### 2006 Year to Date Project Activity by Division

(January to December)

	Phase	Not Started	Initiation	Planning	Execution	Closing *	Completed *	Cancelled**	On Hold	Totals by CART
	Corporate Operations	0	0	4	6	10	3	0	0	23
ΔRT	IT Operations	0	2	3	2	2	13	0	2	24
Ċ	Market Operations	1	1	4	10	6	7	6	1	36
	System Operations	4	3	5	7	5	11	5	5	45
	Totals by Phase	5	6	16	25	23	34	11	8	128

\*NOTE: 18 projects went live in the month of December

\*\*NOTE: 3 projects were cancelled before starting and one project cancelled in Execution.



### Year to Date Project Priority List (PPL) Status

PPL Iterations Origination		Project Phases					Subtotal	Grand Total	
PPL Iterations			Initiation	Planning	Execution	Closing/Completed	On Hold/Cancelled	Subtotal	Grand Total
Driginal 2006 PPL*							31		
	PUCT	1				4	3	8	
	Market			1	3	2	1	7	
	ERCOT				3	6	4	13	
	System Maintenance			1		2		3	
Unexpected Carry Over From 2005									16
	PUCT							0	
	Market					4		4	
	ERCOT			2		8		10	
	System Maintenance					2		2	
New Projects Added in 2006	New Projects Added in 2006								85
	PUCT				1	2	3	6	
	Market	1		1	3	2	2	9	
	ERCOT	3	2	8	14	23	4	54	
	Compliance		3	1			2	6	
	System Maintenance		1	2	1	6		10	
2006 PPL totals as of December 31, 2006	2006 PPL totals as of December 31, 2006 132							132	
	PUCT	1	0	0	1	6	6	14	
	Market	1	0	2	6	8	3	20	
	ERCOT	3	2	10	17	37	8	77	
	Compliance	0	3	2	0	4	2	11	
	System Maintenance	0	1	2	1	6	0	10	
Totals by Project Phase		5	6	16	25	61	19	132	

\*NOTE: 4 of the 31 projects on the Original 2006 PPL list actually went in to production in 2005.



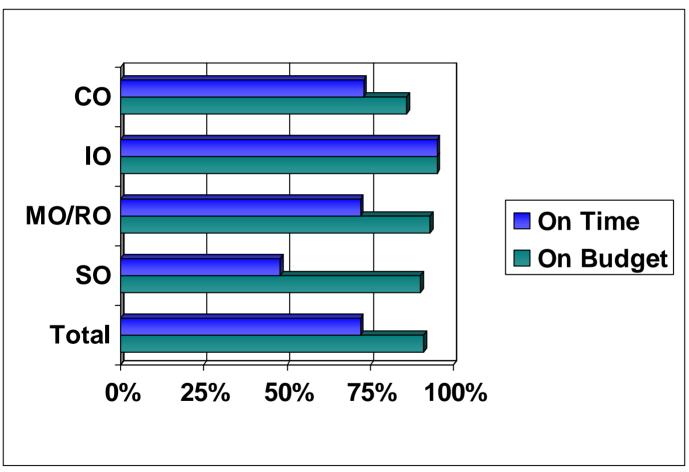
### **Committee Brief**

Projects Over \$1M	Total Budget Committed Actuals 12/31/06		Metrics		
Duration/Information (Sponsor)	Phase/Scheduled Comple	Phase/Scheduled Completion		Budget	
Service Oriented Architecture (2004-2006)	\$8.3M	\$7.642M			
9 separate projects over 24 mos. (R. Giuliani)	Final 2 projects went in to product	tion December 2006			
Enterprise Data Warehouse (2003-2006)	\$3.5M	\$2.858M			
9 separate projects over 36+ mos. (R. Hinsley/R. Giuliani)	Final project went in to production	Final project went in to production November 2006			
Operator Training Simulator (2005-2007)	\$3.8M	\$2.392M			
Training Simulator System for Operators (S. Jones)	Execution Phase/2nd Qtr 2007				
Enhancements to FasTrak Tools (2005-2006)	\$2.7M	\$2.635M			
In Production (R. Giuliani)	Went in to production November 2006				
Enhancements to SCR727 (2005-2006)	\$1.9M	\$1.198M			
(R. Giuliani)	Execution Phase/2nd Qtr 2007	I			
Austin QA Build out (2005-2006)	\$1.162M	\$1.103M			
In Production (R. Hinsley)	Went in to production November 2				
Enhancements to MOMS Study Market Clearing Engines (2006)	\$1.2M	\$888K			
In Production (S. Jones)	Went in to production December 2006				
SBC Network Replacement (2005-2006)	\$1.47M	\$1.439M			
In Production (R. Hinsley)	Went in to production November 2				



### 2006 Year to Date Completed and Active Projects Performance

(January to December)





### Capital Projects – Budget vs. Actuals for Projects Completed YTD

(January to December)

Completed Projects	Baseline Budget	Actuals	\$ (Over)/Under Baseline Budget	% (Over)/Under Baseline Budget		
PR-50121_08 EndPoint Services - Phase II & III (SOA)	175,778	375,037	(199,259)	-113%	(199,259)	-
PR-50017_02 Collateral Calculation	257,745	415,822	(158,077)	-61%	(158,077)	-
PR-50007 Enhancements to FasTrak Tool	2,492,935	2,635,709	(142,774)	-6%	(142,774)	-
PR-40015_02 TCR Report Enhancements Phase II	67,596	197,014	(129,418)	-191%	(129,418)	-
PR-30026 EPS Meter Data	177,511	231,651	(54,140)	-30%	(54,140)	-
PR-50078 SBC Network Replacement	1,420,000	1,439,280	(19,280)	-1%	(19,280)	-
PR-30084 CSC Thermal & Volt Limits Calculations	263,406	274,778	(11,372)	-4%	(11,372)	-
PR-50015_02 Lawson Process Flows	143,262	154,529	(11,267)	-8%	(11,267)	-
PR-50050 Satellite Communication for Black Start Suppliers	52,300	62,321	(10,021)	-19%	(10,021)	-
PR-50132 Network Intrusion/Detection System	587,976	595,304	(7,328)	-1%	(7,328)	-
PR-50026 SIR Enhancements	483,483	489,731	(6,248)	-1%	(6,248)	-
PR-50049 TCCII Completion	549,639	554,962	(5,323)	-1%	(5,323)	-
PR-30105 Congestion Management Reports	82,130	86,061	(3,931)	-5%	(3,931)	-
PR-50152 IT Incident Reporting	93,320	94,867	(1,547)	-2%	(1,547)	-
PR-40086 Incident Report	153,441	154,436	(995)	-1%	(995)	-
PR-50145 Austin Control Center Power and Cooling	198,568	198,568	(0)	0%	-	-
PR-50002_02 Enhancements to MOMS ISR - Post R4	217,087	216,004	1,083	0%	-	1,083
PR-50121_06 SOA EndPoint Services	134,837	133,128	1,709	1%	-	1,709
PR-40098 Performance Monitoring for SCADA/State Estimator	131,226	126,259	4,967	4%	-	4,967
PR-50151 Additional SMP Front End	200,358	191,561	8,797	4%	-	8,797
PR-50033_02 MV90 (Metering) System Installation	64,700	55,134	9,566	15%	-	9,566
PR-50141 Secure Email	314,131	300,170	13,961	4%	-	13,961
PR-60002_01 Increase Number of Seats for Study Market Clearing Engines	100,736	85,505	15,231	15%	-	15,231
PR-50137 Maestro Replacement	743,215	726,767	16,448	2%	-	16,448
PR-50106_01 Security Camera Enhancements	287,027	268,851	18,176	6%	-	18,176
PR-50147 Windows Domain Restructuring	852,278	831,059	21,219	2%	-	21,219
PR-50008 Aggregation of Combined Cycle Units Providing RRS	52,093	29,579	22,515	43%	-	22,515
PR-60068 Distribution Loss Factor Calculations	68,914	45,277	23,637	34%	-	23,637



Continued on next slide

### Capital Projects – Budget vs. Actuals for Projects Completed YTD (cont.)

### (January to December)

Completed Projects	Baseline Budget	Actuals	\$ (Over)/Under Baseline Budget			
PR-50128 Settlements Mismatched Inter QSE Schedules	62,126	38,396	23,730	38%	-	23,730
PR-50004 EDW Business Intelligence Reporting Tool	326,958	300,649	26,309	8%	-	26,309
PR-50125 Production Storage	752,389	725,485	26,904	4%	-	26,904
PR-40113 RAP-C Modeling Enhancements - Conditional	133,401	106,062	27,339	20%	-	27,339
PR-50135 Topology Estimation System (Phase I)	174,258	143,854	30,404	17%	-	30,404
PR-50111_01 Vendor & Contract Management	94,400	62,434	31,967	34%	-	31,967
PR-50136 EMMS Upgrade of OSI PI and OAG	137,281	93,149	44,132	32%	-	44,132
PR-40100 RTCA Archiving	148,521	103,669	44,852	30%	-	44,852
PR-60098 Veritas Vaulting	100,000	54,994	45,006	45%	-	45,006
PR-50140 Log and Event Management	752,325	707,106	45,219	6%	-	45,219
PR-60076_01 Proxy Server	337,706	290,388	47,318	14%	-	47,318
PR-50134 DC Tie Automation	714,315	666,067	48,248	7%	-	48,248
PR-40007 SCR 727 Phase II	389,348	340,217	49,131	13%	-	49,131
PR-40042_06 EDW Lodestar Batch Extracts	998,546	945,079	53,467	5%	-	53,467
PR-40070 Austin Test Environment	1,165,266	1,103,181	62,085	5%	-	62,085
PR-50030 EIS Lodestar Transition to ODS	181,037	105,891	75,146	42%	-	75,146
PR-60016_01 Host Intrusion Detection System II	159,043	81,694	77,349	49%	-	77,349
PR-60088_01 Market Management System Expansion	749,623	654,931	94,692	13%	-	94,692
PR-50060 EDW Transaction Clearinghouse Transition	319,031	220,345	98,686	31%	-	98,686
PR-60092 Storage Upgrade	901,000	801,804	99,196	11%	-	99,196
PR-60080 Market Operation Support Rel. 1	267,617	160,661	106,956	40%	-	106,956
PR-50027 Disk Based Recovery	638,729	490,291	148,438	23%	-	148,438
PR-60009_01 2006 Minor Capital	1,475,000	1,308,274	166,726	11%	-	166,726
PR-50025 Enhanced ESIID Lookup Function	369,906	197,788	172,118	47%	-	172,118
PR-50003 Enhancements to MOMS Study Market Clearing Engines	1,073,389	888,831	184,558	17%	-	184,558
PR-60004_01 EIS Foundations	428,717	217,678	211,039	49%	-	211,039
PR-50123 Document Management	739,600	438,986	300,614	41%	-	300,614
PR-50121_07 Retail Business Processes (SOA)	2,942,847	2,070,383	872,464	30%		872,464
Count = 56			2,610,422	·	(760,978) (15 projects)	3,371,401 (40 projects)

(a) Baseline Budget does not include change controls that were approved without granting a new baseline budget.

(b) Completed Project List may not contain projects waiting for final production verification and/or administrative close out.

(c) Projects completed in December may not include accruals. Therefore, actual costs may be more than reflected on this report.

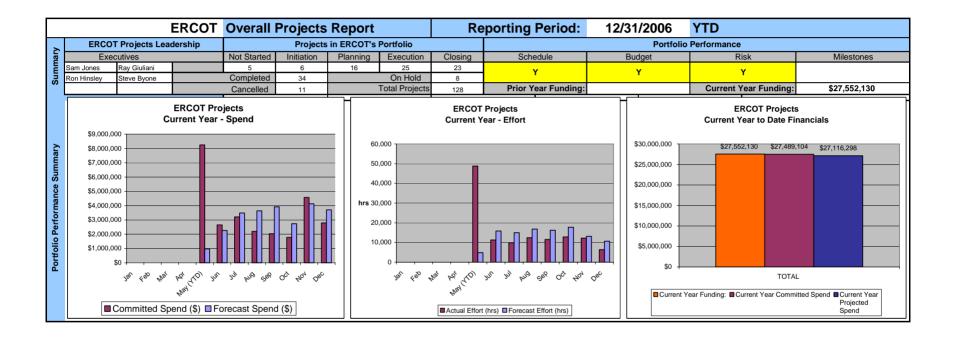
### **Go Live Projects for December**

Project Number	Project Name	Start	Go Live
30026	EPS Meter Data	July 2003	December 2006
30084	CSC Thermal and Voltage Calculations and Postings	February 2005	December 2006
40007	SCR 727 Phase 2	January 2005	December 2006
50003	Enhancements to MOMS UI	June 2005	December 2006
50025	Enhance ESI ID Lookup Function	July 2005	December 2006
50030	EDW Lodestar Transition from DA to ODS	October 2005	December 2006
50060	EIF Transition to ODS	April 2006	December 2006
50121_07	Service Oriented Architecture - Retail Business Processes	August 2005	December 2006
50121_08	Service Oriented Architecture - Endpoint Services Phase II	February 2006	December 2006
50134	DC Tie Automation	June 2005	December 2006
50135	Topology Estimation System	June 2005	December 2006
60002_01	Increase Number of Seats for MCE	June 2006	December 2006
60009_01	Minor Capital	January 2006	December 2006
60016_01	Host Intrusion Detection System (HIDS)	February 2006	December 2006
60068	Modification of Distribution Loss Calculation	September 2006	December 2006
60080_01	Market Operations Support Relase 1	March 2006	December 2006
60092	Storage Upgrade	September 2006	December 2006
60098_01	Veritas Vaulting	September 2006	December 2006

NOTE: Project information found in Appendix A.



### **Enterprise Projects Summary Report**





## **Go Live Projects Information**

### PR-30026 EPS Meter Data

- Scope: Provide an automated extract of daily RID-level EPS Meter data and SCADA data through the ERCOT Portal to Market Participants.
- **Deliverables**: Extract of RID-level EPS Meter Data and SCADA data via the ERCOT Portal.
- Timeline: July 2003 December 2006

### PR-30084 CSC Thermal and Voltage Calculations and Postings

- **Scope**: Automate the calculation and posting of CSC Limits, and move from a day-ahead calculation to a more near real-time calculation.
- Deliverables: A Voltage Security Assessment Tool (VSAT) to calculate CSC Limits with additional software to post the Limits to the Market using web pages and file extracts.
- Timeline: February 2005 December 2006

### • PR-40007 SCR 727 Phase 2

- Scope: To transition full functionality of the SCR 727 ESIID Service History and Usage Extracts from the Data Archive to the ODS/EDW environment. The addition of the capability for a separate data extract for the Lodestar dimensional tables that are reused throughout all Lodestar extracts. The inclusion of a unique file load order number in the extract file names to identify the order in which SCR 727 Count files should be loaded by the Market Participant.
- Deliverables: Daily SCR 727 Extract and Public Reference Data Extract (PRDE) which provides all data from the 8 Lodestar dimensional tables
- **Timeline**: January 2005 December 2006



## **Go Live Projects Information**

- PR-50003 Enhancement to MOMS UI
  - Scope: This project was undertaken to add functionality to the Study MCEs (Market Clearing Engine) within MOMS (Market Oversight Monitoring System) in support of ERCOT Wholesale Market Monitoring function performed by the PUCT (WMO).
  - Deliverables: As requested by the PUCT and ERCOT, the project team defined the business requirements for Study MCE enhancements, designed the Study MCE enhancements, implemented and tested the enhancements, and provided documentation and training on the enhancements.
  - Timeline: June 2005 December 2006

### • PR-50025 Enhance ESI ID Lookup Function

- Scope: Provide additional information for an ESI ID to include current Station ID, Power Region, Premise Type, status (active/de-energized/inactive), pending Move In/Move Out, and CM Zone for an ESI ID via the ESI ID Look Up Function on TML and the TDSP Extract.
- Deliverables: Modified the existing TML, API and TDSP Extract to provide the additional data elements referenced above.
- **Timeline**: July 2005 December 2006



### **Go Live Projects Information**

### • PR-50030 EDW Lodestar Transition from DA to ODS

- Scope: Transition reporting from allowing users direct access to Data Archive to a model that provides table level and subject area views in the Operational Data Store (ODS) at any historical point in time.
- Deliverables: Business Intelligence components were modeled with a view toward maximum reusability for the current and future reports. The entity relationships between tables in each of the subject areas and integrated subject areas cover the entity relationship being demonstrated in the SQLs provided by each of the business units.
- **Timeline**: December 2006

#### • PR-50060 EIF Transition to ODS

- Scope: This project is to transition the data from the EIF Database source to the Operational Data Store (ODS) for
  providing access to point in time data for ERCOT business personnel, Market Participants, and the PUCT as well as
  producing and supporting data extracts and. This project will position ERCOT for the retirement of the DA
  components and enable future projects and market requests for point and time reporting.
- Deliverables: Configured the ODS Data Models and primed a snapshot of the EIF source into the EIF ODS Schema. Configured and Installed the Shareplex Replication for near real-time replication to the ODS.
- **Timeline**: April 2006 December 2006

### • PR-50121\_07: Service Oriented Architecture – Retail Business Processes

- Scope: This project replaced existing SeeBeyond integration components with TIBCO integration components within the Retail Business Processes supporting transaction processing.
- Deliverables: Delivery of a new TIBCO Integration Environment to support Retail Transaction processing, including: New integration framework & monitoring components, administration components, and Retail transaction processing components, new / upgraded hardware environment, conversion of data to support replacement logic, delivery of new cross-application integration between Paperfree, TML, API, and Siebel processes, and retirement of SeeBeyond logic
- **Timeline**: August 2005 December 2006



## **Go Live Projects Information**

- PR-50121\_08: Service Oriented Architecture Endpoint Services Phase II
  - Scope: This project replaced existing SeeBeyond integration components with TIBCO integration components within the following Market Operations business processes: Generate Invoice – Lode\* to Paperfree and ERCOT Read Load – 867\_03 Lode\* to Paperfree
  - Deliverables: Delivery of a new TIBCO integration logic and web services within point-to-point integration processes, to include: New logic for Generate Invoice and ERCOT READ Load processes and retirement of SeeBeyond logic
  - **Timeline**: February 2006 December 2006
- PR-50134 DC Tie Automation
  - Scope: Automate as much as possible the current manual processes that consume considerable ERCOT resources in managing and accounting for energy flow across the DC Ties.
  - Deliverables: The deliverables include detailed requirements, vendor deliverables (scheduling, energy accounting and data services), and integration of internal ERCOT systems to support the DC Ties.
  - Timeline: June 2005 December 2006



## **Go Live Projects Information**

- PR-50135 Topology Estimation System
  - Scope: With this additional software application functionality added to the SE environment the accuracy and reliability of the SE solution will be improved leading to increased accuracy of all downstream real-time sequence processes.
  - Deliverables: A functional evaluation of the Nexant TPOAZ system in the ERCOT environment with a
    recommendation not to purchase the software (at this time).
  - Timeline: June 2005 December 2006
- PR-60002\_01 Increase Number of Seats for MCE
  - **Scope**: Increase the number of seats for the Study Market Clearing Engines from two to five.
  - **Deliverables**: Install a new Server and 3 additional AIMMS Licenses for the MOMs Application.
  - Timeline: June 2006 December 2006
- PR-60009\_01 Minor Capital
  - Scope: Purchase miscellaneous capitalized assets, not included as part of a separate project, that have a useful life greater than one year and equals or exceeds the authorized dollar threshold set by Accounting.
  - Deliverables: CPUs, monitors, wall panels, cabinets, work surfaces, vehicles, cables, routers, software licenses, copy machines, etc.
  - **Timeline**: January 2006 December 2006



## **Go Live Projects Information**

- PR-60016\_01 Host Intrusion Detection System (HIDS)
  - Scope: Implement, in conjunction with the Network IDS/IPS, a host based system for detecting malicious network attacks.
  - Deliverables: Install a commercial HIDS product onto the ERCOT network.
  - **Timeline**: February 2006 December 2006
- PR 60068: Modification of Distribution Loss Calculation
  - Scope: This project implements PRR 565 and 668. Both the PRRs improve the accuracy of calculating distribution losses. PRR 565 requires ERCOT to use actual load for calculating the Settlement Interval Loss Factors (SILF) and PRR 668 uses new TDSP supplied coefficient in the SILF equation.
    - Note: SIR 10901 was initiated to implement PRR 668.
  - Deliverables: Modified Lodestar to accomplish the following: Calculate new SILF, forecasted load, Actual load, use actual SILF for the data aggregation process, and generate new CSV files. Modified TML website and ERCOT.com to provide access to newly created TDSP Distribution Loss Factor files-Actual, Forecasted, and historical data.
  - **Timeline**: September 2006 December 2006

SIR 10901 went live on 11/1/2006

\*\*668 Functionality Suspended: PRR 668 functionality was implemented in the code and was meant to go live on Jan 1, 2007 However, certain TDSPs have not yet supplied the required SILF coefficients. Therefore, the calculations are being held back through effective dating until the TSDPs submit the required data.



## **Go Live Projects Information**

- PR-60080\_01 Market Operations Support Release 1
  - **Scope**: Implement SCR 747, AIMMS 3.6 Upgrade, and AIMMS Code Separation.
  - Deliverables: The deliverables of the project included implementing the AIMMS 3.6 upgrade, completing the code separation, and delivering the code changes for SCR 747.
  - Timeline: March 2006 March 2007
- PR-60092 Storage Upgrade
  - Scope: Acquire high performance disk storage to meet high online transaction processing requirements and growth.
  - **Deliverables**: DMX-3 2500 300GB disk drive upgrade, fiber ports, and tiered software.
  - Timeline: September 2006 December 2006
- PR-60098\_01 Veritas Vaulting
  - Scope: The intent of this project is to allow higher availability and more reliable backups of end-user .pst files while
    reducing the amount of SAN space and backup tapes used.
  - Deliverables: Implementation of Veritas vaulting tool, discovery and management of .pst files in the ERCOT environment, and end user training on utilization of the new tool
  - Timeline: September 2006 December 2006

