



**PR90006_01 – Information Lifecycle Management
Approval to Move Into Execution
with Budget Not-to-Exceed Amount**

**Board of Directors Meeting
January 19, 2010**

- **Issue**
- **Project History**
- **Project Objectives & Purpose**
- **Recommendation**
- **Appendix**
 - Risks
 - Timeline
 - Costs & Benefits

- **Whether to move forward into Execution with Project PR90006_01 Information Lifecycle Management with a Budget Not to Exceed to \$1,210,674.**
 - Includes \$75,000 contingency (20%) of Execution Phase to cover project risk

Project Objectives and Purpose:

- Free up usable storage quickly and control future growth rates.

Project Scope:

- Define ERCOT ILM standards and policies to govern data management going forward.
- Apply these standards and policies to the defined group of Commercial System databases.

Project Feasibility:

- It is important to complete the project now to free up storage immediately and affect the next storage purchase resulting in efficient and controlled growth and lower storage costs.

- Since 2001 ERCOT's databases have grown to more than **500 terabytes (TB)**. The implementation of settlements for advanced meters as well as the Nodal Program will both increase growth considerably.
- As a point of reference -- In 2007 AT&T was considered to have the 3rd largest single-database in the world at **323 TBs** and housing 1.9 trillion calling records*
- ERCOT's databases continue to grow as every data record received and processed is saved by each application it travels through. The growth is compounded by the multiple copies existing for each environment – an average of five (5) environments for each record.
- To address this increasing volume of data, Project PR90006_01 was initiated to free up usable storage quickly and control future data growth rates on a defined set of ERCOT Commercial Systems. This is the first of several projects defined to control data and storage growth. The systems in scope for this first effort (90006_01) are:
 - **EIF** (Enterprise Integration Framework) – includes usage data from 2001 to current day
 - **ETS** (ESIID Tracking System) – includes summarized data from 2001
 - **PaperFree/EDI/FTP** – includes current retail transaction data

http://www.businessintelligencelowdown.com/2007/02/top_10_largest_.html

The following efforts have been identified to apply ILM standards to all ERCOT systems.

ERCOT System	ILM Effort	Target Comp Date	Comments
Commercial Systems – Retail	PR90006_01	05/2010	Includes EIF, Paperfree and NAESB databases.
Commercial Systems – Retail & Archive <i>(Will return to the Board at a later date to finalize budget.)</i>	PR90006_02	2011/2012	Includes Lodestar (zonal), Siebel and 3 archive databases. This project will return to the Board in 2011 (post-Nodal) when ready to gate to the Execution Phase.
Wholesale Systems <i>(Included in Nodal Program.)</i>	Nodal	12/2010	Includes Nodal databases. ILM standards are being implemented with these new systems; therefore, no need for “cleanup” activities.
Other – corporate applications, file systems, etc	PR10031	tbd	The effort is targeted to initiate in Q1 of 2010.

Today’s discussion focuses on PR90006_01 only

Estimated Savings - PR90006_01 only

Database	Current storage allocated as of 1/5/2010	Estimated Reduction in Storage Allocated	Estimated TBs to Reclaim Immediately	Estimated Cost Avoided by Reclaimed Storage	Estimated Cost Avoided by Controlling Future Growth (2010 – 2014)
EIF	32 TBs	72%	23	\$ 414,000	\$ 496,131
ETS	25.3 TBs	58%	14.7	264,600	1,565,205
PFR/EDI/FTP	4.2 TBs	<1%	-		42,325
Total				\$ 678,600	\$ 2,103,661

Total Estimated Savings for PR90006_01:

\$2,782,261

Conclusion/Recommendation:

- ERCOT Staff seeks Board approval to move forward into the Execution Phase with this capital project, PR90006_01 Information Lifecycle Management, with a Total Not to Exceed of \$ 1,210,674.
- Next Steps following Board approval
 - Proceed into Execution Phase of the project.



Appendix

Risks Associated with this Project:

- Known risks in executing the project

ID	Risk Description	Likelihood	Severity	Mitigation
01	Any delay in testing and execution activities could prevent completing 90006_01 activities prior to code/environment freeze on May 1, 2010.	Med	High	Continue to monitor activities closely and escalate as necessary.
02	Resource constraints	Med	Med	Continue to monitor activities closely and escalate as necessary.

- Risks of not doing the Project:

- Inflated storage costs.
- Lack of compliance with Protocol 17.2.5:
 “Data passed to the Data Archive (ISM) will be stored by ERCOT for a total of seven years.”
- Continued inefficient use of storage.
- Increasing inability to recover databases within published SLAs.
- Increasing degradation of performance of database queries, reports, transaction processing.

PR90006_01 Project Phase	Activity	Status
Initiation	Engage SAIC to complete ERCOT ILM Strategic Planning Roadmap	Completed
Planning	Analyze and classify all data in scope based on confidentiality and recoverability, business and application requirements, integrity, performance and scalability and retention schedule.	Completed
Planning	Using the data classifications define the necessary cleanup activities needed.	Completed
Planning	Define ERCOT ILM policies and standards to govern data management going forward.	Completed
Planning/ Execution	Prepare the ISM for changes to the source databases that require replication.	In progress (will continue into Execution)
Execution	Apply defined rules to in-scope systems.	To be started with Board approval.
Execution	Rollout ERCOT ILM policies and standards to govern data management for in-scope systems going forward.	To be started with Board approval.

Timeline

Milestone	Baseline Date
Execution Phase Start	01/19/2010
Development & Product Testing Complete	02/12/2010
Integrated Testing Complete	03/30/2010
Production Migration (w/contingency)	04/25/2010
Stabilization Complete	05/21/2010
Execution Complete	06/04/2010

Costs and Benefits

Original Project Budget Estimate prior to Planning	\$ 463,000
Current Total Project Budget & Not To Exceed	*1,963,000
Requested Additional Funding	0
Revised Total Project Budget & Not To Exceed	\$ 1,210,674

*The project is currently listed on the Market Operations Project Priority List with a total project budget of \$1,963,000. However, this total budget was established to address a greater number of systems than included with PR90006_01. The balance of funds will be used by PR90006_02 to address the remaining systems included in the original scope.

Benefits from Cost Benefit Analysis

Maintain ability to support future ERCOT and Market efforts
Performance optimization – database queries, reports, transaction processing.
Storage and space optimization by releasing and reallocating efficiently
Changes to business processes to align with minimum amount of data required to maintain Protocols.
Creation of SLAs to support data management

Cost Avoided by Reclaiming Storage and Controlling Future Growth (2010–14): \$ 2,782,261