



ERCOT Finance & Audit Committee Special Meeting
7620 Metro Center Drive, Austin, Texas
Met Center, Conference Room 168
April 3, 2008; 1:30pm – 4:00pm*

Item #	Agenda Item Type	Description/Purpose/Action Required	Presenter	Time
1.		Call to order General Session	C. Karnei	1:30pm
2.	For discussion	2a. Overview of preliminary 2009 budget and strategic financial plan	M. Petterson / S. Byone	
	For discussion	2b. Discussion and feedback on assumptions and policy considerations	All	
	For discussion	2c. Public feedback	C. Karnei	
	For discussion	2d. Committee feedback and next steps	C. Karnei	
		Adjourn ISO meeting	C. Karnei	4:00pm

*** 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, April 15, 2008, at ERCOT, 2705 West Lake Drive, Taylor, Texas
 76574, in TCC1 Room 254.*

Decision required
For discussion



2009 Preliminary Budget

Finance & Audit Committee - Special Meeting
April 3, 2008

Steve Byone / Mike Petterson

- **Schedule and process check**
- **Budget preparation objectives**
- **Overview of preliminary 2009 budget and strategic financial plan**
- **Discussion and feedback on assumptions and policy considerations**
- **Public feedback**
- **Committee feedback and next steps**

- **Schedule and process check**

- What has been done

- Initial Board confirmation of policy options
- Detailed management review

- Purpose of today's Special Finance & Audit Committee meeting

- Detailed review, Q&A and public feedback

- What will be done

- Incorporate feedback
- Update and conduct full Board presentation on April 15th

2a. 2009 Budget Development Schedule

Mike Petterson and Steve Byone

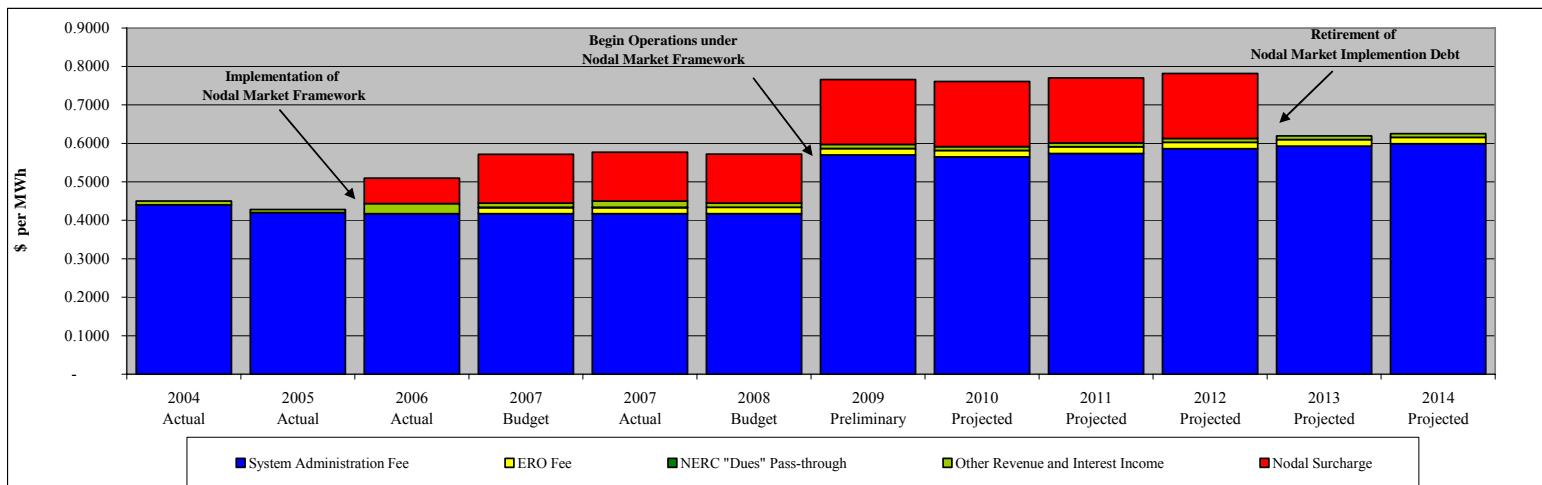
Date	Task	Status
Monday, Nov. 19	Executive Committee - 2009 Strategic Planning & Budget Discussion	√
Monday, Dec. 10	Executive Committee - 2009 Strategic Planning & Budgeting Assumptions	√
Tuesday, Feb. 19	Finance & Audit Committee Agenda - Budget/PPL Status Update	√
Tuesday, Feb. 19	Board Agenda - Strategic Planning & Budgeting Assumptions <i>(briefing & request for public comment)</i>	√
Thursday, Feb. 28	Budget Kick-off Meeting	√
Monday, Mar. 3 - Friday, Mar. 7	Departmental Compilation and Director/VP Review	√
Friday, Mar. 7	Submit Departmental Budget Request	√
Monday, Mar. 10 - Tuesday, Mar. 11	Calculate & Compile DRAFT Categorical Budget (Budget staff)	√
Tuesday, Mar. 11	PUCT Staff - Assumption & Timeline Discussion	√
Wednesday, Mar. 12 - Friday, Mar. 14	Preliminary Budget Review by Office-- VP/Director/Manager Budget Revisions (as necessary)	√
Monday, Mar. 17	Executive Committee Review - Consolidated Schedules	√
Tuesday, Mar. 18	Begin Testimony Preparation	Ongoing
Tuesday, Mar. 18	Finance & Audit Committee Agenda - Preliminary Budget/PPL Presentation <i>(Courtesy copy to all Board members)</i>	√
Tuesday, Mar. 18	Public Meeting - Preliminary 2009 Budget Presentation <i>(in conjunction w/Finance & Audit Committee Meeting)</i>	√
Wednesday, Mar. 19 - Friday, Apr. 4	PUCT Staff Review	Ongoing
Thursday, Apr. 3	Finance & Audit Committee Special Meeting - 2009 Budget Review	
Friday, Apr. 4	Testimony - 1st Draft Due	
Tuesday, Apr. 15	Board Agenda - Finance & Audit Committee 2009 Budget Recommendation & Board Review	
Friday, May 9	Testimony Finalized	
Tuesday, May 20	Board Agenda - 2009 Budget Approval/Vote	
Wednesday, May 21 - Wednesday, May 28	Review and Finalize PUCT Fee Filing	
Friday, May 30	PUCT Fee Filing	

- **Provide high-value, cost-effective service to the citizens of Texas**
- **Provide market participants predictable, stable fees**
- **Control costs while:**
 - Maintaining grid reliability
 - Maintaining and supporting the wholesale market and the retail market
 - Maintaining critical information technology infrastructure
 - Ensuring business controls and oversight
- **Accurately anticipate resource requirements in response to regular and substantial market changes:**
 - Effective operations within a Nodal market framework
 - New protocol revisions
 - Legislative action

The preliminary 2009 budget

- **Assumes operations within a nodal market framework**
- **Funds resources necessary to fulfill legislative obligations and responsibilities (SB 7)**
- **Funds priority projects approved through the Technical Advisory Committee process**
- **Provides direct funding and support of the independent market monitoring function**
- **Funds the PURA functions of the Texas RE**
- **Funds resources necessary to comply with new federal reliability and security mandates**

Historical and Projected Fee



Line	(\$ per MWh)	2004 Actual	2005 Actual	2006 Actual	2007 Budget	2007 Actual	2008 Budget	2009 Preliminary	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected
1	System Administration Fee	0.4400	0.4200	0.4171	0.4171	0.4171	0.4171	0.5698	0.5646	0.5740	0.5860	0.5929	0.5988
2	Other Revenue and Interest Income	0.0103	0.0077	0.0263	0.0105	0.0160	0.0110	0.0105	0.0102	0.0100	0.0099	0.0097	0.0095
3	ERO Fee	0.0000	0.0000	0.0000	0.016	0.0160	0.0169	0.0169	0.0169	0.0169	0.0169	0.0169	0.0169
4	NERC "Dues" Pass-through	0.0000	0.0000	0.0000	0.0010	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	Subtotal	0.4503	0.4277	0.4434	0.4446	0.4501	0.4450	0.5971	0.5918	0.6010	0.6128	0.6195	0.6253
6	Nodal Surcharge	0.0000	0.0000	0.0663	0.1270	0.1270	0.1270	0.1690	0.1690	0.1690	0.1690	0.0000	0.0000
7	Total	0.4503	0.4277	0.5097	0.5716	0.5771	0.5720	0.7661	0.7608	0.7700	0.7818	0.6195	0.6253
8	MWh	288,291,328	298,782,420	304,373,763	319,399,903	305,482,175	313,723,759	319,088,823	326,056,929	332,575,434	338,312,141	344,156,776	349,877,783

Notes:

- (1) System Administration Fee covers ERCOT's base operations and interdependent projects.
- (2) Other revenue and interest income is comprised of wide-area network revenue, non-ERCOT load serving entity revenue, generation interconnection revenue, membership dues, map sales, interest income, and other non-operating income.
- (3) ERO Fee commenced in 2007. The method by which the ERO Fee is assessed and collected is subject to an active Protocol Revision Request (PRR 720).
- (4) NERC "Dues" Pass Through was reflected in the System Administration Fee until 2007. In 2007, the System Administration Fee includes approximately \$963,000 for "NERC Dues". New responsibility and reorganizations at NERC resulted in significant increases to the organization's dues assessments.
- (5) The Nodal Surcharge will remain in effect until the costs of implementing the Nodal Program, as approved by the Public Utility Commission of Texas, are fully recovered. It is currently expected the Nodal Surcharge will cease to be collected in late 2012. Surcharge increase to .169 currently under review by PUCT.

2a. Overview of Preliminary 2009 Budget & Strategic Financial Plan

Mike Petterson and Steve Byone

- ERCOT region fees - approximate impact on Average Household

Fee Description	2008			2009 (preliminary)			2013 (preliminary)		
	Fees per MWh*	Per Month (1000 KWh/month)	Per Year (1000 KWh/month)	Fees per MWh	Per Month (1000 KWh/month)	Per Year (1000 KWh/month)	Fees per MWh	Per Month (1000 KWh/month)	Per Year (1000 KWh/month)
System Administration Fee	\$0.4171	\$0.42	\$5.04	\$0.5698	\$0.57	\$6.84	\$0.5929	\$0.59	\$7.08
Nodal Surcharge	\$0.1540	\$0.15	\$1.80	\$0.1690	\$0.17	\$2.04	\$0.0000	\$0.00	\$0.00
NERC ERO Reliability Fee (Federally mandated; ERCOT collects it but has no control over it)	\$0.0169	\$0.02	\$0.20	\$0.0169	\$0.02	\$0.20	\$0.0169	\$0.02	\$0.20
TOTAL	\$0.5880	\$0.59	\$7.04	\$0.7557	\$0.76	\$9.08	\$0.6098	\$0.61	\$7.28

* Average of 2008 expected fees, based on current filings

- **Previous policy decisions drive ERCOT funding requirements**
 - Operation within the protocols (now Nodal)
 - Significant new functions necessary for Nodal operations
 - Primary cost drivers:
 - » Staffing new functions
 - » Required new technology applications/systems
 - » Facilities to house new staff and systems
 - » One-time items for Nodal stabilization
 - Facilities
 - New space demands are a function of Nodal
 - Data center space for Nodal servers
 - Incremental Nodal staffing
 - MET Center lease is expiring
 - Opportunity to simultaneously address security concerns
 - Mandates from Energy Policy Act (Reliability and Security)
 - Board Financial Policy
 - Project equity contribution rates (40% equity funding)
 - Debt amortization (extinguished by end of asset useful life)

- **Base Budget - Operating Expenses**

- Staffing

- 736 employees
- Employee benefits assumed at 33% of base salaries
- Average annual merit award consistent with long-term market trend assumed at 3% of base salaries
- Average annual allowance for employee promotions and other market adjustments assumed at 2% of base salaries
- Reward & Recognition program assumed at 2% of base salaries
- Vacancy savings assumed at 7% of base salaries
- Labor allocated to project priority list activity based on managers' resource allocation

- Consultants and contractors

- Based on specific requests

- Hardware and software maintenance and support

- Based on specific identification by information technology staff

2a. Discussion and Feedback on Assumptions

Mike Petterson and Steve Byone

- Interest cost
 - Based on outstanding debt projections
- All other categories
 - Increased for average long-term inflation of approximately 2.1% per year based on CPI
- **Project expenditures**
 - \$47.6 million planned for 2009
 - Met Center – \$20.4M
 - All Other – \$27.2M
 - Assumed 40% revenue-funded and 60% debt-funded
 - Reviewed by market committees
- **Energy consumption**
 - Approximately 1.7% MWh growth from 2008 projections based on preliminary analysis prepared by ERCOT's planning staff

Fee Sensitivity Analysis

\$.01 of System Administration Fee equals:

- \$3.2 million of operating expense
 - $\$3.2 \text{ million} / 319,088,823 \text{ MWh} = \$0.01 / \text{MWh}$
 - 29.8 positions (Average Annual Salary of \$107,500)
(includes benefits and employee expenses)
- \$8 million of capital spending
 - 60% leverage (40% equity funding * \$8 million = \$3.2 million)
- 5.6 GWh
 - 1.76% deviation from MWh expected
 - Calculations:
 - $\$3.2 \text{ million} / \$05698 \text{ per MWh} = 5.6 \text{ GWh}$
 - $5.6 \text{ GWh} / 319 \text{ GWh} = 1.76\%$



Public feedback



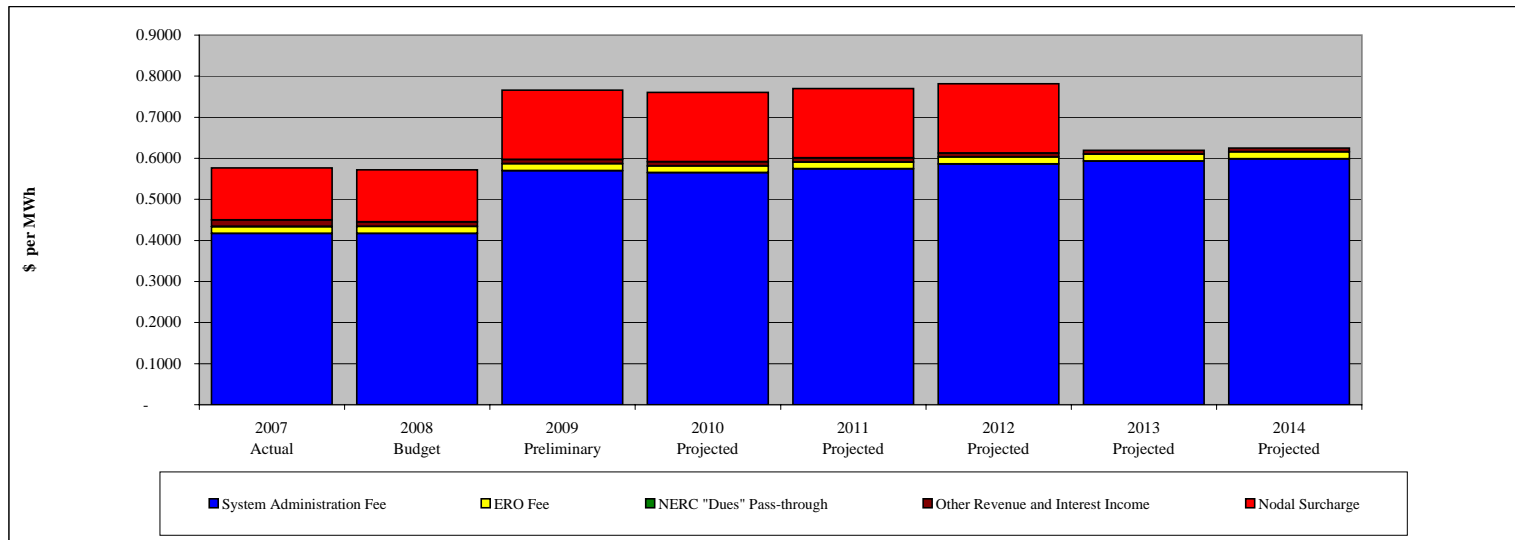
Committee Feedback and Next Steps



Appendix A

Preliminary 2009 budget schedules are presented on the following pages.

ERCOT Fiscal Year 2009 Budget
All ERCOT Income on a per MWh Basis

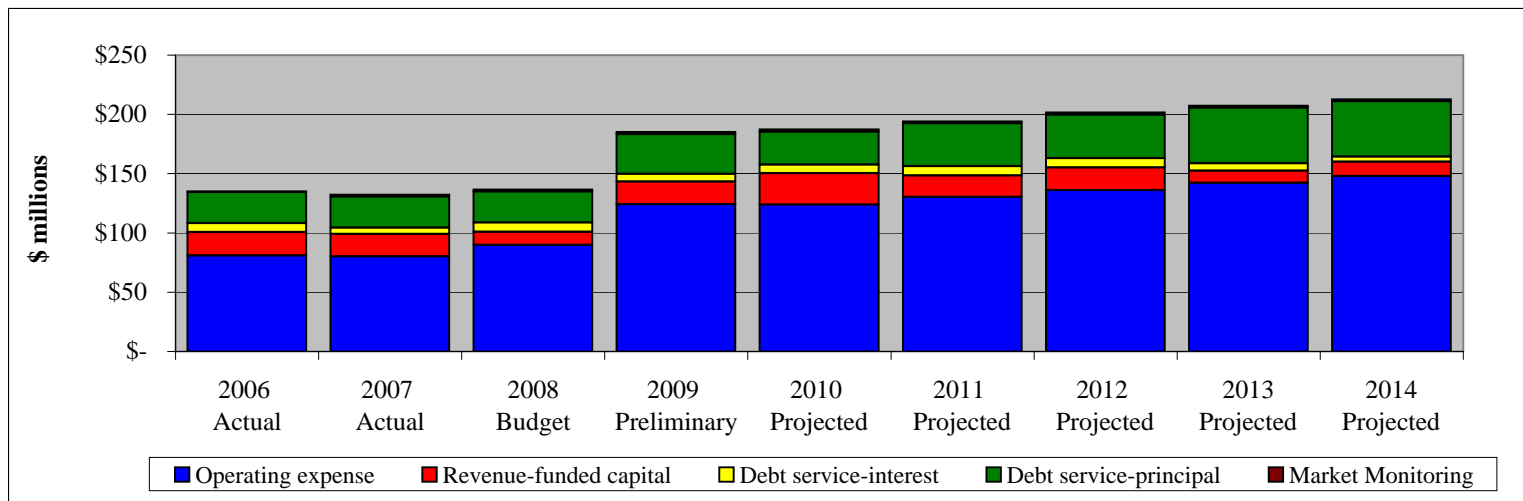


Line (\$ per MWh)	Note	2007 Actual	2008 Budget	2009 Preliminary	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected
1 System Administration Fee	(1)	0.4171	0.4171	0.5698	0.5646	0.5740	0.5860	0.5929	0.5988
2 Other Revenue and Interest Income	(2)	0.0160	0.0110	0.0105	0.0102	0.0100	0.0099	0.0097	0.0095
3 ERO Fee	(3)	0.0158	0.0169	0.0169	0.0169	0.0169	0.0169	0.0169	0.0169
4 NERC "Dues" Pass-through	(4)	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5 Subtotal		0.4499	0.4450	0.5971	0.5918	0.6010	0.6128	0.6195	0.6253
6 Nodal Surcharge	(5)	0.1270	0.1270	0.1690	0.1690	0.1690	0.1690	0.0000	0.0000
7 Total		0.5769	0.5720	0.7661	0.7608	0.7700	0.7818	0.6195	0.6253
8 MWh		305,482,175	313,723,759	319,088,823	326,056,929	332,575,434	338,312,141	344,156,776	349,877,783

Notes:

- (1) System Administration Fee covers ERCOT's base operations and interdependent projects.
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ERCOT Fiscal Year 2009 Budget
Revenue Requirement and ERCOT System Administration Fee Summary



Line	2006	2007	2008	2009	2010	2011	2012	2013	2014
(\$Millions)	Actual	Actual	Budget	Preliminary	Projected	Projected	Projected	Projected	Projected
1 Operating expense	80.9	80.1	89.9	124.3	123.8	130.3	136.2	142.2	148.1
2 Revenue-funded capital	19.7	19.0	11.0	19.0	26.6	18.1	19.0	10.3	12.0
3 Debt service-interest	7.6	5.5	7.9	6.5	7.4	8.0	7.9	6.1	4.4
4 Debt service-principal	26.1	26.1	26.1	33.6	27.9	36.1	36.8	47.0	46.6
5 Market Monitoring	0.6	1.7	1.8	1.7	1.9	1.7	1.7	1.7	1.7
6 Total revenue requirement	134.9	132.3	136.7	185.1	187.4	194.2	201.6	207.4	212.8
7 GWh	304.4	305.5	319.4	319.1	326.1	332.6	338.3	344.2	349.9
8 System Administration Fee	\$0.4171	\$0.4171	\$0.4171	\$0.5698	\$0.5646	\$0.5740	\$0.5860	\$0.5929	\$0.5988
9									
10 Total Project Spending	34.5	42.9	33.7	47.6	66.4	45.4	47.5	25.9	30.0
11									
12 (\$ / MWh)									
13 Operating expense	0.25	0.2524	0.2743	0.3824	0.3729	0.3850	0.3959	0.4065	0.4165
14 Revenue-funded capital	0.06	0.0599	0.0336	0.0586	0.0800	0.0536	0.0553	0.0296	0.0338
15 Debt service-interest	0.02	0.0172	0.0241	0.0201	0.0221	0.0237	0.0229	0.0175	0.0125
16 Debt service-principal	0.08	0.0824	0.0798	0.1034	0.0840	0.1067	0.1070	0.1345	0.1312
17 Market Monitoring	0.00	0.0052	0.0053	0.0052	0.0056	0.0050	0.0049	0.0049	0.0048
18 Total revenue requirement	\$0.4171	\$0.4171	\$0.4171	\$0.5698	\$0.5646	\$0.5740	\$0.5860	\$0.5929	\$0.5988

Note:

- (1) Other revenue will supplement System Administration Fee to meet total funding requirement.
- (2) Revenues collected in excess of funding requirement are utilized to reduce debt funding.
- (3) 2008 Total Project Spending includes \$6.2 million for the Met Center which was authorized subsequent to the 2008 Budget approval and has been reflected as 100% debt funded.

ERCOT Fiscal Year 2009 Budget

Revenue Requirement and ERCOT System Administration Fee Summary Table

(in thousands)

Line	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected
1	ERCOT O&M Expense								
2	\$ 59,131	\$ 69,765	80,027	\$ 85,812	\$ 90,103	\$ 94,608	\$ 99,338	\$ 104,305	\$ 109,520
3	(4,396)	(2,841)	(4,718)	(9,595)	(8,469)	(8,620)	(8,778)	(8,945)	(9,119)
4	(4,984)	(12,523)	(17,178)	-	-	-	-	-	-
5	49,751	54,401	58,131	76,217	81,633	85,988	90,560	95,360	100,401
6	(1,673)	(4,937)	(1,673)	-	-	-	-	-	-
7	(403)	(1,593)	(1,545)	-	-	-	-	-	-
8	(120)	(2,813)	(2,500)	-	-	-	-	-	-
9	(2,196)	(9,342)	(5,718)	-	-	-	-	-	-
10	1,093	1,296	1,127	1,249	1,275	1,302	1,329	1,357	1,387
11	7,740	9,406	9,304	13,816	16,060	17,294	17,915	18,453	19,006
12	9,104	11,234	12,850	17,887	9,420	9,060	9,356	9,596	9,410
13	575	-	-	-	-	-	-	-	-
14	6,940	6,919	7,460	8,713	8,896	9,999	10,254	10,516	10,790
15	1,677	1,692	2,250	1,810	1,848	1,887	1,927	1,967	2,011
16	1,260	1,394	2,016	1,840	1,877	1,914	1,953	1,992	2,032
17	998	903	1,100	1,500	1,532	1,564	1,596	1,630	1,666
18	965	963	-	-	-	-	-	-	-
19	3,018	1,189	1,346	1,225	1,251	1,277	1,304	1,331	1,360
20	80,923	80,054	89,866	124,257	123,792	130,284	136,194	142,202	148,062
21	7,632	5,471	7,905	6,547	7,352	8,018	7,884	6,105	4,448
22	26,137	26,137	26,137	33,600	27,900	36,100	36,800	47,040	46,640
23	19,658	18,983	11,000	10,880	15,310	17,660	19,010	10,340	12,000
24	-	-	-	8,160	11,240	480	-	-	-
25	600	1,650	1,750	1,700	1,850	1,700	1,700	1,700	1,700
26	134,950	132,295	136,657	185,144	187,444	194,242	201,588	207,388	212,849
27	5,795	3,737	2,642	3,089	3,089	3,089	3,089	3,089	3,089
28	2,200	1,138	800	250	250	250	250	250	250
29	\$ 126,955	\$ 127,420	\$ 133,215	\$ 181,805	\$ 184,105	\$ 190,902	\$ 198,249	\$ 204,048	\$ 209,510
30	304,374	305,482	319,400	319,089	326,057	332,575	338,312	344,157	349,878
31	1.9%	0.4%	4.6%	1.7%	2.2%	2.0%	1.7%	1.7%	1.7%
32	\$ 0.4171	\$ 0.4171	\$ 0.4171	\$ 0.5698	\$ 0.5646	\$ 0.5740	\$ 0.5860	\$ 0.5929	\$ 0.5988
33	19,658	18,983	11,000	10,880	15,310	17,660	19,010	10,340	12,000
34	57%	44%	40%	40%	40%	40%	40%	40%	40%
35	14,807	23,888	16,500	16,320	22,965	26,490	28,515	15,510	18,000
36	43%	56%	60%	60%	60%	60%	60%	60%	60%
37	34,465	42,871	27,500	27,200	38,275	44,150	47,525	25,850	30,000
38	-	-	-	8,160	11,240	480	-	-	-
39	-	-	-	40%	40%	40%	-	-	-
40	-	-	6,200	12,240	16,860	720	-	-	-
41	-	-	100%	60%	60%	60%	-	-	-
42	-	-	6,200	20,400	28,100	1,200	-	-	-
43	34,465	42,871	33,700	47,600	66,375	45,350	47,525	25,850	30,000
44	149,757	156,183	159,357	213,704	227,269	221,452	230,103	222,898	230,849

**ERCOT Fiscal Year 2009 Budget
Expenditure Summary by Office**

	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
ERCOT						
<i>Labor & Benefits</i>	59,131,229	69,764,979	80,026,643	85,812,043	5,785,399	7.2%
<i>Labor for Capital Projects</i>	(4,395,649)	(2,840,780)	(4,717,804)	(9,595,313)	(4,877,509)	103.4%
<i>Labor for Nodal</i>	(4,984,423)	(12,523,443)	(17,177,910)	-	17,177,910	-100.0%
<i>Subtotal - Labor & Benefits</i>	49,751,158	54,400,757	58,130,929	76,216,730	18,085,801	31.1%
<i>Support Allocations - Nodal Program</i>	(1,673,237)	(4,936,766)	(1,673,212)	-	1,673,212	-100.0%
<i>Backfill Allocations - Nodal Program</i>	(402,772)	(1,592,512)	(1,545,000)	-	1,545,000	-100.0%
<i>Facilities Allocations - Nodal Program</i>	(120,484)	(2,813,090)	(2,500,000)	-	2,500,000	-100.0%
<i>Subtotal - Allocations - Nodal Program</i>	(2,196,493)	(9,342,368)	(5,718,212)	-	5,718,212	-100.0%
<i>Material, Supplies, Tools & Equipment</i>	1,092,541	1,295,740	1,126,860	1,248,537	121,677	10.8%
<i>Special Reviews</i>	575,026	-	-	-	-	NA
<i>Outside Services</i>	9,703,961	12,883,622	14,600,214	19,586,669	4,986,455	34.2%
<i>Utilities, Maintenance & Facilities</i>	6,939,517	6,919,240	7,459,650	8,713,480	1,253,830	16.8%
<i>HW/SW License and Maintenance</i>	7,740,246	9,405,715	9,303,714	13,816,433	4,512,719	48.5%
<i>Insurance</i>	1,676,549	1,691,854	2,250,000	1,810,369	(439,631)	-19.5%
<i>Employee Expenses</i>	1,259,905	1,393,957	2,016,283	1,840,000	(176,283)	-8.7%
<i>Interest & Fees</i>	7,631,714	5,470,556	7,904,525	6,547,275	(1,357,250)	-17.2%
<i>Property Taxes</i>	997,716	903,497	1,100,000	1,500,000	400,000	36.4%
<i>NERC Dues</i>	964,808	963,138	-	-	-	NA
<i>Other</i>	3,018,129	1,188,998	1,346,360	1,224,960	(121,400)	-9.0%
Total - ERCOT	89,154,777	87,174,707	99,520,323	132,504,453	32,984,130	33.1%

ERCOT Fiscal Year 2009 Budget
Expenditure Summary by Office

	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
Corporate Administration						
<i>Labor & Benefits</i>	11,049,982	13,949,803	13,622,271	12,735,983	(886,288)	-6.5%
<i>Labor for Capital Projects</i>	39,685	(111,557)	(1,030,393)	(559,559)	470,834	-45.7%
<i>Labor for Nodal</i>	(268,250)	(512,009)	(339,708)	-	339,708	-100.0%
<i>Subtotal - Labor & Benefits</i>	10,821,418	13,326,237	12,252,170	12,176,424	(75,746)	-0.6%
<i>Support Allocations - Nodal Program</i>	(1,039,174)	(3,272,773)	(1,192,212)	-	1,192,212	-100.0%
<i>Backfill Allocations - Nodal Program</i>	(21,885)	(90,383)	(100,000)	-	100,000	-100.0%
<i>Facilities Allocations - Nodal Program</i>	(120,484)	(1,681,864)	(1,500,000)	-	1,500,000	-100.0%
<i>Subtotal - Allocations - Nodal Program</i>	(1,181,543)	(5,045,020)	(2,792,212)	-	2,792,212	-100.0%
<i>Material, Supplies, Tools & Equipment</i>	652,371	912,832	751,355	852,832	101,477	13.5%
<i>Special Reviews</i>	575,026	-	-	-	-	NA
<i>Outside Services</i>	5,756,207	5,023,295	4,388,118	5,325,950	937,832	21.4%
<i>Utilities, Maintenance & Facilities</i>	3,526,880	4,257,017	4,172,000	4,933,500	761,500	18.3%
<i>HW/SW License and Maintenance</i>	104,181	54,948	-	-	-	NA
<i>Insurance</i>	1,676,549	1,691,854	2,250,000	1,810,369	(439,631)	-19.5%
<i>Employee Expenses</i>	287,613	338,527	403,149	340,000	(63,149)	-15.7%
<i>Interest & Fees</i>	7,631,714	5,470,556	7,904,525	6,547,275	(1,357,250)	-17.2%
<i>Property Taxes</i>	997,716	903,497	1,100,000	1,500,000	400,000	36.4%
<i>NERC Dues</i>	964,808	-	-	-	-	NA
<i>Other</i>	2,354,972	603,057	780,710	837,110	56,400	7.2%
Total - Corporate Administration	34,167,912	27,536,800	31,209,815	34,323,460	3,113,645	10.0%

ERCOT Fiscal Year 2009 Budget
Expenditure Summary by Office

	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
Information Technology						
<i>Labor & Benefits</i>	18,098,033	21,590,698	25,444,080	30,384,235	4,940,154	19.4%
<i>Labor for Capital Projects</i>	(2,707,320)	(1,403,236)	(1,186,549)	(4,892,888)	(3,706,339)	312.4%
<i>Labor for Nodal</i>	(2,226,401)	(6,106,911)	(7,684,315)	-	7,684,315	-100.0%
Subtotal - Labor & Benefits	13,164,312	14,080,551	16,573,216	25,491,347	8,918,130	53.8%
<i>Support Allocations - Nodal Program</i>	(65,628)	(287,931)	(75,000)	-	75,000	-100.0%
<i>Backfill Allocations - Nodal Program</i>	(45,866)	(374,372)	(445,000)	-	445,000	-100.0%
<i>Facilities Allocations - Nodal Program</i>	-	(1,131,226)	(1,000,000)	-	1,000,000	-100.0%
Subtotal - Allocations - Nodal Program	(111,494)	(1,793,529)	(1,520,000)	-	1,520,000	-100.0%
<i>Material, Supplies, Tools & Equipment</i>	368,656	347,177	343,805	350,505	6,700	1.9%
<i>Special Reviews</i>	-	-	-	-	-	NA
<i>Outside Services</i>	1,045,059	2,279,701	2,836,830	7,676,940	4,840,110	170.6%
<i>Utilities, Maintenance & Facilities</i>	3,283,139	2,644,909	3,247,050	3,739,230	492,180	15.2%
<i>HW/SW License and Maintenance</i>	7,634,923	9,328,909	9,303,714	13,816,433	4,512,719	48.5%
<i>Insurance</i>	-	-	-	-	-	NA
<i>Employee Expenses</i>	397,326	378,489	572,400	592,500	20,100	3.5%
<i>Depreciation & Amortization</i>	-	-	-	-	-	NA
<i>Interest & Fees</i>	-	-	-	-	-	NA
<i>Property Taxes</i>	-	-	-	-	-	NA
<i>NERC Dues</i>	-	-	-	-	-	NA
<i>Other</i>	329,747	297,371	148,550	148,150	(400)	-0.3%
Total - Information Technology	26,111,669	27,563,578	31,505,566	51,815,105	20,309,539	64.5%

**ERCOT Fiscal Year 2009 Budget
Expenditure Summary by Office**

	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
Market Operations						
<i>Labor & Benefits</i>	13,504,416	14,988,182	17,817,461	17,791,719	(25,742)	-0.1%
<i>Labor for Capital Projects</i>	(1,350,328)	(1,068,324)	(2,410,954)	(3,371,550)	(960,596)	39.8%
<i>Labor for Nodal</i>	(1,155,163)	(2,953,403)	(4,362,773)	-	4,362,773	-100.0%
Subtotal - Labor & Benefits	10,998,926	10,966,455	11,043,735	14,420,169	3,376,435	30.6%
<i>Support Allocations - Nodal Program</i>	(309,998)	(844,171)	(110,000)	-	110,000	-100.0%
<i>Backfill Allocations - Nodal Program</i>	(334,490)	(999,015)	(600,000)	-	600,000	-100.0%
<i>Facilities Allocations - Nodal Program</i>	-	-	-	-	-	NA
Subtotal - Allocations - Nodal Program	(644,488)	(1,843,186)	(710,000)	-	710,000	-100.0%
<i>Material, Supplies, Tools & Equipment</i>	28,088	10,245	14,050	20,300	6,250	44.5%
<i>Special Reviews</i>	-	-	-	-	-	NA
<i>Outside Services</i>	1,830,583	2,746,695	3,291,792	2,589,460	(702,332)	-21.3%
<i>Utilities, Maintenance & Facilities</i>	29,497	16,048	40,600	40,750	150	0.4%
<i>HW/SW License and Maintenance</i>	401	9,656	-	-	-	NA
<i>Insurance</i>	-	-	-	-	-	NA
<i>Employee Expenses</i>	229,203	310,046	458,302	392,500	(65,802)	-14.4%
<i>Interest & Fees</i>	-	-	-	-	-	NA
<i>Property Taxes</i>	-	-	-	-	-	NA
<i>NERC Dues</i>	-	-	-	-	-	NA
<i>Other</i>	106,941	93,281	164,100	164,600	500	0.3%
Total - Market Operations	12,579,152	12,309,241	14,302,579	17,627,779	3,325,201	23.2%

ERCOT Fiscal Year 2009 Budget
Expenditure Summary by Office

	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
System Operations						
<i>Labor & Benefits</i>	16,478,797	19,236,296	23,142,831	24,900,106	1,757,275	7.6%
<i>Labor for Capital Projects</i>	(377,686)	(257,663)	(89,908)	(771,316)	(681,408)	757.9%
<i>Labor for Nodal</i>	(1,334,609)	(2,951,120)	(4,791,115)	-	4,791,115	-100.0%
<i>Subtotal - Labor & Benefits</i>	14,766,502	16,027,513	18,261,808	24,128,790	5,866,982	32.1%
<i>Support Allocations - Nodal Program</i>	(258,437)	(531,891)	(296,000)	-	296,000	-100.0%
<i>Backfill Allocations - Nodal Program</i>	(532)	(128,742)	(400,000)	-	400,000	-100.0%
<i>Facilities Allocations - Nodal Program</i>	-	-	-	-	-	NA
<i>Subtotal - Allocations - Nodal Program</i>	(258,969)	(660,633)	(696,000)	-	696,000	-100.0%
<i>Material, Supplies, Tools & Equipment</i>	43,425	25,486	17,650	24,900	7,250	41.1%
<i>Special Reviews</i>	-	-	-	-	-	NA
<i>Outside Services</i>	1,072,112	2,833,931	4,083,474	3,994,319	(89,155)	-2.2%
<i>Utilities, Maintenance & Facilities</i>	100,000	1,267	-	-	-	NA
<i>HW/SW License and Maintenance</i>	742	12,202	-	-	-	NA
<i>Insurance</i>	-	-	-	-	-	NA
<i>Employee Expenses</i>	345,763	366,895	582,432	515,000	(67,432)	-11.6%
<i>Interest & Fees</i>	-	-	-	-	-	NA
<i>Property Taxes</i>	-	-	-	-	-	NA
<i>NERC Dues</i>	-	963,138	-	-	-	NA
<i>Other</i>	226,469	195,289	253,000	75,100	(177,900)	-70.3%
Total - System Operations	16,296,044	19,765,088	22,502,364	28,738,109	6,235,746	27.7%

**ERCOT Fiscal Year 2009 Budget
Staffing Summary by Office (Full Time Equivalency)**

	Funding				Full Time Equivalency			
	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary
ERCOT								
<i>Base Operations</i>	49,751,158	54,400,757	58,130,929	76,216,730	477	477	518	655
<i>Base Projects</i>	4,395,649	2,840,780	4,717,804	9,595,313	37	24	40	81
<i>Nodal Program</i>	4,984,423	12,523,443	17,177,910	-	42	106	145	-
<i>Labor & Benefits Total</i>	59,131,229	69,764,979	80,026,643	85,812,043	556	607	703	736
Corporate Administration								
<i>Base Operations</i>	10,821,418	13,326,237	12,252,170	12,176,424	111	109	119	131
<i>Base Projects</i>	(39,685)	111,557	1,030,393	559,559	-	1	9	5
<i>Nodal Program</i>	268,250	512,009	339,708	-	2	4	3	-
<i>Labor & Benefits Total</i>	11,049,982	13,949,803	13,622,271	12,735,983	113	114	131	136
Information Technology								
<i>Base Operations</i>	13,164,312	14,080,551	16,573,216	25,491,347	121	119	137	196
<i>Base Projects</i>	2,707,320	1,403,236	1,186,549	4,892,888	23	12	10	41
<i>Nodal Program</i>	2,226,401	6,106,911	7,684,315	-	19	52	65	-
<i>Labor & Benefits Total</i>	18,098,033	21,590,698	25,444,080	30,384,235	163	182	212	237
Market Operations								
<i>Base Operations</i>	10,998,926	10,966,455	11,043,735	14,420,169	106	106	107	129
<i>Base Projects</i>	1,350,328	1,068,324	2,410,954	3,371,550	11	9	20	29
<i>Nodal Program</i>	1,155,163	2,953,403	4,362,773	-	10	25	37	-
<i>Labor & Benefits Total</i>	13,504,416	14,988,182	17,817,461	17,791,719	127	140	164	157
System Operations								
<i>Base Operations</i>	14,766,502	12,879,166	13,447,228	17,950,460	139	117	116	152
<i>Base Projects</i>	377,686	212,751	89,908	747,656	3	2	1	6
<i>Nodal Program</i>	1,334,609	2,578,378	4,482,283	-	11	22	38	-
<i>Labor & Benefits Total</i>	16,478,797	15,670,295	18,019,419	18,698,116	153	141	155	158
System Planning								
<i>Base Operations</i>	-	3,148,347	4,814,580	6,178,330	-	27	38	48
<i>Base Projects</i>	-	44,912	-	23,660	-	-	-	-
<i>Nodal Program</i>	-	372,742	308,832	-	-	3	3	-
<i>Labor & Benefits Total</i>	-	3,566,001	5,123,413	6,201,990	-	30	41	48

Notes:

- (1) Data based on the organizational structure as it existed (exists) each year.
(2) System Operations includes System Planning for years prior to 2007.

**ERCOT Fiscal Year 2009 Budget
Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
1	IO	300	Nodal post Go-Live Fixes and Enhancements	2,188,280	Anticipated need to fund Nodal market systems vendors professional services for post-go live bug fixes	Lack of internal expertise with these vendor systems and anticipated volume of work	Delayed delivery of bug fixes during the post nodal go live stabilization period
2	SO	410	Potomac Economics - Independent Market Monitor (IMM) Fees - contract in place	1,700,000	The Independent Market Monitor is responsible for monitoring the wholesale electricity market in the ERCOT power region, including all markets for energy, ancillary services, and congestion revenue rights, and monitoring all aspects of ERCOT's operations that effect supply, demand, and the efficient functioning of the competitive wholesale electricity market.	Independent third party monitoring is required for compliance.	ERCOT would be out of compliance.
3	MO	630	Outsourced 24X7 call center; postcard printing and mailing; switch cancellation processing and databases services.	1,263,960	This activity is required under the ERCOT Protocols and the Public Utility Regulatory Act as stated in the Customer Protection Rules of the Public Utility Commission of Texas.	This function would require ERCOT to operate and maintain a 24X7 customer call center, as well as operate a mass volume printing and mailing service for the creation and distribution of the daily notices. To date, the outsourced solution has been a more viable option from a cost perspective.	Non-compliance of protocols and state utility regulations.
4	MO	550	Zonal backfill for Nodal transition - 9 contractors	1,007,100	ERCOT will maintain both zonal and nodal activities for at least the first 6 months after nodal goes live. Once the zonal market activities cease completely, the contract staff will roll off.	Not feasible to hire the additional FTEs to manage both markets and then lay off when zonal ceases.	No resources to operate the zonal market.

**ERCOT Fiscal Year 2009 Budget
Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
5	CO	180	Performance of required Statement on Auditing Standard SAS70 Type II External Audit	808,500	These audits are required by ERCOT By-Laws and Sarbanes-Oxley requirements that are in place for our Market Participants. PwC is performing the audit in 2007 and PwC is ERCOT's external auditor. Protocol Section 1.4 Operational Audit, requires an annual operational or "settlements" audit, otherwise commonly known as the SAS70 Type II Audit. Note: The SAS70 budget for 2009 is escalated by an additional 5 percent (plus an expected inflation adjustment of 5 percent) above the 2008 budget to allow for the uncertainties caused by the transition from Zonal to Nodal. The transition from Zonal to Nodal during the 2009 SAS70 Audit testing period of October 1, 2008, through September 30, 2009, will create an undetermined amount of additional work on the part of the external audit team.	SAS70 Audits are required to be performed by an external independent certified public accounting firm.	ERCOT could not express an independent opinion on the adequacy and effectiveness of the internal control environment. ERCOT would not be in compliance with Protocol Section 1.4 Operational Audit. This Protocol requires an annual operational or "settlement"
6	IO	300	Staff Augmentation for Market systems integration during post-Nodal go live stabilization period	750,000	Software integration professional services needed to build, support, and troubleshoot Nodal defect and project work.	Inadequate permanent FTE staff resources to perform the anticipated volume of work associated with Nodal go-live stabilization issues. These resources will not be required long-term.	Inability to react quickly to stabilization issues related to the Nodal market systems, potentially resulting in market outages while issues are being resolved.
7	IO	300	Staff Augmentation for Nodal market data warehousing and reporting during post-Nodal go live stabilization period	702,000	Services are needed to support bug fix and stabilization efforts relating to data extracts and reports during go-live without sacrificing service to PUCT (Public Utilities Commission of Texas), Market Participants, or internal ERCOT customers.	Work load during this period of time is expected to be at a level that cannot be managed by existing staff. However, it is also expected to be short-term during the stabilization period. Therefore, additional headcount for this purpose is not needed and staff augmentation is requested.	Delays in analysis, development, testing, and implementation of nodal bug fixes. Delays in service provided to internal ERCOT customers, PUCT (Public Utilities Commission of Texas) requests, or Market Participants requests.

ERCOT Fiscal Year 2009 Budget Outside Services Expense Detail

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
8	CO	101	Expenses associated with the ongoing support and administration of the Board of Directors <ul style="list-style-type: none"> • Independent member compensation • Member replacement • Business expense reimbursement • Special meetings and retreats as necessary 	600,000	ERCOT is governed by a board of directors made up of independent members, consumers and representatives from each of ERCOT's electric market segments.	Governance structure requires board oversight and inclusion of independent members	Failure to comply with governance requirements.
9	SO	410	Staff augmentation to assist with analysis and reporting	576,000	During the Market Management System (MMS) walkthrough with ABB in late 2007 there were a number of enhancements to the ABB deliverables that were identified to aid in gathering information or make the information from MMS more user ready for analysis. During the deep dive process, the expectation was that these enhancements would be in production prior to Nodal go-live. Since then, these enhancements have been removed from ABB's go-live deliverables and now being placed in the 2009 capital projects budget as a discretionary item. If either (1) the enhancements are incorporated into production in early 2009 or (2) it's determined that the current staff is sufficient to perform all the required Nodal activities, this item can be removed.	No additional resource bandwidth.	Market Operations Support activities will need to be prioritized and those items with the lowest priority will not be performed even though they may be high value to ERCOT.
10	IO	300	Staff Augmentation for Market systems during post-Nodal go live stabilization period	566,400	Stabilization and maintenance of Nodal Market Systems. These contract labor resources will focus on debugging software issues, coordinating and implementing patch releases, maintenance of source code and of the development environment. These resources will also participate in 2009 NPRR/mandates and stabilization projects.	These resources are seasoned professionals with substantial experience managing these software platforms. ERCOT staff in this area are comparatively inexperienced and may not initially be able to provide the quick turnaround required by the ERCOT market.	Inability to react quickly to stabilization issues related to the Nodal market systems, potentially resulting in market outages while issues are being resolved.

**ERCOT Fiscal Year 2009 Budget
Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
11	IO	300	Nodal Support Contractor	552,000	Necessary to augment resources during the transition the Zonal to the Nodal market systems.	Inadequate permanent FTE staff resources to perform the anticipated volume of work associated with Nodal go-live stabilization issues. These resources will not be required long-term.	Risk to the success of the migrations from DEV to EDS and Production for the Nodal program
12	CO	120	Outside Legal Services regarding litigation or areas requiring specialized legal knowledge and skills not possessed by in-house legal staff.	549,996	The services are necessary because with a Legal Dept. as small as ERCOT's, it is impossible to have attorneys who possess all the knowledge and skills required for all legal issues confronting the company (e.g. Employee Retirement Income Security Act (ERISA), bankruptcy, antitrust, litigation, etc.)	The services are necessary because with a Legal Dept. as small as ERCOT's, it is impossible to have attorneys who possess all the knowledge and skills required for all legal issues confronting the company.	The legal services could not be provided and the company could decide to take the risk of not complying with the law and/or governmental rules and regulations.
13	SO	450	Consulting support to assist with: - live Congestion Revenue Rights market activity - Congestion Revenue Rights (CRR) ITEST - market trials by resources that are highly knowledgeable with ERCOT's CRR software.	400,000	New staff will be learning new software and will need to assist market participants with their interactions with this system. Although a minimal level of vendor support (8 hours per month) is available through system license agreements, it will not be sufficient to handle the expected demand.	A highly effective way to learn new software is to work alongside an experienced user. Since ERCOT will have new staff learning new software, having access to highly knowledgeable (vendor) support should ensure a successful Congestion Revenue Rights (CRR) market implementation.	Without access to highly knowledgeable vendor support to respond to market participant questions and concerns, market participants are likely to be dissatisfied with CRR market implementation resulting in a higher level of questions and disputes. If this situation is allowed to persist, market participants are likely to fix the Congestion Revenue Rights market through protocol revisions or PUCT rule changes. These activities result in a higher level of ERCOT response in other areas (Market Services / External Relations).
14	IO	300	Release Coordinator - is charged with the tracking, scheduling, and Coordination of changes to ERCOT's production environment.	384,000	Nodal development efforts require additional staffing levels than were previously experienced with zonal due to the additional nodal functional areas (Congestion Revenue Rights (CRR), Nodal Market Management System (NMMS), Credit Monitoring and Management (CMM)), more intense integration, triple the number of supported servers, and the increase in volume of all functional areas.	The ERCOT Full Time Equivalents (FTE) Release Management team is currently staffed for the existing zonal, pre-nodal project, functional areas and level of release complexity. The current FTE staff will not suffice for steady state post nodal go-live.	Full Time Equivalents (FTEs) are working at above maximum capacity but coverage is stretched to the point where quality is decreasing. These resources will mitigate the risk of increased service degradation to test and production controlled environments.

ERCOT Fiscal Year 2009 Budget Outside Services Expense Detail

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
15	SO	420	Black Start Study - Simulation of complete restoration procedure as described in NERC EOP-005 R7	350,000	To be compliant with NERC requirement EOP-005 R7, ERCOT must complete simulation of restoration procedures. We are meeting this standard with current processes, but feel it is important to strengthen our compliance.	Requires specialized expertise and tools.	ERCOT will not have a solid criteria for testing the feasibility of ERCOT Black Start plan. In addition, ERCOT may not clearly comply with North American Electric Reliability Corporation (NERC) requirement EOP-005-1 R7.
16	CO	111	Cash/Banking Services - Bank service fees including wire fees, account maintenance fees and lockbox deposits.	325,200	ERCOT will be required to increase its banking services under the Nodal market primarily due to the addition of the Day-ahead and the Congestion Revenue Rights (CRR) markets.	Required bank services.	Inability to process cash payments and/or deposits.
17	CO	130	Immigration Assistance	324,000	These fees cover the specialized legal expertise in the immigration area as well as the filing fees associated with the hiring of non-US citizens. These fees are increasing at a rapid rate and are required to recruit for power engineers and certain Information Technology functions.	The legal expertise in immigration is a very specialized area and ERCOT does not require a full-time position. Approximate 1/2 of the expense in this area is for legal services and the rest covers the actual fees.	If we do not pay for the immigration process for our new employees, we would not be able to staff many of the functions or meet the required needs of the nodal project. Ongoing expenses for current employees are approximately 70%.
18	CO	111	Credit insurance...to mitigate credit exposure in the ERCOT market.	315,000	Credit insurance is a risk mitigation measure that is being considered by the market.	ERCOT is not an insurer.	Will not mitigate credit risk in the market.
19	IO	300	Staff Augmentation for the Nodal market database systems during post-Nodal go live stabilization period.	306,000	The volume of work anticipated with the Nodal market going live will likely exceed available staff resources.	The quantity of issues may be too great to handle in an acceptable time frame.	Delay in deliverables and potential operational problems
20	IO	300	PPM administrator - - charged with performing development and testing of required modifications to existing workflows and processes and maintenance of PPM.	278,400	To perform development, implementation into production, and maintenance for the existing tool.	The skill set and staff resources are not present.	ERCOT has invested significant resources in tools that provide a coordinated software release and management approach, if these tools are not utilized with post-Nodal go live stabilization activities it will likely lead to continued problems later.
21	IO	300	TripWire support - charged with completing requests to activate tripwire on additional servers with auto email notifications/ reports enabled and provide training.	262,320	To perform services to utilize the Tripwire application for its intended purpose. To integrate with PPM tool so unauthorized changes are detected and proper attention/resolution is provided for unauthorized actions.	The skill set and the bandwidth is not present.	Underutilization of a powerful configuration management tool that when used properly will more quickly remediate Nodal go live stabilization issues.

**ERCOT Fiscal Year 2009 Budget
Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
22	CO	101	Based on historical trending, each year independent studies/reviews are requested by regulatory bodies and/or ERCOT management to ensure effective and efficient organization and market operations.	200,000	Organizational/Market procedural assessment/review	Outside consultant brings independence and expertise that is not available within current ERCOT resources.	Ineffective and inefficient policies and processes could exist and remain unidentified with ERCOT and the market.
23	CO	325	Voice/Data cabling data center assistance - provides the voice, data, fiber optic, and video cabling necessary, for advanced networks at ERCOT.	200,000	The facilities department is responsible for data center and office area voice/data fiber optic and video cabling. We have one FTE position within the department to perform the steady state work and utilize contractors for peak activities. Due to the Nodal program.	Due to the Nodal program we are experiencing significantly higher demand for this service and therefore require the requested funding for outside services	If ERCOT does not procure this service there will be delays on cabling requests which would likely delay projects including the nodal program.
24	CO	370	Security assessment of a sample of ERCOT's applications for vulnerabilities and exploits. The assessment will identify exploitable Application vulnerabilities that exist in the ERCOT Information Technology systems. Creation of a remediation action plan for all identified security issues.	200,000	In order to show due diligence and non partiality, it is best practice to have these types of assessments performed by an external party. In addition, ERCOT cannot be compliant for North American Electric Reliability Corporation (NERC) CIP 7 R8 which states "The Responsible Entity shall perform a cyber vulnerability assessment of all Cyber Assets within the Electronic Security Perimeter at least annually."	A significant contribution of this type of service is the peer review concept where the use of outsiders confirms or corrects the staff view of the security model.	ERCOT's security posture may be compromised because of changing application vulnerabilities, exploits or threats.
25	CO	370	Security assessment of a sample of ERCOT's databases for vulnerabilities that may lead to exploits where critical information may be destroyed, altered or disclosed. Creation of a remediation action plan for all identified security issues.	200,000	In order to show due diligence and non partiality, it is best practice to have these types of assessments performed by an external party. In addition, the assessment results will be used for SAS70 CO 14.1.4 which states "System configuration requirements have been established for operating systems, databases, and firewalls which include security hardening, and documented exceptions. " and NERC CIP 7 R8 which states "The Responsible Entity shall perform a cyber vulnerability assessment of all Cyber Assets within the Electronic Security Perimeter at least annually."	A significant contribution of this type of service is the peer review concept where the use of outsiders confirms or corrects the staff view of the security model.	ERCOT's security posture may be compromised because of changing database vulnerabilities, exploits or threats.

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Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
26	IO	300	ClearCase administrator - charged with performing daily/weekly manual activities and maintenance of Clear Case.	192,000	To perform development, implementation into production, and maintenance for the existing tool.	The skill set and staff resources are not present.	ERCOT has invested significant resources in tools that provide a coordinated software release and management approach, if these tools are not utilized with post-Nodal go live stabilization activities it will likely lead to continued problems later.
27	CO	370	Security assessment of ERCOT's Electronic Security Perimeter around Critical Cyber Assets in accordance with requirement R4 of North American Electric Reliability Corporation (NERC) CIP 005-01. The testing will identify exploitable access point vulnerable	180,000	In order to show due diligence and non partiality, it is best practice to have these types of assessments performed by an external party. In addition, ERCOT cannot be compliant for NERC CIP 5.4 which states "Cyber Vulnerability Assessment — The Responsible Entity shall perform a cyber vulnerability assessment of the electronic access points to the Electronic Security Perimeter(s) at least annually."	A significant contribution of this type of service is the peer review concept where the use of outsiders confirms or corrects the staff view of the security model.	ERCOT's security posture may be compromised because of changing Internet facing vulnerabilities or threats. Failure of North American Electric Reliability Corporation (NERC) CIP 5 R4
28	CO	114	Financial Audit - Price Waterhouse Cooper	175,000	Public Utility Commission of Texas (PUCT) rules	Must be performed by External auditing firm	Inability to get credit, obtain affordable insurance, or establish reasonable vendor relations.
29	CO	114	Property Tax services (Rash & Associates)	140,000	To ensure property tax rates from taxing authorities are accurate. Amount paid is directly linked to savings achieved for ERCOT.	ERCOT accounting staff does not have necessary expertise in property valuations and associated tax strategies to effectively represent ERCOT with tax authorities.	May over pay property taxes
30	CO	702	Non- Statutory services related to Texas Regional Entity (TRE)	128,650	Services such as Board of Trustee Fees, Support Allocation, Audit, Legal Fees, and Insurance are necessary for the operation of the Regional Entity	Staffing level and skills necessary are not sufficient to perform these critical services.	Risks associated with legal and insurance exposure and non compliance issues.
31	IO	300	OSIsoft PI development and/or consulting expertise	120,000	Functional requirements will likely be discovered once the Nodal market is live.	ERCOT does not have FTE resources with this skill set.	Some business requirements will not be met.
32	IO	302	Staff augmentation for administrative work relating to software license compliance activities and contract administration	120,000	Renewal of hardware/software maintenance and renewable license agreements and activities related to software license compliance. ERCOT compliance.	Lack of internal resources	Potential non-compliance with software license agreements and late renewal of hardware and software maintenance contracts.

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Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
33	IO	345	Areva Software Support for Non-Standard Products	120,000	These cost are not covered by the Standard Product Areva support agreement and these are critical to Energy and Market Monitoring Systems (EMMS) production operation.	Some Software source is not provided by Areva and some internals of the Market Operating System (MOS) are best modified by Areva.	Areva could refuse to service critical parts of the Zonal Market operating system and some sections of the Energy Monitoring System leading to excessive downtime.
34	IO	357	Applications Security enhancements (previously PMO Tools upgrade)	120,000	ERCOT engaged a vendor to complete an assessment of application security which included 22 web applications, 3 code reviews, 3 threat models and 1 Web service review. Recommendations were made in the following areas: infrastructure, authentication, authorization, data validation, sensitive data, session management, configuration management and exception management. These remediation areas have been classified by Risk and Priority. Some of the applications included are: TML, REC, ERCOT.COM, Outage Scheduler, ETOD, Siebel, MarkeTrak, AppWorx, Intranet, EDW, ETOD, NAESB/Paperfree. This project will review and address recommendations that can not be addressed in 2008.	This service will be performed along with ERCOT staff. Specific security expertise will be needed in several areas.	Potential Cyber attacks, data corruption, confidential data leaks, etc.
35	IO	300	Staff Augmentation for the Nodal market MIS, CDR, VBP and MPIM systems during post-Nodal go live stabilization period.	112,000	The volume of work anticipated with the Nodal market going live will likely exceed available staff resources.	This service will be performed along with ERCOT staff. Nodal will be transitioned as much as possible. However, to meet the demands of support in a timely and quality manner, it will be necessary to engage resources who have had direct experience on these projects.	Not meeting protocols and/or delivering requested functions to stabilize Nodal in an appropriate time frame.

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Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
36	CO	370	Security assessment of ERCOT's internal network assets from an external and internal perspective. The security assessment will identify exploitable vulnerabilities that exist on the ERCOT network and operating systems.	100,000	In order to show due diligence and non partiality, it is best practice to have these types of assessments performed by an external party. In addition, ERCOT cannot be compliant for North American Electric Reliability Corporation (NERC) CIP 7 R8 which states "The Responsible Entity shall perform a cyber vulnerability assessment of all Cyber Assets within the Electronic Security Perimeter at least annually."	A significant contribution of this type of service is the peer review concept where the use of outsiders confirms or corrects the staff view of the security model.	ERCOT's security posture may be compromised because of changing security vulnerabilities, exploits or threats.
37	MO	550	Consultant review of Verifiable Cost submittals	100,000	To review submission data for Verifiable Costs.	Expertise in power plant operations, which staff do not have, is critical to verify the costs; external consultants provide independent review of submissions.	Possibility of inaccurate verifiable costs which would result in disputes and potentially cost the market millions of dollars.
38	SO	473	Analysis of Impact of Energy Efficiency on Long-Term Load Forecast	100,000	Recent state legislation mandates an increase in energy-efficiency initiatives to reduce peak load growth in ERCOT. This study will provide an analysis of methods to incorporate the impacts of these energy efficiency initiatives into the long-term load forecasting process.	Outside consultant brings independent viewpoint, technical expertise, market knowledge, and software that is not cost effective to maintain within ERCOT.	ERCOT System Assessment will not be able to provide a credible analysis of long-term conditions, as required by statute, without this service.
39	SO	473	Validation Study of Wind Dynamic Models	100,000	ERCOT System Planning requires models simulating the response of specific wind units to system disturbances in order to conduct system analyses of transient stability and the likelihood of voltage collapse. Development of generic models allows system studies to be shared with market participants. Several of these models have been developed, and are being used in system analyses. However, these models have not been validated through field tests, which are required in order to ensure their accuracy.	Outside consultant brings independent viewpoint, technical expertise, market knowledge, and software that is not cost effective to maintain within ERCOT.	Misidentification of stability limits within the system will lead either to excessive market costs (a result of overly conservative transfer limits) or unacceptable levels of risk of transient instability resulting from system disturbances. Field validation is required in order to ensure accuracy of simulation models, and therefore to validate the results of system wide dynamic analyses.
40	IO	330	Staff augmentation for Desk side Services Team (DSST)	96,000	Services are needed to maintain service levels	Lack of internal resources to accommodate volume of work	Failure to meet service levels

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41	SO	422	Common Information Model (CIM) Consultant/Contractor to assist with integration efforts and requirements as part of the Nodal transition.	96,000	The CIM technology will continue to mature, which necessitates some integration effort requirements.	ERCOT requires knowledgeable consultants to help implement updates.	Inefficient and possibly ineffective integration efforts that knowledgeable consultants offer.
42	CO	130	Performance Management	90,000	Create easily understood metrics that establish the effectiveness of ERCOT in fulfilling duties	Third party objectivity in developing metrics and the cost of creating our own software would triple the cost of this project.	Inadequate metrics to evaluate success or failure company-wide.
43	IO	354	Accommodate peak load	90,000	Accommodate peak load	Accommodating Nodal and zonal capital work load.	Delayed delivery of capital projects.
44	CO	130	Career Builder, Monster, Dice and Energy Central	85,000	Recruiting tools to attract candidates for staffing open positions	Services are necessary to provide for candidate searches.	Inability to fill open positions.
45	IO	355	IBM Rational Professional Services related to enhancing protocol traceability and quality assurance	80,000	These services will ensure ERCOT maintains satisfactory traceability to the protocols and operating guides through the use of high-quality, reliable tools.	The vendor brings expert level knowledge.	ERCOT staff will spend more time researching.
46	SO	420	Electrical Power Research Institute (EPRI) display conversion standard	80,000	We currently maintain displays manually. Development of this standard would allow ERCOT to purchase a program to convert its Nodal Market Monitoring System (NMMS) displays to EMS and eliminate the equivalent of .5 FTE in display maintenance while improving quality.	Requires specialized expertise.	Continued expense and some risk (low) of receiving non-compliance fines from NERC for poor operator awareness.
47	CO	114	Federal Energy Regulatory Commission (FERC) General Ledger Setup Consulting for Texas Regional Entity - (Lawson Consultants)	79,000	North American Electric Reliability Corporation (NERC) requirement for Texas Regional Entity	Additional Lawson expertise must be obtained to ensure modifications are done properly	Violation of North American Electric Reliability Corporation (NERC) requirements
48	CO	114	Invoice Imaging	79,000	Cost Savings Project.	Requires unique expertise for invoice imaging process.	Continue using existing processes
49	CO	114	Inventory/Fixed Asset Review	75,000	Public Utility Commission of Texas (PUCT) / Board of Directors directive to ensure ERCOT's fixed assets are properly maintained and tracked.	Bringing in outside specialists provides greater expertise with the fixed asset inventory process. A third party also provides greater internal controls with the inventory process .	Performing inventory by existing Fixed Asset Staff
50	SO	473	Completion of a Loss of Load Expectation (LOLE) Study	75,000	The relationship between system reserve margin and the risk of loss of load events varies depending on system characteristics. Regulators and market participants expect ERCOT to analyze and report on the risks associated with system conditions.	Outside consultant brings independent viewpoint, technical expertise, and software that is not cost effective to maintain within ERCOT.	ERCOT will not be able to maintain the required level of reliability of the transmission system without completion of a loss-of-load expectation study.

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Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
51	IO	310	Citrix Quarterly Checkups and Architectural advice	73,000	Expert Citrix consulting services to maintain this software environment	Lack of internal expertise with these systems	Inefficient use of this software tool
52	SO	422	Common Information Model (CIM) for Electrical Power Research Institute (EPRI) Initiative.	70,000	This is in support and development of CIM for Operations, Planning, Dynamic, and Market Models. This is important for ERCOT to manage model data flow and to prepare for future developments with the industry and Nodal Market Monitoring System (NMMS) technology.	This service is a conduit for the entire industry and ERCOT sponsors a piece of the overall cost. Meetings have been held this year that involved International Electro-technical Committee (IEC) Working Group members, ERCOT Market Participant members, and multiple members in the utilities industry in the United States.	Involvement will help ensure that ERCOT meets its needs and the needs of ERCOT Market Participants.
53	SO	460	REC or Labeling Program Enhancements per Legislative and PUCT mandate	66,000	Changes to the Texas Renewable Energy and the Emissions Labeling programs have occurred at each legislative session since the program started in 2002. Further changes to these programs are currently being discussed by various stakeholders. Between 2005 and 2007, ERCOT spent about \$200,000 in maintenance and enhancement activities for the Renewable Energy and the Emissions Labeling programs.	Current IT staff is working at maximum capacity at this time. Rule changes characteristically have extremely short development time lines. Next change may require very significant changes to the REC program.	ERCOT would be out of compliance with PUCT Rules
54	IO	300	Application Monitoring - Professional Services	65,000	To develop application monitoring interfaces with the new Nodal market systems during the post go live stabilization period	ERCOT staff is not expertly trained in the new applications and how they interact with ERCOT monitoring applications.	There is risk to the success of application support for new applications introduced through the Nodal program
55	CO	130	Management Training	64,800	To provide training for our managers and supervisors on employment laws and improved understanding of how to manage others.	Current staff will assist in the administration of this service but we are not staffed to perform the training. About 1/2 of the cost is related to the diagnostic tools required.	Increased turnover and potential of employment litigation for failure to train managers on how to properly handle disciplinary actions, performance coaching, selection and terminations.
56	CO	130	Compensation review and update of salary information	60,000	Database and Data Management services	To provide support to our compensation program.	Paying employee above or below market and resulting consequences of overpayment or underpayment and turnover.
57	CO	111	Moody's KMV - The credit risk analysis tools -- Credit Edge and Risk Calc provide information on default probabilities for publicly held entities and also help ERCOT to analyze privately held entities.	55,000	To provide more "real time" insight into credit quality of market participants. This tool factors in bond and stock prices and other factors that provide more current information on potential defaults by ERCOT market participants.	ERCOT staff does not have the background or tools (e.g. Bloomberg info, etc) to efficiently conduct this analysis.	Credit function will not have adequate information to make credit decisions concerning ERCOT counterparties.

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Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
58	MO	660	Business Analyst services during Nodal stabilization period (through Q3).	54,000	Staff augmentation needed due to anticipation of a surge in nodal settlement disputes, additional market education, the addition of Market Participant Identity Management (MPIM) system for Market Participant digital certificate responsibilities, and scheduled registration projects.	Expectation is that staff will have an increase work load during the transition to a Nodal market.	ERCOT may not be able to meet time line for completing settlement disputes according to protocol and to support the need for market education through the first three quarters of 2009.
59	CO	120	Expert witness fees, court reporter fees and related items.	50,004	The services are necessary because ERCOT does not possess all the knowledge and skills required for all issues confronting the company (e.g. property values, legal fees, etc.). Also, ERCOT must obtain copies of transcripts (from court reporters) to know exactly what transpired at legal proceedings.	The services are necessary because ERCOT does not possess all the knowledge and skills required for all issues confronting the company (e.g. property values, legal fees, etc.). Also, ERCOT must obtain copies of transcripts (from court reporters) to know exactly what transpired at legal proceedings.	The services are necessary because ERCOT does not possess all the knowledge and skills required for all issues confronting the company (e.g. property values, legal fees, etc.). Also, ERCOT must obtain copies of transcripts (from court reporters) to know exactly what transpired at legal proceedings.
60	IO	310	Symantec Project Server (PS) Support for projects and tuning	50,000	Expert Symantec consulting services to maintain this software environment	Lack of internal expertise with these systems	Inefficient use of this software tool
61	IO	310	Veritas Project Server (PS) Support for projects and tuning	50,000	Expert Veritas consulting services to maintain this software environment	Lack of internal expertise with these systems	Inefficient use of this software tool
62	SO	472	Risk Based and Probabilistic Planning in Power System study	50,000	NERC standards mandate the ability to identify critical transmission facilities.	Outside consultant brings independence and expertise that is not available within current ERCOT resources.	Could impact system reliability or result in loss of load, blackouts, and cascading outages. NERC standards mandate review of Power System Stabilizer (PSS) settings and having all PSS in-service.
63	SO	472	Power System Stabilizer (PSS) settings review.	50,000	NERC standards mandate periodic review of Power System Stabilizer (PSS) settings to determine if there is a need for any Power System Stabilizer (PSS) to be tuned for inter-area modes.	Outside consultant brings independence and expertise that is not available within current ERCOT resources.	Could impact system reliability or result in loss of load, blackouts, and cascading outages.
64	SO	472	Electrical Power Research Institute (EPRI) Gen Dynamic Model Parameters Identification and Validation	50,000	Provide modern tools and techniques for performance of generator parameter estimation of a regular basis will enable ERCOT to satisfy industry reliability mandates.	Outside consultant brings independence and expertise that is not available within current ERCOT resources.	Could impact system reliability or result in loss of load, blackouts, and cascading outages.

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Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
65	SO	473	Analysis of Methods to Develop Load Forecasts for Stochastic Planning Studies	50,000	ERCOT System Assessment is required by statute to complete a Long-Term System Assessment every even-numbered year. NERC requirements also specify completion of long-term analyses of expected system conditions. A key input to the analysis of future system conditions is the type and potential locations of future generating units.	Outside consultant brings independent viewpoint, technical expertise, market knowledge, and software that is not cost effective to maintain within ERCOT.	ERCOT System Assessment will not be able to provide a credible analysis of long-term conditions, as required by statute, without this service.
66	IO	357	Sharepoint Portal Upgrade and Support for internal departments	48,000	The Corporate Applications team is transitioning from Sharepoint Portal Server 2003 to Microsoft Office Sharepoint Server 2007 (MOSS) which is basically an upgraded version with many more features. There are already many Sharepoints sites in use at ERCOT including some heavily used sites such as the nodal sites and Release Management. As the tool becomes more visible, the demand is increasing at an extraordinary rate. It is possible that this tool will be used for the new ERCOT intranet. It also has the possibility of being used for some external sites as well. One of the biggest advantages of using this tool is rapid deployment and the ease of use allows non-Information Technology (IT) resources to be in control of their own sites. In order to support the demand, ERCOT will need to invest in some experts to assist in the standardization, deployment strategies and build out of some sites which will build the foundation and set us up to provide a good service with internal resources.	Specific application knowledge is required to more efficiently and effectively upgrade the software.	Unsupported software

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Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
67	IO	357	Lawson Integration and Maintenance	48,000	These interfaces are necessary to provide services for the Corporate Operations division and all ERCOT employees. Without the interfaces, there would be a very high volume of manual work. ERCOT does not have the resources to do the work manually and it would not be cost effective.	The hosting vendor has already developed interfaces with all the major organizations such as Cigna, Fidelity, etc. It is much more cost effective to have them implement a solution they already have than it would be to write one from scratch.	Data could not be shared easily with external partners for payroll, 401K, MPP, healthcare, etc.
68	CO	114	Nodal Accountant- Contractor (Accounting Principals)	46,800	Nodal Accounting functions require additional accounting resources that are not available from existing Accounting staff.	No one available to perform required Nodal accounting functions	Accounting for NODAL project would not occur
69	IO	356	Siebel Technical Account Manager package. This package allows for a certain number of technical hours to aid in analysis and development.	46,440	We currently use the Siebel System to support our Retail Choice Registration System. Based on the complexity of the business model and the fact that there is not another system even similar, it would be advantageous to have the Software Vendor engaged in our design and deployments.	ERCOT is not the software company for the development of the Siebel application and has no visibility into its code.	Does not allow vendor company to take into account ERCOT's special deployment. May cause vendor to make application changes that will adversely effect our ability to upgrade.
70	IO	357	Remedy and Atrium Configuration Management Data Base (CMDB) Maintenance	40,000	Expert professional services to aid in the tuning and maintenance of the Configuration Management Database	Volume of work is too great for ERCOT staff to perform during post-Nodal go live period	Inefficient use of this software tool that could lead to delayed problem and incident resolution times
71	MO	500	Recognition of coverage for unforeseen events such as PUCT, Board of Director, or Independent System Operator/Regional Transmission Organization (ISO/RTO) Council requests for information and/or studies not otherwise budgeted.	40,000	This is a small amount being requested for services that are not anticipated at this time that may surface in 2009.	We will procure only if specialized services are needed which in house staff is unable to perform.	No cushion for unforeseen needs.

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Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
72	SO	473	Continuation of Wind Generation Modeling Project	40,000	ERCOT System Planning requires models simulating the response of specific wind units to system disturbances in order to conduct system analysis of the likelihood of voltage collapse and transient stability. Development of generic models allows system studies to be shared with market participants. These studies are required to comply with NERC requirements and to maintain acceptable levels of system reliability.	Outside consultant brings independent viewpoint, technical expertise, and software that is not cost effective to maintain within ERCOT.	Not identifying stability limits within the system will lead either to excessive market costs (a result of overly conservative transfer limits) or unacceptable levels of risk of transient instability resulting from system disturbances.
73	SO	473	Econometric Data for Load Forecast Development	40,000	ERCOT System Assessment is responsible for the annual development of the long-term load and demand forecast. Econometric forecasts are required as an input to the process used to develop the long-term load and demand forecast. The long-term load and demand forecast is provided to regulators and stakeholders, is included in the annual system analysis of forecasted capacity and demand, and is utilized in all system planning modeling and analyses. Development of the long-term load forecast is required to meet PUC regulations, NERC requirements, and numerous requests from stakeholders including State legislative committees.	Outside consultant brings independent viewpoint, technical expertise, market knowledge, and software that is not cost effective to maintain within ERCOT.	The long-term load and demand forecast cannot be developed without thoroughly researched econometric analysis and forecasts. Without a credible long-term load forecast, ERCOT System Planning will not be able to perform its required job functions of analysis of system reliability and transmission upgrades.
74	IO	300	Information Technology Committee (ITC) Independent System Operators (ISO) Council - ERCOT's share of consulting fees for a council of the Chief Information Officers of the Independent System Operators that meet quarterly.	35,000	ERCOT's share of consulting fees for a council of the Chief Information Officers for the Independent System Operator's that meet quarterly.	Council is made up of the Chief Information Officers of the Independent System Operators	

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75	IO	357	ERCOT is currently using Aperture View and Vista. Vista is used to manage components in the data center whereas View is used to manage the facilities in Taylor and Austin. It is likely that a major upgrade will need to occur in 2009. The last major upgrade for Vista was 2007. There have been no updates to View since it was implemented in 2005. Specific application expertise is required.	34,000	Specific application knowledge is required to more efficiently and effectively upgrade the software.	This service will be performed along with ERCOT staff. Specific application expertise will be needed	Unsupported software
76	MO	660	L-Soft-ListPlex outsourcing service for "List Net" email distribution services, which provides self-serve access to a list of email distribution lists for market participant communications (ERCOT Governance, ERCOT Market Notices, etc).	32,400	There are numerous references in ERCOT Protocols specifying the Independent System Operator's (ISO's) responsibilities for timely communications with market participants, governance groups, and regulatory parties.	The ListPlex service was selected over setting up and maintaining this service in house due to cost and available resources.	ERCOT would not be able to meet obligation for timely market notification and governance communications per protocol.
77	MO	550	Consultant review of Reliability Must Run (RMR) actual cost submittals	32,000	To verify the appropriateness of costs submitted by Reliability Must Run units.	External consultants with industry wide knowledge and experience offer independence and confirmation of accurate costs submitted by Reliability Must Run units.	Possibility of inaccurate Reliability Must Run contracts costing the market millions of dollars.
78	CO	130	Drug Testing and background check program	30,600	Drug testing and Background checks as required by standards or North American Electric Reliability Corporation (NERC)	Not allowed and do not have equipment necessary	Compliance issues
79	CO	111	Fitch ratings service and data feed to ERCOT's new credit program for Nodal from Rome. The use of these services is contingent on the Board of Directors approving creditworthiness standards that include Fitch ratings.	30,000	The current draft of proposed updates to the creditworthiness standards include the use of Fitch ratings. This item covers the cost of that service. The service is contingent upon approval of creditworthiness standards by the Board of Directors with include the use of Fitch.	Some level of credit analysis is performed by ERCOT staff as well; however, not at the depth provided by Fitch.	Inability to comply with Protocols and Creditworthiness Standards.
80	IO	356	Meta Data changes to the LODESTAR Database Schema	30,000	Any need to add meta-data to support the Settlements process and generally tied to ERCOT Protocols.	We can actually do the changes, but if the changes are not included in the vendor product (which is what we are paying for), we will be unable to upgrade or patch the product as the meta data definition would cause a data relationship issue.	Same as above - We would not be able to upgrade or patch our LODESTAR application

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81	MO	605	Perception Survey (deliver and report results) for Market Participants, Market Committees, and Board of Directors.	30,000	ERCOT Executive management requests this type of survey in order to obtain perceptions from external stakeholders for various services offered to the market such as meeting management, website revisions, Lessons Learned, etc.	Third party provider offers confidentiality, objectivity, and professional expertise.	Non-compliance with the request from CEO and CMO, in regards to confidentiality and objectivity.
82	SO	471	Competitive Constraint Modeling	30,000	Necessary to allow model to better match actual operation of system and improve estimation of the benefits of proposed transmission.	Manual processes for doing this could be developed, but it would have ongoing costs in addition to a similar fixed cost for developing the process and databases. If this is automated in Uplan software, the other ERCOT users of Uplan can also utilize the increased functionality.	Will need to incur similar fixed costs and develop in house databases and processes that will have ongoing costs not incurred if included in the Uplan software.
83	SO	473	Membership in the Utility Wind Integration Group and the Operating Impact and Wind Plant Modeling Users Groups	30,000	An increasing amount of wind capacity is being connected to the ERCOT transmission system. These uncontrolled generating facilities create challenges for transmission planning. Participation in the Utility Wind Integration Group provides a forum for discussions with other utility and Regional Transmission Organization (RTO) planning organizations regarding wind integration issues.	Outside consultant brings independent viewpoint and technical expertise that is not cost effective to maintain within ERCOT.	ERCOT will not be able to maintain the required level of reliability of the transmission system without the information that the Utility Wind Integration Group (UWIG) provides. Without the technical expertise of this organization, ERCOT will not be able to adequately analyze the optimal methods for limiting the risks associated with increasing wind integration.
84	CO	130	Determine the Financial Accounting Standards Board (FASB) 106 Liability for post retiree medical benefits for ERCOT (Rudd and Wisdom Actuaries)	28,000	Accounting support for determining the Financial Accounting Standards Board (FASB) 106 liability for ERCOT	Performed by actuaries	Compliance and tax reporting issues
85	IO	310	Offsite storage and retrieval services for tape cartridges	27,000	In order to meet Protocol and audit requirements, cartridges must be stored offsite for disaster recovery.	Storing tape cartridges in an employees house or garage is not recommended	Failing to meet protocol, audits and potential disaster recovery
86	IO	330	Time and materials for Private Branch Exchange (PBX) and voicemail maintenance.	25,500	Services are critical to maintaining communication systems.	Not enough ERCOT staff with the skills necessary to maintain these systems.	Improperly maintained systems may be subject to malfunctions.
87	CO	111	Bloomberg - Automated data feeds of financial information (financial statements, ratings, etc) directly to Rome credit monitoring system.	24,000	After implementation of Nodal, ERCOT will receive financial information in an automated way to reduce need to manually enter financial information, to ensure information is updated timely and to be sure information is entered accurately.	Service could be performed by ERCOT staff with the addition of new headcount within the credit department.	Manual preparation and entry of data which would be more costly and error prone.

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Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
88	IO	357	Development Tool Upgrade	24,000	The Corporate Applications team uses many different development tools and technologies. Some of these tools will require upgrades in 2009 bringing ERCOT up to the latest stable versions that are consistent with the ERCOT technical roadmap. Outside services are required to augment staff in order to continue service in other areas. We have not yet identified the specific tools that will require upgrades. The following would be under consideration: CVS, JBOSS, Java, Siteminder, Verisign, Jira, TIBCO portal builder and Ruby on Rails.	This service will be performed along with ERCOT staff. If ERCOT staff were to completely implement these changes, other critical responsibilities would be at risk.	Upgrading will help us realize immediate benefits through the richer, broader applications, and applets you develop. Also, the vendor might stop supporting the current version.
89	IO	300	Nodal After Market Support	21,600	Based on the complexity and numbers of new market functions and the likelihood that we will be needing to make changes it will be necessary to keep technical experts on to help us react quickly to issues or new requirements to aid in smoothing out market operations.	The quantity of issues may be too great to handle in an acceptable time frame.	Not meeting protocols and/or delivering requested functions to stabilize Nodal in an appropriate time frame.
90	CO	130	Benefit Audit (401K and Medical Claims)	20,000	Federal law requires that ERCOT include audited benefit plan financial statements with its annual Internal Revenue Service (IRS) Form 5500 filing.	The benefit plan audits must be performed by an independent audit firm.	Loss of the qualified tax status of the benefit plans resulting in significant liability to the company and possible ERCOT employees.
91	CO	325	Architectural services to ERCOT for space planning and design layout.	20,000	These services are necessary when planning and designing new space like for example, TCC2 2nd floor build out, Independent Market Monitoring (IMM)/Texas Regional Entity (TRE) construction at the Met Center and expansion of the TCC2 parking lot.	Requirements go above and beyond ERCOT staff capabilities.	Without this service ERCOT would likely spend a more time and money designing the most efficient and cost effective layout of space.

**ERCOT Fiscal Year 2009 Budget
Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
92	IO	354	COGNOS System Administrator advanced training, User training	20,000	COGNOS training for internal ERCOT business users should be occurring as a deliverable of a zonal project. However, if this does not take place then there will be a negative impact on the nodal transition.	Enterprise Information Services (EIS) lost key COGNOS resources last year. Some training has been provided but no one has a proficiency to instruct business users as of yet. Contract staff with COGNOS abilities are involved in Enterprise Data Warehouse (EDW) project for nodal effort and do not have bandwidth to do training. There is some advanced training that will need to occur to bring existing Enterprise Information Services (EIS) staff up to an advanced level to be able to support COGNOS related efforts going forward.	Inability of business users to use tools required by nodal. Inability of Enterprise Information Services (EIS) personnel to support COGNOS related efforts.
93	CO	325	Indoor Environmental Consultants provide indoor air quality sampling and infrared thermo graphic inspection for all ERCOT buildings.	18,900	ERCOT's facilities experience water penetration events and internal water leaks over the course of each year which could negatively impact indoor air quality. It is appropriate to verify the indoor air quality of ERCOT's facilities to ensure the safety and health of all occupants.	It is most cost effective to utilize outside services to perform ERCOT's air quality analysis. To perform the work internally would require additional staffing, purchase of air quality sampling and analysis equipment and on going training.	The health of ERCOT staff, contractors and visitors may be compromised if the internal air quality is not verified. Air quality testing also confirms the safety of ERCOT's internal air quality allowing staff and visitors to focus their attention on their business.
94	SO	422	Common Information Model (CIM) Tool updates which are anticipated requirements with the transition to Nodal and as CIM standards are updated.	15,000	This tool is required to verify (validate) CIM changes, and is needed to prepare for future developments with the industry and Nodal Market Monitoring System (NMMS) technology. The tool is required to verify (validate) CIM changes.	This service is a conduit for the entire industry and ERCOT sponsors a piece of the overall cost. Meetings have been held this year that involved International Electro-technical Committee (IEC) Working Group members, ERCOT Market Participant members, and multiple members in the utilities industry in the United States	Protocols call for CIM to be utilized but do not necessarily dictate release timing. This will be a coordination effort between NMMS, EMS, and MMS along with other ERCOT software.
95	SO	471	CIM (Common Information Model) for planning (development and training)	15,000	Necessary to improve the transmission planning process by improving the ability to exchange models through a common format.	This is a highly specialized area and there are consultants that are subject matter experts in CIM that can perform tasks more efficiently to develop the CIM for planning.	Incorrect exchange of planning data can lead to delay and unknown errors in the planning of transmission facilities.
96	CO	114	Tax Service -Internal Revenue Service (IRS) Form 990 (Price Waterhouse Cooper)	12,000	Required statutory audit.	External audit required.	Non compliance with law.

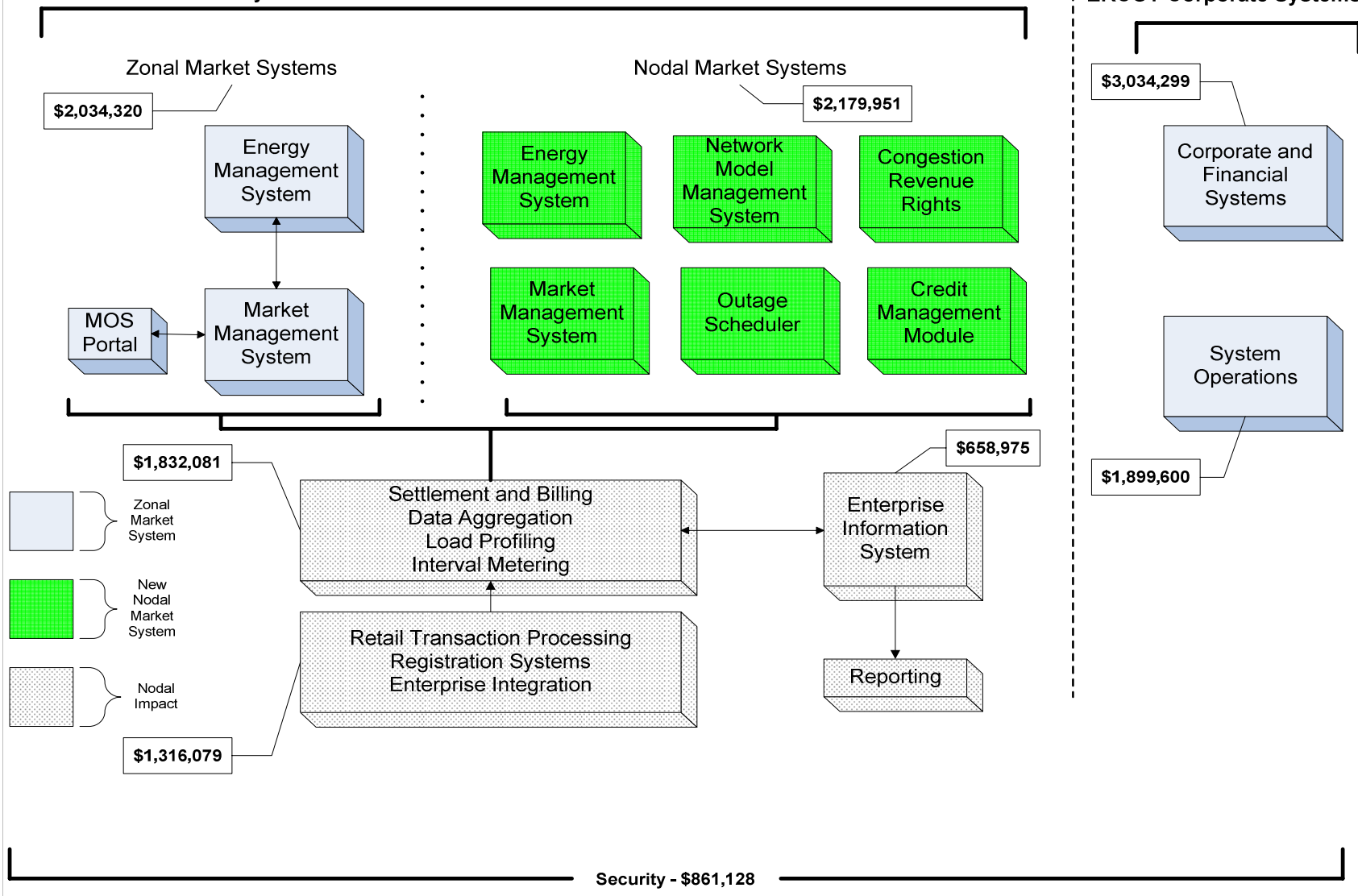
**ERCOT Fiscal Year 2009 Budget
Outside Services Expense Detail**

Line	Office	Dept	Description of Service(s)	2009 Preliminary	Why are Services Necessary	Why Can't Staff Perform Tasks	Consequence(s) of Not Procuring Services
97	SO	427	Computer Based Training (CBT) software for system operators to maintain NERC certification	11,319	Currently, all system operators are enrolled in this program. Anticipated personnel turnover will require new hires to be enrolled in the course since it is non-transferable.	This service augments the overall ERCOT training program.	Loss of operator certification.
98	CO	130	Diversity and Harassment Training	10,500	Provide training for our managers and supervisors on employment laws which require training on diversity and sexual harassment.	We are currently not staffed to provide training and if we staffed up for this training, it would be more costly.	Non-compliance with legal requirements and potential for increased employment litigation or administrative charges.
99	MO	540	Statistical consulting services in the areas of load profiling, sample design, or other related areas.	10,000	To assist load profiling staff in analysis required by Protocols.	Given the volume of current workload, these types of ad-hoc analyses can be performed using consulting services without requiring additional Full Time Equivalents.	Analysis may not be completed on-time. Other high priority work items may be impacted as well.
100	MO	540	Consulting services for the development or review of Renewable Generation Load Profiles	10,000	To assist load profiling staff in analysis required by Protocols.	Given the volume of current workload, these types of ad-hoc analyses can be performed using consulting services without requiring additional Full Time Equivalents.	Analysis may not be completed on-time. Other high priority work items may be impacted as well.
101	MO	585	Analytical and data management support	10,000	Augment daily staff operations in support of ERCOT Protocols and Statement on Auditing Standard (SAS) 70.	Over allocated resources	Decline in progression of work for daily operations and development of commercial operations business services.
102	CO	114	1099-Misc and 1099-INT Programming portion only for Reporting Service (NEPS)	1,000	NEPS's proprietary software requires coding from same company	Additional Lawson expertise must be obtained to ensure modifications are done properly	Violation of Federal Tax requirements to issue 1099 tax forms
Total				19,586,669			

ERCOT 2009 Hardware & Software Support/Maintenance Budget = \$13,816,433

ERCOT Production Systems

ERCOT Corporate Systems



**ERCOT Fiscal Year 2009 Budget
Facilities Summary**

Description	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
<u>Utilities</u>						
Electricity	1,194,744	1,422,453	1,323,000	1,570,000	247,000	18.7%
Water Service	45,512	-	20,000	20,000	-	0.0%
Fuel Oil	6,020	11,739	12,000	12,000	-	0.0%
Water/Gas/Sewer/Trash	2,203	75,272	55,000	55,000	-	0.0%
Subtotal - Utilities	1,248,479	1,509,464	1,410,000	1,657,000	247,000	17.5%
<u>Rent</u>						
Office Rental	831,127	690,252	864,000	1,314,000	450,000	52.1%
Miscellaneous Rental	-	5,343	-	-	-	NA
Storage Rental	6,341	51,314	28,200	25,000	(3,200)	-11.3%
Subtotal - Rent	837,468	746,909	892,200	1,339,000	446,800	50.1%
<u>Telecom</u>						
PBX Lease for ISO	6,268	-	-	-	-	NA
Telephone - Local	737,121	182,230	174,000	205,200	31,200	17.9%
Telephone - Long Distance	78,640	103,072	126,000	99,180	(26,820)	-21.3%
Telephone - Conf. Calls	43,381	35,373	59,200	73,800	14,600	24.7%
Internet Service	92,323	83,302	85,000	108,000	23,000	27.1%
Subtotal - Telecom	957,733	403,977	444,200	486,180	41,980	9.5%
<u>WAN</u>	2,364,889	2,258,066	2,846,000	3,310,800	464,800	16.3%
<u>Building Maintenance</u>						
Building Maintenance	445,493	570,308	525,000	525,000	-	0.0%
Grounds Maintenance	58,300	64,666	45,000	45,000	-	0.0%
Custodial Service	212,895	228,803	248,000	248,000	-	0.0%
Miscellaneous Services	118,885	105,000	134,250	122,500	(11,750)	-8.8%
Bldg Security Services	848,453	993,053	1,050,000	1,120,000	70,000	6.7%
Subtotal - Maintenance	1,684,027	1,961,830	2,002,250	2,060,500	58,250	2.9%
<u>Nodal/ERO Allocations</u>	(373,564)	(2,813,090)	(2,635,000)	(140,000)	2,495,000	-94.7%
Total	6,719,033	4,067,156	4,959,650	8,713,480	3,753,830	75.7%

**ERCOT Fiscal Year 2009 Budget
Employee Expense Detail**

	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
Training Registration Fees	437,277	415,673	519,963	503,181	(16,782)	-3.2%
Training -Travel Lodging	184,349	132,613	125,525	123,104	(2,421)	-1.9%
Training -Travel Airfare	133,953	87,672	136,592	118,470	(18,123)	-13.3%
College Education Reimbursement	4,585	29,033	112,608	82,576	(30,032)	-26.7%
Training Mileage Reimbursement	155,993	100,145	63,624	58,961	(4,663)	-7.3%
Training - Meals	48,238	37,659	55,050	52,064	(2,986)	-5.4%
Training -Travel Other	37,499	21,006	25,161	28,916	3,755	14.9%
Subtotal - Training	1,003,293	823,801	1,038,523	967,271	(71,253)	-6.9%
Business-Travel Airfare	8,864	69,756	139,403	146,297	6,894	4.9%
Business - Mileage Reimbursement	6,860	54,186	215,867	137,702	(78,165)	-36.2%
Business - Travel Lodging	11,789	104,976	102,611	109,892	7,281	7.1%
Business Registration Fees	2,150	10,252	80,484	79,625	(859)	-1.1%
Business - Meals	792	31,888	61,888	51,149	(10,739)	-17.4%
Business - Travel Other	2,019	20,960	49,709	26,400	(23,308)	-46.9%
Cellular Phone	123,407	167,386	170,433	173,552	3,118	1.8%
Remote System Access	69,072	59,784	81,601	72,212	(9,390)	-11.5%
Professional Dues	31,658	31,058	53,726	46,488	(7,238)	-13.5%
Wireless PC Card	-	19,910	22,038	29,412	7,374	33.5%
Subtotal - Business Related	256,612	570,156	977,760	872,729	(105,030)	-10.7%
Total - ERCOT	1,259,905	1,393,957	2,016,283	1,840,000	(176,283)	-8.7%

ERCOT Fiscal Year 2009 Budget
Other Expense Detail

	2006 Actual	2007 Actual	2008 Budget	2009 Preliminary	2008 Budget vs. 2009 Preliminary	
					\$ Variance	% Variance
Relocation Benefit	335,343	187,017	350,000	360,000	10,000	2.9%
Subscriptions & Publications	315,764	432,135	414,750	279,750	(135,000)	-32.5%
Recruiting Expense	314,602	155,277	148,500	142,600	(5,900)	-4.0%
Sponsored Meetings	50,200	40,811	126,750	141,750	15,000	11.8%
Reward & Recognition	(2,541)	2,657	96,000	100,800	4,800	5.0%
Postage and Delivery	51,101	16,022	38,460	59,610	21,150	55.0%
Dues	48,216	-	78,150	35,050	(43,100)	-55.2%
Media - Print	-	-	-	30,000	30,000	NA
Job Posting Advertising	13,288	38,158	25,250	25,250	-	0.0%
Report Printing	55,488	54,318	59,700	24,050	(35,650)	-59.7%
Corporate Events	5,234	7,025	-	12,500	12,500	NA
Misc Expenses	13,582	-	7,800	7,600	(200)	-2.6%
Late Fee Payment	17,047	13,699	-	6,000	6,000	NA
Write Off Adjustments	(9,721)	2,954	-	-	-	NA
Temp-to-Hire Fees	-	-	1,000	-	(1,000)	-100.0%
Freight	2,219	-	-	-	-	NA
Express Shipping	-	30,630	-	-	-	NA
Stationery & Office Forms	-	1,631	-	-	-	NA
Tax - Sales, Excise and Use	56,970	150,588	-	-	-	NA
Gain/Loss on Sale of Assets	1,747,447	55,241	-	-	-	NA
Operator Training Services	(17,777)	824	-	-	-	NA
Training Cost Recovery	1,185	-	-	-	-	NA
Claim Settlements	20,482	-	-	-	-	NA
Total - ERCOT	3,018,129	1,188,988	1,346,360	1,224,960	(121,400)	-9.0%

**ERCOT Fiscal Year 2009 Budget
Project Priority List**

2009 Initiatives by CART

CART Rank	Project Name / Type	Estimated Budget Range	Candidate Projects / Additional Details	Source
CO 1	Identity and Access Management	\$100k-\$250k	Automate and provide ability to generate SAS70, NERC and 17799 compliance reports	ERCOT / Carryover
CO 2	Vendor Contract Management (Phase 2)	\$50k-\$100k	Automate and link Hummingbird's contract approval process with the contract and vendor database.	ERCOT / Carryover
CO 3	Microsoft Project Server Upgrade	\$250k-\$500k	Upgrade or replace the current Enterprise Project Management (EPM) tool and to implement portfolio management & reporting processes by streamlining management, access, and availability to project and portfolio data ultimately automating project dashboard reporting thereby reducing the effort required by PMs, BAs, project resources, etc. utilizing manual tools.	ERCOT / Carryover
CO 4	Corporate Document Management	\$250k-\$500k	Implement Corporate Document Management strategy in the following departments: HR, Finance, Procurement, Security	ERCOT / Carryover
CO 5	SEM Enhancement (Security Event Mgr)	\$100k-\$250k	The SEM was originally implemented to monitor, collect and correlate information from the primary systems at ERCOT, firewalls, servers (Unix, Linux and Windows) databases (SQL Server & Oracle) and IDS. Its functionality has been demonstrated successfully and ISSD has determined to expand its data gathering capabilities and upgrade the software to improve its correlation and reporting abilities as well	ERCOT / Carryover
CO 6	IDS Capability Enhancement (Intrusion Detection System)	\$250k-\$500k	The current IDS-IPS will be three years old and much of the implementation was based on network design that is no longer current. The system must be redesigned to appropriately monitor and (in the case of IPS) manage traffic into and within the ERCOT network.	ERCOT / Carryover
CO 7	Security Configuration Management	\$250k-\$500k	Due to the current issues with the present Security Configuration Management software (NetIQ), it may be necessary to research, purchase and implement an alternative solution prior to the July 2008 timeframe in order to ensure compliance with NERC CIP Standards.	ERCOT
CO 8	Critical Area Notification and Isolation	\$50k-\$100k	Provide operations personnel with notification of an emergency or intrusion. Provide those personnel the ability to isolate themselves mechanically if necessary in such a way as to negate the possibility of entry by compromise of the access control.	ERCOT / Carryover
CO 9	Procurement Process Flows	<\$50k	Programs developed with the Lawson Process Flow toolset which automates the flow of information during various steps to business processes. The number, type, and requirements will be determined as part of the overall Procurement business process review.	ERCOT / Carryover
CO 10	Physical Security Perimeter Hardening	<\$50k	This project will address any areas of the perimeter of the ERCOT facility that is exposed to threats such as direct assault or accidents. Project will upgrade or augment as needed existing fence intrusion alarms, install re-enforcement cabling along portions of perimeter.	ERCOT / Carryover

**ERCOT Fiscal Year 2009 Budget
Project Priority List**

2009 Initiatives by CART

CART Rank	Project Name / Type	Estimated Budget Range	Candidate Projects / Additional Details	Source
CO 11	Finance Process Flows	<\$50k	Programs developed with the Lawson Process Flow toolset which automates the flow of information during various steps to business processes. The number, type, and requirements will be determined as part of the overall Finance business process review.	ERCOT / Carryover
CO 12	Process Flows - HR	<\$50k	Automate and provide auditable checkpoints for the hiring and termination of ERCOT employees.	ERCOT / Carryover
CO 13	E-Procurement	<\$50k	Included in Lawson's Requisition Self Service is the E-Procurement application. E-Procurement allows for designated individuals to shop for goods from pre-approved outside vendors within the Requisition Self Service screens.	ERCOT / Carryover
CO 14	Network Anomaly Detection	<\$50k	Implement a system of anomaly behavior sensors on the ERCOT network, tightly integrated with our, current, IDS-IPS, Internet Scanner, Fusion and Site Protector systems to monitor network traffic for anomalous behavior indicative of malicious activity.	ERCOT / Carryover
CO 15	MET Center Disposition	\$10M - \$25M	Project to deliver: 1) Austin Control Center & Data Center; 2) Taylor Data Center Expansion; 3) Executive and Administrative Staff Office Lease Space	ERCOT / Carryover
CO 16	Credit Model Integration with ROME	\$250k-\$500k	Placeholder to respond to NPRRs and mandates	ERCOT
CO 17	Corporate Document Management (ENTERPRISE)	\$250k-\$500k	Develop a strategy for ERCOT organization document management in 2008 and implement the strategy in 2009 to accomplish the following: Managed Security of Records and Information; Statutory and Regulatory Compliance (new rules of civil procedure: eDiscovery); Improved efficiency and productivity.	ERCOT
CO 18	Endpoint Security	\$250k-\$500k	Our current model does not allow for the network monitoring we currently employ for ensuring that traffic into and across our network does not represent a threat to ERCOT's data processing capability. NERC requirement.	ERCOT
CO 19	Security Monitoring Enhancement	\$250k-\$500k	The original IDS/IPS equipment which is the backbone of our NERC required security monitoring system will exceed 3 years of age and requires replacement. This project is to identify what sensors available from ISS will meet our requirements, procure and install.	ERCOT
CO 20	Asset Management Integration (Altiris, Remedy, Lawson)	\$100k-\$250k	ERCOT currently has several Asset Management tools including Altiris, Aperture, Remedy and Lawson. Each of these tools provide a unique purpose and data. Integration between the systems is necessary to eliminate errors resulting from duplicate data.	ERCOT
CO 21	SharePoint Hosting	\$250k-\$500k	Potential hosting of SharePoint at an external site	ERCOT
Subtotal		\$ 23,950,000		
IO 1	Network - Switches	\$250k-\$500k	Replaced every 5 years.	ERCOT
IO 2	Network - Firewalls	\$100k-\$250k	Replaced every 4-5 years.	ERCOT

**ERCOT Fiscal Year 2009 Budget
Project Priority List**

2009 Initiatives by CART

CART Rank	Project Name / Type	Estimated Budget Range	Candidate Projects / Additional Details	Source
IO 3	Infrastructure Monitoring Enhancement Project	\$500k-\$1M	System enhancement to the existing Remedy and OpenView systems	ERCOT
IO 4	Other Projects TBD	\$250k-\$500k	TBD	ERCOT
IO 5	Computing Hardware - X-series Replacement	\$1M-\$2M	Replaced every 3-4 years.	ERCOT
IO 6	Computing Hardware - Desktops	\$250k-\$500k	Replaced every 3 years	ERCOT
IO 7	Data Storage	\$3M-\$4M	Storage Requirements for all environments to support data virtualization and ensure adequate capacity for ongoing operations and growth	ERCOT
IO 8	Storage - Misc.	\$250k-\$500k	Allotment for additional storage projects for supporting equipment - SAN directors & switches, eg. to allow implementation of storage equipment	ERCOT
IO 9	Minor Capital	\$1M-\$2M	Average minor capital expenditure (not budget) over the last 3 years is \$2M.	ERCOT
	Subtotal	\$ 8,350,000		
MO 1	ERCOT System Throughput for IDR (Advanced Metering)	<\$50k	Planned carryover for closing: Provide incremental increases in IDR processing capability for ERCOT systems.	ERCOT / Carryover
MO 2	Demand Response for Settlement	\$500k-\$1M	Implementation resulting from PUCT project 34610 or related PUCT order	Market
MO 3	Verifiable Cost Management System	\$100k-\$250k	Creation of the Verifiable Cost Management System (VCMS), the interface QSEs will use for submitting and tracking their verifiable costs requested by TPTF.	Market
MO 4	Web-enabled Registration	\$100k-\$250k	Create an interface and provide web-enabled registration forms (including RARF, NOI, interconnect, etc.) - total of around 50 forms. Nodal Go-live manual process.	Market
MO 5	MPIM integration with Siebel	\$100k-\$250k	Eliminate manual workaround and dual entry (2009 deferral necessary due to Siebel freeze)	ERCOT
MO 6	Nodal.ercot.com Retirement	\$250k-\$500k	Migration of content from nodal.ercot.com website to ERCOT.com website; retirement of nodal.ercot.com website.	ERCOT
MO 7	Enhancements to API for Disputes	\$500k-\$1M	MPs (from COPs) have requested that ERCOT enhance an API to programmatically submit disputes. The API would interface with Siebel and would be created in the integration layer.	Market
MO 8	NPRRs & Mandates	\$2M-\$3M	Additional post-nodal efforts - not yet defined and not covered under stabilization or Operations and Maintenance.	Market
MO 9	COMS Extract, Report & Web Services Monitoring & Usage Statistics	\$250k-\$500k	Provide research capabilities for Commercial Operations extract, report and web services data for internal business users, which include monitoring functionality and usage analysis capabilities.	ERCOT
	Subtotal	\$ 4,300,000		

**ERCOT Fiscal Year 2009 Budget
Project Priority List**

2009 Initiatives by CART

CART Rank	Project Name / Type	Estimated Budget Range	Candidate Projects / Additional Details	Source
RO 1	MarkeTrak Enhancements (Workflow & Reporting)	\$50k-\$100k	Planned Enhancements to the functionality of MarkeTrak per SCR749	Market / Carryover
RO 2	Small Renewables/Distributed Generation - RMWG	<\$50k	Legislature / PUCT project	PUCT / Carryover
RO 3	Advanced Metering - Mkt Changes for PUCT 34610 (fka RMWG/TX SET)	\$250k-\$500k	PUCT Project	PUCT / Carryover
RO 4	Data Research and Reporting (formerly ETS Transition to EDW)	\$100k-\$250k	Deliver a data research and reporting tool for ERCOT Commercial Operations.	ERCOT / Carryover
RO 5	EDW EAI Transition Phase 1(inc. PaperFree & NAESB)	\$50k-\$100k	Phase 1 will transition Paperfree and NAESB data from the Data Archive to Operational Data Store and begin replication. Necessary to decommission outdated DA hardware.	ERCOT / Carryover
RO 6	Advanced Metering Infrastructure - ERCOT	\$1M-\$2M	This project will begin implementation of the approved CSD from PR70057 for a system wide enhancement of data throughput for Market Operations. MKT Project is PUCT 34610. This project expected to be a phased approach across multiple years. Supports outcome of PUCT 34610 for ERCOT changes.	PUCT
RO 7	TML Transition to MIS	\$500k-\$1M	Migration from TML to MIS of functions that support the Retail market and/or Zonal-related reporting that will continue past Nodal Go-Live. Will maintain 2 systems until this transition occurs.	ERCOT
RO 8	EDW EAI Transition Phase 2 (including PaperFree & NAESB)	\$100k-\$250k	Phase 2 will build reporting from the Paperfree and NAESB Data Archive into the Operational Data Store. Critical infrastructure project.	ERCOT
RO 9	MarkeTrak Phase 3	\$100k-\$250k	Additional efficiencies not limited to a version upgrade. Will include Market requests. Required to maintain vendor support of application.	ERCOT
RO 10	Retail Application Upgrades	\$1M-\$2M	Version upgrades of retail applications and infrastructure components that will introduce new functionality. Required to maintain vendor support of applications.	ERCOT
Subtotal		\$ 3,500,000		
SO 1	MMS Multiple Network Models	\$50k-\$100k	Ability to provide separate models for DAM & RUC. Functionality currently being developed by Nodal per requirements	Market / Carryover
SO 2	MMS Dynamically scheduled resource incremental and decremental energy offer curves.	\$50k-\$100k	ERCOT implemented functionality based on their original interpretation; further discussion yielded a new interpretation for ERCOT that will require a change to the requirements and design. Part of Nodal requirements delivery.	Market / Carryover
SO 3	MMS S&B Information only calculations	<\$50k	S&B information only calculations DAOPTPRINFO & RTOPTPRINFO will not be available until after go-live. Part of Nodal requirements delivery.	Market / Carryover

**ERCOT Fiscal Year 2009 Budget
Project Priority List**

2009 Initiatives by CART

CART Rank	Project Name / Type	Estimated Budget Range	Candidate Projects / Additional Details	Source
SO 4	OTS (Operator Training Simulator)	\$1M-\$2M	AREVA components – Base OTS functions, Power System Modeling changes, QSE model revamp and implementation and Time Synch ABB components – Case development, Operational market data feed to OTS, Interface with simulation engine, Instructor control functions. In-flight Nodal project completing in 2009 needed for Operator training.	ERCOT / Carryover
SO 5	NPRRs & Mandates	\$1M-\$2M	In flight & new NPRRs. Legislative or PUCT mandates.	Market
SO 6	IMM & ERCOT Market Operations Support Study Tools	\$1M-\$2M	Enhancements to the ABB base product to improve functionality as a study tool. This is required by the IMM to monitor the Nodal Market. At this time it is expected that both the IMM and ERCOT Market Operations Support will benefit from these enhancements. If the needs of the IMM and ERCOT are determined to be significantly different a separate project may be necessary. This budget estimate includes the cost of hardware for the IMM as well as the study tool enhancements.	IMM
SO 7	ERCOT System Operations User Interfaces & Alarm Improvements	\$500k-\$1M	Improve EMS & MMS User Interfaces (UI's) for enhanced ERCOT Operator situational awareness. Improve Alarm Handling/Presentation – Control Room/EMS. Operators will be able to use delivered interfaces.	ERCOT
SO 8	CRR API	\$500k-\$1M	System to system interactions for the uploading and downloading of data between ERCOT and Market Participants without manual intervention. Nomination submittals (upload), Auction bid/offer submittals (upload), CRR Network Model files (download), CRR ownership records (download), CRR Auction results (download) Market Participants will be able to access CRR without API.	Market
SO 9	NMMS API	\$500k-\$1M	System to system interactions for the uploading and possible future downloading of data between ERCOT and Market Participants with minimal manual intervention. NOMCR submittals (upload) including data submittals, one-line submittals and CIM XML submittal. Various other submittals such as Rating Methodologies, SPS documents, etc. Market Participants will be able to submit NOMCRs without API.	Market
SO 10	MMS A/S Deliverability Evaluation Function (DEF) Enhancements	\$250k-\$500k	This tool is used by ERCOT operators to determine if there is a situation where Ancillary Service (AS) over a given time horizon is undeliverable. During MMS 2 pre-FAT where this tool was tested, certain enhancements in the scenarios simulated and results presented were proposed. ERCOT still has work to do to evaluate the proposed enhancements. There is a concern that it will take to long for the Operator to set and run once an hour.	ERCOT
SO 11	MMS Weekly RUC Enhancements	\$50k-\$100k	Provide enhanced configurability of WRUC study periods. Needed for daily run to support PASA	ERCOT

**ERCOT Fiscal Year 2009 Budget
Project Priority List**

2009 Initiatives by CART

CART Rank	Project Name / Type	Estimated Budget Range	Candidate Projects / Additional Details	Source
SO 12	Implementation of "shelf-ready" functionality for co-optimizing energy and A/S for self-committed resources in DAM	\$250k-\$500k	Need approved NPRR and requirements (NOTE: This is a preliminary estimate. A TPTF sub-group is still defining the requirements. Once protocol and requirement changes are approved, MMS will work with ABB to estimate the work. Design and implementation details may also alter the estimate.	Market
SO 13	MMS Save Case Format Enhancement	\$50k-\$100k	All major processes (SCED, DAM, RUC) inputs/outputs are archived (referred to as save cases). These save cases can be reloaded into MMS for future analysis. To aid in analysis it was considered beneficial if the binary files in the save case could be stored in a ASCII file format. Workaround is available as data in binary file is still accessible after loading into MMS	ERCOT
SO 14	MMS CCT Data Enhancement	<\$50k	Provide additional data in the database for monthly and annual CCTs for further analysis (Congestion management group) Workaround is available as raw data will be available in files	ERCOT
SO 15	MMS Credit Check Performance Enhancement	\$50k-\$100k	Improve the performance of Phase 2 validation for the credit limit check component. At present it is not known whether further performance improvements are needed	ERCOT
SO 16	Outage Scheduler Enhancements	\$100k-\$250k	Provide enhancements to the Outage Scheduler	Market / ERCOT
	Subtotal	\$ 7,500,000		
	Grand Total	\$ 47,600,000		

Financing Considerations

- **The Board Financial Standard allows capital expenditures to be funded with a combination of revenue and debt; however, the Financial Standard**
 - Requires ERCOT to consider the impact of the current year decision on future years
 - Indicates that, when ERCOT uses debt to fund a portion of capital expenditures, ERCOT should generally structure debt such that the average maturity of the debt approximates the average life of the assets financed
- **In developing the financing plan, ERCOT considered the combined impact of 3 key components**
 - **The costs to be funded with revenue in the year purchased/developed**
 - In recent history, the Board has elected to fund 40% of capex in the year purchased/developed
 - **The debt payments required in future years**
 - Payments are lower in forward years when initial investment is high
 - Payments are higher in forward years when initial investment is low
 - **The interest expense related to outstanding debt**
 - Interest expense is lower in forward years when initial investment is high
 - Interest expense is higher in forward years when initial investment is low

- **Key factors considered when evaluating what blend of revenue and debt to use to fund capital expenditures:**
 - Impact on ERCOT's financial position. Higher debt levels can negatively impact ERCOT's balance sheet. Higher levels of revenue funding strengthen ERCOT's balance sheet.
 - Overall cost to the rate payers. The more debt incurred, the more interest cost must be paid and thus the higher the overall cost of the project.
 - Matching cost with benefit. Matching of the payment for capital expenditures through the SAF with the benefit from those assets once they are in place.
 - Desire to minimize "spiking" in the SAF. The need or desire to have a consistent, predictable fee that will not fluctuate significantly.

Financing Options Considered

Option	Debt repayment period - Base	Debt repayment period - Met Center	System Admin Fee Impact in 2009 (1)			Total SAF Int Exp through 2020	Inc over Base Case	Projected debt o/s at 12.31.2012	Projected debt o/s at 12.31.2015
			2009 - 2012 or 2014	2013 to 2015	2015 or 2016 through 2019				
1 Met Center @ 60% debt, Base @ 60% debt		Weighted average life of 9 years	0.183	n/a	0.107	63.65	-	135	71
2 Met Center @ 80% debt, Base @ 60% debt	4 +	9 yrs w/ no payments the first 4 yrs (beg payments 2015)	0.173	n/a	0.123	70.53	6.89	152	91
3 Met Center @ 100% debt, Base @ 60% debt	4 +	9 yrs w/ no payments the first 4 yrs (beg payments 2015)	0.158	0.177	0.126	75.82	12.18	174	95
4 Met Center @ 100% debt, Base @ 100% debt thru 2012	4 +	9 yrs w/ no payments the first 4 yrs (beg payments 2015)	0.131	0.230	0.116	80.40	16.76	214	82

Note 1: For purposes of this analysis, debt repayments for debt incurred in 2009 through 2012 vary by year and are structured to reduce fee variability between years rather than to produce equal debt payments. In some cases, payments by year may be "lumpy" to accommodate debt payments due under other issues.

Note 2: In all scenarios, the peak debt is around \$343 million and is incurred at December 31, 2008 and decreases thereafter.

(1) The Sys Admin impact takes into consideration the combined effects of a) the amount funded with revenue for the year, b) the debt payments required for the year and c) the interest expense for the year.

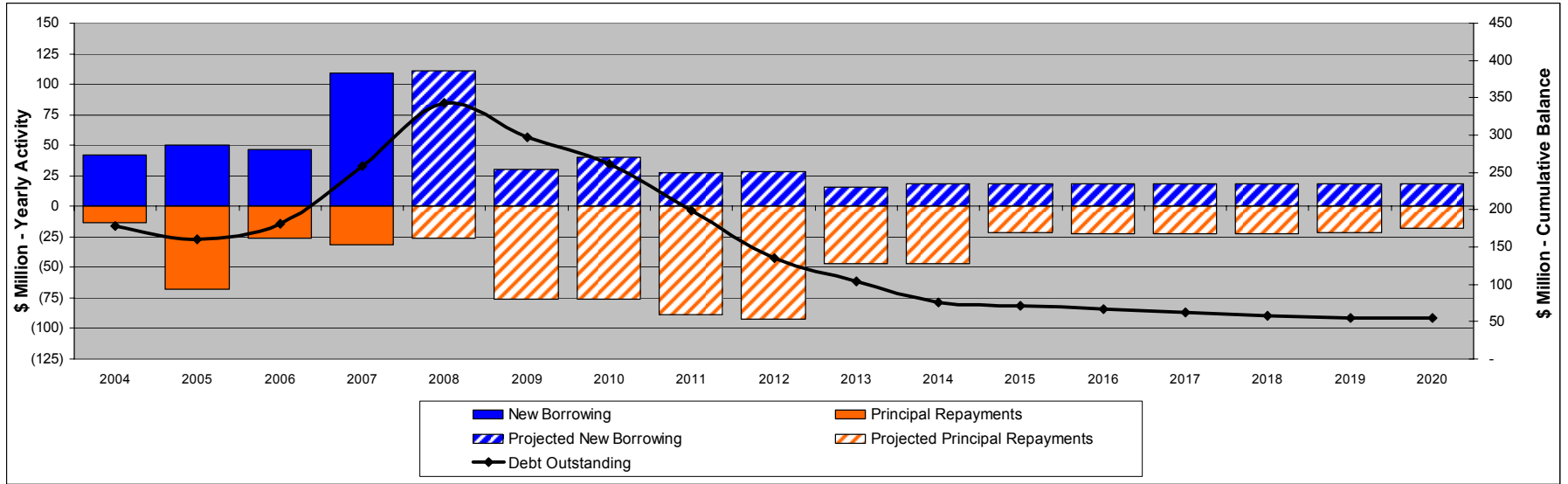
Comparison of Financing Options

Option	Impact on financial position	Overall cost	Match cost with benefit	Minimize SAF "spiking"
1 Met Center @ 60% debt, Base @ 60% debt	Lowest debt level at 12.31.2012	Least cost	Yes	Yes
2 Met Center @ 80% debt, Base @ 60% debt			Yes	Yes
3 Met Center @ 100% debt, Base @ 60% debt			Costs "back loaded"	Interim inc req'd
4 Met Center @ 100% debt, Base @ 100% debt thru 2012	Highest debt level at 12.31.2012	Highest cost	Costs "back loaded"	Interim inc req'd

ERCOT staff recommends Option 1 and has included this alternative as the base case

- Most favorable impact on ERCOT's financial position
- Is the lowest cost alternative
- Good match of cost with benefit
- Minimizes spiking

Debt Profile Associated with Base Case Option



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Outstanding Debt - Beginning Balance	150.0	178.4	160.3	181.1	258.9	343.3	297.3	260.9	199.5	135.3	103.8	75.1	71.3	67.0	62.8	58.6	54.8
New Borrowing	42.0	50.0	46.9	109.6	110.6	30.2	39.8	27.2	28.5	15.5	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Principal Repayments	(13.6)	(68.1)	(26.1)	(31.8)	(26.2)	(76.2)	(76.2)	(88.7)	(92.7)	(47.0)	(46.6)	(21.8)	(22.3)	(22.2)	(22.2)	(21.8)	(18.0)
Outstanding Debt - Ending Balance	178.4	160.3	181.1	258.9	343.3	297.3	260.9	199.5	135.3	103.8	75.1	71.3	67.0	62.8	58.6	54.8	54.8
Change in Debt Outstanding	28.4	(18.1)	20.8	77.8	84.4	(46.0)	(36.4)	(61.5)	(64.2)	(31.5)	(28.6)	(3.8)	(4.3)	(4.2)	(4.2)	(3.8)	-
Projected New Borrowing					110.6	30.2	39.8	27.2	28.5	15.5	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Projected Principal Repayments					(26.2)	(76.2)	(76.2)	(88.7)	(92.7)	(47.0)	(46.6)	(21.8)	(22.3)	(22.2)	(22.2)	(21.8)	(18.0)