

Use Case – Convert PMCR to NOMCR

COPS.P01ModelManageData_UseCase_ConvertPMCR2NOMCR_V0.9

Name: Conversion of PMCR to NOMCR

Summary:

A PMCR is created by the TSP Planning group when a future change in the operational grid is anticipated, expected or planned. These changes may be created 3 months to 5 years in advance of the actual implementation of the change. When a PMCR is about to be implemented, the TSP will generate an NOMCR to be input into the operational model. To ensure the change is properly addressed, the ERCOT Model Coordinator will initiate notifications to the planning and operations TSPs to convert the PMCR to an NOMCR.

Acronyms:

MC	ERCOT Model Coordinator
ERCOT	Electric Reliability Council of Texas
NOMCR	Network Operations Model Change Request (AKA: Project Files)
PMCR	Planning Model Change Request
NMMS	Network Model Management System
CIM	Common Information Model
MIS	Market Information System
MP	Market Participant
TSP	Transmission Service Provider

Actor(s):

Name	Role description
ERCOT Model Coordinator (the receiving entity) – Network Modeling Group	Archive IDV files and remove all PMCRs after the submission date deadline or archive IDV files and remove all converted PMCRs from project list. Notify MP (TSP) that the PMCR projects were removed or converted
MP- TSP (the sending entity)	Post IDV or RAWD files using the Thin Client. If a RAWD file is posted, the TSP will create the IDV file from the RAWD file. Receive emails from NMMS system regarding conversion from PMCR to NOMCR and the expiration time for the PMCR Modify PMCR including energization date as and when needed
MP – Operations Designee	Identify PMCR projects that need to be converted to NOMCR and then convert these projects to NOMCR

Participating Systems:

System	Services or information provided
The EMS and Planning systems or third party tools at the MP.	Post the PMCR IDV or RAWD files using the thin client
Thin Client	Allow market participant (TSP Planning) to login and post PMCRs (IDV files or RAWD files) using the thin client. This

	may require the MP to login to the thin client and enter a PMCR in the Project Tracker and Coordinator (PTC)
The NMMS System at ERCOT	Keep track of PMCRs created, energization date, converted NOMCRs that need to be processed normally like other NOMCRs, removal and archival of expired PMCRs or converted PMCRs as triggered by MC Provide automatic emails to MP (TSP) to convert PMCRs to NOMCRs based on deadline date for submission, once 30 days prior to submission deadline and once 5 days prior to submission deadline.
Thin client for MP to access NMMS	PMCR (RAWD and/or IDV files) will be posted to Thin client by MP (TSP Planning) De-activate the PMCR once a NOMCR is submitted with the PMCR ID. Send automatic emails to ERCOT MC when a NOMCR converted out of a PMCR is submitted

Pre-conditions:

The PMCRs are submitted by MP (TSP) Planning and posted on Planning and Operations thin client

Each PMCR contains a PMCR ID number, Planned energization date, change description, file attachment (either an IDV or RAWD file) containing planning data. If a RAWD file is attached, there must be sufficient information for the TSP to process the file and generate an IDV file.

The NMMS can receive any PMCR, keep track, remove and archive the expired PMCRs and process the converted NOMCRs like a normal NOMCR processing

The CIM/XML file produced after PMCR conversion to NOMCR 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:

- None

Example of PMCRs

A PMCR is a form much like the NOMCR except it is completed by the TSP Planning group and submitted with an IDV or RAWD file. The IDV or RAWD file is an ASCII CSV flat file that contains either the change (IDV file) or a complete planning model (RAWD file) in the format required by the planning software.

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

- If a market participant does not convert a PMCR to a NOMCR, the MC will remove the PMCR from the Planning project's list as soon as the PMCR reaches the deadline for a NOMCR submission date
- The conversion of a PMCR to an NOMCR is the sole responsibility of Market Participants (TSP Operations designee) and ERCOT or NMMS has no role in it
- A Single PMCR may result in the creation of multiple NOMCRs. The PMCR stays in the project list unless the MC confirms that the PMCR conversion is complete or the PMCR in-service date is at or beyond the deadline for project submission of a NOMCR. Situations may arise where a

market participant has already converted the PMCR but no notice was sent and the PMCR still exists in Project list.

- All submission deadlines refer to the timeline table for NOMCR submissions found in Protocol section 3.10.1.
- NMMS Status notification should include the following status:
 - a. Submitted PMCR (PMCR posted into Thin client with a reference ID)
 - b. Initial PMCR Conversion Notice (Initial warning email sent for PMCR conversion to NOMCR 30 days prior to deadline for submission of Operational Model)
 - c. Final PMCR Conversion Notice (Final warning email sent for PMCR conversion to NOMCR 5 days prior to deadline for submission of Operational Model)
 - d. Expired PMCR (PMCR that has reached the date within the deadline for submission of Operational Model. The PMCR is archived and removed)
 - e. Converted PMCR (PMCR that has already been converted to required NOMCR(s) and is archived and removed from Project list)
 - f. Deactivated PMCR (status that automatically changes on a PMCR when a NOMCR with that PMCR ID is submitted, this status will make the PMCR invisible inside Thin Client but ERCOT MC should be able to see that)

Normal Sequence:

Use Case Step	Description	From - To	Information Content
Step 1	MP (TSP) Planning group posts existing PMCR consisting for IDV or RAWD files for data changes in Thin Client (NMMS)	(from) MP Planning (to) thin client	PMCR contains a PMCR ID number, planned energization date, change description and other data as required. The IDV or RAWD file is attached.
Step 2	NMMS sends an automatic email to MP (TSP) Operations and planning designee advising project requires conversion from PMCR to Operations NOMCR when the project date is 30 days prior to deadline for NOMCR submission date (based on PMCR energization date).	(from) NMMS (to) MP (TSP Operations and Planning designee)	PMCR ID numbers, energization dates
Step 3	NMMS sends an automatic email to MP (TSP) Operations and planning designee advising project requires conversion from PMCR to Operations NOMCR as the project date is 5 days prior to deadline for NOMCR submission date (based on PMCR energization date).	(from) NMMS (to) MP (TSP Operations and Planning designee)	PMCR ID numbers, energization dates
Step 4	MP (TSP) operations designee selects projects and converts them to NOMCR and submits NOMCR. Submission of NOMCR is described in Use Case COPS P01 ModelManageData_UC_CreateNOMCR.doc The NOMCR form refers to the PMCR ID.	(from) MP (TSP Operations designee) (to) MP (TSP Planning) & ERCOT MC	NOMCR with PMCR ID referenced in NOMCR description
Step 5	NMMS changes the status of PMCR to deactivated as soon as the NOMCR with a PMCR ID is	NMMS	PMCR not available in project

	submitted. This PMCR is no longer visible to any of the MPs		list, only NOMCRs
Step 6	MC receives NOMCRs with PMCR ID. At this point NOMCR is processed based on Use case COPS P01 ModelManageData_UC_ProcessNOMCR.doc	(from) MC (to) MP (Operations designee)	PMCR ID and the corresponding NOMCR IDs that resulted from the PMCR
Step 7	MC accepts the converted NOMCR, and may also archive and remove the corresponding PMCR with the associated IDV files or RAWD files from Project list Otherwise the PMCR stays in deactivated status until the submission deadline is reached when all PMCRs that have reached the deadline are archived and removed from project list	(from) MC	Archive old PMCR IDV or RAWD file, NOMCR with PMCR ID referenced in NOMCR description
Step 8	MC sends email notification to MP (TSP) operations and planning designee stating the PMCR project is converted to NOMCR and the PMCR is removed/closed	(from) MC (to) MP (TSP) Operations and Planning designee	PMCR IDs and corresponding NOMCR IDs

Exceptions / Alternate Sequences:

Use Case Step	Description	From – To	Information Content
Step 4a	PMCR is not converted to NOMCR and project date reaches the deadline for NOMCR submission. MC removes PMCR project to archive and removes from Project List, PMCR is considered expired. Any PMCR that reaches the NOMCR submission deadline, whether converted or not, is archived and removed.	MC using NMMS	PMCR ID for expired PMCRs
Step 5a	MC sends email notification to MP (TSP) and planning designee stating PMCR projects reaching deadline for submission are archived and removed/expired	(from) MC (to) MP (TSP) and Planning designee	PMCR project IDs for expired PMCRs

Post-conditions:

All PMCRs that have reached the deadline for NOMCR submission should be archived and removed from the Project list. All PMCRs that are converted to NOMCRs should be also archived and removed so that they are not re-accessed and re-processed by mistake

References:

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

- COPS P01 ModelManageData_UC_CreateNOMCR.doc
- COPS P01 ModelManageData_UC_ProcessNOMCR.doc

The following Standards and 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 Nodal Protocols
- ERCOT NMMS Requirements

Issues:

ID	Description	Status
1.	For any Project converted to NOMCR, the NMMS must set the status automatically to deactivated so that the project is no longer visible to the MP using a Thin Client. This will remove the possible chance of duplication.	

Revision History:

No	Date	Author	Description
1	8/11/06	M. Sengupta	Initial version for PMCR2NOMCR
2	8/21/06	M. Sengupta	Changes incorporated after telephonic discussion
3	8/23/06	M. Sengupta	Changes incorporated after discussion with Margaret
4	8/24/06	M. Sengupta	Changes incorporated after discussion with Margaret
5	8/24/06	M. Sengupta	Changes incorporated after discussion with Margaret
6	8/25/06	M. Goodrich	Add final edits
7	8/25/06	M. Sengupta	Accepted changes, updated document based on Margaret's comments
8	9/7/06	M. Sengupta	Modified Use Case based on changed business process as decided in the meeting of Aug 27 – 31
9	9/10/06	M. Goodrich	Added Consistency edits and prepared for ERCOT internal review.
10	9/11/06	M. Goodrich	Added edits from NMG