

#### ERCOT Finance & Audit Committee Meeting 7620 Metro Center Drive, Austin, Texas Met Center, Conference Room 168 January 15, 2008; 8:00am – 10:00am\*

Item #	Agenda Item Type	Description/Purpose/Action Required	Presenter	Time
1.		Call to order General Session	C. Karnei	8:00am
2.	Decision required	Approval of general session minutes (Vote) (12/11/07)	C. Karnei	8:00am
3.	Decision required	Election of committee Chair and Vice-Chair (Vote)	S. Byone / E. Doolin	8:01am
4.	Decision required	Approval of CWG Chair and Vice-Chair (if nominated by CWG) (Vote)	C. Yager	8:05am
5.	For discussion	Review of preliminary 2007 year-end financial results	M. Petterson	8:10am
6.	For discussion	Review of quarterly investment results	C. Yager	8:15am
7.	Decision required	Briefing on Nodal budget impacts (Vote)	M. Petterson / C. Yager	8:20am
8.	For discussion	Update on proposed Texas RE service agreement	M. Petterson	8:35am
9.	Informative	Committee Briefs (Q&A only)	All	8:45am
10.	Informative	Future agenda items	S. Byone	8:50am
		Recess General Session		8:55am
		Convene Executive Session		
11.	Decision required	11a. Approval of executive session minutes (Vote) (12/11/07)	Chairman	8:55am
	For discussion	11b. Review of long-term financial plans	S. Byone / M. Petterson/ C. Yager	8:56am
	Informative	11c. Update on Met Center disposition	S. Grendel	9:15am
	For discussion	11d. Internal Audit status report	B. Wullenjohn	9:25am
	Informative	11e. EthicsPoint update	B. Wullenjohn	9:35am
	For discussion	11f. Quarterly private discussion with Chief Audit Executive	B. Wullenjohn	9:40am
		Adjourn ISO meeting	Chairman	9:45am

\*\* Background material is enclosed or will be distributed prior to meeting. All times shown in the agenda are approximate. The next Finance & Audit Committee Meeting will be held Tuesday, February 19, 2008, at ERCOT, 7620 Metro Center Drive, Austin,

e next Finance & Auait Committee Meeting will be neta Tuesday, February 19, 2008, at ERCOT, 7620 Metro Center Drive, Austin Texas 78744, in Room 168.

Decision required For discussion

- Approval of General Session Minutes
  - Vote 12/11/07



#### **Draft** MINUTES OF THE <u>OPEN SESSION</u> OF THE ERCOT ISO FINANCE & AUDIT COMMITTEE MEETING

Hilton – Austin Airport

Pursuant to notice duly given, the meeting of the Electric Reliability Council of Texas, Inc. Finance & Audit Committee convened at 8:30 A.M. on **December 11, 2007**. The Meeting was called to order by Clifton Karnei, who ascertained that a quorum was present.

#### Meeting Attendance

#### Committee members:

Clifton Karnei,	Brazos Electric	Cooperative	Present
Chair	Cooperative		
Miguel Espinosa,	Unaffiliated Board	Unaffiliated Board Member	Not Present
Vice Chair	Member		
Nick Fehrenbach	City of Dallas	Consumer	Present
R. Scott Gahn	Just Energy	Ind. Retail Electric Provider	Not Present
Michehl Gent	Unaffiliated Board	Unaffiliated Board Member	Present
	Member		
Tom Standish	Centerpoint Energy	Investor-Owned Utility	Not Present
William Taylor	Calpine Corporation	Independent Generator	Not Present
Dan Wilkerson	Bryan Texas Utilities	Municipal	Present
Robert Thomas	Green Mountain Energy	Ind. Retail Electric Provider	Present for
			Scott Gahn
Bob Helton	International Power	Independent Generator	Present for
	America		William Taylor

#### Other Board Members and Segment Alternates:

Steve Bartley CPS Energy Municipal Present				
	Steve Bartley	CPS Energy	Municipal	Present

ERCOT staff and guests present:

Barry, Sean	PricewaterhouseCoopers
Brenton, Jim	ERCOT
Byone, Steve	ERCOT
Campbell, Cassandra	ERCOT
Davies, Morgan	Chair, Credit Work Group
Day, Betty	ERCOT
Delenela, Ann	ERCOT
Doolin, Estrellita	ERCOT
Gallo, Andrew	ERCOT
Grable, Mike	ERCOT
Kahn, Bob	ERCOT
Moseley, Cheryl	ERCOT
Petterson, Mike	ERCOT
Rocap, Nisha	PricewaterhouseCoopers
Troxtell, David	ERCOT
Wullenjohn, Bill	ERCOT
Yager, Cheryl	ERCOT

#### **Executive Session**

At 8:30 a.m., the Committee went into Executive Session until 9:17 a.m., when the Committee returned to Open Session.

#### **Approval of Previous Minutes**

Nick Fehrenbach moved to approve the minutes for the Finance & Audit Committee meetings held on November 9, 2007 and November 13, 2007; Dan Wilkerson seconded the motion. The motion passed unanimously.

#### **Designation of Committee Secretary**

Clifton Karnei recognized Susan Vincent for her outstanding service as Committee Secretary and acknowledged Ms. Vincent's decision to transition from the ERCOT ISO Division to the ERCOT TRE Division. Pursuant to the Committee Charter and based upon ERCOT staff recommendation to name an ERCOT ISO Division attorney as secretary, **Michehl Gent moved to name Estrellita Doolin as Committee Secretary; Dan Wilkerson seconded the motion. The motion passed unanimously.** 

#### 2008 Audit Committee Meeting Planner

Steve Byone reviewed the 2008 meeting planner including items for each quarter of 2008 as well as recurring items. Mr. Karnei requested that the annual review of the Committee Charter be moved to the third quarter instead of the first quarter since the Charter had been revised recently. In connection with Mr. Gent's question regarding frequency of review for Director & Officer insurance coverage, Mr. Karnei commented that the Committee should review all ERCOT insurance coverage and instructed staff to add an agenda item for an upcoming F&A Committee meeting to inform the Committee of existing requirements for the Board or Committees to review insurance coverage.

#### 2007 SAS 70 Audit Report

Sean Barry and Nisha Rocap of PricewaterhouseCoopers (PwC) presented a summary of the 2007 SAS 70 audit process and final report. Mr. Barry congratulated ERCOT staff on receiving an unqualified SAS 70 audit – the first time that ERCOT has passed the audit with no exceptions. He also cautioned management of the challenge of sustaining the unqualified status. In response to questions, Mr. Barry noted that to his knowledge no previous qualified ERCOT SAS 70 audit had resulted in qualifications for any Market Participant audit since the basis of previous ERCOT qualifications were not material to Market Participant audits. He confirmed that if the previous qualifications had been based on exceptions to objectives in the market settlement process—controls over which are and have been strong—the qualification would have been more likely to be material to Market Participant audits. Mr. Barry informed the Committee that PwC had completed SAS 70 audits for PJM, Cal ISO, and SPP. Mr. Barry confirmed that pre-work completed by the Internal Audit team contributed to the success of the audit.

#### Credit Work Group (CWG) Report & Semi-Annual Credit Update

Morgan Davies reviewed for the Committee CWG activities completed during the past six months and CWG activities planned for the next six months. He noted that CWG had (1) been involved with Credit Review Project led by vendor Oliver Wyman, (2) researched risk mitigation measures, (3) updated Creditworthiness Standards, (4) updated CWG Charter, and (5) reviewed PRRs and NPRRs for credit implications. Future activities include continued involvement with the Credit Review Project and election of Chair and Vice Chair.

Mr. Davies noted that he did not anticipate running for the Chairman position next year. Mr. Karnei expressed the Committee's appreciation for Mr. Davies' leadership of the CWG for the past several years. Ms. Yager added that ERCOT Credit staff also appreciated Mr. Davies' leadership during his term.

The Committee instructed staff to schedule a Special Meeting of the Committee so that Oliver Wyman could make a presentation of the final report prior to presenting to the full Board. The tentative date, time and location selected are February 6, 2007 from 1-3 p.m. at the ERCOT office in Austin.

Mr. Karnei requested that staff provide an update on the efforts undertaken to review and update the current domestic and foreign guarantee forms. He specifically asked that outside counsel engaged to review the documents provide written explanation of all proposed substantive changes.

#### Finance & Audit Committee Self-Assessment

Mr. Karnei summarized the results of the annual self-assessment questionnaire that had been completed in November and facilitated a discussion of the responses. He noted that members are generally pleased with the functioning of the Committee and that the biggest areas for improvement include ongoing education and training for Committee members and making better use of peer information when benchmarking ERCOT.

#### Committee Briefs (Q&A only)

Committee members were provided written reports with information for the following areas:

- 1. Market Credit
- 2. Internal Control Management Program (ICMP)
- 3. Enterprise Risk Management (ERM)
- 4. Project Management Organization (PMO)

Michehl Gent requested an explanation for the elevated risk level for "Administration, Settlement & Billing" included in the ERM report. Mr. Byone explained that technology issues were delaying some settlement processes and that the root cause analysis of the problem was ongoing.

Mr. Byone informed the Committee that he anticipated ERCOT would end the year with a surplus of revenues over revenue requirements. In response to a question from Mr. Wilkerson, Mr. Byone indicated that a large driver of the favorable expense variance was due to staff work and support on the Nodal program and the related cost allocations.

#### **Future Agenda Items**

Steve Byone noted the following future agenda items:

- 1. Standing Internal Audit status report(s)
- 2. Election of Committee Chair and Vice-Chair
- 3. Review of preliminary 2007 year-end financial results
- 4. Review of proposed Texas RE service agreement
- 5. Update on Met Center disposition
- 6. Committee Briefs

#### **Adjournment**

At 10:16 a.m., the Committee meeting was adjourned. The next regular Committee meeting is scheduled for January 15, 2008.

Estrellita J. Doolin, Secretary

## 3. Election of Committee Chair and Vice-Chair Steve Byone / Estrellita Doolin

# <Vote>



# 4. Approval of Credit Work Group Chair and Vice-Chair Cheryl Yager

# <Vote>



## 5. Review of Preliminary 2007 Year-End Financial Results Mike Petterson

# For discussion



# Discussion



## 7. Summary of Proposed Nodal Budget Changes Mike Petterson / Cheryl Yager

	Authorized <u>Budget</u>	Estimate at Completion	Net Increase
Total Program budget Less:	\$ 263.0	\$ 319.4	56.4
Interdependent projects	37.0	39.7	2.7
(Capitalized) Interest	<u>   10.6</u>	<u>   10.6</u>	0
Nodal costs to be financed	215.4	269.1	53.7

• The increase in the estimated Nodal Program costs, if approved, must be funded with a combination of revenue (Nodal Surcharge) and/or debt.



#### 7. Factors Considered Mike Petterson / Cheryl Yager

- Key factors considered when evaluating what blend of revenue (Nodal Surcharge) and debt to use to fund the Nodal Program:
  - <u>Impact on ERCOT's financial position</u>. Higher debt levels can negatively impact ERCOT's balance sheet. Higher levels of revenue funding via the Nodal Surcharge strengthen ERCOT's balance sheet.
  - <u>Overall cost of the project</u>. The more debt incurred, the more interest cost must be paid and thus the higher the overall cost of the project.
  - <u>Matching cost with benefit</u>. Matching of the payment for the Nodal Program via the Nodal Surcharge with the benefit from the Nodal Program once it is in place.
  - <u>Desire to minimize "spiking" in the Nodal Surcharge.</u> The need or desire to have a consistent, predictable fee that will not fluctuate significantly.



### 7. Alternatives Previously Considered Mike Petterson / Cheryl Yager

- Considered the following revenue / debt funding scenarios in light of the key factors previously identified:
  - Flat fee
  - 100% revenue funding during development
  - 50% revenue funding during development
  - 10% revenue funding during development
  - 100% debt funding during development
- Previously, the BOD approved a filing and the PUCT approved a fee of \$0.127 per MWh based on the "flat fee" scenario



### 7. Alternatives Considered to Fund Proposed Increase Mike Petterson / Cheryl Yager

- Increase Nodal Surcharge. Increase the existing Nodal Surcharge as soon as practicable from \$0.127 per MWh to \$0.169 per MWh. Revised rate to remain in effect until all Nodal Program costs are recovered (projected to be by the end of 2012). This option anticipates using a blend of borrowed funds and the Nodal Surcharge to maintain a flat fee from mid 2008 through 2012 (the remainder of the development period and the estimated average useful life of the assets).
- 2. Extend Collection Period. Hold the Nodal Surcharge at \$0.127 per MWh and extend the period to collect the fee through mid 2014. Under this alternative, 100% debt would be used to finance the additional costs.



-	Approved Budget	Alternative 1 Increase Nodal Surcharge	Alternative 2 Extend Collection Period
Nodal costs to be financed Debt financing costs	215.4 33.5	269.1 42.2	269.1 56.4
Costs recoverable via Nodal Surcharge	248.9	311.3	325.5
Expected Nodal Surcharge	0.127	0.169	0.127
Projected end of collection period	Dec 2012	Dec 2012	Sept 2014
Estimated "peak" debt (related to Nodal)	149.7	199.3	208.3
Funding during development	31.5%	27.5%	23.5%



### **ERCOT** recommendation

- ERCOT staff believes that the "flat fee" methodology adopted for the current Nodal Surcharge continues to be appropriate for recovery of the revised estimate of Nodal Program costs.
- ERCOT staff recommends Alternative 1 since it
  - Yields the lowest overall cost
  - Preserves the ability to extinguish Nodal debt by the end of the estimated useful life of the assets
  - Produces a more favorable financial position (stronger balance sheet) for ERCOT
- ERCOT staff requests the BOD approve the revised Nodal Program budget and authorize ERCOT to make a fee filing at the PUCT
  - To increase the Nodal Surcharge to \$0.169 / MWh
  - With the new Surcharge to be effective until all Nodal Program costs are fully recovered (currently estimated to be by the end of 2012)



- 7. F&A Action Vote Mike Petterson / Cheryl Yager
  - Assuming BOD approval of the proposed increase in the Nodal Program costs in conjunction with BOD decision template # 7, what is F&A's recommendation for funding the increased cost?
    - Alternative 1
    - Alternative 2
    - Other
  - Vote



#### 8. Update on Proposed Texas RE Service Agreement Mike Petterson

#### • Memorandum of Understanding / Service Agreement

- Under development and review
- Anticipated that the Texas RE will be allocated indirect cost from
  - Information technology
  - Facilities
  - Accounting, budget and payroll
  - Human resources
  - Procurement
  - Treasury and credit

#### • Audit Requirements

- Year-end "Treasurer's Report" must be audited
  - A comparison of budgeted and actual expenditures
  - Audit will be based on agreed upon procedures
- NERC says separate audited Texas RE financial statements are not required for 2007
- Texas RE Revenue Recognition
  - Texas RE revenue (approved annual budget / 4 quarters) is not equal to the Electric Reliability Organization fee (\$0.016 per MWh) collected by ERCOT



# Q&A only



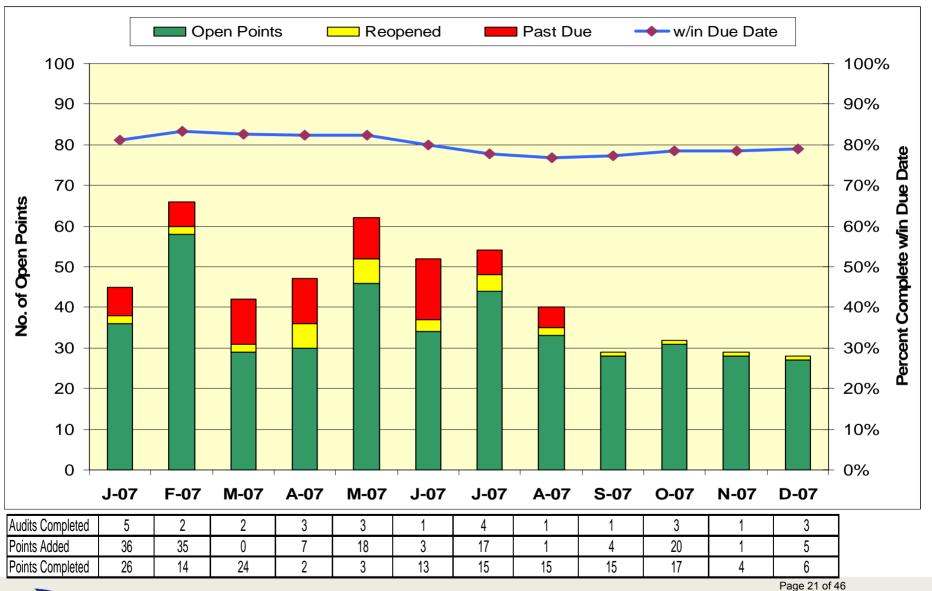
#### **ERCOT Market Credit Status**

	<u>.</u>	as of 11/3	0/2007		-	as of 12/31/2007				
	# of QSEs*	Estimated Aggregate Liability (\$)	% of EAL	Total Unsec Credit Limit / Security Posted		# of QSEs*	Estimated Aggregate Liability (\$)	% of EAL	Total Unsec Credit Limit / Security Posted	
Exposure in the ERCOT Market (owed to ERCOT)										
<b>OSEs that meet ERCOT Creditworthiness Standards</b>										
Ratings over BBB-	11	28,340,234	7%	108,325,004	U	9	19,513,263	6%	101,853,059	U
<b>QSEs that do not meet ERCOT Creditworthiness Standards</b>										
Ratings below BBB- or not rated			10-1		~			10.1		~
Cash & Letters of Credit Guarantee Agreements	45 16	203,527,105 179,589,704	49% 44%	364,360,976 575,979,236		45 14	159,070,827 150,108,165	48% 46%	347,728,420 476,976,336	
Summer Agreements	10	179,509,704		515,519,250	5	14	150,100,105	4070	470,970,550	5
Total Exposure	72	411,457,043	100%			68	328,692,255	100%		
Other QSEs in the ERCOT Market (ERCOT owes)										
QSEs that meet ERCOT Creditworthiness Standards										
Ratings over BBB-	5	(249,807)	0%	14,624,762	U	7	(1,443,575)	-3%	21,096,707	U
<b>QSEs that do not meet ERCOT Creditworthiness Standards</b>										
Ratings below BBB- or not rated	40	(22.764.200)	5.00		G	50	(21.057.220)	600/	49 (50 (02	G
Cash & Letters of Credit Guarantee Agreements	48 10	(33,764,300) (26,036,380)	-56% -43%	26,268,660 159,700,000	S S	50 13	(31,957,330) (19,827,339)	-60% -37%	48,652,603 244,143,775	
Summer Agreenens	10	(20,030,380)	-+5/0	139,700,000	5	15	(17,027,537)	-3770	277,173,773	5
Total	63	(60,050,487)	-100%			70	(53,228,244)	-100%		
Total	135					138	]			

U: Unsecured since these QSEs meet the creditworthiness standards

S: Secured i.e. required to post collateral since these QSEs do not meet the creditworthiness standards

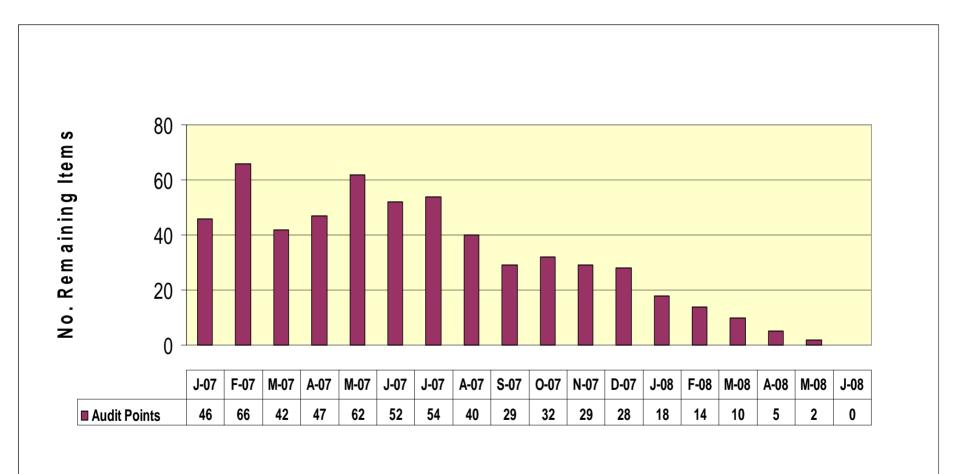
## 9. Committee Brief: ICMP – Status of Open Audit Points Cheryl Moseley





### 9. Committee Brief: ICMP Cheryl Moseley

## **Projected Audit Point Progress**





### 9. Committee Brief: Audit Cheryl Moseley

# **Audits Completed**

(last 3 months) Internal Audits

- Nodal Acctg./Allocation
- Nodal Vendor Billings
- Testing of Internal Controls
- Protocol/Market Guide Approvals/Revisions
- Operator Procedural Compliance (Limited Scope)
- Non-Nodal Vendor Billings
- Fixed Assets (Special Request)
- Nodal Infrastructure
   Purchasing (Special Request)
- Ethics Compliance (ERCOTwide)
- Debt Financing

## External Audits

• 2007 SAS70 (PwC)

# **Open Audits**

**Internal Audits** 

- Nodal Contractor Time Reporting
- Nodal Schedule & Delivery
   Time

## External Audits

- Texas Nodal Program Controls – Review #5 (IBM
- Managed by IAD)

# **Planned Audits**

#### (next 3 months) Internal Audits

- Nodal Project SOWs
- Nodal Spending
- Contractor Ethics
   Compliance
- Business Continuity/Disaster Recovery Plan
- Year-end Accruals Validations (Special Request)

# **External Audits**

 Texas Nodal Program Controls – Review #6 (IBM -Managed by IAD)

\*NOTE: Conducted by internal resources other than the Internal Audit Dept.



9. Committee Brief: Audit Cheryl Moseley

Consultation/ Analysis Reports Completed

(last 3 months)

**External Assessments** 

Open Consultation/ Analysis Reviews Planned Consultation/ Analysis Reviews (next 3 months)

External Assessments

External Assessments 1 security assessment planned



ERCOT Limited - For Discussion Purposes

		RISK		COUNCIL OF TEXAS, INC. ILE MATRIX (as of January 1st, 2	008)	
	<b>a</b>		Operational Risks			
	Strategic Risks	Operational Excellence	Market Facilitation	Grid Reliability	Reporting Risk	Legal and Regulatory Compliance Risks
orporate o corporates	Strategy Development bipictive setting adequately s informed stakeholder input, ities and management		Market design promotes efficient choice by customers of energy providers with effective mechanisms to change incumbent market participants as desired.	Grid Operations Information required to operate the grid is efficiently gathered. Appropriate tools are prudently configured to efficiently operate the system.	Review Practices Prudent measures are taken to insure that company disclosures are properly vetted and not misleading.	Legal & Legislative Operations are conducted in compliance wit laws and regulations. Impacts of current an proposed legislation are understood and communicated.
level (5-10 and busin to be exte strategic p	lanning effort only at tactical 0 years). Risk assessment ess planning horizon needs ended. Development of a plan is underway; expect to b Board during Q1'08.		Work to improve database backup processes and production failover processes in case of emergencies is on hold due to the implementation of many retail system infrastructure changes. We will implement improvements to mitigate such residual risk concerns after infrastructure changes stabilize. We currently manage disaster recovery events on a case-by-case basis and will continue to do so to meet stakeholder expectations for accurate and timely processing.	Significant improvements have been made in the State Estimator and the accuracy and availability of SCADA data in preparation for Nodal operation. An Operator Training Simulator is in place and is being used in our operator training program. Load Forecast accuracy has improved. Continued improvement must be made.		
	Mission and Goals objectives and performance are understood and followed.	Business planning, processes and management standards are effective and efficient.	Nodal Implementation Project Nodal Implementation on budget on schedule, and within defined scope.	Planning Long-range planning methods enable efficient responses to system changes that are necessary to maintain reliability standards.	Disclosure Reporting and other disclosures to intended parties is timely, accurate and effective.	Internal Control Compliance Internal Control Compliance, processes and management standards are effective and efficient.
		Disaster recovery plans are currently below desired expectations. Business Continuity Plan cordinator has been selected. Gap analysis complete. Business Impact Assessments (BIA's) complete. Working off BIA's, IT is developing recommendations to either close gaps identified or accept limited risks until nodal moved to production. Review and update of the Business Continuity Plan has been initiated.	Scope is green, budget quality and timeline remain amber. Major milestones have been reached to date. Many base systems have been delivered. Baseline 1 and 2 systems are in various delivery phases. Quality tracking has improved and metrics show varying degrees of quality across all projects. Critical items yet to be resolved include implementation of integrated testing environment (January) and resolution of common information model (CIM) importer problems.	The December update to the 2007 ERCOT Five Year plan shows higher reserve margins in the near term due to an improvement in generation outlook, but still falling below the 12.5% target in 2009 and after 2011. The CREZ Transmission Optimization Study and the surge of generation interconnection requests in the five-year horizon are tying up all available resources in System Planning.		The Internal Control department (ICMP) h an initial training plan for business proces training for certain areas. ICMP is workin with the business process owners and HF set up company-wide training for delivery 2008.
	Reputation	Workforce	Counterparty Credit	Bulk System Resources	Communication	Industry Standards
ess cost	rceptions by stakeholders lead and greater flexibility enhanced enterprise value.	Organization design, managerial and technical skills, bench strength and reward systems aligned with corporate goals.	Maintain credit risk exposure for overall market within acceptable limits.	Market Participants construct and make available adequate bulk electric grid resources.	Internal & external communications are timely and effective.	Business practices provide stakeholders wi required assurances of quality.
		We continue to face an increased demand for the skill sets of our employees. Our open positions have increased to over 55. The number of openings should decline over the next 2 months, based on historical performance. Management has also implemented some benefit modifications, employee recognition programs and minor changes to the dress policy, which have improved moral. Recently implemented a college recruiting program which has been successful in recruiting three new engineering graduates.	ERCOT is developing enhanced metrics to measure the residual credit risk assumed by market participants and the associated probabilities that the market could withstand such an event. F&A received an update on the progress of this project at it's November meeting. Final results are expected to be discussed with the Board during the first quarter 2008. A determination of the acceptable level of residual credit risk exposure will be made by the ERCOT Board of Directors.	Preparation for the ERCOT Long Term System Assessment (due in Jun'08) will begin in the first quarter of 2008. ERCOT is developing new transmission interconnection solutions for new proposed power plants included in the new CDR update, evaluating the revised methodology approved at the Dec'08 Board meeting for acquiring additional responsive reserves, and communicating the resource outlook to industry groups, regulators and other stakeholders. ERCOT is also reviewing the applicability of demand response programs towards planning reserves.		Initiation of ERO/TRE reliability standard Compliance Monitoring and Regional En Compliance Program in June introduces additional audit and penalty risks which ERCOT is still assessing. Issues raised date by the Texas RE have been addres corrected. ERCOT received an unqualifi SAS70 audit report in December.
) design	Fiscal Management requires competent, prudent fective provision of services .	Information systems, supporting facilities and data are effectively managed and are reliable.	Administration, Settlement & Billing Market rules fairly applied to all participants. Accounting is timely and accurately reflects electricity production and delivery.	Operational Responsibility Market participant conduct their operations in a manner which facilitates consistent grid reliability.	Adequacy and Integrity Robust processes exist to support management assertions embodied within financial reports.	Regulatory Filings Evidence, testimony and other supporting materials are compelling and successful.
		SAIC has completed the review of the retail systems. Several recommendations have been suggested and will be considered for future implementation. The AIX migrations continue on schedule. Most production systems have been moved to AIX and system stabilization has gone well. Wholesale system processing slowdowns have been addressed and infrastructure design changes will be implemented after January 1, 2008. Aging hardware is becoming a concern. Projects to replace older servers have been initiated while other hardware will be replaced by the Nodal project.	Delays in batch processing have been occurring since the Settlements & Billing database was migrated to AIX in late October. Analysis of the root cause of processing delays ongoing.	Response of generators and LaaRs to grid operation events has been improving. However frequency control as measured by CPS-1, while still well above NERC requirements, is on a downward trend. ERCOT Staff and the Reliability and Operations Subcommittee are investigating causes. Enhanced enforcement of NERC standards and ERCOT Protocols and Operating Guides will exist through the ERO / TRE and IMM which will provide additional incentive for improved performance. Increased wind generation will present additional operational challenges that are currently being defined in a special study which should be completed in the first quarter of 2008.		Page 25 of 46

# December 2007 Year to Date Project Activity by Division

	Phase	Not Started	Initiation	Planning	Execution	Closing	Closed	Cancelled	On Hold	Deferred	Totals by CART	Go-Live* (To Date)	Projected Go-Live (by Y.E.)
	Corporate Operations         1         1         9         11         4         4         4         0         14         48         11         11											11	
RT													7
CA	Market/Retail Operations         0         1         5         7         2         9         7         1         3         35         6         6												
	System Operations         0         0         1         4         1         13         5         0         0         24         7         7												
	TRE         0         0         1         1         0         0         2         0         0         4         1         1												
	Totals by Phase         6         2         18         37         9         28         18         1         17         136         32         32												
(CC (CC (CC (MC (SC (SC (SC (SC (TR	<ul> <li>* Note: Projects Gone Live in December 2007</li> <li>(CO) PR-50123_02 HotDocs Implementation (Go Live was Feb. 2007). This was not reported in the Feb. 2007 package</li> <li>(CO) PR-50017_02 Collateral Calculation</li> <li>(CO) PR-70051_01 Exempt / Non-Exempt</li> <li>(MORO) PR-70006_01 Website Enhancements for ERCOT Outage Notification</li> <li>(SO) PR-60082_01 Dynamic Rating Data to TSP Using ICCP Link</li> <li>(SO) PR-50024_01 Enhancements to SCR727 (Go Live was April). This was not reported in the April 2007 package</li> <li>(SO) PR-50024_02 COGNOS Infrastructure (Go Live was Nov. 2007). This was not reported in the Nov. 2007 package</li> <li>(TRE) PR-50071_01 Governor Analysis Enhancements</li> <li>(IO) PR-70026_01 Virtual Tape Backup</li> </ul>												
(IO)	PR-70049_01 SAN Hardeni	ing											
(10)													
(IO)	PR-099907 Minor Capital											00 -f 40	



PPL Iterations	Origination				Project Pha	ases				Deferred	Subtotal	Grand Total
	Origination	Not Started	Initiation	Planning	Execution	Closing	Closed	On Hold	Cancelled	Projects	Subtotal	Ofallu Total
Original 2007 Pl	PL											79
	PUCT						2		3		5	
	Market			1	2	2	1		5		11	
	ERCOT	5		9	11	1	9	1	5	17	58	
	Compliance			1	2				2		5	
	System Maintenance										0	
Unexpected Car	rry Over From 2006											22
	PUCT						2				2	
	Market				1		3		1		5	
	ERCOT				3	2	10				15	
	Compliance										0	
	System Maintenance										0	
New Projects A	dded (Since PPL Appro	oval in August	2006)									35
	PUCT				1						1	
	Market			1							1	
	ERCOT	1	2	6	17	4	1		2		33	
	Compliance										0	
	System Maintenance										0	
2007 PPL totals	to date											136
	PUCT	0	0	0	1	0	4	0	3	0	8	
	Market	0	0	2	3	2	4	0	6	0	17	
	ERCOT	6	2	15	31	7	20	1	7	17	106	
	Compliance	0	0	1	2	0	0	0	2	0	5	
	System Maintenance	0	0	0	0	0	0	0	0	0	0	
Totals by Projec	et Phase	6	2	18	37	9	28	1	18	17	136	



Page 27 of 46

# Projects Over \$1 Million

#### December 2007 Year to Date

Project (CART) Number and Description	Total Budget	Total Committed To Date	Metrics		
(Duration) Phase (Sponsor)	Scheduled Completion		Schedule	Budget	
(IO) PR-70049_01: SAN Hardening	\$880K	\$871K			
(2007) Currently in Execution (R Hinsley)	Expected Completion 4th Qtr 2007		7		
(MO/RO) PR-50024: Enhancements to SCR727 (consists of 2 sub-projects)	\$1.61M	\$1.25M			
(2005-2008) Currently in Closing/Execution (R. Giuliani)	Expected Completion 4th Qtr 2007/1st	Qtr 2008	7 🔴		
(CO) PR-60099_01: TCC2 Build-Out Phase One	\$2.65M	\$2.02M			
(2007) Currently in Execution ( B. Kahn)	Expected Completion 4th Qtr 2007	7			
(IO) PR-60055_01: Enterprise Service Management	\$1.31M	\$1.23M			
(2006-2007) Currently in Execution (R. Hinsley)	Expected Completion 4 <sup>th</sup> Qtr 2007		7 -		
(CO) PR-60075: Identity Access Management (consists of 2 sub-projects)	\$2.46M	\$1.3M			
(2006-2007) Currently in Execution ( B. Kahn)	Expected Completion 4 <sup>th</sup> Qtr 2008		7		
(IO) PR-70026: Virtual Tape	\$1.35M	\$801K			
(2007) Currently in Execution (R Hinsley)	Expected Completion 4th Qtr 2007		7		
(IO) PR-70054_01: Blade Refresh	\$2.50M	\$1.88M			
(2007-2008) Currently in Planning (R Hinsley)	Expected Completion 2nd Qtr 2008		1 🛡		
(IO) PR-70055_01: SAN Capacity (part one)	\$1.75M	\$742K			
(2007-2008) Currently in Execution (R Hinsley)	Expected Completion 1st Qtr 2008	•	1 🛡		



Page 28 of 46

#### Budget vs. Actuals for Closed in Lawson for 2007

December 2007 Year to Date

Completed			Baseline		\$ Fav/(UnFav)	% Fav/(UnFav)
Projects	Description	Implemented	Budget	Actuals	Baseline Budget	Baseline Budget
30084	CSC Thermal and Voltage Calculation and Postings	2007	263,406	321,989	(58,589)	(22)
30105	Congestion Management Reports	2007	90,127	86,716	3,384	4
40007	SCR 727 Phase II	2006	389,348	363,713	25,587	7
40070	Austin QA Buildout	2006	1,165,226	1,108,641	56,559	5
50003	MOMS - Enhancements to AREVA Study Tools	2007	1,073,389	958,712	114,688	11
50005	EDW EMMS Reports	2007	327,190	319,928	7,272	2
50007	Enhancements to FasTrak Tools	2006	2,492,935	2,629,354	(136,454)	(5)
50025	Enhance ESIID Lookup Function	2006	313,075	230,615	82,485	26
50030	Lodestar Transition to ODS	2006	181,037	115,871	65,129	36
50123	Document Management	2006	579,000	442,398	136,602	24
50130	SCE Performance Monitoring (PRR525)	2007	47,959	92,500	(44,500)	(93)
50132	Network Intru Detect and Intru Protect Sys	2005	587,976	516,565	71,435	12
50134	DC Tie Automation and Scheduling	2006	665,550	748,822	(83,222)	(13)
50137	Maestro Upgrade	2006	515,000	749,992	(234,992)	(46)
30026_01	Automate EPS Meter Data Transmittal	2006	158,302	231,651	(73,351)	(46)
40015 01	TCR Report Enhancements	2005	23,102	38,787	(15,687)	(68)
40015 02	TCR Report Enhancements PH II	2006	174,148	203,517	(29,417)	(17)
40038 01	Mass Customer Transition	2007	1,628,470	1,540,377	88,123	5
40042_06	EDW LodeStar Batch Extracts	2006	910,451	947,569	(37,069)	(4)
40090_02	Operator Training Simulator System	2007	3,848,054	3,545,483	302,617	8
50015 02	Lawson SIR - Process Flow	2006	232,943	163,709	69,191	30
50021_01	Imp Rel of Frg Input to ACG	2007	75,477	73,001	2,499	3
50121_08	End Point Services Phase II	2006	175,778	88,506	87,294	50
60002_01	Increase No of Seats for Market Clearing Engines Study	2007	103,608	86,231	17,369	17
60004 01	EIS Conformed Data Warehouse Foundations	2006	428,717	217,678	211,022	49
60016 01	Host Intrusion Detection System	2006	177,143	124,819	52,281	30
60068_01	PRR 565 and PRR 668 Mod of Distrib Loss Calc	2006	68,914	48,922	19,978	29
60076_01	Proxy Server	2006	337,706	308,283	29,417	9
60080 01	Market Operation Support Release 1	2006	267,617	172,137	95,463	36
60084 01	Mid Term Load Forecast Enhancements	2007	193,300	183,108	10,192	5
60088_01	Market Management System Expansion	2006	749,623	654,931	94,669	13
60090 01	Upgrade to Load Profiling Software	2007	140,979	111,432	29,568	21
60092 01	Storage Upgrade	2006	901,005	801,804	99,196	11
60096 01	Citrix Rebuild	2007	900,000	716,919	183,081	20
60097 01	Desktop Standardization	2007	484,130	407,511	76,589	16
60098 01	Veritas Vaulting	2006	100,000	82,279	17,721	18
60100 01	Lawson Software Procurement	2006	189,692	197,569	(7,869)	(4)
60102_01	Nodal Buildout (NP60C03_01)	2006	549,000	515,318	33,682	6
60103 01	Nodal Buildout (NP60C04 01)	2006	250,000	192,071	57,929	23
70029_01	SO Emergency Notification System	2007	290,000	265,038	24,962	9
70031_01	Spectal Hotline System Replacement	2007	195,411	236,186	(40,786)	(21)
—		Count = 41	22,244,788	20,840,652	1,404,048	6

NOTE:

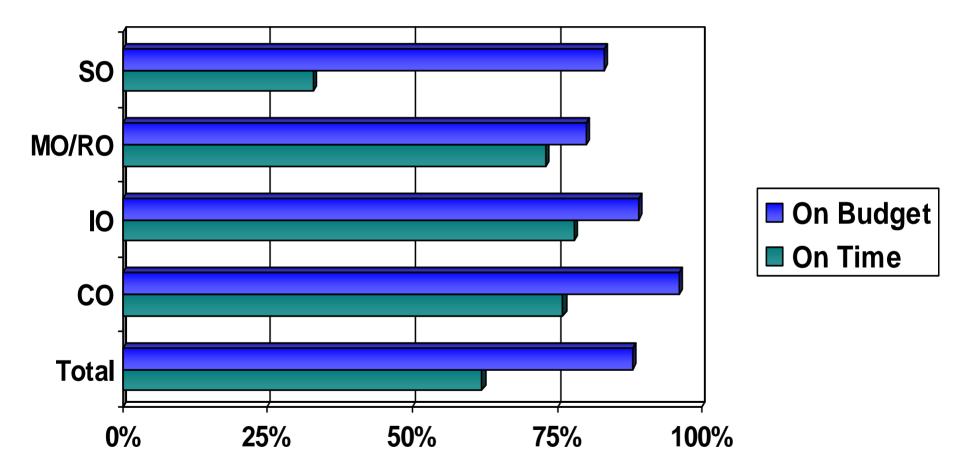
1. Baseline budget does not include change controls that were approved without granting a new baseline budget.

2. List and totals include projects delivered and reported in previous years' project management reports but closed in Lawson in 2007.

3. Fav orable is when a project is delivered under budget. (UnFav) orable is when a project is delivered over budget.



2007 Completed and Active Projects Performance





# PR-70006\_01 Website Enhancements for ERCOT Outage Notification

 Scope: A central location for outage information and notices is needed on ERCOT.com Posting an "Alert" on the website of ERCOT unplanned system outages. Including a calendar for ERCOT planned outages.

## – **Deliverables**:

Notices of ERCOT Retail Application Service interruptions on ERCOT.com Log and Calendar of planned and unplanned system outages. Solution was built in Collage. **Put in production November 28, 2007** 

**Timeline:** February 2007 – November 2007



# **Go Live Project for December**

- PR-50017\_02 Collateral Calculation
  - **Scope**: Automate QSE credit exposure collateral calculation

## - Deliverables:

- Automate calculation of Daily Total Exposure
- Post Weekly EAL Report to ERCOT Portal for QSE review

- **Timeline**: August 2005 – December 2007



- PR-70051\_01 Exempt / Non-Exempt
  - Scope: Modify payroll process support ERCOT Policy of two pay code classes: Exempt and Hourly.

- Reduce pay code classes from three (Exempt, Non-Exempt, Hourly) to two (Exempt & Hourly) to simplify payroll process
- Automate overtime calculation & employee unpaid leave calculations
- Support "Approved" hours uploaded into Lawson Payroll System from Lawson Time Entry module
- **Timeline**: October 2007 December 2007



- PR-60082\_01 Dynamic Rating Data to TSP Using ICCP Link
  - Scope: Provide ERCOT's transmission element dynamic rating data (in MVA) to the facility Transmission Service Provider (TSP) through the Inter-Control Center Protocol (ICCP) link.
  - Deliverables: An ICCP modeling tool was modified to track Dynamically Rated transmission elements. The tool maps outbound ICCP points to dynamic rating SCADA points. The HABCLINK application was utilized to transfer Dynamic Ratings to outbound ICCP. PI tags corresponding to the ICCP points were created to capture runtime history.
  - **Timeline**: July 2006 December 2007



# • PR-50071\_01 Governor Analysis Enhancements

 Scope: Provide reporting and data tools at the unit level to assess ERCOT system-wide performance during Frequency Disturbance Events.

- Integration of Governor Analysis Processbook into the PI Operations Processbook
- User Interface to input Frequency Disturbance Event information and produces Graphic and Tabular reports at the System, QSE, and Unit Levels.
- **Timeline**: January 2007 December 2007



# **Go Live Project for February**

- PR 50123\_02 HotDocs Implementation
  - Scope: The HotDocs product provides predefined and preauthorized templates and on-line interviews to accelerate and automate the creation of many types of documents.
  - **Deliverables**: Installation of the HotDocs product
  - **Timeline**: October 2006 February 2007



- PR-70049\_01: SAN Hardening
  - Scope: To provide Storage Area Network Director hardware and software to meet ERCOT's Production Reliability and Capacity needs.
  - Deliverables: Hardware and software that will meet ERCOT's current and future architectures and SAN requirements.
  - **Timeline**: October 2007 December 2007



- PR-70026\_01: Virtual Tape Backup
  - Scope: The Virtual Tape Backup Project will focus on implementing a tapeless environment to meet growing backup and restore needs, with offsite archiving and retrieval capability and retire the Powderhorn Tape Library in the Taylor Computer Center that was acquired in 2002.
  - Deliverables: Hardware and Software necessary to meet ERCOT's requirements for backup and restore capabilities.
  - **Timeline**: October 2007 December 2007



- PR-60097 Deskside Standardization
  - Scope: Deliver a standard set of hardware, OS, OS configuration, management tools and applications to the end user environment.
  - Deliverables: Deliver updated deskside systems to ERCOT end users. Implement standardized processes for building, monitoring, and maintaining deskside systems. Standardize deskside applications and user access rights.
  - **Timeline**: January 2007 December 2007



# **Go Live Project for November**

# PR-50024\_02: COGNOS Infrastructure (aka Enhancements to SCR727)

 Scope: Original scope of project was to support adhoc reporting into ERCOT via Web and Business Intelligence Services. The business scope was delivered thru parent PR50024 and SIR efforts. PR50024\_02 was rescoped to deliver hardware and software for increasing demands on these tools with Zonal and Nodal expectancies in 2007/2008.

- Install and Configure COGNOS Application Clustering and Hardware in DEV, pTEST, ITEST, and PROD
- Upgrade to Oracle Application Server 10.2.0.2 & Oracle Content Management SDK 9.0.4.2.2
- Upgrade COGNOS Business Intelligence Application from v1.1 to 8.1. COGNOS.
- **Timeline**: May 2005 November 2007



# **Project Completed in December**

# • PR-09907 – 2007 Minor Capital

 Scope: Purchase of non-project specific items such as printers, computers, software, furniture, etc. that are usually in excess of \$1000 and are considered assets to the company.

- Miscellaneous desks, chairs, monitors, software, licenses, test lab equipment, projectors, switches, power supplies, copiers, printers and other items as needed throughout the year.
- Purchased additional SAN memory to meet development capacity needs and clustered servers to resolve Retail Transaction processing performance issues
- **Timeline**: January 2007 December 2007



# Large Project Update

## • PR-60055 Enterprise Service Management

 Scope: Deliver and implement an enterprise service management suite of applications, using ITIL best practices, to track systems installations and changes and to report and track issues through resolution.

- Integration of Remedy and Aperture for Data Center Hardware Support
- Implementation of Incident and Problem Management Modules
- Installation of IBM Accelerators for Industry-Standard Incident and Problem Management Process Flows
- Implementation of Application Discovery Module to populate and maintain Configuration Management Data Base
- **Timeline**: January March 2008
- Board Request: Project expected to exceed budget. Request budget increase at Executive Session.



# **Project Update**

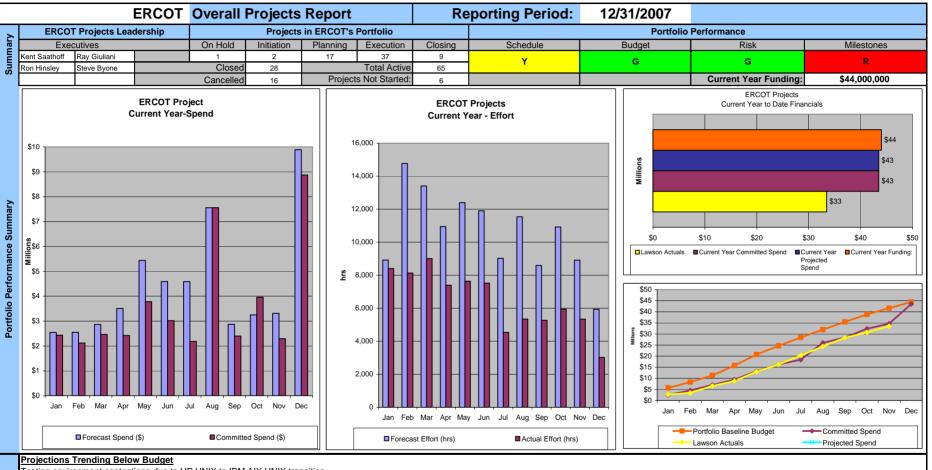
### • PR-60006\_01 ERCOT Outage Evaluation Phase II (SCR745)

ERCOT Outage Evaluation and Resolution, Phases 1 and 2, represents the implementation of SCR745 which requested an in depth analysis of ERCOT's commercial applications to determine the root causes of unplanned retail system outages. \*\*Project spend approx. \$800K to date. If project is expected to exceed \$1MM, will seek BoD approval.

- Scope: Phase II will address the single points of failure in the Paper Free application system.
- Deliverables: Implementation of a solution for application clustering and file server clustering to prevent the application servers:
  - A) from losing their mapping (file server clustering)
  - B) allow processing to continue should one application server go down (application clustering and redundancy).
- **Timeline**: January 2006 February 2008



## **ERCOT Enterprise Projects Summary Report**



Testing environment contentions due to HP UNIX to IBM AIX UNIX transition.

Resource contentions (mainly NODAL)

Projects On-Hold/Not Approved to start by sources (PUCT, Compliance, IMM).

#### Project/Status Count Variance

CO:(9 Deferred); IO:(1 NODAL in Closed); SO-DPO:(1 NODAL in Execution); SO-TRE:(1-Hold/1-Cancelled/1-Planning/ 1-Execution)); Deferred:(8-2007 PPL).



Notes

Future Agenda Items – February 2008

- Standing Internal Audit status report (s)
- Preview of Oliver Wyman report
- Update on 2007 year-end financial results
- Update on status of Nodal filing
- Update on 2009 budget schedule
- Review of external auditor guidelines for engagement and external auditor independence
- Committee briefs



# **F&A Yearly Schedule**

#### Quarter 1

- •Elect officers and confirm financial qualifications
- •Approve the Guidelines for Engagements of External auditors for Other Services (pre-approval policy)
- •Required written communication and discussion of auditor independence
- •Review scope of annual financial audit
- •Report by CWG Chair on ERCOT credit policy
- •Vote on CWG Chair/Vice Chair

#### Quarter 2

- •Report results of annual independent audit to the Board
- •Report of external auditor pre-approval status/limits
- •Review the procedures for handling reporting violations
- •Review results of annual audit (including required communications)
- •Review and approve ERCOT Annual Report (N/A)
- •Review operating plan and budget assumptions
- •Review and approve Internal Audit Department Charter
- •Annual review of insurance coverage

#### Quarter 3

- •Appoint the independent auditors for upcoming year
- •Review of committee charter
- •Approval of independent auditor fees for upcoming year
- •Assessment of compliance, the internal control environment and systems of internal controls
- •Review and approval of annual operating budget
- •Report by CWG Chair on ERCOT credit policy
- •Review updated year-end forecast

#### Quarter 4

- •Approve audit committee meeting planner for the upcoming year, confirm mutual expectations with management and the auditors
- •Review and approval of Financial & Investment policies
- •Approve scope of internal auditing plan for upcoming year
- •Assessment of the adequacy and effectiveness of the Internal Audit staff
- •Perform Finance & Audit committee Self Assessment
- •Review requirements for membership in CWG
- •Review and approve CWG charter
- •Review updated year-end forecast

#### **Recurring Items**

- •Review minutes of previous meeting
- •Report monthly matters to the Board (chair)
- •Review EthicsPoint activity
- •Review significant audit findings and status relative to annual audit plan
- •Review investment results quarterly

