

PROJECT NO. 39537

RULEMAKING PROCEEDING TO	§	
IMPLEMENT HB 971, RELATING TO	§	PUBLIC UTILITY COMMISSION
ECONOMIC CRITERIA FOR A	§	
CERTIFICATE OF CONVENIENCE	§	OF TEXAS
AND NECESSITY FOR AN ELECTRIC	§	
TRANSMISSION PROJECT	§	

**ORDER ADOPTING AMENDMENT TO §25.101
AS APPROVED AT THE MARCH 7, 2012 OPEN MEETING**

The Public Utility Commission of Texas (commission) adopts an amendment to §25.101, relating to Certification Criteria, with changes to the text as proposed in the September 23, 2011 issue of the *Texas Register* (36 TexReg 6232). The amendment implements House Bill 971 of the 82nd Legislature, Regular Session in 2011 (HB 971), which requires the commission to establish criteria to use in evaluating a certificate of convenience and necessity (CCN) for an electric transmission project that serves the Electric Reliability Council of Texas (ERCOT) power region, that is not necessary to meet state or federal reliability standards, and that does not serve a competitive renewable energy zone. The criteria must include a comparison of the estimated cost of the transmission project and the estimated cost savings that may result from the transmission project. The amendment is adopted under Project Number 39537.

Initial comments were filed by Lone Star Transmission LLC (Lone Star); TXU Energy Retail Company LLC (TXU); Sharyland Utilities, L.P. (Sharyland); Luminant Energy Company LLC (Luminant); Lone Star Chapter of the Sierra Club (Sierra Club); NRG Texas LLC (NRG); Tri-Community Alliance, Inc. (TCA); CenterPoint Energy Houston Electric LLC (CenterPoint); Texas Industrial Energy Consumers (TIEC); CPS Energy; Oncor Electric Delivery Company LLC (Oncor); LCRA Transmission Services Corporation (LCRA); Preserve Austin County

Together (PACT); Voices Opposing Large Transmission Lines (VOLT); Calpine Corporation (Calpine); AEP Texas Central Company, AEP Texas North Company, and Electric Transmission Texas, LLC (collectively, AEP); and South Texas Electric Cooperative, Inc. (STEC). Reply comments were filed by Oncor, Luminant, TIEC, NRG, CenterPoint, PACT, VOLT, TCA, and AEP. Comments were also received from State Senators Troy Fraser, Glenn Hagar, and Dan Patrick, and State Representatives Patricia Harless, Phil King, and Lois Kolkhorst.

Comments were also received from individuals (collectively, individual commenters): Scott A. Miller, Sherry and Vidar Andresen, Sunnie Barker, John and Jean Oliver, William M. Hazard, Leroy and Loretta Peschel, Ronnie and Melissa Peschel, Allyn and Lillie Meischen, Brittan and Patricia Walker, Veronica and Gregory Kueleke, David A. Rose, Melvin W. Tarwater, Carole Tarwater, Jan-Michael Andresen, John W. Mikus, Robert G. Levy, Paul and Cynthia Lurix, Linda Behrend, Ruth Jean Harden, Robert T. Baldwin, Kathryn Moeller, Kristofer Andresen, Barbara G. Hazard, Alfred Krause, Joyce Krause, Jackie Lane, Clarence Ruether, Linda Ruether, Eddie Marx, Connie Henneke, Bertha M. Lessenger, Charles Lessenger, June Knolle Levy, Helen Blacklock, Jerry Bob Blacklock, Travis J. Koehn, Rolf and Anita Nelson, Patricia R. Sunderman, Danny S. Sunderman, George W. and Joyce M. Bone, Roy T. Hurta, Sandra Aschenbeck, Susan E. Plant Hurta, Winfred J. Eben, Herman Aschenbeck, David Lane, Bud Smith, Arleen Smith, Carol Koenig, H. W. Buddy Koenig, Kay Marx, Charlotte Ozment, Randall Dahl, Shirley Dahl, Alfred and Marlene Zettel, DJ Cramer, Shelby Levy, Todd and Felicia Smith, Suzie Thomas White, Mark Schrab, Michelle Hendry, Cynthia Scott, L.B. Wilson, Allen Scott, Arthur and Louise Rice, Pat Aldredge, Mike Aldredge, Bonnie Russell, M. Boone Smith and Kimberly Smith, Brad and Robbie Peterson, Gary and Mary Hohlt, Lewis W. "Chip"

Smith, Glenda Luedeker, Daniel Anderson, Mary Lynne Anderson, Becky Stanford, Andrea Barth, Jeanie Muegge, Linda Niehuus, Jan and Sheila Johnson, Rosemary Gambino, Gary L Kott, Gary Ckudre, M. E. Aldredge, Barbara Kott, Rick White, Tina White, Gerard F Knesek, David Luedeker, Tom and Kiane Paben, Celia Kincaid, W. D. Hord, Jr., Jan Knabe, Carrie Grissom, Mary Jo Ayton, Victor M Perez, Daniel Doyle, Edward Ellis, Jean Ellis, Leslie Matula, Janice Hord, Don Garrett, Dan Matula, Sherry Meischen Kutch, Mary Anne Piacentini, AJ and Rosemary Gambino, Maggie Saia, Marie M Galloway, Allen Christ, Verena S. Aeschbacher, Mr. and Mrs. James H Parr, Doris Christ, Frankie Melder, Libby Lovejoy, Irene Lejau Spurrier, Linda Kresek, Karen B. Hartman, Robert V. Hartman, Johnny Moore, Jennie Moore, David Micak, Walter Carl Hinze, Deborah L. Hinze, Sylvia Micak, Angela Micak, Floyd and Brenda Tonn, Mark S. Austin, Major Marvana Austin, Lilian Laas Arrington, Mark R. Sleeper, Margaretta P. Sleeper, Karole Fedrick, Richard and Dorothy Button, Bobby J. Bean, Larry Dittlinger, Jan R. Moles, Greg Strake, Lianne Parker, C. E. Fenner, Camilla Fenner, Mike Moody, Roger J. Grissom, Jeri Grissom, Robert Bolten, Bob Macarthur, Olin Hartmann, Dayne and Karla Rice, John Jacobson, Hampo Hekimian, Anne Somerby, Jo Goldberg, Chris Hovland, Jason Langford, Emily Mckenzie, Meaghan Beacon, Natalia Garmashova, Billy Jenkins, John Reagan Kott, Dan Barth, Jason De La Cruz, R. Charles Kott, Douglas D. Lottridge, Lois Allbright, Mary A. Van Kerrebrook, Ronald and Shirley Brune, Mary Mccleary, Steven A. Wilson, Marilyn Lang, Colby Mccay, Rick Zimmerman, Marilyn and Traylor Walker, Iris Jean Thompson, Kathy Barnhill, David and Kathy Hicks, Steven Alvarez-Wiemann, Marcus Simpson, George Flaherty, Michelle McCay, Gary Kaufman, Altberta Kaufman, Mable E. McKnight, Adeline L. Luedke, Carolyn Laskoskie, A. Buie, Russell Loehr and Family, Rosemary Gambino, Milton Sowa, Bertha Sowa, James R. Larson, John S. Henderson, Sally A.

Henderson, Dorene Laas, Harvey Laas, Melissa Griffith, Andrew and Jane Couch, Paul Griffith, Larry W. Eder, Stephen D. Strake Sr., Carla Erickson, Karen A. Perez, Annette De Walch Strake, Roger J. Grissom, Joe M. Eldridge, Jim Wenman, George W. Strake Jr., Kristen Midyett, John And Beth Glowacz, Stephen Strake, Louis Blackmon, Linda and Roland Villarreal, James Havran, Jean Havran, Jennifer Ishmael, Tom and Mary Garbett, Dana Strake, Robert L. Moore, Trey Strake, Sheneika Lee, and Ginger Cruikshank.

Many of the individual commenters indicated opposition to the proposed Fayetteville to Zenith transmission line under development by CenterPoint. However, CenterPoint has not filed an application with the commission for a CCN for the Fayetteville to Zenith transmission line, and this rulemaking does not address this or any other specific transmission line. Therefore, comments specific to this transmission line will not be addressed in this rulemaking. Many of the individual commenters also made several comments that were not specific to the proposed Fayetteville to Zenith transmission line under development by CenterPoint, which are addressed below.

After the deadline for reply comments, various commenters filed possible compromise approaches to some of the issues raised in this rulemaking. Instead of adopting any of these approaches, the commission resolved the issues in the manner described below.

Question 1:

Should the commission, consistent with ERCOT Nodal Protocols, Section 3.11.2(6), find a need for a transmission project if the levelized ERCOT-wide annual generator revenue

reduction attributable to the project is equal to or greater than the first-year annual revenue requirement for the project?

NRG, Calpine, PACT, VOLT, and TCA filed initial comments supporting the elimination of the “consumer benefit” or “generator revenue reduction” test described by question one. The individual commenters that addressed this issue also recommended elimination of this test. Senator Hagar expressed skepticism about the consumer benefit test. Luminant, TXU, CPS, TIEC, Lone Star Transmission, CenterPoint, Oncor, STEC, AEP, and Sharyland filed initial comments supporting the continued use of the consumer benefit test in determining the need for economic transmission projects. Senator Fraser requested that the commission retain the consumer benefit test, while Senator Patrick and Representatives Harless and King stated that their intent was for the commission to keep the current tests used by ERCOT, including the consumer benefit test. LCRA stated that regardless of the criteria the commission approves, the testing criteria need to be clearly defined, not easily amendable, and consistent with the testing criteria used by ERCOT. AEP, Lone Star, and Sharyland also stated that consistency should exist between ERCOT and commission criteria. The Sierra Club stated that both the “societal benefit” (or “production cost savings”) test and the consumer benefit test are too narrow, and the economic criteria for transmission planning need to consider other alternatives to congestion such as distributed renewable generation and demand side management.

Commenters who did not support the consumer benefit test in their initial comments stated that the test should be eliminated for one or more of the following general reasons: (1) the consumer benefit test is more susceptible to changes in speculative input prices and system topology; (2) a

reduction in generator revenues does not necessarily translate to a reduction in consumer prices; (3) the consumer benefit test would create inequity in terms of those who benefit and those who do not benefit from a transmission line passed by the consumer benefit test; (4) a transmission line built as a result of passing the consumer benefit test is not beneficial to consumers in the long run because the overall transmission costs would not be offset by system-wide reduced production costs; and (5) the consumer benefit test would approve transmission projects that would have a detrimental impact on resource adequacy.

The commenters listed above who supported the continued use of the consumer benefit test stated that the consumer benefit test needed to be retained for one or more of the following general reasons: (1) the consumer benefit test measures the benefits that a proposed transmission line would have on consumers whereas the production costs savings test does not; (2) the consumer benefit test would provide transmission solutions to congestion problems in areas where generation might not be incented to build because of environmental or other restrictions; (3) the current testing criteria in place that utilize both the production cost savings test and the consumer benefit test were vetted and approved through the stakeholder process and approved by the ERCOT Board of Directors; and (4) the consumer benefit test would approve projects that would have a beneficial impact on resource adequacy.

Senator Hagar stated that market assumptions used in the consumer benefit test are too speculative to justify the long-term costs and benefits of a transmission project, and that any regulatory measures that discourage generation investment should be rejected. NRG, PACT, VOLT, and TCA stated that the results of the consumer benefit test are prone to be inaccurate,

because such results are highly susceptible to future changes in input data such as the price of natural gas and changes to system topology. NRG and TCA noted that the results do not reflect actual bidding behavior that occurs in real-world market operations. TCA further suggested that the simulation testing model should be more probabilistic by assigning weighting factors to possible scenarios that could occur in the future. TCA also stated that the model should incorporate the effects of strategic bidding. STEC suggested that the consumer impact test should be validated in the initial years after the line is built to see how well the testing criteria performs, so that subsequent projects may be better evaluated. Individual commenters raised concerns about using speculative market information to determine the economic benefits of a transmission project, and instead recommended that more accurate data, such as production cost data, be used instead.

PACT, VOLT, and TCA stated that a reduction in generator revenues, as indicated by the consumer benefit test, does not equate to a reduction in consumer prices, and any reduction to consumer prices as a result of a transmission line built based on the consumer benefit test is coincidental. They indicated that the market for congestion revenue rights (CRRs) adds a layer of complexity to the traditional economic analysis, because revenues paid to CRR holders from actual congestion that occurs in market operations could be more or less than the revenue that ERCOT distributes to load from the sale of CRRs during the CRR auction. NRG, PACT, VOLT, and TCA also referenced presentations given by ERCOT, such as the one at the February 4th, 2006 Joint Planning and Congestion Management Working Group, that led these commenters to believe that the results of the consumer benefit test are untrustworthy in terms of indicating accurate benefits to consumers. These commenters noted how one slide from the February 4th,

2006 meeting indicated that the consumer benefit test can justify bad projects and even the removal of transmission (instances when the transmission line would cause a net system wide increase in generator revenues). PACT, VOLT, and TCA commented that such examples of consumer benefit test results indicate that the consumer benefit test does not accurately show how a transmission line will repay consumers.

PACT, VOLT, and TCA stated that the consumer benefit test creates “winners and losers” in terms of who do and who do not benefit from a transmission line approved by the consumer benefit test. They explained that even though a transmission line approved by the consumer benefit test may cause congestion costs to decrease in areas that were previously constrained, the same transmission line can cause energy prices to increase in areas outside of the previously constrained area. TCA’s individual comments suggested that the economic criteria analysis should identify who benefits and who does not benefit from a lined passed by the consumer benefit test.

NRG, PACT, VOLT, and TCA stated that the consumer benefit test could lead to projects that reduce congestion costs in the near term, but those benefits may not last for the life of the transmission project and will not benefit customers in the long term because transmission costs would not be offset by reduced system-wide reduced production costs.

Calpine, NRG, PACT, VOLT, and TCA commented that a transmission line constructed on the basis of passing the consumer benefit test would have the effect of truncating the price signals that would be needed for new generation investments, and this effect would negatively impact

long-term generation resource adequacy. Individual commenters that addressed this issue also raised this concern. Furthermore, use of the consumer benefit test creates more uncertainty for those making generation investment decisions. These commenters also noted that if transmission projects were approved by passing the consumer benefit test, the investment risk associated with a solution to resolve congestion pricing would be transferred from the competitive market to a risk that would be borne by a non-market solution in the form of transmission rates paid by consumers.

Senators Fraser and Patrick and Representatives Harless and King stated that it is important for ERCOT and the commission to consider transmission projects that will lower electric costs to consumers. Luminant, TXU, TIEC, Lone Star Transmission, CenterPoint, and STEC stated that of the two tests, the consumer benefit test is a better measure of the impact that a proposed transmission line has on consumers because it measures the pricing impact of congestion relief. CPS noted that consumers, not generators, have to pay for transmission costs of service, so a test measuring the pricing impact for consumers would be appropriate. STEC commented that the commission should give more weight to the consumer benefit test than the production cost savings test, because the consumer benefit test is a better measure of whether or not load will benefit from a proposed transmission line. Oncor noted that the consumer benefit test considers revenue reduction on a levelized basis so that spikes and lulls in anticipated generator revenues (or anomalous data) are averaged on an annualized basis.

CPS, TIEC, and AEP commented that the consumer benefit test would be the appropriate testing criteria to apply to situations in which generation is unable to build in load pockets that are part

of nonattainment zones. CPS also noted that the consumer benefit test would be appropriate for constrained areas in which frequent, continued, and irresolvable congestion pricing exists.

CenterPoint, Oncor, AEP, and Sharyland stated in their arguments supporting the consumer benefit test that the criteria used by ERCOT were vetted through the ERCOT stakeholder process, and were approved by the Technical Advisory Committee and the ERCOT Board of Directors.

Luminant and CenterPoint stated that the consumer benefit test would approve transmission projects that allow generation outside of previously constrained areas to produce and deliver generation to areas of high load. As a result, overall resource adequacy would be improved. Luminant commented that price suppression outside of transmission constrained areas occurs when a number of efficient generation units cannot reach areas of high demand due to transmission constraints. Such price suppression in areas outside of load pockets, Luminant stated, leads to the mothballing and retirement of units. Furthermore, generation outside of transmission constrained areas is not incented to invest in new units if prices are suppressed and if they cannot reach areas of high load. CenterPoint commented that the consumer benefit test does not provide a disincentive for construction of generation capacity that would not otherwise exist in the market. CenterPoint noted that transmission approved by the consumer benefit test would lower the prices that exist in a load pocket, and as a result, generation might not be incented to build in a load pocket because the transmission built would alleviate the prices that would be needed for investments in generation. CenterPoint noted that building a generation facility inside a load pocket would also result in lowering prices resulting from congestion, so the

long-term impact would be the same in regards to the dissipation of sustained high prices that would incent the construction of generation. CenterPoint and Luminant stated that the consumer benefit test would allow for the necessary transmission that would enable the most economical generation resources to operate and be dispatched within the entirety of the ERCOT market.

NRG, Luminant, PAC, VOLT, TCA, TIEC, Oncor, AEP, and CenterPoint submitted reply comments on this issue. In response to comments that results of the consumer benefit test are more susceptible to future changes in input data such as changes in natural gas prices and/or bidding behavior, Luminant and CenterPoint argued that the consumer benefit test can understate the reduction in generator revenue that would occur due to changes in these input data. Luminant acknowledged that the consumer benefit test results are more susceptible to forward market prices than the production cost savings test. Luminant, however, stated that future gas prices will more than likely go up from where gas prices are now so the reduction in generator revenues, as a result, would be more than what a present consumer benefit test would indicate. Luminant also addressed NRG's statement that generators, in a real-world setting, bid at costs that are not necessarily reflective of the generator's marginal production cost even though ERCOT's simulation testing is modeled on the assumption that generators are bidding at their marginal production costs. Luminant stated that the consumer benefit test results for a proposed line would understate the reduction in generator revenues that a proposed transmission line would enable, because marginal generating units setting the clearing price are more than likely bidding at prices higher than the simulation testing assumes. Luminant stated that for example in a real world setting, cheaper generation from outside of the previously constrained area would replace those marginal units that typically bid above their production costs (to recoup investment

costs as well as costs associated with start-up and/or not knowing how long they will be dispatched). Luminant stated that if bidding behavior were incorporated into the simulation testing, then the addition of the transmission line would probably make the results of the line more pronounced as far as reducing generator revenue.

Luminant and others noted that ERCOT performs sensitivity testing to account for possible future changes to the input data, and ERCOT uses the same marginal production costs as input data for both the production cost savings test and the consumer benefit test.

CenterPoint noted that TIEC and TXU, representatives of the consumer segment, support the consumer benefit test.

NRG noted the initial commenters who expressed support for the consumer benefit test did not address the inherent flaws of the test. NRG reiterated that the consumer benefit test is flawed because the benefits identified by the test are short-lived. NRG, PACT, VOLT, and TCA also reemphasized that forecasts of revenue reduction depend on the ability to accurately predict input prices over the long-term, and ERCOT is unable to determine how future market scenarios will play out with exact precision.

PACT, VOLT, and TCA replied to TXU's statement that of the two tests that ERCOT uses as criteria for economic transmission projects, the consumer benefit test is the only one that evaluates the impact that the line will have on prices consumers pay for electricity. PACT, VOLT, and TCA noted that the production cost savings test considers the benefit a proposed

transmission line will have on both generators and consumers. They reemphasized that the production cost savings test measures how a transmission line will allow for the overall dispatch of lower cost generation on a long-term basis. PACT, VOLT, and TCA also refuted TXU's statement that the consumer benefit test is an accurate measure of how a proposed transmission line will impact prices consumers pay. These commenters stated that TXU statement was incorrect, because revenues allocated to load in the CRR auction do not necessarily correspond to the revenue paid to CRR account holders in actual market operations.

In response to CenterPoint's, Oncor's and other utilities' statement that the consumer benefit test was approved through the stakeholder process, PACT, VOLT, and TCA noted that certain stakeholders had objected to the consumer benefit test as it was vetted through that process. Moreover, they noted that language in Nodal Protocol Revision Request (NPRR) 292 would allow the stakeholders to continue discussions and make necessary changes to the protocols detailing the economic criteria testing provisions. CenterPoint acknowledged that the consumer benefit test did not receive unanimous support through the stakeholder process; however, the stakeholder process serves those with many different interests. CenterPoint noted that a majority of the stakeholders did approve the consumer benefit test, and CenterPoint also noted that the consumer segment unanimously supported adoption of the consumer benefit test.

NRG replied to CenterPoint's, TIEC's and Luminant's statement that use of the consumer benefit test would not discourage generation builds. NRG stated that the uncertainty and unpredictability of the consumer benefit test will dis-incent the construction of generation, particularly units that are needed during relatively few instances of exceptionally high demand.

Such peaking units typically are only able to recoup their investment costs during a few peak intervals. According to NRG, having an economic transmission testing criterion such as the consumer benefit test that merely looks at the pricing impact that a transmission line will have on removing transmission constraints poses a disincentive to the building of this type of unit. NRG also addressed the statement that transmission lines approved by the consumer benefit test allow for more generation from outside of the previously constrained area to serve load; NRG stated that no new generation is added to the ERCOT system in the long run in that situation.

CenterPoint responded to NRG's statement that the consumer benefit test creates disincentives for generation builds, by arguing that generators make investment decisions based on long-term revenue expectations. CenterPoint then referenced NRG's opposition to the consumer benefit test on the basis that the results of the consumer benefit test are short-lived and subject to change. CenterPoint reasoned that transmission projects approved by the consumer benefit test would not reduce long-term revenues and, therefore, should not threaten the building of new generation. CenterPoint and TIEC also replied to NRG's and TCA's claim that the consumer benefit test would shift the risk of investment from the market to ratepayers, by arguing that transmission approved based on the consumer benefit testing criteria enhances a competitive wholesale market. They stated that the consumer benefit test would approve transmission lines that would allow generation outside of a constrained area to produce and receive more revenue for their generation once the constraint is removed.

Luminant and TIEC opposed CPS's position that the consumer benefit test should be used in special situations such as when generation is unable to build in a non-attainment area or in

instances when persistent congestion exists that is not resolved by Security Constrained Economic Dispatch (SCED). Luminant and TIEC stated that economic projects approved by the consumer benefit test should be approved solely on the results of the test and should not take into account external considerations such as environmental restrictions as a basis for applying the test. In regards to repeated, irresolvable congestion, Luminant claimed that such situations are addressed through reliability testing criteria.

Commission Response

The commission concludes that the consumer impact/generator revenue reduction (GRR) test should not be used, for three reasons: the test is very sensitive to input assumptions; a transmission project that passes the test can result in a substantial number of customers paying higher prices; and the use of the test may result in generation resources not being built, thereby harming resource adequacy.

ERCOT currently uses two tests to determine whether a transmission project should be built for economic, as opposed to reliability, reasons: the societal impact/production cost savings (PCS) test and the GRR test. The first step in ERCOT's evaluation is determining whether a proposed transmission project will pass the PCS test. If the proposed project passes the PCS test, the project will be recommended. Only if the project fails the PCS test is it then evaluated under the GRR test. The proposed line must then pass the GRR test in order to be recommended. The PCS test compares the estimated levelized annual savings in system production costs resulting from the project to the estimated first-year revenue requirement for the project. If the system production cost savings is equal to or greater

than the first-year revenue requirement of the project, the project passes the test. The GRR test measures the estimated generator revenues with and without the line. If the levelized reduction in the estimated generator revenues is greater than the first-year revenue requirement of the project, the project passes the test.

ERCOT purchases electric energy using the well-established market clearing price method, in which the most expensive resources needed to meet the demand for energy set the prices paid to all the resources providing energy to ERCOT. The market clearing prices are set using the prices at which resources offer to provide energy or in some cases offer prices that are mitigated due to generator market power. The GRR test likewise uses market clearing prices, in order to calculate generator revenues. However, because the market clearing prices are forecasted, the GRR estimates generators' offer prices assuming that they equal the generators' costs.

In ERCOT, market clearing prices are usually set by generators that use natural gas to generate electricity. As a result, market clearing prices, and consequently generator revenues, are very sensitive to the price of natural gas. The results of the GRR test are therefore very sensitive to the price of natural gas. Natural gas prices are volatile; they can increase or decrease substantially over the course of a few years. They are therefore difficult to accurately forecast. In addition to the natural gas price forecast, the GRR test is also very sensitive to other input assumptions. For example, small changes in the load forecast or system topology assumptions can affect which generators set the market clearing prices, which in turn can substantially affect the calculated generator revenues.

Transmission lines usually have very long service lives; they are typically assumed to last 40 or more years. Therefore, in the GRR test, the comparison of a long-lived transmission line to generator revenues that are very hard to accurately forecast can easily produce results that are very inaccurate.

A transmission project that fails the PCS test but passes the GRR test may result in a substantial number of customers paying higher prices even in the situation where the GRR test accurately forecasts costs and revenues. A project passes the PCS test only if the estimated first-year revenue requirement of the project is less than the estimated levelized first-year reduction in the estimated generation costs to meet the forecasted load. Therefore, if a project passes the GRR test but fails the PCS test, the estimated first-year revenue requirement of the project is equal to or greater than the estimated levelized first-year reduction in the estimated generation costs to meet the forecasted load. The GRR test addresses a “load pocket” – an area in which there is more load than generation; the generation in the area is higher cost than the generation outside of the area; and the transmission lines connecting the area to the rest of the system are insufficient to allow sufficient generation to be imported to avoid use of the expensive generation in the area. In the case where a transmission project passes the GRR test but fails the PCS test, customers inside the load pocket will pay lower costs but customers outside the load pocket may pay higher costs than if the line had not been built.

The use of the GRR test may result in generation resources not being built, thereby harming resource adequacy. Resources are adequate when there are sufficient resources to serve load and there are sufficient resources in reserve for use if resources are unavailable when needed (which is called the reserve margin). A load pocket can be eliminated or ameliorated in one of three ways: increasing import capability through the addition of transmission facilities; decreasing the amount of load in the load pocket through energy conservation and load management; or increasing the amount of resources in the load pocket. Absent the addition of transmission facilities or substantial increases in conservation and load management, generation developers have the incentive to respond to the relatively high prices in the load pocket by building generation in the load pocket that can generate at a cost that is lower than the cost of the generation that exists in the load pocket. As a result, if transmission facilities are added to eliminate or ameliorate the load pocket, the result may be that less generation is built in the system, thereby adversely affecting resource adequacy.

Question 2A:

When comparing the projected levelized ERCOT-wide annual production cost savings or levelized ERCOT-wide annual generator revenue reduction attributable to a transmission project to the first-year annual revenue requirement for the project, as described in ERCOT Nodal Protocols, Sections 3.11.2(4)-(6), should the commission adopt a minimum ratio of the production cost savings or generator revenue reduction to the first-year annual revenue requirement that is higher than the ratio currently required by ERCOT?

Lone Star, Oncor, Sharyland, and CenterPoint opposed adopting a minimum ratio higher than the ratio currently used by ERCOT. LCRA stated that the language in HB 971 corresponds loosely to the current production-cost test, but stated that it would leave the issue to the commission and the other parties to resolve. STEC stated that it supports the proposed rule as published, which assumes support for the current ratio used by ERCOT, but suggested re-examination of the annual revenue requirement method currently used by ERCOT. Lone Star stated that the current system preserves flexibility to consider the merits of individual projects. Oncor and AEP stated that the current process was robustly developed through the ERCOT stakeholder process and no changes are needed at this time. Oncor and Sharyland stated that the current ratio properly balances competing interests. CenterPoint stated that future savings might be higher than predicted and future costs might be lower than anticipated, and therefore the conservative approach taken by ERCOT in evaluating economic projects produces recommendations robust for economic justification. CPS stated that the societal benefit test and the ratio should remain unchanged, and advocated for tighter restrictions on the use of the consumer test, such as limiting its use in areas where there are limitations on the construction of generation or where there is persistent congestion that is irresolvable by Security Constrained Economic Dispatch (SCED) into a load pocket. CPS also suggested that a 25% adder should be applied to the benefits in the consumer test, such that the reduction in generator revenues should be 125% of the transmission line's first-year revenue requirement.

Calpine supported the current ratio used by ERCOT for the societal test. Calpine, however, stated that the current ratio is not robust enough for the consumer test and appeared to support using a higher ratio for that test, although Calpine did not suggest any particular ratio. NRG

echoed Calpine's comments and suggested a ratio of 2:1 for the consumer test. Luminant did not specifically state whether the ratio should be higher, but appeared to support using the current ratio for both the societal test and the consumer test.

TXU believed that a higher ratio should not be used because the current process "...already penalizes the [proposed] transmission project as compared to an evaluation using a levelized-to-levelized assessment." TXU stated that the revenue requirement will start high, and will decrease as the project is depreciated; the first-year revenue requirement for the transmission project is the highest of any year, and is approximately 25% higher than the levelized cost of the transmission project. Therefore, comparing the first-year benefits in either the production cost savings or generator revenue reduction test to the first-year revenue requirement already represents a high hurdle.

TIEC stated that it proposed no changes to either the societal or consumer test as currently conducted by ERCOT, and hence proposed no change to the current ratio. Sierra Club did not agree with using either the production cost savings or generator revenue reduction tests. Instead, the applicant should show that the net public benefits of the proposed transmission line outweigh the net societal costs and the proposed line is better than other alternatives. However, if the commission decides to keep these tests, Sierra Club suggested a minimum additional savings above the revenue requirement of at least 50%. VOLT, PACT, and TCA recommend against using the consumer test and stated that the ratio for the societal test should be higher than the ratio currently used by ERCOT. The PACT, VOLT, and TCA joint filing recommended that the

annual savings for the societal test be at least one-half of the project cost, corresponding to a ratio of 3:1 or greater.

Reply comments directly addressing this question were submitted by CenterPoint, Luminant, and TIEC, and all supported keeping the ratio that is currently used by ERCOT.

Commission Response

As stated in the response to question 1, the commission rejects the use of the generator revenue reduction (GRR) test. Therefore, the commission does not need to address an increased threshold for this test.

The commission concludes that the current 1:1 threshold used in the production cost savings (PCS) test for approving a proposed project (i.e., the estimated levelized annual savings in system production costs resulting from the project is equal to or greater than the estimated first-year revenue requirement for the project) should be retained. The PCS test is much less sensitive to input assumptions than the GRR test. In addition, the PCS is conservative in its estimate of savings, because the only cost in the test used for the transmission project is the project's estimated first-year revenue requirement. The annual revenue requirement for the project will decline substantially over time due to accumulated depreciation.

Concerning STEC's suggestion to re-examine the annual revenue requirement method currently used by ERCOT, the commission declines to do so because STEC raised no

particular concerns about that method. However, STEC is free to request re-examination of the method through the ERCOT stakeholder process.

Question 2B:

Should the ratio be different when comparing the production cost savings than when comparing the generator revenue reduction?

TXU, Lone Star, Luminant, Oncor, Sharyland, CenterPoint, and AEP stated that the ratios for both tests should be the same and should not change from the current level. TXU pointed out that the ratios should be 1:1 (comparing the first-year production cost savings for the societal benefit test or generator revenue reduction for the consumer benefit test to the first-year revenue requirement of the project) for both tests, because both tests are already biased in their comparison of a levelized quantification to one that is not levelized. Lone Star stated that a minimum cost-benefit ratio would limit the commission's authority to approve transmission investment at a time when such investment is needed to address generating unit retirements and peak load growth. CenterPoint stated that the commission should take a balanced view in regard to forecast uncertainty and that while actual benefits may be less than forecasted, it is true that actual benefits may be higher than forecasted. CenterPoint also stated that the current approach used by ERCOT is a conservative approach that understates benefits and overstates costs. Sharyland, AEP, and Oncor noted that the tests were evaluated and adopted through the ERCOT stakeholder process and the ERCOT Board.

STEC stated that it was important that the production cost savings or generator revenue reduction meet or surpass the first-year revenue requirement, and also recommended that it be determined if the first-year revenue requirement method is still appropriate.

Calpine and NRG stated that a higher ratio was warranted for the generator revenue reduction test than for the production cost savings test. NRG stated that the ability to forecast benefits under the generator revenue reduction test is limited by the use of speculative data and is far less reliable than the forecasts of production costs. NRG added that it preferred that the generator revenue reduction test not be used, but if it is, the ratio should be 2:1, while the ratio production cost savings test should remain at 1:1. TCA stated that the current standard is not sufficient for the commission to find a “need” for an economic-based transmission line, but if the commission is going to authorize a line on economic need, the threshold should be high, perhaps the 50% proposed by commission staff. The individual commenters that addressed this issue recommended that either the payback be limited to no more than five years or that the generator revenue reduction be at least 50% of the total project cost. PACT, VOLT, and TCA argued that the consumer benefit test should not be used and that a modification of the ratio will not resolve the fundamental issues with the test.

TIEC and LCRA did not suggest any changes to the tests in response to this question.

In its reply comments, TIEC agreed with CPS’s reasoning for supporting the consumer benefit test, but did not agree with the suggestion to delineate specific circumstances where the test

could be applied. Luminant likewise argued against adders or restrictions to the generator revenue reduction test, stating that there is no basis for restricting the application of the test.

Commission Response

As stated in the response to Question 1, the commission rejects the use of the generator revenue reduction test. Therefore, this question no longer needs to be answered.

Deadline to File Re-Evaluation of Economic Analysis

Initial comments on this issue were received by AEP, Calpine, CenterPoint, Sharyland, Oncor, STEC, LCRA, and PACT, VOLT, and TCA. Representative Kolkhorst also filed comments on this issue, and stated that her intent for the statutory language was for the commission to request a new study that should consider more realistic and updated scenarios for the price and availability of natural gas. AEP and CenterPoint both recommended that the 18-month deadline be completely removed from the rule. AEP stated that after a study is performed, it could take six to eight months for ERCOT Board approval of the project, with another 18 months to complete the CCN application, routing analysis, and identification of all potentially affected landowners. CenterPoint stated that a transmission service provider (TSP) should not be discouraged from taking the time to address landowners and public input in order to submit an application before a deadline. Both AEP and CenterPoint noted that individual projects vary in size and scope, which would affect the time to prepare an application. Requiring a re-evaluation of the test could further delay transmission projects. CenterPoint also argued that a TSP should be able to rely on the determination by the ERCOT Board that a project is necessary to move forward with developing the CCN application. Requiring a re-evaluation of the economic

analysis would place the TSP at risk for the costs incurred to develop a project. CenterPoint pointed out that the burden in a CCN application is ultimately on the applicant, and it will be a fact issue on whether the ERCOT analysis is still valid to support the project. Finally, CenterPoint stated that if there is a deadline, it should be measured from ERCOT Board approval, not from the time the study was performed.

LCRA, STEC, and Oncor suggested a longer time period than 18 months. LCRA and Oncor suggested 24 months from the date of ERCOT Board approval, also noting that the requirements to complete a CCN application can take 18-24 months. LCRA also pointed out the benefits of having regulatory certainty and the risk that a TSP may not recover costs to develop a project if it is subject to re-evaluation.

Calpine and Sharyland supported the 18-month requirement in the proposed rule. Sharyland stated that the 18 month timeframe provides adequate time to prepare a CCN filing, and would provide impetus for timely progression of transmission projects.

TCA stated that the 18-month timeframe does nothing to ensure that the assumptions used in the ERCOT assessment are based on the most recent pricing and operational data available at the time of the application. TCA and the joint comments of PACT, VOLT, and TCA supported a rerun of the economic analysis no more than 90 days before the submission of an application. The joint comments suggested that if the refreshed analysis shows that the proposed project is no longer economically viable, then the TSP should be allowed to recover the costs of preparing the application in the same manner that other transmission-related costs are recovered. In addition,

VOLT, PACT, and TCA argued that within 90 days of the filing, the applicant could use estimates from the CCN application, which would be better than estimates used in the ERCOT planning process, and the application should only be filed if all viable routes pass the economic test used to support the line.

Reply comments were filed by NRG, AEP, CenterPoint, TIEC, and VOLT, PACT, and TCA. TIEC stated that it is unreasonable that there be no expiration date on an economic analysis, and believed that a 12-18 month timeframe is reasonable. CenterPoint rejected the proposal to rerun the analysis 90 days before the application is filed, and reiterated that it would be a fact issue for the commission to consider. AEP supported the recommendation that the deadline should be 24 months after ERCOT Board approval, if a time period is adopted. AEP also recommended that the 90-day rerun suggestion be rejected, stating that such a short timeline is unreasonable, especially when the parties in a CCN docket can argue the validity of the economic benefit study in the CCN proceeding. NRG argued that ERCOT does not need to re-evaluate the project at the time of the CCN application because ERCOT's endorsement is not determinative; the burden rests on the applicant; and a TSP that relies on a two-year-old planning study does so at their own risk. PACT, VOLT, and TCA clarified their recommendation, and noted that it is understood that a CCN application would take more than 90 days to complete, and that the analysis performed would be a "refresher" analysis.

Commission Response

As explained previously, the production cost savings test is much less sensitive to inputs than the generator revenue reduction test. Because the commission is eliminating use of

the generator revenue reduction test, it concludes that a specific deadline to use the original study applying the production cost savings test is unnecessary. As a result, a party to a CCN docket is free to argue that the test results are stale, and the burden will be on the applicant to prove that the results are valid.

Projects Excluded from Scope of Rule

Initial comments on this issue were filed by AEP, LCRA, Lone Star, and NRG. AEP stated that the proposed rule should be modified to also exclude projects required to relocate, alter, or reconstruct an existing transmission line when required by any federal, state, county, or municipal government body or agency for purposes including, but not limited to, highway transportation, airport construction, public safety, or air and water quality. LCRA proposed additional amendments to the rule language to exclude projects intended to address local reliability issues, the load-serving function, or to interconnect a generator. LCRA also suggested that the commission put a \$25 million threshold on projects for economic evaluation. NRG agreed with the commission's proposed language, with the modification that the reference to competitive renewable energy zone (CREZ) projects refer to applications "filed under §25.174 of this title (relating to Competitive Renewable Energy Zones)," which would make the rule consistent with other rules and the existing CCN application forms that provide a mechanism for identifying CREZ lines. Lone Star suggested that the rule's applicability should not extend to projects needed for serving load, for public safety, or for generator interconnections.

Reply comments were filed by Oncor and AEP. AEP generally agreed with the recommendations by the other parties, and specifically agreed with the recommendation from

LCRA. Oncor agreed with the suggestions of both LCRA and Lone Star, and stated that the need for these projects is non-economic. Oncor suggested that the exclusion could be done through LCRA's proposed language or a broad definition of "state reliability standard."

Commission Response

PURA §37.056(d) states: "The commission by rule shall establish criteria ... for granting a certificate for a transmission project that serves the ERCOT power region, that is not necessary to meet state or federal reliability standards, and that does not serve a competitive renewable energy zone. The criteria must include a comparison of the estimated cost of the transmission project and the estimated cost savings that may result from the transmission project...." Projects that are needed to serve load or interconnect generators or other transmission service customers are necessary to meet state reliability standards and therefore should not be subject to the criteria (i.e., the cost-benefit study specified by the rule). Likewise, a project is necessary to meet state reliability standards if it is needed due to the requirements of any federal, state, county, or municipal government body or agency for purposes including, but not limited to, highway transportation, airport construction, public safety, or air or water quality. The commission has therefore not subjected these projects to the criteria. For other projects in the ERCOT power region, the commission has not put a threshold for the criteria to apply, because PURA §37.056(d) does not provide for one. For clarity, the commission has added a reference to §25.174 (relating to Competitive Renewable Energy Zones) for CREZ lines. The Commission also clarifies in a new §25.101(h) that nothing in §25.101 is intended to limit the commission's

authority to recommend or direct the construction of transmission under PURA §§ 35.005, 36.008, or 39.203(e).

Use of Other Factors in the Economic Analysis

Initial comments on this issue were received by Lone Star, Oncor, CenterPoint, VOLT, PACT, TCA, Sharyland, Luminant, and Sierra Club. Representative Kolkhorst also filed comments on this issue, and recommended that the commission look at the effect of any new transmission line on rates, and determine whether or not prices in other areas of the state will increase due to a new project. Sierra Club, in arguing that neither of the ERCOT tests should be used, stated that the commission should consider cost-effective alternatives to a proposed transmission line, such as demand response, energy efficiency, or onsite renewable resources to meet the same purpose as the proposed transmission project. Sierra Club also argued that the commission should consider other societal values such as land and habitat impacts, and the potential for increased or decreased emissions from generation supported by the new transmission line. PACT, VOLT, and TCA argued that landowner impact costs should be included as part of an economic analysis. TCA also argued that other resource alternatives to the proposed project should be considered. Luminant stated that the ERCOT Nodal Protocols, Operating Guides, and Planning Charter detail which costs and revenues are considered in the consumer benefit test, including Reliability Must-Run payments, and other indicators of consumer benefits, including actual observed congestion. Sharyland, Lone Star, and Oncor also noted that the ERCOT Protocols allow the flexibility to include indirect benefits and costs in any economic consideration, to the extent the benefits are tangible and can be calculated, and supported the flexibility in the proposed rule. Sharyland noted that the indirect benefits may include future reliability benefits, deferral of other projects,

and additional operational flexibility for ERCOT. Luminant stated that the ERCOT Nodal Protocols, Operating Guides, and procedures include significant flexibility to allow for application of factors and costs as appropriate for the specific circumstances under consideration. While not advocating that the commission directly consider other benefits, CenterPoint argued in its support for the consumer benefit test that a transmission line not built to North American Electric Reliability Corporation (NERC) or ERCOT reliability standards may still have reliability benefits, and that economic transmission projects allow for more robust dispatch options, which could allow for underlying reliability concerns to be addressed through the re-dispatch of generation.

Reply comments were filed by Oncor, TIEC, CenterPoint, and VOLT, PACT, and TCA. VOLT, PACT, and TCA noted that other parties mentioned that the ERCOT Protocols allow for the consideration of indirect costs and benefits. However, this is only done in the context of the societal benefit test in Nodal Protocol 3.11.2(5), and is not mentioned in Nodal Protocol 3.11.2(6), which describes the consumer benefit test. Importantly, while the Nodal Protocols allow for the consideration of the indirect costs and benefits, there is no methodology for defining or analyzing these amounts, nor do any parties propose any methodology. VOLT, PACT, and TCA urged caution in including indirect costs and benefits, because “indirect benefits” are undefined and may be used to justify any proposed economic project. VOLT, PACT, and TCA stated that it is not clear if ERCOT has the ability to calculate either the indirect costs or benefits with great accuracy. VOLT, PACT, and TCA also argued against the proposal of CenterPoint and Sharyland to consider the indirect reliability benefits of a project. VOLT, PACT, and TCA argued that this rulemaking is to consider transmission projects that are not

needed for reliability purposes, but rather have positive economic benefits despite the fact they are not needed for reliability. VOLT, PACT, and TCA stated that if ERCOT determines that a transmission line is required for reliability purposes, then there is no need to evaluate the economic criteria, and adding transmission based on assertions of indirect reliability benefits adds unjustified and unreasonable costs. CenterPoint responded to Sierra Club's arguments, and stated that there are existing methods to promote energy efficiency and demand response, but they are not used to remedy transmission constraints due to modeling complexities and untenable assumptions. CenterPoint concluded that these considerations should not be added to the criteria for determining whether transmission projects are necessary. TIEC opposed the consideration of indirect or "societal" benefits and consideration of non-transmission alternatives as advocated by Sierra Club. TIEC stated that including subjective, non-monetized, and speculative impacts is unpredictable, opaque, and overtly politicized; leads to inefficient transmission planning; and imposes substantial unjustified costs on consumers or prevents construction of lines that are economically justified. TIEC proposed that the economic criteria should be limited to the costs and resulting savings of a proposed project, and not speculative, qualitative, or subjective potential consequences of the project. Oncor stated that energy efficiency and demand-side resources are properly addressed and implemented through other rules, that the impact of energy efficiency is already captured through load forecasts used for economic modeling, and that it is not necessary to consider these resources into the analysis for economic transmission projects.

Commission Response

As stated above concerning question 1, the commission has adopted use of the production cost savings test, in which the levelized ERCOT-wide annual production cost savings

attributable to the proposed project is equal to or greater than the first-year annual revenue requirement of the proposed project of which the transmission line is a part. The current ERCOT Nodal Protocols, Section 3.11.2(5), provide that “[i]ndirect benefits and costs associated with the project should be considered as well, where appropriate.” The commission concludes that indirect benefits and costs can also be considered in the cost-benefit study and does not seek to change the current process to the extent that indirect benefits and costs to the transmission system are currently included in any economic analysis. However, in response to comments by the Sierra Club, the commission declines to allow for the evaluation of broader factors outside of the transmission system in any economic study. Allowing consideration of broader indirect costs and benefits would make the study too open-ended and speculative. The commission notes, however, that factors such as demand response, energy efficiency, and onsite resources are reflected in ERCOT’s load forecast that is used in the study. Furthermore, in evaluating a CCN application, PURA §37.056(c) requires the commission to consider various factors such as community values and environmental integrity in determining the route and mitigation measures for a needed transmission line.

Performance of the Economic Analysis by the Commission

Representative King stated that it was not his intent, in supporting this provision of HB 971, that the commission perform a separate transmission study, but that the commission should rely on the expertise of ERCOT in this study. TCA and individual commenters filed initial comments recommending that the commission perform its own analysis, rather than rely on the ERCOT analysis for economic projects. TCA stated that the commission should, at a minimum, retain

the ability to reject an economic benefits assessment performed by ERCOT and reach its own conclusions based on the evidentiary record. TCA also stated that it appears the intent of HB 971 was for the commission to conduct its own analysis. While not directly addressing the issue of whether the commission should conduct its own analysis, AEP stated that ERCOT possesses the necessary tools, input data, and expertise to test the economic benefits of a new transmission process. AEP also asserted that the ERCOT procedures to evaluate the economic benefit of a new transmission project as described in the Nodal Protocols serves the mandate of HB 971. NRG also mentioned the concern that the commission require an in-depth, independent analysis nearer the time that a CCN application is submitted, but did not recommend whether the commission conduct that analysis.

Reply comments were filed by AEP, Oncor, and CenterPoint. CenterPoint argued that the commission should not duplicate the ERCOT analysis. CenterPoint noted that ERCOT is the designated independent organization and has no vested interest to protect, and that the Legislature has provided the commission oversight authority of ERCOT's functions. CenterPoint argued that, due to this fact, it is unnecessary and inefficient for the commission to re-analyze projects already developed by ERCOT. CenterPoint and Oncor pointed out that ERCOT has the specialized personnel and the comprehensive system-wide transmission data to conduct the analysis, is in an independent position in the market, and the commission should continue to give "great weight" to the ERCOT analysis. AEP stated that ERCOT provides an informed, uniquely capable manner towards vetting proposed economic and reliability transmission projects, that the ERCOT process works, and that it provides the best approach to address the broader, greater interests of the ERCOT region as a whole.

Commission Response

PURA §37.056(d) requires that the commission by rule establish criteria for the study of an economic transmission project; it does not require that the commission itself to conduct such studies. Pursuant to PURA §39.151(a)(2), ERCOT is the statutorily recognized independent organization that is charged with ensuring the reliability and adequacy of the ERCOT system. As such, ERCOT has the specialized personnel and the comprehensive system-wide transmission data to conduct an unbiased and thorough economic cost-benefit study. As a result, it is appropriate for the commission to give great weight to an economic cost-benefit study that is conducted by ERCOT in accordance with the rule's criteria. However, giving great weight to such a study is not tantamount to approving the study; parties in a CCN docket have the right to challenge ERCOT's study and the commission may reject the study if it is deficient or stale.

All comments, including any not specifically referenced herein, were fully considered by the commission. The commission has changed the proposed amendments consistent with the discussion above and for the purpose of clarifying its intent.

The amendment is adopted under the Public Utility Regulatory Act, Texas Utilities Code Annotated §14.002 (West 2007 and Supp. 2011) (PURA), which provides the commission with the authority to make and enforce rules reasonably required in the exercise of its powers and jurisdiction, and specifically, HB 971, Section 2, codified as PURA §37.056(d), which requires the commission to establish criteria for granting a certificate for a transmission project that serves the ERCOT power region, that is not necessary to meet state or federal reliability

standards, and that does not serve a competitive renewable energy zone. The criteria must include a comparison of the estimated cost of the transmission project and the estimated cost savings that may result from the transmission project.

Cross Reference to Statutes: Public Utility Regulatory Act §14.002 and HB 971, Section 2, codified as PURA §37.056(d).

§25.101. Certification Criteria.

- (a) **Definitions.** The following words and terms, when used in this section, shall have the following meanings unless the context clearly indicates otherwise:
- (1) **Construction and/or extension** -- Shall not include the purchase or condemnation of real property for use as facility sites or right-of-way. Acquisition of right-of-way shall not be deemed to entitle an electric utility to the grant of a certificate of convenience and necessity without showing that the construction and/or extension is necessary for the service, accommodation, convenience, or safety of the public.
 - (2) **Generating unit** -- Any electric generating facility. This section does not apply to any generating unit that is less than ten megawatts and is built for experimental purposes only, and not for purposes of commercial operation.
 - (3) **Habitable structures** -- Structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis. Habitable structures include, but are not limited 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.
 - (4) **Prudent avoidance** -- The limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort.
- (b) Certificates of convenience and necessity for new service areas and facilities. Except for certificates granted under subsection (e) of this section, the commission may grant an application and issue a certificate only if it finds that the certificate is necessary for the

service, accommodation, convenience, or safety of the public, and complies with the statutory requirements in the Public Utility Regulatory Act (PURA) §37.056. The commission may issue a certificate as applied for, or refuse to issue it, or issue it for the construction of a portion of the contemplated system or facility or extension thereof, or for the partial exercise only of the right or privilege. The commission shall render a decision approving or denying an application for a certificate within one year of the date of filing of a complete application for such a certificate, unless good cause is shown for exceeding that period. A certificate, or certificate amendment, is required for the following:

- (1) **Change in service area.** Any certificate granted under this section shall not be construed to vest exclusive service or property rights in and to the area certificated.
 - (A) Uncontested applications: An application for a certificate under this paragraph shall be approved administratively within 80 days from the date of filing a complete application if:
 - (i) no motion to intervene has been filed or the application is uncontested;
 - (ii) all owners of land that is affected by the change in service area and all customers in the service area being changed have been given direct mail notice of the application; and
 - (iii) commission staff has determined that the application is complete and meets all applicable statutory criteria and filing requirements,

including, but not limited to, the provision of proper notice of the application.

(B) Minor boundary changes or service area exceptions: Applications for minor boundary changes or service area exceptions shall be approved administratively within 45 days of the filing of the application provided that:

- (i) all utilities whose certificated service area is affected agree to the change;
- (ii) all customers within the affected area have given prior consent; and
- (iii) commission staff has determined that the application is complete and meets all applicable statutory criteria and filing requirements, including, but not limited to, the provision of proper notice of the application.

(2) **New generating unit.** A new electric generating unit constructed, owned, or operated by a bundled electric utility.

(3) New electric transmission line. All new electric transmission lines shall be reported to the commission in accordance with §25.83 of this title (relating to Transmission Construction Reports).

(A) Need:

- (i) Except as stated below, the following must be met for a transmission line in the Electric Reliability Council of Texas (ERCOT) power region. The applicant must present an economic

cost-benefit study that includes an analysis that shows that the levelized ERCOT-wide annual production cost savings attributable to the proposed project are equal to or greater than the first-year annual revenue requirement of the proposed project of which the transmission line is a part. Indirect costs and benefits to the transmission system may be included in the cost-benefit study. The commission shall give great weight to such a study if it is conducted by ERCOT. This requirement for an economic cost-benefit study does not apply to an application filed pursuant to §25.174 of this title (relating to Competitive Renewable Energy Zones) for a transmission line that is intended to serve a competitive renewable energy zone. This requirement also does not apply to an application for a transmission line that is necessary to meet state or federal reliability standards, including: a transmission line needed to interconnect a transmission service customer or end-use customer; or needed due to the requirements of any federal, state, county, or municipal government body or agency for purposes including, but not limited to, highway transportation, airport construction, public safety, or air or water quality.

- (ii) For a transmission line not addressed by clause (i) of this subparagraph, the commission shall consider among other factors, the needs of the interconnected transmission systems to support a

reliable and adequate network and to facilitate robust wholesale competition. The commission shall give great weight to:

- (I) the recommendation of an organization that meets the requirement of PURA §39.151; and/or
 - (II) written documentation that the transmission line is needed to interconnect a transmission service customer or an end-use customer.
- (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 alternative 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 300 feet of the centerline of a transmission project of 230 kV or less, or 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.
 - (C) Uncontested transmission lines: An application for a certificate for a transmission line shall be approved administratively within 80 days from the date of filing a complete application if:
 - (i) no motion to intervene has been filed or the application is uncontested; and
 - (ii) commission staff has determined that the application is complete and meets all applicable statutory criteria and filing requirements, including, but not limited to, the provision of proper notice of the application.
 - (D) Projects deemed critical to reliability. Applications for transmission lines which have been formally designated by a PURA §39.151 organization as critical to the reliability of the system shall be considered by the commission on an expedited basis. The commission shall render a decision approving or denying an application for a certificate under this subparagraph within 180 days of the date of filing a complete application for such a certificate unless good cause is shown for extending that period.
- (c) **Projects or activities not requiring a certificate.** A certificate, or certificate amendment, is not required for the following:
 - (1) A contiguous extension of those facilities described in PURA §37.052;
 - (2) A new electric high voltage switching station, or substation;

- (3) The repair or reconstruction of a transmission facility due to emergencies. The repair or reconstruction of a transmission facility due to emergencies shall proceed without delay or prior approval of the commission and shall be reported to the commission in accordance with §25.83 of this title.
- (4) The construction or upgrading of distribution facilities within the electric utility's service area.
- (5) Routine activities associated with transmission facilities that are conducted by transmission service providers. Nothing contained in the following subparagraphs should be construed as a limitation of the commission's authority as set forth in PURA. Any activity described in the following subparagraphs shall be reported to the commission in accordance with §25.83 of this title. The commission may require additional facts or call a public hearing thereon to determine whether a certificate of convenience and necessity is required. Routine activities are defined as follows:
 - (A) The modification or extension of an existing transmission line solely to provide service to a substation or metering point provided that:
 - (i) an extension to a substation or metering point does not exceed one mile; and
 - (ii) all landowners whose property is crossed by the transmission facilities have given prior written consent.
 - (B) The rebuilding, replacement, or respacing of structures along an existing route of the transmission line; upgrading to a higher voltage not greater

than 230 kV; bundling of conductors or reconductoring of an existing transmission facility, provided that:

- (i) no additional right-of-way is required; or
- (ii) if additional right-of-way is required, all landowners of property crossed by the electric facilities have given prior written consent.

(C) The installation, on an existing transmission line, of an additional circuit not previously certificated, provided that:

- (i) the additional circuit is not greater than 230 kV; and
- (ii) all landowners whose property is crossed by the transmission facilities have given prior written consent.

(D) The relocation of all or part of an existing transmission facility due to a request for relocation, provided that:

- (i) the relocation is to be done at the expense of the requesting party;
and
- (ii) the relocation is solely on a right-of-way provided by the requesting party.

(E) The relocation or alteration of all or part of an existing transmission facility to avoid or eliminate existing or impending encroachments, provided that all landowners of property crossed by the electric facilities have given prior written consent.

(F) The relocation, alteration, or reconstruction of a transmission facility due to the requirements of any federal, state, county, or municipal governmental body or agency for purposes including, but not limited to,

highway transportation, airport construction, public safety, or air and water quality, provided that:

- (i) all landowners of property crossed by the electric facilities have given prior written consent; and
- (ii) the relocation, alteration, or reconstruction is responsive to the governmental request.

(d) **Standards of construction and operation.** In determining standard practice, the commission shall be guided by the provisions of the American National Standards Institute, Incorporated, the National Electrical Safety Code, and such other codes and standards that are generally accepted by the industry, except as modified by this commission or by municipal regulations within their jurisdiction. Each electric utility shall construct, install, operate, and maintain its plant, structures, equipment, and lines in accordance with these standards, and in such manner to best accommodate the public, and to prevent interference with service furnished by other public utilities insofar as practical.

- (1) The standards of construction shall apply to, but are not limited to, the construction of any new electric transmission facilities, rebuilding, upgrading, or relocation of existing electric transmission facilities.
- (2) For electric transmission line construction requiring the acquisition of new rights-of-way, electric utilities must include in the easement agreement, at a minimum, a provision prohibiting the new construction of any above-ground structures within the right-of-way. New construction of structures shall not include necessary

repairs to existing structures, farm or livestock facilities, storage barns, hunting structures, small personal storage sheds, or similar structures. Utilities may negotiate appropriate exceptions in instances where the electric utility is subject to a restrictive agreement being granted by a governmental agency or within the constraints of an industrial site. Any exception to this paragraph must meet all applicable requirements of the National Electrical Safety Code.

- (3) Measures shall be applied when appropriate to mitigate the adverse impacts of the construction of any new electric transmission facilities, and the rebuilding, upgrading, or relocation of existing electric transmission facilities. Mitigation measures shall be adapted to the specifics of each project and may include such requirements as:
- (A) selective clearing of the right-of-way to minimize the amount of flora and fauna disturbed;
 - (B) implementation of erosion control measures;
 - (C) reclamation of construction sites with native species of grasses, forbs, and shrubs; and
 - (D) returning site to its original contours and grades.
- (e) **Certificates of convenience and necessity for existing service areas and facilities.** For purposes of granting these certificates for those facilities and areas in which an electric utility was providing service on September 1, 1975, or was actively engaged in the construction, installation, extension, improvement of, or addition to any facility actually used or to be used in providing electric utility service on September 1, 1975, unless found

by the commission to be otherwise, the following provisions shall prevail for certification purposes:

- (1) The electrical generation facilities and service area boundary of an electric utility having such facilities in place or being actively engaged in the construction, installation, extension, improvement of, or addition to such facilities or the electric utility's system as of September 1, 1975, shall be limited, unless otherwise provided, to the facilities and real property on which the facilities were actually located, used, or dedicated as of September 1, 1975.
- (2) The transmission facilities and service area boundary of an electric utility having such facilities in place or being actively engaged in the construction, installation, extension, improvement of, or addition to such facilities or the electric utility's system as of September 1, 1975, shall be, unless otherwise provided, the facilities and a corridor extending 100 feet on either side of said transmission facilities in place, used or dedicated as of September 1, 1975.
- (3) The facilities and service area boundary for the following types of electric utilities providing distribution or collection service to any area, or actively engaged in the construction, installation, extension, improvement of, or addition to such facilities or the electric utility's system as of September 1, 1975, shall be limited, unless otherwise found by the commission, to the facilities and the area which lie within 200 feet of any point along a distribution line, which is specifically deemed to include service drop lines, for electrical utilities.

- (f) **Transferability of certificates.** Any certificate granted under this section is not transferable without approval of the commission and shall continue in force until further order of the commission.

- (g) **Certification forms.** All applications for certificates of convenience and necessity shall be filed on commission-prescribed forms so that the granting of certificates, both contested and uncontested, may be expedited. Forms may be obtained from Central Records.

- (h) **Commission authority.** Nothing in this section is intended to limit the commission's authority to recommend or direct the construction of transmission under PURA §§35.005, 36.008, or 39.203(e).

This agency hereby certifies that the adoption has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority. It is therefore ordered by the Public Utility Commission of Texas that §25.101, relating to Certification Criteria, is hereby adopted with changes to the text as proposed.

ISSUED IN AUSTIN, TEXAS ON THE _____ DAY OF _____ 2012.

PUBLIC UTILITY COMMISSION OF TEXAS

DONNA L. NELSON, CHAIRMAN

KENNETH W. ANDERSON, JR., COMMISSIONER

ROLANDO PABLOS, COMMISSIONER