The Project was identified by ERCOT in its CREZ Optimization Study (CTO Study), and subsequently assigned to LCRA TSC to construct as a "Priority Project" in Docket No. 35665.
3. LCRA TSC will install one 345-kV circuit on the transmission line, but the proposed structures will accommodate a second 345-kV circuit when necessary.
4. The Project will be located in the Hill Country of Central Texas spanning Gillespie, Burnet, Llano, and Lampasas counties. The proposed transmission line would traverse portions of rugged terrain through the Hill Country, including several river crossings. The land involved is mostly undeveloped ranchland, except for some rural residential developments and small towns, but the area is also known for its viewsapes and other scenic areas, including Enchanted Rock.
5. LCRA TSC formulated its 11 proposed routes through a series of "links" that may be combined to form as many as 27 different forward progressing routes.

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<sup>55</sup> P.U.C. Staff Exhibit 1, Direct Testimony of T. Brian Almon at 21.

6. Typical structure heights are expected to be approximately 115-185 feet above the ground surface, depending upon the type of structures used.
7. LCRA TSC will not build any new stations for the Project, but LCRA TSC will expand its Gillespie Station, in order to accommodate both the project proposed in this docket and another of its CREZ priority projects (identified in Docket No. 35665) as well as three additional default CREZ projects (identified in Docket No. 36146). LCRA TSC will own, operate and maintain all transmission line facilities for the Project.

#### ***Procedural History, Notice, and Jurisdiction***

8. Written direct notice of the Application was mailed on October 28, 2009, to each owner of land on the current Gillespie, Llano, San Saba, Burnet, and Lampasas Counties tax appraisal district listings whose property would be directly affected by the proposed transmission line.
9. Written direct notice was mailed on or before November 18, 2009, to several directly affected landowners whose names had not appeared on LCRA TSC's original list (submitted as Attachment 7 to the Application).
10. Written notice was mailed on October 28, 2009, to the municipalities of Bertram, Boerne, Burnet, Cottonwood Shores, Fredericksburg, Granite Shoals, Highland Haven, Horseshoe Bay, Kempner, Lampasas, Llano, Lometa, Marble Falls, Meadowlakes, Richland Springs, San Saba, and Sunrise Beach Village, and to Gillespie, Llano, San Saba, Burnet, and Lampasas Counties.
11. Written notice was mailed to twenty neighboring utilities providing electric service, specifically Bandera Electric Cooperative, Inc., Cap Rock Energy Corporation, Central Texas Electric Cooperative, Inc., City of Boerne, City of Burnet, City of Fredericksburg, City of Lampasas, City of Llano, City of San Saba, City of Copperas Cove, Hamilton County Electric Cooperative, Kerrville Public Utility Board, Pedernales Electric Cooperative, Inc., AEP Texas North Company, AEP Service Corporation, Brazos Electric Cooperative, Inc., Oncor, City of Goldthwaite, City of Brady, and City of Mason.

#### ***Material Deficiencies***

12. No material deficiencies exist in the Application.

#### ***CREZ Priority Transmission Plan***

13. The Application is for a Competitive Renewable Energy Zone (CREZ) priority project.

14. The Project will accomplish the intended results for the CREZ priority project designated as the "Gillespie to Newton transmission line project" and ordered by the Commission in Docket No. 35665, Commission Staff's Petition for Selection of Entities Responsible for Transmission Improvements Necessary to Deliver Renewable Energy from Competitive Renewable Energy Zones, (Order on Rehearing May 15, 2009), and 36801, *Proceeding to Sequence Certificate of Convenience and Necessity Applications for the Priority Projects from the Competitive Renewable Energy Zones* (July 8, 2009).
15. The projected energizing date for the Project is November 2012.
16. In addition to the Project being a CREZ priority project, it will also help minimize existing congestion, and improve reliability west of Austin.

### ***Route***

### ***Community Values***

17. In order to solicit public input and involvement in its process, LCRA TSC held a series of open house meetings in May of 2009 at locations in Lampasas, Burnet, Llano, Fredericksburg, and Comfort, Texas (on May 4, 5, 7, 11, and 12, 2009, respectively).
18. A total of 694 persons attended the five open houses where they could receive and complete questionnaires about the Project. Approximately 600 completed questionnaires were received by LCRA TSC.
19. Information received from the public open-house meetings and from local, state and federal agencies was considered and incorporated into the routing analysis and the selection of preferred and alternative routes.
20. In addition to the open houses, LCRA personnel also met with numerous public officials, landowners, and interested organizations prior to filing the Application for the Project.
21. Based on the questionnaires received, two community values expressed most strongly were maximizing the distance from residences and using or paralleling existing transmission line right-of-way (ROW). These community values are competing.
22. PBS&J evaluated habitable structures, city limits, rural subdivisions, lakes and reservoirs, and airports, airstrips, and heliports as areas to avoid if possible when assessing community values.
23. Route GN6 goes through the community of Buchanan Dam where there are habitable structures.
24. The community of Buchanan Dam was developed in the presence of transmission lines that were energized as early as 1941, and 1955. People built structures in close proximity to existing 69 kV and 138 kV transmission lines.

25. Route GN6 will parallel a roadway, Highway 29, which has already cut a path through the Buchanan Dam community. Route GN6 will not cut an entirely new corridor through the community although the existing ROW may require expansion.
26. One rural subdivisions along Route GN6 already have transmission lines running through them with development restrictions caused by those lines.
27. Route GN6 either uses existing ROW or parallels existing transmission line ROW for 75% of its length. It uses and parallels the most ROW of any filed route and minimizes damage to previously untouched land.
28. Route GN6 crosses Inks Lake just south of Buchanan Dam. Inks Lake can be spanned at this point by Route GN6.
29. No airports, airstrips or heliports present any insurmountable constraint on routing along Route GN6.

#### ***Recreational and Park Areas***

30. In order to consider impacts upon recreational and parks areas, LCRA TSC's routing consultant, PBS&J, reviewed USGS topographic maps, TxDOT County Highway maps, the Texas Parks & Wildlife Department's "Texas Outdoor Recreation Inventory," recent aerial photography and also conducted limited field reconnaissance.
31. Route GN10M is not located in close proximity to any of the parks or recreational areas identified by LCRA TSC including Inks Lake State Park, Enchanted Rock State Natural Area, Post Oak Falls, or Colorado Bend State Park

#### ***Historical and Aesthetic Values***

32. All of LCRA TSC's 11 alternative routes for the Project cross one or more recorded historic or pre-historic sites. Seven routes cross at least 14 or more such sites. In addition, the 11 routes all have additional recorded historic or pre-historic sites within 1,000 feet of the ROW centerline, with numbers ranging between 6 and 22 such sites.
33. All the routes will impact historical sites and areas. GN10 has nine (9) sites identified within 1,000 feet of the ROW centerline.
34. All of the proposed alternative routes would result in a negative impact throughout the study area to aesthetic values, some more than others depending on the visibility from homes, public roadways, and recreational areas
35. The length of modified GN10 within the foreground visual zone of U.S. and State highways is 11.09 miles which is lower than most of the routes.

36. .

### ***Environmental Integrity***

- 37. LCRA TSC's consultant, PBS&J, examined a wide range of environmental information in its Environmental Assessment and Alternative Route Analysis (EA), which was researched and analyzed through a variety of methods and by representatives of various environmental disciplines.
- 38. Because the geographic locations of environmentally sensitive and other restrictive areas within the study area were located and considered during the transmission line route delineation process, the overall impact of alternative routes has been greatly reduced.
- 39. LCRA TSC used the Loomis Report to identify potential golden-cheeked warbler habitat.
- 40. LCRA TSC used data from three transmission line projects within the same geographic range as the Project to estimate the percentage of each link that would cross through potential vireo habitat.
- 41. LCRA TSC properly considered endangered species habitat as well as habitat for species classified as threatened or protected, by either the state or federal government.
- 42. All of the routes avoid, to the extent practicable, known habitat of endangered species.
- 43. Route GN10M affects less than 14.99 acres of upland woodland and bottomland/riparian woodland..
- 44. Route GN10M crosses the Colorado River along a link that located in an area that is already fragmented.
- 45. Route GN10M has fewer river crossings than most other routes.
- 46. Route Route has the shortest length parallel to streams or rivers of any filed route.
- 47. Route Route is not likely to disrupt bald eagles or whooping cranes.
- 48. The possibility of soil erosion during construction can be mitigated through the use of a Storm Water Pollution Prevention Plan (SWPPP) and re-vegetation.
- 49. LCRA TSC will develop and implement a SWPPP.

### ***Goal for Renewable Energy***

- 50. The Project is necessary to deliver renewable energy generated in the CREZ.

### ***Engineering Constraints***

51. Route GN10M will be constructed mostly along existing and parallel to existing ROW. New easements will vary from an estimated minimum easement width of 100 feet to an estimated maximum easement width of 160 feet, and these widths are sufficient for all LCRA TSC structure types.
52. LCRA TSC will design and construct the proposed transmission line to meet nationally recognized guidelines and specifications, including the applicable version of the National Electrical Safety Code (NESC), as well as established regional electric system planning criteria to address various categories of contingency conditions and applicable PUC rules, in order to operate the proposed transmission line in a safe and reliable manner.
53. Route GN10M will cross granite, span the Colorado River, and have narrow ROW corridors in habited areas.
54. LCRA TSC has extensive experience in constructing transmission facilities in granite, spanning rivers and lakes, and with narrow ROW corridors.
55. Route GN10M presents no major engineering constraints.
56. There are no FAA-registered airports within 10,000 or 20,000 feet of the centerline of Route GN10M. There is two private airstrip located within 10,000 feet of the Route GN6 centerline, and no heliports within 5,000 feet of that proposed centerline. Route Route GN10M would have little or no effect on aviation operations in the area.

### ***Costs***

57. Routes GN6, GN11, and GN10M are estimated to be among the lowest cost routes. LCRA TSC's estimated transmission line costs for all routes range from \$161.0 million to \$207.1 million, with the most significant cost variances among routes resulting from ROW acquisition costs and other costs for potential habitat mitigation.
58. Route GN6 is projected to cost approximately \$164.8 million.
59. ROW costs estimated by LCRA TSC did not use data from the counties the Project will cross and are inaccurate.
60. The inaccuracies in LCRA TSC's data exist on all filed routes and should not be used to change the cost estimates of any route individually.
61. Habitat mitigation costs are significant throughout the Project.
62. Two methods were used to calculate mitigation costs for the two different species, and mitigation acreage costs of \$12,000 per acre were included in costs according to mitigation acreage ratios. The ratios included mitigation for direct effects to habitat as well as indirect effects. As a result, cost comparisons between routes reflect different attributes of the routes.

63. GN10M crosses over prairie land rather than woodland thus further reducing the estimated habitat mitigation costs of the route and the impacts on endangered species habitat.

***Using Existing Compatible ROW, Paralleling Compatible ROW, and Paralleling Other Features***

64. GN10M
65. Approximately 51% of Route GN10M uses existing ROW or parallels existing transmission lines. It is one of the highest of the proposed routes, with the next highest routes (GN6 and GN11) using and paralleling 78% and 48% respectively.
66. .
- 67.

***Prudent Avoidance***

68. LCRA TSC's proposed alternative routes minimize, to the extent reasonable, the number of habitable structures located in close proximity to the routes.
69. Route GN6 has the highest number of habitable structures at 164. Route GN11 has 48 habitable structures. Route GN10 and GN10M have 42,.
70. Route GN6 complies with the Commission's prudent avoidance policy.

***Alternate Routes with Less Negative Impact***

71. The Gillespie Substation Intervenors and LCRA TSC agreed to move Link C3 slightly to the northwest where it crossed their properties. Moving the line in this manner will move the line away from the Gillespie Substation Intervenors' homes and habitable structures. Alternate Link C3 would move the line further from Fredericksburg and would move the line off the summit of the hilltops on the Gillespie Substation Intervenors' lands, making the line less visible from Fredericksburg.
72. The additional cost of Alternate Link C3 is \$300,000, which is reasonable.
73. The Gillespie Substation Intervenors have not agreed to offset any of the additional cost of Alternate Link C3.
74. .

### ***Proposed Modifications to CREZ Order***

75. LCRA TSC's proposed Gillespie to Newton project meets the requirements of the ERCOT CTO Study and does not deviate in transmission project components from the original transmission specifications in the ERCOT CTO Study.

### ***Cost Discrepancies***

76. ERCOT had estimated the cost for the CREZ Gillespie to Newton project at \$136.5 million and 105 miles in length.
77. LCRA TSC's estimated cost for all 11 evaluated routes ranging from \$161.0 million to \$207.1 million.
78. LCRA TSC's estimates include capitalized interest and habitat mitigation costs, which were not included in the ERCOT estimate.
79. LCRA TSC's estimated construction costs are higher due to maneuvering equipment in rugged terrain with little public access and drilling foundations in harder geologic substrates typical in the Hill Country area.
80. LCRA TSC's estimated ROW acquisition costs could be higher in the Hill Country compared to what LCRA TSC would estimate for ROW acquisition in some other areas.
81. LCRA TSC's estimated costs are reasonable even though they vary from ERCOT's estimate.

### ***TPWD Comments, Recommendations***

82. TPWD submitted a letter addressing the Project and recommendations on December 23, 2009.
83. The letter addressed issues related to ecology and the environment. TPWD did not consider other factors that the Commission and utilities must consider and balance in CCN applications, including the numerous routing criteria that involve direct effects on people.
84. LCRA TSC avoided specific known occupied habitat locations in the process of delineating preliminary route links and alternative routes.
85. Once the Commission approves a route, LCRA TSC can access private property and perform a survey of the area, and if permits are necessary, apply for and comply with all permit conditions.

86. LCRA TSC does not have access to private property prior to the selection of a route.
- 87.
88. TPWD recommended Route GN6 particularly to avoid Enchanted Rock, Colorado Bend State Park, and previously undisturbed river crossings.
89. LCRA TSC must comply with all applicable environmental laws and regulations governing erosion control, endangered species, storm water prevention, and all other environmental laws and regulations.
90. The recommended Ordering Paragraphs are sufficient to address TPWD's recommendations or requests.

**B. Conclusions of Law**

1. LCRA TSC is an electric utility as defined in PURA §§11.004 and 31.002(6).
2. The Commission has jurisdiction over this matter pursuant to PURA §§14.001, 32.001, 37.051, 37.053, 37.054, 37.056, and 39.203(e).
3. LCRA TSC filed its CREZ CCN Application in this docket on October 28, 2009 in conformance with the Commission's standard CREZ CCN Application form and the Commission's Orders in P.U.C. Docket Nos. 33672 and 35665. LCRA TSC's Application has met the filing requirements set forth in P.U.C. SUBST. R. § 25.216(g)(2) and (3).
4. LCRA TSC provided proper notice of the Application in compliance with PURA §37.054 and P.U.C. PROC. R. 22.52(a).
5. LCRA TSC's Application is sufficient under PUC SUBST. R. 25.216(g)(2) and (3) and LCRA TSC's notice was adequate.
6. SOAH exercised jurisdiction over this docket pursuant to PURA §14.053 and TEX. GOV'T CODE ANN. §2003.049.
7. This docket was processed in accordance with the requirements of PURA and the Administrative Procedure Act, TEX. GOV'T CODE ANN. Chapter 2001.

8. LCRA TSC is entitled to approval of the Application, as described in the findings of fact, using Route GN10M, taking into consideration the factors set out in PURA §37.056 and P.U.C. SUBST. R. 25.101.
9. Route GN10M complies with all aspects of PURA §37.056 and P.U.C. SUBST. R. 25.101, including the Commission's policy of prudent avoidance.
10. The Project, as a CREZ transmission project identified in Docket No. 35665, is exempt under PURA §§39.203(e) and 39.904(h) and P.U.C. SUBST. R. 25.174(d)(2) from the requirement of proving that the construction ordered is necessary for the service, accommodation, convenience, or safety of the public and need not address the adequacy of existing service, the need for additional service, the effect of granting the certificate on the recipient of the certificate and any electric utility serving the proximate area, and the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted.
11. The Proposed Project is consistent with the Commission's goals for the CREZ program and PUC SUBST. R. § 25.174 in that it provides (1) long-term cost effective solutions consistent with the Final Order in Docket No. 35665, and (2) transmission facilities consistent with ERCOT's recommendations to be constructed as soon as possible to relieve existing and growing constraints in delivering wind generation and placed in service.
12. The Project is consistent with and in furtherance of the goals and mandates of Section 39.904 of PURA.
13. Pursuant to P.U.C. SUBST. R. 25.174(d)(10), the level of financial commitment by generators is sufficient under PURA §39.904(g)(3) to grant LCRA TSC's Application for a CCN in this docket.

### C. Ordering Paragraphs

**In accordance with these findings of fact and conclusions of law, the Commission issues the following orders:**

1. LCRA TSC's CCN No. 37448 is amended and LCRA TSC's Application to build a new 345-kV double-circuit transmission lines that extend from the existing Gillespie Switching Station to the new Newton Switching Station is approved. The Project will follow the route described as Route GN10M, with the adjustments to Link C3 to create Alternate Link C3 and the adjustment at the Llano River crossing.
2. LCRA TSC shall implement erosion control measures as appropriate. LCRA TSC shall return each affected landowner's property to its original contours and grades except to the extent necessary to establish appropriate right-of-way, structure sites, setup sites, and access for the transmission line or unless otherwise agreed to by the landowner.
3. In the event LCRA TSC or its contractors encounter any archaeological artifacts or other cultural resources during construction of the Project, LCRA TSC shall cease work immediately in the vicinity of the resource and report the discovery to the Texas Historical Commission (THC) and take action as directed by the THC.
4. LCRA TSC shall follow the procedures outlined in the following publications for protecting raptors: *Suggested Practices for Avian Protection on Power Lines, The State of the Art in 2006*, Avian Power Line Interaction Committee (APLIC), 2006 and the *Avian Protection Plan Guidelines* published by APLIC in April 2005.
5. LCRA TSC shall install bird diverters at all river crossings.
6. LCRA TSC shall minimize the amount of flora and fauna disturbed during construction of the Project, except to the extent necessary to establish appropriate right-of-way clearance for the transmission line. LCRA TSC shall re-vegetate using native species considering landowner preferences and avoid adverse environmental impacts to sensitive plant and animal species and their habitats as identified by TPWD and USFWS. LCRA TSC may use non-native species to re-vegetate only to control erosion.
7. LCRA TSC shall exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides for controlling vegetation within the right-of-way and that such herbicide use comply with rules and guidelines established in the *Federal Insecticide, Fungicide and Rodenticide Act* and with the Texas Department of Agriculture regulations.
8. LCRA TSC shall cooperate with directly affected landowners to implement minor deviations in the approved route to minimize the impact of the Project. LCRA will make minor route adjustments where, with *reasonable* investments of money and effort,

exposures can be limited. Any minor deviations in the approved route shall only directly affect landowners who received notice of the transmission line in accordance with P.U.C. PROC. Rule 22.52(a)(3) and shall directly affect only those landowners that have agreed to the minor deviation.

9. LCRA TSC shall update the reporting of this project on their monthly construction progress report prior to the start of construction to reflect final estimated cost and schedule in accordance with P.U.C. Subst. R. 25.83(b). In addition, LCRA TSC shall provide final construction costs, with any necessary explanation for cost variance, after completion of construction and when all charges have been identified.
10. LCRA TSC shall file in Project No. 37858 information pursuant to P.U.C. SUBST. R. 25.216(f) and the Order on Rehearing in Docket No. 35665.
- 11.

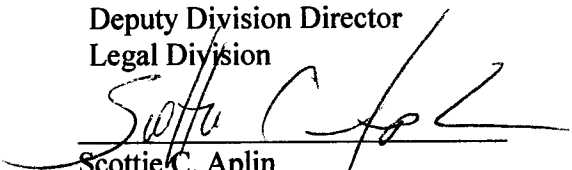
All other motions, requests for entry of specific findings of fact and conclusions of law, and any other requests for general or specific relief, if not expressly granted, are denied.

**DATE: March 26, 2010**

Respectfully Submitted,

Thomas S. Hunter  
Division Director  
Legal Division

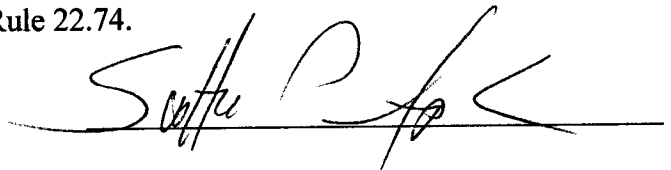
Keith Rogas  
Deputy Division Director  
Legal Division



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P.O. Box 13326  
Austin, Texas 78711-3326

**CERTIFICATE OF SERVICE**

I certify that a copy of this document will be served on all parties of record on March 26, 2010, in accordance with P.U.C. Procedural Rule 22.74.



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# Cost Comparison between Lattice Tower and Monopole Costs

Docket No. 37448

## Monopole the following:

- 1 Alternate Link C3
- 2 Portion of Link C17 south of Lake Buchanan through Buchanan Dam community
- 3 Link C29
- 4 Anywhere GN6 is within 200 feet of a habitable structure

**C29** 22,820 feet (Exhibit RRR-3R, page 3)

**C17** 13,380 feet (measured on map starting at the beginning of C17  
(intersection of C10 & C14) to the western bank of the  
Colorado River

**Alt C3** 6,200 feet (page 44 of the PFD)

**C14** 8,000 feet (39 habitable structures within 200 feet of centerline  
measured on map after reviewing Detail maps 6.2 & 6.3)

**Other** Five habitable structures are within 200 feet on other links (C1, C5, C11, C18)

## Difference between lattice towers and concrete poles

(Exhibit CDS-1R as amended on 2/4/10)

<u>Soil Type</u>	<u>Cost/mile (\$ X 1000)</u>			<u>Cost/structure (\$ X 1000)</u>		
	<u>Concrete</u>	<u>Lattice</u>	<u>Difference</u>	<u>Concrete</u>	<u>Lattice</u>	<u>Difference</u>
<b>Sand</b>	723	563	160	89	112	-23
<b>Limestone</b>	724	437	287	96	87	9
<b>Granite</b>	975	553	422	120	110	10

	<u>Sand</u>	<u>Limestone</u>	<u>Granite</u>
	<u>\$160,000/mi</u>	<u>\$287,000/mi</u>	<u>\$422,000/mi</u>
C3: 1.17 miles	\$187,200	\$409,500	\$544,050
C17: 2.53 miles	\$404,800	\$885,500	\$1,176,450
C29: 4.32 miles	\$691,200	\$1,512,000	\$2,008,800
C14: 1.52 miles	\$243,200	\$532,000	\$706,800
	<u>\$-23,000/structure</u>	<u>\$9,000/structure</u>	<u>\$10,000/structure</u>
Single H.S.	(\$115,000)	\$81,000	\$50,000
<b>TOTAL</b>	<b>\$1,411,400</b>	<b>\$3,420,000</b>	<b>\$4,486,100</b>