



Nodal Program Update

Mike Cleary

Sr. VP and Chief Technology Officer

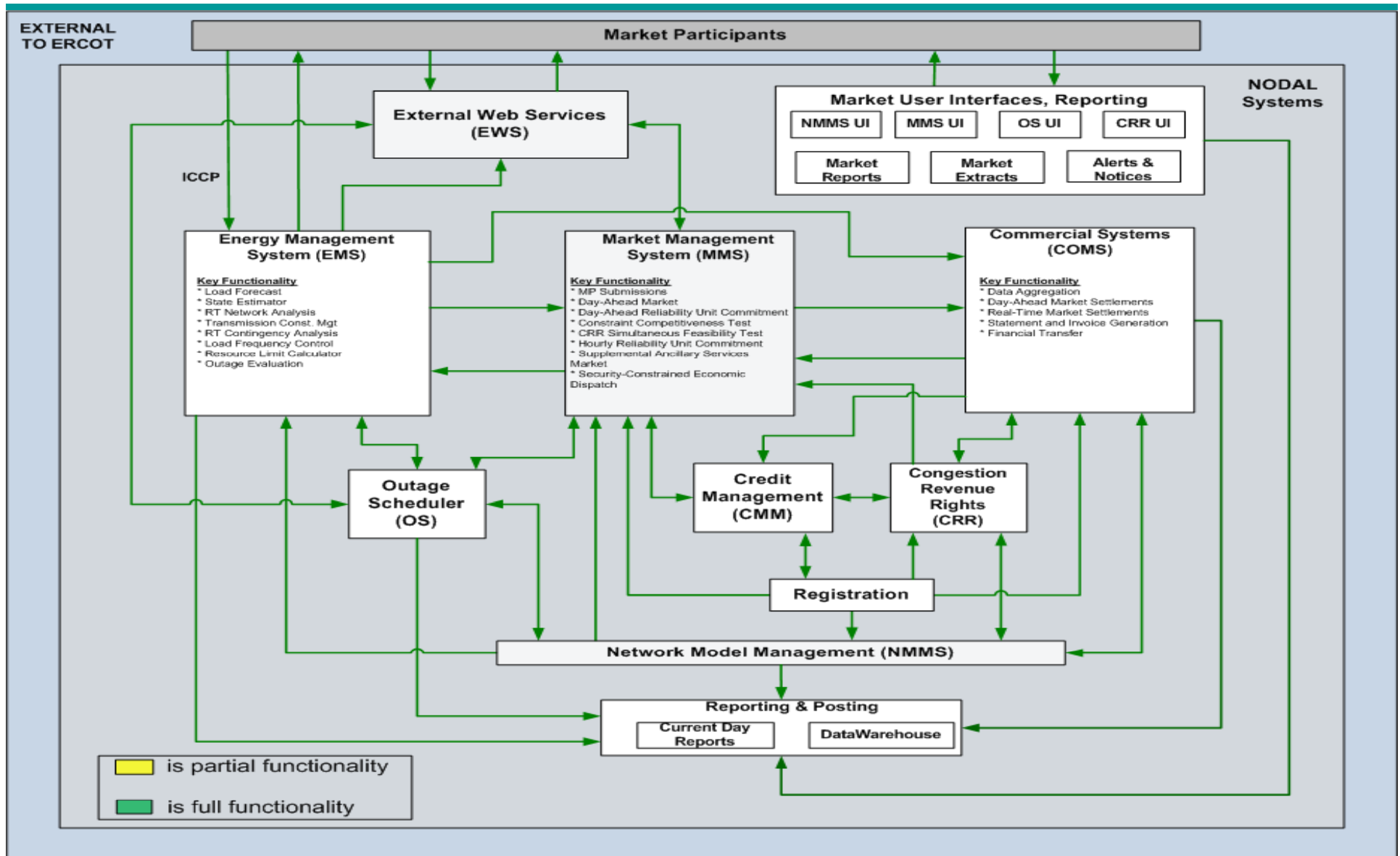
ERCOT Board of Directors

19 January 2010

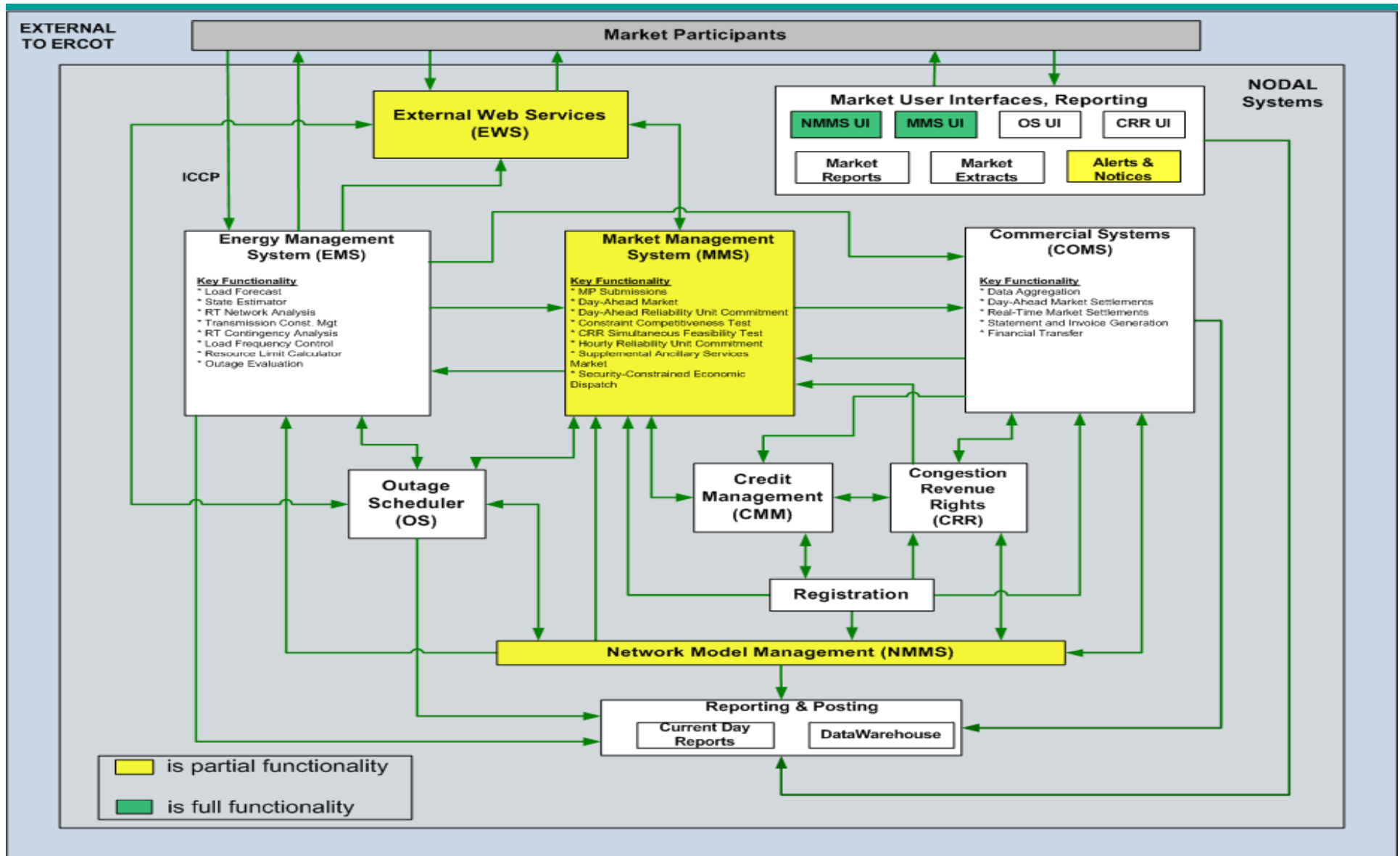
Agenda

- **Program Status**
- **Market Readiness**
- **Financials**
- **Appendix**

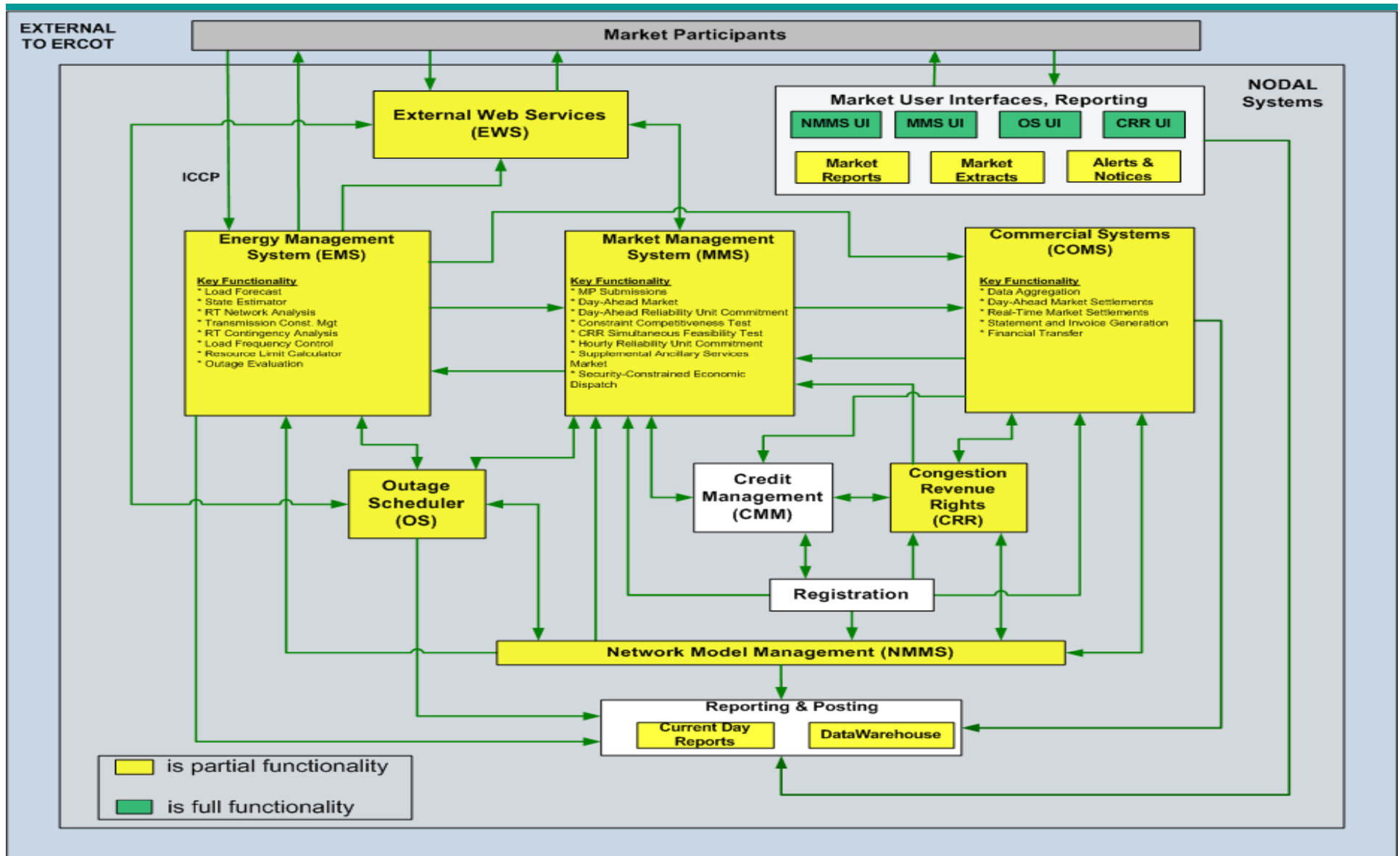
Nodal Systems Blueprint



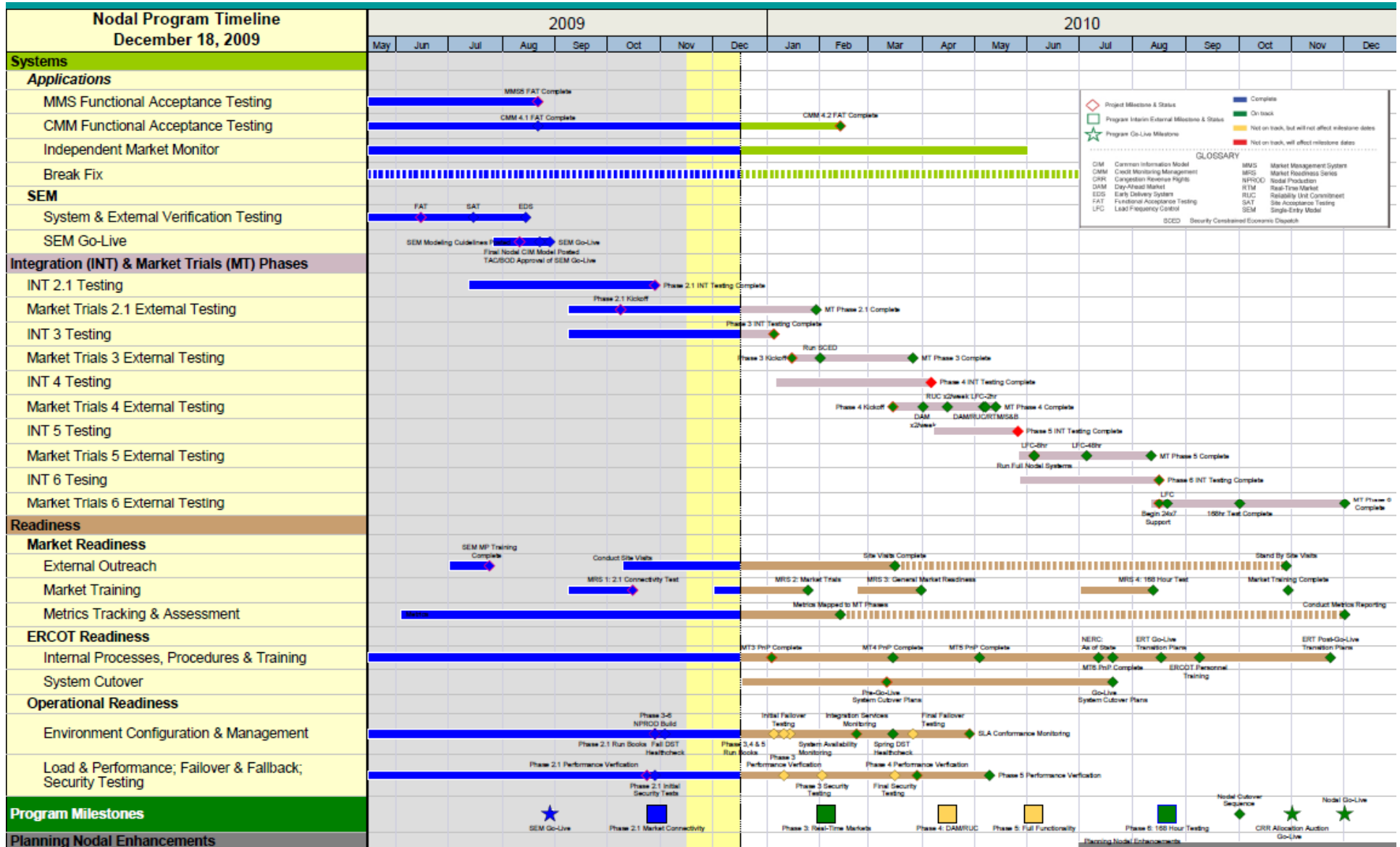
Nodal Systems Blueprint - Today



Nodal Systems Blueprint - Market Trials

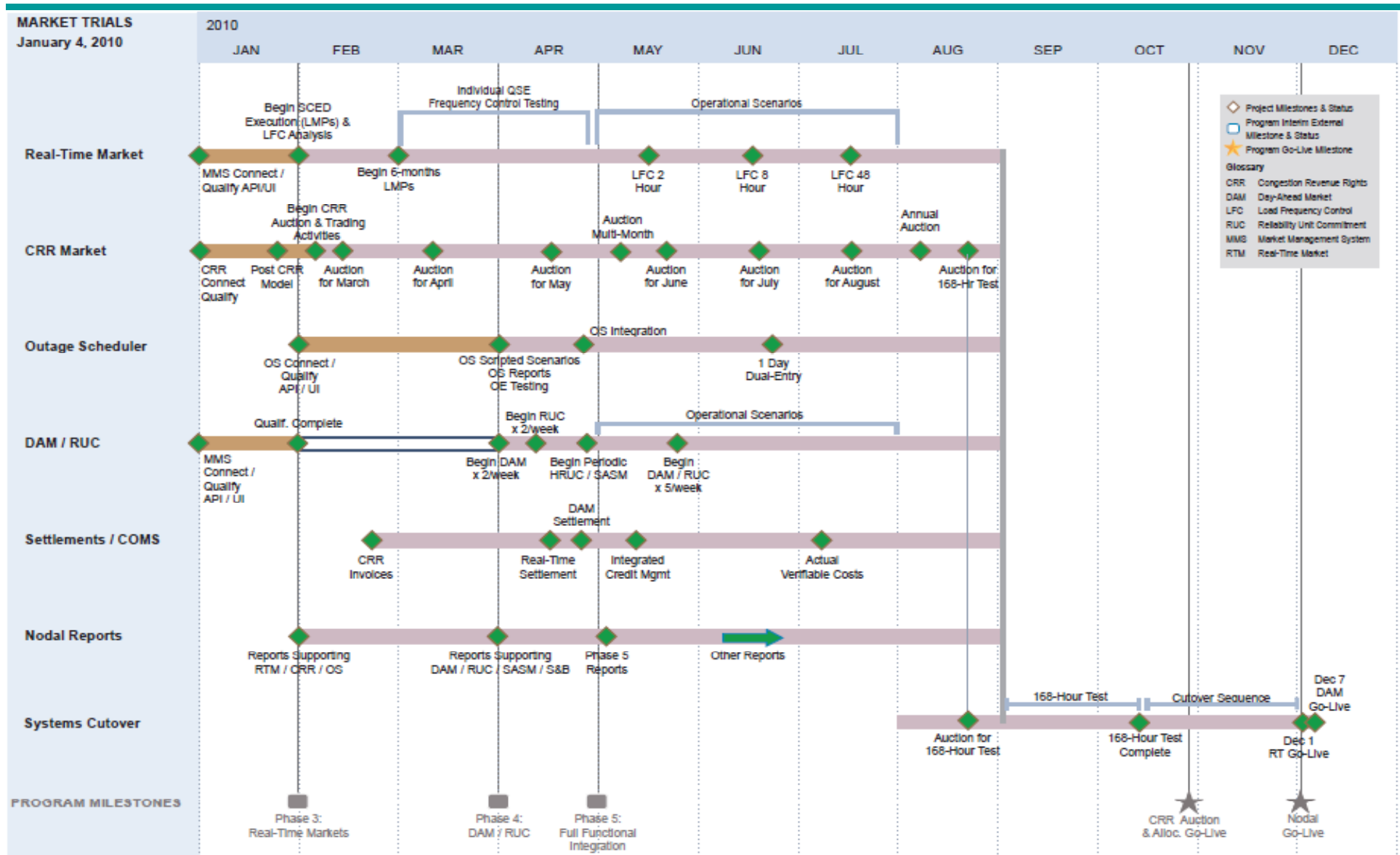


Integrated Nodal Timeline



19 January 2010

2010 Market Trials Timeline



Nodal Program Dashboard

	Delivery Area	Project	Milestone Description	Project Milestone Link	Schedule Date	This Weeks Status
■	Program Milestone	PMO/DA	PHASE 2.1 - MARKET CONNECTIVITY	Phase 2.1 Market Connectivity	10/28/09	Complete
◆	Integration Testing	INT	Phase 2.1 Integration Testing	MTPHASE-2.1 (EWS, MMS, Ufs)	10/28/09	Complete
◆	Market Trials	MT	Phase 2.1 Kick-off Meeting	Phase 2.1 Kick-Off Meeting	10/8/09	Complete
◆	Market Training	ERT	MRS 1: 2.1 Connectivity Test	MRS 1: 2.1 Connectivity Test	10/15/09	Complete
◆	Env. & Config Management	INF/ORT	Phase 2.1 NPROD Build	NProd Build	9/25/09	Complete
◆	Env. & Config Management	INF/ORT	Phase 2.1 Run Books, Monitoring	MT 2.1 Run Books	10/28/09	Complete
◆	L&P; Failover & Fallback; Security	INF/ORT	Phase 2.1 Security Testing (rd 1)	Phase 2.1 Initial Security Tests Complete	10/28/09	Complete
◆	L&P; Failover & Fallback; Security	INF/ORT	Phase 2.1 Performance Testing	Phase 2.1 Performance Verification Complete	10/23/09	Complete
■	Program Milestone	PMO/DA	PHASE 3 - Real-Time Markets	Phase 3: Real-Time Markets	2/4/10	Green
◆	Integration Testing	INT	Phase 3 - INT Testing Complete	MTPHASE-3 (RTM, SCED, CRR)	1/4/10	Green
◆	Market Trials	MT	Phase 3 Kick-off Meeting	Phase 3 Kickoff	1/15/10	Green
◆	Market Training	ERT	MRS 2: Market Trials	MRS2: Market Trials	1/25/10	Green
◆	Internal Process, Procedures, Training	ERT	MT3 PnP Complete	Process and Procedures Drafted for MT3	3/18/10	Green
◆	Env. & Config Management	INF/ORT	Phase 3-6 NPROD Build	Phase 3-6 NPROD Build Complete	10/28/09	Complete
◆	Env. & Config Management	INF/ORT	Phase 3,4,&5 Run Books	MT 3, 4 & 5 Run books	1/5/10	Green
◆	Env. & Config Management	INF/ORT	System Availability Monitoring	System Availability Monitoring Complete	1/14/10	Green
◆	L&P; Failover & Fallback; Security	INF/ORT	Performance Verification	Phase 3 Performance Verification Complete	1/11/10	Green
◆	L&P; Failover & Fallback; Security	INF/ORT	Phase 3 Security Testing	Phase 3 Security Testing Complete	2/2/10	Yellow
■	Program Milestone	PMO/DA	PHASE 4 - DAM/RUC	Phase 4: DAM/RUC	4/14/10	Yellow
◆	Integration Testing	INT	Phase 4 - INT Testing Complete	MTPHASE-4 (DAM/RUC)	4/5/10	Red
◆	Market Trials	MT	Phase 4 Kick-off Meeting	Phase 4.0 Kickoff	3/15/10	Green
◆	Market Trials	MT	MT Phase 3 Complete	MT3-Market Trial Activities	3/16/10	Green
◆	External Outreach	ERT	Conduct Site Visits	Conduct Site Visits (Start)	3/16/10	Complete
◆	External Outreach	ERT	Site Visits Complete	Site Visits Complete	3/31/10	Green
◆	Market Training	ERT	MRS 3: General Market Readiness	MRS3: General Market Readiness	2/12/10	Green
◆	Metrics Tracking & Assessment	ERT	Metrics Mapped to MT Phase	Metrics Mapped to MT Phases	3/15/10	Green
◆	Internal Process, Procedures, Training	ERT	MT4 PnP Complete	All MT4 L-1 to L-4 Updated Process and Procedures	1/11/10	Green
◆	Env. & Config Management	INF/ORT	Initial Failover Testing	Initial Failover Testing Complete	3/26/10	Green
◆	Env. & Config Management	INF/ORT	Final Failover Testing	Final Failover Testing Complete	2/22/10	Green
◆	Env. & Config Management	INF/ORT	Integration Services Monitoring	Integration Services Monitoring Complete	3/16/10	Green
◆	L&P; Failover & Fallback; Security	INF/ORT	Final Security Testing	Final Security Testing Complete	3/29/10	Yellow
◆	L&P; Failover & Fallback; Security	INF/ORT	Phase 4 Performance Verification	Phase 4 Performance Verification Complete	3/29/10	Green
■	Program Milestone	PMO/DA	PHASE 5 - Full Functionality	Phase 5: Full Functionality	6/4/10	Yellow
◆	Integration Testing	INT	Phase 5 - Integration Testing Complete	MTPHASE-5 (FULL INTEGRATION)	5/26/10	Red
◆	Market Trials	MT	MT Phase 4 Complete	MT4-Market Trial Activities	5/13/10	Green
◆	Internal Process, Procedures, Training	ERT	MTS PnP Complete	All MTS L-1 to L-4 Updated Process and Procedures	5/4/10	Green
◆	Env. & Config Management	INF/ORT	Fall DST Testing	Fall DST Testing	11/3/09	Complete
◆	Env. & Config Management	INF/ORT	Spring DST Testing	Spring DST Testing	3/15/10	Green
◆	Env. & Config Management	INF/ORT	SLA Conformance Monitoring	SLA Conformance Monitoring Complete	4/28/10	Green
◆	L&P; Failover & Fallback; Security	INF/ORT	Phase 5 Performance Verification	Phase 5 Performance Verification Complete	5/10/10	Green
■	Program Milestone	PMO/DA	PHASE 6 - 168 Hour Testing	Phase 6:168 Hour Testing	8/20/10	Green

Program Milestone Schedule Mitigation

Phase 4: DAM / RUC

Integration Testing Schedule has been restored

Cause:

- **Environment Issues (Power Outage, Storage Issues)**
- **Planning delays due to Phase 2.1 and Phase 3 delivery focus**

Mitigation Strategy:

- **Scheduled more work to occur during the holiday period slowdown(12/18-1/4)**
- **Authorize resource overtime for Phase 4 test execution**
- **Reduce the number of Operating Day (OD) runs planned through the end of the year to more effectively leverage testing and resources**
- **Prioritize and pull forward more comprehensive End-to-End scenarios where applicable**

Phase 5: Full Functionality

Integration Testing Schedule has slipped 2 weeks

- **Schedule impact from Phase 4 slippage**
- **Phase 5 Planning delays and a large reporting scope**
- **Comprehensive Test Case development with Business**
- **Continue to leverage overtime for Phase 5 test execution**
- **Prioritize and phase in the delivery of reports during Market Trials**
- **Prioritize Testing to ensure the critical functionality and reports are completed first**
- **Prioritize must have End-to-End scenarios**

Nodal Program Risks & Issues

Risk/Issue	Impacted Milestone	Target	Status
Integration Testing - Risk <i>Continued risk around technology delivery of business systems integration due to complexity and continuing maturing of application and data dependencies.</i>	Program	May 2010	<ul style="list-style-type: none"> Phase 3 On track; planning complete, execution in progress. Execution of work plan, with specific focus on January Market Trials functionality, under way. Later phase schedules have slipped due to environment issues and focus on Phase 2.1, Phase 3 delivery.
Market Interaction Operating Level Agreements (OLAs) <i>Need to determine operating level agreements associated with market interactions to assist ERCOT in establishing operational thresholds. ERCOT is responsible for ensuring any market thresholds required before Go-Live are defined, managed through the appropriate stakeholder processes and communicated in a timely fashion.</i>	Program	April/May 2010	<ul style="list-style-type: none"> On track. Phase 2.1 OLAs established and communicated to the market during Oct. 8 Market Readiness Seminar. Phase 3 and 4 OLA definitions in process.

Nodal Program Risks & Issues

Risk/Issue	Impacted Milestone	Target	Status
Network Model Load Frequency <i>Model updates for Nodal will require more attention and coordination by both MPs and ERCOT to ensure alignment. ERCOT has determined that a bi-monthly Nodal database load represents the most manageable solution for updating the real-time environment when Nodal begins in December 2010.</i>	Program	July 2010	<ul style="list-style-type: none"> • An initial Network Model load process has been established and is being verified. • Impact and process discussions started with Internal & External Stakeholders.
Reconciling Protocols, Systems and Market Expectations <i>Experience by other ISOs in deploying nodal markets has shown that expectations of the market participants are often missed, despite best efforts at defining tariffs or protocol requirements. ERCOT needs to assume such a risk exists for this nodal implementation as well.</i>	Phase 3	Feb 2010 (Change control submitted)	<ul style="list-style-type: none"> • Work underway to trace protocols, requirements and business processes alignment analyses are in progress. • SMEs added to the team in May.
Credit Management – Business & Technical Exposure <i>Credit Management rules and exposure calculations will change significantly with the implementation of the Nodal Program. During the requirements and design phase of the program stakeholder concerns have been expressed that may result in requested system changes as the program moves into Market Testing of Credit Management.</i>	Phase 5	July 2010	<ul style="list-style-type: none"> • ERCOT business and Nodal Program reviewing Credit concerns and next steps.

Earned Value for the Nodal Program from March - December

To be updated and provided before the Board meeting.

Participant Readiness Touch Points

2010				
	January	February	March	April
Meetings	<ul style="list-style-type: none"> • NATF 1/5 	<ul style="list-style-type: none"> • NATF 2/2 	<ul style="list-style-type: none"> • NATF 3/2 	<ul style="list-style-type: none"> • NATF 4/6
Training	<ul style="list-style-type: none"> • Nodal 101 • LSE 201 • Generation 101, 201 • CRR –Online ◆ Settlement Workshop • NMMS 	<ul style="list-style-type: none"> • Nodal 101 • LSE 201 • Basic Training • Generation 101, 201 • CRR – instructor-led ◆ Settlement Workshop • Operations Seminar 	<ul style="list-style-type: none"> • Nodal 101 • LSE 201 • Basic Training • Generation 101, 201 • CRR – instructor-led ◆ Settlement Workshop • Operations Seminar 	<ul style="list-style-type: none"> • Nodal 101 • Trans 101 • Generation 101, 201 • CRR – instructor-led • NMMS • Economics of LMP
Outreach	<ul style="list-style-type: none"> • 7 site visits • MP 6 –Telemetry & MP 14 –RARF launched ◆ 1/28 MRS #2 	<ul style="list-style-type: none"> • 5 site visits • Additional Phase 3 metrics • Standby site visits mitigation approach 	<ul style="list-style-type: none"> • 4 site visits • Scheduled Site Visits conclude • MRS #3 	<ul style="list-style-type: none"> • Standby site visits • Phase 4 metrics launch
Market trials	<ul style="list-style-type: none"> • Start weekly calls ■ Mandatory QSE/CRRRAH re-qualification begins • Phase 3 Handbooks <ul style="list-style-type: none"> • COMS • Outage Scheduler • CRR • RTM/LFC 	<ul style="list-style-type: none"> • Weekly calls • Phase 3 Market Trials initiates • QSE OS qualification • Phase 4 Handbooks <ul style="list-style-type: none"> • DAM/RUC • MIS • Credit 	<ul style="list-style-type: none"> • Weekly calls • Phase 3 Execution • Phase 4 Handbooks <ul style="list-style-type: none"> • Updates to prior handbooks • LFC individual QSE tests 	<ul style="list-style-type: none"> • Weekly calls • Phase 4 Market Trials initiates

Market Participant Site Visits

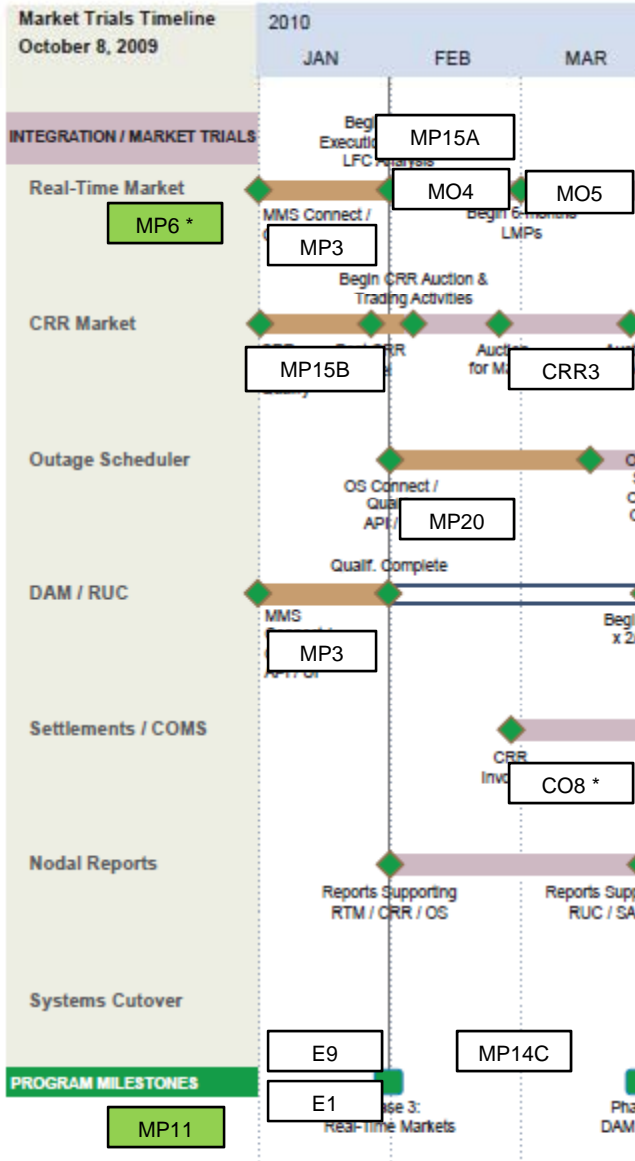
Confirmed ☐ Completed ☒

20 Outreach Site Visits have been completed

Entity	Date	Entity	Date
<input checked="" type="checkbox"/> LOWER COLORADO RIVER AUTHORITY	9-Oct	<input checked="" type="checkbox"/> NRG TEXAS POWER	15-Dec
<input checked="" type="checkbox"/> CALPINE CORP	14-Oct	<input checked="" type="checkbox"/> DIRECT ENERGY LP	5-Jan
<input checked="" type="checkbox"/> AUSTIN ENERGY	20-Oct	<input checked="" type="checkbox"/> CPS ENERGY	6-Jan
<input checked="" type="checkbox"/> CITY OF GARLAND	21-Oct	<input type="checkbox"/> BTU (Bryan Texas Utilities) SERVICES	13-Jan
<input checked="" type="checkbox"/> GDF SUEZ ENERGY MARKETING	29-Oct	<input type="checkbox"/> TOPAZ POWER MANAGEMENT	19-Jan
<input checked="" type="checkbox"/> ANP FUNDING	3-Nov	<input type="checkbox"/> OCCIDENTAL	20-Jan
<input checked="" type="checkbox"/> LUMINANT ENERGY	5-Nov	<input type="checkbox"/> SHELL ENERGY	21-Jan
<input checked="" type="checkbox"/> INVENERGY WIND DEVELOPMENT	10-Nov	<input type="checkbox"/> TENASKA POWER SERVICES	26-Jan
<input checked="" type="checkbox"/> EXELON	11-Nov	<input type="checkbox"/> OPTIM ENERGY	27-Jan
<input checked="" type="checkbox"/> AMERICAN ELECTRIC POWER SERVICE	12-Nov	<input type="checkbox"/> APX	3-Feb
<input checked="" type="checkbox"/> CONSTELLATION ENERGY	17-Nov	<input type="checkbox"/> NEXTERA ENERGY	11-Feb
<input checked="" type="checkbox"/> PSEG ENERGY RESOURCES	18-Nov	<input type="checkbox"/> WIND PANEL (Houston)	16-Feb
<input checked="" type="checkbox"/> J ARON	19-Nov	<input type="checkbox"/> RETAIL PANEL (Houston)	17-Feb
<input checked="" type="checkbox"/> FULCRUM POWER	2-Dec	<input type="checkbox"/> TRI-EAGLE ENERGY	18-Feb
<input checked="" type="checkbox"/> EAGLE ENERGY PARTNERS I LP	3-Dec	<input type="checkbox"/> XTEND ENERGY LP	2-Mar
<input checked="" type="checkbox"/> STEC	9-Dec	<input type="checkbox"/> EC AND R QSE	9-Mar
<input checked="" type="checkbox"/> BP ENERGY COMPANY	10-Dec	<input type="checkbox"/> BRAZOS ELECTRIC	10-Mar

Metrics Roadmap

Find descriptions at: <http://nodal.ercot.com/readiness/scorecard/metrics/index.html>



Confirming start and criteria
of all metrics in February

Market Participant Metrics Activated

Two metrics engaged:

● MP11 (RARF data): http://scorecard.ercot.com/mp/resource_sheet

- Resource Entities
 - Green overall
 - 97.69% of registered MW generation
 - 7 Yellow
 - 2.25% of registered MW generation
 - 1 Red
 - .06% of registered MW generation

● MP6 (Telemetry): http://scorecard.ercot.com/mp/group_metrics/2

- QSE with Resources
- Status lit up as each entity is confirmed (Green first)
- Over 61% of QSEs confirmed
- Represents 58% of total generation in the market



Monthly Financial Review

Don Jefferis

Interim Director – Nodal Financial Management Office

19 January 2010

Monthly Financial Review

Financials to be provided before the Board meeting.

Questions?

Appendix

Defect Definitions

Severity	Definition
Severity 1: Data loss/critical error	Defects that render unavailable the critical functions of the system under test. These include errors such as system errors, application failures, loss of data, incorrect calculations, inability to transfer data, failure to access database, and inability to display information to the user.
Severity 2: Loss of functionality w/o workaround	Defects that render unavailable partial functionality of the system under test with no workaround available. These include errors such as incorrect information displayed to the user, information not updating correctly, extracts failing, and missing export files.
Severity 3: Loss of functionality with workaround	Defects that render unavailable partial functionality of the system under test with a workaround available. These include errors such as incorrect message displayed, optional information missing or not displayed correctly, not receiving e-mail notifications, and incorrect defaults.
Severity 4: Partial loss of a feature set	Defects that affect a feature that is not executed on a frequent basis and there is not a significant impact on the system. These include errors such as help information, filtering, and consistent naming.
Severity 5: Cosmetic/documentation error	Defects that are cosmetic and need to be resolved, but are not a factor in the functionality or stability of the system. These include errors such as field alignment, report formatting, drop down list order, fonts, column order and documentation that is inconsistent with the system(s) as tested.

	Prescription in Quality Center
Priority 1	Must fix ASAP
Priority 2	Must fix prior to Go-Live
Priority 3	Not critical to fix before Go-Live
Priority 4	Minor system/user impact
Priority 5	No system/user impact

Protocol Traceability Effort Update

Tier 1 Sections					
	PTE Traced Items	Research Items	In Progress: Business Procedures	In Progress: Reports/ Extracts	PTE Alignment Items
Section 3 – Management Activities for the ERCOT system (Dec NATF)	928	166	550	193	67
Section 4 – Day Ahead Operations (Nov NATF)	635	10	65	75	3
Section 5 – Transmission Security Analysis and RUC (Nov NATF)	166	17	53	15	10
Section 6 – Adjustment Period and Real-Time Operations (Jan NATF)	926	50	485	52	TBD
Section 7 – Congestion Revenue Rights (Oct NATF)	445	26	58	27	1
Section 8 – Performance Monitoring (Jan NATF)	226	84	206	44	TBD
Section 9 – Settlement & Billing (Nov NATF)	408	0	128	55	2
Section 16.11 – Financial Security for Counter Parties (Dec NATF)	198	2	33	25	3
Section 17 – Market Monitoring & Data Collection (Dec NATF)	25	7	21	1	6
Total	3957	362	1599	487	92

Protocol Traceability Results Update

- **Status as of December 23th 2009:**
 - **Reported to NATF on Sections 3, 4, 5, 7, 9, 16.11, 17**
 - **92 Alignment items identified to date**
 - **Proposed action on Alignment items:**
 - **10 – revise business procedure**
 - **17 – NPRR**
 - **4 – handbook**
 - **4 – revise business requirement**
 - **1 – draft a service level agreement**
 - **56 – still under discussion internally for recommended resolution**
 - **Sections 6 and 8 will be presented to NATF in January**

Requirements to Test Artifact Tracing

- Status as of December 1st 2009:**

Requirements to Test Artifacts			
Project	# of Requirements	# and Type of Traced Test Artifacts	Comments
Energy Management System (EMS)	192	*427 Test Cases/Scripts	Complete as of July 2009 - numbers pending final analysis
Market Management System (MMS)	*231	*1328 Test Cases/Scripts	Complete as of Oct. 2009 - numbers pending final analysis
Outage Scheduler (OS)	*21	*9 Test Cases	Complete as of Jan. 2009 – final analysis in review
Commercial Systems (COMS)	*2160	*8444 Test Cases/Scripts	Under analysis – pending team review of Registration and Commercial Systems Integration Information artifacts
Congestion Revenue Rights (CRR)	50	32 Test Cases	Complete as of Nov. 2009
Credit Monitoring Management (CMM)	*1300	*3000 Test Scripts	In progress - CMM Build 4.2 to be finalized for final analysis of number of requirements & test artifacts
Network Model Management System (NMMS)	*152	*210 Test Cases	Team review of existing documents in progress
Market Information Systems (MIS)	*345	*1235 Test Scripts	Being Reviewed for Final Analysis
Reports and Extracts (EDW, CDR)	*55	*1200 Test Scripts	Team review of existing documents in progress
*indicates that number of requirements or test artifacts are subject to change with completion of artifact tracing			

Protocol Section 4 PTE Trace Report Executive Summary

Section 4 Traceability Overview				
	PTE Traced Items	In Progress Research items (Business / PTE team)	PTE Alignment Items	Full Trace Report
Section 4 Day Ahead Operations	635	60 / 128 Total - 188	3	Posted 11/23/09

Section 4 Alignment Item Review		
#	Summary of Alignment Issue	Resolution Status
A31	MMS DA SPP Calculations for Resource Nodes, Load Zones, and Hubs (sec 4.6.1)	Resolution Identified – change functional requirement No change control should be required as the system has demonstrated the functionality, at least in testing to date. While the change will likely be done earlier, it should be done by phase 5 market trials.
A78	Virtual/Emergency QSE Bid/Offer Limitations (sec 4.4.10 / 16.2.6.2(3))	Discussed Business Procedure Business Procedure needed for Phase 5 of market trials
A80	Combined Cycle Modeling in Protocol Sections 4 and 5 (sec 4.4.9.2.3)	Discussed Protocol change NPRR to be submitted in January

Protocol Section 5 PTE Trace Report Executive Summary

Section 5 Traceability Overview				
	PTE Traced Items	In Progress Research items (Business / PTE team)	PTE Alignment Items	Full Trace Report
Section 5 - Transmission Security Analysis and RUC	167	26 / 91 Total - 117	9	Posted 11/23/09

Section 5 Alignment Item Review		
#	Summary of Alignment Issue	Resolution Status
A54	Unacceptable Use of Modified Load Forecast in RUC (sec 5.5.2(9)(b))	Resolution Identified – address in a Business Procedure
A55	Unacceptable Use of Modified Generic Limits in RUC (sec 5.5.2(8)(b))	Resolution Identified – address in a Business Procedure

Protocol Section 5 PTE Trace Report Executive Summary

Section 5 Alignment Item Review - Continued		
#	Summary of Alignment Issue	Resolution Status
A56	Administrative Controls for Use of Updated Load Forecast (sec 5.5.2(8)(b))	Resolution Identified – address in a Business Procedure
A57	Control of Operator Updates to the Load Forecast (sec 5.5.2(8)(b))	Resolution Identified – address in a Business Procedure
A58	Use of Different Computational Modules to Perform the RT/DA/HA Security Analysis (sec 5.5.1(2))	Resolution Identified – Submit NPRR
A81	DRUC Execution when DAM Fails (sec 5.5.2(1), 5.1(3))	Resolution Identified – Submit NPRR to allow execution of DRUC when DAM fails Will bring to NATF for discussion
A82	Combined Cycle Additions to Section 5 (sec 5.5.2(5))	Resolution Identified – Submit NPRR to address handling on Combined Cycle in RUC Will bring to NATF for discussion
A83	Default for Resource Status when COP is Not Available (sec 5.5.2(9)(a))	Resolution Identified – Submit NPRR to address how Resources will be considered when COP is not available

Protocol Section 5 PTE Trace Report Executive Summary

Section 5 Alignment Item Review - Continued		
#	Summary of Alignment Issue	Resolution Status
A91	QSE Failure to Respond to 5 Year Verifiable Cost Update (sec 5.6.1(9))	Business will develop a Procedure and validate internal system processing to address resetting a Resource's verifiable cost to generic cost when the Market Participant fails to respond to ERCOT's request to file a verifiable cost update following the 5 year anniversary of it's Verifiable Cost approval. Will bring to NATF for discussion

Protocol Section 7 PTE Trace Report Executive Summary

Section 7 Traceability Overview				
	PTE Traced Items	In Progress Research items (Business / PTE team)	PTE Alignment Items	Full Trace Report
Section 7 Congestion Revenue Rights	445	88 / 82 Total - 170	1	Update posted 11/23/09

Section 7 Alignment Item Review		
#	Summary of Alignment Issue	Resolution Status
A20	CRR Market User Interface Handbook (sec 7.5.3(3))	Resolution Identified – Create and publish a CRR Market User Handbook Handbook needed for Phase 3 of Market Trials

Protocol Section 9 PTE Trace Report Executive Summary

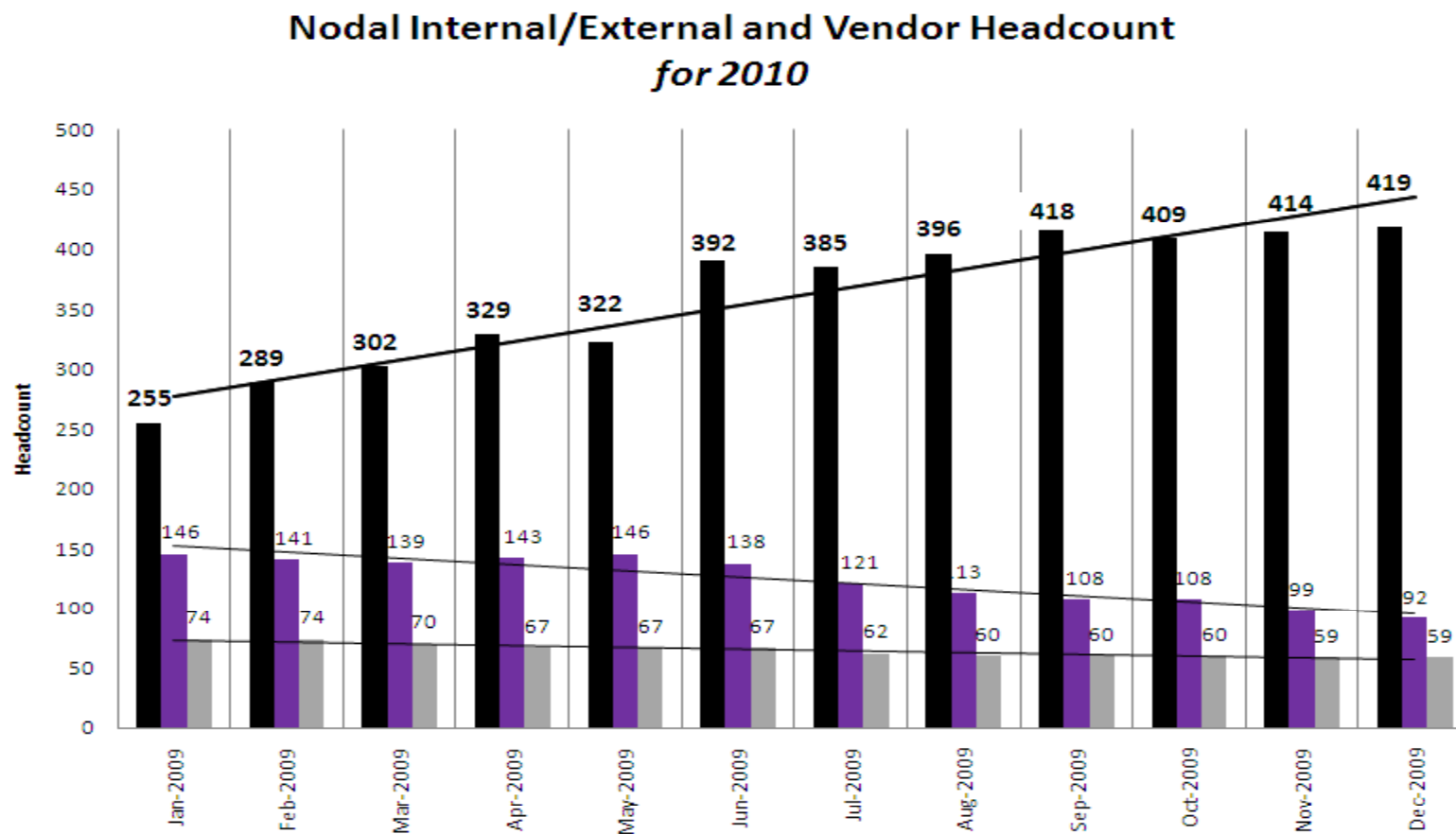
Section 9 Traceability Overview				
	PTE Traced Items	In Progress Research items (Business / PTE team)	PTE Alignment Items	Full Trace Report
Section 9 Settlements and Billing	407	0 / 185 Total - 185	2	Posted 11/23/09

Section 9 Alignment Item Review		
#	Summary of Alignment Issue	Resolution Status
A62	DAM Short Pay Process (sec 9.7.3(e)(ii))	Resolution Identified – Short paid DAM Invoices to be addressed in NPRR147
A72	Missing Reject Status for Disputes (sec 9.14.2(3), 9.14.2(4), 9.14.2(5), 9.14.3.(1))	Resolution Identified – NPRR to be submitted to add the Reject status category

Next Steps

- Questions about a research item or alignment item should be forwarded via e-mail to NodalMarketTransition@ercot.com. Subject line “Protocol Traceability Question”
- Planned dates for Web Ex review
 - Mid-January – sections 6 & 8

Nodal Internal/External and Vendor Headcount 2010



	Jan-2009	Feb-2009	Mar-2009	Apr-2009	May-2009	Jun-2009	Jul-2009	Aug-2009	Sep-2009	Oct-2009	Nov-2009	Dec-2009
■ ERCOT Employees	255	289	302	329	322	392	385	396	418	409	414	419
■ Contingent Labor	146	141	139	143	146	138	121	113	108	108	99	92
■ Vendor Labor	74	74	70	67	67	67	62	60	60	60	59	59

Program Issue:

Market Interaction Operating Level Agreements

◇ Potential Milestone Impact: Phase 3 RTM, Phase 4 DAM/RUC, Phase 5 Full, Go-Live

ISSUE: Market Interaction OLA		Need to determine service level agreements associated with market interactions to assist ERCOT in establishing operational thresholds. ERCOT is responsible for ensuring any market thresholds required before Go-Live are defined, managed through the appropriate stakeholder processes and communicated in a timely fashion.		
Life Cycle State				
Plan	Manage			
Mitigation Plans		Who	Target Date	Current Status
1. ORT to define OLA with business and the market for each phase.		ORT, Market Trials	January	The team has already established an OLA for the Phase 2.1 release and is continuing to define Market OLAs for all subsequent Market Trial Phases as part of the ORT project plan. Phase 3 & 4 OLA Definitions in Progress.
2. PMO working with ORT to ensure consistent communications and work planning is in place to deliver the appropriate OLA and market throttling recommendations for each market release.		PMO, ORT, Market Trials	January, April, May, August	Continuous communication will be delivered to the internal and external stakeholders in support of each market delivery.

Program Risk: Integration Testing

◇ Potential Milestone Impact: Market Trials

Risk: Integration Testing				Continued risk around technology delivery of business systems integration due to complexity and continuing maturing of application and data dependencies.		
Risk Life Cycle State						
Define	Plan	Manage	Watch			
Mitigation Plans				Who	Target Date	Current Status
<ul style="list-style-type: none">Planned Integration Test phases and associated functional and technology components.Created effort-based testing delivery work plan to prioritize and align deliverables to key external milestones.Instituted daily PMO meetings to manage and mitigate day-to-day risks to scope and schedule deliverables.				PMO	Ongoing	Nodal Program Release Scope and Schedule defined to ensure delivery. Program Status Report and Dashboard in place to track progress.

Program Issue: Network Model Load Frequency

◇ Potential Milestone Impact: Overall Program

ISSUE: Network Model Load Frequency		<i>Model updates for Nodal will require more attention and coordination by both MPs and ERCOT to ensure alignment. ERCOT has determined that a bi-monthly Nodal database load represents the most manageable solution for updating the real-time environment when Nodal begins in December 2010.</i>		
Life Cycle State				
Plan	Manage			
Mitigation Plans		Who	Target Date	Current Status
1. Define and document Initial Model Load Process.		ERT	Complete	Initial Process Documented, to be updated based on feedback from Testing and Operations teams.
2. Validate and improve the Model Load Process over the next several months based on a Zonal Bi-Weekly load timeframe.		INT, INF	January - March	Initial loads completed, targeting mid January Model load to align with Zonal schedule..

Program Risk: Reconciling Protocols, Systems, and Market Expectations

◇ Potential Milestone Impact: Market Trials

Risk: Reconciling Protocols, Systems and Market Expectations				Experience with deploying nodal markets by other ISOs has shown that expectations of the market participants are often missed, despite best efforts at defining tariffs or protocol requirements. ERCOT needs to assume such a risk exists for this nodal implementation as well.		
Risk Life Cycle State						
Define	Plan	Manage	Watch			
Mitigation Plans				Who	Target Date	Current Status
1. Assess maturity and readiness of software in the initial nodal release, focusing on new/tailored capability for Texas Nodal.				B. Day K. Farley	1/31/10	12/10/09 – SME continue work with business teams. Number of items for research taking longer than estimated. NATF web ex for 12/18/09 and mid-Jan to review full trace reports with Market Participants for Tier 1 sections.
2. Add team members to the nodal program with Texas market experience to ensure readiness for Market Trials. SMEs to discussion alignment issues with ERCOT business owners. SMEs to report the results of the assessment to the ERCOT business owners for resolution.				B. Day K. Farley	Ongoing	12/10/09 – Work is underway to trace protocols, requirements and business processes alignment analyses are in progress.
3. Keep the oversight groups apprised of progress.				M. Cleary	Ongoing	12/10/09 – status reports provided to program, NATF, TAC, Special Nodal Committee monthly.