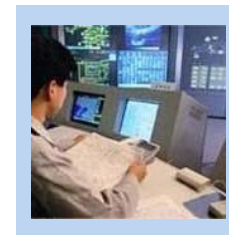
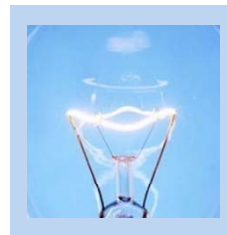
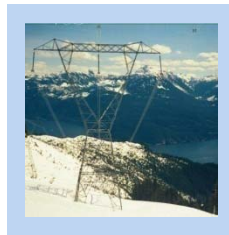




Nodal Program Oversight Report 10 – Infrastructure and Integration Readiness Assessment

ERCOT Board of Directors Meeting
April 22, 2009



Scope

The objectives of Nodal Market Oversight Report Number 10 is to provide an independent assessment of the IT Infrastructure required to support the Nodal Program and the current state of Integration Readiness.

Approach

- Infrastructure Assessment – Are the IT processes robust and scalable enough to support Nodal?
 - Assess the effectiveness of current IT processes supporting zonal operations.
 - Assess how current IT processes have been adapted to meet nodal requirements.
 - Review the plan to develop the future state of IT processes to support Nodal post go-live.
 - Review the Nodal Infrastructure schedule and budget and comment on progress to date.
 - Review the ERCOT Data Center Capacity Plan and comment on its ability to support the Nodal Program.
- Integration Readiness – Are the core projects on track to be ready for End-to-End Testing?
 - Review a sample of core application projects: CRR, COMS, MMS, NMMS and Outage Scheduler.
 - Assess current progress against budget and schedule.
 - Review test plans and the approach for requisite Integration Testing.
- Confirm Findings and Recommendations
- Present Findings and Recommendations

Review Area	Findings
<p><u>Infrastructure Assessment</u> - Are the IT processes robust and scalable to support Nodal?</p>	<p>The current IT processes are sufficiently supporting Zonal operations. However, the processes are not consistently documented or ubiquitously understood and the process management tools are inefficient.</p>
	<p>IT has implemented several revised operational processes and taken action to support the Nodal Program that will help to eliminate perceived roadblocks. However, not all of the IT processes have been addressed.</p>
	<p>If the recommendations herein are implemented, IT should be prepared to support the projected wave of work from the Nodal Program.</p>
	<p>Nodal contract staff has not been fully introduced to the IT processes.</p>
	<p>IT is working to implement the Information Technology Infrastructure Library (ITIL) process model which should ensure that the IT operational processes can support the post Nodal go live environment.</p>
	<p>The Nodal Infrastructure budget was significantly overestimated with regards to resource utilization from October 2008 through January 2009.</p>
	<p>The Taylor expansion project is on-time and on budget and will provide enough capacity to support the Nodal Market. The new Data Center build-out projects (both Taylor and Bastrop) are not required before the Nodal Market implementation and are on track for completion when needed.</p>

Review Area	Recommendations
<p><u>Infrastructure Assessment</u> - Are the IT processes robust and scalable to support Nodal?</p>	<ol style="list-style-type: none"> 1. ERCOT IT and the Nodal Program should continue to streamline and adjust the Release Management, Change Management, Access Management and Problem Management processes to ensure that unique Nodal Program requirements can be accommodated without violating critical process controls. 2. ERCOT should complete implementation of the Information Technology Infrastructure Library (ITIL) Service Management model. 3. The Nodal Infrastructure budget should be refined and made more accurate. 4. ERCOT Facilities Management, IT and the Infrastructure Project Team must continue to manage the Taylor Control Center Expansion project to ensure that additional capacity is available to support Nodal go-live operations.

Review Area	Findings
<p><u>End-to-End Readiness Assessment</u> - Are the core projects on track to be ready for End-to-End Testing?</p>	<p>Congestion Revenue Rights is on track to be ready for the start of End-to-End Testing.</p>
	<p>Settlement and Billing is on track to be ready for the start of End-to-End Testing.</p>
	<p>The Credit Monitoring and Management system is at risk of not being ready for the start of End-to-End testing.</p>
	<p>Registration and Dispute Management appear ready for End-to-End testing now.</p>
	<p>Of the systems reviewed, the Market Management System carries the highest risk of impacting the End-to-End schedule.</p>
	<p>The Network Model Management System is on track to be ready for the start of End-to-End Testing.</p>
	<p>Outage Scheduler is on track to be ready for the start of End-to-End Testing.</p>
	<p>It is premature to assess progress against the recent Integration Test plan.</p>
	<p>The Integration Test approach is sensible given the current state of the project.</p>

Review Area	Recommendations
<p><u>End-to-End Readiness Assessment</u> - Are the core projects on track to be ready for End-to-End Testing?</p>	<ol style="list-style-type: none"> 5. ERCOT should continue to work with its vendors to increase vendor performance and to decrease overall defect closure time. 6. ERCOT and the Nodal Program should start End-to-End business readiness activities as soon as possible. 7. ERCOT should start organizing staff now for long-term operations and support. 8. The Nodal Program should create and execute contingency plans for failed data transfers. 9. The Nodal Program should provide monthly End-to-End Testing Readiness updates.