The Public Utility Commission of Texas (commission) proposes amendments to \$25.192 relating to Transmission Service Rates, \$25.193 relating to Procedures for Modifying Transmission Rates, \$25.194 relating to Determining Peak Load and Megawatt Mile Impacts, \$25.198 relating to Initiating Transmission Service, and \$25.204 relating to Summary of Required Filings. The proposed amendments implement recent legislation requiring the use of postage stamp pricing for transmission service in the Electric Reliability Council of Texas (ERCOT). Project Number 21080 has been assigned to this proceeding.

Section 35.004(d) of the Public Utility Regulatory Act (PURA), as amended, effective September 1, 1999, directs the commission to "price wholesale transmission services within ERCOT based on the postage stamp method of pricing under which a transmission-owning utility's rate is based on the ERCOT utilities' combined annual costs of transmission divided by the total demand placed on the combined transmission systems of all such transmission-owning utilities within a power region." Sections 25.192, 25.193, 25.194, 25.198 and 25.204 are modified to comply with the legislative directive to adopt a postage stamp method for ERCOT. Accordingly all references to a distance sensitive method, and the calculation and description of the distance-sensitive component of the transmission pricing under the existing rule is deleted and replaced with language that conforms to the new method prescribed by the legislature. Prior to the proposed amendments, the commission's rules established a facilities charge that was the sum of a distance sensitive impact charge and a postage-stamp access charge.

Since 1999 is the last year of the transition mechanism, §25.192(a)(3) is deleted.

PURA §39.052 freezes the base rate tariffs of an electric utility at the September 1, 1999 level until January 1, 2002. Accordingly, §25.193(a)(4) has become moot and, therefore, is deleted.

The commission is retaining the requirement that utilities provide information to the independent system operator (ISO) relating to their loads and resources, so that the ISO may conduct studies to ensure the adequacy of the transmission network. However, the information will no longer be used to calculate impact charges. Therefore, §25.194 is renamed Determining Peak Load and Transmission Adequacy.

There are matters that raise significant policy and legal issues on which the commission seeks the comments of interested parties:

- 1. What legal impediments, if any, would preclude the commission from making this rule retroactive to September 1, 1999, the effective date of PURA 1999?
- 2. Should the load nomination procedures in §25.194 continue to be implemented for the purpose of ensuring system reliability and transmission adequacy?
- 3. ERCOT is in the process of developing the infrastructure for retail competition and implementing a single control area for ERCOT, in place of the current system of multiple control areas. In view of the resources being devoted to these matters, should the commission dispense with the requirement in §25.192(g) that control-area utilities

compensate for inadvertent energy by monetary payments and that the ERCOT ISO develop a mechanism for such payments?

Damayanti Ghosh, Senior Economist in the Office of Regulatory Affairs, has determined that for the first five-year period that the proposed sections are in effect there will be no direct fiscal impact for state or local government as a result of enforcing or administering the sections. However, certain municipalities that operate electric utilities (and, some other utilities) in the State may experience higher transmission payments. In the long run as a robust competitive market develops, customers in ERCOT will be able to exercise their right to shop from efficient providers of electricity, and benefit from lower electricity rates. State and local government will benefit from these reductions, just as other utility customers.

Ms. Ghosh has determined that for each year of the first five year period the proposed sections are in effect the public benefit anticipated as a result of enforcing the sections will be reduced administrative costs resulting from the use of the postage stamp method together with the benefits of competition as stated above. The commission expects that overall more robust wholesale competition will benefit utilities and their customers, including small businesses and micro-businesses, but it is impossible to estimate the costs and benefits.

Ms. Ghosh has also determined that for each year of the first five years the proposed sections are in effect there should be no affect on a local economy, and therefore no local employment impact statement is required under Administrative Procedure Act §2001.022.

SUBSTANTIVE RULES. CHAPTER 25. ELECTRIC.

The commission staff will conduct a public hearing on this rulemaking under Government Code

§2001.029 at the commission's offices, located in the William B. Travis Building, 1701 North

Congress Avenue, Austin, Texas 78701, on Monday, November 8, 1999 at 9:30 a.m. in Room 1-

111.

Comments on the proposed amendments (16 copies) and responses to the policy questions listed

above may be submitted to the Filing Clerk, Public Utility Commission of Texas, 1701 North

Congress Avenue, PO Box 13326, Austin, Texas 78711-3326, within 15 days after publication.

The commission invites specific comments regarding the costs associated with, and benefits that

will be gained by, implementation of the proposed section. The commission will consider the

costs and benefits in deciding whether to adopt the section. All comments should refer to Project

Number 21080.

These amendments are proposed under the Public Utility Regulatory Act, Texas Utilities Code

Annotated §14.002 (Vernon 1999) (PURA), which provides the Public Utility Commission with

the authority to make and enforce rules reasonably required in the exercise of its powers and

jurisdiction; and specifically, PURA §35.004(d) which requires the commission to price

wholesale transmission services within ERCOT based on the postage stamp method of pricing.

Cross Reference to Statutes: Public Utility Regulatory Act §14.002, and §35.004.

§25.192. Transmission Service Rates.

- (a) Charges for transmission service. Transmission service customers shall incur_access

 [both facilities] charges, loss compensation charges, and an independent system operator

 (ISO) fee for all planned transmission service. Transmission service customers shall

 incur loss compensation charges and an ISO fee for unplanned transmission service. [The

 facilities charge for annual and monthly planned transmission service shall consist of an

 access fee and an impact fee.] Access [Facilities] charges shall be determined in

 transmission ratemaking proceedings conducted periodically, at such intervals as the

 commission determines are appropriate.
 - (1) The costs included in the access charge [fee] will be [seven-tenths of] the annual cost of transmission service for each transmission service provider in the Electric Reliability Council of Texas (ERCOT). A transmission service customer taking planned transmission service will pay a share of these costs, based on its share of the total load in ERCOT.
 - (A) For each transmission service provider, an access rate will be calculated by dividing [seven tenths of] the transmission service provider's annual transmission cost of service by the total ERCOT load, as calculated in accordance with this section.
 - (B) Each transmission service customer taking annual planned transmission service will pay an access charge to transmission service providers,

calculated by multiplying the applicable access rate by the transmission service customer's peak load, as calculated in accordance with this section.

- [(2) The costs included in the impact fee will be three tenths of each transmission service provider's annual cost of transmission service. A transmission service customer taking planned transmission service will pay an impact fee to the transmission service providers, based on the impact of transmitting its resources to its loads, calculated using the vector absolute megawatt mile method for assessing impacts.]
 - [(A) For each transmission service provider, a megawatt-mile rate will be calculated by dividing three-tenths of the transmission service provider's annual transmission costs, as determined in accordance with this section, by the sum of the megawatt-mile impacts of all planned resources on the transmission service provider's system, using the impacts calculated in accordance with \$25.194 of this title (relating to Determining Peak Loads and Megawatt-Mile Impacts).]
 - [(B) Each transmission service customer taking annual planned transmission service will pay an impact charge to transmission service providers, calculated by multiplying the applicable rate by the impact of the transmission service customer's planned resources on the transmission service provider's system, as calculated in accordance with §25.194 of this title.]

- [(3) In adopting facilities charges under this section, the commission shall apply a transition mechanism in 1999 to reduce the impact of the changes in the level of transmission charges under this section on an electric utility or its customers. In applying this transition mechanism, the commission shall calculate the "unadjusted rate impact" for each electric utility, which shall be the difference between the facilities charge and the transmission revenues an electric utility would receive under this section, both calculated at the time transmission rates were first determined under the commission's open access transmission rules, and without regard to any adjustment under this paragraph. An adjustment shall be made to the 1999 facilities charge equal to 70% of the difference between the 1997 facilities charge incurred by an electric utility and its annual transmission eost of service for calendar year 1997.]
- (2) [(4)] The commission may adjust the <u>access</u> [facilities] charges under this section to account for any transmission revenues that an electric utility receives under an existing transmission contract.
- (3) [(5)] The access [facilities] charge for the short-term planned service described in §25.198 of this title (relating to Initiating Transmission Service) will be the [based on a] prorated [portion of seven-tenths of the] annual cost of transmission service for each transmission service provider and will be charged on the basis of the megawatts of transmission service that are reserved. A transmission service customer will be obligated to pay all transmission service providers for this service upon making a request, whether the customer uses the service or not.

Transmission service providers shall file tariffs for this service for commission approval.

- (b) (No change.)
- (c) **Billing units.** As used in this section, a transmission service customer's system demand is the average of the demand of the transmission service customer's retail and wholesale customers for hours that are coincident with the most recent ERCOT system coincident peak demand. In determining a transmission service customer's demand and ERCOT system coincident peak demand, the actual demand on electric utility systems shall be considered, and the ERCOT system coincident peak demand shall be an average of the highest aggregate demand in each of the months of June, July, August, and September of the relevant period. Actual electric utility demand shall be calculated based on the electric utility's net hourly generation, plus wholesale purchases, minus wholesale sales.
 - (1) The megawatt mile impact of transmitting resources to load shall be calculated using the loads and resources at the ERCOT peak and shall be calculated by the independent system operator or calculated under its supervision. Megawatt mile impacts shall be calculated in the manner prescribed in §25.194 of this title.]
 - [(2)] Peak demand [and megawatt mile impact] may be adjusted for known and measurable changes to wholesale customer loads and resources, when such changes can be identified and quantified with reasonable certainty.

- (d) Transmission revenue. The access [facilities] charges prescribed in subsection (a) of this section are intended to provide each transmission service provider an opportunity to recover its transmission cost of service. Revenue from the transmission of electric energy out of ERCOT over the DC ties that is not recovered through rates for annual planned transmission service and revenue from monthly, weekly, and daily planned transmission service shall be credited to all transmission service customers as a reduction in the transmission cost of service for transmission service providers that receive the revenue.
- (e)-(g) (No change.)
- (h) Transmission rates for exports from ERCOT. Access [Facilities] charges, ISO charges, and loss compensation for exports of power from ERCOT will be assessed to transmission service customers for that portion of transmission that is within the boundaries of ERCOT, in accordance with this section.
 - (1) For the purposes of facilitating these transactions, the annual <u>access</u> [facilities] charge shall be prorated on a monthly, weekly, daily and hourly basis.
 - (2) (No change.)
 - (3) The monthly on-peak access fee will be one-fourth the annual rate, and the monthly off-peak access fee will be one-twelfth the annual rate. The peak period used to determine the applicable transmission rate for such transactions shall be the months of June, July, August, and September. [The impact charge will be calculated in accordance with this section.]

§25.193. Procedures for Modifying Transmission Rates.

- (a) Revision of transmission rates. Each provider of transmission and ancillary service in the Electric Reliability Council of Texas shall periodically revise its transmission and ancillary service rates to reflect changes in the cost of providing such services. Any request for a change in transmission rates shall comply with the filing requirements established by the commission under §25.192 of this title (relating to Transmission Service Rates).
 - (1) Each transmission service provider in ERCOT may on an annual basis update its transmission rates to reflect changes in its invested capital. If the transmission service provider elects to update its transmission rates, the new rates shall reflect the addition and retirement of transmission facilities and additional depreciation on such facilities and changes in loads [and megawatt mile impacts].
 - (2)-(3) (No Change.)
 - [(4) Mechanisms will be established for a utility that serves retail load to expeditiously pass through to retail customers changes in wholesale transmission charges.

 These mechanisms will be implemented only following a review of the utility's transmission cost of service after the effective date of this section, if it is a transmission service provider, and consistent with any rate freeze applicable to the utility.]

- (4) [(5)] Transmission service providers shall file reports that will permit the commission to monitor their transmission costs and revenues, in accordance with filing requirements and a schedule prescribed by the commission.
- (b) **Commission order.** The <u>access</u> [facilities] rates and charges calculated in accordance with Division 1 of this subchapter (relating to Transmission and Distribution), of this title will be converted to monthly amounts, and such monthly charges will be paid to the transmission service providers. Disputes concerning the charges for transmission service may be resolved by the commission.
- §25.194. Determining Peak Load and <u>Transmission Adequacy</u> [-Megawatt-Mile Impacts].
- [The vector absolute megawatt mile impacts referred to in §25.192 of this title (relating to Transmission Service Rates) shall be calculated in accordance with this subsection.]

 Each electric utility in the Electric Reliability Council of Texas (ERCOT) shall on an annual basis provide to the independent system operator historical information concerning peak loads and the load and resource information necessary for the ISO to determine the adequacy of transmission facilities and perform its transmission planning functions [to perform the calculations described in this section].

- The independent system operator shall establish a working group, with equal participation from all market participants that are eligible for participation in the governance of the independent system operator and shall appoint a chair of the working group. This working group shall review the peak load information [and load flow case] and the underlying data[7] to reconcile the peak load information[7, and perform the impact calculations]. The independent system operator shall include in the working group any transmission service provider or eligible transmission service customer that requests to participate.
- (2) (No change.)
- (b) **Peak load.** The working group established under this section shall determine the prior year's peak load for ERCOT and for each transmission service customer, in accordance with §25.192 of this title. Peak load will be determined in a consistent manner, to the greatest extent possible, from one transmission service customer to another.
- [(c) Load flow model. Megawatt miles for all ERCOT loads shall be determined using a single load flow model that is based on the following conditions or assumptions:]
 - [(1) the transmission system will be configured as it is anticipated to operate in the upcoming summer season;]
 - [(2) every generator that is a part of any load's planned resource commitment will be represented in the calculations; and]

- [(3) the models and assumptions used will be applied in a consistent manner, to the greatest extent possible, from one transmission service provider to another and from one transmission service customer to another.]
- [(d) Pairing of loads and resources. The impact calculation is based on identifying the generating units that, by reason of ownership or contractual entitlement, are serving the load of a transmission service customer and have been identified as planned resources.

 Each group of generating units and the loads they serve are referred to in this section as a transmission event.
- Division 1 of this subchapter (relating to Transmission and Distribution), shall nominate from its list of planned resources a specific amount of generation from each unit, such that the sum of the nominations is greater than or equal to 115% of the electric utility's demand or at a level based on the reserver equirement established by the independent system operator. Such nominations shall be consistent with an economic dispatch of the transmission service customer's resources.
- [(f) Method. The vector absolute megawatt mile impact is an assessment of the impact of the transmission of power and energy made by calculating the sum of the impacts of individual transmission lines with a nominal operating voltage of at least 60,000 volts when measured phase-to-phase. The impact for each transmission line is the product of

the vector absolute change in megawatt power flows for the transmission line and the length of each line in miles, calculated for each generator.]

- [(1) The impact calculation is based on a single load flow base case that takes into account all transmission events.]
- [(2) The impact calculation is performed for each generator bus that serves load within a single transmission event, as follows:]
 - [(A) A portion of the load on every bus that is assigned to the particular transmission event is removed.]
 - [(B) The output of the generators in the transmission event is reduced by an amount that results in a balancing of load and generation, without affecting the output of generators that are not included in the transmission event.]
 - [(C) The vector-absolute change in flow on every line is determined by comparing the flow calculated in subparagraph (B) of this paragraph with the base case and multiplying the vector-absolute change in flow, in megawatts, by the length of the line in miles.]
 - [(D) The megawatt-mile impact per megawatt of generation is determined by dividing the impact determined in subparagraph (C) of this paragraph by the generation change used in subparagraph (B) of this paragraph.]
- [(3) From the information calculated in paragraph (2) of this subsection, a matrix is prepared that shows the megawatt-mile impact on each transmission service provider per megawatt of generation for each generator in each transmission event.]

- [(4) The total megawatt mile impact of a transmission event is determined by summing the product of the nomination level for each generator, as prescribed in subsection (e) of this section, and the megawatt mile impact per megawatt for that generator, as calculated in paragraph (2) of this subsection.]
- [(5) Using the impacts calculated in accordance with this subsection, the impact on a transmission service provider's transmission system will be calculated as follows:]
 - [(A) the total impact of each transmission service customer's planned resources
 will be determined by calculating the sum of the customer's megawatt
 miles of impact on the transmission service provider's system; and]
 - (B) the total impact of all transmission service customers' planned resources
 will be determined by calculating the sum of all transmission service
 customers' megawatt miles of impacts on the transmission service
 provider's system.]

§25.198. Initiating Transmission Service.

- (a) (b) (No change.)
- (c) Application procedures for annual planned transmission service. An eligible transmission service customer requesting annual planned transmission service under this section must submit an application for service to the independent system operator, no

later than October 1 in the year preceding the year in which service is to commence. The purpose of this application is to identify deficiencies in the ERCOT transmission system so that plans may be formulated by the independent system operator and transmission service providers to correct these deficiencies. A completed application shall provide information required in paragraph (1) of this subsection.

- (1) (6) (No change.)
- (7) Unplanned transmission service transactions of a duration of 30 days may be converted to planned transmission service transactions upon approval of an application submitted pursuant to subsection (d) of this section. [To the extent that such a conversion requires more megawatt miles than those offset by terminating a previously approved planned transaction, the additional megawatt miles may be purchased from transmission service providers or from other transmission service customers.] The participants to such a transaction are responsible for the costs of feasibility analysis.
- (d)- (m) (No change.)

§25.204. Summary of Required Filings.

Summary of required filings. This section summarizes the filings and matters requiring commission approval that are adopted in Division 1 of this Subchapter (relating to Transmission and Distribution). The applicability and deadline for each filing are detailed in the relevant sections of Division 1 of this subchapter:

- (1) (No change.)
- (2) <u>Access [Facilities</u>] charges for transmission service, in accordance with §25.192(a) of this title (relating to Transmission Service Rates);
- (3) (8) (No change.)
- (9) Information concerning peak loads and load and resource information [relating to the calculation of megawatt-mile impacts,] in accordance with §25.194(a) of this title (relating to Determining Peak Loads and Transmission Adequacy [Megawatt-Mile Impacts]);
- (10) (15) (No change.)

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

ISSUED IN AUSTIN, TEXAS ON THE 1st DAY OF OCTOBER 1999 BY THE PUBLIC UTILITY COMMISSION OF TEXAS RHONDA G. DEMPSEY