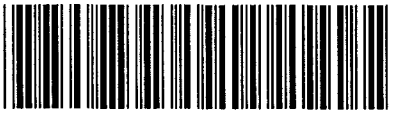

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Item Number: 463

Addendum StartPage: 0

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JOINT APPLICATION OF TEXAS GENCO, LP AND CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC TO RECONCILE ELIGIBLE FUEL REVENUES AND EXPENSES PURSUANT TO SUBST. R. 25.236	§ § § § § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

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October 10, 2003

TABLE OF CONTENTS

Description **Page**

463

DOCKET NO.

APPLICATION OF RELIANT ENERGY, INC. TO RECONCILE ELIGIBLE FUEL REVENUES AND EXPENSES	§ § § § § § §	BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS

DIRECT TESTIMONY OF

ADRIAN PIENIAZEK

FOR

RELIANT ENERGY, INCORPORATED, FORMERLY RELIANT ENERGY HL&P

FUEL RECONCILIATION

JULY 2002

TESTIMONY OF ADRIAN PIENIAZEK

TABLE OF CONTENTS

TABLE OF FIGURES

EXECUTIVE SUMMARY

ADRIAN PIENIAZEK

Adrian Pieniazek is currently a Director for Reliant Energy, Incorporated. Mr. Pieniazek holds an undergraduate degree in Mechanical Engineering and a masters degree in Business Administration. He is also a registered professional engineer in the state of Texas.

During the reconciliation period, Mr. Pieniazek was the Director of Asset Management for Reliant Energy. In this capacity, one of Mr. Pieniazek's responsibilities was the energy dispatch center. Mr. Pieniazek will provide testimony as to how the many changes occurring in ERCOT, due to industry restructuring and the implementation of single control area operation, affected the eligible fuel expenses and revenues associated with the operation of Reliant Energy's system.

TESTIMONY OF ADRIAN PIENIAZEK

INTRODUCTION

Q. PLEASE STATE YOUR NAME, BACKGROUND, AND CURRENT POSITION.

A. My name is Adrian Pieniazek, and my business address is 1005 Congress Avenue, Suite 650, Austin, Texas, 78701. I am a Director for Reliant Energy, Incorporated (Reliant Energy) working in the Governmental and Regulatory Affairs Group.

I received a Bachelor of Science degree in Mechanical Engineering from Texas A&M University in 1982, and a Masters of Business Administration from Our Lady of the Lake University in San Antonio in 1994. Upon graduation from Texas A&M, I worked for TXU, Inc. in Dallas, TX, in their fossil-fired power plant operating division. In 1989, I joined City Public Service of San Antonio and held various positions at the company, primarily in the power generation division. I joined Reliant Energy HL&P (HL&P), the regulated utility division of Reliant Energy, Incorporated, in November 2000.

Upon joining HL&P, I worked as the Director of Asset Management until mid-March of 2002. During the fuel reconciliation period, I was responsible for various transition issues in Reliant Energy's Fuel and Energy Management Department that occurred due to electric restructuring. Most of the transition issues dealt with the many changes ongoing at the Electric Reliability Council of Texas (ERCOT).

PURPOSE AND BACKGROUND INFORMATION

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to discuss the numerous transition issues faced by HL&P due to the restructuring of the electric market in Texas. Specifically, my testimony provides a comparison of generation dispatch operations in the multiple control area market structure versus the single control area market structure. In addition, I describe the expense and revenue differences between the two market structures, especially those eligible expenses and revenues associated with ERCOT which are appropriate for reconciliation in this proceeding. Also included in my testimony are several Figures, which were prepared under my supervision and control.

Q. BRIEFLY DESCRIBE THE BASIC MARKET STRUCTURE IN ERCOT DURING THE FUEL RECONCILIATION PERIOD.

A. The ERCOT market had two very distinct structures during the reconciliation period: (1) a multi-control area structure, and (2) a single control area structure. ERCOT operated under a multi-control area design from August 1, 1997 through July 30, 2001. Beginning July 31, 2001, ERCOT operated under a single control area design. The differences between the two control area structures are significant and affect both the costs and the revenues of electric utilities in ERCOT.

Q. WHY DID THE MARKET STRUCTURE CHANGE?

A. The market design was modified under the oversight of the Public Utility Commission (PUC) to accommodate the retail choice provisions mandated by Senate Bill 7, which

was passed during the 1999 Texas Legislative session. To comply with Senate Bill 7, ERCOT made several significant changes to its structure and functions. Prior to retail choice, ERCOT's primary function was to ensure overall system reliability by facilitating communication among ten separate control areas. These control areas were operated by individual electric utilities, each responsible for maintaining a continual balance between the electric loads being served and the electricity being produced in the respective control areas. Each utility's control area also assumed responsibility for maintaining adequate levels of generation reserves to address contingencies. In addition, each control area agreed to assist other control areas during any ERCOT declared emergencies.

Beginning July 31, 2001, in preparation for the commencement of retail customer choice beginning January 1, 2002, a single control area structure was implemented. The single control area is administered and operated by an independent system operator (ISO). ERCOT became the ISO. By assuming all of the control area functions previously provided by the utilities in their separate control areas, ERCOT assumed a much larger role in overseeing the reliability, development and effective operation of the new deregulated market.

MULTIPLE CONTROL AREA MARKET STRUCTURE

Q. PLEASE DESCRIBE THE MULTI-CONTROL AREA MARKET STRUCTURE THAT WAS IN PLACE DURING THE FIRST FORTY-EIGHT MONTHS OF THE FUEL RECONCILIATION PERIOD.

A. Prior to retail choice, electric consumers were generally limited to a single provider of electric service. The providers of electric service, normally vertically integrated or "bundled" utilities, took care of generating, scheduling and delivering electric energy to their customers. Additionally, most bundled utilities had the responsibility of ensuring transmission grid reliability and security by operating their own control areas. While the control area operator's responsibilities were numerous, the primary and most important function was to ensure that load and reserve requirements were constantly matched with generation supply. This was done using automatic generation control (AGC) computer systems to maintain system frequency at the required 60 cycles per second, and to ensure that the "interchange" of electricity among the ten control areas was held at the quantities scheduled by the individual control area operators.

Figure AP-3 shows the ten control areas operating during the period of August 1, 1997 through July 30, 2001.

Q. PROVIDE AN EXAMPLE OF THE "INTERCHANGE" THAT FREQUENTLY OCCURRED BETWEEN THE TEN CONTROL AREAS.

A. If one control area were having operational difficulties with one or more generating units, the system operators running that control area might decide to purchase and schedule energy from a different control area that had excess generation. The two separate control areas would ensure the proper flow of energy from one control area to the other by means of simultaneous, offsetting schedules. For example, the control area with excess generation might schedule 200 MW of energy "out", while the deficit control area would schedule 200 MW of energy "in" over an agreed to period of time. The control area with

the troubled units might then bring those units off line for repairs, yet still maintain the safe and reliable delivery of energy to its customers. This interchange of energy from one control area to another was scheduled. The fact that it was scheduled is important because later in my testimony I will utilize the concept of "inadvertent" interchange, *i.e.*, unscheduled transfers, to highlight one of the major differences between the multi-control area market design and the single control area market design.

Q. WHAT WERE SOME OF THE OTHER MAJOR FUNCTIONS PERFORMED BY THE TEN SEPARATE CONTROL AREAS?

A. One of the most important functions of the ten separate control areas was to provide or arrange for all of the necessary Ancillary Services needed to ensure system reliability. For example, each control area provided Load Following and Regulation services. Because customer usage changes every second, the control areas had to continuously adjust the dispatch of their generating units to instantaneously follow the ever-changing load demand. This function is referred to as Load Following. In the HL&P control area, customer demand can change significantly in one hour. For example, on August 31, 1999, HL&P's demand fell approximately 2,550 MW in one hour due to thunderstorms rolling through Houston. Therefore, the Load Following function provided by HL&P was critical to the reliable operation of the utility system.

Regulation is the Ancillary Service needed to raise or lower generation to maintain frequency at 60 cycles per second. Regulation is sometimes compared to the cruise control system in a car. Just as the cruise control system in a car may be set to maintain

55 miles per hour, for example, an electric system's frequency must be maintained at 60 cycles per second. As a car slows down, the cruise control adds more fuel to maintain the 55 miles per hour requirement. If the car speeds up, the cruise control decreases the fuel. The Ancillary Service of Regulation provides a similar function. When an electric system's frequency falls below 60 cycles per second, the control area's AGC system tells the units to add more fuel. When frequency goes above 60 cycles per second, fuel is reduced.

Another important Ancillary Service provided by each of the ten control areas was Responsive Reserve. Responsive Reserve is the daily operating reserve provided to restore the frequency of the interconnected transmission system within the first few minutes of an event that causes a significant deviation from standard system frequency of 60 cycles per second.

In summary, the policies and procedures for the provision of Ancillary Services are some of the most significant changes resulting from the switch to a single control area design from a multi-control area design.

Q. YOU MENTIONED PREVIOUSLY THAT THE MARKET STRUCTURE WAS CHANGED DUE TO ELECTRIC INDUSTRY RESTRUCTURING. PLEASE EXPLAIN FURTHER WHY THE MULTIPLE CONTROL AREA CONCEPT WAS ABANDONED.

A. When Senate Bill 7 was passed, the formerly bundled utilities were required to functionally "unbundle" into separate business units. Each bundled utility was required

to create separate companies, which included a power generation company (PGC), a transmission and distribution utility (T&D utility or TDU), and a Retail Electric Provider (REP). To facilitate the opening of a competitive retail market on January 1, 2002 a retail pilot program[1] and single control area operations commenced on July 31st, 2001.

With the functional unbundling and customers' ability to choose their retail providers, the incumbent utilities and the control areas were no longer required to provide all of the previously mentioned energy and Ancillary Services. Instead, these services were made competitive and an ISO, ERCOT, was placed in charge of overseeing the entire transmission grid. Each customer's retail provider became responsible for ensuring that all required energy and Ancillary Services were made available to that customer. Thus, customer choice led to the creation of a single control area under ERCOT's supervision -- arguably the single largest, fundamental change ever in the way electrical systems have been operated in the ERCOT region of Texas.

Q. HOW WOULD YOU SUMMARIZE THE MULTIPLE CONTROL AREA MARKET STRUCTURE AND ERCOT'S ROLE IN THAT MARKET STRUCTURE?

A. In a multi-control area environment, all of the requirements needed to ensure system reliability and stability were provided by the traditional utilities that were responsible for their respective control areas. ERCOT performed important roles in monitoring the operations of the control area utilities and in serving as a clearinghouse for collecting and

[1] A pilot program was initiated by ERCOT on July 31, 2001 that allowed 5% of eligible customers to choose their electric provider. This is also the date on which single control area operation began.

disseminating information to facilitate secure and reliable operations by the individual control area utilities.

SINGLE CONTROL AREA MARKET STRUCTURE

Q. DESCRIBE THE MARKET STRUCTURE CURRENTLY IN PLACE THAT REPLACED THE MULTIPLE CONTROL AREA STRUCTURE DESCRIBED PREVIOUSLY.

A. On July 31, 2001, ERCOT took over all responsibility for system reliability, plus the added responsibility of ensuring the proper implementation of competitive wholesale and retail markets. These functions are performed through a single control area structure operated by ERCOT. As the ISO, ERCOT is required by Senate Bill 7 to perform the following functions:

- Ensure access to the transmission and distribution systems for all buyers and sellers of electricity on nondiscriminatory terms.
- Ensure that electricity production, scheduling, and deliveries are accurately accounted for among the generation resources and wholesale buyers and sellers in the ERCOT region.
- Ensure the reliability and adequacy of the ERCOT transmission grid.
- Ensure that information relating to a customer's choice of retail electric provider in the State of Texas is conveyed in a timely manner to the persons who need that information.

The ten control areas discussed previously historically handled the first three of these functions, but the new market design has these functions residing under ERCOT's purview. ERCOT now operates a control center that receives continuous information on every generating plant and transmission line that operates in the geographic area formerly served by the ten control area utilities.

Q. NOW THAT THERE IS A SINGLE CONTROL AREA BEING OPERATED BY ERCOT, WHAT ARE SOME OF THE OPERATIONAL DIFFERENCES EXPERIENCED BY HL&P?

A. Even though ERCOT has taken over most of the responsibilities previously performed by the ten separate control areas, there are still important functions that remain the responsibility – or have become new responsibilities – of market participants. These functions are now performed by newly defined market participants called Qualified Scheduling Entities (QSEs), which act as agents for generation resource entities and load serving entities. QSEs provide the main communication and/or information interface with ERCOT, similar to the historical control areas. As described in the ERCOT Protocols, some of the functions of QSEs are: (1) submit balanced energy and Ancillary Service schedules in which Resources and Obligations match, (2) bid to provide Ancillary Services as required by ERCOT, (3) designate a representative who shall be responsible for operational communications and who shall have sufficient authority to commit and bind the QSE and the entities the QSE represents, (4) maintain a 24-hour, 7-day per week scheduling center with qualified personnel for the purposes of communicating with ERCOT for scheduling purposes and for deploying the QSE's

Ancillary Services in real time, and (5) be financially responsible for payment of settlement charges for those entities the QSE represents.[2] All market participants, whether they are a REP, PGC, municipal utility, electric cooperative, or other entity, must either register and qualify as a QSE, or contract with a firm offering QSE services, if they wish to participate in the ERCOT market.

Beginning July 31, 2001, HL&P served as its own QSE for its generation resources and load obligations. Reliant Resources, Inc. established its own QSE during the fuel reconciliation period. HL&P seeks recovery of only the reconcilable costs incurred by its own QSE.

Q. BESIDES THE INTRODUCTION OF A NEW ENTITY, THE QSE, DESCRIBE OTHER MAJOR DIFFERENCES BETWEEN THE MULTIPLE CONTROL AREA MARKET STRUCTURE AND THE NEW SINGLE CONTROL AREA MARKET STRUCTURE.

A. The new single control area structure can best be described by comparing it to the multi-control area structure discussed previously. Recall that one of the major functions of any control area is to ensure that load and reserve requirements are constantly matched with generation supply. This is done to ensure that system frequency is maintained at the required 60 cycles per second, and that system reliability is preserved. In the multi-control area model, each control area operator's system constantly metered customer aggregate demand and generation output within its control area, and then corrected the generation (or load, if interruptible) as needed to maintain frequency. If, for whatever

[2] Complete registration requirements for QSEs can be found in Section 16 of the ERCOT Protocols.

reason, one control area became deficit, then the other nine control areas would respond to this deficit by immediately increasing their generation to maintain system frequency. The net result of this operational scenario was that inadvertent, or unscheduled, energy would periodically flow from surplus control areas to the deficit control area. In the historical, multi-control area market, this inadvertent energy was typically repaid "in kind." In other words, once the deficit control area utility's problems were remedied, it would submit a schedule that would cause energy to flow to the surplus control area(s) to pay them back for the energy they had earlier provided. Typically, there was no exchange of money among the control areas.

With the advent of the single control area model, entities can no longer meter their customers' aggregate load in real time. Market participants instead must generate to match the individual schedules submitted by their QSEs. The concept of inadvertent energy flowing between control areas, to be repaid by in-kind transfers among control areas, has been replaced with "imbalance" fees. Under single control area operations, an imbalance charge or payment occurs when and if a QSE is off schedule. All QSEs, including HL&P's, are subject to either Load Imbalance or Resource Imbalance expenses or revenues, any of which may apply in a Settlement Interval. The HL&P QSE is charged or receives the Market Clearing Price of Energy (MCPE) times the amount of imbalance in each Settlement Interval in which ERCOT deems it off schedule. The MCPE for Balancing Energy is established by ERCOT based upon "balancing up" and "balancing down" bids submitted by the QSEs. Additional detail on Balancing Energy and the various charges and payments put in place to implement single control area

operation will be discussed later in my testimony.[3]

Q. YOU MENTIONED THAT ONE OF THE MOST IMPORTANT FUNCTIONS OF A CONTROL AREA IS THE PROVISION OF ANCILLARY SERVICES. HAS THIS CHANGED IN THE SINGLE CONTROL AREA STRUCTURE?

A. No. A major function of any control area is to ensure that all of the necessary Ancillary Services needed to ensure system reliability and security are provided. In the multi-control area structure, the ten individual control areas were each responsible for providing certain Ancillary Services to maintain system reliability. With single control area implementation, ERCOT took on the responsibility of ensuring the proper levels of these services. Based on historical operation, ERCOT set the system wide requirements for the services as follows:

- Regulation Down – 1,000 MW
- Regulation Up – 1,000 MW
- Responsive Reserve – 2,300 MW
- Non-Spinning Reserve – 1,500 MW

ERCOT ensures that the proper levels of these services are continuously provided, with each load serving entity being responsible for supplying its portion based on its load-ratio

[3] As described in more detail at later portions of my testimony, certain charges and payments incurred by the HL&P QSE are reflected in reconcilable fuel expenses.

share. For example, if HL&P schedules 10% of the load in ERCOT, then HL&P is responsible for providing 10% of the Regulation (1,000 MW x .10 = 100 MW), 10% of the Responsive Reserve and 10% of the Non-Spinning Reserve service. HL&P could either self-provide these services through the use of HL&P's Resources, enter into a bilateral agreement with another generating company, or choose to obtain the services from ERCOT. If HL&P chose to obtain the Ancillary Services from ERCOT, QSEs would submit bids to provide the service, ERCOT would procure them, and then ERCOT would back charge HL&P the market clearing bid price times the quantity procured.

Q. ARE THERE OTHER SIGNIFICANT CHANGES IN ANCILLARY SERVICES DUE TO THE SINGLE CONTROL AREA MARKET STRUCTURE?

A. One other significant and new item applicable to all market participants in the single control area is Balancing Energy. All QSEs are required to submit balanced schedules to ERCOT that match Resources and Obligations. However, QSEs are seldom able to match their schedules perfectly in real time operations. This is because no entity is capable of perfectly predicting how much energy its customers will be consuming at any future point in time. Moreover, generation resources, while they may be scheduled to come on line and generating at a certain time and at a certain level in the future, are subject to the same failure mechanisms inherent in any complicated process that involves a myriad of equipment and systems. ERCOT, acting as the control area responsible for system reliability, must also periodically relieve loading on transmission lines. Because QSEs (i) seldom match their scheduled load and resource obligations perfectly, (ii) electric systems must be maintained at 60 cycles per second, and (iii) transmission constraints must periodically be relieved, ERCOT has the responsibility of adjusting

Resources to handle any of these operational issues. ERCOT's primary method of doing this is by procuring Balancing Energy Up and Balancing Energy Down for every Settlement Interval of every day.

ERCOT continuously monitors the schedules submitted by QSEs, evaluates the relative effects of the schedules on the system, and then procures adequate Balancing Energy Up and/or Balancing Energy Down to ensure system reliability. For example, if it appears that a particular transmission line is going to be loaded beyond its capabilities, ERCOT will procure Balancing Down service on one side of the line and Balancing Up service on the opposite side, depending on the direction of energy flow on the line, in a magnitude large enough to alleviate the line's loading. In this transmission congestion example, one QSE with generating resources may be asked to balance its portfolio up by 100 MW. To keep the system in balance yet alleviate the constraint, another QSE with generating resources on the opposite end of the line may be asked to balance its portfolio down by 100 MW. The QSE increasing its generation will be paid the MCPE for the Balancing Energy and the QSE decreasing its generation will pay the MCPE. Frequently, the Balancing Energy prices paid to the two QSEs are not equal and opposite in price due to the QSEs being in different congestion zones.[4] If this is the case, then any resulting difference is allocated to a charge called the Balancing Energy Neutrality Adjustment (BENA). BENA is designed to keep ERCOT financially neutral and the balances in BENA are either paid or received by QSEs based upon their respective load-ratio shares.

[4] ERCOT procures balancing energy bids by transmission congestion zone, usually resulting in different market clearing prices between the zones. During the fuel reconciliation period, there were three such zones: north, south, and west. HL&P was in the south zone.

ERCOT has other methods of ensuring transmission grid reliability besides the procurement of Balancing Energy. The other methods and their effect on HL&P's eligible fuel expenses are described later.

Q. DID THE IMPLEMENTATION OF THE SINGLE CONTROL AREA CHANGE HL&P'S SYSTEM DISPATCH AND ENERGY PLANNING PROCESSES.

A. Yes. HL&P's system dispatch and energy planning processes underwent several changes once the single control area was implemented by ERCOT. Two mentioned previously are the submittal of Balanced Energy and Ancillary Service schedules and the submittal

of Ancillary Service bids. Another significant change is that HL&P's AGC system now controls to a schedule submitted by HL&P's QSE instead of controlling to a real time aggregate load signal.

Even though there were several significant changes to the system dispatch and energy planning process, some of the processes did not change due to the implementation of the single control area. For example, the AGC system still matches generation with system demand (demand now being the submitted schedules instead of aggregate load demand) in the most economical means possible. The AGC system still uses heat-rate curves and fuel costs to continually determine the optimum operating point for each generating unit so that least cost energy production can be achieved. Furthermore, the planning process still has as its main focus the determination of which generating units should be operated each day to satisfy system demand and achieve the optimal commitment of system resources.

Q. WITH RESPECT TO RECONCILABLE FUEL EXPENSES FOR HL&P, WHAT IS THE PRIMARY EFFECT OF THE CHANGE BY ERCOT TO A SINGLE CONTROL AREA MARKET STRUCTURE?

A. The main point to be considered for fuel reconciliation purposes is that HL&P has been subject to new charges beyond what would have been incurred had ERCOT not been required to change to a single control area operation. A second point is that not all of the charges are new to HL&P. However, they are now categorized or described under a different name, while their impact on eligible fuel expenses has not changed. Finally, as

a market participant, HL&P also received eligible revenues for energy sales and/or certain Ancillary Services related to the new ERCOT single control area structure. These revenues have been credited to HL&P's eligible fuel expenses.

Q. PLEASE PROVIDE SOME SPECIFIC EXAMPLES OF HOW THE CHANGE IN MARKET STRUCTURE AFFECTED HL&P'S ELIGIBLE FUEL EXPENSES.

A. One example is

charges to clear congestion and/or maintain reliability of the transmission grid. As described previously, ERCOT periodically has to clear congestion on a transmission line by Balancing Up a generator on one side of a constrained line and Balancing Down a generator on the opposite end of the line.

These transmission reliability and congestion management procedures typically resulted in significant costs. HL&P was required to pay its portion of these costs based upon its load-ratio share in ERCOT.

Q. DID EVERY CHARGE TYPE IMPOSED BY ERCOT RESULT IN AN ELIGIBLE FUEL EXPENSE FOR HL&P?

A. No. Several of the charge types imposed by ERCOT would have been incurred by HL&P even if ERCOT had not changed to the single control area structure. Two examples are Regulation and Responsive Reserve. When HL&P operated as a control area it was responsible for providing Regulation and Responsive Reserve from its units to maintain frequency at required levels. Any charges imposed by ERCOT for Regulation and Responsive Reserve would have been borne by HL&P prior to single control area implementation. Therefore, the expenses ~~and revenues~~ from these ERCOT charge types have been excluded from eligible fuel expenses.

SUMMARY OF ERCOT FEES AND PAYMENTS

Q. PLEASE SUMMARIZE THE VARIOUS CATEGORIES OF EXPENSES AND REVENUES IMPOSED BY ERCOT AND THEIR APPLICABILITY AS ELIGIBLE FUEL EXPENSES.

A. Below is a summary of the ERCOT invoice charge and payment types incurred by HL&P beginning July 31, 2001 and continuing through the end of the fuel reconciliation period. Also included is a brief explanation as to whether or not these expenses and revenues have been included as eligible fuel expenses. For brevity, a detailed description and calculation methodology for each ERCOT charge or payment is excluded from my

testimony.

Capacity Related and Their Applicability Charges and Payments ~~Not Included~~ as Eligible Fuel Expenses

All of the following ERCOT single control area expenses and revenues, except for one (late fee payment or charge), are for Ancillary Services that are related to providing generation capacity to maintain system reliability. Therefore, ~~they have been excluded from eligible fuel expenses.~~ the expenses for these capacity related services have been excluded from eligible fuel expenses as per PUC Substantive Rule 25.236(a)(4). Any revenues from these charge types have been included as an offset to eligible fuel expenses as per PUC Substantive Rule 25.236(a)(7)(c).

- Regulation up service charge
- Regulation down service charge
- Responsive reserve service charge
- Non-spinning reserve service charge
- Black start service charge
- Regulation up service payment
- Regulation down service payment
- Responsive reserve service payment
- Non-spinning reserve service payment
- Emergency short supply regulation up capacity payment
- Emergency short supply regulation down capacity payment
- Emergency short supply Responsive service capacity payment
- Emergency short supply non-spinning reserve service payment
- Capacity payment for Resources supplied to ERCOT for Black Start service
- Late fee payment or charge

Energy Related Charges and Payments Included as Eligible Fuel Expenses

The following ERCOT charges and payments are energy related and have been treated as an energy purchase. Thus, all of the expenses and revenues in this section have been included as eligible fuel expenses.

Charges and Payments Required to Ensure Transmission Service and Implement the Deregulated Market

As discussed, on July 31, 2001, ERCOT took over responsibilities for system reliability, plus the added responsibility of ensuring the proper implementation of a competitive wholesale and retail market. These functions, as mandated by Senate Bill 7, are performed by ERCOT as the ISO. The charges and fees listed in this section all relate to ERCOT's requirement to administer the deregulated electric market and to ensure the availability and reliability of the transmission system. The expenses and revenues in this section enabled all market participants, including HL&P, to transmit their electricity over the entire transmission grid to its final delivery point.

- Out-Of-Merit Capacity (OOMC) and Out-Of-Merit Energy (OOME) Service fees or payments – Another mechanism utilized by ERCOT to solve transmission congestion or other reliability problems was the use of Out-Of-Merit services. OOM services were utilized at ERCOT's direction and consisted of Resources that would otherwise not be selected to operate because of their place (or absence) in the merit order of Resources' bids for Ancillary Services. OOMC is used by ERCOT to provide for the availability of sufficient capacity so that Balancing Energy bids are available to solve transmission

congestion, or other reliability needs, when a market solution does not exist. Similarly, OOME is the deployment by ERCOT of energy from Resources that may or may not have provided resource specific premium bids, but were used by ERCOT to provide Balancing Energy Service when no market solution exists. HL&P was charged for these OOM transmission congestion and reliability costs based on its load-ratio share. Therefore, they are included as eligible fuel expenses. Any revenues received by HL&P for providing the OOM services have been netted with the costs.

Q. PLEASE PROVIDE YOUR OPINION AS TO THE PRUDENCE OF THE ERCOT SINGLE CONTROL AREA CHARGES AND PAYMENTS DESCRIBED IN THIS TESTIMONY.

A. The ERCOT charges and payments described in my testimony, as incurred by HL&P, were both prudent and necessary. The charges and payments were a reasonable and necessary cost of participation in the single control area market administered by ERCOT, they were incurred pursuant to the ERCOT Protocols, and are required to enable ERCOT to fulfill its role as the independent system operator charged with maintaining system reliability and implementing the new retail choice market.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

DOCKET NO. _____

PETITION OF RELIANT ENERGY, INC. TO RECONCILE ELIGIBLE FUEL REVENUES AND EXPENSES	* * * *	BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS

AFFIDAVIT

THE STATE OF TEXAS	*
	*
COUNTY OF HARRIS	*

Before me, the undersigned notary public, on this day personally appeared Adrian Pieniazek, to me known, who being duly sworn according to law, deposes and says:

"My name is Adrian Pieniazek. I am of legal age and a resident of the State of Texas. The foregoing testimony and figures offered by me on behalf of Reliant Energy, Incorporated are true and correct, and the opinions stated therein are, in my judgment and based upon my professional experience, true and correct."

Adrian Pieniazek

SUBSCRIBED AND SWORN BEFORE ME ON THIS 26th day of June 2002.

NOTARY PUBLIC STATE OF TEXAS
PANDY LIVINGSTON
Notary Public, State of Texas
My Commission Expires 3/21/2006

Pandy Livingston
Notary Public

My commission expires:

3/21/2006

278

DEFINITIONS OF TECHNICAL TERMS AND ABBREVIATIONS

When used in this testimony, each of the following terms shall have the meaning set forth below.

Ancillary Services – those services, described in Section 6 of the ERCOT Protocols, necessary to support the transmission of energy from Resources to loads while maintaining reliable operation of the transmission grid.

Balancing Energy – the change in energy output or demand determined by ERCOT to be needed to ensure secure operation of the ERCOT transmission grid. Balancing Energy is supplied by ERCOT through the deployment of competitive bids from Resources to meet load variations not covered by Regulation Service. For single control area operations, Balancing Energy is supplied as Balancing Up and Balancing Down service.

Black Start Service – an Ancillary Service contracted by ERCOT commencing with single control area operations for the benefit of all loads. Black Start service is provided by Resources capable of starting without support of the ERCOT transmission grid.

Business Separation Plan – documentation submitted to, and subsequently approved by, the PUC as required by PURA § 39.051 (Unbundling) which describes Reliant Energy's business separation activities.

ERCOT Protocols – documents created through the collaborative efforts of representatives of all segments of market participants, including any attachments or exhibits as amended from time to time, that contain the scheduling, operating, planning, reliability, and settlement policies, rules, guidelines, procedures, standards, and criteria of ERCOT.

Load Imbalance – the amount in dollars calculated by ERCOT for each QSE for each Settlement Interval equal to the actual load consumption minus the QSE's scheduled load multiplied by the MCPE.

Megawatt (MW) – One million watts of electrical power. A watt is a unit of measurement commonly used to quantify electric power.

Megawatt Hour (MWH) – An amount of electrical energy equal to one MW of power applied for one hour.

Obligations – total obligations scheduled by a QSE, normally comprised of energy and Ancillary Service obligations, plus allocated transmission losses, energy sales by the QSE, and energy exports.

Qualified Scheduling Entity (QSE) – A market participant that is qualified by ERCOT in accordance with Section 16 of the ERCOT Protocols (Registration and Qualification of Market Participants) to submit Balanced Schedules and Ancillary Service bids and settle payments with ERCOT.

Regulation – an Ancillary Service used to control the power output of Resources in response to a change in system frequency in order to maintain system frequency at 60 cycles per second. For

single control area operations, Regulation was comprised of two components, Regulation Up and Regulation Down.

Responsive Reserve – daily operating reserves intended to help restore the frequency of the interconnected transmission grid within the first few minutes of an event that causes a significant deviation from the standard frequency of 60 cycles per second.

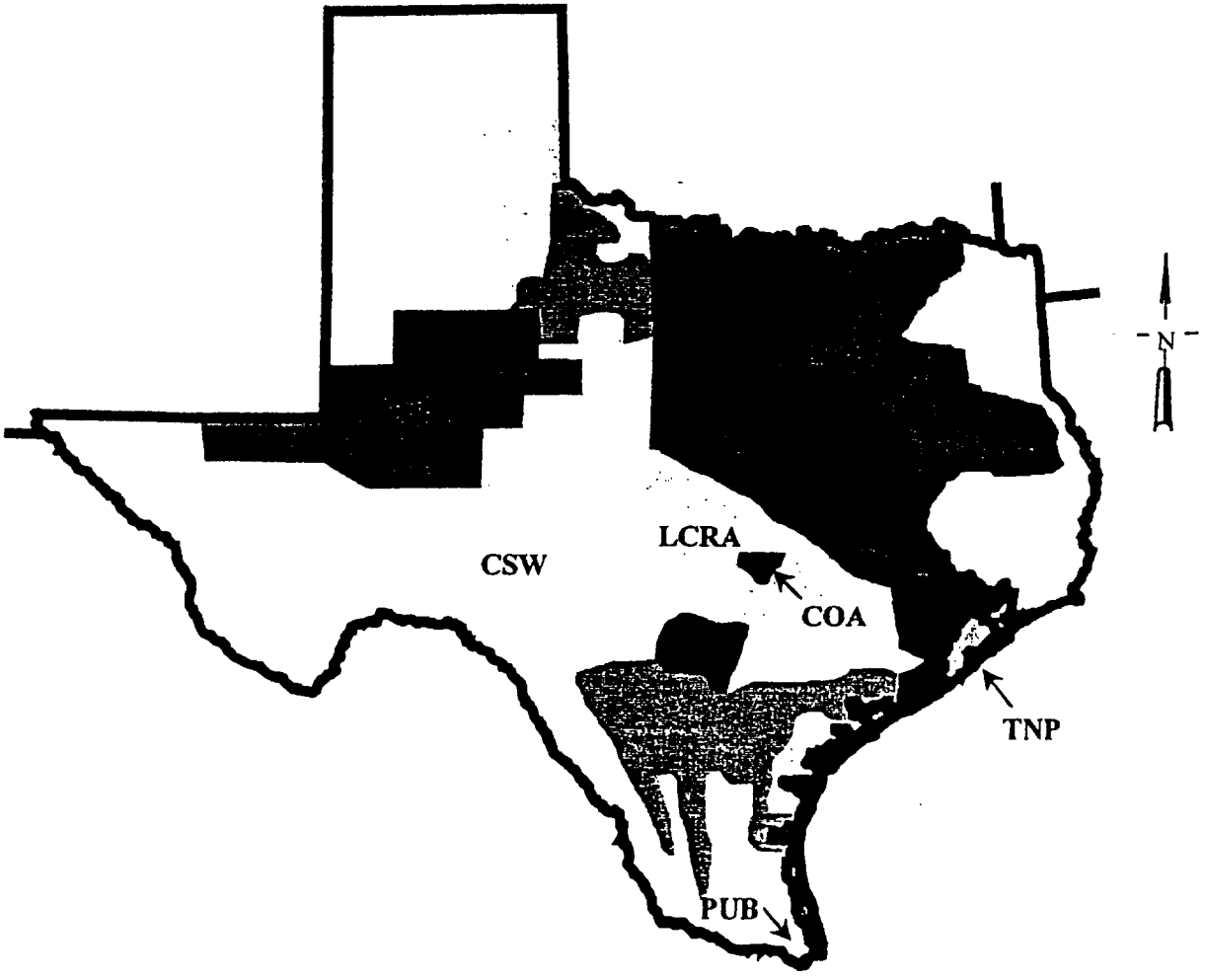
Resources – facilities capable of providing electrical energy or Ancillary Services to the ERCOT electrical system.

Resource Imbalance – the amount in dollars calculated by ERCOT for each QSE for each Settlement Interval equal to the Resource MWHs scheduled by the QSE minus the actual metered MWHs supplied by the QSE multiplied by the MCPE.

Settlement Interval – the time period for which ERCOT and QSEs deploy and financially settle energy and/or Ancillary Services. The currently defined settlement interval is 15 minutes.

System Congestion Fund (SCF) – ERCOT's accounting fund from which payments for resolving transmission congestion are disbursed and to which ERCOT credits congestion-related receipts from QSEs representing loads.

TEN CONTROL AREAS PRIOR TO JULY 31ST, 2001



CERTIFICATE OF SERVICE
SOAH Docket No. 473-02-3473
PUC Docket 26195

I hereby certify that a true and correct copy of the foregoing document was hand delivered, electronic mail or sent by overnight delivery or United States first class mail to all parties this 10th of October 2003.