

Use Case – Process SAMR

COPS.P01ModelManageData_UseCase_ProcessSAMR_V0.4

Name: SAMR Process

Summary:

Send all information regarding Special Protection Systems (SPS), Remedial Action Plans (RAP), Conditional Remedial Actions Plans (RAPC), Mitigation Action Plans (MAP), Rating Methodologies, Contingencies and other information required to be submitted to the Network Modeling Group. The NMMS will track the SAMR submittals similar to conventional NOMCRS but other parts of the normal NOMCR process will not apply to a SAMR. Generally the SAMR will convey information to ERCOT for inclusion into the NMMS database. The file containing the information may be included with the model distribution; however, this information will generally not be included in the Network Operations Model.

Acronyms:

MC	ERCOT Model Coordinator
ERCOT	Electric Reliability Council of Texas
NOMCR	Network Operations Model Change Request (AKA: Project Files)
NMMS	Network Model Management System
CIM	Common Information Model
IEC	International Electrotechnical Committee
MIS	Market Information System
MP	Market Participant
SAMR	Special Action Modeling Request

Actor(s):

Name	Role description
ERCOT Model Coordinator (the receiving entity) – Network Modeling Group	SAMRs are received from the Market Participants for Processing. Generally the data submittal timeline does not pertain to SAMRs. The information may be passed on to requesting parties within ERCOT or the information may be inserted into the proper database and posted to MIS as required by Nodal Protocol. The MC will determine the proper handling of the SAMR based on business processes.
Other ERCOT receiving group	Receives the requested information from Network Modeling Group and determines future actions. This group may approve the information and request that Network Modeling insert the information into the proper database within NMMS.
Market – REP or Wholesale	Generate and send SAMR to the MC. These updates may be CIM/XML Incremental files that meet the specifications of IEC 61970-552-4 or text files and attached diagrams.
MP- TSP (the sending entity)	Generate and send SAMR to the MC. These updates may be CIM/XML Incremental files that meet the specifications of IEC 61970-552-4 or text files and assorted diagrams.

Participating Systems:

System	Services or information provided
The NMMS System at ERCOT	Receive SAMRs and distribute to the appropriate group for

	review and approval. Once approved, store in the NMMS system for distribution when requested.
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Pre-conditions:

The MP (TSP) can provide SAMR changes to ERCOT using one of the following methods:

1. The MP (TSP) has access to an NMMS Thin Client to enter changes into the ERCOT system.
2. The MP (TSP) can produce a CIM/XML Incremental File for submission to ERCOT over a secure network connection.
3. The MP (TSP) submits a comma separated file (CSV) in the ERCOT specified format over a secure network connection.
4. The MP (TSP) may submit the information in text files with attached drawings and diagrams.

ERCOT has an existing power system model and can receive CIM/XML Incremental files.

The CIM XML file produced complies with the IEC 61970-552-4 standard specification entitled CIM XML Model Exchange Format Rev6 20050505. This specification is located on the CIM User's Group Web Site.

Design Considerations:

- Consistent naming must be used in all descriptions of transmission elements and devices.
- Sufficient model data is provided to unequivocally determine the destination of the information.
- The Business Processes exist to define where the SAMR will be sent and what processing the MC must complete for each type of SAMR.

Examples of Special Action Model Request are:

1. Remedial Action Plans (RAP)
2. Special Protection Systems (SPS)
3. Conditional Remedial Action Plans (RAPC)
4. Ratings Methodologies
5. Contingency files
6. Mitigation Action Plans (MAP)

Posting Requirements for Each type of SAMR

1. All SPSs, RAPs, RAPCs and MAPs under consideration must be posted within 5 Business Days.
2. All SPSs, RAPs, RAPCs and MAPs that have been approved must be posted within 2 Business Days BEFORE implementation and the date of implementation must be included in the posting.
3. All Rating Methodology changes shall be posted 7 days FOLLOWING the change implementation date.
4. All Contingency Files must be posted with the Model.

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

None

Normal Sequence:

Use Case Step	Description	From - To	Information Content
Step 1	MP (TSP) proposes a SAMR after discussion with various groups affected by it and submits the proposed SAMR	(from) MP (TSP) (to) various other MP	SAMR form with attached files containing one or more of the

			following: RAPs, RAPCs, Rating Methodologies, SPSs, Contingency definitions
Step 2	MC receives a SAMR and sends a Notification of Receipt to the sending MP (TSP) immediately	(from) MC (to) MP (TSP) and vice versa	SAMR form with attached files containing one or more of the following: RAPs, RAPCs, Rating Methodologies, SPSs, Contingency definitions
Step 3	MC passes the SAMR to Operations Planning Coordinator or other ERCOT internal group as defined by the Business Process.	(from) MC (to) Operations Planning Coordinator or other ERCOT group	SAMR form with attached files containing one or more of the following: RAPs, RAPCs, Rating Methodologies, SPSs, Contingency definitions
Step 4	Operations Planning Coordinator or other ERCOT internal group receives the SAMR and the MC posts to MIS within 5 business days of submission	(from) MC (to) MIS Web site	SAMR form with attached files containing one or more of the following: RAPs, RAPCs, Rating Methodologies, SPSs, Contingency definitions
Step 5	Operations Planning Coordinator or other ERCOT internal group studies and approves the SAMR. Other affected market participants also study and approve the SAMR If the SAMR needs correction, the MP (TSP) is notified and a corrected SAMR is submitted	(from) Operations Planning Coordinator or other ERCOT group (to) various Market participants	SAMR form with attached files containing one or more of the following: RAPs, RAPCs, Rating Methodologies, SPSs, Contingency definitions
Step 6	The approval notice is sent to submitter and MC	(from) Operations Planning Coordinator (to) MP (TSP), MC	Approved SAMR
Step 7	Approved SAMR is posted to MIS by MC within 2 business days. If the SAMR is a Rating Methodology change, it must be posted to the MIS 7 Business Days following the change.	(from) MC (to) MIS web site	Approved SAMR

Step 8	The SAMR is sent to appropriate groups by the MC per the ERCOT Business Process.	(from) MC (to) Appropriate groups	Approved SAMR
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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.

- None

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

- IEC 61970-552-4, CIM XML Model Exchange Format Rev6 20050505 Standard
- IEC 61970-501, CIM RDF Schema
- ERCOT Protocol documents
- ERCOT NMMS Requirements document

Issues:

No	Description	Status
1.		

Revision History:

No	Date	Author	Description
0	8/08/06	M. Sengupta	Initial version
1	8/08/06	L. Caylor	Inserted SAMR modifications
2	8/08/06	M. Goodrich	Inserted corrections and added References
3	8/08/2006	M. Sengupta	Reviewed corrections, changed version no
4	8/25/06	M. Goodrich	Inserted corrections
5	8/25/06	M. Sengupta	Updated versions, accepted correction, updated document as the actual scenario is not exactly matching protocol section 3.10.7.3
6	9/18/06	M. Goodrich	Added edits from NMG