(4) Data Aggregation:

the ability to aggregate ESI-ID monthly load information by REP into a composite hourly load shape to support wholesale market settlement.

Q. WHAT IS "TEXAS SET"?

A. "Texas SET" is a set of electronic messages defined by the ERCOT, in collaboration with Texas retail market participants, as the standard for electronic transactions used by the market participants to communicate with each other and ERCOT, including the registration and tracking of customers within Texas but outside of ERCOT (because ERCOT is the *statewide* customer registration agent).[4]

Q. GENERALLY, WHAT IS "LOAD PROFILING AND DATA AGGREGATION"?

A. For ESI-IDs that do not have metering that measures usage on a timed interval basis (*e.g.*, a reading every 15 minutes), Load Profiling is a process to:

(1) develop a pattern of consumption (profile) for like groups of customers that closely approximates hourly consumption; and

[4] ERCOT Protocols Section 15: Customer Registration

"ERCOT shall maintain a registration database of all metered and unmetered ESI IDs in Texas for Customer Choice. ERCOT will track transactions and allocate costs of the registration database to the Market Participants."

(2) apply the profile to monthly consumption amounts by the ESI-ID.

Because a Retail Electric Provider's total hourly/monthly load cannot be measured by one meter, Data Aggregation is a process for compiling the profiled monthly consumption of all non-IDR customers and the monthly consumption of IDR customers for each REP in a manner that accurately determines each REP's aggregate hourly load. This information is then used to calculate and resolve (that is, "settle") a transaction in the wholesale market.[5]

Q. WHAT IS THE RELATIONSHIP BETWEEN EGSI AND ETD?

A. EGSI is the bundled electric utility operating in both Texas and Louisiana. EGSI is one of the five Entergy Operating Companies. ETD is the name used to describe what would have been the distribution company that would have been "unbundled" from EGSI upon the commencement of ROA in ESAT. According to Senate Bill 7, which is the statute that established the ROA scheme for all of Texas, EGSI was to have corporately unbundled into three or four separate companies: a generation company, a retail electric provider(s) ("REPs"), and a TDSP or separate transmission and distribution companies. EGSI planned to unbundle its TDSP into separate transmission and distribution companies, with ETD being the distribution company.

[5] ESAT Protocols, Part IV Retail Protocols, Section 6 (Load Data Aggregation) and Section 7 (Load Profiling).

ETD did not actually come into existence because ROA, and thus corporate unbundling, was delayed in ESAT. Until the spring of 2004, however, EGSI expected that it would proceed to ROA in the near-term, and therefore was structuring its operations in ESAT prior to and during the pilot (and extended pilot) as if ETD would soon be in existence and serving customers in ESAT as the electric distribution company.

Q. WHY DID EGSI'S EXPECTATIONS REGARDING ROA CHANGE IN THE SPRING OF 2004?

A. In March 2004, the Commission issued a preliminary order in an EGSI case—Docket No. 28818—that eliminated the then-existing December 2004 target date for ROA. Until that order, EGSI had been operating under orders from the PUCT that referred to near-term target dates for some form of ROA in ESAT.

Q. WHAT IS THE RELATIONSHIP BETWEEN ESI AND EGSI/ETD?

A. ESI is the Entergy-wide corporate support and services company that provides services, as an affiliate, to the Entergy Operating Companies, including EGSI. As explained in more detail in my testimony, efforts to implement ROA in ESAT from EGSI's perspective were generally undertaken directly by EGSI—through EGSI employees using EGSI systems (or contractors)—as well as by ESI in support of EGSI.

Q. WHY ARE YOU QUALIFIED TO ADDRESS THESE ISSUES AND TO PROVIDE THIS TESTIMONY?

A. Because of my active participation in EGSI's preparation for ROA, I am familiar with the market mechanics activities and the pilot project activities undertaken to prepare EGSI and ETD for ROA in ESAT. I am also familiar with the costs incurred through those activities. I first became involved in the work to prepare for ROA in late 1999. In early 2000, I began work on the market mechanics and pilot project activities, and continued to work on these activities until early 2003. From July 2000 until May 2002, I had overall responsibility for these market mechanics activities and costs, which were integral to the pilot project activities. Since May of 2002, I have continued to provide support for these activities, including participation in the development of the ESAT Protocols through "collaborative" sessions convened in Commission Docket No. 25089. As noted above, in 2003, I also filed testimony in Docket No. 25089 on behalf of EGSI. In that testimony, I supported the portions of the ESAT Protocols that dealt with the interfaces between the anticipated ETD and the retail market in ESAT.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. The remainder of my testimony is organized as follows:

In Section III, I provide an overview of the time period applicable to the TTC costs that I sponsor, and the relationship between ERCOT and

ESAT. "ESAT" is the term now used to describe the EGSI Texas service territory in the context of ROA.

In Section IV, I provide an overview of the market mechanics and distribution systems costs incurred to prepare for ROA, implementation of the pilot, and the on-going pilot operational costs.

In Section V, I explain and support the three classes of costs that I sponsor: (1) Texas SET and Load Profiling and Data Aggregation; (3) Pilot Project; and (4) Pilot Operations. This Section V explains, by class, why these costs were necessary, reasonable, and, as to "affiliate" costs, why the costs charged by the affiliate ESI to EGSI were no higher than the costs that ESI would charge other affiliates for the same or similar service, and that the costs reasonably approximate the actual costs of the services provided.

I conclude my testimony in Section VI.

Q. DO YOU SPONSOR ANY EXHIBITS?

A. Yes. The exhibits that I sponsor are listed in the Table of Contents to this testimony. I also include work papers that support my testimony and exhibits.

Q. DO YOU CO-SPONSOR ANY EXHIBITS NOT LISTED IN YOUR TESTIMONY?

A. Yes. I co-sponsor with Company witness Chris E. Barrilleaux the project summaries that apply to the TTC costs that I sponsor. These project summaries are attached as exhibits to Mr. Barrilleaux's testimony.

Q. DO YOU SPONSOR ANY PRO FORMA ADJUSTMENTS?

A. Yes. The pro forma adjustments that I sponsor are described in Exhibit TRM -3 attached to my testimony.

III. TRANSITION COST TIME PERIOD AND RELATIONSHIP BETWEEN ERCOT AND ESAT

Q. WHAT IS THE TIME PERIOD OVER WHICH THE TRANSITION COSTS THAT YOU SPONSOR WERE INCURRED?

A. The TTC cost period is from June 1, 1999 through June 17, 2005. The majority of the TTC costs that I sponsor were incurred during the period commencing in early 2000 (when EGSI began to prepare for the pilot and ultimately ROA) through 2001, although significant TTC costs were also incurred through the beginning of 2004. TTC costs were incurred in the last half of 2004 and into 2005, but at levels much reduced from the earlier years.

Q. WHY IS THIS THE APPROPRIATE TIME PERIOD?

A. I understand that EGSI is authorized, by Texas House Bill 1567, to recover its reasonable and necessary TTC costs incurred before the June 18, 2005 effective date of that bill. This means that the TTC cost period

would be from the date the TTC costs were first incurred after passage of the law that established the ROA requirements and standards through to June 17, 2005. From the standpoint of EGSI's experience in preparing for ROA, Senate Bill 7 required most investor owned utilities within Texas (including EGSI) to implement ROA on January 1, 2002, preceded by a pilot originally scheduled to begin on June 1, 2001. To be ready for both the pilot and ROA, EGSI, as well as the other market participants in Texas,[6] began its initial work as early as June 1999, upon passage of Senate Bill 7. From June 1999 through the end of that year, EGSI began to prepare for the pilot and ultimately ROA by beginning to develop, among other things, its Business Separation Plan, Affiliate Code of Conduct compliance, and Unbundled Cost of Service filings, all of which were filed in early 2000. EGSI begin its formal project work for market mechanics and the pilot (including participation in the applicable Commission rulemaking projects) by the second quarter of 2000.

Although ESAT was not opened to ROA on January 1, 2002, the Commission's initial decision to delay ROA in the service area was not made until late 2001 in EGSI's Docket No. 24469, with the order memorializing the Commission's decision to delay ROA in ESAT being signed on December 20, 2001. Until that decision was made, EGSI continued to prepare for ROA, including the completion and market certification testing required for the implementation of state-wide Texas

[6] For example, ERCOT issued its original RFP in preparation for ROA in late 1999.

SET Version 1.4 in January of 2002, as if the pilot would end on December 31, 2001, and ROA would commence on January 1, 2002.

The Commission's order in Docket No. 24469 also required EGSI to extend the pilot beyond December 31, 2001, and created a framework that would allow customer choice potentially to begin "in the 2002 time frame." This initial target date, however, was not achieved, and ROA was further delayed through Commission orders in subsequent dockets. The pilot also was further extended and remained in effect until the summer of 2004, at which time it was terminated in accordance with the Commission's July 2004 order in Docket No. 28818.

Q. WHY ARE THE TEXAS SET REQUIREMENTS STATE-WIDE, RATHER THAN UNIQUE TO EITHER ERCOT OR ESAT?

A. ERCOT has been designated as the state-wide "registration agent" and, as such, is responsible for registering and managing the retail customer data base, including the functionality to process customer "switching" among REPs throughout Texas. Furthermore, having consistent standard electronic transactions state-wide avoids the necessity and costs of ERCOT and other market participants, such as the REPs, having to develop and use different transactions in the different markets.

With further regard to Texas SET, all retail market participants in Texas (whether within ERCOT or outside of ERCOT) must use the most current version of state-wide Texas SET transactions to maintain market

certification. This requirement applied to EGSI even though EGSI remained in a pilot mode from June 2001 into June 2004, and required implementation of every SET version in order to participate in the retail market pilot since January 1, 2002. In ESAT, there was very limited and intermittent participation by the REPs in the pilot. Nevertheless, because the pilot remained in effect, EGSI had to maintain its systems in a readiness mode so that REPs could, if they chose, participate at any time during the pilot in ESAT.

Q. WHAT ARE SET "VERSIONS," AND WHY ARE THEY NECESSARY?

A. SET versions are a formal way of managing and implementing changes to the electronic transactions used by ERCOT and the market participants to ensure that electronic communications between the participants are maintained in a consistent electronic manner. For example, since 2001 there have been a number of revisions to the SET transactions, primarily intended to improve the transactions and thus the communication flow between the market participants. These improvements would include things such as correcting errors in the transactions and/or adding new data to the transactions. Each revision is assigned a version number, such as SET 1.3, SET 1.4, SET 1.5, etc. Prior to a SET version (or "flight") implementation, market participants must test each new version of the transactions with each other and ERCOT through market certification testing.

Q. WHAT ARE THE "ERCOT PROTOCOLS"?

A. The ERCOT Protocols are the market rules for ERCOT. More specifically, they are a collection of scheduling, operating, planning, reliability, and settlement (including customer registration) policies, rules, guidelines, procedures, standards and criteria of ERCOT. Except for the customer registration procedures and standards (including the standard electronic transactions) in the ERCOT Protocols, those rules did not generally apply to EGSI because EGSI is located outside of ERCOT in the Southeastern Electric Reliability Council geographic area.

Q. WHY DID EGSI INCUR (OR CAUSE TO BE INCURRED) THE TTC COSTS COVERED BY YOUR TESTIMONY?

A. Because, to participate in the required Pilot, and then in the anticipated ROA market following the Pilot, it was necessary for EGSI to be in compliance with the established market requirements, such as the Texas SET and Load Profiling/Data Aggregation requirements. A number of the statewide parameters were established in the ERCOT Protocols and did apply to EGSI throughout the pilot periods. In addition, it was necessary to develop some more specific retail-related protocols for the ESAT *retail* market, and a detailed set of wholesale-related protocols for the ESAT *wholesale* market. With respect to the retail market, the ESAT Protocols for the most part adopted the ERCOT Protocols for the retail market SET. With respect to the wholesale market, the ESAT Protocols were

significantly different from the ERCOT Protocols because, primarily as I understand it, the Federal Energy Regulatory Commission ("FERC") has jurisdiction over wholesale transactions outside of ERCOT, while the Commission has jurisdiction over wholesale transactions within ERCOT.

EGSI incurred the pilot-related costs in accordance and in compliance with the provisions in Senate Bill 7 and the Commission's substantive rules that required the implementation of pilot projects to prepare and test for ROA. In EGSI's situation, the Company participated in the "initial" pilot for the period through December 2001, and, when ROA was delayed in the ESAT region, in the "extended" pilot that was in effect from January 1, 2002 through the summer of 2004.

Q. BUT FOR THE REQUIREMENTS OF SB 7 AND THE VARIOUS COMMISSION ORDERS IMPLEMENTING SB 7, WOULD EGSI HAVE INCURRED THE COSTS IN THE CLASSES THAT YOU SPONSOR?

A. No. Had it not been for those requirements, these costs would not have been incurred.

IV. OVERVIEW OF MARKET MECHANICS AND PILOT FUNCTIONS COSTS

Q. DO YOU EXPLAIN AND SUPPORT THE TRANSITION COSTS THAT YOU SPONSOR SOLELY ON AN "AFFILIATE CLASS" BASIS?

A. No. I support both affiliate and non-affiliate costs. Therefore, although I include a discussion of the TTC costs that I sponsor on a class-by-class basis in the next section of my testimony, that discussion is structured to support both the affiliate and non-affiliate costs in each of my three classes. To provide a more specific explanation of the total TTC costs that I sponsor, I also provide a description of the costs, in this Section IV, based on the types of costs incurred by both EGSI and ESI to prepare for and support ROA in ESAT.

Q. WHAT ARE THE TOTAL TRANSITION COST DOLLARS THAT YOU SPONSOR?

A. I sponsor a total of $58,415,316.15 of TTC costs that EGSI and ESI, on EGSI's behalf, have incurred since June 1, 1999 through June 17, 2005. The total costs as of June 17, 2005, including attendant Allowance for Funds Used During Construction ("AFUDC"), not broken down by class (which I show later in my testimony), are displayed in total on the following table.

Table 1

Total Costs

Group Description	Affiliate Costs Direct	Affiliate Costs Allocated	Affiliate Costs Total	Non-Affiliate Costs	Total Net Requested
Internal - Payroll / Benefits	4,422,818.63	350,710.43	4,773,529.06	337,258.71	5,110,787.76
Internal - All Other Internal Support Costs	189,017.45	91.78	189,109.23	2,115.29	191,224.52
External - Legal Contractor Costs	25,724.70	-	25,724.70	21,809.73	47,534.43
External – All Other Support Costs	16,554,353.54	573,361.81	17,127,715.35	18,442,790.80	35,570,506.14
AFUDC & Capital Overhead	-	-	-	17,495,263.29	17,495,263.29
Grand Total	21,191,914.32	924,164.01	22,116,078.33	36,299,237.81	58,415,316.15

Q. PLEASE EXPLAIN THE COMPONENTS OF TABLE 1.

A. In this table, which will be repeated in each of my classes by class below, the rows segregate costs between either "internal" or "external" groups of costs. Internal costs are costs incurred and billed by Entergy (including EGSI) personnel to a specific project. "Payroll / Benefits" is, obviously, the payroll and benefits costs of the Entergy employees' time spent on the applicable TTC projects. The "All Other Internal Support Costs" category picks up the cost of system hardware, software, and the like developed by the internal employees for TTC purposes.

The "external" costs rows are segregated between either outside (non-Entergy employee) lawyer/legal fees charges, and outside (non-legal) contractors' charges to TTC projects.

The columns are segregated between "affiliate" and "non-affiliate" costs. Affiliate costs include all non-EGSI charges; for example, TTC costs incurred by ESI. The term "non-affiliate" refers to EGSI; that is, costs incurred directly by EGSI, rather than costs direct billed or allocated to EGSI by an affiliate. The affiliate charges are further broken down to either direct charges or allocated charges. A "direct" charge is one in which 100% of the cost of a project is billed to EGSI and not to any other entity. An "allocated" charge is one in which a portion of a project cost is charged (allocated) to EGSI, while another portion of that project cost is allocated to another entity, such as Entergy Louisiana.

Q. WHY WERE SOME COSTS INCURRED DIRECTLY BY EGSI, AND OTHER COSTS INCURRED BY ESI AND BILLED TO EGSI?

A. The work that is captured in my classes of TTC costs was work either to add new Information Technology ("IT") capabilities, or required significant changes to the existing IT systems. Because this work is supported and maintained by ESI, a large part of these costs are billed to EGSI from its affiliate, ESI. ESI-shared services (which are addressed in Company witness Barrileaux's testimony), therefore, along with services from ESI's IT and Customer Service Functions, IT project management, vendor contracts, and ESI's payment of ERCOT Load Serving Entity ("LSE") Fees, were major parts of the affiliate costs charged to EGSI.

In addition, EGSI, through its own employees, engaged in ROA-related activities and projects, including implementation, product design, and participation in state-wide projects necessary to implement ROA. Over the approximately five years that active work on market mechanics and the pilot project was ongoing, responsibilities for some project codes shifted between EGSI and ESI. To be clear, this was a coordinated effort; ESI was not duplicating efforts undertaken directly by EGSI. ESI, as the affiliated corporate support company, assisted and supported EGSI in the ROA-related projects.

Q. HOW DO NON-AFFILIATE AND AFFILIATE COSTS RELATE IN COMPOSING THE CLASSES OF SERVICE THAT YOU SPONSOR?

A. Each class of service that I sponsor was provided in part by EGSI and in part by ESI, so that the costs in each class include both non-affiliate and affiliate costs, separately identified. These classes, and their respective costs, are explained in more detail below when I discuss each class separately.

Q. CAN YOU SHOW HOW MUCH IN TTC COSTS WERE INCURRED IN EACH OF YOUR CLASSES BY, FOR EXAMPLE, PROJECT, YEAR, OR TYPE OF COST?

A. Yes. I have attached four alphabetically-labeled exhibits to this testimony as Exhibits TRM-A, TRM-B, TRM-C, and TRM-D. These four exhibits show different views of the costs in each of my TTC Cost Classes.

Exhibit TRM-A is a more detailed version of the "Table 1" above that breaks down that multi-class composite table into the group descriptions and affiliate vs. non-affiliate costs for each of my three TTC classes.

Exhibit TRM-B shows cost information for each of my classes based on the project codes and associated billing methods that were used to compile each class.

Exhibit TRM-C shows the cost information for each of my classes by year from 1999 through 2005.

Exhibit TRM-D shows the cost information for each of my classes segregated between either a "capital" cost or an "expense" cost.

In my discussions below regarding each of my classes, I may refer to these four alphabetically-labeled exhibits.

Q. IN EXHIBIT TRM-B, WHAT ARE PROJECT CODES AND BILLING METHODS?

A. I will discuss specific project codes and billing methods later in my testimony when I describe the composition of each of my individual TTC cost classes. As an overview, each of my classes was constructed by aggregating project codes that were related to the topic of that class. Project codes are an accounting tool used by Entergy so that employees and contractors can bill their time, expenses, and costs to a specific code that is established to capture the costs of a defined project. A project code captures the capital or expense of a specified project. Based on the nature and intent of the project, a single billing method is assigned to a project code so that the capital or expense in that project can be billed to the appropriate legal entity or entities, such as one or more of the Entergy Operating Companies (including EGSI), depending on which entity or entities benefits from that project.

Q. IN EXHIBIT TRM-D, PLEASE EXPLAIN THE TERMS "EXPENSE" AND "CAPITAL."

A. "Capital" refers to those costs associated with acquiring, preparing, and placing into service a capital asset; that is, developing the asset and "closing it to plant" (or "closing it to book"). A capital asset is any property or equipment with a useful life of more than one year that costs $1,000 or more, or is a unit of property added to plant. For example, the costs

required to design, install, and test new IT systems, or enhance existing IT systems, are capital costs. Once the asset is completed, it is placed in service for use in the Company's operations.

Generally, "expenses" are those on-going costs associated with operating and maintaining Company assets once the asset is in service; "expense" is not used to "create" the asset, as is capital, but is used to operate and maintain the asset once it is in service. For example, EGSI's payments to ERCOT for the LSE fees are an expense cost because they relate to the operation of the Company rather than to creation of an asset for the Company.

Q. WHAT MANAGEMENT STRUCTURE AND CONTROLS WERE USED TO MANAGE THE MARKET MECHANICS COSTS?

A. There were three levels of management structure and governance in place to manage and control the market mechanics costs: Transition Management, the Market Mechanics Steering Committee, and the Market Mechanics Project team.

The overall Transition Management structure and responsibilities are specifically addressed in Company witness Phillip R. May's testimony. As stated in his testimony, the Market Mechanics team and work fell under the Distribution Decision Board. As a part of the overall transition management structure, the Market Mechanics project team participated in periodic (normally monthly but as often as weekly) meetings to coordinate

schedules and work activities and to address and resolve common problems and issues. A typical status report is included in Exhibit TRM-4.

The Market Mechanics Project was more specifically governed and directed by the Market Mechanics Steering Committee. This committee was led by the Vice-President of Customer Service Support and composed of other members of Senior Management, including Entergy's Chief Informational Officer, the Vice-President of Finance, and the Vice-President of Contract Managements. The committee included EGSI and ESI business Directors ("stakeholders"). In addition to the overall management of costs, the committee's responsibilities included providing guidance and direction to the market mechanics project in addressing schedules and risks. The Steering Committee met periodically (normally monthly) with the market mechanics project managers. An example of a monthly Steering Committee Report is included in Exhibit TRM-5.

The Market Mechanics Project team also had a formal structure with qualified program and project managers to manage individual components of the project as well as the overall project. The project structure is included in Exhibit TRM-6. The program and project managers used a very structured project management system to schedule and track very detailed work components and tasks involved in the project to both manage cost and schedule compliance. Examples of this level of detail are shown on pages 2 through 4 of Exhibit TRM-6.

V. DISCUSSION OF COSTS BY CLASS

Q. DO YOU EXPLAIN WHY THE COSTS IN YOUR TTC COST CLASSES ARE REASONABLE AND NECESSARY?

A. Yes. For the remainder of my testimony, the total TTC costs that I sponsor are organized into three "classes" of costs to more specifically explain the necessity for and reasonableness of these costs and, for the affiliate costs within these classes, to explain the pricing of those costs.

With regard to the necessity for and reasonableness of these costs, as discussed below, my testimony applies to both the non-affiliate (*i.e.*, direct) and the affiliate costs. I understand that the standard for recovery of affiliate costs in Texas is different, and more stringent, than for recovery of non-affiliate costs. However, because the TTC costs that I sponsor are a combination of both affiliate and non-affiliate costs, I use the same proof of reasonableness and necessity for all of the costs. The exception to this presentation is with regard to the affiliate standard that requires that the prices charged by the affiliate to the utility are "no higher than" the prices charged by the affiliate to other affiliates, and that the prices charged reasonably approximate the actual cost of the services provided. In this section of my testimony, when I am addressing the "no higher than" and "actual cost" considerations, I will be referring solely to the affiliate costs.

Q. WHAT ARE THE CLASSES OF COSTS THAT YOU SPONSOR, AND WHAT IS THE DOLLAR AMOUNT OF EACH OF THESE CLASSES?

A. The three classes of distribution-related TTC costs that I sponsor are: Texas SET and Load Profiling and Data Aggregation class (also referred to as "Texas SET and LPDA" class); Pilot Project class; and Pilot Operations class.

A. The Texas SET and Load Profiling and Data Aggregation Class

Q. PLEASE DESCRIBE AND EXPLAIN COSTS OF THE TEXAS SET AND LPDA CLASS.

A. As indicated above and in Table 2 below, the costs included in the Texas SET and LPDA class are approximately $46,534,135.71.

Table 2

Texas SET & LPDA

Group Description	Affiliate Costs Direct	Affiliate Costs Allocated	Affiliate Costs Total	Non-Affiliate Costs	Total Net Requested
Internal - Payroll / Benefits	3,419,354.93	350,710.43	3,770,065.36	164,944.08	3,935,009.43
Internal - All Other Internal Support Costs	67,518.82	91.78	67,610.60	1,186.67	68,797.27
External - Legal Contractor Costs	25,724.70	-	25,724.70	21,809.73	47,534.43
External – All Other Support Costs	15,312,992.19	573,361.81	15,886,354.00	11,379,433.34	27,265,787.33
AFUDC & Capital Overhead	-	-	-	15,217,007.24	15,217,007.24
Grand Total	18,825,590.64	924,164.01	19,749,754.65	26,784,381.05	46,534,135.71

This class is comprised predominately of capital costs. The total costs of $46,534,135.71 million include $10,590,796.00 of AFUDC costs. The

following discussion of the Texas SET and LPDA class is further segregated into two cost groups: Texas SET group and LPDA group The discussions of the Texas SET and LPDA groups do not include a discussion of the associated AFUDC costs, because these are the "carrying costs" applicable to the capital costs in this class.

Q. PLEASE EXPLAIN WHY THE "TEXAS SET AND LPDA" CLASS IS DIVIDED INTO THE TWO COST GROUPS OF "TEXAS SET" AND "LPDA".

A. In the fall of 2000, one project code, TTTCAT, was established to capture the primary cost of the two new functionalities that EGSI needed to have to support ROA. Those new functionalities included: 1) the ability to support the retail market operations by being able to communicate with REPs and ERCOT through electronic transactions (Texas SET), and 2) the ability to support wholesale market operations by being able to provide profiled and aggregated metering data for wholesale settlement (LPDA). For clarity and understanding, the total costs in this class are further broken down into these two groups. I have included a work paper that explains how the total costs captured under project code TTTCAT were further broken down between these two groups of costs.

Q. PLEASE DESCRIBE AND EXPLAIN AFUDC COSTS OF THE TEXAS SET AND LOAD PROFILING AND DATA AGGREGATION CLASS.

A. The AFUDC costs are the costs of funds used to create and implement a capital project. These costs are capitalized as part of the cost of the project and are recovered over the life of the asset through depreciation. AFUDC is calculated monthly based on the life-to-date charges to the project using percentage rates determined by FERC guidelines and are based on EGSI's cost of debt, preferred stock, and common stock information. The AFUDC rate is applied to the principal balance of the capital costs for each project under development in order to arrive at the amount of AFUDC to be added to the capital costs. AFUDC ceases to accrue when the capital project is placed in service.

1. <u>The Texas SET Group</u>

Q. PLEASE DESCRIBE AND EXPLAIN THE NON-AFUDC COSTS OF THE TEXAS SET GROUP.

A. The non-AFUDC costs in the Texas SET group is $22,976,617.92 and include the costs incurred by EGSI (as a TDSP) to develop the capability to communicate electronically with other retail market participants, including the REPs (both affiliated and unaffiliated) serving customers in ESAT, and to communicate with ERCOT in its role as the state-wide customer registration agent. The medium for this electronic communication is generally referred to as Electronic Data Interchange

("EDI"). Using the EDI medium, a number of Standard Electronic Transactions (again, "SET") were designed by state-wide collaborative market teams commencing in 2000 for use in communicating information between the retail market participants. These transactions are generally referred to as the "Texas SET." Texas SET, as I have already discussed, is a portion of the overall "market mechanics" functions necessary to operate in the pilot and in the ROA market.

Texas SET costs enable EGSI, as a TDSP, to communicate information electronically with the other retail market participants. For this to occur, the Texas SET Working Group[7] designed SET Transactions for each market participant to use in sending or receiving its respective information in a very precise EDI format and time sequence.

These SET Transactions are used to electronically communicate specific data depending on the type of transaction, such as the "867_03" transaction through which a TDSP (such as EGSI) transmits a customer's monthly meter reading to that customer's REP. In July 2004 (that is, the month in which the Commission issued the order that terminated the ESAT pilot), there were 41 SET Transactions that TDSPs must use to send information to and/or receive information from the other retail market participants. A list of the SET Transactions[8] including those required for

[7] *See* Retail Market Implementation Guide, Version 1.0 July 22, 2004. Section 6.1.2.1 Texas Standard Electronic Transactions Working Group (Texas SET) on the ERCOT website.

[8] Texas SET Transactions are more specifically defined in ERCOT Protocols - March 1, 2004, Section 19: Texas SET as published on the ERCOT website.

use by a TDSP is attached as my Exhibit TRM-7 – Distribution Texas SET Transactions.

Providing the information system functionality necessary to fully participate in Texas SET involved a very substantial effort. EGSI added the capability to adhere to the SET requirements through a combination of outsourcing and internal systems development in order to communicate with the retail market participants through the following processes:

- IBM's "VeriTRAN" clearinghouse service was procured through a competitive bidding process, for EDI conversion, data transport, and transaction management.
- A new internal system ("Market Mechanics Database") was developed to assimilate, disseminate, and synchronize data to and from internal systems for the communication of data to and from the VeriTRAN clearinghouse.
- Existing IT systems, including the Customer Information System ("CIS"), distribution work management systems, and meter reading systems also required modifications to accommodate the new customer delivery point identifying number (commonly referred to as the "Electric Service Identifier" or the "ESI-ID") and to be able to send and receive the appropriate data for the required SET Versions as they changed over time. A diagram showing the relationships of these systems is attached in Exhibit TRM-8 – Diagram of System Relationships.

From June 1999 through July 2004, five SET "Versions" were designed, developed, tested, and implemented for the retail market in Texas. The most recent Texas SET version—Version 2.0—was implemented in July 2004. The TTC costs that I sponsor include the costs of preparing for and beginning the implementation of that new SET

Version. Each version contained as many as 33 specific electronic transactions applicable to the TDSP.

The Texas SET group of costs includes the costs to develop, test, and implement the initial SET Version 1.3 for the initial pilot period, and the cost to update that capability to remain compatible with the changing SET versions from the original pilot Version 1.3 in 2001, to the SET Version 2.0 implemented in July 2004.

Q. WHAT ARE THE SET TRANSACTIONS VERSIONS THAT ARE INCLUDED WITHIN THIS TEXAS SET GROUP OF COSTS?

A. There are five SET Versions included in these costs:

- SET Version 1.3 was completed, tested, and implemented for the pilot opening in July 2001. Additionally, prior to Version 1.3, three preliminary versions (SET Versions 1.0, 1.1, and 1.2) were also serially developed, but were ultimately replaced by SET Version 1.3 for the opening of the initial pilot.
- SET Version 1.4 was completed and implemented in preparation for market opening Jan 1, 2002.
- SET Versions 1.5 and 1.6, which were implemented in the retail market in December 2002 and December 2003, respectively.
- SET Version 2.0 was implemented in July 2004.[9]

[9] To my knowledge, there were no SET Versions 1.7 through 1.9. ERCOT Protocol 19.2 specifies that "In developing and maintaining the implementation guides, the appropriate ERCOT TAC subcommittee, or its designated working group shall (7)Develop and follow processes and procedures and follow these for the management of changes to SET; and (8)Develop and follow processes and procedures for the release of new versions of SET."

A chart of the market timelines for SET versions implementations after market opening is attached in my Exhibit TRM-9 – SET Implementation Timeline.

Q. HOW ARE THE DOLLARS WITHIN THIS TEXAS SET GROUP SEGREGATED AMONG THE VARIOUS SET VERSIONS THAT YOU DESCRIBE ABOVE?

A. The $22,976,617.92 million of non-AFUDC costs in this group are segregated by SET Versions in Table 3 below:

Table 3

Texas SET Group Costs by SET Version					
	SET 1.3	SET 1.4	SET 1.5	SET 1.6	SET 2.0
CTC CHARGES	$ 5,433,369.98	$ 5,030,573.97	$ 205,939.19	$ 88,356.78	$ 171,741.43
SAIC	$ 3,920,283.40	$ 3,386,125.23	$ 167,520.66	$ (65,864.08)	$ -
General	$ 1,498,284.07	$ 2,681,907.67	$ 210,342.27	$ 55,632.01	$ 192,405.32
non-AFUDC total	$ 10,851,937.46	$ 11,098,606.88	$ 583,802.12	$ 78,124.71	$ 364,146.75

To reiterate, SET Version 1.3, implemented for the initial pilot in June of 2001, includes the costs associated with Versions 1.0, 1.1, and 1.2.

Q. WHY ARE ALL OF THESE COSTS CAPITAL COSTS?

A. As I stated earlier, a capital asset is any property or equipment with a useful life of more than one year that costs $1,000 or more, or is a unit of property added to plant. With respect to IT systems, the costs required to design, install, and test new IT systems, or enhance existing IT systems, are capital costs. Each SET version and subsequent testing, including

market certification testing, was an enhancement of the information technology needed to maintain accurate electronic communications with the market participants.

Q. WHY WAS IT NECESSARY FOR EGSI TO INCUR THE COSTS IN THIS TEXAS SET GROUP?

A. It was necessary for EGSI and ESI to spend the dollars that are reflected in this class to implement, test, and maintain the various Texas SET Versions as those versions arose and evolved prior to and during the initial and extended pilots. To remain active in the Texas retail market, all market participants are required to upgrade to the most recent SET Version, and to achieve certification (through market testing) of that particular SET Version. This requirement applied to EGSI even though it remained in a pilot mode from July 2001 to the summer of 2004. EGSI would not have been able to continue to operate in and maintain its operations in the pilot and in preparation for ROA without incurring these costs, and thereby maintaining operations under the mandatory SET Versions. The level of costs for implementing these evolving versions was made necessary for a number of reasons.

First, Texas was implementing a new retail market structure that had not previously been implemented in any other retail market. The retail market structure in Texas included the unique aspect of creating a state-wide registration agent that managed the movement of customers as they

switched from one REP to another. This required (and requires) the registration agent to maintain, for the pilot and ROA, information about each TDSP, REP, and end-use customer in a central database.

The creation of a state-wide registration agent (ERCOT) resulted in the requirement for, and development of, a unique ESI-ID. Each TDSP had to assign a unique ESI-ID to each delivery point in its distribution system (that is, the point on a distribution system at which a customer receives electric service). The ESI-ID is the key identifier that associates and maintains the relationship between the customer, the REP providing electricity to that customer, and the TDSP delivering the electricity to that customer. This requirement necessitated that EGSI, as well as other TDSPs, develop the capability to create an ESI-ID for each service delivery point on its distribution system and accurately maintain that relationship between the ESI-ID, the end-use customer, and the customer's REP in its internal systems. Additionally, as information about a specific ESI-ID changed (such as a customer's zip code), the change had to be transmitted to the registration agent. The Texas SET Working Group designed and created one transaction for TDSPs, such as EGSI, to create, maintain, and retire the ESI-IDs.

In its role as registration agent, ERCOT also managed, through the customer "switching" process, the movement of customers from one REP to another. Thirty-one SET Transactions were developed to facilitate this process. EGSI and other TDSPs had to develop the capability to send

and receive the switching-related transactions to and from ERCOT, as well as maintain this information within its internal systems. For example, as a customer switched from one REP to another, EGSI would receive this information through a SET Transaction, and then update its internal systems to reflect the new REP providing service to the end-use customer. This would include recording the new REP as the LSE for the applicable ESI-ID, and updating the Company's billing systems to begin billing that REP for the electricity delivered to the ESI-ID. If the customer was switching "off-cycle" (that is, on a date other than the scheduled meter reading date), then EGSI would have to initiate a work order within its internal systems to read the meter for that ESI-ID on the requested switch date, and then send that meter reading information back to ERCOT as well as to both the prior and new REP for their respective uses.

Additionally, SET Transactions were developed to electronically communicate to (or from) ERCOT and/or the REPs the following information or activity:

- The normal monthly meter readings for the ESI-IDs required to be developed so that the REP could receive the monthly meter reading for its respective ESI-IDs.
- EGSI's monthly bill to the REP for each ESI-ID.
- For EGSI to receive a payment advisory from the REP indicating the REP's payment (by electronic funds transfer) of its bill for specific ESI-IDs.

- For EGSI to receive and respond to "service order" requests from REPs who chose to provide that service to the customer.[10] Service order requests are requests related to the distribution system, and would include items such as a request to trim a tree.

- For EGSI to receive and respond to reports of customer outages if the REP chose to provide that service to its customers.[11] Because these transactions were not intended for the pilot, and to mitigate costs until there was a certainty of ROA, EGSI deferred the implementation of this capability.

Each of these SET Transactions also required the modification of EGSI's internal systems to be able to receive, act on, and initiate the necessary data information required by the SET Transaction. For example, the internal meter reading systems required modification (a programming change) so that the information required by the meter reading SET Transaction "867_03" would be initiated for inclusion in the SET Transaction that communicated this information to the REP.

As indicated in Table 3 above, the majority of the Texas SET costs were incurred in developing and implementing SET Versions 1.3 and 1.4 leading to the initial anticipated market opening in January 2002. This is because these two Versions included the majority of the transactions, and especially those that were fundamental to the retail market:

- The creation and maintenance of the ESI-IDs;
- Customer-switching transactions;
- Monthly meter reading transactions; and

[10] REPs have the option (under the Standard Terms and Conditions developed by the market) to provide these service to their customers or allow their customers to interact directly with the TDSP.

[11] *Id.*

- Monthly billing and payment transactions.

Every SET Transaction is unique to the Texas retail market in the sense that the transaction either was "built from scratch" (such as the ESI-ID, switching, and service order transactions) or was a customization of an existing industry EDI (such as the billing and payment transactions.)

Q. PLEASE EXPLAIN SET VERSION 1.3.

A. The non-AFUDC costs associated with SET Version 1.3 were $11.1 million. SET Version 1.3 implemented the basic transactions for the pilot beginning June 2001. Costs associated with SET 1.3 were incurred between August 2000 and the implementation of SET 1.3, when the initial pilot actually began to operate in July 2001. Although the initial pilot was supposed to commence in full on June 1, 2001, full customer enrollment did not begin until July 2001.

Because these were either all new transactions, or transactions modified specifically for the Texas retail market, developing and implementing the SET 1.3 Version to be used in the initial pilot required multiple iterations of design and testing. These iterations were reflected in the continuous changes of the technical designs between the initial design (Version 1.0), through two more revisions (Versions 1.1 and 1.2), and finally to Version 1.3 for the initial pilot. The final Version 1.3 SET technical requirements were completed by the market teams in March 2001, just three months prior to the date the initial pilot was supposed to

begin, and practically simultaneous to the first market testing beginning for the pilot.

Thus, the costs included in Version 1.3 related to the design, analyses, and IT system modifications and development equivalent to four SET Versions, which were necessary for each of the SET Transactions being implemented in the pilot. These iterations also required repetitive testing of the work and internal systems as the changes were made. The costs also include the market certification (testing with other market participants) for "Test Flight 1" and "Test Flight 3801" for SET Version 1.3. In summary, from 2000 to 2001, there were 233 changes requested by these committees and, with the final approval through the ERCOT process, 136 changes were made. This process resulted in a SET Version 1.3 being implemented in June 2001. But another version (SET Version 1.4) was introduced and tested during the pilot, and implemented in December 2001. These constant and material changes, including the multiple versions (and associated changes) for SET Versions 1.3 and 1.4, caused substantial overruns in the original Entergy planning timeline, leading to the market opening in January of 2002. The timeline of SET Version changes in 2001 is shown in my attached Exhibit TRM-10.

Q. WHAT IS A "TEST FLIGHT," AND HOW ARE THEY NUMBERED?

A. A "test flight" is a series of tests developed by the Texas Test Plan Team in which the market participants participate to test the newest version of

the SET Transactions.[12] This testing with other market participants, including ERCOT, verifies that the transactions were modified correctly and work as planned. The Test Flight number is assigned by The Texas Test Plan Team.

Q. PLEASE EXPLAIN SET VERSION 1.4.

A. The non-AFUDC costs associated with SET Version 1.4 were $11,098,606.88 million. Work on SET Version 1.4 began in early 2001 and overlapped the work being done on SET Version 1.3. SET Version 1.4 primarily included the addition of the service order transactions, and a complete redesign of the monthly meter reading transactions. Design and requirements changes were made to practically every other SET Transaction already implemented in SET Version 1.3. These changes and additions were necessary to add the new service order capabilities to the market, and to correct errors discovered during the testing of the Version 1.3 Transactions. Changes made or added in this version include the following:

- Two New EDI Transactions (814_28 and 814_29)
- Modification of Existing Transactions (details below)

[12] ERCOT Protocol: Section 23.1 – "The Texas Test Plan Team (TTPT) is an ERCOT standing working group that reports to the Retail Market Subcommittee (RMS). The TTPT is comprised of volunteers from Market Participant (MP) companies. These volunteers work in a cooperative manner to establish processes and procedures for testing the commercial operations to verify retail systems compliant with ERCOT protocols and Public Utility Commission of Texas (PUCT) rulemakings."

- New EDI Outage Management
- Simplification/Modification of 650 Service Order Transactions
- 814_PC and 814_PD Transaction Changes
- Major 867 SET Transaction Changes (this term designates a specific type of revision to Version 1.3 that resulted from testing)
- Invoice Transaction Changes
- Major Termination Transaction Changes (forced move-outs and reschedules)
- Meter Transaction Changes
- Separate transactions to handle Pending Switches / Move-ins
- Minor reworking of remaining transactions

As these changes were made to the design of the SET Transactions, either technical or data-related, it was necessary for EGSI's systems to be changed and retested to verify the accuracy of the change.

Because the final design requirements for SET 1.4 were not released until August 2001, internal IT system development for some components of SET 1.4 was not completed until the end of the first quarter of 2002. Workarounds were in place to support these items (for example, the Service Order transactions).

During the second quarter of 2002, after it became clear that ROA would be delayed beyond the 2002 time frame, EGSI began efforts to minimize costs. This included a ramp-down of the project work by reducing staffing levels, and minimizing use of the IT systems and associated maintenance, with work-arounds being developed and used to

support any pilot participation to the extent possible. SET 1.4 costs reflected in this TTC class accounted for this ramp-down, which reduced costs until such time as pilot participation began or until additional work was needed to accommodate future SET Version releases. This ramp-down is reflected in cost trends discussed in more detail below and as shown in my exhibit TRM-C.

Finally, there was extensive market testing for the market participants for SET Version 1.4 leading to the implementation of that version at market opening on January 1, 2002. SET Version 1.4 market testing included market certification for Test Flight 1001, which was extremely comprehensive, to ensure as much accuracy as possible for the market opening in January 2002.

To be clear, although there was very little actual activity in EGSI's initial pilot, and EGSI did not move to ROA on January 1, 2002, it was necessary for EGSI to remain current with the evolving Texas SET Versions so that it could participate in the initial and extended pilots, and in anticipation that ROA would commence in ESAT in the near-term.

Q. PLEASE EXPLAIN SET VERSIONS 1.5, 1.6, AND 2.0.

A. The non-AFUDC costs associated with SET Version 1.5 were $583,802.12 million. This version primarily added transaction-specific capability to interact with municipally owned utilities. The primary costs

included in the SET Version 1.5 costs were to support market certification testing in Test Flight 0902 from September to November 2002.

The non-AFUDC costs associated with SET Version 1.6 were $78,124.71 million. This version primarily added competitive metering requirements, with limited impact on EGSI. The primary costs include costs for market certification testing in Test Flight 1003 from October through November 2003. Additionally, and again, EGSI minimized internal systems costs by developing work-arounds for use while in a pilot mode.

In October 2003, a small number of customers began participating in the pilot. SET Version 1.6 includes costs to activate a minimum level of IT systems and employees to support the pilot participation.

The non-AFUDC costs associated with SET Version 2.0 were $364,146.75 million. This version primarily included adding additional functions to the "Move-In/Move-out" types of transactions, informally referred to by the market as "stacking," to address problems that had been experienced in earlier versions regarding the accuracy and timely accounting for customers moving into or out of their homes or businesses. Implementing the stacking solution in Version 2.0 required modifications to the processing rules for almost all of the SET transactions. During the third quarter of 2003, a project team was formed to begin preparation for SET 2.0 implementation. Additionally, because at the time, the next re-invigorated pilot target date for ESAT was expected to be in mid-2004, with ROA beginning in December 2004 or January 2005, work was begun

to perform gap analyses and to fulfill requirements necessary to be ready for ROA.

However, in March 2004, it became apparent that ROA would not occur in the near future when the Commission, in its preliminary order in Docket No. 28818, eliminated any target date for ROA (including the then-existing December 2004 target date). Because of that Commission ruling, a decision was made to mitigate the costs associated with SET Version 2.0 by implementing less costly "work-arounds" if at all possible rather than implementing a comprehensive IT solution. Taking this approach until there was more certainty about the start dates of ROA reduced the costs of implementing SET Version 2.0.

Accordingly, because the activities described above with regard to the Texas SET group of costs were mandatory and dictated by the market, it was necessary for EGSI (and ESI on behalf of EGSI) to incur the costs included within this Class. EGSI achieved required market certification in each of the SET Version implementations, including SET Version 1.4, Version 1.5, Version 1.6, and Version 2.0.[13] Exhibit TRM-11 includes the market certifications for each of these versions.

[13] Market certification for SET Version 2.0 was received in July 2004.

Q. WHAT IS "MARKET CERTIFICATION"?

A. As generally discussed earlier, "market certification" is the process by which market participants test the changes made to the newest SET versions.[14] This testing among market participants is managed by the Texas Test Plan Team through a set of test "scripts" and ensures that modifications made to the SET transactions by the market participants work as planned. Each certification testing is assigned a Test Flight number by the Test Team. Market participants, including EGSI, gain "market certification" by successfully completing their assigned testing in the Test Flight.

2. The Load Profiling and Data Aggregation Group

Q. PLEASE DESCRIBE AND EXPLAIN THE NON-AFUDC COSTS OF THE LOAD PROFILING AND DATA AGGREGATION GROUP.

A. The non-AFUDC costs in the Load Profiling and Data Aggregation ("LPDA") group is $3,688,631.54. These costs are comprised predominately of capital costs and include the costs incurred for EGSI to be able to perform the Load Profiling and Data Aggregation functions. The ESAT Protocols require EGSI, as a TDSP, to furnish end-use customer load information, in an appropriate format, to the Independent

[14] ERCOT Protocols Section 23.5 Testing Success

Testing success is defined according to the information in the TMTP, the testing standards and the test scripts. Where these documents are not explicit, the ITPTA, or its successor, will determine whether or not a test is successful.

Organization responsible for overseeing operations of the ESAT market and to REPs to support wholesale market settlements. This functionality is provided by ERCOT within ERCOT, but ERCOT does not provide this functionality to non-ERCOT territories in Texas. This functionality requires that all end-use customer load be converted to hourly increments (if it is not already provided in hourly increments for those few large customers that have IDR meters), and then those hourly loads must be aggregated by REP. In ESAT, less than 500[15] of the approximate 393,000 service delivery points (ESI-IDs) had an IDR meter that measured end-use customer load in hourly increments. Established load profiles are also applied to these non-IDR customers as a method to "forecast" how much energy a particular customer would consume throughout a 24-hour period. Thus, to provide this functionality, EGSI had to acquire the ability to develop statistically valid profile models that are used to convert the usage at the non-IDR points to hourly increments.

Q. ARE THE COSTS IN THE LOAD PROFILING AND DATA AGGREGATION GROUP NECESSARY?

A. Yes. The ESAT Protocols require EGSI as a TDSP to furnish to the Independent Organization and to REPs with end-use customer load, information, in an appropriate format, to support "wholesale" market

[15] As of April, 2004 there were 464 IDRs installed on 407 customer accounts in ESAT.

settlements; that is, the settlements between the REPs and their energy suppliers for the amount of electricity that was supplied by a particular electricity supplier, such as a generator, to a REP, which the REP then packages with its retail services to sell to its end-use customers. To settle these wholesale transactions, all end-use customer load must be converted to hourly increments, and then those hourly loads must be aggregated by REP. This load profiling/data aggregation function is provided by the TDSP (that is, EGSI prior to ROA during the pilot, and ETD upon unbundling and ROA) because the TDSP is the entity that is responsible for metering the end-use consumption of electricity from the TDSP's "wires." Thus, it was necessary for EGSI to implement the capability to perform the load profiling and data aggregation functions during the pilot, and for ETD to be ready to take on these functions upon ROA.

To be more specific, because most end-use customers do not have IDR meters that allow direct recording of usage on an hourly basis, a load profiling function is necessary to convert monthly usage amounts to hourly increments. Additionally, because a REP's customers may be spread across the entire distribution system, and thus receive delivery service from the same distribution wires as other REPs' customers, it is not possible to directly meter each REP's cumulative load; that is, a REP would not have an exclusive service territory within ESAT, such that its load could be measured by meters that meter usage only within a discrete

area within ESAT for that particular REP. Thus, EGSI had to acquire the capability to aggregate the individual loads of each REP's customers into a composite amount.

"Load Profiling" develops the consumption pattern of a group of similar customers, using sample data to show the similar customers' variations in demand for electricity on an hourly basis. To allow for the creation of the profile models, approximately three years of load research data was installed in the LPDA system, with subsequent analysis to create the profiling formulae and profile models. Ten different profile models were created to use in the Profiling process. A description of these ten profile models is attached as my Exhibit TRM-12.

"Data Aggregation" is the process of receiving IDR and standard meter consumption data, applying appropriate load profile models to the meter data, and calculating aggregated hourly consumption data by REPs on a monthly basis. Data aggregation produces hourly data necessary to settle the wholesale electricity market among generators, power marketers, and REPs. This information is then sent to the Independent Organization for use in settling the wholesale market. Additionally, each REP's aggregated load is posted to a secure website for access by that REP. The more explicit and specific requirements of the LPDA functions are defined in Part IV of the ESAT Protocols.[16]

[16] ESAT Protocols, Part IV: Retail Protocols, Section 6.

The following Table 4 will assist in the explanation of why these costs were necessary and reasonable. This table breaks out LPDA-related services by vendor.

Table 4

LPDA SUMMARY	2000	2001	2002	2003	2004	2005	Grand Total
CTC CHARGES	54,501.40	2,307,317.15	-	-	-	-	2,361,818.55
SAIC CHARGES	53,827.46	688,454.83	-	-	-	-	742,282.29
GENERAL CHARGES	39,905.73	544,624.98	-	-	-	-	584,530.70
LPDA AFUDC	1,528.99	185,282.39	342,198.45	370,991.99	406,851.96	199,179.80	1,506,033.58
TOTAL LPDA	149,763.57	3,540,396.96	342,198.45	370,991.99	406,851.96	199,179.80	5,194,665.13

Referring to Table 4, above, ESI, on behalf of EGSI, acquired a load profiling and data aggregation system, Energy Vision 2000 ("EV2K"), from ICF Consulting. EGSI also engaged ICF Consulting for professional assistance in developing statistically valid profile models and profile classes for EGSI customers.

Similarly, as also shown on Table 4, above, LPDA functionality was provided by SAIC (which was acquired through competitive bidding as described above), Entergy's primary service provider for IT services. SAIC configured approximately five years of historical load data and loaded it into the system so that the LPDA functionality developed by ICF could produce the load profiles and data aggregation models, and interface the LPDA system (EV2K) with Entergy's other IT systems.

The remaining costs include the general project management and ESI costs, including ESI employees (salaries and benefits) who either had expertise in Load Research or were assigned to provide guidance to the vendors in support of this project.

Without EV2K, EGSI did not have (and would not have had) the capabilities to provide the LPDA functionality necessary for both the pilot and ROA. There was not an LPDA system available that could be purchased "off the shelf," and neither EGSI nor ESI had the internal capability to provide this functionality. For these reasons, it was necessary to outsource development of this functionality. Accordingly, both the functionality and the costs incurred to obtain and implement that functionality were necessary.

3. The Reasonableness of the Texas SET and Load Profiling and Data Aggregation Class of Costs

Q. WHY ARE THE COSTS INCLUDED IN THIS TEXAS SET AND LOAD PROFILING AND DATA AGGREGATION CLASS REASONABLE?

A. The costs are reasonable for a number of reasons. First the majority of these costs (approximately $5,194,665.13 million, including approximately $1,506,033.58 million of AFUDC) were for external IT vendors who were procured through competitively-bid Request for Proposals ("RFPs").

As explained above with regard to the Texas SET group, the initial RFP process resulted in the acquisition of functionality from experienced vendors, who provided these services at the least cost (as well as ability to deliver on time). That RFP process, which resulted in the hiring of ICF as part of the IBM "solution," (described below) applied also to this class of costs. Please refer to my Exhibit TRM-17 for more information on this IBM

solution and selection process. IBM's proposal, as were the proposals from the other respondents, was for a packaged solution, meaning that IBM included other specialized vendors (such as ICF) in its proposal. ICF provided the specialized expertise for the LPDA function within IBM's proposal. In other words, ICF "came with" IBM's winning response to the RFP.

Accordingly, the costs included within the LPDA group that are related to services provided by the outsourced vendors are reasonable because these vendors were selected through competitive RFPs. In addition, Company witnesses May and Vikki G. Cuddy discuss the reasonableness of the overall TTC costs.

In 1999, ESI outsourced its IT work for system maintenance and support of its existing systems through a competitive bidding process. In 2000, in preparation for ROA, ESI issued an RFP and, through that process, acquired additional IT vendors to assist with the overall market mechanics systems for both the distribution and retail operations that would be necessary for the pilot and ultimately for ROA, then expected to commence on January 1, 2002.

The costs were also reasonable when compared to the costs of implementing and operating under the pilot programs within ERCOT, and the subsequent increases in ERCOT's costs as it moved into ROA, including the mandatory changes in Texas SET, as I discuss in detail

above. Company witness Cuddy includes in her testimony a discussion of the increases in the ERCOT costs during this time period.

Q. PLEASE EXPLAIN THE RFP PROCESSES.

A. In 1998, Entergy undertook an effort to reduce its overall IT costs by outsourcing its Information Technology work to an external vendor. This was accomplished through a series of RFPs, resulting in six proposals from IT companies. The vendor proposals were evaluated based on costs and technical capabilities. As a result of this process, Science Applications International Corporation ("SAIC") was awarded a five-year out-sourcing contract for IT services, including application development and support. Although this effort was not initiated because of the prospect of ROA, it immediately preceded the start of the systems development work required for ROA. A summary of the RFP for the selection of SAIC is included in Exhibit TRM-14.

Q. HAS ENTERGY BENEFITED FROM ITS DECISION TO OUTSOURCE INFORMATION TECHNOLOGY SERVICES TO SAIC?

A. Yes. Company witness Craddock discusses SAIC and Entergy's outsourcing contract with SAIC in his direct testimony in the context of Entergy's overall IT operations during the TTC cost period. In his testimony, Mr. Craddock explains, among other things, that the SAIC contract requires benchmarking to ensure that costs remain advantageous

to Entergy. He also describes and attaches as an exhibit to his testimony a benchmarking study to show that Entergy compares favorably to comparable companies with respect to IT costs.

Q. WAS ENTERGY'S DECISION TO OUTSOURCE ITS INFORMATION TECHNOLOGY SERVICE TO SAIC MADE SO THAT THE DEVELOPMENT OF THE MARKETS MECHANICS APPLICATIONS NECESSARY FOR ROA COULD BE ACCOMPLISHED?

A. No. Keep in mind Entergy's outsourcing to SAIC was for overall IT work for Entergy, and did not include any specific ROA-related work because the need for ROA-related had not yet been defined in 1998.

Following that outsourcing effort, in 1999 Entergy (including EGSI) began preparing for ROA in its service territories with a specific focus on Texas and Arkansas, because both states had enacted legislation to begin customer choice in 2002, with a preceding pilot in Texas intended to begin in June 2001. Accordingly, because ROA would require new capabilities that were not available in-house and because we did not have internal experience on how to implement and manage ROA markets, EGSI (and Entergy) determined that the most efficient way to move forward would be to hire an experienced and qualified contractor who could provide functionality for all of market mechanics, including those needed by both the future ETD "wires" company, as well as what would eventually become the affiliated Texas REPs. These capabilities included the electronic

communication requirements to support the SET Transactions and load profiling and date aggregation function for the distribution company, and to support the Texas SET Transactions and load forecasting functionality for what would eventually become the separate affiliated REP. For this reason, ESI, on behalf of EGSI and Entergy Arkansas, Inc. ("EAI"), issued an RFP in April 2000 soliciting proposals to assist the utilities with meeting the requirements of Senate Bill 7 and Arkansas House Bill 1556. The RFP was written with general high-level requirements to meet the needs of the companies for ROA.

The RFP sought the multiple functionality needed to support ROA by Entergy, and included functionality for a pilot program in Texas. A copy of that RFP is attached as my Exhibit TRM-13. Four potential vendors responded to that RFP with IT solutions for accommodating ROA. They were: Anderson Consulting, Ernest & Young, Logica, and IBM. Several of these companies had formed relationships with other IT companies to offer a complete solution. The decision criteria for selecting the best vendor included cost as well as other non-cost factors such as the highest probability of success, the greatest business solution functionality, the highest ability to deliver by the required dates for ROA, and risk aversion.

In July 2000, ESI selected IBM's proposal. In addition to being the lowest bid, IBM's proposal included a five-year year "Transaction Clearinghouse Service" that would be provided through VeriTRAN, with LPDA and Load Forecasting functionality to be provided by ICF

Consulting. A copy of the confidential Vendor Selection Process is attached as Exhibit TRM-15.

In summary, IBM's proposal best supported the "Guiding Principles"[17] adopted by the project team at the beginning of the project:

(1) our systems must be ready to support ROA on1/1/02;

(2) our systems must work, and work well;

(3) our systems must have as little cost impact to customers as possible; and

(4) our systems must be understandable, usable, and a tool for employees to serve our customers promptly and efficiently.

Additionally, because at that time Entergy was planning for ROA in Texas and Arkansas in 2002, and anticipating ROA in the other states in its territory in the following years, a "clearinghouse" approach was determined to be the best long-term solution. Using a "clearinghouse" approach would mitigate the Entergy companies' exposure to additional costs associated with different electronic transaction designs in the different states. Secondly, the proposed clearinghouse would also allow EGSI and the other operating companies to realize future cost decreases as the volume of participants and ESI-IDs/accounts increased at the clearinghouse.

[17] *See* Exhibit TRM-9, Appendix B.

These vendors began to assist EGSI and EAI (and ESI) in preparing for the pilot in Texas, and ultimately ROA in both states. Work on the EAI aspect of the systems ceased two months after the vendors were selected (because the Arkansas Commission postponed/abandoned its efforts towards ROA). With the cessation of work toward ROA in Arkansas in late summer 2000, the ROA focus shifted exclusively to Texas. All of the costs associated with the Arkansas portion of the Entergy's ROA-related efforts have been removed from the TTC costs sought to be recovered in this docket.

The products developed through this single RFP addressed the capabilities needed by both the future TDSP and its anticipated affiliated REPs in Texas. This included the capability for the respective companies to electronically support their respective, but different, SET Transactions, and functionality for the future unbundled ETD to perform load profiling and data aggregation (which I discuss as a separate class in more detail below). After the selection of the vendor, two separate project teams were established. These project teams' organization structures are shown in my attached Exhibit TRM-6. One project focused on implementing the needs of the distribution functions for the pilot and the future ETD for ROA. The other project focused on implementing the needs for the future affiliated REPs. Additionally, separate project codes were established to capture the respective costs of the individual projects. Commencing in mid-2000, Entergy's Retail operations began to establish separate legal REP