

5 Year Project Forecast

Special Finance & Audit Committee Meeting August 17, 2009

Project Forecast

5 Year Project Forecast by CART												
Program Area	2010	2011	2012	2013	2014	2015						
СО	\$1,900,000	\$10,675,000	\$11,750,000	\$11,450,000	\$6,450,000	\$6,450,000						
IO	1,450,000	0	6,100,000	3,550,000	6,600,000	29,875,000						
MO	1,500,000	22,850,000	25,870,000	25,250,000	12,500,000	13,600,000						
RO	1,850,000	5,500,000	4,000,000	2,500,000	2,500,000	2,750,000						
SO	150,000	20,000,000	21,750,000	21,750,000	14,750,000	14,750,000						
Subtotal	\$6,850,000	\$59,025,000	\$69,470,000	\$64,500,000	\$42,800,000	\$67,425,000						
Met Center Disposition	31,900,000	1,000,000	6,000,000									
TCC1 Data Center Expansion		550,000										
Data Center Equipment	7,500,000	47,685,000										
Total	\$46,250,000	\$108,260,000	\$75,470,000	\$64,500,000	\$42,800,000	\$67,425,000						

NOTE:

Forecast for 2011 – 2015 includes Post Nodal estimates for break/fixes, defects & critical enhancements and parking deck/deferred functionality.

Project Forecast - Post Nodal Impact

Post Nodal Estimate distribution among the CARTS:

	% Allocation	2011	2012	2013	2014	2015
*Post Nodal Estimates	100%	\$50,000,000	\$50,000,000	\$50,000,000	\$25,000,000	\$25,000,000
co	15%	\$7,500,000	\$7,500,000	\$7,500,000	\$3,750,000	\$3,750,000
MO	45%	\$22,500,000	\$22,500,000	\$22,500,000	\$11,250,000	\$11,250,000
so	40%	\$20,000,000	\$20,000,000	\$20,000,000	\$10,000,000	\$10,000,000

Assumptions:

Post Nodal estimates includes break/fixes, defects & critical enhancements and parking deck/deferred functionality.

- Break/fix: Emergency fixes that will need to go into production relatively quickly, in some cases within 1-2 days.
- Defects: Remaining defects after Nodal go live low priority severity 3 defects (that currently have a workaround) and high priority 4, 5, and 6 severity defects.
- Critical Enhancements: Enhancements that will need to be implemented within 1 year after golive. (These items will probably be discovered during Market Trials and shortly after go-live/production cut-over.)
- Parking Deck/Deferred Functionality: Enhancements that can wait for release for more than 1 year after go-live.

2010 Portfolio Rank	2010 Priority	Carry over	Source	Program Area	Source Doc	Project Number	Project Name	Current Status	2010 Budget Range	Cumulative 2010 Budget Range	Summary Description
1.0	1-Critical	Υ	PUCT	Nodal		N/A	Nodal	Execution	\$ -	\$ -	Line item to indicate relative importance of Nodal project compared to other efforts.
2.0	1-Critical	Υ	ERCOT	Met		80001_01	MET Center Disposition	Execution	>\$10M	\$30M-\$32M	Begin to respond to the recommendations documented during MET Facility Analysis Phase 1 with regard to housing the activities currently performed at the MET Center.
3.0	1-Critical	N	ERCOT	Data Center		10010_01	Tier 1 Storage	Not Started	\$100k-\$250k	\$30M-\$32M	Needed to populate new data centers and replace existing equipment reaching end of life. Equipment upgrades scheduled for 2010/2011 and 2015/2016. Normal life cycle replacement is supported by Gartner.
4.0	1-Critical	N	ERCOT	Data Center		10011_01	P-series (6-P595s, 4-P6-570s, local storage)	Not Started	\$50k-\$100k	\$32M-\$34M	Needed to populate new data centers and replace existing equipment reaching end of life. Equipment upgrades scheduled for 2010/2011 and 2015/2016. Normal life cycle replacement is supported by Gartner.
5.0	1-Critical	N	ERCOT	Data Center		10013_01	Windows/Linux Servers	Not Started	<\$50k	\$32M-\$34M	Needed to populate new data centers and replace existing equipment reaching end of life. Equipment upgrades scheduled for 2010/2011 and 2015/2016. Normal life cycle replacement is supported by Gartner.
6.0	1-Critical	N	ERCOT	Data Center		10014_01	Virtual tape (Tier 4)	Not Started	<\$50k	\$32M-\$34M	Needed to populate new data centers and replace existing equipment reaching end of life. Equipment upgrades scheduled for 2010/2011 and 2015/2016. Normal life cycle replacement is supported by Gartner.
7.0	1-Critical	N	ERCOT	Data Center		10015_01	Telcom Equipment	Not Started	\$3M-\$5M	\$34M-\$36M	Equipment necessary to build out new data centers. This is new equipment required as a result of extending Austin data center lease plus additional components required for Taylor
8.0	1-Critical	N	ERCOT	Data Center		10016_01	Network Gear	Not Started	\$3M-\$5M	\$38M-\$40M	Equipment necessary to build out new data centers. This is new equipment required as a result of extending Austin data center lease plus additional components required for Taylor
9.0	1-Critical	Y	PUCT	RO	PRR 766; PUCT 34610	80027_01	Advanced Metering – Interim Settlement Solution	Execution	\$100k-\$250k	\$38M-\$40M	This project supports the interim settlement of up to provisioned Advanced Meters using actual 15 minute data as defined by PUCT Project 34610 (Interim Solution) (including small distributed renewable generators.)
10.0	1-Critical	Y	PUCT	RO		90024_01	POLR Rule and Expedited Switch	Planning	\$250k-\$500k	\$38M-\$40M	Will add logic to monitor ESI IDs that were switched to POLR for 60 calendar days after the mass transition. The first switch completed on one of these ESI IDs away from POLR will be changed to be an Off Cycle Switch. This monitoring will continue until the ESIID is no longer with the POLR or 60 days expires. ERCOT will also send postcards to customers (under PUC seal) notifying them of the Mass Transition.
11.0	1-Critical	Y	ERCOT	МО		90006_01	Information Lifecycle Management (Comm Ops Systems)	Planning	\$1M-\$2M	\$40M-\$42M	ERCOT will be evaluating the data stored in source and archived systems, including both databases and file servers to determine what data and how much of it will need to be stored and maintained ongoing. This will set the ILM
12.0	1-Critical	N	ERCOT	Ю		10018_01	Annual Storage Growth	Not Started	\$500k-\$1M	\$42M-\$44M	This is the portion deferred from PR90004_01. Project to bring on Disks, Licensing, Memory and anything else needed to keep up with SAN disk consumption of 16 TB per month.
13.0	1-Critical	N	ERCOT	СО		10028_01	Physical Security Project #1	Not Started	\$250k-\$500k	\$42M-\$44M	
14.0	1-Critical	N	ERCOT	Minor Cap		TBD	Minor Capital - Critical	Execution	\$500k-\$1M	\$42M-\$44M	Annual funding for critical small capital purchases
15.0	1-Critical	N	ERCOT	Ю		10021_01	Disaster Recovery Processes	Not Started	\$250k-\$500k	\$42M-\$44M	Plan, review, and revise documentation and runbooks for IT system disaster recovery (Retail only)
16.0	1-Critical	N	ERCOT	Ю		10020_01	enVision Syslog Replacement	Not Started	\$100k-\$250k	\$42M-\$44M	Address need to upgrade Solarwinds, Envision, ArcSight and Juniper NSM that are at end-of-life. These monitor all events within ERCOT's network
17.0	2-High	Y	ERCOT	SO		90002_01	Large Wind Power Production Ramp Forecasting	Planning	\$50k-\$100k	\$42M-\$44M	Provide ERCOT operators with a display that will indicate periods of time within the next six hours during which there is high risk for a large wind power production ramp to occur.
18.0	2-High	Υ	ERCOT	СО		60075_01	Cyber Security Project #1	Execution	<\$50k	\$42M-\$44M	

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19.0	2-High	Υ	ERCOT	со		70014_01	Cyber Security Project #2	Execution	<\$50k	\$42M-\$44M	
20.0	2-High	Υ	ERCOT	so		50029_01	Improvements to VSA/DSA (TSAT/VSAT) - Phase II	Execution	\$50k-\$100k	\$42M-\$44M	The current implementation of VSAT/TSAT allows Operations to detect when ERCOT is at risk of voltage collapse for certain steady state risk situations, but does not support Operators with advice on how to correct the "At risk" state.
21.0	2-High	Y	ERCOT	со		60029_01	Corporate Document Management (ENTERPRISE)	Execution	<\$50k	\$44M-\$46M	First project in a series of projects that together will form the overall Enterprise Records Management program. The objective of this project is to develop the strategy, road map and framework for ERCOT Records Management as defined in CS6.2 Records Man
22.0	2-High	N	ERCOT	со		10031_01	Enterprise Records Management Framework Part 2 (classification component)	Not Started	\$500k-\$1M	\$44M-\$46M	Provide a centralized record management repository for ERCOT with email integration.
23.0	2-High	Υ	ERCOT	RO		50088_01	Data Research and Reporting (ETS Transition to EDW)	Planning	\$1M-\$2M	\$46M-\$48M	Transition of ETS reporting from Data Archive to Enterprise Data Warehouse
23.5	2-High	N	Market	RO	PRR805	TBD	Add AMS Meter Flag to the Database Query Function on MIS	Not Started	\$50k-\$100k	\$46M-\$48M	Add AMS Meter Flag to the Database Query Function on MIS
			Cutline	•							
24.0	2-High	N	ERCOT	Met		80001_04	MET Center Lease (Finish-out)	Not Started	\$1M-\$2M	\$46M-\$48M	Begin finish-out of new leased space to replace the Met Center
25.0	2-High	Ν	TX Leg	МО		10005_01	REC Project (SB 541)	Delete	\$500k-\$1M	\$48M-\$50M	The purpose of Senate Bill 541 (SB 541) is to continue Texas' leadership in installing clean, renewable energy in Texas in a market-based manner that drives manufacturing jobs and provides price protection for businesses and consumers.
26.0	2-High	N	ERCOT	СО		70015_01	Cyber Security Project #3	Not Started	\$100k-\$250k	\$48M-\$50M	
27.0	2-High	N	ERCOT	со		10033_01	Cyber Security Project #4	Not Started	\$100k-\$250k	\$48M-\$50M	
28.0	2-High	N	ERCOT	СО		10029_01	Audit Preparation Status	Not Started	\$250k-\$500k	\$48M-\$50M	Purchase, install, configure, train users, and implement a software solution to maintain and report on ERCOT's NERC regulatory status. The software solution will also provide capabilities to extract information needed for various compliance reviews, assessments, and audits.
29.0	2-High	Υ	ERCOT	СО		80047_01	Taylor Data Center Expansion	Execution	\$500-\$1M	\$48M-\$50M	Deferred purchase of storage building related to the Data Center Expansion. Current storage areas are being displaced by this project.
30.0	2-High	N	ERCOT	Ю		10019_01	Retail Web Application Enhancements	Not Started	\$50k-\$100k	\$48M-\$50M	Upgrade the retail web application to the current preferred platform. Reassess TIBCO queuing implementation.
31.0	2-High	N	ERCOT	Ю		10023_01	Embedded Switches	Not Started	\$500k-\$1M	\$50M-\$52M	Project to reduce the number of ports, increase redundancy for connectivity to the SAN Fabric and reclaim ~20KVA through SAN Director reduction. Reduces annual maintenance costs by \$200k.
32.0	2-High	Z	ERCOT	Ю		10026_01	ldM Gap Analysis	Not Started	\$500k-\$1M	\$50M-\$52M	Identify gaps in the IdM implementation after IAM is finished and address them. This will retire the Intranet from an EAC perspective and implement hooks into Remedy and SharePoint where it makes sense. This is a Utilicast recommendation.

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33.0	2-High	N	ERCOT	Ю		10024_01	Remedy Program	Not Started	\$1M-\$2M	\$52M-\$54M	To ensure a continuous and progressive implementations and enhancements to functionality - BMC Application Performance and Analytics module; Integrate Atrium CMDB with Lawson; Use SMARTS ADM and Atrium CMDB to create reports and systems maps of the hardware, software, and network components in the data centers. Support Nodal "OR" and leverage ILM results to close IT operational gaps and implement tools to operate more efficiently, including storage monitoring. This is a Utilicast recommendation.
34.0	2-High	N	ERCOT	Ю		10027_01	Server Management Suite	Not Started	\$500k-\$1M	\$52M-\$54M	Some of the key components will be NERC reporting and remediation, Patch reporting and remediation, Asset Management and Capacity reporting
											Implement a solution for TNS Names resolution (OID or similar product)
35.0	2-High	N	ERCOT	Ю		10022_01	TNS Names Solution	Not Started	\$100k-\$250k	\$52M-\$54M	
36.0	2-High	N	ERCOT	Ю		10025_01	OpenText	Not Started	\$1M-\$2M	\$54M-\$56M	Select a tool that will better serve the needs of the Email community for attestation and evidence in NERC and Legal audits (Replace current Vault)
37.0	2-High	N	ERCOT	со		10038_01	Leave Management (Exception Time)	Not Started	\$100k-\$250k	\$54M-\$56M	Re-evaluate and re-define a process to track leave hours, investigate and/or implement an upgrade to the Lawson software or select an alternative software product that will meet the tracking and reporting functionality desired for exception hours.
38.0	2-High	N	ERCOT	СО		10039_01	Physical Security Project #2	Not Started	\$50k-\$100k	\$54M-\$56M	
39.0	2-High	N	Market	МО		90015_01	Web-enabled Registration	Not Started	\$250k-\$500k	\$54M-\$56M	This project will create an interface that MPs (and potential MPs) can use to electronically submit and update registration data post nodal go-live. Only expect to start Planning activities in 2010.
40.0	2-High	N	ERCOT	MO		10006_01	EPS Meter DB Redesign	Not Started	\$500k-\$1M	\$56M-\$58M	Move departmental EPS Meter DB and web views due to unsupported compatibility (in access).
41.0	2-High	N	ERCOT	СО		10030_01	Vendor Contract Information Database Review	Not Started	\$250k-\$500k	\$56M-\$58M	Move the management of vendors and vendor contracts from the current, inhouse developed application to a best-practice model application
42.0	2-High	N	ERCOT	СО		10040_01	Contract / Legal Request Process Flow (in conjunction with Procurement & CAF)	Not Started	\$100k-\$250k	\$56M-\$58M	Replace the CAF function by modifying the Procurement Process flow to include contract information.
43.0	2-High	N	ERCOT	СО		10043_01	BOD Material Preparation & BOD Resolution Tracking	Not Started	\$100k-\$250k	\$56M-\$58M	
44.0	2-High	N	ERCOT	RO		80030_01	MarkeTrak Phase 3	Not Started	\$250k-\$500k	\$56M-\$58M	MarkeTrak version upgrade and business enhancements requested by ERCOT and Market. Budget
45.0	2-High	N	ERCOT	СО		10041_01	MS-Project Server Enhancements	Not Started	\$100k-\$250k	\$56M-\$58M	
46.0	2-High	N	ERCOT	Minor Cap		TBD	Minor Capital - Other	Execution	\$1M-\$2M	\$58M-\$60M	Annual funding for non-critical small capital purchases
47.0	3-High / Medium	N	Market	RO		90011_01	Advanced Metering - Retail Market Interface	Not Started	\$100k-\$250k	\$58M-\$60M	Adding POLR Customer Class and AMS Meter Flag to the Database Query Function on the MIS. Resource impact with Nodal makes it difficult to execute this project prior to go-live.
48.0	3-High / Medium	N	Market	МО		10007_01	Verifiable Cost Management System	Not Started	\$50k-\$100k	\$58M-\$60M	The Verifiable Cost Management System (VCMS) will implement an interface that QSEs will use for submitting and tracking their verifiable costs. This will satisfy ERCOT's needs for managing (submission, receipt, storage, and tracking) VC submissions and their related documentation.
49.0	3-High / Medium	N	Market	МО		10008_01	Enhancements to API for Disputes	Not Started	\$50k-\$100k	\$58M-\$60M	This project to enhance the API Disputes functionality for updates, search and other functions post nodal go-live. 2010 will be for planning efforts only.

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50.0	3-High / Medium	Y	ERCOT	со		70020_01	Process Flows - HR	Execution	<\$50k	\$58M-\$60M	Currently ERCOT does not utilize all the capabilities and functionality available in the Lawson Manager/Employee Self Serv Module. This project will open up certain Lawson functionality to make more information available to managers and employees.
51.0	3-High / Medium	N	ERCOT	со		10037_01	BB Evacuation Route	Not Started	\$100k-\$250k	\$58M-\$60M	
52.0	3-High / Medium	N	ERCOT	СО		10032_01	App Log Centralization	Not Started	\$250k-\$500k	\$58M-\$60M	
53.0	3-High / Medium	N	ERCOT	со		10035_01	TCC2 Cubicle Reconfig and Offices	Not Started	\$500k-\$1M	\$58M-\$60M	
54.0	3-High / Medium	N	ERCOT	со		10034_01	TCC1 first floor Cubicle Reconfig and Offices	Not Started	\$500k-\$1M	\$60M-\$62M	
55.0	3-High / Medium	N	ERCOT	со		10048_01	Succession Planning / Talent Management	Not Started	\$100k-\$250k	\$60M-\$62M	
56.0	3-High / Medium	N	ERCOT	со		10044_01	Training Requirements Tracking DB	Not Started	\$100k-\$250k	\$60M-\$62M	
57.0	3-High / Medium	N	ERCOT	со		10042_01	Business Continuity	Not Started	\$100k-\$250k	\$60M-\$62M	
58.0	3-High / Medium	N	ERCOT	со		10049_01	Collateral Calculation Enhancement	Not Started	\$100k-\$250k	\$60M-\$62M	
59.0	3-High / Medium	N	ERCOT	RO		10004_01	Retail Testing Website Enhancement	Not Started	\$250k-\$500k	\$60M-\$62M	ERCOT upgrade to transition to Enterprise Architecture approved infrastructure. No functional changes planned.
60.0	3-High / Medium	N	ERCOT	МО		90017_01	ERCOT.com CMS Replacement	Not Started	\$250k-\$500k	\$60M-\$62M	Replace the current unsupported application with one that is vendor- supported and requires minimal support by ERCOT IT.
61.0	3-High / Medium	N	ERCOT	МО		10009_01	EILS Enhancements	Not Started	\$500k-\$1M	\$62M-\$64M	This project to automate the ERCOT Energy Interruptible Load Service reporting process in expectation of higher volumes with AMI.
62.0	3-High / Medium	N	ERCOT	со		10047_01	Future HR Enhancements	Not Started	\$100k-\$250k	\$62M-\$64M	
63.0	3-High / Medium	N	ERCOT	со		10046_01	Lawson P2P Initiatives	Not Started	\$250k-\$500k	\$62M-\$64M	
64.0	3-High / Medium	N	ERCOT	RO		10003_01	ERCOT Usage Data Loading	Not Started	\$500k-\$1M	\$62M-\$64M	Mid term needs in preparation for the long term solution. Move 86703 report off ftp, modify 867 loading process to L*, splitting out interval data from LSChannelCutHeader if no impact to Nodal
65.0	3-High / Medium	N	ERCOT	со		10045_01	Document Preparation Software	Not Started	\$100k-\$250k	\$62M-\$64M	
66.0	3-High / Medium	N	ERCOT	со		TBD	Inventory Control & Asset Tracking	Not Started	\$100k-\$250k	\$62M-\$64M	
67.0	4-Medium	N	PUCT	RO		90007_01	Advanced Metering – Long- Term Settlement Solution	Not Started	\$1M-\$2M	\$64M-\$66M	Scope TBD by PUCT. Effort to begin after Nodal go-live.
68.0	4-Medium	N	ERCOT	со		TBD	Intranet Replacement	Not Started	\$250k-\$500k	\$64M-\$66M	