Use Case – Create EMS Test Model
COPS.P01 ModelManageData_UC_CreateEMSTestModel_V0.3

Name: Create the EMS Test Model

Summary:

Create an EMS Test Model for the AREVA test system using the NMMS software and the selected NOMCRs and SAMRs from the Approved and Scheduled list. The output is a CIM/XML file that is generated per the RDF specification plus the ERCOT CIM extensions. The Contingency File, Dynamic Ratings File, SPS, and RAP supporting information files should also be packaged and sent with this model

Acronyms:

ERCOT	**Electric Reliability Council of Texas**
MC	**ERCOT Model Coordinator**
EMS	**Energy Management System**
MP	**Market Participant**
NMMS	**Network Model Management System**
NOMCR	**Network Operations Model Change Request (AKA: Project Files)**
MT	**ERCOT Model Tester (NMMS)**
SAMR	**Special Action Model Request**
TSP	**Transmission Service Provider**

Actor(s):

Name	Role description
MC at ERCOT	Selects from the list of Scheduled NOMCR's and SAMRs to be included in the current EMS Test Model and creates the EMS Model for specific day(s). Attaches the companion files as required. These files include the Contingency, SPS, RAP and other supporting files.

Participating Systems:

System	Services or information provided
Energy Management System (EMS)	Receives the Model after the Case Builder completes the EMS Test Model build
NMMS at ERCOT	The MC uses the Case Builder within the NMMS to build the EMS Test Model using the selected NOMCRs and SAMRs. SPS definitions, RAP definitions, and the Contingency filet are also pulled and sent to the EMS Test system. The EMS Test Model is generated based on the CIM RDF format and delivered in a CIM/XML file. The EMS Test Model build contains ERCOT extensions to the CIM schema, which are included within the generated Model file.

Pre-conditions:

> NONE

Design Considerations:

- None

Known assumptions, limitations, constraints, or variations that may affect this use case:

- One or more of these models may be generated daily by one or more testers.
- The models may include all or some of the approved and scheduled NOMCRs and SAMRs
- The models may also include unapproved or unscheduled NOMCRs and SAMRs

Normal Sequence:

Use Case Step	Description	From - To	Information Content
Step 1	Based on inputs from the MC, the NMMS software inserts the selection of NOMCRs and SAMRs into the Network Operations Model	(from) NMMS to (to) NMMS	
Step 2	NMMS software creates the CIM model file with ERCOT CIM extensions and sends the CIM/XML RDF file to the EMS.	(from) NMMS to (to) MMS	The model is in the CIM RDF format and contains ERCOT CIM extensions. They are delivered in CIM XML RDF. The package should also contain the supporting files such as Contingency files and SPS and RAP information files.

Exceptions / Alternate Sequences:

> NONE

Post-conditions:

> NONE

References:

> Use Cases referenced by this use case, or other documentation that clarifies the requirements or activities described.

- COPS.P01.ModelManageData_UC_ProcessContingencyDefinition

The following Standards and other documents are referenced by this case:

- IEC 61970-552-4, CIM/XML Model Exchange Format Rev6 20050505 Standard (Incremental Change Specification)
- IEC 61970-501, CIM RDF Schema
- ERCOT Nodal Protocols
- ERCOT NMMS Requirements

Issues:

ID	Description	Status
1.	Description of the ERCOT CIM extensions to be included in the CIM XML output	In Work

Revision History:

No	Date	Author	Description
0		J. Winkel	Initial Version
1	9/10/06	M. Goodrich	Added comments from Crews and Moseley
2	9/12/06	M. Goodrich	Added edits from NMG