Control Number: 38743

Item Number: 329

Addendum StartPage: 0

SOAH DOCKET NO. 473-11-0945
PUC DOCKET NO. 38743

APPLICATION OF ELECTRIC TRANSMISSION TEXAS, LLC TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE TESLA TO EDITH CLARKE TO CLEAR CROSSING TO WEST SHACKELFORD 345-KV CREZ TRANSMISSION LINE IN CHILDRESS, COTTLE, HARDEMAN, FOARD, KNOX, HASKELL, JONES, AND SHACKELFORD COUNTIES	§	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

DUFF/ALEXANDER GROUP'S

INITIAL BRIEF

SPECIFIC TO THE TRANSMISSION LINE PROJECT PORTION FROM THE CLEAR CROSSING SUBSTATION TO THE WEST SHACKELFORD SUBSTATION

February 7, 2011

SOAH DOCKET NO. 473-11-0945
PUC DOCKET NO. 38743

Table of Contents

SOAH DOCKET NO. 473-11-0945
PUC DOCKET NO. 38743

APPLICATION OF ELECTRIC TRANSMISSION TEXAS, LLC TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE TESLA TO EDITH CLARKE TO CLEAR CROSSING TO WEST SHACKELFORD 345-KV CREZ TRANSMISSION LINE IN CHILDRESS, COTTLE, HARDEMAN, FOARD, KNOX, HASKELL, JONES, AND SHACKELFORD COUNTIES	§	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

I. EXECUTIVE SUMMARY

The statistics calculated for each of the thirty-nine (39) factors set out in the Environmental Assessment performed by PBS&J, [1] ETT's environmental consultant, prove that there are no numerically significant differences in these factors between the proposed routes - *except* for river crossings.[2] Generally, any route that uses segment C16 crosses the Clear Fork of the Brazos River three (3) times versus any other route which crosses the River only once.

To set the stage:

- ETT's preferred route is Route CW5 which consists of segments C1, C3, C6, C6b, C11, C16, C16b, and C17.[3]
- PBS&J's preferred route is Route CW11, which consists of segments C4, C7, C8, C8a, C12, C12b, and C17.[4]
- [5] PUC Staff's preferred route is Route CW11, which is the same as PBS&J's.

---

[1] ETT is the acronym for Electric Transmission Texas, LLC.

[2] ETT ("Electric Transmission Texas") Ex. 1A , the Environmental Assessment ("EA") at Figure 7-1c.

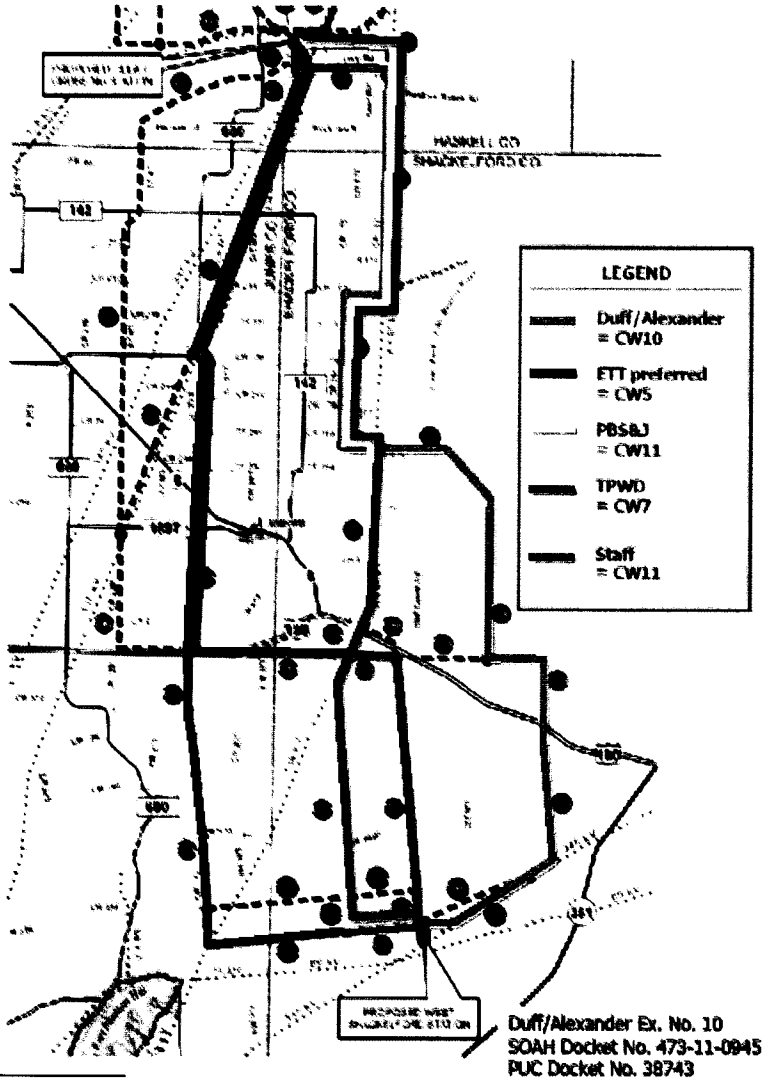
[3] ETT Ex. 5 at 18.

[4] *Id.*

[5] Public Utility Commission of Texas ("Commission" or "PUC")

- TPWD's[6] preferred route is Route CW7,[7] which consists of segments C1, C3, C6, C6b, C10, C13, C14, and C14a.
- The Duff/Alexander Group's preferred route is Route CW10, which consists of segments C1, C3, C5, C7, C9, C18, and C18b.[8]

The Duff/Alexander Group's Exhibit No. 10 illustrates these preferences.

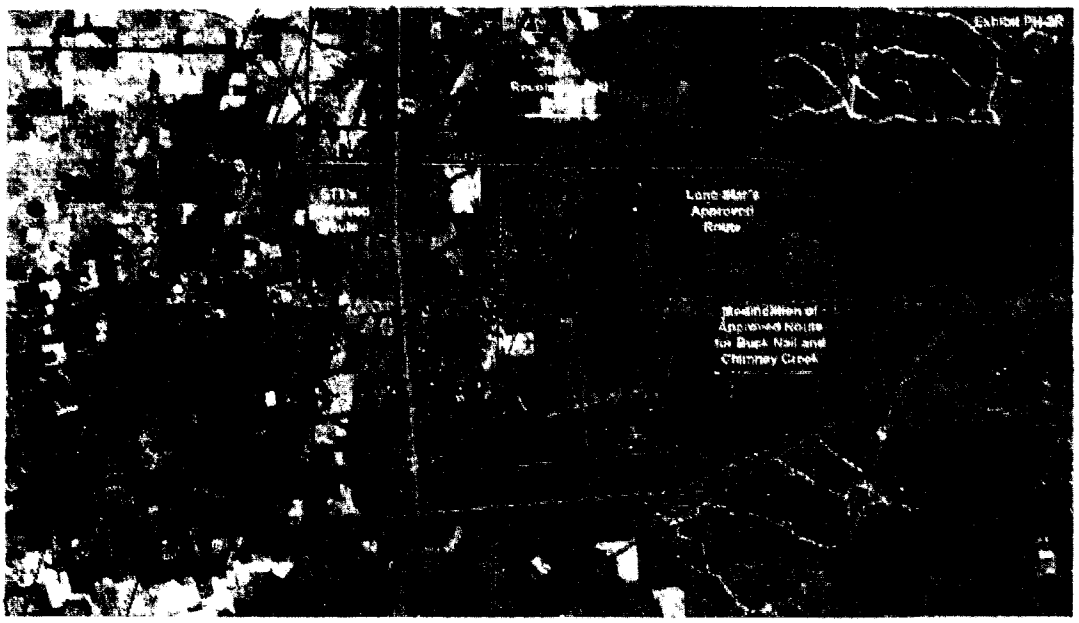


[6] TPWD is the acronym for Texas Parks and Wildlife Department.

[7] Staff Ex. 1 at 68 (TPWD Letter dated Dec. 17, 2010).

[8] ETT Ex. 1, EA at 3-11.

Another important factor for Your Honor to consider in recommending the best route to the Commission is the electric grid reliability concerns of crossing or paralleling an existing CREZ[9] transmission line (in this case, the Lone Star CREZ line).[10] As articulated in ETT witness Mr. Paul Hassink's rebuttal testimony, crossing or paralleling an existing CREZ transmission line is not an optimal solution, and should be avoided.[11] Because the route for the Lone Star CREZ line which goes through the West Shackelford substation was not known at the time this application was filed, ETT's designated preferred route did not address this issue. However, the Commission has since approved a route for the Lone Star CREZ Project that goes into and out of the West Shackelford substation. The Duff/Alexander Group is the only party to advocate a routing solution that does not cross or parallel the Lone Star CREZ line – Route CW10. All other parties advocate routes that cross and/or parallel the Lone Star line.[12]



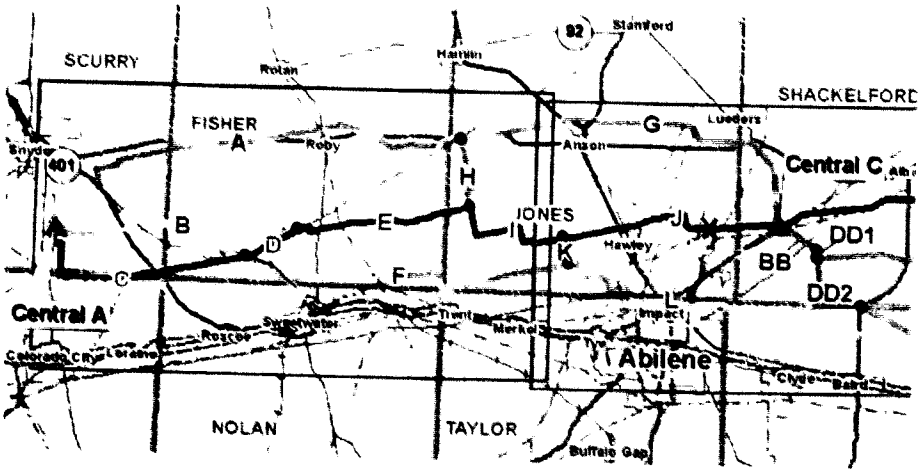
[9] *Application Of Lone Star Transmission, LLC For A Certificate Of Convenience And Necessity For The Central A To Central C To Sam Switch/Navarro 345-kV CREZ Transmission Line,* PUC Docket No. 38230 Final Order (November 17, 2010) "The Lone Star Case".

[10] The Lone Star CREZ CCN transmission line route was approved by the Commission as illustrated in ETT Ex. 10 at Attachment PH-R2.

[11] ETT Ex. 4 at 6. (ETT witness Mr. Hassink's Direct Testimony).

[12] Note that the use of segments C6b, C6c, C8a, C12, C13, and C14 either cross or parallel Lone Star's approved line.

It is noteworthy for Your Honor to consider and weigh the fact that the utility's preferred route in this case, Route CW, traces a routing segment that was already proposed and rejected by the Commission in the Lone Star Case.[13] The Commission rejected using the link in that case (Link J),[14] in part, because it bisected a number of smaller tracts as Route CW5 does here.[15]



Central A to Central C: Proposed Routes

Preferred Route ——— Alternate Routes ———

Duff/Alexander Group Exhibit 15
S.O.A.H. Docket No. 473-11-0945
P.U.C. Docket No. 38743

The proposed routes in the southwestern portion of the study area in this case suffer from the same flaws in that they bisect smaller tracts instead of following property lines on the larger tracts in the southeast portion of the study area, and adjustments to follow property lines on the smaller tracts are not feasible.[16] Route CW10 complies with the principle of following property boundaries to minimize impact to a much better degree than Route CW5. Following property lines has been an important principle in every CREZ CCN case.

Further, Route CW10 is in close proximity to existing wind energy development. The land in the eastern portion of the study area is already impacted by two wind farms and has land

---

[13] The Lone Star Case

[14] The Lone Star Case *see, for example Duff/Alexander Ex. 15.*

[15] *Id.* Proposal for Decision "PFD" 42-43.

[16] *See, for example,* ETT Ex. 15.

with high potential for wind development in the future. This potential is demonstrated by the fact that the eastern portion of the study area has a higher elevation than the west and the properties there are actually in the Central CREZ area designated by ERCOT, as demonstrated by Attachment 1 to this brief.[17] The Commission has made clear that routing CREZ transmission lines in areas with existing and potential wind development is consistent with the purpose of the CREZ project and complies with PURA § 37.056(c)(4)(F) in that it best satisfies the legislature's goal to bring renewable energy from the areas of highest wind potential into the ERCOT grid to serve the state's major population centers.[18]

II. INTRODUCTION

ETT's Application seeks a Certificate for Convenience and Necessity ("CCN") for three distinct CREZ transmission projects identified in the ERCOT CREZ transmission optimization study ("CTOS") filed in Project No. 33672.[19] The Duff/Alexander Group only has property interests in the study area for the southernmost transmission line project identified in the Application, that which connects the proposed Clear Crossing substation to the existing West Shackelford substation. Therefore, this brief exclusively addresses routes for that portion of ETT's Application in this case. The other two transmission line projects have been resolved by settlement and Duff/Alexander Group does not contest or oppose the routes identified in those settlements.[20]

The Duff/Alexander Group consists of a community of landowners who have served as caretakers for properties in Jones and Shackelford counties for many years or, in several cases, many generations, and who have chosen to participate in this proceeding at their own expense in

---

[17] ERCOT is the acronym for the Electric Reliability Council of Texas.

[18] *Application of Sharyland Utilities, LP to Amend Its Certificate of Convenience and Necessity for the Hereford to White Deer 345-KV Crez Transmission Line (Formerly Panhandle A to Panhandle BA) in Armstrong, Carson, Deaf Smith, Oldham, Potter, and Randall Counties*, Docket No. 38290, Final Order Adopting Proposal for Decision at 38-39 (December 13, 2010).

[19] *Commission Staff's Petition for the Designation of Competitive Renewable Energy Zones,* P.U.C. Docket No. 33672, ERCOT's CREZ Transmission Optimization Study (April 2, 2008).

[20] ETT Exs. 17 and 18.

order to ensure that their values and those of their community are duly considered in the routing of ETT's transmission line. The Duff/Alexander Group includes: Jim Alexander, Cathey Weatherl, Laurie Eagle, Mitch Hall, Rob Hailey, Perry Scott, John Sawyer, Dr. Jim Duff, and Mike Alexander. Collectively, their properties would be directly and negatively impacted by segments C6b, C6c, C10, C11, C16, C16a, C16b, and C17.[21]

Name	**Links**	**Tract #**
Mr. Mike Alexander, Jim Alexander, Cathey Weatherl, and Laurie Eagle	C6b, C6c, C10, C11, C16, C17	JO-051, JO-090, JO-092, JO-099, SH-04312
Dr. James Duff	C16, C16a, C16b	JO-108, SH-038.2
Mr. Rob Hailey	C16a, C16b	SH-041
Mr. Perry Scott	C16	JO-097
Mr. Mitch Hall	C6b, C6c, C10, C11, C16	JO-040
Mr. John Sawyer c/o Annco	C16	JO-098

Members of the Duff/Alexander Group have previously participated in the CREZ transmission process in Docket No. 38230 – The Lone Star Case to construct a 345-kV transmission line from Central A to Central C (referred to as West Shackelford in this docket) to Sam Switch/Navarro substations. In that docket, the route that would have most directly impacted the properties owned by the Duff/Alexander Group was not selected on the basis that it did not best comply with the routing criteria of PURA or the Commission's rules as it directly bisected properties rather than routing parallel to their borders or other existing compatible rights-of-way ("ROW").[22]

---

[21] Duff/Alexander Ex.1 at 3-4.

[22] The Lone Star Case.

When these considerations are applied in light of the record evidence in its entirety and based on applicable Commission precedent, Route CW 10 is the most appropriate routing choice for the Clear Crossing to West Shackelford transmission line segment. ETT has identified Route CW5 as its preferred route and a number of landowners that would be affected by lines routed in the eastern portion of the study area (those well away from Route CW5) have supported this preference. The preferred route of the utility applying for a transmission line CCN has no special weight or deference afforded to it by PURA or the Commission's rules, [23] however, and when considered objectively, Route CW5 is a problematic choice.

Though it has a nominally shorter length and lesser cost than Route CW10, Route CW5 has greater community, historical, environmental and aesthetic impacts, complies to a lesser extent with the goal of prudent avoidance, and bisects small properties rather than following the property boundaries in accordance with the Commission's Rules[24]. Additionally, when the study area for the Clear Crossing to West Shackelford project is considered as a whole, the eastern portion of the area currently features two sizeable wind farms, transmission lines, oil and gas development, and open space – all features that make this area more compatible for transmission line routing. In contrast, the western portion of the study area consists of small properties located in the valley of the Clear Fork of the Brazos River that serve as homesteads and/or cropland. Additionally, the western portion of the study area features no wind farms, hosts locations of historical importance, and has few man-made features that are compatible with the construction of a bulk double-circuit 345-kV transmission line such as ETT has applied to build in this case. When all the criteria of PURA and the factors of Commission's rules are objectively considered, Route CW10 is demonstrably superior to Route CW5.

Though Duff/Alexander Group advocates the selection of Route CW10, other parties are not in agreement. Commission Staff advocates Route CW11, a selection that is consistent with applicable statutory and regulatory criteria. Notably, ETT's routing consultant PBS&J selected Route CW11 as its favored route also. Joining with ETT, Intervenors Chimney Creek Land

---

[23] Docket No. 38743, SOAH Order No.1 at 3 "Parties are cautioned that the designation carries no significance in the decision making process (October 28, 2010)

[24] P.U.C. SUBST. R. 25.101 (b) (3) (B) (iii)

Company, LLC ("Chimney Creek"), California Creek Intervenors, Knox County and Newell-Miller Groups, John A. Matthews, Jr., Del Mar River Mouth, LLP, Rio 42 Ranch, Randy Rogers, MDIG Ranches, LP, the Swenson Family, Buck Nail Ranch, W.T. Waggoner Estate, and William "Pete" Baker, advocate selection of Route CW5 which traverses the western portion of the study area and, in many instances, bisects small property tracts in direct defiance of the guidelines prescribed in the Commission's rules. The City of Abilene has intervened in this proceeding to advocate avoidance of its planned reservoir in the eastern portion of the study area, though that project is some decades – and numerous Federal permits away[25] – from completion. Even when the arguments of these parties are considered, ETT has evaluated all of its proposed routes and concluded that they are all viable and feasible, despite the various objections raised to them. The Duff/Alexander Group does not assert that Route CW5 is not viable or feasible, rather that it is an inferior selection when compared against the others offered in ETT's Application in the context of PURA and the Commission's rules.

The Duff/Alexander Group respectfully advocates that the Administrative Law Judge ("ALJ") recommend Route CW10 for construction of the Clear Crossing to West Shackelford transmission line project, and would show in support the arguments in the following sections.

III. ISSUES SET OUT BY THE COMMISSION IN ITS ORDER OF REFERRAL AND PRELIMINARY ORDER[26]

The Duff/Alexander Group's participation in this case is primarily related to the ultimate selection of the route along which ETT will be approved to construct the 345-kV transmission line from the Clear Crossing substation to the West Shackelford substation. Accordingly, a number of the issues identified in the Preliminary Order are not applicable to Duff/Alexander

---

[25] ETT Ex. 22, Tr. at 257.

[26] Pursuant to the ALJ's instructions at the conclusion of the hearing on the merits Duff/Alexander Group presents its arguments in the format of the Preliminary Order issued in this case by the PUC's Commission Advising and Docket Management (CADM) division issued on October 25, 2010.

Group's position and will not be briefed. The numbering convention from the Preliminary Order is maintained for the convenience of the ALJ.

Route

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)?

PURA and P.U.C. SUBST. Rule 25.101(b)(3)(B) identify a number of criteria that must be considered when routing a proposed transmission line. Neither PURA nor the Commission's rules provide a proscriptive definition of what a transmission line must include or avoid, but combine to set out a framework of factors with which each approved transmission line should comport to the extent possible. For ease of reference, each of the factors identified by statue and rule are set out below. Duff/Alexander Group will brief all of these factors in turn, emphasizing which routes comply best with certain factors and pointing out which routes least comport with others. Specifically, the recent criteria and factors are:

PURA § 37.056(c)(4)

(A) community values;

(B) recreational and park areas;

(C) historical and aesthetic values;

(D) environmental integrity;

(E) [excluded from CREZ CCN proceedings]

(F) to the extent applicable, the effect of granting the certificate on the ability of this state to meet the goal established by Section 39.904(a) of this title.

P.U.C. SUBST. R. 25.101(b)(3)

(B) Routing: An application for a new transmission line shall address the criteria in PURA §37.056(c) and considering those criteria, engineering constraints, and costs, the line shall be routed to the extent reasonable to moderate the impact on the affected community and landowners unless grid reliability and security dictate otherwise. The following factors shall be considered in the selection of the utility's preferred and alternate routes unless a route is agreed to by the utility, the landowners whose property is crossed by the proposed line, and

owners of land that contains a habitable structure [...] within 500 feet of the centerline of a transmission project greater than 230 kV, and otherwise conforms to the criteria in PURA §37.056(c):

(i) whether the routes utilize existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;
(ii) whether the routes parallel existing compatible rights-of-way;
(iii) whether the routes parallel property lines or other natural or cultural features; and
(iv) whether the routes conform with the policy of prudent avoidance.

PURA § 37.056(c)(4)(A) Community Values

ETT's routing consultant PBS&J defines community values as a "shared appreciation of an area or other natural or human resource by a national, regional, or local community."[27] Although community values are not defined by PURA or the Commission's rules, there is a long history of Commission precedent addressing this statutory criterion. An objective consideration of the study area for this project demonstrates that the community values of the eastern section of the area better comport with the routing of a CREZ transmission line than the western section. This conclusion is supported by the following factors:

- Two substantial wind farms currently exist in the eastern portion of the study area whereas the western portion is devoid of such wind development;
- The eastern section of the study area has properties more suitable to future wind development than the western section;
- The western section of the study area consists primarily of small tracts of property that would be bisected by the proposed Route CW5;
- The eastern section of the study area consists primarily of large tracts of property with boundaries that can easily be paralleled by the proposed Route CW10 if certain modest routing modifications are made;

[27] ETT Ex. 1, the EA at 2-54.

- The impact of the transmission line will be more severely felt on the western section of the study area because of the increased environmental, aesthetic, and land—use impacts.[28]

The prominent presence of the two wind farms in the study area is apparent from a review of any aerial map of the proposed routes near the West Shackelford substation such as that included in the Application at Attachment 1- EA Volume II Fig. 3-1e.[29] Evidence was presented at the hearing that the eastern portion of the study area has good potential for future wind development. Mr. Matthews testified that NextEra Energy, a large wind developer, owns acreage between the two existing wind farms.[30] Chimney Creek witness Henry Paup testified in Docket No. 38230 that the "best use" of his property to the immediate northwest of the West Shackelford substation is as a 100MW wind farm.[31] Mr. Paup further identified the eastern portion of his ranch as providing the most suitable locations for wind turbine sites.[32] This testimony is consistent with the ERCOT CTOS which identified the areas of the state with the best potential for wind energy development.[33] The Central CREZ – shown on Duff/Alexander Group Exhibit 6 as a purple cloud-like area – encompasses the eastern portion of the study area but not the west.[34] All of these facts support the conclusion that the eastern portion of the study area is highly compatible with wind development and that this compatibility extends to the eastern routing of the Clear Crossing to West Shackelford transmission project.

---

[28] Attachment 2 to this brief shows where the wind farms are located and is demonstrative of the area's land use.

[29] ETT Ex. 1, Attachment 1- EA Volume II Fig. 3-1e.

[30] Tr. at 161-162.

[31] Duff/Alexander Group Ex. 14 at 9. "The optimum use of this property is not as a transmission conduit, but is in the production of electricity in the form of a minimum 100 megawatt wind farm. The topography of this property diminished in production potential as the elevation/altitude declines toward the west. In fact, the land west of our 'west most' boundary has little potential as a wind farm and would be a favorable location for an electric transmission line."

[32] *Id.*

[33] Tr. at 409.

[34] Duff/Alexander Group Exhibit 6 is attached to this brief as Attachment 1.

The Commission has established a requirement for the utility's applying for a transmission line CCN to hold Open House meetings to get a gauge of community values. Based on the Open Houses held by ETT related to this case, the following community values were identified as priorities[35]:

1) Minimizing impacts to agricultural lands
2) Maximizing the distance from residences
3) Paralleling existing ROW
4) Paralleling of property lines

Route CW10 better satisfies each of these community values as compared to Route CW5.[36]

PURA § 37.056(c)(4)(B) Recreational and Park Areas

As demonstrated on Table 7-1c of the EA, none of the 18 routes proposed by ETT for the Clear Crossing to West Shackelford transmission project cross or traverse within 1,000 ft of any existing parks or recreation areas. The EA concludes that no interference with any potential recreation activities is expected by the presence or construction of the transmission line.[37] Consequently Route CW10 and Route CW5 are indistinguishable based upon this routing criterion.

PURA § 37.056(c)(4)(C) Historic and Aesthetic Values

The EA provides the proximity of historical sites to the ROW of each of the alternate routes. As demonstrated on Table 7-1c of the EA, Route CW5 impacts three historical sites whereas Route CW10 impacts one. One of the historic cites noted by ETT for Route CW5 is the

---

[35] Staff Ex. 1 at 27.

[36] ETT Ex. 1A, Table 7-1c

[37] ETT Ex. 1, the EA at 4-24.

official State of Texas Historic Marker for Fort Phantom Hill. This Official Texas historic marker would be within the ROW of Proposed Link C11 on ETT's preferred route.[38] In addition to the three historical sites affected by Route CW5 as identified in Table 7-1 of the EA, Route CW5 will bisect the property on which the historical site of Fort Phantom Hill is located. The Texas Historical Commission operates a statewide Heritage Trials program to enable people to learn about, and be surrounded by, local customs, traditions, history and culture of the different regions of the state.[39] This program includes Fort Phantom Hill.[40] Fort Phantom Hill was one of the military outposts established by the US Army shortly after Texas achieved statehood to protect the westward-moving frontier of Texas settlements.[41] Duff/Alexander Group witness Mike Alexander owns the property on which the fort is located and testified that his family has maintained the site on their property for generations and has established a foundation so that future generations can enjoy the fort and its artifacts.[42] The Alexander property where Fort Phantom Hill is located would be bisected by Route CW5 such that visitors to the fort would likely have to travel beneath the line and have it dominate the views from the fort, rather than be able to enjoy the site in somewhat the state that it existed when constructed in the 1850s.[43]

Aesthetic values are defined by the EA as "the subjective evaluation of natural beauty in the landscape."[44] Staff witness Brian Almon testified that the aesthetics of the study area will be negatively affected to varying degrees regardless of which route is selected for the Clear Crossing to West Shackelford project, noting that some aesthetic effects will be temporary and others permanent.[45] Though aesthetic values are somewhat subjective, some objective

---

[38] *Id.* at 4-34-35. The other two historic sites crossed by Route CW5 are stone-lined cist "hearth" sites.

[39] *Id.* at 2-56.

[40] *Id.*

[41] Duff/Alexander Group Ex. 1 at 6.

[42] *Id.*

[43] *Id.*.

[44] ETT Ex. 1, the EA at 2-56.

[45] Staff Ex. 1 at 32-33.

conclusions can be drawn by observing the features that are currently present on the land that would be impacted by Routes CW5 and CW10. As described in the "community values" section above, there are two wind farms in the eastern section of the study area where much of Route CW10 would be located. The presence of these features indicates that the aesthetics of the area have already been impacted in a manner consistent with the impacts of Route CW10.

This analysis is confirmed by the testimony of representatives for Buck Nail Ranch, Rio Ranch 42, the Swenson Family, and by Mr. Matthews, which indicates that the aesthetic values of their property is already diminished due to the visibility of the wind turbines in the area.[46] The western portion of the study area, however, is not impacted by wind towers and thus any aesthetic impacts of Route CW10 would be new and unique to the area. While the Duff/Alexander Group does not disagree with Staff witness Almon that the aesthetic impacts of the Clear Crossing to West Shackelford transmission line will be negative regardless of which route is selected, it is preferable to incur such impacts in areas that are already aesthetically impacted by wind power development.

PURA § 37.056(c)(4)(D) Environmental Integrity

As in every CREZ CCN docket, TPWD has offered an environmental analysis from a perspective neutral to individual landowner interests. To preserve environmental integrity TPWD recommends constructing transmission lines in areas that are already disturbed and to avoid areas that are subject to deleterious effects from the clearing of ROW or the fragmentation of presently non-fragmented wildlife habitat.[47] The eastern portion of the study area that would be impacted by Route CW10 is presently impacted by the presence of two wind farms and, the record evidence demonstrates that some tracts in the eastern portion of the study area have disturbed land surface due oil and gas development.[48] The eastern portion of the study area also

[46] Tr. at 59, 72, 87, and 160 respectively.

[47] Staff Ex. 1 at bates 66.

[48] See for example Miller Family Ex. 1 at 3 and Waggoner Ex. 1 at 4.

contains the proposed reservoir site for the City of Abilene. As pointed out in Mr. Hughes' testimony the incremental environmental impact of a transmission line in this area is minimal compared to the environmental impacts of a reservoir and multiple wind farms.[49] In addition to the aesthetic impacts of the turbines as discussed above, the presence of the wind farms indicates that the environment in this part of the study area is already fragmented and disturbed by structures greater in size and similar in environmental effect to the proposed transmission line.

The EA lists a number of environmental factors in ETT Exhibit No. 1A, which compares the impacts of the proposed routes. There is one important environmental factor in which Route CW10 greatly outperforms Route CW5, however, and that is the number of times each route crosses the Clear Fork of the Brazos River.

TPWD recommends minimizing river crossings because of the habitat fragmentation impact on the riparian woodlands and wetlands that are often in close proximity to rivers and because the clear cutting of the ROW for the line can increase detrimental erosion on the banks of a river.[50] Route CW5 crosses the Clear Fork of the Brazos River three times on Duff/Alexander Group members' property; the property of Mr. Perry Scott would bear one crossing and Mr. John Sawyer's single piece of property would bear a river crossing twice.[51] The Clear Crossing to West Shackelford transmission line must cross the Clear Fork of the Brazos River at least once to connect the Clear Crossing substation to the West Shackelford station because the river traverses the area between the two points horizontally. TPWD recommended that the river be crossed only once.[52] Route CW5 also crosses a tributary to the Clear Fork of the Brazos River, Deadman Creek. Duff/Alexander Group witness Dr. Duff

---

[49] Duff/Alexander Exhibit 5 at 7.

[50] ETT Ex. 1, the EA at 1-13 (PBS&J discussing mitigation for erosion around stream banks).

[51] See ETT Ex. 15 (Intervenor Ownership Map).

[52] Staff Ex. 1 at bates 68. (Staff witness selected route CW7 which according to Table 7-1c only has one river crossing.)

explained the importance of Deadman Creek, noting that it "flows about 24 million gallons per day, every day, and never goes dry, which is a rarity in West Texas." [53]

Routes that would cross the Clear Fork of the Brazos River is also important to consider because the River is a potential habitat for the Brazos River Snake, a small, non-venomous reptile native to approximately 182 miles of the upper Brazos River basin.[54] The Brazos River Snake is one of only three endangered or threatened species identified by the EA to have potential habitat in the study area.[55] This rare snake has been sited on property in the western portion of the study area.[56] Route CW10 minimizes the number of crossings of the Clear Fork of the Brazos River, as recommended by TPWD, and thus better complies with the factor of environmental integrity than Route CW5 which crosses the River three times. Route CW10 is also superior environmentally due to its location in a portion of the study area that is already disturbed by wind turbines and oil and gas activities, both of which require electricity to operate. [57]

PURA § 37.056(c)(4)(F) Effect of Granting the Certificate on the Ability of this State to Meet the Goal Established in Section 39.904(a) of PURA

The selection of Route CW10 best complies with the goal of PURA § 39.904(a) and will enhance the state's ability to facilitate the generation and delivery of renewable energy. As the Commission found in Docket No. 38290, the location of wind generation relative to the route of a CREZ transmission line is a relevant consideration in a CREZ CCN docket.[58] In that case, the Commission determined that, in addition to allowing wind developers to more efficiently interconnect with the line, routing the line near the generators "would also be relevant to

---

[53] Duff/Alexander Ex. 3, Direct Testimony of Dr. James Duff at 11.

[54] ETT Ex. 1, the EA at 2-33.

[55] *Id.* at 4-11.

[56] Duff/Alexander Ex. 3 at 7.

[57] Tr. at 416.

[58] Docket No. 38290, PFD at 39.

environmental and land use issues and overall cost by reduction of length of interconnection lines."[59] In the relevant portion of the Docket No. 38290 proposal for decision adopted by the Commission, the Commission recognized the ripple effect benefits of placing a transmission line close to wind generation sources and acknowledged its importance towards the overall facilitation of generation of renewable energy. See Attachment 1, which illustrates the CREZ wind zones clearly, indicates that the eastern portion of the study area has the most potential for efficient wind energy production as it is within the Central CREZ.[60] Selection of Route CW10 is preferable to Route CW5 as the route provides the opportunity to place a transmission line in an area that already has two wind farms and is likely to have further wind development in the future. This also places Route CW10 in a better position to reap all of the financial and environmental benefits in furtherance of the State's renewable energy goals in PURA § 39.904(a).

P.U.C. SUBST. R. 25.101(b)(3)(B) Cost

The estimated costs for the alternate routes between the Clear Crossing and West Shackelford substations ranges from approximately 55 to 65 million dollars.[61] Route CW10 has an estimated cost of $64.7 million and Route CW5 has an estimated cost of $56.2 million. Thus, the difference between the estimated costs of the routes amounts to $8.5million, or only 3.3% of the total cost of the CREZ projects in ETT's Application.

It is important to recognize that these preliminary cost estimates do not incorporate any mitigation measures that might be required. Mr. Van Zandt, who testified on behalf of several intervenors with properties that would be impacted by Route CW10, proposed conveniently route modifications to Route CW5 to attempt to mitigate some of the most negative environmental aspects of the route. Interestingly, not one of Mr. Van Zandt's clients would be

---

[59] *Id.*

[60] Attachment 1.

[61] ETT Ex.1 Attachment 9; Route CW1 has the highest estimated cost ($64,971,000) while Route CW15 has the lowest estimated cost at $55,215,000.

affected by Route CW5 or Mr Van Zandt's major route modifications, nor has any landowner or intervenor affected by Mr. Van Zandt's proposal agree to the major modifications.[62] The Van Zandt modifications would involve "angling off Route CW5 in a southeasterly direction from a point more than one half north of the Clear Fork Crossing"[63] to thus narrowly avoid crossing the Clear Fork of the Brazos River more than once as well as making effort to parallel property boundaries.[64] Staff witness Mr. Almon testified that these modifications are not a slight realignment and would require the addition of a number of angle structures, each of which adds significant costs to the route.[65] ETT presented evidence that Route CW5, employing Mr. Van Zandt proposed modifications, would cost $61,648,000, diminishing the cost discrepancy between Routes CW5 and CW10 to $3.1 million without truly remedying any of the problems with the route as proposed by ETT.[66]

If Route CW5 were modified to more completely comply with P.U.C. SUBST. R. 25.101(b)(3)(B)(iii) and follow the property boundaries of the small properties it currently bisects, the cost of the route would be even greater. In recent CREZ proceedings the Commission has included an ordering paragraph allowing CCN applicants to make more than minor modifications in order to accommodate landowner preferences when a transmission line impacts their property while not following a property line or an existing compatible ROW.[67]

---

[62] Tr. at 143-144.

[63] Rio 42 Ranch Ex. 2 (Direct Testimony of Mr. Van Zandt) at 18.

[64] *Id.*

[65] Tr. at 211.

[66] Route CW5 with modification as compared to Route CW10 is only approximately 3 million dollars cheaper.

[67] *Application Of LCRA Transmission Services Corporation To Amend Its Certificate Of Convenience And Necessity For The Proposed McCamey D To Kendall To Gillespie 345-Kv Crez Transmission Line In Schleicher, Sutton, Menard, Kimble, Mason, Gillespie, Kerr And Kendall Counties,* P.U.C. Docket No. 38354 (Jan. 24, 2011) Ordering Paragraph No. 6: "LCRA shall be permitted to deviate from the approved route in any instance in which deviation would be more than a minor deviation, but only if the following two conditions are met: First LCRA TSC shall receive consent from all the landowners who would be affected by the deviation regardless of whether the affected landowner received notice of or participated in this proceeding. Second, the deviation shall result in a reasonably direct path towards the terminus of the line and not cause an unreasonable increase in cost or delay the project."

First note, Mr. Van Zandt's proposed modifications do not reflect any consent by any affected landowners. Second, if such modifications were applied to Route CW5 to follow the property boundaries of Dr. Duff, Mr. Alexander, Mr. Scott, Mr. Hall, Mr. Sawyer, and Mr. Hailey, a rough estimate of the additional cost – considering only the additional turning structures required at the cost estimates stated in the Application – would be $12 million.[68]

When the true costs of Routes CW5 and CW10 are compared as they would likely be constructed after including landowner modifications, Route CW10 is a cost effective routing alternative that is not significantly more expensive than Route CW5 and well within the range of alternate routes proposed by ETT. Route CW10 should not be rejected on the basis of cost.

P.U.C. SUBST. R. 25.101(b)(3)(B) Engineering Constraints

Consideration of the entirety of the evidence identifies two potential engineering constraints in the Clear Crossing to West Shackelford study area.[69] First is the crossing or paralleling of other 345-kV CREZ transmission lines, which have electric grid reliability issues.[70] Crossing other high voltage lines also presents engineering constraints due to the higher towers needed to accomplish the crossing. ETT witness Paul Hassink testified that the crossing or paralleling of the 345-kV CREZ transmission lines should be avoided when possible.[71] The study area in this case is impacted by the Lone Star 345-kV double-circuit CREZ line approved in Docket No. 38230.[72] As shown on ETT Ex.10 at PH-2R (attachment to ETT's Ex.10), the Lone Star line enters the study area to the north of U.S. Hwy 180 and proceeds southward along the boundaries of the Chimney Creek and Buck Nail Ranch properties. ETT's preferred route, Route CW5, will cross the Lone Star 345-kV Line as approved in Docket No. 38230 at least

---

[68] This estimate is based upon a count of approximately 20 necessary ninety degree turning structures each valued at approximately $600,000 as stated Tr. at 389.

[69] See generally ETT Ex. 4 and City of Abilene Ex. 1 at 9.

[70] See generally ETT Ex. 4.

[71] ETT Ex. 4 at 6.

[72] The Lone Star Case.

once. Staff's recommended Route CW11 also crosses the Lone Star line at least once. Route CW10 avoids crossing or paralleling the Lone Star line.

Though the EA states that Route CW10 could cross an Oncor CREZ line depending of which route is ultimately selected for that project, the route that was approved by the Commission at its February 3, 2011 Open Meeting for the Oncor CREZ line will not be crossed by Route CW10.[73]

The other potential engineering constraint identified in the study area is the proposed Cedar Ridge Reservoir which *may* be constructed by the City of Abilene in the future. However, ETT has designed Route CW10 in a manner that ensures that the reservoir should not be considered an engineering constraint that would impede the construction of Route CW10.[74] There is no guarantee the reservoir will be built, as numerous state and federal permits are required for such a project and, even if those permits are issued, the City projects that the project will not be completed until 2029 at earliest.[75] Abilene asserts that the eastern routes should not be used since they would require structures within a future floodplain. However, as pointed out in Mr. Hughes' testimony, transmission lines are often built within floodplains and the disadvantages of building within an existing floodplain do not apply in this instance since the line would be built approximately 20 years before the area could potentially become a floodplain.[76]

Abilene further asserts that the aesthetic impacts of the future reservoir should be considered when evaluating the different routes. Again, as pointed out in Mr. Hughes' testimony, consideration of potential, future, speculative aesthetic impacts would place an

---

[73] *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,* Docket No. 38517, Proposal for Decision at 6 (January 4, 2011).

[74] ETT Ex. 9 at 4; Duff/Alexander Group Ex. 5 at 4-5.

[75] ETT Ex. 22 at City of Abilene's Reponse to RFI 1-7 at 9-10; , Tr. at 258; and Duff/Alexander Group Ex. 5 at 4-5.

[76] Duff/Alexander Ex. 5 at 5- 6.

impossible burden on any entity seeking a CCN as well as, and importantly to the Chairman and Commissioners.[77] Further, both ETT witness Mr. Tucker and Duff/Alexander Group witness Mr. Hughes testified that Route CW10 can be engineered to mitigate being negatively impacted by the reservoir construction and that the area of the reservoir that the line would traverse can be spanned without disturbance to either the reliable function of the line or the use of the reservoir.[78]

P.U.C. SUBST. R. 25.101(b)(3)(B)(i)-(iii) Using or Paralleling Existing Compatible Rights-of-Way Including Property Lines

ETT Witness Mr. Johnson succinctly testified to two factors the Commission should consider when evaluating the impact of a transmission line on a property: the size of the property, and its proximity to a substation.[79] As discussed above, a review of ETT Exhibit 15 demonstrates that the tract sizes in the western portion of the Clear Creek to West Shackelford study area are significantly smaller than those in the east.[80] Failure to follow property boundaries has a major impact on the smaller properties located in the western portion of the study area.[81] Each member of the Duff/Alexander Group is bisected by the line, as shown on Attachment 3.[82] Link C16b of Route CW5 bisects the properties owned by Dr. Duff and Mr. Hailey in the same way Lone Star's proposed Link J would have in Docket No. 38230, though that link was rejected by the ALJs and Commission. In deciding not to select routes including this link, the ALJs observed that the link "presents serious problems for small landowners, specifically bisecting the small tract of land owned by Cheryl Howerton [and] also bisects the

---

[77] Duff/Alexander Ex. 5 at 6.

[78] ETT Ex. 3 at 4-5 and Duff/Alexander Group Ex. 5 at 5.

[79] ETT Ex. 8 at 21.

[80] See for example Landowner Maps Issued in ETT's Application ETT Ex 15.

[81] Duff/Alexander Group Ex. 4 at 6.

[82] Duff/Alexander Group Ex. 1 at 8-11.

Henry P. Robinson tract and the larger ranch of Dr. Duff".[83] The Commission determined that links that follow property boundaries have significant advantages over those that do not.[84] Route CW5's link c16b has effectively been considered in the CREZ routing process and rejected due to its effects on the relatively small tracts in that portion of the study area. The Duff/Alexander Group urges that it be rejected again and that Route CW5 not be selected for construction.

P.U.C. SUBST. R. 25.101(b)(3)(B)(iv) Prudent Avoidance

Prudent avoidance is defined by PUC SUBST. R. 25.101(a)(4) as "the limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort." One measure of prudent avoidance can be inferred from the number of habitable structures that are within 500-ft of the centerline of the transmission line ROW for lines of greater than 230-kV. Route CW10 affects three habitable structures whereas six are within 500-ft of the centerline of CW5.[85] One of the habitable structures impacted by Route CW5 is the residence of Duff/Alexander Group member Mr. Perry Scott whose habitable structure is just 330 feet from the proposed centerline. His testimony demonstrates that the line would cross the Clear Fork of the Brazos River directly in front of his home.[86] Route CW5 also traverses within two habitable structures that are 130 feet from the centerline.[87] In addition, Route CW5 also crosses in front of homes on the Duff property.[88] These habitable structure impacts support selection of Route CW10.

---

[83] The Lone Star Case PFD.
[84] The Lone Star Case
[85] ETT Ex. 1, the EA at 7-84 and 7-94.
[86] Duff/Alexander Group Ex. 4 at 6.
[87] ETT Ex. 1, the EA at 7-84 and 7-94.
[88] Duff/Alexander Group Ex. 3 at 12.

7. Are there alternative routes or facility configurations that would have a less negative impact on landowners? What would be the incremental cost of those routes?

When all of the evidence is considered objectively, the negative impact to properties that would be bisected by Route CW5 is far greater than the negative impact of the presence of a transmission line on the properties that would have Route CW10 along their property lines. As demonstrated by the testimony of members of the Duff/Alexander Group, the small tracts owned along Route CW5 are primarily used as residences, retirement properties, and areas of recreation, aesthetic, and historical value. By contrast, the large properties that would be impacted by Route CW10 – primarily as it parallels their boundaries – are primarily rangeland with high potential for future wind development, as most dramatically illustrated by their presence within the Central CREZ designated by ERCOT.

A review of ETT's Ex. 15 demonstrates that a majority of the properties along Route CW5 are small and have boundaries that are not paralleled by the route as proposed by ETT. In Docket No. 38230, a route for the Lone Star line that was substantially similar to Route CW5 was rejected by the ALJ and the Commission because it bisected small properties.[89] Duff/Alexander Group witness Mike Alexander testified that his property with the Fort Phantom Hill artifacts would be bisected[90] which would detract from the aesthetics of the historical site and the enjoyment of the general public when visiting the fort. Dr. Duff, another member of the Duff/Alexander Group, testified that his land too would be bisected[91] and that he and his family would have to drive under the line to access their property and view the transmission line from their recently constructed home.[92] Dr. Duff's goal of building a private airstrip on his property to make it easier for him provide air transportation to those with medical emergencies will never

---

[89] The Lone Star Case.

[90] Duff/Alexander Group Ex. 1 at 6.

[91] Duff/Alexander Group Ex. 3 at 4.

[92] *Id.* at 12.

come to fruition with the construction of the transmission line on Route CW5.[93] The transmission line also would require clearing of the environmentally sensitive habitat of Deadman Creek.[94] Mr. Hailey, a Duff/Alexander Group member, testified that the bisection of his property would severely impair hunting operations on his property that are a primary source of his income.[95]

Unlike the western properties bisected by Route CW5, the properties to the east of the study area that would be impacted by Route CW10 are large with property boundaries that are generally paralleled by the route as proposed and could be modified to further parallel property boundaries with relatively few additional turning structures. This is confirmed by a review of ETT Exhibit 15 and the testimony of parties with eastern properties. John Eric Swenson on behalf of the Swenson Family testified that their property was approximately1,800 acres.[96] William Randolph Rogers, testifying on behalf of Rio 42 Ranch, stated the ranch was approximately 2,807acres.[97] John Matthews for Del Mar River Mouth, LP verified at the hearing on the merits that the ranch is more than 13,400 acres.[98] Henry Paup and T. Edgar Paup in their pre-filed direct testimony listed their ranch as 14,006 acres.[99] Finally, J. Todd Thomas on behalf of the W.T. Waggoner Estate described the property as 535,000 acres in size, making it the largest ranch in the United States within one fence.[100] The proportional impact to individual landowners whose property would be bisected is much greater than the impact of following property lines on these larger tracts.

---

[93] *Id.* at 11.

[94] *Id.* at 13.

[95] Duff/Alexander Group Ex.2 at 4, 6.

[96] Tr. at 86.

[97] Tr. at 71.

[98] Tr. at157.

[99] Chimney Creek Ex 1 at 2.

[100] W.T. Waggoner Estate Ex. 1 at 5.

8. 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?

b. Have the accommodations to landowners diminished the electric efficiency of the line or reliability?

One modification was proposed for Route CW5 by Mr. Van Zandt, but he did not propose this on behalf of those landowners who would be impacted by the route and the Duff/Alexander Group does not believe that this modification will address its concerns.[101] The costs of Mr. Van Zandt's proposal are discussed in the routing section above. No other modifications have been proposed by the parties to this case and Duff/Alexander Group does not propose any at this time.

9. If this application proposes segments of routes that travel parallel to existing 345-kV transmission lines for some portions of the proposed routes but do not parallel existing 345-kV transmission lines for other portions of the proposed routes, what circumstances justify the disparate treatment?

In general, crossing or paralleling two CREZ transmission lines could present significant reliability concerns that should be avoided where possible.[102] To the extent feasible, ETT encourages the Commission not to select a route in this case that crosses or significantly parallels a CREZ line route it has approved in another proceeding."[103] The routes advocated by ETT (Route CW5), Staff and PBS&J (Route CW11), and TPWD (Route CW7) uniformly present the flaw of paralleling or crossing Lone Star's recently approved CREZ line as shown on the insert

---

[101] Tr. at 143-144.

[102] ETT Ex. 4 at 6.

[103] *Id.*

on page 6 of this brief.[104] The risk created with crossing or paralleling high voltage transmission lines with similar electric grid functions is that a single event could take both lines out of service and thus create a "serious impact on the reliability of the ERCOT grid."[105] Routes CW5, CW7, and CW11 would each cross the Lone Star Line once.[106] Route CW10 would relieve the reliability concerns associated with crossing the Lone Star line. In instances when paralleling transmission lines does not create electric grid reliability concerns, such as when a CREZ line parallels a lower-voltage non-CREZ line, paralleling presents a positive routing feature because it results in less wildlife habitat fragmentation and consolidates negative aesthetic impacts into a single area. Route CW10 parallels existing transmission lines for over 25% of its total length.[107] From a reliability standpoint, Route CW10 is the best choice as it avoids the potential reliability concerns of crossing the Lone Star line while taking advantage of existing transmission line ROW corridors for a substantial portion of its length and thus achieving the environmental and aesthetic benefits of paralleling.

10. If this application does not propose any segments of routes that travel parallel to existing 345-kV transmission lines, why not?

See response to issue 9.

11. What are the potential ramifications to system reliability if 345-kV transmission lines proposed in this application are sited adjacent to other 345-kV transmission lines?

See response to issue 9.

---

[104] Attachment PH-2R to Paul Hassink's rebuttal testimony.

[105] ETT Ex. 10 at 5.

[106] *Id.*

[107] Calculation based upon ETT Ex. 1A.

12. Should there be additional reliability considerations for transmission lines proposed in this application for the Panhandle that parallel or cross transmission lines from other power regions?

Not applicable to this proceeding.

IV. Conclusion

The Duff/Alexander Group, many members of which are participating in their second CREZ CCN proceeding, are a group of landowners joined together to protect their community interests by urging that the Clear Crossing to West Shackelford transmission line be routed in a manner that is most compatible with the line's community values, historical, aesthetic, land-use, and environmental impacts. The Duff/Alexander Group believes that when evaluated in the context of the routing criteria in PURA and the Commission's Rules, the record evidence strongly supports selection of Route CW10 rather than ETT's preferred Route CW5.

Route CW10 impacts properties in the eastern section of the study area that are in close proximity to two wind farms, and have the strong potential for further development to produce wind energy. Route CW10 generally follows the property lines on these tracts, or can be reasonably modified to do such. Route CW5, by contrast, impacts smaller properties – bisecting many of them as currently routed, is in closer proximity to twice as many habitable structures, crosses the Clear Fork of the Brazos River three times, and impacts three sites of historical importance as well as the property on which Fort Phantom Hill is located and has been preserved by Duff/Alexander Group member Mike Alexander and his preceding generations.

Route CW10 most completely complies with the relevant routing factors of PURA and the Commission's rules, would traverse areas more compatible with a transmission line in terms of aesthetic impact and land-use characteristics, and will avoid bisecting small properties in environmentally and historically sensitive areas. Route CW10 presents the best option for a difficult routing decision and the members of the Duff/Alexander Group respectfully urge the ALJ to recommend its selection in this case.

Respectfully submitted,

Shannon K. McClendon
State Bar No. 13412500
shannonk@webmclaw.com
Devon B. McGinnis
State Bar No. 24060257
mcginnis@webmclaw.com

WEBKING McCLENDON, P.C.
1301 Nueces Street, Suite 200
Austin, Texas 78701
(512) 651-0515 telephone
(512) 651-0520 facsimile

ATTORNEYS FOR DUFF/ALEXANDER GROUP

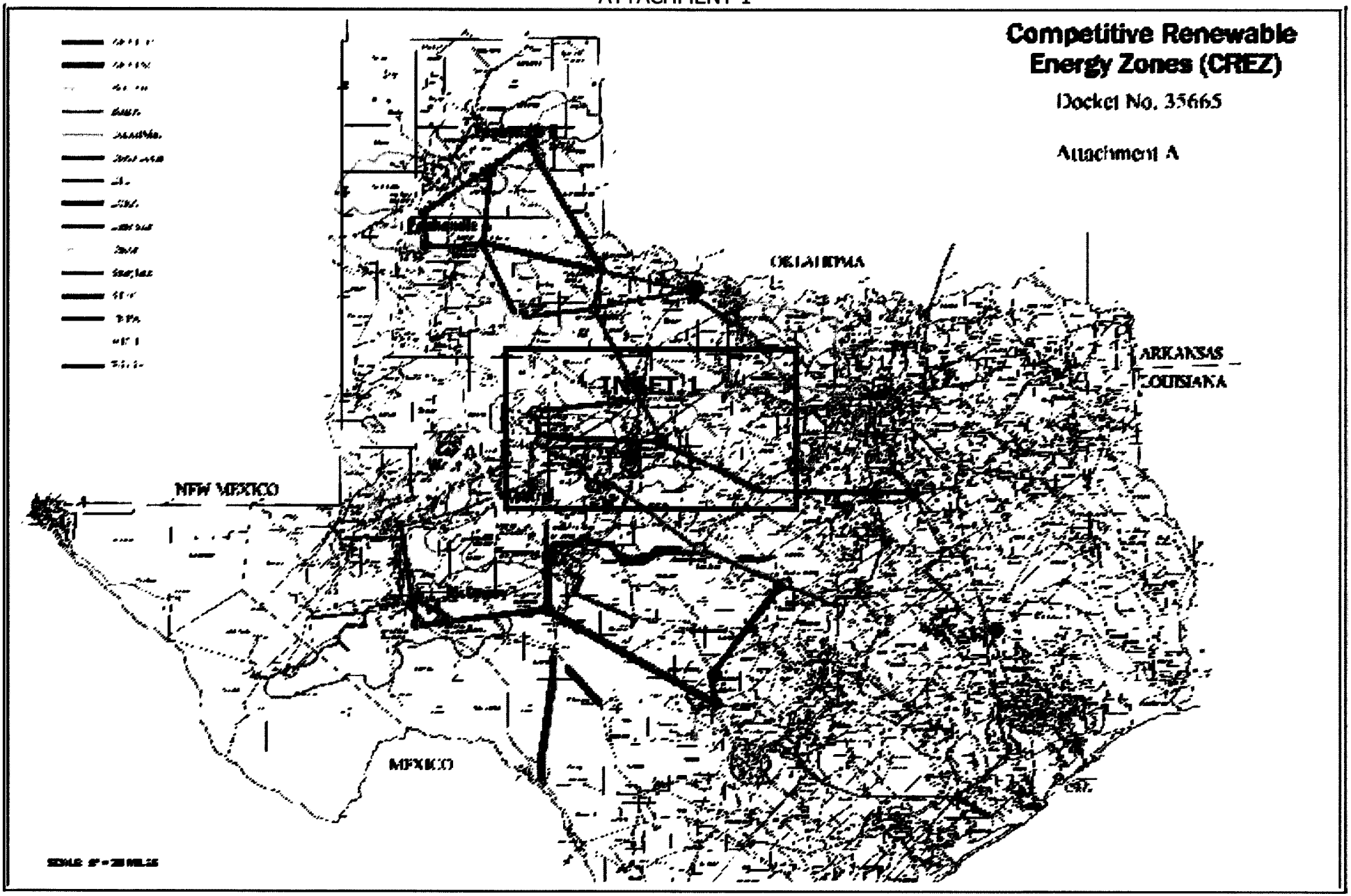
CERTIFICATE OF SERVICE

I certify that a copy of the above has been served in accordance with the procedural orders in this proceeding on this 7th day of February, 2011.

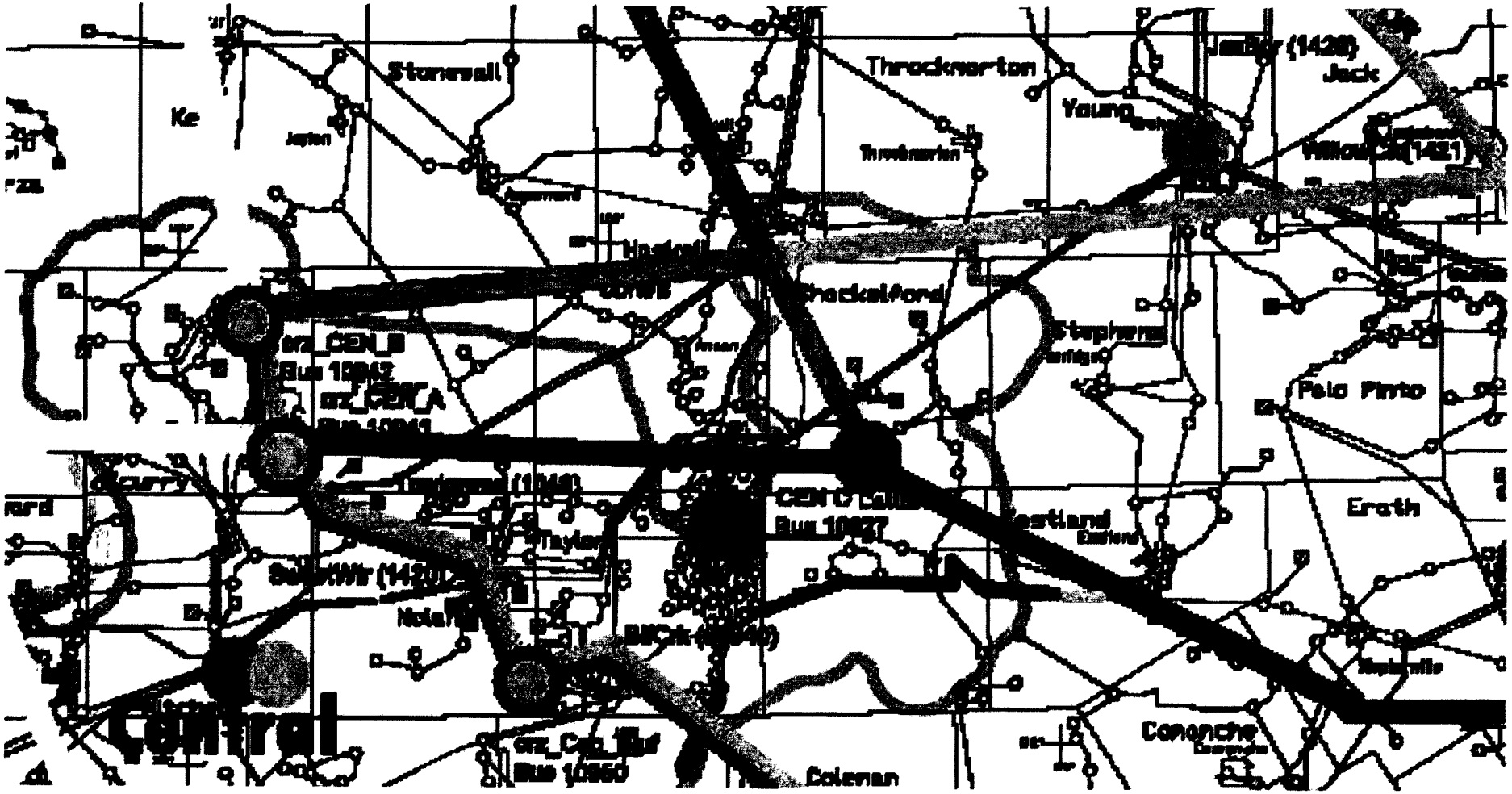
Matt Lopez

ATTACHMENTS

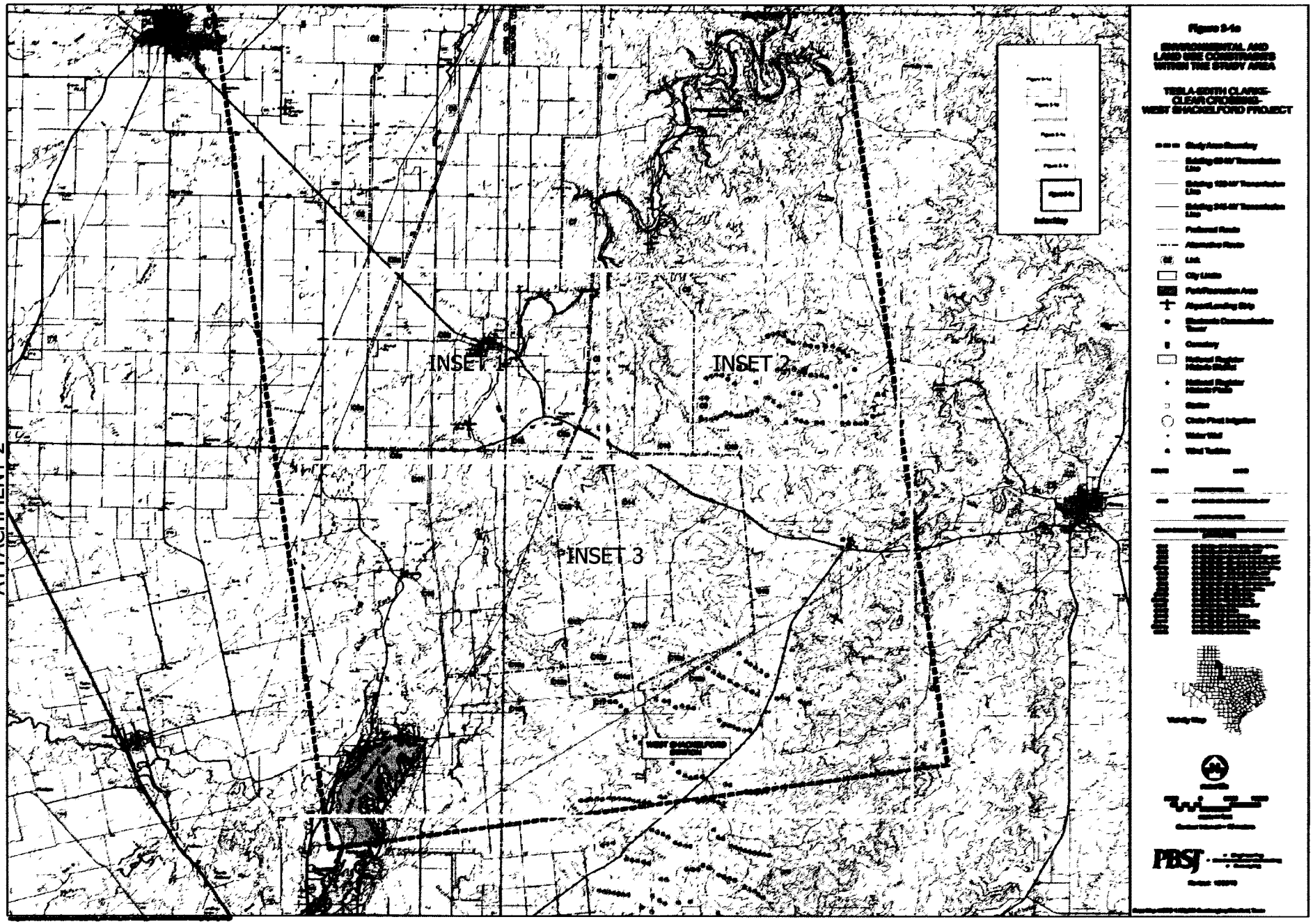
ATTACHMENT 1



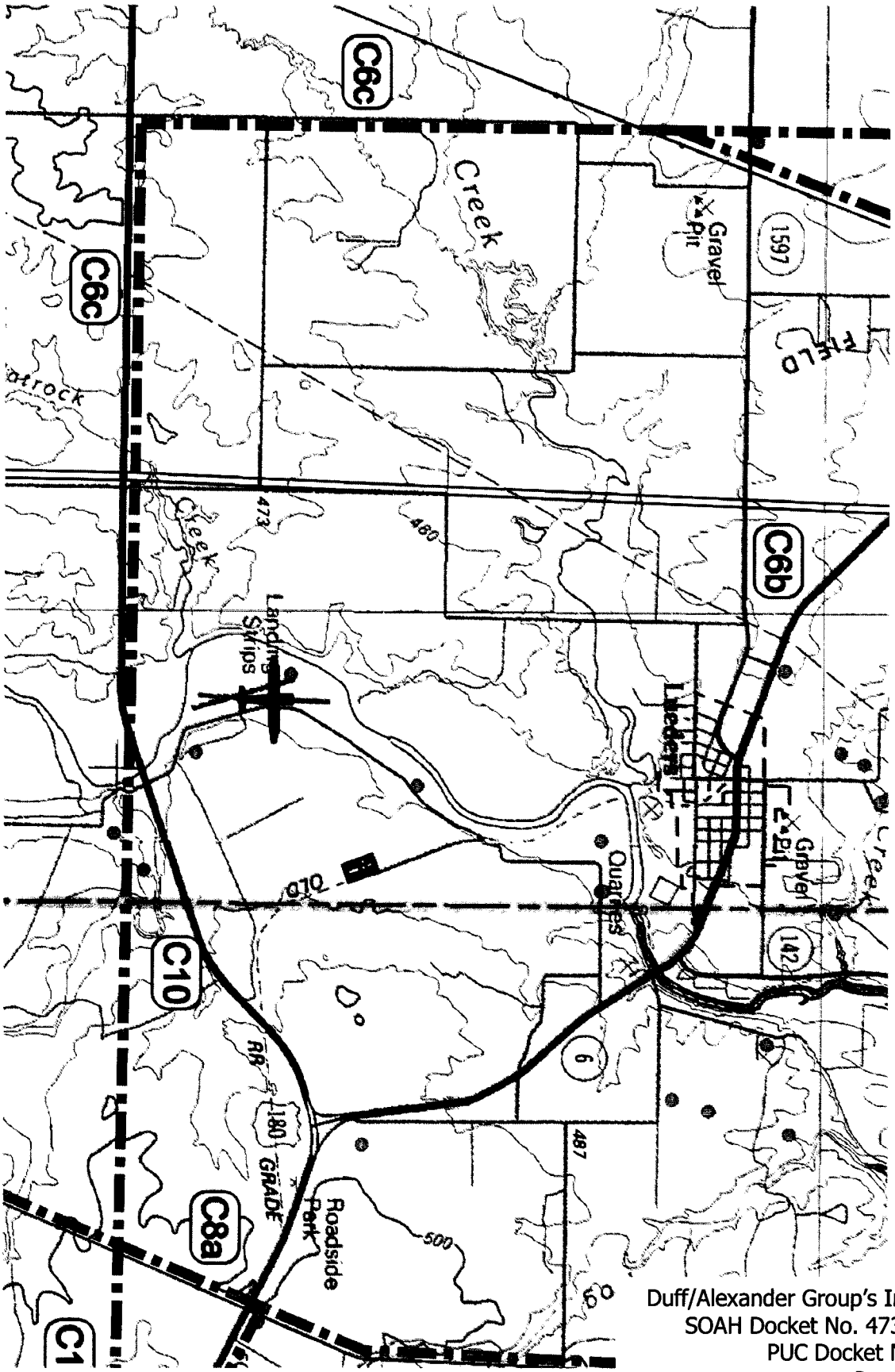
ATTACHMENT 1
INSET 1



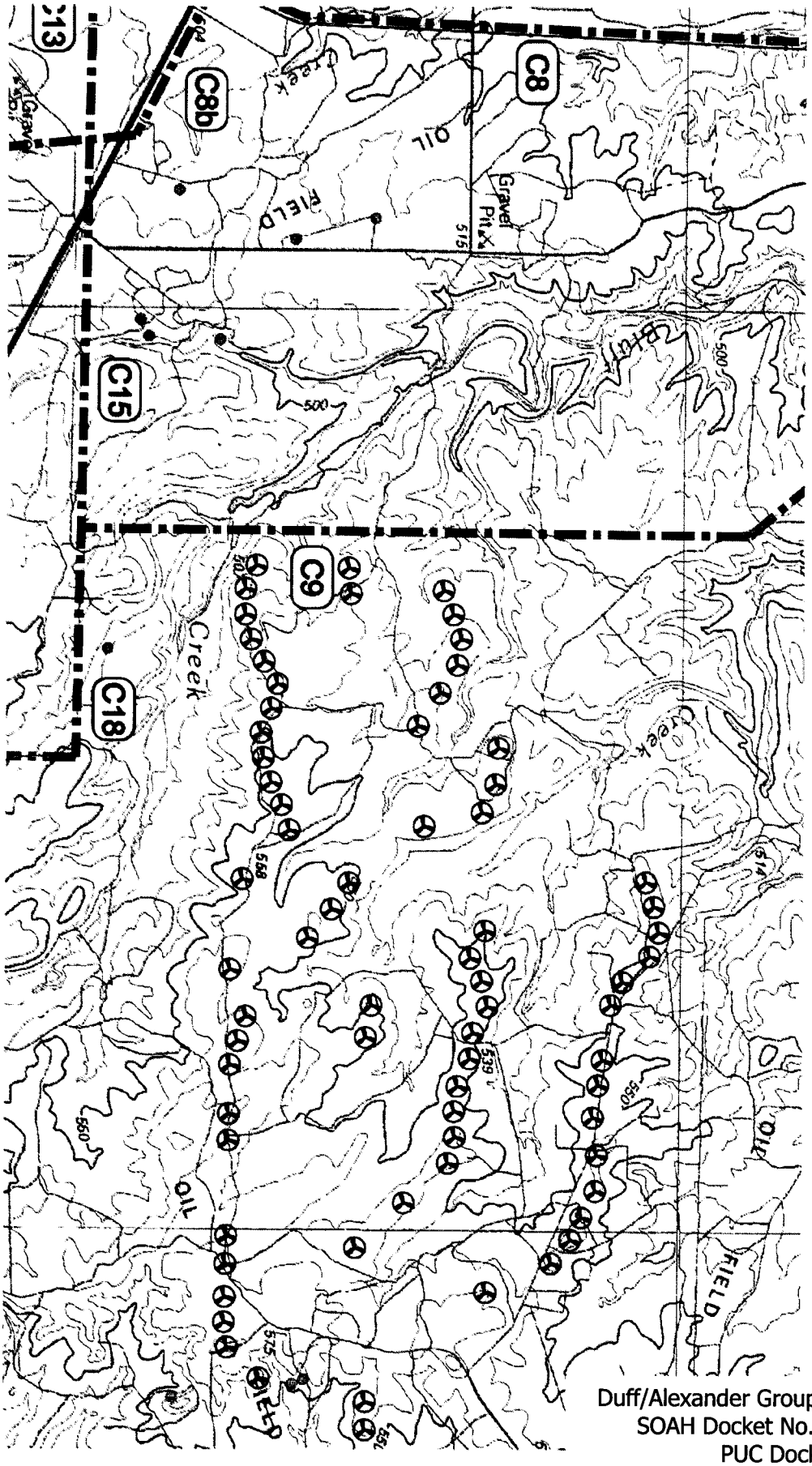
ATTACHMENT 2



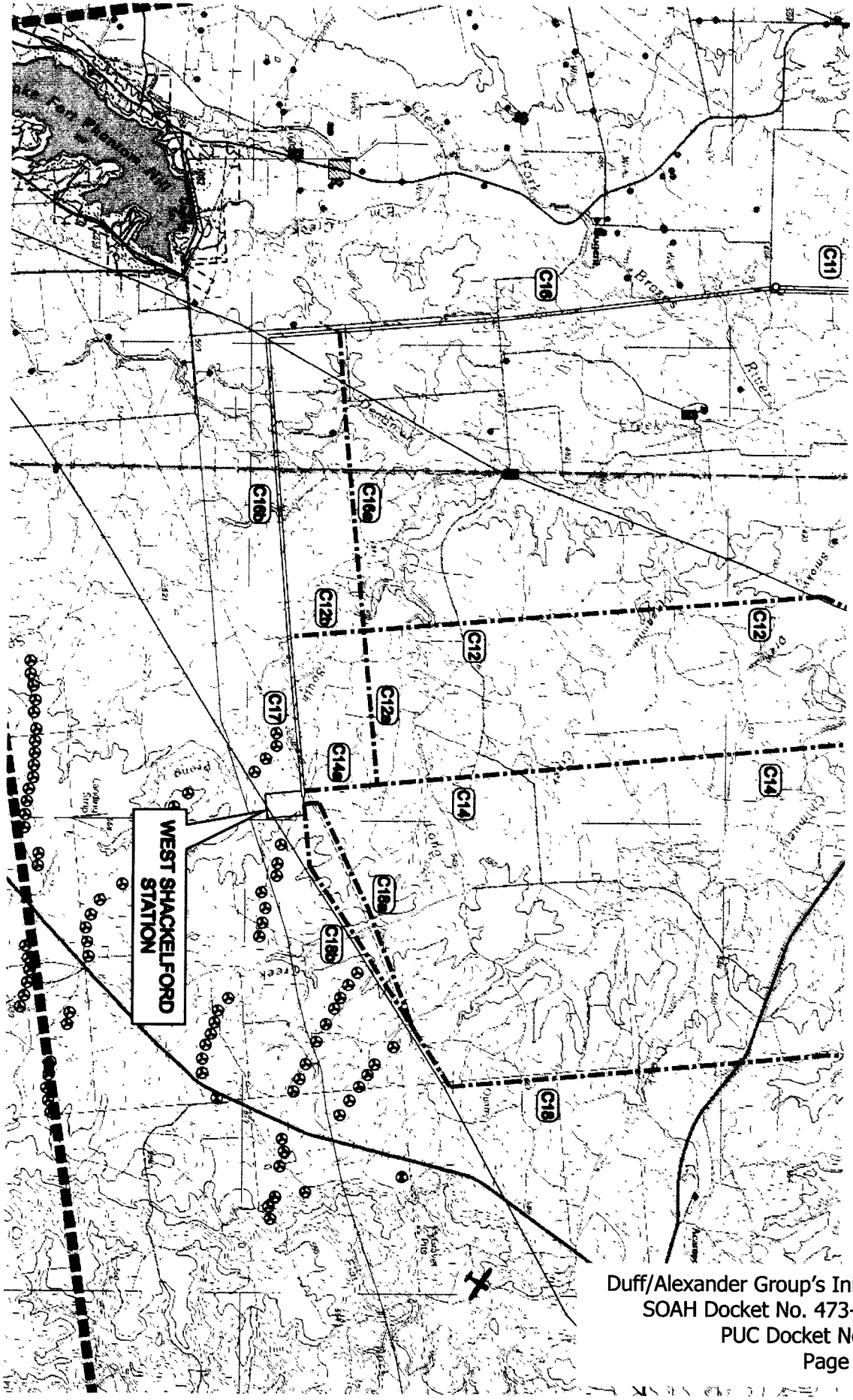
ATTACHMENT 2
INSET 1



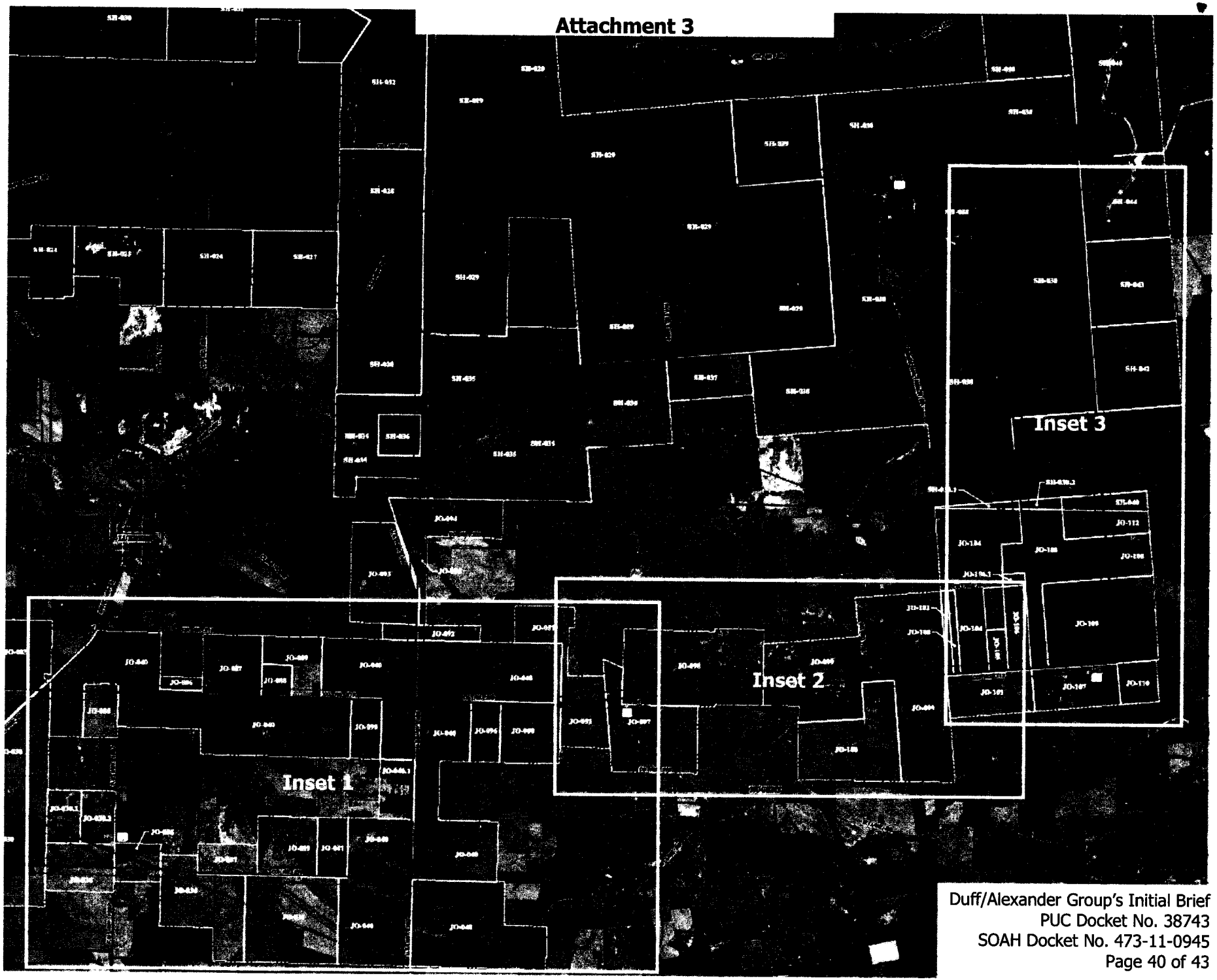
ATTACHMENT 2
INSET 2



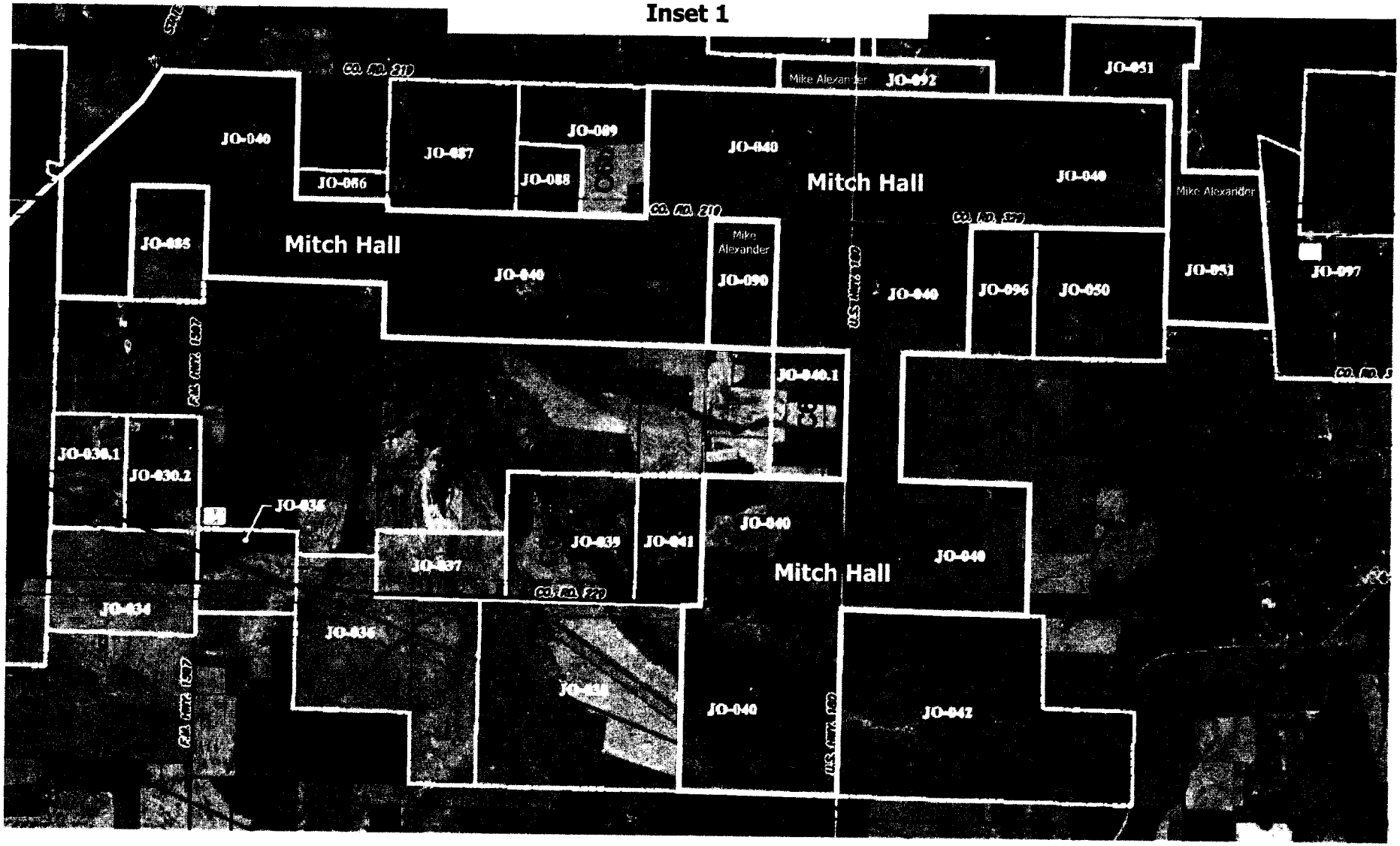
ATTACHMENT 2
INSET 3



Attachment 3



Attachment 3
Inset 1



Attachment 3
Inset 2

Attachment 3
Inset 3