TARGET DATE: **November 2010**
MILESTONE: **Outage Scheduling Cutover**

PURPOSE
This document outlines the Program Readiness Criteria for transitioning Nodal Systems for Go-Live. The Readiness Criteria and supporting information have been evaluated based on the target of starting the Outage Scheduling transition rather than Production Ready. The expectation is that the Systems, Processes, and People readiness will continue to be evaluated through the final Go-Live decision for Nodal.

Section I: Program Milestones
Section II: Outage Scheduling System Readiness Criteria
Section III: Outage Scheduling Process Readiness Criteria
Section IV: Outage Scheduling People Readiness Criteria
Section V: Outage Scheduling Readiness Review and Approval
Section VI: Appendix – Supporting Information

SIGNOFF
ERCOT Management signoff represents acknowledgement of the completion of the Readiness Criteria for continuing transition toward Nodal Production Operations targeted for December 1, 2010.

ERCOT Management Area	Business Owner Name / *Technical Owner Name (If Tech Verification only)*	Signature (Not required – Email will count as electronic signature)	Date
Manager Operations Support	Bill Blevins		
Director Grid Operations	Joel Mickey		
Nodal Program Sr VP Chief Operating Officer	Mike Cleary		

I. Program Timelines, Project Milestones:

The Timeline and dashboard below outline the key tracking milestones for the Program. Based on the overall progress of the Program and identified cutover activities for transitioning into Production, the Outage Coordination timelines and Protocol requirements will be enacted on November 1st.

	Delivery Area	Project	Milestone Description	Baseline Finish	Current Finish	This Weeks Status
	Program Milestone	PMO/DA	PHASE 2.1 - MARKET CONNECTIVITY		10/28/09	Complete
	Program Milestone	PMO/DA	PHASE 3 - Real-Time Markets	2/1/10	1/29/10	Complete
	Program Milestone	PMO/DA	PHASE 4 - DAM/RUC	4/1/10	4/1/10	Complete
	Program Milestone	PMO/DA	PHASE 5 - Full Functionality	5/3/10	5/3/10	Complete
	Program Milestone	PMO/DA	PHASE 6 - 168 Hour Testing	9/1/10	9/1/10	Green
	Integration Testing	INT	MT 6 - End to End Testing Complete	8/16/10	8/16/10	Green
	Market Training	ERT	Market Readiness Series 4	8/12/10	8/12/10	Green
	Internal Process, Procedures, Training	ERT	NERC As Of State	7/12/10	7/23/10	Complete
	Internal Process, Procedures, Training	ERT	MT6 PnP Complete	8/31/10	9/21/10	Yellow
	System Cutover	INF/ORT	Pre Go-Live System Cutover Plans	5/28/10	5/25/10	Complete
	System Cutover	INF/ORT	Go-Live System Cutover Plans	8/17/10	8/17/10	Green
	Market Trials	MT	Run SCED	3/31/10	3/31/10	Complete
	Market Trials	MT	MT Phase 3 Complete	3/31/10	3/31/10	Complete
	Market Trials	MT	Run DAM / RUC	4/15/10	4/15/10	Complete
	Market Trials	MT	Run DAM / RUC / RTM / S&B	4/15/10	4/21/10	Complete
	Market Trials	MT	LFC-2hr	5/14/10	5/20/10	Complete
	Market Trials	MT	MT Phase 4 Complete	4/30/10	4/30/10	Complete
	Market Trials	MT	LFC-8hr	6/17/10	6/17/10	Complete
	Market Trials	MT	LFC-5hr	7/21/10	7/21/10	Complete
	Market Trials	MT	Full System Market Reliability Test - 24Hr	8/5/10	8/5/10	Green
	Market Trials	MT	Full System Market Reliability Test - Open Duration	8/16/10	8/16/10	Green
	Market Trials	MT	Full System Market Reliability Test - Multi Day	8/30/10	8/30/10	Green
	Market Trials	MT	Begin 24x7 Support	8/16/10	8/16/10	Green
	Market Trials	MT	Full System Market Reliability Test - Open Duration	9/13/10	9/13/10	Green
	Market Trials	MT	Full System Market Reliability Test - Open Duration	9/27/10	9/27/10	Green
	Market Trials	MT	MT Phase 6 Complete	12/1/10	12/1/10	Green
	Market Training	ERT	Market Training Complete	10/29/10	10/29/10	Green
	Internal Process, Procedures, Training	ERT	ERCOT Personnel Training	9/8/10	9/3/10	Green
	Program Milestone	PMO/DA	SEM Go-Live	8/28/09	8/28/09	Complete
	Program Milestone	PMO/DA	CRR Auction & Allocation Go-Live	11/1/10	11/1/10	Green
	Program Milestone	PMO/DA	Nodal Go-Live	12/1/10	12/1/10	Green

LEGEND: BLUE - Complete, GREEN - No Delay, YELLOW - Delay w/o Impact, RED - Impacted Milestone

**** Pulled from the Nodal Status Report week ending 07/23/10***

II. Outage Scheduling System Readiness Criteria

The following table outlines the System Readiness Criteria for the Outage Scheduler System. Additional details for the criteria are available in the Appendix.

Criteria	Planned Completion	Status
Outage Scheduler Released to Market Trials	2/1/10	COMPLETE • System Functionality and User Interface delivered in Phase 3 with known defects to support Market Trials activities. • Integration interfaces and Opportunity Outage functionality delivered in Phase 4, Phase 5 deployments with known defects • 2 remaining defects required for Go-Live o Severity 3 (workaround available) o Nodal production target 8/6/10 * These defects are not Market Facing
Outage Scheduler Integrated with DAM, RUC	4/15/10	COMPLETE • Outage Integration with the Market Management System (MMS) completed to support Market Trials. • There are no OS to MMS Integration defects.
Outage Scheduler Connectivity Qualification **(MP20)**	4/13/10	GREEN • Current Score GREEN – Aug TAC Presentation o QSER's 98.9% (78/79); TSPs 99.7% (20/23) o Successful submissions of OS transactions • July TAC Score GREEN o QSER's 98.9% (78/79); TSPs 99.7% (20/23) o Successful submissions of OS transactions

III. Outage Scheduling Process Readiness Criteria:

The following table outlines the Process Readiness Criteria for Outage Scheduling.

Criteria	Planned Completion	Status
Verify Outage Evaluation System Functionality **(EMO3 #1)**	6/23/10	GREEN • A test of the Outage Management Process is complete • Evaluation against future models patch currently in testing. This functionality is not critical for go-live.
Outage Coordination Procedures	07/16/10	COMPLETE • ERT Project - Outage Coordination Procedures complete
Market Rules – Protocol Transition Plan updated	07/29/10	COMPLETE • Operations Support has provided applicable Nodal Protocol sections that will be enacted on 11/01/10, • Protocols not required to be enacted to support the CRR Model build in October, the ERCOT team will compare against the Zonal system.
Outage Scheduling Transition Plan Established	07/08/10	COMPLETE • A transition plan to support both Market Trials (168 hour test) and Outages for the CRR Network Model (for the December auction) was reviewed with NATF and TAC • Outages for December that are transferred from Zonal are to be 'certified' during September to support the CRR Model for the December Auction.

IV. Outage Scheduling People Readiness

The following table outlines the System Readiness Criteria for the Network Model Management System.

Criteria	Planned Completion	Status
ERCOT Staff Support of Market Trials	09/30/10	ON TRACK • The Outage Management process continues to be executed in support of Market Trials • Outage Coordinators and Information Technology personnel continue to support system execution and Market questions.

ERCOT Staff Trained on System and Processes	09/03/10	ON TRACK • Outage Coordinators and Information Technology personnel are ready to support the System and Outage processes. • Last training scheduled for 9/3/10
Market Participant Training Delivered	07/15/10	COMPLETE • The last scheduled class is completed on 07/15/10 • Additional training workshop requested for energizing and retiring equipment for the Model and Outage Scheduler.

V. Readiness Review and Approval

The following table outlines the System Readiness Criteria for the Network Model Management System.

Review	Planned Completion	Status
NATF Review	07/08/10 07/29/10	• Reviewed at NATF 07/08/10 • NATF motion to recommend approval of Readiness Criteria to TAC • Review at NATF on 7/29/10
ERCOT Management Approval	08/04/10	• Signoff of this document
TAC Approval	08/05/10	• Any TAC concerns will be noted and used to evaluate next steps prior to BOD presentation
Board of Directors Approval	08/17/10	• Target for BOD approval of Readiness Criteria
30 Day Market Notice	10/01/10	• Market Notice to be drafted pending TAC and Board of Directors feedback

VI. Appendix – Supporting Information

The following information provides the supporting details for each of the Readiness Criteria outlined above.

System Readiness Criteria

Outage Scheduler Released to Market Trials

The table below identified the key functionality released to Market Trials as defined in the PMO scope document for Market Trials Phase 3.

Functionality / Interfaces	Description	MT Phase
MP input to OS - Outage Submission	EIS (sec 7) - Planned, Maintenance, Forced, RSA, Simple	MT P3
OS output to MP – Notifications	Received, Accept/Approved, Extended, Ended	MT P3

Integration Testing and Program Signoff documentation can be found at:

- TestingSignOffDocument_Phase 3.0 Baseline 12042009 (Link)
- MT3.0 Entrance Sign-off Document 01292010 (Link)
- Phase 3 Program Milestone Signoff Document (Link)

Defect resolution needed for Go-Live

Defect ID	Status	Project	Summary	Priority	Severity	Market Facin	NPROD Migration Da
15537	Reopen	OS	Data Issue: OS 2.2.0 The System message box does not always get the TOO match conditions	2	3	N	2010-08-13
15832	Open	OS	Data Issue: OS NMMS: Mismatch between DSV and Model Data - Need process for validating model data	2	3	N	2010-08-13

**** Quality Center (Priority 1/ 2 – Req. for Go-Live; Defect on Demand query tool 8/02/10 18:00)***

Outage Scheduler Integrated with DAM, RUC

Functionality / Interfaces	Description	MT Phase
OS output to MP – Notifications	EIS (sec 5) - Outage State Change Notifications	MT P4
Outage Integration to MMS	Outage for DAM, RUC	MT P4
Export Outages to EMS	To support Outage Evaluation, FOD	MT P4
Import Outage Evaluation Results from EMS	Outage Evaluation Results	MT P4
Export Outages to NMMS	Support CRR Planning Model	MT P5
OS input from NMMS – Network Model Equipment Info integrated	Equipment List, Service Dates, Operatorship, Related Equipment	MT P5

Integration Testing and Program Signoff documentation can be found at:

- MT4.0 Entrance Sign-off Document 03262010 final (Link)
- MT5.0 Entrance Sign-off Document 04302010 final (Link)
- Phase 4 Program Milestone Signoff Document (Link)
- Phase 5 Program Milestone Signoff Document (Link)

Outage Scheduler Connectivity Qualification (MP20)
Reported at TAC on 04/08/10 – (Link)
- QSERs - GREEN @ 98.1% (74/79 QSERs qualified)
- TSPs – GREEN @ 99.8% (18/25 TSPs qualified)

Reported GREEN at TAC on 07/01/10 (Link)
- QSERs - GREEN @ 98.9% (79/80 QSE's w/ Resources
- TSPs – GREEN @ 99.7% (20/23 TSPs qualified)

Process Readiness Criteria

Verify Outage Evaluation System Functionality (EM03 #1)
Reported GREEN at TAC on 07/01/10 (Link)
OS to OE integration tested throughout Market Trials and reviewed at 6/23 NATF

Outage Coordination Procedures Ready
The table below was consolidated the ERT tracking spreadsheet – (Link)

L3 Process / Procedure Owner	Procedures	Procedure% Complete
Bill Blevins	OC_Switching Alternatives for Relieving Violations associated with Outages	100%
Bill Blevins	OC_Temporary Outage Action Plan (TOAP)	100%
Bill Blevins	OC_Failure of the Outage Scheduler	100%
Bill Blevins	OC_Outage Coordinator Procedures	100%
Bill Blevins	OC_Outage Coordination Network Model Coordination Process	100%
Bill Blevins	OC_Outages associated with or may have an impact on SPSs	100%
Bill Blevins	OC_Outages without a reasonable solution	100%
Bill Blevins	OC_Resource Outage Approval Process	100%
Bill Blevins	OC_Acceptance Procedure for Resource Outages Requested Less Than Eight Days Prior to Start Date	100%
Bill Blevins	OC_Transmission Outage Approval Process	100%
Bill Blevins	OC_Resource and Transmission Outage Coordination Procedure	100%
Bill Blevins	OC_Incident Report Procedure`	100%

Market Rules – Protocol Transition Plan identified
Updated Matrix provided at NATF on 7/29/10 (Link)

- Section 3.1 Outage Coordination to go live on 11/1

Outage Scheduling Transition Plan Established
NATF Presentation 07/08/10 (Link)

- 08- Outage Scheduler Transition Plan 100707

People Readiness Criteria

ERCOT Staff Support of Market Trials

- ERCOT Business SME's have supported
  - Weekly Outage Scheduler Market calls since January
  - Market Trials mailbox questions
  - OS Market Trials Handbook (v3) 03/31/10 (Link)

ERCOT Staff Trained on System and Processes

- ERT Weekly Status – Training Status Slide 07/26/10 (Link)
  - 86% - 112/131 Required Training Items Complete
  - Last Training due date 09/3/10

Market Participant Training Delivered

Outage Scheduler Training 7/22/09 – 7/22/10 (Transmission 101, Operations Seminar, OS UI, Workshops)		
	Instructor Led	Web Based
ERCOT	50	8
MP	627	100

* Data provided by Nodal Training team based on LMS and Workshops

Overall Readiness Criteria

NATF Presentation on 07/08/10
09- Nodal Go-Live Update 100708 (Link)

NATF Presentation on 07/28/10
Outage Scheduler Readiness Criteria (Link)