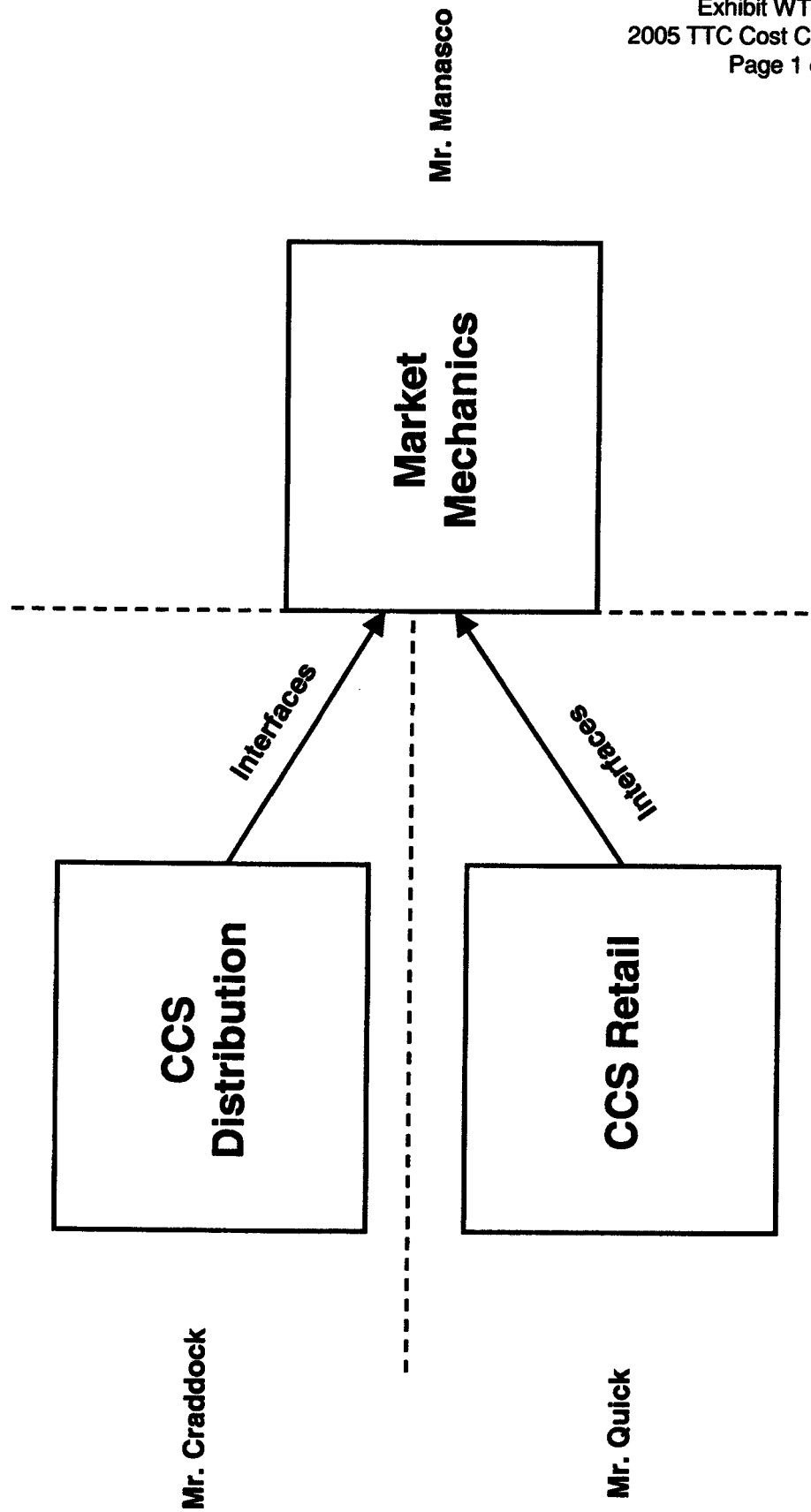


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Logical Relationships Among Witnesses



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Adjustment Recap

Adjustment	Date	Distribution	Retail	Total
1	Dec 2000	2,530,278	1,682,874	4,213,152
2	May 2002	1,144,496	946,705	2,091,201
		<u>\$3,674,774</u>	<u>\$2,629,579</u>	<u>\$6,304,353</u>

Note: These numbers do not include AFUDC

Adjustment 1 -- Portion of December 2000 increase attributable to TX deregulation

Cost Summary

Data Source

PwC Cost	\$3,838,894	from Sheet: Adj 1 Backup (Page 3 of 7)
PwC Hours for TX iDocs	14,120	from Sheet: Adj 1 Backup (Page 3 of 7)
ETR Ratio	0.353	from Note 1 below
ETR Hours	4,990	
ETR Hourly Rate	75	original assumption
ETR Cost	\$374,258	
Adjustment 1 Total		
PwC	3,838,894	
ETR	374,258	
Total	<u>\$4,213,152</u>	

Note 1 ... ratio of ETR to PwC hours (from Dec 2000 PwC Contract Order)

	PwC	ETR	Total
Business Processes	68,067	44,090	112,157
Software Development	83,073		83,073
Project Management	10,982	13,205	24,187
Total	162,122	57,295	219,417
if PwC Hours =	162,122		
and ETR Hours =	57,295		
then ETR ratio =	<u>0.353</u>		

Split between Distribution and Retail (using the iDoc hours in the Dec 2000 PwC Contract Order)

Category	No of iDoc hours	%	Cost
Distribution	8,480	60.1%	2,530,278
Retail	5,640	39.9%	1,682,874
Total	14,120	100.0%	<u>\$4,213,152</u>

Note: an iDoc is a Texas deregulation interface from CCS to Market Mechanics

Adj 1 – Back-up for Portion of Dec 2000 increase attributable to TX dereg

Step 1: Split of cost increases between development scope increase and shift of existing project hours to contractor

Final system integration contract amount:	\$39,258,000	from Dec 2000 Contract Order
Less original budget estimate	(\$30,825,640)	from Jan 2001 Budget Comparison
Less shift of technical hours:	(\$3,573,000)	from Dec 2000 Contract Order
Net budget increase due to additional contract development	\$4,859,360	

Step 2: Split of additional contract development cost between TX deregulation (iDocs) and general objects

Development Object Category	Low	Med	High	Low Complexity Hours	Medium Complexity Hours	High Complexity Hours	Total Hours Dec 2000
Conversions	4	25	34	128	252	392	20,140
Interfaces	6	34	47	112	200	320	22,512
Rept Extracts	0	9	10	112	200	320	5,000
Reports	3	13	8	48	90	128	2,338
Forms	0	4	4	112	176	240	1,664
Extensions	0	12	27	96	176	228	8,268
iDocs -- Dist	0	19	31	80	120	200	8,480
iDocs -- Retail	0	17	18	80	120	200	5,640
Workflows	0	9	16	104	144	240	5,136
Bolt-Ons	0	0	0				0
Total	13	142	195				79,178

Category	April Proposal Scope	Med/High Complexity Hours *	April Hour Estimate	Dec Hour Estimate	Increase/ (Decrease)	
Conversions	59	322	18,998	20,140	1,142	
Interfaces	55	260	14,300	22,512	8,212	
Rept Extracts	0	260	0	5,000	5,000	
Reports	90	109	9,810	2,338	(7,472)	
Forms	36	208	7,488	1,664	(5,824)	
Extensions	45	202	9,090	8,268	(822)	
iDocs -- Distr	0	160	0	8,480	8,480	
iDocs -- Retail	0	160	0	5,640	5,640	
Workflows	0	192	0	5,136	5,136	
Bolt-Ons**	8	200	1,600	0	(1,600)	
	293		61,286	79,178	17,892	
			Less: iDocs increase -->		(14,120)	79% deregulation
			Leaves: non iDocs -->		3,772	21% general

* See Sheet: Avg Complexity for additional rationale to use "med/high" hours

** Assume Bolt-Ons equivalent to "Medium" Interfaces

Step 3: Allocation of net contract increase due to additional development work between TX deregulation and general

Category	Percent from Step 2	Cost from Step 1	Allocation
Deregulation	79%	\$3,838,894	Texas (to be further split between Distribution and Retail)
General	21%	\$1,020,466	All Jurisdictions
Total	100%	\$4,859,360	

Adjustment 1 – Alternative Back-up for Portion of Dec 2000 incr attributable to TX deregulation

Step 1: Split of cost increases between development scope increase and shift of existing project hours to contractor

Final system integration contract amount:	\$39,258,000	from Dec 2000 Contract Order
Less original budget estimate	(\$30,825,640)	from Jan 2001 Budget Comparison
Less shift of technical hours:	<u>(\$3,573,000)</u>	from Dec 2000 Contract Order
Net budget increase due to additional contract development v	\$4,859,360	

Step 2: Split of additional contract development cost between TX deregulation (iDocs) and general objects

Development Object Category	April Proposal Scope	December Scope Agreement	Change April to December	Low Complexity Hours	Medium Complexity Hours	High Complexity Hours	Med/High Complexity Hours
Conversions	59	63	4	128	252	392	322
Interfaces	55	87	32	112	200	320	260
Rept Extracts	0	19	19	112	200	320	260
Reports	90	24	(66)	48	90	128	109
Forms	36	8	(28)	112	176	240	208
Extensions	45	39	(6)	96	176	228	202
iDocs	0	85	85	80	120	200	160
Workflows	0	25	25	104	144	240	192
Bolt-Ons*	8	0	(8)				
Total	293	350	57				

Category	Change April to December	Med/High Complexity Hours *	Total Change in Hours		
Conversions	4	322	1288		
Interfaces	32	260	8320		
Rept Extracts	19	260	4940		
Reports	(66)	109	(7194)		
Forms	(28)	208	(5824)		
Extensions	(6)	202	(1212)		
iDocs	85	160	13600		
Workflows	25	192	4800		
Bolt-Ons**	(8)	200	(1600)		
	57		17118		
	Less: iDocs increase -->		(13600)	79%	deregulation
	Leaves: non iDocs -->		3518	21%	general

* See Sheet: Avg Complexity for additional rationale to use "med/high" hours

** Assume Bolt-Ons equivalent to "Medium" Interfaces

Step 3: Allocation of net contract increase due to additional development work between TX deregulation and general

Category	Percent from Step 2	Cost from Step 1	Allocation
Deregulation	79%	\$3,838,894	Texas (to be further split between Distribution and Retail)
General	21%	\$1,020,466	All Jurisdictions
Total	100%	\$4,859,360	

Average Complexity of Development Objects

Development Object Category	Low Complexity	Med Complexity	High Complexity	Total	Average Complexity
Conversions	4	25	34	63	2.476
Interfaces	6	34	47	87	2.471
Rept Extracts	0	9	10	19	2.526
Reports	3	13	8	24	2.208
Forms	0	4	4	8	2.500
Extensions	0	12	27	39	2.692
iDocs -- Dist	0	19	31	50	2.620
iDocs -- Retail	0	17	18	35	2.514
Workflows	0	9	16	25	2.640
Bolt-Ons*	0	0	0	0	
Total	13	142	195	350	2.520

Source: December 2000 Contract Order

Adjustment 2 -- Portion of May 2002 increase attributable to TX deregulation

Cost for Release 3 -- Market Mechanics Interfaces Upgrade -- SET 1.4

PwC Hours	8,231	from Note 1 below
PwC Hourly Rate	<u>200.6</u>	from Note 2 below
PwC Cost	\$1,651,139	
ETR Hours	7,041	from Sheet: Adj 2 Backup (Page 7 of 7)
ETR Hourly Rate	<u>62.50</u>	from Note 3 below
ETR Cost	\$440,063	
Adjustment 2 Total		
PwC	1,651,139	
ETR	<u>440,063</u>	
Total	<u>\$2,091,201</u>	

Note 1 ... from May 8, 2002 PwC Change Order, Attachment 1

Set 1.4 Repts	128	
SCR 847 D	2,384	
SCR 868 R	1,972	
847/868 Increase	3,017	
847/868 incr 3/23 to 4/26	<u>730</u>	
	8,231	PwC dev hours

Note 2 ... from May 8, 2002 PwC Change Order, Attachment 1

base hourly rate = \$170/hr + 18% exp ==> \$200.6/hr fees plus expenses

Note 3 ... calculated blended hourly rate for testing

assume 1 contractor @ \$100/hr for every 3 ETR employees @ \$50/hour

	50
	50
	50
	<u>100</u>
blended hourly rate	62.5

Split Between Distribution and Retail (using Ratio of SCR 847 D and SCR 868 R from Note 1):

	Hours	Percent	Cost
SCR 847 D	2,384	54.73%	1,144,496
SCR 868 R	1,972	45.27%	946,705
	<u>4,356</u>	<u>100.00%</u>	<u>\$2,091,201</u>

Adj 2 – Back-up for Entergy Testing Hours (from TeamPlay report)

Step 1: Calculate Hours for CCS Release 3A/B Non-Project Management General Tasks

	CCS	non-CCS	Total
CCS R3A CCS Release 3A			
TTCTEST2.1 Shared Activities -- See Step 2			
TTCTEST2.3 CapabilityTest		2,972.1	2,972.1
TTCTEST2.6 Regression Test		1,705.2	1,705.2
CCS R3B CCS Release 3B Texas Pilot Set 1.4			
CCSR3B.4 Veritran Testing Support		80.0	80.0
CCSR3B.2 Transaction Integration Testing	3,527.2		3,527.2
CCSR3B.5 3B Transaction Testing Support	441.2		441.2
CCSR3B Suspend.4 Veritran Testing Support		23.7	23.7
CCSR3B Suspend.2 Transaction Integration Testing	1,535.1		1,535.1
MMTTCCCB1.2.4 Testing (Interface, Integration, Regression)		24.0	24.0
MMTTCCCB2.19 VeriTRAN Integration Testing Support		488.0	488.0
Total -- Non-Project Management General Tasks	5,503.5	5,293.0	10,796.5
Percentage	51.0%	49.0%	

Step 2: Calculate % of Project Management Time from CCS R3A Item

TTCTEST2.1 Shared Activities = 3016.9 hours	1,537.9	1,479.0	3,016.9
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Step 3: Recap of SET 1.4 Testing Hours

non-project management	5,503.5
pro-rata share of shared project management	1,537.9
Total	7,041.4

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EXHIBIT A

SCOPE OF WORK

RESPONSE DETAILS

Each Bidder should submit answers to the following requests. As much detail as possible should be provided.

The Bidder may include supporting literature, as appropriate, describing the details of solution capabilities, commands and utilities. If this documentation is intended to supplant the inclusion of a detailed explanation, specific references to the pertinent sections of the supporting literature should be stated (page and section numbers, etc.).

To assist Bidder in their understand of Entergy's requirements, Appendices A and B attached to this Scope of Work provide additional information about Entergy's CIS related size and volumes as well as information discovered through the in-process Blueprint effort.

SCOPE OF SERVICES BEING REQUESTED

Entergy desires to evaluate potential outside parties to provide three (3) major support service solutions:

- **Systems Integration** - Perform overall implementation services for Entergy's use of the CCS software. Provide skilled personnel in the areas of Project Management, Business Analysts, Programming, Technical Support and all other implementation activities. Assume the risk for a successful CCS/Entergy implementation under a fixed fee contract. (See Section 2)
- **System Operations** - Manage the technical environment and resources that support the on-going use of the CCS software. This includes such support components as the data center, operations personnel, technical software support personnel, software and network performance tuning, etc. Also, potentially included within the scope of this service solution is the support to manage the installation of future CCS software releases. (See Section 3)
- **On-Going Software Maintenance and Support** - Assist Entergy in the management, construction and implementation of Entergy defined user system change requests. Perform all activities in the day-to-day support of the software (e.g., restart/recovery, fixes, software help desk, etc.). Also, potentially included within the scope of this service solution is the support to manage the installation of future CCS software releases. (See Section 4)

1. GENERAL BIDDER INFORMATION

The Bidder should provide a detailed response to the following:

1. Define the relationship and experience your organization has, or has had, with SAP
2. Define your organization's experience with SAP – CCS
3. Define your organization's experience with SAP – R3
4. Define your organization's experience/knowledge within the utility industry (in particularly with the deregulated business)
5. Define your organization's approach, and/or offerings, relative to change management facilitation

2. SYSTEMS INTEGRATION SUPPORT SERVICE SOLUTION

If Bidder is proposing a solution for systems integration support, the following areas should be responded to. If not proposing this solution, please indicate as "Decline to Bid".

2.1 GENERAL

The Bidder should provide a detailed response to the following:

1. Identification of the organization or organizations, if any, that will partner with Bidder in providing the System Integration support service solution
2. A client contact list for previous SAP – CCS systems integration projects (USE THE CLIENT REFERENCE FORM INCLUDED WITHIN THIS SCOPE OF WORK FOR AT LEAST THREE REFERENCES)
3. Identification, by skill set (e.g., Project Management, Business Analyst, etc.), of the number of Bidder staff, or solution partner staff, that have had direct systems integration project experience for another SAP – CCS implementation project

2.2 PROJECT IMPLEMENTATION PLAN

The Bidder should provide a detailed discussion and provide supporting documentation of the structured methodology that would be used in managing the implementation of a project the size and scope of the Entergy CCS Project. The response should include a detailed discussion of the following topics:

- a) Provide an overview of the general approach and work plan that would be utilized in implementing the Entergy CCS application and the average time for implementation of the proposed application.
 - Indicate key project steps and tasks
 - Indicate type/skill set of project member(s) assigned to each task (e.g. "Business Analyst", "Programmer", etc.)
 - Indicate the work day effort of each task and the division of work between Bidder vs. Entergy personnel
- b) Describe the Bidder's approach to project management and the aspects that assure adequate project planning, monitoring and controls
- c) Identify the significant project management or software development tools that might be used in the project and the significance for their use
- d) Describe policies, procedures and methodologies used to provide technical assistance and application development in implementing the application
- e) Describe the policies and procedures that demonstrate the Bidder's commitment to quality, and ability to establish an effective quality assurance program

3. SYSTEM OPERATIONS SUPPORT SERVICE SOLUTION

If Bidder is proposing a solution for system operations support, the following areas should be responded to. If not proposing this solution, please indicate as "Decline to Bid".

3.1 GENERAL

The Bidder should provide a detailed response to the following:

1. Identification of the organization or organizations, if any, that will partner with Bidder in providing the system operations support service solution
2. A contact list for current SAP – CCS system operations clients (USE THE CLIENT REFERENCE FORM INCLUDED WITHIN THIS SCOPE OF WORK FOR AT LEAST THREE REFERENCES). Should Bidder require referencing SAP – R3 clients to fulfill the three client customer contact requirement, you may do so
3. Identification, by skill set (e.g., Operations Manager, Network Performance Analyst, etc.), of the number of Bidder staff, or solution partner staff, that have had direct system operations experience for other SAP – CCS clients
4. Describe the hardware, operating system software, and any other software typically required to support a CCS application that is capable of supporting the data, transaction volumes and requirements of Entergy

3.2 HELP DESK SUPPORT

Bidder should describe the offering of help desk support. Provide such information as hours of availability, any Entergy tier-1 expectations, typical response times, etc.

3.3 OPERATIONS SUPPORT

Bidder should provide a detailed description of the types of services offered to Entergy in the realm of general operations support.

3.4 APPLICATION OF FUTURE RELEASES

Bidder should provide a detailed description of the support services offered, if any, in applying new CCS releases into the Entergy production environment.

3.5 DISASTER/RECOVERY SUPPORT

Bidder should provide a detailed description of all options offered for disaster/recovery of Entergy's system and data assets. Provide the relative costs associated with each option.

3.6 SERVICE LEVEL AGREEMENT (SLA)

Bidder should provide a detailed description of the SLA support services offered in meeting a 7 x 24 CCS availability requirement for Entergy's production environment.

3.7 OTHER SERVICE OFFERINGS

Bidder should describe any other Customer Care/Billing and/or utility services offered as optional support services.

4. ON-GOING SOFTWARE MAINTENANCE AND SUPPORT

If Bidder is proposing a solution for software maintenance and support, the following areas should be responded to. If not proposing this solution, please indicate as "Decline to Bid".

4.1 GENERAL

The Bidder should provide a detailed response to the following:

1. Identification of the organization or organizations, if any, that will partner with Bidder in providing the software maintenance and support service solution
2. A contact list for current SAP – CCS software maintenance and support clients (USE THE CLIENT REFERENCE FORM INCLUDED WITHIN THIS SCOPE OF WORK FOR AT LEAST THREE REFERENCES). Should Bidder require referencing SAP – R3 clients to fulfill the three client customer contact requirement, you may do so
3. Identification, by skill set (e.g., Project Manager, Business Analyst, Programmer etc.), of the number of Bidder staff, or solution partner staff, that have had direct software maintenance and support experience for other SAP – CCS clients
4. Describe the number of support staff by skill set/responsibility typically required to support a CCS application that is capable of supporting the users and business processes represented by Entergy

4.2 MAINTENANCE SUPPORT STAFF LOCATION

Bidder should describe the following:

1. Location(s) of the proposed support staff
2. The number of support staff by skill set/responsibility proposed to support Entergy's CCS application

4.3 MANAGEMENT OF ENTERGY USER CHANGE REQUESTS

Bidder should describe the following:

1. The process for change request submittal, review, estimating, authorization and resolution
2. Bidder's knowledge of the contents of future SAP – CCS releases and how that knowledge is transferred to Entergy. How is this knowledge typically used in the management of change requests
3. Performance reporting of Bidder's staff (e.g., how effectively are change requests being resolved, metrics for measuring productivity levels, etc.)

4.4 SERVICE LEVEL AGREEMENT (SLA)

Bidder should provide a detailed description of the SLA support services offered in meeting the requirements for Entergy's production availability environment.

4.5 APPLICATION OF FUTURE RELEASES

Bidder should provide a detailed description of the support services offered, if any, in applying new CCS releases into the Entergy production environment.

year	company	state	billing_c	billing_proj	total	billing_meth	Summary Res	Summary Res Desc	Subtotals
2004	GL	LA		FI7006	\$1,900.30		AFC	AFUDC	
2004	GL	LA		FI7006	\$1,808.76		AFC	AFUDC	
2004	GL	LA		FI7006	\$877.89		AFC	AFUDC	
2004	GL	LA		FI7006	\$1,391.10		AFC	AFUDC	
2004	GL	LA		FI7006	\$1,324.09		AFC	AFUDC	
2004	GL	LA		FI7006	\$642.66		AFC	AFUDC	
2004	GT	TX		FI7006	\$22,284.93		AFC	AFUDC	
2004	GT	TX		FI7006	\$17,643.42		AFC	AFUDC	
2004	GT	TX		FI7006	\$16,313.48		AFC	AFUDC	
2004	GT	TX		FI7006	\$12,915.70		AFC	AFUDC	
2004	GT	TX		FI7006	(\$17,643.42)		AFC	AFUDC	
2004	GT	TX		FI7006	(\$22,284.93)		AFC	AFUDC	
2004	GT	TX		FI7006	\$5,722.24		AFC	AFUDC	
2004	GT	TX		FI7006	\$5,520.92		AFC	AFUDC	
2004	GT	TX		FI7006	\$5,520.89		AFC	AFUDC	
2004	GT	TX		FI7006	\$5,520.88		AFC	AFUDC	
2004	GT	TX		FI7006	\$4,714.16		AFC	AFUDC	
2004	GT	TX		FI7006	\$3,853.36		AFC	AFUDC	
2004	GT	TX		FI7006	\$1,859.70		AFC	AFUDC	
2004	GT	TX		FI7006	\$1,770.11		AFC	AFUDC	
2004	GT	TX		FI7006	\$859.14		AFC	AFUDC	
2004	GT	TX		FI7006	(\$12,915.70)		AFC	AFUDC	
2004	GT	TX		FI7006	(\$16,313.48)		AFC	AFUDC	
2004	GT	TX		FI7006	\$4,188.91		AFC	AFUDC	
2004	GT	TX		FI7006	\$4,041.54		AFC	AFUDC	
2004	GT	TX		FI7006	\$4,041.52		AFC	AFUDC	
2004	GT	TX		FI7006	\$4,041.51		AFC	AFUDC	
2004	GT	TX		FI7006	\$3,450.95		AFC	AFUDC	
2004	GT	TX		FI7006	\$2,820.82		AFC	AFUDC	
2004	GT	TX		FI7006	\$1,361.37		AFC	AFUDC	
2004	GT	TX		FI7006	\$1,295.79		AFC	AFUDC	
2004	GT	TX		FI7006	\$628.92		AFC	AFUDC	
2005	GT	TX		FI7006	\$6,432.02		AFC	AFUDC	
2005	GT	TX		FI7006	\$6,432.02		AFC	AFUDC	
2005	GT	TX		FI7006	\$3,649.83		AFC	AFUDC	
2005	GT	TX		FI7006	\$3,649.83		AFC	AFUDC	
2005	GT	TX		FI7006	(\$5,722.25)		AFC	AFUDC	
2005	GT	TX		FI7006	\$5,722.25		AFC	AFUDC	
2005	GT	TX		FI7006	(\$4,188.92)		AFC	AFUDC	
2005	GT	TX		FI7006	\$4,188.92		AFC	AFUDC	
2005	GT	TX		FI7006	\$5,722.25		AFC	AFUDC	
2005	GT	TX		FI7006	\$4,188.92		AFC	AFUDC	
									subtotal = \$99,232.40
2004	GL	LA		FI7006	\$19.56		CSC	CAPITAL OVERHEAD CLEARING	
2004	GL	LA		FI7006	\$78.17		CSC	CAPITAL OVERHEAD CLEARING	
2004	GL	LA		FI7006	\$95.25		CSC	CAPITAL OVERHEAD CLEARING	
2004	GL	LA		FI7006	\$165.47		CSC	CAPITAL OVERHEAD CLEARING	
2004	GL	LA		FI7006	\$4,321.17		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$227.17		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$9,298.23		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	(\$9,298.23)		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	(\$227.17)		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$0.04		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$0.04		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$0.04		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$3,970.85		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$266.16		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$19.15		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$76.50		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$93.21		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$161.93		CSC	CAPITAL OVERHEAD CLEARING	
2004	GT	TX		FI7006	\$4,228.83		CSC	CAPITAL OVERHEAD CLEARING	

EXHIBIT A-STATEMENT OF WORK

ENTERGY TEXAS DISTRIBUTION RETAIL OPEN ACCESS SYSTEMS UPGRADE

1.0 Summary /Background

Customer Choice

Retail Customer Choice was intended to become effective in the Entergy Service Area of Texas (ESAT) on January 1, 2002, preceded by a pilot beginning June 1, 2001. Due to certain issues relative to wholesale market operations in areas of Texas not within the ERCOT Region, Customer Choice has been delayed in the Entergy Service Area. The initial pilot remained in effect, however there was no customer participation in Entergy's Service Area until November 2003, when ESAT's initial pilot participants were processed.

Within the Entergy Service Area, Customer Choice is now proposed to be introduced beginning January 1, 2005. Active pilot participation in the Entergy Service Area will continue in the interim.

Project History

In preparation for the original customer-choice implementation date of January 1, 2002, Entergy Distribution began in 2000 to prepare for Customer Choice in its Texas service area. This effort included:

- ❖ The procurement of a service provider (VeriTRAN) for retail market transactions.
- ❖ Internal development of systems/interfaces to support retail market transactions compliant with EDI standards specified in ERCOT Protocol 19, Standard Electronic Transactions (SET)
 - ❖ CCS is currently operating on SET 1.3
 - ❖ Market Mechanics is currently operating on SET 1.4
 - ❖ The Entergy side of VeriTRAN is currently operating on SET 1.4
 - ❖ The Market side of VeriTRAN is currently operating on SET 1.6
- ❖ Procurement and installation of a load profiling/data aggregation system (EV2K) to provide aggregated load data for wholesale market purposes, including market settlement data.
- ❖ Modification and development of necessary internal systems/interfaces to support retail and wholesale market protocols as developed and proposed, for the Entergy Service Area of Texas (ESAT Protocols).
- ❖ Implementation of SET Version 1.3 for the customer choice pilot, which began about June 1, 2001.

Overall Project Scope Structure

The objective of this RFP is to equip and prepare Entergy's Texas Distribution (ETD) company for Customer Choice and the implementation of customer choice. The three 2004 releases included in the overall project are generally described as follows:

❖ **2004 TXROA Release 1: Automated Pilot Participation at SET 1.6**

Upgrade of systems from current SET version to SET 1.6, the market standard as of December 15, 2004. This automation is desired to support the increased volume of customers expected to participate in the pilot. Minimal internal work has been completed in this phase. ETD's service provider (VeriTRAN) has already completed work to be SET 1.6 compatible on the Market side of its interfaces. VeriTRAN will work in conjunction with selected bidder to be SET 1.6 compatible on the Entergy side as soon as possible.

❖ **2004 TXROA Release 2: SET 2.0 Upgrade**

Upgrade of systems from SET 1.6 version (or lower) to SET 2.0 with a flight certification market testing date of May 5, 2004. The current market implementation date for SET 2.0 is scheduled for August, 2004, but Entergy must be prepared to begin participation in market testing/market certification on May 5, 2004. No internal work has been completed in this phase. VeriTRAN (or other Entergy-selected bidder) will work in conjunction with selected bidder to be SET 2.0 compatible at the required market implementation date(s).

❖ **2004 TXROA Release 3: Full ROA**

This phase implements customer choice in the ETD's service area inclusive of the conversion of customer information from ETD's legacy CIS to ETD's new CCS as well as supporting the conversion of certain customer information to ETD's Retail Affiliate Co.

Additional requirements impacting EV2K for full customer choice were defined during the Entergy protocol collaborative process. These additional requirements, specified in the proposed ESAT Protocols, will also be implemented during Full ROA.

2.0 Scope Requirements

The scope of this work includes the development and delivery of the IT solution(s) within specific technical bounds to complete Release 1, Release 2 and Release 3 inclusive of the overall program/project management of this project.

Primary requirements for the IT solution(s) are the Entergy Service Area of Texas (ESAT) Protocols which specify the market rules, transactions, and communication protocols the IT solution(s) must support.

Bidder will be expected to support and deliver any additional changes required by the market during the period of the engagement.

Bidder will be expected to provide solutions that include all phases of the project lifecycle and all affected Entergy systems. Entergy expects to conduct a Business Readiness Test following the conclusion of bidder's System Test/User Acceptance Test. Bidder will be expected to certify that code is production ready prior to turnover to Entergy's Business Readiness Test organization.

Bidder will be required to warranty each release for 30 days following the production implementation and provide appropriate implementation and storm support during that period.

Bidder will be required to transition implemented solutions to the appropriate Entergy systems maintenance organization(s) following the warranty period.

Bidder will be required to follow Entergy Problem & Software Configuration Management Requirements, as outlined in Appendix B.

Bidder will be expected to provide status, schedules and issues using the tools and methodologies specified by Entergy's Program Management Office (PMO).

Alternate Solution(s)

Given certain known constraints, alternate solutions and/or work-arounds may, and if necessary must, be implemented to meet specified "date-certain" delivery dates.

- ❖ Entergy is willing to work with bidder to reduce scope of 2004 TXROA Release 1. Entergy's goal for Release 1 is the ability to further automate support for high volumes of pilot participation. Bidder should know that any proposed work-arounds must be approved by the market before Entergy and bidder can reach agreement on scope reduction. Entergy recognizes that there may not be adequate detail in this RFP to allow Bidder to specify a valid and reasonable alternative, so Entergy will allow Bidder the option to develop a de-scoping alternative after the bid has been awarded. Entergy would like Bidder to declare their intent to develop a de-scoped alternative in their proposal if the latter option is chosen.
- ❖ Entergy is willing to work with bidder to modify the schedule of 2004 TXROA Release 2 to meet May 5, 2004 target date for some transactions and postpone the implementation of others or to deliver 2004 TXROA Release 2 in its entirety at a later date prior to the market implementation date for SET 2.0. Bidder should know that any proposed work-arounds must be approved by the market before Entergy and bidder can reach agreement on schedule modification. Entergy recognizes that there may not be adequate detail in this RFP to allow Bidder to specify a valid and reasonable alternative, so Entergy will allow Bidder the option to develop a scheduling alternative

after the bid has been awarded. Entergy would like Bidder to declare their intent to develop a scheduling alternative in their proposal if the latter option is chosen.

Delivery Date(s)

- ❖ Solution(s) for active pilot participation: **ASAP.**
- ❖ Solution(s) for market testing/certification of SET 2.0: **May 5, 2004** (with market implementation date of **August, 2004**).
- ❖ Solution(s) and conversion for Customer Choice: **January 1, 2005.** Currently date-certain, although this could change because of Texas Public Utility Commission regulatory action.

3.0 Scope Details

2004 TXROA Release 1: Automated Pilot Participation at SET 1.6

Entergy commissioned a Gap Analysis to determine the extent of completion and remaining work for the upgrade to SET 1.6 for internal systems. The extent of completion and remaining work for the internal market transaction system(s), (market mechanics) is specified, by change control reference and SET transaction, in Appendix C. The extent of completion and remaining work for the Customer Care and Service (CCS) system is specified, by business process, in Appendix D. Note that this Gap Analysis is not comprehensive and Bidder should expect to identify additional scope during the Requirements Analysis phase and plan to deliver it with the release.

2004 TXROA Release 2: SET 2.0 Upgrade

Entergy commissioned a Gap Analysis to determine the extent of completion and remaining work for the upgrade to SET 2.0 for internal systems. The extent of completion and remaining work for the internal market transaction system(s), (market mechanics) is specified, by change control reference and SET transaction, in Appendix C. Changes specific to SET 2.0 can be located by setting a filter on the SET Version column and selecting 2.0. There are approximately 100 Change Controls issued by the Market for SET 2.0., 40 of which are covered in the Gap Analysis as SET 2.0 specific. The extent of completion and remaining work for the Customer Care and Service (CCS) system is specified, by business process, in Appendix D. Appendix D does not differentiate between Release 1 and Release 2 changes. Note that this Gap Analysis is not comprehensive and Bidder should expect to identify additional scope during the Requirements Analysis phase and plan to deliver it with the release.

2004 TXROA Release 3: Full ROA

CIS to CCS Conversion

Bidder will be expected to analyze and complete development work in CCS to prepare for conversion from legacy CIS.

Conversion to Customer Choice

Conversion of necessary customer information from legacy CIS to ETD's CCS, and support of data conversion from legacy CIS to ETD's retail affiliate as specified under Customer Choice market rules.

These additional market rules/requirements will not be required for SET 2.0 or market certification, but will be required for Customer Choice on January 1, 2005:

- ❖ Development of additional reports in the Data Aggregation System, EV2K, as result of Entergy Protocol Collaborative:
 - Aggregated Load before losses applied by CR, Profile Type
 - Aggregated load by CR by Profile Type by Voltage class before/after loss adjustment
 - Aggregated load by CR by Profile Type for Transmission Authority by Voltage class after loss adjustment
 - Total ESAT Load by Profile Type before/after adjustments for losses
 - The CR's ESI ID count by Profile Type
 - The CR's ESI ID count by voltage class
 - Total ESAT ESI ID count by Profile Type
 - Total ESAT ESI ID count by voltage class
 - Back-casted weather-adjusted profile data each day for the settlement day; post to website.
 - Report of the proxy day data used to estimate missing IDR data for ESI IDs with IDRs; post to website
 - Report of the proxy day used for the missing IDR data by weather sensitive and non-weather sensitive categories; post to website
 - Create report/post each ESI ID (with customer identifiers such as profile type, voltage code, meter type code, etc) used in the aggregation for each CR. Post for every settlement day.
- ❖ Internal changes in EV2K system for profile naming convention.

Out of Scope Items

Certain market rules/requirements will not be implemented for Customer Choice in ESAT and are not included within the scope of this contract. These items will be implemented at some time after Customer Choice begins:

1. Electronic Outage Reporting (Will be implemented post-ROA)
2. Competitive Metering requirements currently under development in the Texas market

4.0 Technical Discussion

Transaction Processing

VeriTRAN serves as Entergy's interface to the Texas Market Clearinghouse. In addition to sending and receiving transactions, VeriTRAN also manages a subset of Entergy's ESI ID data so that it can respond to some transactions on Entergy's behalf without sending a request and waiting for a response from Entergy's back-end systems.

When VeriTRAN receives an EDI market transaction either from ERCOT or the CR, the transaction is validated that it meets ANSI and Texas SET standards. The EDI transaction is then converted to XML so that it can be loaded into the VeriTRAN Database. From the VeriTRAN database, a client side (VeriTRAN to Entergy) XML transaction is generated. This XML transaction is then written to a generic file structure (VFF) based on key information Entergy defined as being required from the market for Entergy's back-end system.

After the VFF is generated, the file is FTP'd to Entergy where it is processed by the **Market Mechanics** application. In many cases, **Market Mechanics** processes the transaction and sends it to the Market Mechanics Database (MMDA). **Market Mechanics** sends the data through the EAI Adapters, which may result in more than one transaction being published to the EAI Broker. Once

the transaction is published there are EAI adapters on the other of the EAI Broker, which pull the canonicals and create transaction(s) for their systems using the canonical. In the case of CCS the information in the canonical is used to create IDOCs. Various applications including CCS, EV2K, AM/FM, DFM, SAISO, MV90 and Billing Expert (BEX) then subscribe to the transaction(s). If one of these systems subscribes to a type of transaction, the application will retrieve the transaction from the EAI layer and use the applicable information within their system. Once a transaction is processed, a response from Entergy may be required. An example of this is an off-cycle switch request. In this example, CCS will create an IDOC, a canonical will be published to the EAI, Market Mechanics will subscribe to the transaction, and the reverse flow of the transaction will continue to VeriTRAN back out to the market.

For additional detail associated with migrating from Texas SET 1.3 to Texas SET 1.6/SET 2.0 refer to Appendices D and E. For a view of the technical architecture, refer to Appendix F.

Load Profiling and Data Aggregation

Energy Vision 2000 (EV2K, a software product from ICF Consulting) is a system for load profile development and daily data aggregation processing. EV2K requires data feed from Entergy systems for customer identification (ESI-ID, competitive retailer assignment, substation data, voltage class, etc), monthly meter consumption data, interval data recorder (IDR) data, and interval weather data. Legacy systems involved are CIS/CCS, MV90 and Billing Expert (BEX), along with an outside vendor for weather data. Data feeds from legacy systems flow through the EAI layer to EV2K.

EV2K processes data received to create hourly aggregated files on a daily basis. The processing includes estimating hourly loads using a weather-adjusted load profile for customers with no IDR, utilizing IDR data for customers with IDRs, sorting/summing all hourly loads by voltage class/competitive retailer/weather zone/UFE zone, applying line losses and creating output files of data.

Hourly aggregated files are output for each competitive retailer in ESAT's territory for the market settlement day. The output data are also provided to the Transmission Authority or settlement agent for use in the financial settlement of the market.

5.0 Overall Project Approach

Due to certain regulatory issues, it is anticipated that this project will begin prior to final approval by Entergy to implement Customer Choice in the Entergy Service Area. Given this uncertainty, the overall project approach, and vendor proposal, should include the following major considerations:

- ❖ A "back-end loaded" project approach for "just-in-time" delivery, within acceptable risk parameters, to minimize cost expenditures until final Commission approval.
- ❖ Approach "exit" strategies that minimize costs, if during the course of the project, Customer Choice within the Entergy Service areas is delayed and/or terminated.

6.0 Constraints

This project will be constrained by these major factors:

2004 TXROA Release 1: Automated Pilot Participation at SET 1.6:

- ❖ Active pilot participation must be supported ASAP.
- ❖ Retail market implemented SET Version 1.6 in December, 2003.
- ❖ Estimated project start is not before January 19, 2004.

2004 TXROA Release 2: SET 2.0 Upgrade:

- ❖ Retail Market will begin testing of SET 2.0 on May 5, 2004.
- ❖ Estimated project start is not before January 19, 2004 with a date certain delivery of May 5, 2004.

2004 TXROA Release 3: Full ROA:

(Implementation is subject to the outcome of certain regulatory proceedings currently before the Public Utility Commission of Texas.)

- ❖ Date-certain delivery of overall project.
- ❖ January 1, 2005 is a fixed date at which functioning solutions delivery for customer choice must occur.
- ❖ Estimated project start is not before January 19, 2004 with a date certain delivery of January 1, 2005.

Other Entergy Projects:

- ❖ Upgrade of Customer Care and Service (CCS) system from SAP V4.6.2, 4.6C(R/3) to SAP V4.72. This project must run parallel and in concert with the anticipated project to upgrade the version of SAP Entergy is currently using to operate its CCS.
- ❖ Upgrade of EV2K software to EVE

Entergy Resources:

The availability and timing of Entergy business and technical resources will be constrained due to other projects currently in progress within Entergy. Bidder should articulate their requirements for Entergy resources in their proposal.

7.0 Entergy's Expectations of its Vendor

Knowledge/Capability/Experience

Vendor must have demonstrable knowledge, capabilities, and experience in the following specific areas:

- ❖ Program/project management
- ❖ Ability and adaptability to work in concert with other on-going projects.
- ❖ Knowledge and understanding of the Texas Customer Choice retail market rules, requirements, protocols, and transactions, with specific detailed knowledge and experience with Texas SET protocols.
- ❖ Implementation and configuration of SAP version 4.6.2 (CCS), 4.6.C (R/3)
- ❖ Web Method's Active Works version 4.1.1.
- ❖ Load profiling/data aggregation vendors must have statistical and load research expertise along with knowledge and understanding of the Texas Customer Choice retail market rules, requirements and protocols.

Cost Estimation / Management / Mitigation

Vendor must have demonstrable knowledge, capabilities, and experience in:

- ❖ Accurate estimation of total project costs, inclusive of needed resources from other entities necessary for project completion.

- ❖ Management of project costs and schedules and well as cost mitigation strategies.

Vendor Proposals

Costs

- ❖ Vendor proposals based on not-to-exceed time and material contracts will be accepted.
- ❖ To the extent possible, vendor costs should be firm or capped-price based and should address date-certain guarantees along with risk/reward proposals.
- ❖ Proposal should include an estimate of the total project cost to Entergy in addition to the vendors cost proposal.

Assumptions

For each assumption on which the vendor's proposal is contingent, the vendor should discuss the following:

- ❖ the probability that the assumption is true
- ❖ The estimated impact to the project deliverables and costs if the assumption is subsequently proven untrue.

Risks

Vendor proposals should identify and discuss, inclusive of mitigation, the key risk areas perceived to be associated with this project.

Activity	Base Hours	Base Cost	Not Usable %	Not Usable Cost	Note
1 Requirements	5,880	441,000	100%	441,000	A
2 Core Development	9,298	1,162,288	23%	261,515	B
3 Rates Development	5,057	632,143	100%	632,143	
4 Testing Infrastructure	4,573	571,625	100%	571,625	
5 System Testing	13,389	1,004,103	50%	502,052	A
6 Assembly Test Support	7,239	904,914	50%	452,457	A
7 System Test Support	5,171	646,367	50%	323,184	A
8 Non-Discretionary SCR's	3,006	375,788	0%	0	
9 Legacy	866	86,570	0%	0	
10 Conversion	6,095	609,500	0%	0	
11 Acceptance Test	8,936	670,163	0%	0	
12 Acceptance Test Support	0	0	0%	0	
13 Training Development	4,400	330,000	0%	0	
14 Training Time	19,500	1,462,500	0%	0	
15 Performance Test	0	1,000,000	0%	0	
16 Legacy Test Support	0	0	0%	0	
Subtotal	93,410	\$9,896,961		\$3,183,975	
17 PMO & Mgt Overhead	9,600	1,200,000	32%	386,055	C
Total	103,010	\$11,096,961		\$3,570,030	
Subtotal without PMO & Mgt OH	93,410	\$9,896,961			
AFUDC				\$1,396,836	
Total with AFUDC				\$4,966,866	

Notes

- A Project Management assumption
- B This "not usable" percentage is calculated by dividing the AR/CC core hours (2093) by the total core hours (9298) from TeamPlay details
- C This "not usable" percentage is calculated by dividing the not usable activity subtotal (\$2,662,626) by the total non-PMO & Mgt Overhead Hours (\$9,986,961)

Assumptions

- 1 The EGSI TX costs are comparable to the EGSI LA costs.
- 2 The functionality not usable was programmed based on deregulated market rules.
- 3 Not all activities are unusable. Refer to the "not usable %" column.

Workpaper for TTC - CCS - EGSi TeamPlay Hours

Activity Name	Total Actual Labor Hour Units	Cost #
EGSI Fund and Management Overhead (10 FTE x 12 months)	9600	\$1,200,000
EGSI Requirements	5860	\$732,500
EGSI CORE	9298	\$1,162,250
EGSI.1.7.1 AR/CC	2093	
EGSI.1.7.2 BILLING	4271	
EGSI.1.7.3 CS/OPS	1869	
EGSI.2.3 Additional Core Development & Configuration	1065	
EGSI EGSi Rates Development	5067	\$632,140
Rates Installation Facts	45	
Rates Design	2045	
EGSI.2.2.1 Group 1	567	
EGSI.2.2.2 Group 2	816	
EGSI.2.2.3 Group 3	912	
EGSI.2.2.4 Group 4	717	
EGSI BILL DELIVERY (CCR and CSF Side)	5463	\$682,875
SCR.586 EGSi Bill Print Changes (Bill Delivery Hours)	1212	
SCR.586 EGSi Bill Print Changes	2323	
SCR.586 EGSi Bill Print Changes (Bill Delivery - EDI)	197	
SCR.590 EGSi Bill Print Changes for Collective Invoicing (Bill Delivery)	250	
SCR.590 EGSi Bill Print Changes for Collective Invoicing (Bill Delivery)	174	
SCR.591 EGSi Changes for Disconnect Notices (Bill Delivery)	151	
SCR.591 EGSi Changes for Disconnect Notices	118	
SCR.596 EGSi Internet Billing (Bill Delivery)	278	
SCR.596 EGSi Internet Billing	59	
SCR.370 EGSi Changes to CSF Audit Reports for EGSi	550	
EGSI NON-DISCRETIONARY SCR's & Cutover	1033	\$129,125
SCR.354 EGSi - Line Item Type Consistency	1033	
SCR.361 EGSi Security Deposit Changes	322	
SCR.570 EGSi RTPS Changes	381	
SCR.587 EGSi Late Payment Charges	383	
SCR.588 EGSi Tax Changes	170	
SCR.783 EGSi Additional Deposit Calculation	167	
Cutover Tasks	550	
EGSI LEGACY	888	\$111,000
EGSI CONVERSION	6025	\$753,125
EGSI INFRASTRUCTURE	4678	\$584,750
EGSI BUSINESS WAREHOUSE (2 Man Weeks - G. Black)	320	\$40,000
TESTING AND TESTING SUPPORT (See Below)		

Assembly Test Support (35% of Dev)

Assembly Test Support Core	3254
Assembly Test Support Rates	1770
Assembly Test Support Bill Delivery	1912
Assembly Test Support SCR's	193
Assembly Test Legacy Systems	303
Subtotal Assembly Test Support	7239

System Test Support (25%)

System Test Support Core	2325
System Test Support Rates	1264
Assembly Test Support Bill Delivery	1366
Assembly Test Support SCR's	138
Assembly Test Legacy	216
Subtotal System Test Support	5171

System Test Execution (50%)

System Test Core	4649
System Test Rates	2529
System Test BD	2731
System Test Support SCR's	275
Legacy Systems	433
System Test Conversion	3048
Subtotal System Test Execution	13389

Customer Acceptance Test & QA (30%)

CA Core	2789
CA Rates	1517
CA BD	1639
CA SCR's	902
CA Legacy	260
CA Conversion	1829
Subtotal Customer Acceptance Test and Execution	8936

Activity	Base Hours	Base Cost	Not Usable %	Not Usable Cost
1 Bill Delivery Base Work	8,051	813,124	50%	406,562
2 Requirement Development	1,499	187,433	100%	187,433
3 Design	609	85,260	100%	85,260
4 Construction	958	134,120	100%	134,120
5 Testing	3,100	232,500	100%	232,500
6 Implementation and Training	548	41,124	100%	41,124
Total	14,765	\$1,493,561		\$1,086,999
AFUDC				\$358,407
Total with 9.28% AFUDC				\$1,445,406

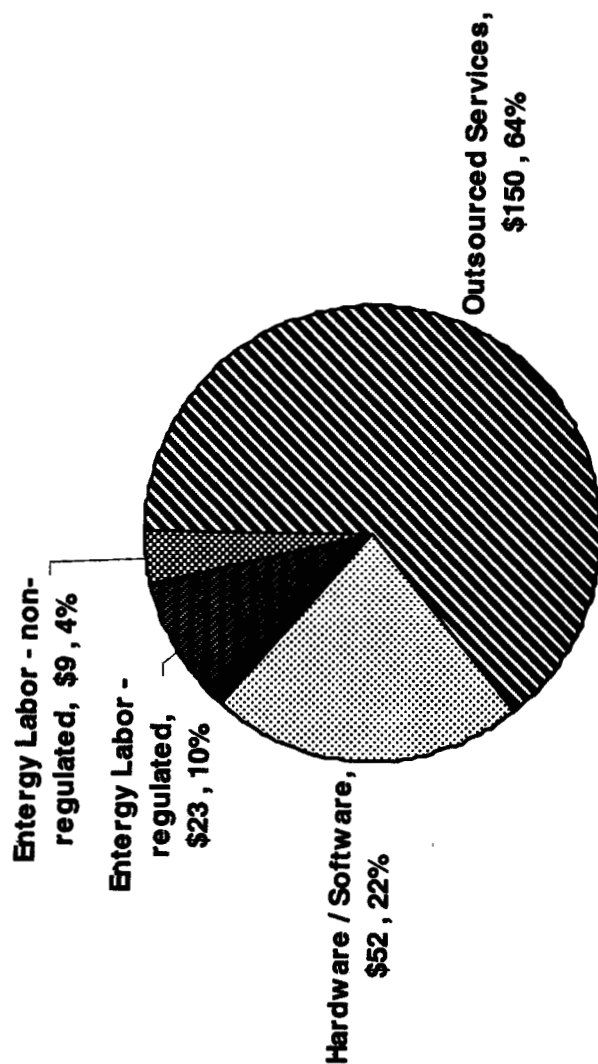
Assumptions

- 1 The percent not usable is from project management assumptions
- 2 The EGSI TX Distribution costs are comparable to the EGSI TX Retail costs.
- 3 The functionality not usable was programmed based on deregulated market rules.

WORK PAPERS FOR BILL DELIVERY

Activity ID	Activity Name	Actual Labor Units
CCSTBD	CCS Texas Retail Pilot Bill Delivery	6715.18h
CCSTBD.1	Bill Delivery Functional Requirements	854.56h
CCSTBD.2	Bill Delivery Technical Requirements	644.90h
CCSTBD.3	Bill Delivery Analysis and Preliminary Design	115.00h
CCSTBD.4	Bill Delivery Detailed Design (Tx Pilot)	494.00h
CCSTBD.5	Bill Delivery Construction	958.00h
CCSTBD.6	Bill Delivery Testing	3100.40h
CCSTBD.7	Bill Delivery Release Management	548.32h
CCSPMBW	Program Management and Base Work	8050.73h

IT Cost Breakdown



- Outsourced Services
- Hardware / Software
- Entergy Labor - regulated
- Entergy Labor - non-regulated

Represents total budgeted IT spending for 2004 for Entergy Corporation and its subsidiaries, including the Corporate IT function as well as all of the business units, both regulated and non-regulated. Cost figures in millions of dollars.

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**Entergy Services, Inc. Selected as Gartner 'TOP' Award Winner of 2004
Winner Announced at Gartner Symposium/ITxpo 2004**

SAN DIEGO, March 30, 2004 — Gartner, Inc. (NYSE: IT) today announced that Entergy Services, Inc. is the winner of the Gartner Technology, Organization and Process (TOP) Performance Award. The award was presented today at Gartner Symposium/ITxpo 2004, in San Diego.

Gartner recognizes Entergy for its ongoing commitment to continuous improvement and performance management throughout its organization.

"Entergy and their primary service provider, SAIC, are committed to using measurement programs to continuously monitor their service delivery," said [senior Measurement official and title]. "By measuring annually both their IT infrastructure costs and end-user satisfaction, Entergy and SAIC have worked closely together to achieve a 'Best in Class' status ranking for three years from the Entergy end users. Entergy also has an internal goal to be in the top 25% of their peers in the Gartner benchmark database, and develops specific action plans to meet that goal."

Entergy Services, Inc. and SAIC have used Gartner's benchmarking services for many years, measuring both the quantitative and qualitative aspects of their service delivery, thus building a closely aligned partnership that is a best practice. They assess alignment between SAIC and their business units quarterly, as well as end-user satisfaction semi-annually to continuously monitor service quality.

Gartner TOP Award recipients are selected based on the following criteria:

- Ongoing commitment to continuous improvement
- Strong IT management skills and a willingness to be measured
- Visibility of benchmark results within the organization
- Strong partnership between the IS organization and management
- Measurement is used as a management tool
- Measurement is instrumental to the strategic planning cycle
- Significant improvement achieved as a result of benchmarking investment
- Benchmark data collected quickly and accurately
- Approaching or in the top 10 percent of Gartner Measurement's client database

Past winners of the Gartner TOP award are ExxonMobil in 2003, JP Morgan Chase in 2002, and Air Products and Chemicals in 2001.

Gartner Symposium/ITxpo is the IT industry's largest and most strategic conference

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Entergy Information Technology Overview Analysis

Report on 2003 Data

June 6, 2004

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 - Aggregate Cost Efficiency Comparisons
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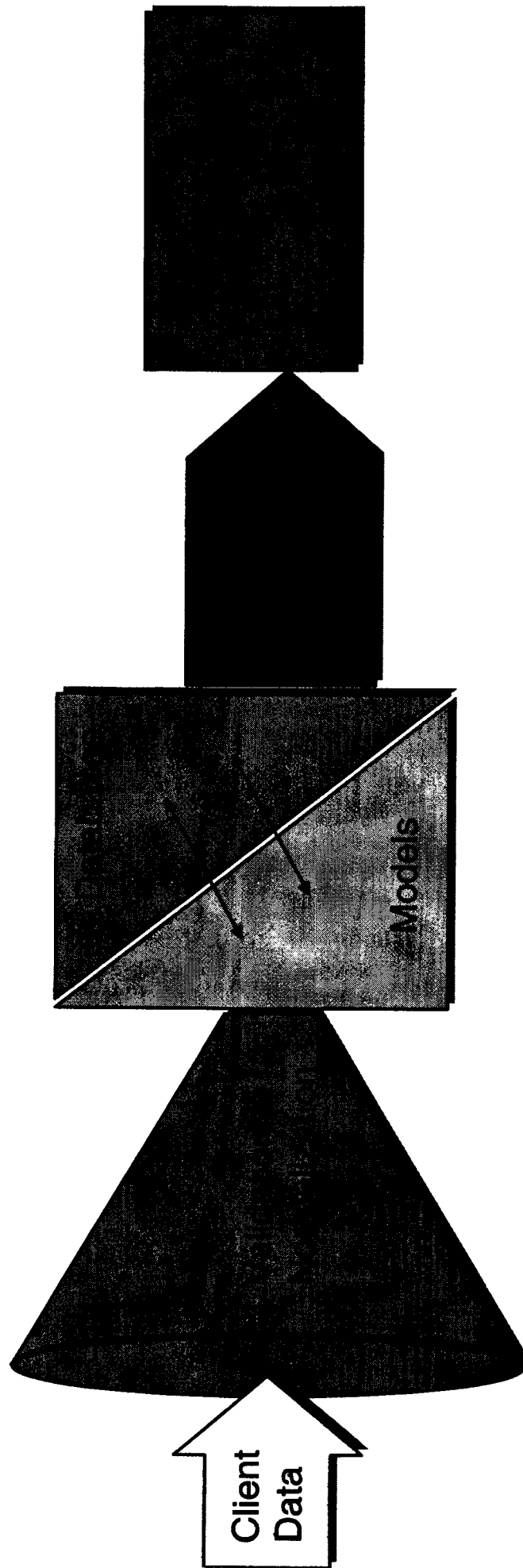
Study Objectives

- ◆ Cost Efficiency:
 - Provide Entergy with baseline metrics and measures across the IT areas evaluated that will serve as the foundation for continuous improvement programs.
 - Identify quantitative performance improvement initiatives for Entergy's IT environment.
 - Assess, to the extent possible, those quantitative improvement initiatives in conjunction with the needs of the business.
 - The ultimate goal is to balance IT investment with line of business alignment and end user enablement.
 - Represents a look at calendar year 2003 data in select IT areas - this in support of Entergy's corporate wide check-up process.

Study Scope

- **Distributed Computing - Cost per end user**
- **Help Desk - Cost per call**
- **Mainframe**
- **Midrange - Cost per Server**
 - UNIX
 - NT
- **Voice Network - Cost per Minute**
- **Voice Technology - Cost per Extension**
- **Wide Area Data Network - Cost per Device**

Study Methodology - Cost Efficiency



All GartnerMeasurement studies follow a standard methodology. For each functional area of IT (e.g. Applications, Distributed Computing, Midrange etc.) there is a model that defines what is included, what is excluded and the basis of measurement for each. The IT Overview Analysis collected high level data on the services provided by Entergy in each of the major functional areas. This data was then compared with the data provided by other GartnerMeasurement clients. The clients used for comparison were selected according to specific factors for each service area with account taken of the broader nature of Entergy's business.

Study Methodology - Peer Comparisons

- ◆ **Peer Group - This consists of the subset of analyses from the Gartner databases selected specifically on the criteria of client characteristics such as workload, size, topology, service delivered and general 'fit' to the client's IS environment. The selection process is both quantitative (that is, key metric number based) and qualitative (that is, configuration and service based). It may or may not contain some industry group analyses and usually does contain analyses from other industries. This is the group Gartner Measurement considers most appropriate for cost efficiency comparison.**
- ◆ **Gartner maintains separate databases for each technology area evaluated. As such, those organizations that make up each technology area's peer group will be different.**

Gartner

Study Methodology - Top Quartile Comparisons

- ◆ **The comparisons to top quartile averages reflects how Entergy compares from a cost efficiency standpoint relative to the average of top quartile of cost efficient performers within each peer group.**
 - It should be noted that these comparisons are cost efficiency based only; typically organizations that are this cost efficient are not as well aligned to the needs of their business as others.
 - In addition, the smaller sample size upon which these comparisons are based (5 in all cases with the exception of voice network) should dictate that these comparisons be treated as reference points only.

- ◆ **It should be noted that the overall comparison to the standard peer group as well as to the top half of cost efficient performers may prove to be more valuable indicators of performance; this given the statistical merits of having more observations making up the averages as opposed to just the 5 that typically make up the top quartile.**

Gartner

Study Methodology - Utility Comparisons

- ◆ **The comparisons to Utility averages reflects how Entergy compares from a cost efficiency standpoint relative to the subset of utility companies within each IT area benchmarked that already exist within the standard peer group comparison; in other words, these are utility companies whose IT workload supported is homogenous to Entergy's.**
 - It should be noted that the smaller sample size upon which these comparisons are based should dictate that these comparisons be treated as reference points only.
 - It should also be noted that these utility companies are not purely utility companies that Entergy would consider to be competitors within the utility industry.

Study Methodology - Peer Group Composition

Benchmarking Topic	Number in Database	Total Number of Peers in Peer Group	Total Number of Utilities in Peer Group	Number of Utilities in Top Quartile	Number of Utilities in Top Quintile
Distributed Computing	273	20	4	5	1
Help Desk	230	20	5	5	1
Mainframe	155	20	4	5	1
Midrange					
NT	254	20	4	5	1
UNIX	294	20	4	5	1
Voice Network	157	20	5	5	1
Voice Technology	235	20	5	5	2
Wide Area Data	196	20	6	5	2

Executive Summary - Synopsis

- ◆ In 2003, Entergy spent \$81.3M annually for the IT areas evaluated.
- ◆ To support Entergy's workload, the peer groups would have, on average, spent \$89.7M annually. The top quartile, those group of organizations that represent the top 25% of cost efficient performers within each peer group, would have averaged spending \$69.0M annually.
- ◆ Thus, Entergy's enterprise in aggregate (for those IT areas evaluated) in 2003 was at a level of efficiency better than that of its peer group. The areas where its costs exceed the peer group averages were in:
 - Mainframe -> 8% higher with a total cost variance of \$525K
 - Midrange NT -> 30% higher with a total cost variance of \$1.921M annually
 - WAN -> 17% higher with a total cost variance of \$1.223M
- With respect to Entergy's performance relative to the "top quartile" averages, Entergy costs were higher in aggregate, but lower in the following IT areas:
 - Help Desk -> 5% lower with a total cost variance of \$100K
 - Midrange UNIX -> 10% lower with a total cost variance of \$1.6M
 - Voice Technology -> 14% lower with a total cost variance of \$942K annually

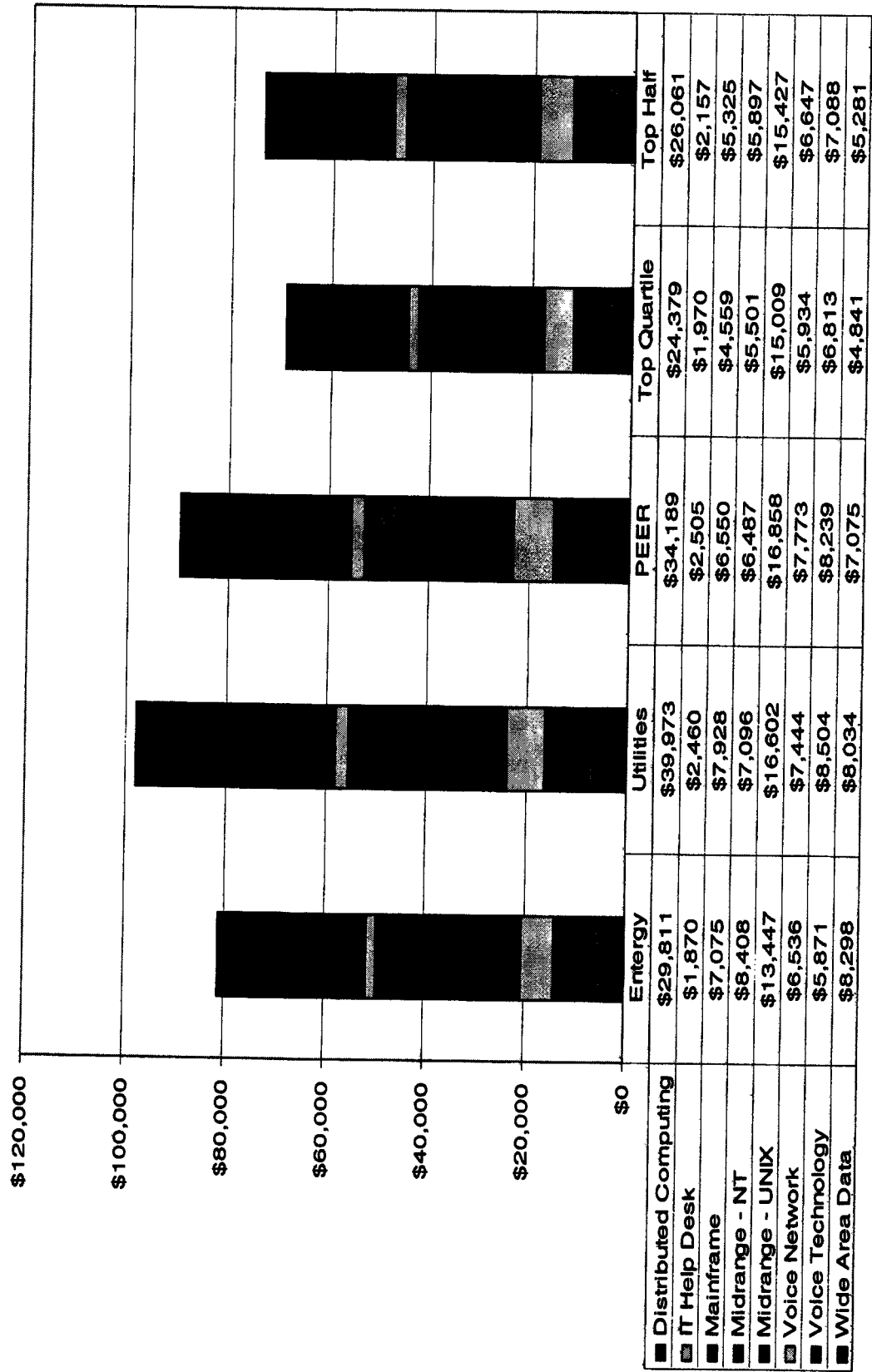
Gartner

Executive Summary - Synopsis

- ◆ From a cost component standpoint, Entergy's combined level of spend in personnel and outsourcing, at \$40.2M (50% of its total cost), is higher versus all comparison groups with the exception of the utility group's cost which is \$549K (just 1%) higher.
- ◆ Costs in hardware and software are lower than all comparison groups (in aggregate) including the top quartile.
- ◆ Entergy's \$ allocated to disaster recovery costs are significantly lower (on a % basis) than peers.
- ◆ The findings from Entergy's cost profile versus peers indicates that its generally spending more on personnel related activities and less on assets.
 - Entergy should note, however, that it is TCO that matters most and that cost "by category" comparisons can be misleading.
 - The WAN environment, for instance, appears very costly from an outsource and personnel standpoint; this is largely attributable to the engineering functions associated with maintaining its own fiber.
 - Engineering functions, for the majority of commercial organizations to which Entergy is being compared is performed by the network provider and is embedded in the transmission, and not the personnel or outsource cost categories.

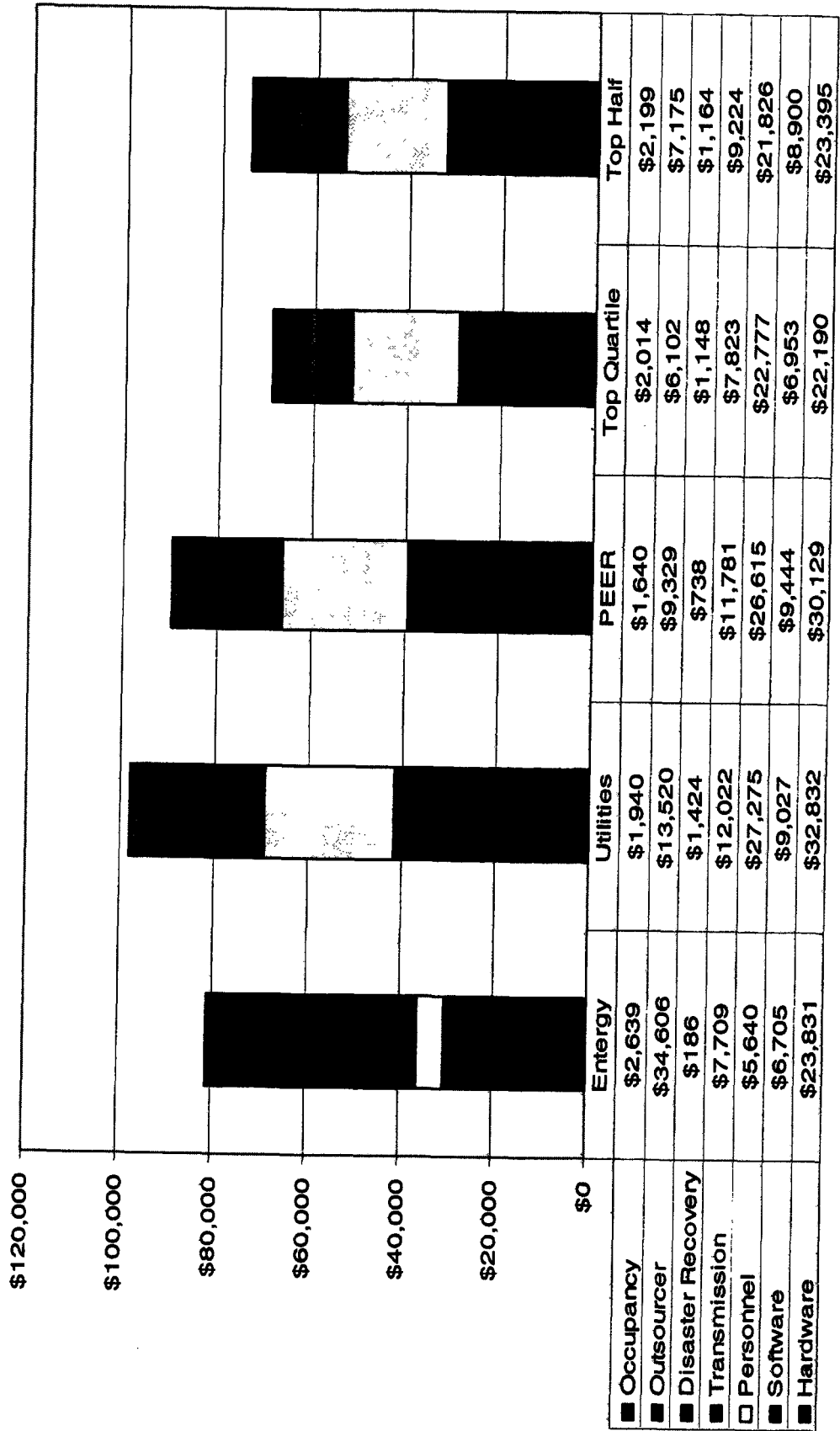
Total Cost by Technical Area (\$000)

\$81.3M \$98.0M \$89.7M \$69.0M \$73.9M



Total Cost by IS Component (\$000)

\$81.3M \$98.0M \$89.7M \$69.0M \$73.9M



Executive Summary - Unit Cost Comparisons

Category		Utilities Peer Group Cost	Peer Top 25%	Peer Top 50%	Utilities Database Average	Databases Database Average		
Distributed Computing	Cost Per End User	\$2,073	\$2,777	\$2,376	\$1,695	\$1,812	\$2,724	\$2,377
Help Desk	Cost per Call	\$12	\$16	\$17	\$13	\$14	\$25	\$23
Mainframe	Cost per MIPS	\$20,944	\$23,540	\$19,430	\$13,526	\$15,798	\$17,519	\$16,635
Midrange								
NT	Cost Per Server	\$15,542	\$13,119	\$11,991	\$10,171	\$10,899	\$14,822	\$14,730
UNIX	Cost Per Server	\$57,221	\$70,599	\$71,745	\$63,868	\$65,608	\$62,791	\$84,193
Voice Network	Cost per Minute	\$0.044	\$0.050	\$0.052	\$0.040	\$0.045	\$0.06	\$0.07
Voice Technology	Cost per Extension	\$14	\$20	\$19	\$16	\$16	\$18	\$19
Wide Area Data	Cost per Device	\$443	\$429	\$377	\$258	\$282	\$464	\$420

Executive Summary - Conclusion

Gartner's Conclusion of Study:

"Entergy's overall cost efficiency performance has IT performing at a level of efficiency between with that of its peer group and the top 25% of performers within its peer group."

Distributed Computing

- Scope of Distributed Computing
 - 14,384 users located at 249 sites
 - Complexity = 10.2 (database range 5.3 – 14.9; database average = 8.6)

- Peer Profile

- Companies with similar complexity as characterized by attributes such as similar:
 - » Number of platforms supported, workstation refresh rates, Percentage of portable units supported, user dispersion profile, service level response, resolution and availability requirements
- Peer group consists of 6 manufacturing, 4 public administration, 4 utilities, 2 financial, 1 banking, 1 chemical, 1 consumer goods and 1 healthcare
- Top quartile group consists of 1 chemical, 1 financial, 1 manufacturing, 1 public administration and 1 utility

Gartner

Distributed Computing

- Observations

- At \$2,073, Entergy's cost per user is 13% lower than the peer group average of \$2,376, but 22% higher than the top quartile average of \$1,695; this would equate to Entergy's spending an average of \$4.4M less and \$5.4M more than the peer and top quartile group averages respectively on an annual basis.
- At a combined cost of \$16.0M for outsource functions and personnel, its cost is lower than the peer group's \$18.5M, but higher than the top quartile average cost of \$13.3M.
- Entergy's LAN infrastructure costs are lower versus all comparison groups.
- Entergy's desktop hardware cost is lower versus all comparison groups except the top quartile and top half groups where its cost is respectively \$1.1M and \$736K higher.
- Entergy's desktop software cost is relatively consistent with both the peer and utility groups and \$1.4M and \$560K higher respectively versus the top quartile and top half groups.
- Occupancy cost is higher than all group averages with the range being between \$503K and \$624K more annually.

Gartner