Single Entry Model (SEM) Go-Live Update

Matt Mereness

ERCOT Board of Directors & Special Nodal Program Committee August 2009



SEM Go-Live

- ERCOT and Market Criteria Status for Go-Live Aug 31, 2009
- Market Readiness Criteria approval consideration (possible vote)
- Appendix
 - What is SEM Go-Live?



SEM Go-Live Market Criteria Status (as of 8/14/2009)

TO/TDSP	Attendance at any of the SEM Market Calls	# of Representatives scheduled to take SEM Training	# of TDSP users with access to the test SEM environment	# Test NOMCRs Submitted by TDSPs to the test SEM environment
AEP TEXAS CENTRAL COMPANY	x	x	x	x
BRAZOS ELECTRIC POWER CO OP INC (TDSP)	x	x	x	x
BROWNSVILLE PUBLIC UTILITIES BOARD (TDSP)	x	x	x	x
BRYAN TEXAS UTILITIES (TDSP)	x	х	х	x
CENTERPOINT ENERGY HOUSTON ELECTRIC LLC (TDSP)	x	х	x	x
CITY OF AUSTIN DBA AUSTIN ENERGY (TDSP)	x	x	x	x
CITY OF COLLEGE STATION (TDSP)	x	x	x	x
CITY OF GARLAND (TDSP)	x	x	x	x
CPS ENERGY (TDSP)	x	x	x	x
DENTON MUNICIPAL ELECTRIC (TDSP)	x	x	x	x
GOLDEN SPREAD ELECTRIC COOPERATIVE INC (TSP)	x	х	x	x
LCRA TRANSMISSION SERVICES CORPORATION	x	х	x	x
ONCOR ELECTRIC DELIVERY COMPANY	x	х	x	x
RAYBURN COUNTRY CO OP DBA RAYBURN ELECTRIC (TDSP)	x	x	x	x
RIO GRANDE ELECTRIC CO OP (TDSP)	x	x	x	x
SOUTH TEXAS ELECTRIC CO OP INC	x	x	x	x
TEXAS MUNICIPAL POWER AGENCY	x	х	x	x
TEXAS-NEW MEXICO POWER CO (TDSP)	x	x	x	x
TEX-LA ELECTRIC CO OP OF TEXAS	x	x		
WEATHERFORD MUNICIPAL UTILITY SYSTEM	x	х	x	x

Notes- ERCOT working one TSP to catch-up on final testing/training

- TSP has signed up for Sep 29th make-up training

- ERCOT will support this TSP (and any other TSP) with assistance in submission of NOMCRs



Overall SEM Go-Live ERCOT/Market Criteria Dashboard

Summary of Criteria from TAC-approved SEM Go-Live Procedure (http://nodal.ercot.com/readiness/golive/index.html)

Readiness Criteria called out in SEM Go-Live Procedure	Readiness status	Planned Completion date
TSPs & ERCOT complete EDS/trials activities (ie training and testing)	Green	Complete
Refer to overall engagment summary view (attendance, training, testing, submissions)	Green	Complete
On schedule to complete pre-SEM Go-Live training July 31	Green	Complete
Schedule to support Post Go-Live training scheduled for Sept 22-Oct 20	Green	Sept 29th
Actively pursuing the TSPs not engaged and/or deficient in training	Green	Complete
No Severity 1 or 2 issues in ERCOT or market testing	Green	Complete
Acceptable ratings of classroom training and system performance	Green	Complete
ERCOT sufficiently staffed for maintenance of nodal & zonal systems	Green	Complete
Network Model Group is staffed for dual entry of model changes into zonal and nodal	Green	
ERCOT publishes Network Operations Model validation whitepaper	Green	Complete
Delivered to NDSWG July 14th	Green	
Nodal EMS is capable of consuming NMMS CIM files through the EMS CIM importer for use in the Nodal EMS applications	Green	Complete
Model consumed by EMS (test/screening consumption on July 7, final on July 28)	Green	
ERCOT publishes latest CIM data dictionary and schema	Green	Complete
Posted final CIM 1.21 schema posted on July 31 (http://nodal.ercot.com/readiness/eds2/documents/index.html)	Green	
ERCOT publishes NMMS Modeling Guidelines / Validation Rules document	Green	Complete
Numerous meetings with NDSWG to refine guidelines, blackline version to publish Aug 14	Green	
ERCOT publishes Network Operations Model validation results		Aug 17th
ERCOT will publish analysis of validation results (including CIM Audit, Zonal/Nodal consistency check, Rules validation)		in progress
Nodal network model validated and approved as baseline for SEM Go-Live by ERCOT SysOps and MarketOps Directors		Aug 17th
Sign-off will be based on Network Operations Model validation results		in progress
SEM Go-Live readiness approved by TAC and ERCOT Board		Aug 18th
Consider timing of criteria/completions to determine when to vote		in progress
ERCOT publishes populated CIM model to be used for SEM Go-Live		Aug 30th
TAC approved posting model only to TSPs, and ERCOT has modified the systems accordingly		in progress
Green- activity complete		
White- in progress, no significant issues risk at this time		
Red- needs attention		



SEM Go-Live Approval of Market Readiness Criteria

21.12.2 Notice to Market Participants of Activities Essential for Nodal Market Open

ERCOT shall issue Notices informing Market Participants of the confirmation of, or any changes to, the implementation schedules for each of the following nodal market design activities. The Notice will include an update of the implementation schedules for the remaining nodal market design activities:

- Single entry model;
- Initiation of the 168-hour testing;
- (3) Completion of 168-hour test;
- First congestion revenue rights monthly auction;
- (5) Real-time market implementation; and
- (6) Day-ahead market implementation.

21.12.3 Notice to Market Participants of Effective Date for Nodal Protocol Provisions and Retirement of Zonal Protocol Provision

No part of the nodal market design may start operation until all the Market Readiness Criteria for that part of the nodal market design have been met. Certification that all Market Readiness Criteria have been met must be made at least by each of the following: the Transition Plan Task Force (TPTF), TAC, ERCOT Staff and the ERCOT Board. Upon such certification, ERCOT shall issue two Notices alerting Market Participants to the effective date of Nodal Protocol sections and the retirement of Zonal Protocol sections, as applicable. ERCOT shall issue the first Notice no less than thirty (30) days prior to the effective date or retirement date, as applicable, and the second Notice no less than ten (10) days prior to the effective date or retirement date, as applicable. The Notice shall include:

- (1) The Nodal Protocol Sections to become effective and
- The Zonal Protocol Sections to be retired, if any.



Market Readiness Criteria approval consideration

- Summary of Stakeholder meeting for SEM discussion/approval of Go-Live
 - August
 - 30-day Market Notice sent July 31st
 - NDSWG special meeting Aug 4th
 - Agreement to 3 workarounds- Limits/Alarms, MVA, Owner/Operator
 - TAC met Aug 6th, deferred approval consideration to special TAC on Aug 18th
 - ROS meeting Aug 13th
 - No issues significant issues raised
 - ERCOT publishes results and sign-off of model from Directors on Aug 17th
 - TAC vote* special meeting- Aug 18th 7:30am
 - BOD vote* Aug 18th
 - 10-day Market Notice Aug 21st
 - SEM Go-Live Aug 31st
 - Board can consider whether "Certification that all Market Readiness Criteria have been met"
 - All training complete, and plans in place to support one TSP
 - Note that no protocol changes go into effect Aug 31 (system change only)



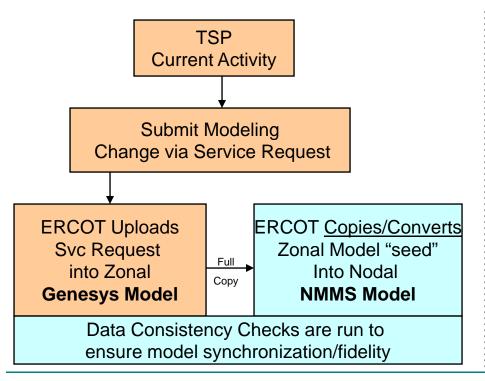
APPENDIX

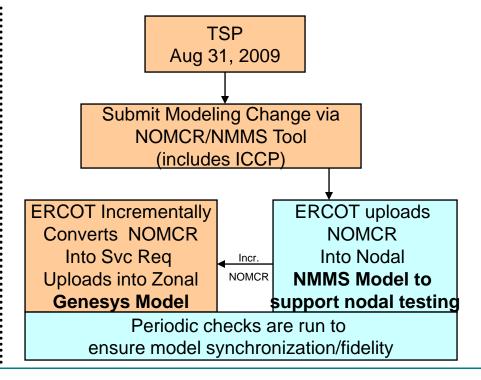
What is SEM Go-Live?



SEM Go-Live Overview

- Single Entry Model (SEM) Go-Live is the switchover on Aug 31, 2009 for TSP submissions of network operations model change requests
 - from "Service Request" submissions via TML
 - to "NOMCR" submissions via the NMMS
 - System of record for model changes becomes NOMCRs on 8/31//09
 - System of record for Network operations Model for reliability and dispatch remains Zonal/Genesys system until Dec 2010







Current Network Operations Model Maintenance for TSPs

TSP

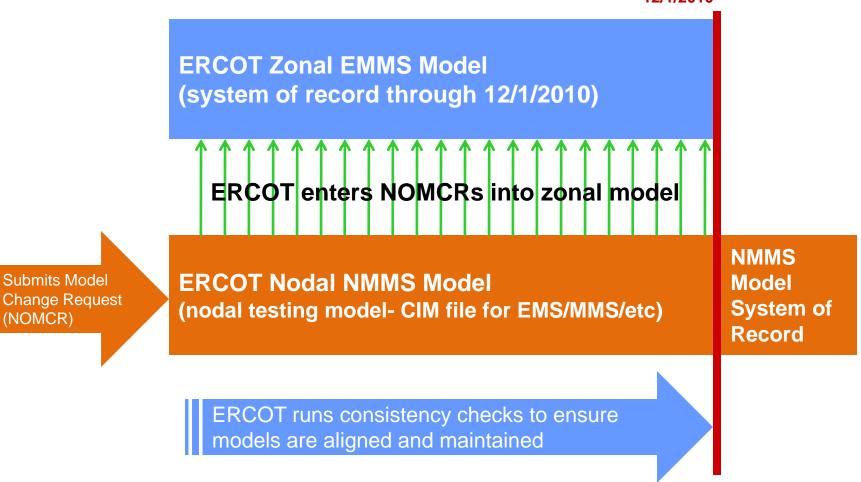
Submits Service Request to Change Model ERCOT Zonal EMMS Model (system of record through 12/1/2010)

Periodic full copy and conversion of model (zonal seed used for nodal systems)

ERCOT Nodal NMMS Model (nodal testing model- CIM file for EMS/MMS/etc)

After 8/31/2009: SEM Go-Live **Network Operations Model Maintenance for TSP**

Nodal Go-Live 12/1/2010



TSP

(NOMCR)

Network Operations Model Maintenance for Resource & QSE (today and post 8/31/09)

