Control Number: 38140

Item Number: 902

Addendum StartPage: 0

PUC DOCKET NO. 38140

APPLICATION OF ONCOR ELECTRIC DELIVERY COMPANY TO AMEND A CERTIFICATE OF CONVENIENCE AND NECESSITY (CCN) FOR A PROPOSED CREZ 345 KV TRANSMISSION LINE WITHIN ARCHER, CLAY, COOKE, DENTON, JACK, MONTAGUE, WICHITA, WILBARGER, AND WISE COUNTIES	§ § § § § § § § § §	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

RESPONSE OF ONCOR ELECTRIC DELIVERY COMPANY LLC TO HENRY FAMILY'S FIFTH REQUEST FOR INFORMATION

TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

Oncor Electric Delivery Company LLC ("Oncor") files this Response to the aforementioned requests for information.

I. Written Responses

Attached hereto and incorporated herein by reference are Oncor's written responses to the aforementioned requests for information. Each such response is set forth on or attached to a separate page upon which the request has been restated. Such responses are also made without waiver of Oncor's right to contest the admissibility of any such matters upon hearing. Oncor hereby stipulates that its responses may be treated by all parties exactly as if they were filed under oath.

II. Inspections

In those instances where materials are to be made available for inspection by request or in lieu of a written response, the attached response will so state. For those materials that a response indicates may be inspected at the Austin voluminous room, please call at least 24 hours in advance for an appointment in order to assure that there is sufficient space and someone is available to accommodate your inspection. To make

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an appointment at the Austin voluminous room, located at 1005 Congress, Suite B-50, Austin, Texas, or in the Dallas voluminous room, located at 1601 Bryan Street, Dallas, Texas, or to review those materials that a response indicates may be inspected at their usual repository, please call Teri Smart at 214-486-4832. Inspections will be scheduled so as to accommodate all such requests with as little inconvenience to the requesting party and to company operations as possible.

Respectfully submitted,

ONCOR ELECTRIC DELIVERY COMPANY LLC

By: _____

E. Allen Nye, Jr.
State Bar No. 00788134
Daniel J. Kelly
State Bar No. 24041229
Jaren A. Taylor
State Bar No. 24059069

Trammell Crow Center
2001 Ross Avenue, Suite 3700
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ATTORNEYS FOR ONCOR ELECTRIC DELIVERY COMPANY LLC

CERTIFICATE OF SERVICE

It is hereby certified that a copy of the foregoing has been emailed or sent via overnight delivery or first class United States mail, postage prepaid, to the propounding party, on this the 12th day of July, 2010.

_____

REQUEST:

Reference page 3 of Mr. Donohoo's May 21, 2010 affidavit, in which he states: "Oncor instructed its routing consultants to avoid paralleling Oncor CREZ 345 kV lines for the Proposed Transmission Line Project."

Please produce all communications and documents exchanged between Oncor and "its routing consultants" in the last five years concerning paralleling of 345 kV lines, including Oncor CREZ 345 kV lines but also non-Oncor lines and non-CREZ lines.

RESPONSE:

The following response was prepared by or under the direct supervision of Kenneth Donohoo, the sponsoring witness for this response.

Please see attached emails and notes.

ATTACHMENTS:

ATTACHMENT 1: Notes from Larry Reiter regarding Tonkawa-Sweetwater, 2 pages

ATTACHMENT 2: Email from Larry Reiter regarding Brown-Newton, 1 page

ATTACHMENT 3: Notes from Larry Reiter regarding Central A - Tonkawa, 1 page

ATTACHMENT 4: Notes from Larry Reiter regarding Cental B-Central A, 2 pages

ATTACHMENT 5: Email from Larry Reiter regarding Central B - Central A - Tonkawa, 1 page

ATTACHMENT 6: Email from Larry Reiter regarding Newton - Killeen, 1 page

ATTACHMENT 7: Email from Larry Reiter regarding Oklaunion - Bowman, 1 page

ATTACHMENT 8: Email from Larry Reiter regarding Paralleling of Existing Lines, 1 page

ATTACHMENT 9: Notes from Larry Reiter regarding Sweetwater East - Central Bluff, 3 pages

DOCKET 38140 ATTACHMENT 1
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

TONKAWA – SWEETWATER EAST

1.) LINKS C & D, ~~and~~ T, N3, Z, N1, ~~[illegible]~~ and T are not recommended because they parallel and place two major 345 kV lines in a common corridor.

Of the above, the least objectional routes from a reliability view point ~~[illegible]~~ would be

A - B - ~~B~~ C - E - O - ~~Q~~ P - V - X
A - B - C - E - O - Q - S - V - X
A - B - C - D - O - ~~Q~~ P - V - X
~~A - B - T - L - N1 - N2 - N-3 - R - ~~8~~ S - V -~~ X
A - B - C - D - O - Q - S - V - X

~~[illegible]~~

2.) Link Q and R ~~may~~ could possibly replace the existing line rather than be adjacent to it. The Sweetwater may be retired soon, and even if it is not, the generation could be tied to the CREZ line and the loop disconnected from the through line near Bitter Creek.

3.) All the ~~[illegible]~~ 138 KV lines shown out of Tonkawa are actually 345 KV lines.
Fig 3-2a

4.) Page 4-2, ~~[illegible]~~ section 4.1.1, 2nd paragraph, 3rd line – Strike the word 'out'. There

are no 138KV lines tie to Tonkawa.

5. There is a 69KV line that extends along the U P RR from Eskota - Sweetwater to Roscoe to Loraine to Colorado City. The part from Sweetwater to Roscoe & Loraine is not shown on Fig 3-2a and Fig 3-2b.

6.

DOCKET 38140 ATTACHMENT 2
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

Besier, Travis

From: Reiter, Larry
Sent: Friday, September 25, 2009 4:51 PM
To: cjasper1@oncor.com
Cc: Walter.Simmons@oncor.com
Subject: Brown - Newton EA Comments

Charles, following are comments on the Brown – Newton EA for your consideration:

1. The existing 345 kV line from Brown to Comanche Switch is an important transfer path from West Texas. Links A and B place the proposed line, which will be an important transfer path from West Texas also, parallel and adjacent to the Brown to Comanche Switch for extensive distances. Therefore it is recommended, for reliability purposes, that none of the filed routes include Links A and B.
2. Based on the length of exposure of critical lines in the same corridor, the most desirable route leaving Brown would be the southernmost. The next most desirable route leaving Brown, on the same basis, would be the most northern route.
3. There is no prejudice against the northern route leaving Brown, and a route from Bluff Creek to Brown being in the same corridor.
4. It is recommended that the routes into Newton not be parallel and adjacent (for a half mile or more) to the proposed LCRA line into Newton.
5. There is no concern about routes being parallel and adjacent to 138 kV and 69 kV lines in the area.
6. Section 4.0 discusses the Preliminary Alternative Routes. Is the intent here to discuss the Alternative Routes that were selected prior to the Public Input Meetings and subsequent modifications? If so, this section does not do this. It discusses links that were created after the public input meetings as well as links that have subsequently been removed (e.g., Link C, which is discussed on page 4-2 in Paragraph 4.1). Also, Figure 4-1 does not show the links that were present before the Public Input Meeting and subsequent modifications.
7. Figure 3-1b shows that Links T and U come together at one point. There may be a good reason for not doing so (especially at this late date), but this appears to be a logical place for a node and different link designations.
8. Page 4-6, Paragraph 4.3, 5th line should read '(Links X and EEE)' instead of '(Links X and E)'.
9. Page 4-6, Paragraph 4.3, 8th line should read 'heads southeast' instead of 'heads south'.

We will hold this EA until you can pick it up or we can make arrangements to have it delivered to you. Larry.

DOCKET 38140 ATTACHMENT 3
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

Central A - Tonkawa

1.) Links L and J ~~across the K.O~~ parallel an existing 345 KV line are not recommended for reliability ~~[redacted]~~ reasons.

2.) Figure 3-3 Legend has the colors swapped on 4 and 5, This is true for all EA's.

3.) Figure 3-2 Legend ~~should~~ should add 69 KV lines to symbol for ~~[redacted]~~ existing 138 KV lines.

4.) Figure 3-2 Not all transmission lines are shown. Existing wind gathering lines south from Tonkawa are 345 KV lines not 138 KV.

DOCKET 38140 ATTACHMENT 4
TO Henry Family RFI SET 5
QUESTION NO. 5-01

Central B - Centr...

1.) Fig. 3-2a, 3-2b, ~~3-2e~~ do not have any existing 138 & 69 KV lines shown.

2.) Fig 3-2c & 3-2d ~~[illegible]~~ do not have all of existing 138 & 69 KV lines shown.

3.) Legend should ~~be~~ on above figures should be labeled for 138 & 69 KV.

4.) Figure 3-2d has an Inset B. ~~Do~~ Do not know purpose of Inset B as it does not appear to show any more detail and is smaller than area on map.

5.) Figure 3-2b has Inset A which shows existing lines is smaller than area on map. It does however show existing transmission lines, but not existing substations.

6.) Page 4-1, Section 4.1.1 First two sentences Link A+S should be added to equal ~~[illegible]~~ 10 links. Add a sentence about link A

7.) Page 4-2 Section 4.1.2 First two sentences Links A+S should be added to equal 13

Add a sentence about Link A,

8.

DOCKET 38140 ATTACHMENT 5
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

Besier, Travis

From: Reiter, Larry
Sent: Tuesday, September 08, 2009 3:15 PM
To: cjasper1@oncor.com
Cc: kking2@oncor.com; Kevin.Sills@oncor.com
Subject: Central B - Central A - Tonkawa

Charlie, we have only a few comments for your consideration, and they are as follows:

- The new names for the endpoints are introduced up front in Item #4 of the Application, but are not used throughout the filing, I am assuming this was by design.
- Item #4 and Item # 5 of the Application refer to 5000 A and 4998 A, respectively. Both references should be 4998 A.
- Item #11 of the Application states no other utilities will be affected. The alternate routes to the east of Snyder will cross Midwest Coop and AEP facilities, but this may be interpreted as no affect, but we will have to work with them on possible clearances when pulling conductor across their facilities if one of these routes is chosen over the preferred route.
- Attachment No. 3 column headings are not obvious as well as Attachment No. 7 route designations. It would seem that 'CB – CA' would be more appropriate than 'BA – CA' since this is the Central B – Central A line section that is being discussed.
- The notice maps in Attachment No. 7 have a color coding in the legend box to show a designation for the preferred route, but the preferred route is not shown by that color coding on the maps.
- The only negative of the preferred route from a reliability view is the CA – TO link J. This link is less than a mile in length and parallels a corridor that has the Oncor Morgan Creek – Tonkawa 345 kV line in it. The proposed project would be approximately 255 ft from the existing 345 kV line. This is not ideal, but is acceptable given the short length of link J and its distance from the existing 345 kV line.

You can pick up the Application at your leisure. It will be in one of my office side chairs. Thanks. Larry.

DOCKET 38140 ATTACHMENT 6
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

Besier, Travis

From: Reiter, Larry
Sent: Thursday, September 24, 2009 4:23 PM
To: cjasper1@oncor.com
Cc: Walter.Simmons@oncor.com
Subject: Newton - Killeen EA

Charles, in looking over this EA and the alternative line routes included therein, we have the following comments for your consideration :

1. For reliability considerations the only paralleling of an existing line that is of a concern, is the paralleling of the existing 345 kV line serving Killeen Switching Station. This occurs with links BBB1, BBB2, and AAA. All of the potential routes will include Link BBB1 which parallels and is adjacent to the existing 345 kV line for its length (1+ miles). Routes that minimize this reliability exposure are more desirable and routes that contain all three of the above mentioned links would be least desirable.
2. For reliability considerations it is recommended that none of the filed routes be parallel and adjacent to the new LCRA line into Newton for more than a half mile.
3. Page 2-13, Paragraph 2.6, 1st line, change 'six' to 'seven'. Refer to page 6-3. Six conditions created seven new links.
4. Page 2-13, Paragraph 2.6, 2nd line, change '63' to '40'. Refer to page 6-1. There were 73 modifications to links, but only 40 links were modified.
5. Page 2-13, Paragraph 2.6, 2nd line, change 'one link was' to 'two links were'.
6. Page 2-13, Paragraph 2.6, 5th line, change 'of a link are' to 'of links are'.
7. Page 6-2, 4th line, change 'remove' to 'move'.
8. Page 6-13, Figure 6-5, The name on the Lampasas River runs together/overlaps itself.
9. Page 6-103, Tabel 6-1, Route 44 is incorrect as it does not end with BBB1.

We will hold onto the EA until you can pick it or we find someone going your way. Larry.

DOCKET 38140 ATTACHMENT 7
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

Besier, Travis

From: Reiter, Larry
Sent: Tuesday, September 08, 2009 3:49 PM
To: rholt1@oncor.com
Cc: kking2@oncor.com
Subject: FW: Oklaunion - Bowman CCN

Robert, I added another bullet for your consideration below.

From: Reiter, Larry
Sent: Tuesday, September 08, 2009 3:28 PM
To: Holt, Robert
Cc: King, Kenesha
Subject: Oklaunion - Bowman CCN

Robert, following are some comments for your consideration:

- Through most of the documents the northern endpoint is referred to as 'Riley Substation'. In Attachment No. 3, AEP refers to the 'Riley station', and Attachment No. 4 references 'Riley Switching Station' in the note on the table. Unless ETT has indicated that the official name is 'Riley Substation', it is felt here that the proper name should be 'Riley Switching Station'.
- Throughout the documents 'double circuit' is used as an adjective, and as such it should be hyphenated as 'double-circuit'.
- Item #11 of the Application refers to affected utilities. AEP and Western Farmers are likely to be affected during construction in that any of their facilities being crossed will likely need to be taken out of service until the crossing is completed.
- Item #16 of the Application, 2nd line from the bottom of the page, Holliday is spelled incorrectly.
- Several locations in the public notice and on the maps attached there is a reference to 'AEP water transmission line', this would be better referenced as 'AEP water transmission pipeline'.
- The maps in the notice should show the pipelines adjacent to the line routes, just as paralleled transmission lines are shown and not covered by proposed line routes where they are parallel and adjacent.
- Link T where it runs south to north parallel to the existing Graham – Bowman 345 kV line for approximately 2 miles is not ideal. But since this existing line is not critical in nature this will be an acceptable route link.

If you would like, I can mail the Application back to you through the company mail, or I can leave it on my office side chair for you/Charlie to pick up. Larry.

DOCKET 38140 ATTACHMENT 8
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

Besier, Travis

From: Juricek, Michael
Sent: Sunday, December 13, 2009 7:43 PM
To: larry.reiter@oncor.com
Subject: FW: Paralleling of Existing Lines

From: Reiter, Larry
Sent: Thursday, April 30, 2009 12:05 PM
To: Jasper, Charles
Cc: Juricek, Michael; Donohoo, Ken
Subject: Paralleling of Existing Lines

Charles, this is a follow up on our conversations on the topic of possible CREZ routes paralleling other lines. In general, I would use the following as a guideline for paralleling in a common corridor:

- The paralleling of 138 kV and/or 69 kV lines with a proposed CREZ line is acceptable
- One CREZ line should not parallel another CREZ line except for possibly ingress and egress of a switching station.
- A CREZ line paralleling a wind plant 345 kV line is acceptable.
- A CREZ line paralleling a radial 345 kV line is acceptable.
- A CREZ line paralleling a non-ERCOT line of any voltage is acceptable.
- It is preferable for a CREZ line to not parallel a 345 kV network line. This should be reviewed on a case by case basis.

Larry.

LARRY KEITER

DOCKET 38140 ATTACHMENT 9
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-01

Sweetwater East - Central Bluff EA.

(1.) Paragraph 1.3.1 2nd Sentence
"statues" should be change to
'Statutes'.
This common to ~~all the~~ some EA's

2. Paragraph 3.1 2nd Paragraph
Seventh line down - Formating of line.

3. Large Maps in plastic pockets

All Maps should change legend
to show existing 138 + 69 KV lines
since there is ~~not~~ no differentiation
being made on the map.

Map 3-2a has a 69 KV line
incorrectly labeled as a 345KV
line and a 345KV line
incorrectly labeled as a 138KV line.
These errors are marked on
the map in the pocket.

The maps also show the tops of
numbers throughout. These should
be removed.

4. Link B is not a desirable link as it places 2 exit lines (345kV) in the same corridor. ~~Link X and W~~ Link B should not be ~~as~~ considered for reliability reasons.
Links V and X are acceptable as they place an exit and entrance line in the same corridor.

5. Link W page 4-2 states that this link parallels an existing 138 kV line. This is the existing Eclipse - Mary Neal 69 kV line.

6. Page 4-4 Description of Link F ~~and link~~ does not match ~~the~~ maps. There is no Link V on the maps (Fig 3-2a thru 3-2c) ~~No description was made on this page in the text.~~

No mention of Link V in the modifications. How long is Link V?

7. Page 4-3 1st paragraph under Paragraph 4.2 change 'western' to 'eastern'.

8. Tabel 6-1 on page 6-26
The first 4 sources are not desirable as they have limit B in them.

9. Table 7-4 on page 7-12
last entry should be
"TA-025" rather than "TAC-025"

REQUEST:

Reference page 3 of Mr. Donohoo's May 21, 2010 affidavit, in which he states: " ...Oncor also recently contacted ABB, an international power technologies firm with engineering specialties in power system planning and reliability analysis ..."

Please produce all communications and documents exchanged between Oncor and ABB in the last five years concerning paralleling of 345 kV lines, including Oncor CREZ 345 kV lines but also non-Oncor lines and non-CREZ lines.

RESPONSE:

The following response was prepared by or under the direct supervision of Kenneth Donohoo, the sponsoring witness for this response.

The information requested is highly sensitive confidential and will be made available only after execution of a certification to be bound by the protective order in this docket. The information has been provided to the propounding party.

ATTACHMENTS:

ATTACHMENT 1 - Highly Sensitive Confidential Index, 1 page

Docket 38140
Henry RFI Set No. 5
Question No. 5-2
Attachment 1

HIGHLY SENSITIVE CONFIDENTIAL INDEX

1. E-mails from ABB to Oncor, dated 5/19/2010, 5 pages

REQUEST:

Reference page 4 of Mr. Donohoo's May 21, 2010 affidavit, in which he states: "Oncor has also contacted ERCOT concerning its views on paralleling CREZ transmission lines.

Please produce all communications and documents exchanged between Oncor and ERCOT in the last five years concerning paralleling of 345 kV lines, including Oncor CREZ 345 kV lines but also non-Oncor lines and non-CREZ lines.

RESPONSE:

The following response was prepared by or under the direct supervision of Kenneth Donohoo, the sponsoring witness for this response.

See attached documents. Portions of the information requested are highly sensitive confidential and will be made available only after execution of a certification to be bound by the protective order in this docket. The information has been provided to the propounding party.

ATTACHMENTS:

ATTACHMENT 1 - E-mail from ERCOT to CREZ TSP Group, dated 5/25/2010, 6 pages

ATTACHMENT 2 - E-mail from ERCOT to CREZ TSP Group, dated 1/19/2010, 9 pages

ATTACHMENT 3 - E-mail from Oncor to ERCOT, dated 1/19/2010, 1 page

ATTACHMENT 4 - Highly Sensitive Confidential Index, 1 page

Dillier, Joshua

From: Competitive Renewable Energy Zone Transmission service Providers [CREZ_TSP@LISTS.ERCOT.COM] on behalf of Carter, Cathey [ccarter@ERCOT.COM]

Sent: Tuesday, May 25, 2010 3:56 PM

To: CREZ_TSP@LISTS.ERCOT.COM

Subject: FW: CTT Category D Contigencies

Attachments: Tesla-Gray and Telsa-Silv.idv; Silv-Tesla and Silv-Cottnwood.idv; Silv-Telsa and Silv-WhiteDeer.idv; Gray-WhiteDeer and Gray-Tesla.idv

Hello Willie and CREZ TSPs,

Please add the attached type D contingencies to the CREZ D contingencies files for all future work. There is no need to re-do any work that has already been done. These common ROWs are all at least five miles long, and Cross Texas will avoid them if possible. However, no TSP has perfect control of route selection and these should be studied in case they are selected by the Commission.

Thank you,
Cathey Carter
ccarter@ercot.com

From: Tim Cook [mailto:TCook@LSPower.com]
Sent: Tuesday, May 25, 2010 3:38 PM
To: Carter, Cathey
Cc: Lasher, Warren; Joshua York; Douglas Mulvey
Subject: CTT Category D Contigencies

Cathey,

Many of the TSPs have been getting questions concerning the paralleling of proposed 345kV lines (or existing 345kV lines). I've discussed with Warren the idea of having ABB perform some additional Category D Contingencies to address them. Below is a list of 345kV lines associated with CTT lines that parallel other 345kV circuits. I've also attached the related idv. Please add them to the Category D Contingency file.

Category D Contingencies:

1. Tesla – Gray (double circuit) and Tesla – Silverton (double circuit)
2. Silverton – Tesla (double circuit) and Silverton – Cottonwood (double circuit)
3. Silverton – Tesla (double circuit) and Silverton – White Deer (double circuit)
4. Gray – White Deer (double circuit) and Gray – Tesla (double circuit)

Thanks,
Tim

Timothy D. Cook
Manager, Electric Transmission
Cross Texas Transmission, LLC
400 Chesterfield Center, Suite 105
Chesterfield, MO 63017
636.534.3310

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@! File:"\\lspower\lsp_data\ST_Users\tcook\Work Files\ERCOT CREZ TSP\03232010 CREZ Base Cases
\Tesla - Gray.idv", generated on TUE, MAY 25 2010  15:05, release 31.02.00
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BAT_DSCN,79002
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BAT_DSCN,60502
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BAT_BRANCH_DATA,60501,79000,'1',0,,,,,,,,,,,,,,,,,,,,;
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Dillier, Joshua

From: Competitive Renewable Energy Zone Transmission service Providers [CREZ_TSP@LISTS.ERCOT.COM] on behalf of Lasher, Warren [wlasher@ERCOT.COM]

Sent: Tuesday, January 19, 2010 7:58 AM

To: CREZ_TSP@LISTS.ERCOT.COM

Subject: Multiple Transmission Circuits in Single Corridors

Attachments: 37464_669_637968.pdf

ERCOT submitted the attached letter in response to questions from Public Utility Commission (PUC) Staff regarding the planning implications of routing multiple transmission lines in the same transmission corridor in Docket No. 37464.

ERCOT understands that the CREZ Transmission Owners (TOs) are required to develop an adequate set of routes for review in the PUC's CCN application process. However, in developing your route recommendations, we ask that you take into consideration the fact that the placement of multiple circuits in a single corridor can lead to the development of a super-contingency that may need to be addressed in future planning studies. The loss of an entire transmission corridor is a NERC category D contingency. Furthermore, the use of a single corridor for multiple circuits, especially multiple 345-kV circuits, may impact the maximum transfer capacity and effectiveness of the CREZ Transmission Plan (CTP). The CREZ Transmission Optimization (CTO) Study did not presume that new Category D Contingencies would be created as a result of the routing and construction of the new CREZ circuits, and therefore the potential impact of such a contingency on the CTP is unknown at this time.

In addition, when developing your route recommendations, please also consider that increased circuit lengths may have a negative impact on the effectiveness of the overall CTP, although these impacts have not been quantified at this time.

Let me know if you have any questions or would like to discuss these issues further.

WL

Warren Lasher
Manager, System Assessment
ERCOT
512-248-6379
wlasher@ercot.com

THIS DOCUMENT CONTAINED A BARCODE

UNABLE TO SCAN

TO VIEW DOCUMENT(S)
PLEASE GO TO
PUC'S
CENTRAL RECORDS

(512) 936-7180

Public Utility Commission of Texas

January 5, 2010

Mr. Matt Morais
Mr. Warren Lasher
ERCOT
7620 Metro Center Drive
Austin, Texas 78744

RE: Docket 37464, *Application of Oncor Electric Delivery Company, LLC to Amend Its Certificate of Convenience and Necessity for a Proposed CREZ 345kV Transmission Line in Brown, Mills, Lampasas, McCullough and San Saba Counties.*

Dear Mssrs. Morais and Lasher:

Staff has proposed Route 140 in the above-styled docket. Route 140 begins at the Brown substation and parallels the Oncor-owned Red Creek to Comanche Switch 345kV transmission line for approximately 22 miles. Staff would like ERCOT to respond to the following questions in any format you choose:

Please explain ERCOT's responsibilities relating to the reliability of the ERCOT Region electric grid.

How does ERCOT meet its responsibilities described above?
Please explain how ERCOT relies upon transmission providers to help meet its responsibilities, if at all.

Please explain what factors ERCOT considers when evaluating the reliability of parallel transmission lines, specifically two 345kV transmission lines.

What kind of reliability data (including occurrence of outages) does ERCOT maintain regarding parallel 345 kV transmission lines?

Please describe ERCOT's evaluation of any reliability issues relating to the paralleling of 345kV transmission lines in Route 140, as described above.

Specifically, assuming that Route 140 was selected by the Commission, please explain what would happen if an outage of both transmission lines were to occur at the same time.

1701 N. Congress Avenue PO Box 13326 Austin, TX 78711 512/936-7000 Fax: 512/936-7003 web site: www.puc.state.tx.us

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Can ERCOT maintain system reliability if Route 140 is selected by the Commission?

We appreciate your assistance in this matter and look forward to your reply.

Sincerely,

Andres Medrano
Margaret Uhlig Pemberton
Attorneys – Legal Division

cc: Lori Cobos

January 7, 2010

Ms. Margaret Uhlig Pemberton
Mr. Andres Medrano
Public Utility Commission of Texas
Legal Division
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711

Re: PUCT Docket No. 37464, *Application of Oncor Electric Delivery Company, LLC to Amend its Certificate of Convenience and Necessity for the Brown-Newton 345-kV CREZ Transmission Line in Brown, Mills, Lampasas, McCulloch and San Saba Counties.*

Dear Ms. Pemberton and Mr. Medrano:

In response to your January 5, 2010 letter, ERCOT provides the following response to the questions regarding proposed Route 140 in Public Utility Commission of Texas (PUCT) Docket No. 37464:

Please explain ERCOT's responsibilities relating to the reliability of the ERCOT Region electric grid.

Under PUCT Substantive Rule §25.361, ERCOT is designated as an independent organization under the Public Utility Regulatory Act (PURA) §39.151. One of ERCOT's designated responsibilities is to ". . . ensure the reliability and adequacy of the regional electrical network . . .". ERCOT is further required to ". . . maintain the reliability and security of the ERCOT region's electrical network, including the instantaneous balancing of ERCOT generation and load and monitoring the adequacy of resources to meet demand." §25.361 C(4). ERCOT is also registered with the North American Electric Reliability Corporation (NERC) for several reliability functions, including the Reliability Coordinator, Planning Authority, Balancing Authority, and Transmission Operator and in those roles, ERCOT is required to comply with the NERC Reliability Standards.

AUSTIN
7620 Metro Center Drive
Austin, Texas 78744
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TAYLOR
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Taylor, Texas 76574
Tel. 512.248.3000
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How does ERCOT meet its responsibilities described above?

As these responsibilities relate to system planning, ERCOT employs a staff of engineers and other technical specialists who use various computer models to simulate the expected future operational states of the system and to determine its limitations. These individuals work closely with the PUCT, ERCOT transmission providers, and other stakeholders through the established ERCOT stakeholder committee structure to plan the ERCOT electrical system in a reliable manner.

The overarching reliability rules that drive the planning process are the NERC Reliability Standards. These standards require that the system be planned such that it can handle certain levels of stress. Stresses to the system are called "contingencies" under the NERC rules, and there are different planning requirements for the different types of contingencies. For example, a Category B Contingency represents the loss of a single system element – i.e., a single transmission line, a transformer, or a generator. Under these circumstances, the system must be planned so that it can absorb such stress without shedding firm load. Category C and D contingencies are more severe; as an example, the loss of all transmission elements in a common right-of-way (ROW) is a Category D Contingency. For this type of contingency, the NERC reliability criteria allow for some firm load to be tripped off line in order to relieve any overloads or other problems resulting from the Category D Contingency, but do not allow for cascading outages and complete system failure. In essence, it is these requirements that drive ERCOT's actions in maintaining system reliability.

Please explain how ERCOT relies upon transmission providers to help meet its responsibilities, if at all.

As it relates to system planning, ERCOT relies upon transmission providers (as well as other Market Participants) to provide data necessary for the reliable operation and planning of the ERCOT transmission system. The data includes transmission line impedances and ratings, generator reactive and dynamic characteristics, and contingency definitions on their respective systems. Stakeholder committees and ERCOT personnel incorporate this information into model databases that describe the characteristics of the power system, and ERCOT uses these databases to analyze the capabilities of the power system against the NERC Reliability Standards. As described above, if the results of this analysis demonstrate that the ERCOT system violates any relevant NERC requirement, transmission upgrades are developed to resolve the issue. Such upgrades are then constructed solely by the transmission providers in the ERCOT region, subject to PUCT oversight.

The transmission providers are also the NERC-registered Transmission Planners for their portion of the system and are responsible, in that role, for meeting numerous NERC Reliability Standards.

Please explain what factors ERCOT considers when evaluating the reliability of parallel transmission lines, specifically two 345kV transmission lines.

ERCOT does not have direct knowledge of transmission lines that are routed within a single transmission corridor. Only the transmission providers have these system details, and, as described above, they use this information to identify the relevant contingencies on their respective systems and provide those contingencies to ERCOT.

Accordingly, in the case of parallel transmission lines in a single corridor, a transmission provider would identify that set of circuits as a NERC Category D Contingency and would provide that information to ERCOT. ERCOT regularly analyzes the most extreme of the Category D Contingencies to ensure that a Category D Contingency will not result in significant impacts to the transmission system, including loss of the entire system.

As a general matter, Category D Contingencies are the most severe stresses to the system under the NERC Reliability Standards. Without commenting on the specific proposal at issue, ERCOT notes that its opinion of the importance of Category D Contingencies is consistent with the following statements by Oncor in the Rebuttal Testimony of Ken Donohoo in this docket (PUCT Docket No. 37464):

> While I agree that the occurrence of an event that may cause an outage of both the existing Red Creek - Comanche line and the CREZ 345 kV Brown to Newton project ("Proposed Transmission Line Project"), if constructed on parallel links, is not likely, nonetheless this is an important issue that the Commission should consider (page 2, lines 22 – 25); and,
>
> However, when the paralleling includes multiple 345 kV Brown - Newton CCN lines, reliability issues that could arise from paralleling should also be considered as part of the routing and approval process. (page 3 lines 1 -2).

What kind of reliability data (including occurrence of outages) does ERCOT maintain regarding parallel 345kV transmission lines?

ERCOT does not maintain statistics associated with the outages of parallel circuits.

Please describe ERCOT's evaluation of any reliability issues relating to the paralleling of 345kV transmission lines in Route 140, as described above.

ERCOT has not specifically analyzed any reliability issues associated with the paralleling of 345kV transmission lines in Route 140 as developed by Oncor in PUCT Docket No. 37464. As described above, ERCOT is required to analyze NERC Category D Contingencies under the NERC Reliability Standards, which would include parallel lines in a single corridor (as identified by the relevant ERCOT transmission provider). In general, evaluating Category D Contingencies requires both steady-state and transient stability analysis. These evaluations require development of highly detailed model input datasets, complex computer modeling, and analysis of extensive model outputs.

Specifically, assuming Route 140 was selected by the Commission, please explain what would happen if an outage of both transmission lines were to occur at the same time?

This scenario would be a NERC Category D Contingency and ERCOT would model it as such based on the information provided by the relevant ERCOT transmission provider. Based on the system and operational plans developed by ERCOT to address this contingency, in essence, ERCOT would operate the system to ensure that the instantaneous loss of all of these circuits would not result in significant impacts to the transmission system, including loss of the entire system. However, the loss of electrical service to a widespread area could result and would be acceptable under NERC Reliability Standards, as a result of such an event.

Can ERCOT maintain system reliability if Route 140 is selected by the Commission?

Yes. ERCOT will plan and operate the system consistent with all applicable reliability standards.

However, ERCOT notes that despite the fact that system reliability would be maintained, Route 140 could impact the *transmission transfer capacity* of the Competitive Renewable Energy Zone (CREZ) Transmission Plan (CTP). Route 140 and similar routes where multiple 345kV lines are on the same ROW would result in a new Category D Contingency. The CREZ Transmission Optimization (CTO) Study did not presume that new Category D Contingencies would be created as a result of the routing and construction of the new CREZ circuits. Accordingly, because the CTO Study did not consider these types of contingencies, their potential impact is unknown. Category D Contingencies (e.g., Route 140 or similar routes) could have minimal impact on the system or could have sufficient impact to warrant lowering the maximum transfer capability in order to reduce that impact to an acceptable reliability level. Because of the unknown variables involved in understanding the potential impact to system capability, and the complex studies required to estimate such an impact, if any, ERCOT cannot provide a reasonable

quantitative estimate at this time and is merely noting this potential effect as a qualitative consideration.

I hope you find this information helpful to your analysis of proposed Route 140 in this docket.

Sincerely,

Warren Lasher
Manager, System Assessment

Dillier, Joshua

From: Donohoo, Ken
Sent: Tuesday, January 19, 2010 9:03 AM
To: Lasher, Warren
Cc: Woodfin, Dan
Subject: RE: Multiple Transmission Circuits in Single Corridors

As we indicated in Dec 2008/Feb 2009, ERCOT requirements need to be communicated in a timely manner. No information or direction about these contingencies was provided in the CTO report. TSP's are required to consider using existing corridors under PUCT rules. Studies are needed to backup need of a reliability concern. General statements are ineffective!

Ken D.

From: Competitive Renewable Energy Zone Transmission service Providers [mailto:CREZ_TSP@LISTS.ERCOT.COM] **On Behalf Of** Lasher, Warren
Sent: Tuesday, January 19, 2010 7:58 AM
To: CREZ_TSP@LISTS.ERCOT.COM
Subject: Multiple Transmission Circuits in Single Corridors

ERCOT submitted the attached letter in response to questions from Public Utility Commission (PUC) Staff regarding the planning implications of routing multiple transmission lines in the same transmission corridor in Docket No. 37464.

ERCOT understands that the CREZ Transmission Owners (TOs) are required to develop an adequate set of routes for review in the PUC's CCN application process. However, in developing your route recommendations, we ask that you take into consideration the fact that the placement of multiple circuits in a single corridor can lead to the development of a super-contingency that may need to be addressed in future planning studies. The loss of an entire transmission corridor is a NERC category D contingency. Furthermore, the use of a single corridor for multiple circuits, especially multiple 345-kV circuits, may impact the maximum transfer capacity and effectiveness of the CREZ Transmission Plan (CTP). The CREZ Transmission Optimization (CTO) Study did not presume that new Category D Contingencies would be created as a result of the routing and construction of the new CREZ circuits, and therefore the potential impact of such a contingency on the CTP is unknown at this time.

In addition, when developing your route recommendations, please also consider that increased circuit lengths may have a negative impact on the effectiveness of the overall CTP, although these impacts have not been quantified at this time.

Let me know if you have any questions or would like to discuss these issues further.

WL

Warren Lasher
Manager, System Assessment
ERCOT
512-248-6379
wlasher@ercot.com

Docket 38140
Henry RFI Set No. 5
Question No. 5-3
Attachment 4

HIGHLY SENSITIVE CONFIDENTIAL INDEX

1. E-mail from ERCOT to Jaren Taylor, dated 5/20/2010, 2 pages

REQUEST:

(a) Has a tornado ever taken down, or otherwise taken out of service, one of your transmission lines? (b) If so, please identify the line(s) taken out of service, and where and when the event(s) occurred. (c) And if so, please identify all transmission lines that were, at the location of the event, routed adjacent to and parallel, or approximately parallel, to the line(s) taken out of service. (d) If multiple lines were taken out service by a single tornado, please state whether the affected lines were routed adjacent to and parallel, or approximately parallel, to each other at the location of the event.

RESPONSE:

The following response was prepared by or under the direct supervision of Ken Donohoo, the sponsoring witness for this response.

a) Yes, tornadoes have taken out of service Oncor transmission lines.
b) The attachment identifies the lines taken out of service and the date the event occurred. The specific location of the tornado damage was not recorded in the database.
c) The attachment identifies all the transmission lines that were taken out of service due to tornado/tornadoes. The date stamp will identify the lines that were affected by the event(s). The following lines are known to have been outaged by tornado/tornadoes and are located adjacent to each other in a common corridor:

Lake Creek to Jewett 138 kV line
Lake Creek to Jewett 345 kV line

d) Oncor's database does not contain information about the location of the event, only which line(s) are taken out of service and the cause.

ATTACHMENT:

ATTACHMENT 1 - Outages due to Tornados, 3 pages.

DOCKET 38140 ATTACHMENT 1
TO Henry Family RFI Set 5
QUESTION NO. 5-04

REGION	LINE NAME	VOLTAGE	DATE OFF
SOUTHEAST	TEMPLE SW. - MINERVA	69	10/01/1988
SOUTHEAST	HILLSBORO - MERTENS	69	05/04/1989
FORT WORTH	COMANCHE PEAK NPP(7020)-DECORDOVA SES(4460)	138	05/16/1989
SOUTHEAST	STRYKER (W) - LUFKIN	138	05/17/1989
SOUTHEAST	JEWETT - BIG BROWN TAP	138	05/17/1989
SOUTHEAST	STRYKER - LUFKIN SW.	345	05/17/1989
FORT WORTH	LEON SWITCH(2040)-PUTNAM-ABILENE SOUTH(4430)	138	06/07/1989
SOUTHEAST	LUFKIN SW - DIBOLL - LUFKIN S	138	06/07/1989
SOUTHEAST	DIBOLL - CORRIGAN (SPA)	69	06/07/1989
SOUTHEAST	NACOGDOCHES - APPLEBY (POD TO TEX-LA)	69	02/09/1990
SOUTHEAST	MARTIN LAKE - NACOGDOCHES SE - STRYKER (SE)	345	02/09/1990
SOUTHEAST	STRYKER - NACOGDOCHES	138	02/09/1990
SOUTHEAST	HILLSBORO - WAXAHACHIE (W)	69	03/14/1990
SOUTHEAST	HILLSBORO - WAXAHACHIE (E)	69	03/14/1990
FORT WORTH	LEON-DUBLIN	69	04/25/1990
SOUTHEAST	NAVARRO MILLS TAP (BEPC) - NAVARRO MILLS	69	04/27/1990
FORT WORTH	NAVY KICKAPOO SWITCH(4990)-HOLLIDAY(1630)	69	07/21/1990
SOUTHEAST	TEMPLE - TAYLOR	69	08/27/1990
FORT WORTH	STEPHENVILLE(3690)-LEON SWITCH(2030)	138	09/16/1990
DALLAS	SULPHUR SPRINGS SW. - (ROYSE SW.) - FORNEY SW	345	05/11/1992
WESTERN	GRAHAM-MORGAN CREEK #3	345	11/21/1992
DALLAS	FERRIS(2040)-CORSICANA(880)	69	05/09/1993
DALLAS	ROYSE SWITCH(1320)-BEN DAVIS(8040)(8050)	138	05/09/1993
FORT WORTH	EVERMAN SWITCH(4520)-CLEBURNE SWITCH(247)	138	09/13/1993
WESTERN	SNYDER(2390)-ENNIS CREEK SWITCHING(2950)	69	10/18/1993
DALLAS	WATERMILL(025)-CEDAR HILL(2110)	138	04/25/1994
DALLAS	GAINESVILLE(2950)-VALLEY VIEW(1645)	138	04/26/1994
FORT WORTH	BOWIE(1160)-HENRIETTA(1340)	69	04/26/1994
DALLAS	GAINESVILLE 336-CAMP HOWZE-WHITESBORO	69	04/26/1994
DALLAS	GAINESVILLE(390)-MUENSTER(SWT 409)	69	04/26/1994
FORT WORTH	RICE(4910)-NVY KICKAPOO(4970)-W.FALLS SO(5020	138	04/26/1994
SOUTHEAST	JEWETT(1864)-BRWN MAGNOLIA-WORTHAM GULF(1596)	69	05/26/1994
SOUTHEAST	TRADINGHOUSE SES(4360)-VENUS SWITCH(4570)	345	11/04/1994
SOUTHEAST	TRADINGHOUSE SES(3920)-VENUS SWITCH(5650)	345	11/04/1994
WESTERN	SWEETWATER(1030)-COLORADO CITY(2180)	69	05/31/1995
WESTERN	ESKOTA SWITCH(1990)-SWEETWATER(1010)	69	05/31/1995
WESTERN	ESKOTA SWITCH(1890)-SWEETWATER(1020)	69	05/31/1995
WESTERN	SWEETWATER(1030)-COLORADO CITY(2180)	69	05/31/1995
WESTERN	SWEETWATER COGEN(5900)-MORGAN CREEK SWT(6520)	345	05/31/1995
WESTERN	MULBERRY CREEK - MORGAN CREEK	345	05/31/1995
FORT WORTH	HOLLIDAY(1700)-SEYMOUR(1180)	69	06/09/1995
WESTERN	GARDEN CITY(2790)-MIDKIFF SWITCH(2160)	69	06/10/1995
WESTERN	GARDEN CITY(2790)-MIDKIFF SWITCH(2160)	69	06/22/1995

SOUTHEAST	NAVARRO(3290)-WORTHAM GULF(1596)	69	11/07/1996
SOUTHEAST	JEWETT(1864)-BRWN MAGNOLIA-WORTHAM GULF(1596)	69	11/07/1996
SOUTHEAST	WACO WEST(3760)-TEMPLE ELM CREEK(7830)	138	05/27/1997
SOUTHEAST	HERTY NORTH SWITCH(5330)-HUNTINGTON	138	02/10/1998
SOUTHEAST	HERTY NORTH SWITCH(5290)-LUFKIN SOUTH(1945)	138	02/10/1998
SOUTHEAST	LUFKIN SWITCH(3416)-DIBOLL-LUFKIN SOUTH(1945)	138	02/10/1998
WESTERN	GRAHAM PLANT SWT(6350)-MORGAN CREEK SWT(6580)	345	10/02/1998
SOUTHEAST	BIG BROWN(4160)-VENUS SWITCH(4920)	345	10/17/1998
SOUTHEAST	BIG BROWN(4170)-VENUS SWITCH(4480)	345	10/17/1998
DALLAS	CUMBY TAP(1180)-CUMBY	69	01/28/1999
WESTERN	CHINA GROVE(1070)-SWEETWTR AMOCO-SNYDER(2370)	69	04/02/1999
SOUTHEAST	STRYKER CREEK SES(3130)-PALESTINE SOUTH(2925)	138	04/04/1999
SOUTHEAST	STRYKER CREEK SES(3130)-PALESTINE SOUTH(2925)	138	04/04/1999
SOUTHEAST	DIALVILLE(2025)-RUSK MAIN	69	04/04/1999
SOUTHEAST	RUSK 2076 - ALTO	69	04/04/1999
SOUTHEAST	STRYKER CREEK SES(3130)-PALESTINE SOUTH(2925)	138	04/04/1999
DALLAS	ROYSE SWITCH(1130)-TERRELL SWITCH(1210)	69	12/04/1999
FORT WORTH	EVERMAN(6110,6120)-SHERRY(6220)-CDR HILL(335)	345	03/28/2000
FORT WORTH	SHERRY-DECORDOVA	345	03/28/2000
FORT WORTH	JACKSBORO SUBSTATION(N.O)-ORAN(1170)	69	04/30/2000
FORT WORTH	RICE(4910)-NVY KICKAPOO(4970)-W.FALLS SO(5020	138	04/30/2000
FORT WORTH	GRAHAM(1650)-NAVY KICKAPOO SWITCH(4980)	69	04/30/2000
SOUTHEAST	TROUP POD(2046)-OVERTON(2071)	69	05/27/2000
WESTERN	SNYDER(2390)-ENNIS CREEK SWITCHING(2950)	69	06/12/2001
SOUTHEAST	GROESBECK(3085)-MEXIA(2012)	138	03/30/2002
SOUTHEAST	LAKE CREEK SES(2870)-JEWETT(1834)	138	03/30/2002
SOUTHEAST	LAKE CREEK SES(4110)-JEWETT SWITCH(3990)	345	03/30/2002
SOUTHEAST	SHAMBURGER(5345)-LINDALE-TYLER NORTHWEST(670)	138	04/07/2002
FORT WORTH	HANDLEY SWITCH(220)-DENTON AVENUE(410)	69	04/16/2002
WESTERN	CHINA GROVE SWITCH(1060)-COLORADO CITY(2190)	69	05/04/2002
SOUTHEAST	TEMPLE SWITCH(2560)-BELL COUNTY-GABRIEL(5430)	138	06/26/2002
FORT WORTH	BRECKENRIDGE(5720)-GRAHAM(1640)	69	04/05/2003
SOUTHEAST	LAKE CREEK SES(2840)-WACO EAST(2960)	138	04/29/2006
SOUTHEAST	WACO WEST(2180)-TEMPLE(1500)	69	05/06/2006
SOUTHEAST	TRADINGHOUSE SES(4280)-ELM MOTT(3575)	345	05/06/2006
SOUTHEAST	LAKE CREEK(2710)-MARLIN PLANT(2007)(N.O.)	69	05/06/2006
SOUTHEAST	LAKE CREEK SES(2850)-WACO WEST(2980)	138	05/06/2006
SOUTHEAST	WACO EAST(3330)-WACO WEST(3790)	138	05/06/2006
DALLAS	PARIS PLANT(950)-HONEY GROVE	69	05/09/2006
SOUTHEAST	LAKE CREEK SES(4110)-JEWETT SWITCH(3990)	345	12/29/2006
SOUTHEAST	MCGREGOR PHILLIPS(1244)-MCGREGR HERCULES(6250	69	03/30/2007
SOUTHEAST	HILLSBORO(168)-ALVARADO(035)	69	05/02/2007
SOUTHEAST	JEWETT(1864)-BRWN MAGNOLIA-WORTHAM GULF(1596)	69	02/10/2009
DALLAS	VALLEY SES(3340)-PAYNE SWITCH(1680)	138	07/17/2009

SOUTHEAST	TRINIDAD SES(1450)-NAVARRO(3280)	69	04/24/2010
SOUTHEAST	RICHLAND CHAMBERS(7075)(7055)-TRINIDAD(4890)	345	04/24/2010
SOUTHEAST	TRINIDAD SES(1460)-ATHENS(1200)	69	04/24/2010
SOUTHEAST	TRINIDAD SES(1470)-CORSICANA(850)	69	04/24/2010
SOUTHEAST	TRINIDAD SWT(4040)-STRYKER CREEK SWT(3245)	345	04/24/2010
SOUTHEAST	TRINIDAD SES(3520)-MONTFORT SWITCH(5525)	138	04/24/2010
SOUTHEAST	TRINIDAD SES(3520)-MONTFORT SWITCH(5525)	138	04/24/2010
SOUTHEAST	ATHENS(1020)-FRANKSTON(N.O)	69	04/24/2010
SOUTHEAST	TRINIDAD SES(1460)-ATHENS(1200)	69	04/24/2010
SOUTHEAST	TRINIDAD SES(3550)-NAVARRO(3335)	138	04/24/2010
SOUTHEAST	CORSICANA(1040)-NAVARRO(3270)	69	04/24/2010
SOUTHEAST	TRINIDAD SES(1790)-PALESTINE(1650)	69	04/24/2010
SOUTHEAST	TRINIDAD SES(3510)-LONG LAKE(1515)	138	04/24/2010
WESTERN	CRANE(2120)-ODESSA NORTH(3830)	69	06/29/2010

REQUEST:

Please ask Mr. Jasper to identify which of the routes that go north of Wichita Falls would be his preferred route, and why, if he had only those routes to pick from.

RESPONSE:

The following response was prepared by or under the direct supervision of Charles T. Jasper, the sponsoring witness for this response.

Pursuant to the Commission's rules, Mr. Jasper evaluated all of the 695 routes studied by Halff and selected a preferred route and 89 alternate routes. Oncor is willing to build any of those 90 routes approved by the Commission and all 90 routes comply with the Commission's rules. No ranking of routes nor analysis of a subset of routes was performed.

Of the 695 alternative routes evaluated in the Environmental Assessment and Routing Study, there are a total of 55 alternative routes that have been identified that are located or travel north of Wichita Falls. If these 55 alternative routes comprised the entire universe that Mr. Jasper had to select from, Mr. Jasper would have selected alternative route 467.

REQUEST:

(a) Please confirm whether it is technically feasible to construct the proposed links that go nearest to Sheppard Air Force Base with towers approximately 80 feet tall. (b) If it is not feasible, please explain in detail why not. (c) If it is feasible to constructing the proposed links that go nearest to Sheppard Air Force Base with towers approximately 80 feet tall, please explain in detail the negative consequences, if any, in your opinion, of doing so.

RESPONSE:

The following response was prepared by or under the direct supervision of Jill L. Alvarez, P.E., the sponsoring witness for this response.

(a) Yes, it is technically feasible to construct the proposed links north of Sheppard AFB on structures (not lattice steel towers but 3-pole steel H-frames) that meet an 80-ft maximum height requirement. See Oncor's response to Staff RFI Set 1, Question No. 1-01.
(b) Not applicable.

(c) The structures being contemplated can be designed and constructed to not only meet the 80-ft height criteria but also remain within the standard 160-ft right-of-way width while meeting all of the National Electrical Safety Code requirements and allowing for the safe and reliable operation and maintenance of the proposed transmission line. One disadvantage with these special structures will, be that will, require additional cost not only for the design of the structure but also for materials and construction. Another potential disadvantage is the difference in the aesthetics of the structure since it will look significantly different than the lattice steel V-tower. In addition, the electric magnetic fields could be greater within the transmission line right-of-way as a result of losing the geometric efficiencies and field cancelling effects characteristic of the lattice steel V-tower phase configuration.

REQUEST:

Please produce all communications and documents exchanged between representatives of Oncor (including its consultants) and representatives of Sheppard Air Force Base concerning the routing of transmission lines in the vicinity of Sheppard Air Force Base.

RESPONSE:

The following response was prepared by or under the direct supervision of Russell J. Marusak, the sponsoring witnesses for this response.

Please see Attachment 1.

ATTACHMENTS:

Attachment 1 - Questionnaire from McBurnett, 5 pages.

DOCKET 38140 ATTACHMENT 7
TO HENRY FAMILY RFI SET 5
QUESTION NO. 5-07

Riley–Krum West 345 kV Transmission Line Project
Public Open House Meeting

1. In your opinion, has the need for the project been adequately explained to you?
   Yes X No____ (How could we have improved this effort?)
   _____
   _____
   _____

2. Were the Exhibits and explanations of the Need for the Project helpful to you?
   Yes X No____ (How could we have improved this effort?)
   _____
   _____
   _____

3. Do you believe that the information presented was helpful for your understanding of the project?
   Yes X No____ (How could we have improved this effort?)
   _____
   _____
   _____

4. The Public Utility Commission of Texas requires that several factors be considered when routing an electric transmission line, including:
   - Proximity to single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, and schools
   - Proximity to commercial radio transmitters, microwave relay stations or other electronic installations
   - Proximity to parks and/or recreational areas
   - Proximity to FAA-registered airports, private airstrips, and heliports
   - Proximity to historical or archeological sites
   - Agricultural areas irrigated by traveling irrigation systems
   - Environmentally sensitive areas
   - Protected or endangered species

   HALFF has plotted all of these features, which we know about, on the Environmental and Land Use Constraints Map. To your knowledge, are those features shown on the map accurately plotted? Yes X No___. Are you aware of any of these features that are not presently shown or are incorrectly located on the map? Yes___ No X (continue on next page)

If so, please list below and help us identify the approximate location of any missing or incorrectly located features on the Environmental and Land Use Constraints Map.

THE MAP IS CORRECT. SHEPPARD AIR FORCE BASE HAS CONCERNS SURROUNDING THE PROXIMITY OF THE TRANSMISSON LINES NORTH & EAST OF THE BASE PROPERTY DUE TO OUR FLYING MISSION AND POSSIBLE FUTURE MISSION EXPANSION

5. The routing of a transmission line includes consideration of land use factors including the following. Please rank the following factors in order of importance to you. Indicate the most important factor with a number 1, the second most important with a number 2, and so on.

____	a)	Minimize the overall length of the line
____	b)	Minimize the length across cultivated land
____	c)	Minimize the length across pasture land
____	d)	Minimize the length across residential areas
____	e)	Minimize the length across wooded areas
____	f)	Minimize the length along road frontage
____	g)	Minimize the visibility of the line
____	h)	Other (please specify) MINIMIZE HEIGTH OF LINE

6. The routing of a transmission line also includes consideration of paralleling existing corridors (e.g. existing transmission line and roadway corridors). Please rank the following existing corridors that are found within the project study area that you would prefer the new transmission line to parallel. Indicate your first preference with the number 1, your second preference with the number 2, and so on.

1	a)	Maximize the distance along existing transmission line corridors
____	b)	Maximize the distance along existing pipeline corridors
____	c)	Maximize the distance along existing roadway corridors
____	d)	Maximize the distance along existing railroad corridors
____	e)	Maximize the distance along existing property boundaries
____	f)	Other (please specify)

7. The routing of a transmission line also includes consideration of the distance to habitable structures and community values/resources. Please rank the following habitable structures and community values/resources that you would prefer to maximize the distance from the proposed transmission line. Indicate your first preference with the number 1, your second preference with the number 2, and so on.

___	a)	Maximize the distance from residences, including single-family and multi-family dwellings
1	b)	Maximize the distance from commercial, industrial, and/or business structures AIR FORCE BASE
___	c)	Maximize the distance from churches
___	d)	Maximize the distance from hospitals
___	e)	Maximize the distance from nursing homes
___	f)	Maximize the distance from schools
___	g)	Maximize the distance from parks/recreational areas
___	h)	Maximize the distance from historical and archaeological sites
___	i)	Other (please specify) _____ _____

8. In your opinion, are there any other factors or features that should be considered in determining the location of the proposed transmission line?

Yes X No___

If so, would you please list them in the space below?

EVEN THOUGH COST IS HIGH WE REQUEST CONSIDER BURY THE LINE UNDER GROUND DUE NORTH OF RUNWAYS AT SAFB. OTHER PLACES THE DISTANCE IS APPROPRIATE

9. How did you learn about this open house?

NEWSPAPER

10. Which of the following applies to your situation?

___	a)	Alternative line route is near my home
X	b)	Alternative line route is near my business AIR FORCE BASE
___	c)	Alternative line route is on my land
___	d)	Other, please specify_____ _____ _____

11. If you are concerned about a particular property (or properties), please provide, in the space below, the Tract Number for the property and the nature of your concern. If you received a mailed notice regarding this meeting, the Tract Number will be on a label attached to the notice. If you did not receive a notice, or you did not bring the notice, the Tract Number can be obtained from the exhibits showing property ownership Tract Numbers.

SHEET #7 LINES C2 C3 C4 D1 D2 D3 D4
E1 E2 E3 F2 & K1

12. If you would like to know the results of the Company's selection of a preferred route and alternate route(s) for submittal to the Public Utility Commission of Texas for approval, or if you would like follow-up contact, please enter your name, address, and phone number below.

Results of the Route Selection Yes X No___
Follow-up Contact Yes X No___

Name MARK Mc BURNETT

Address 2100 WENONAH AVE

City/State Wichita Falls TX Zip 76309

Telephone (home) 918 348 8195 (work) 940 676-2158

13. Do you have any general remarks or comments?

SHEPPARD AIR FORCE BASE IS VERY INTERESTED IN HAVING THE INFRASTRUCTURE CLOSE TO OUR INSTALLATION. WE LOOK FORWARD TO THE USE OF RENEWABLE ENERGY CARRIED BY YOUR LINES

HOWEVER, THE PROXIMITY TO THE RUNWAYS AND HEIGHT OF THE TOWERS COULD BE A VERY CRITICAL ISSUE DUE TO THE HIGH VOLUME OF INBOUND & OUTBOUND FLIGHT TRAFFIC

Thank you for your comments.

REQUEST:

Please produce all communications and documents exchanged between representatives of Oncor (including its consultants) and representatives of Wichita Falls concerning the routing of transmission lines in the vicinity of Sheppard Air Force Base or Wichita Falls.

RESPONSE:

The following response was prepared by or under the direct supervision of Charles T. Jasper and Russell J. Marusak, the sponsoring witnesses for this response.

Please see Attachments 1 thru 7.

ATTACHMENTS:

Attachment 1 - Letter from Daniel P. Nix, Public Utilities Operations Manager for the City of Wichita Falls to Travis Besier with the map included with his letter, dated December 14, 2009, 3 pages.

Attachment 2 - Emails Kay Yager & Travis Besier, dated December 14, 2009, 2 pages.

Attachment 3 - Email from Mona Statser to Mike Nieto, dated December 9, 2009, 2 pages.

Attachment 4 - Email from Tom Whaylen to Mike Nieto, dated December 8, 2009, 1 page.

Attachment 5 - Email from Tom Whaylen to Mike Nieto, dated December 7, 2009, 1 page.

Attachment 6 - Email from Tom Whaylen, dated December 9, 2009, 2 pages.