Use Case – Create Planning Model Change Request
CPPS.P01 PlanFutureBaseCases_UC_CreatePMCR_V0.5

Name: Create PMCR – Incremental Changes

Summary:

Create data change file for all additions, deletions or modifications that apply to the Planning Models of ERCOT. This file is attached to a Planning Model Change Request form that jointly constitutes the PMCR. The creation may be done by logging in the thin client and directly entering data into NMMS using the graphic interface, sending changes in a NON-CIM file format (may be excel spreadsheet/ one line diagram etc.) or sending changes in a CIM/XML file format

Acronyms:

MIS	**Management Information System**
NMMS	**Network Model Management System**
NMG	**Network Model Group**
NOMCR	**Network Operating Model Change Request**
OS	**Outage Scheduler**
PMCR	**Planning Model Change Request**
PSS/E	**Power System Simulator/ Engineering**
RAWD	**Raw Data, a PTI planning model format**
SAMR	**Special Action Model Request**
TSP	**Transmission Service Provider Planner**
PC	**ERCOT Planner**

Actor(s):

Name	Role description
TSP Planner	TSP Planner who creates the Planning Model Change Request and generates the RAWD files or IDV files. If RAWD files are generated, the TSP Planner uses comparison tools within MOD to compare two RAWD files and generate the IDV file.
ERCOT Planner	The ERCOT Planner may create PMCRs as well
NMG Staff	Using the facilities, the NMG coordinate the generation, verification and tracking of the PMCR.

Participating Systems:

System	Services or information provided
NMMS	ERCOT Network Model Management System, which is the central repository for all NOMCRs, SAMRs, and PMCRs
MIS Secure Area	ERCOT Management Information System Secure Area. This is a web-based system, which allows market participants to access and download ERCOT Network, Planning and other data. The MIS Secure Area includes log-on, user authentication, and the management of user access control

	rights.

Pre-conditions:

- MIS Secure area contains the annual planning models
- NMMS is up and running
- The NMMS contains a copy of all approved PMCRs, SAMRs, and NOMCRs.
- The NMMS contains a copy of all candidate PMCRs
- The ERCOT user has logged-on to NMMS and has the authority to work on all data referenced in this use case.

Design Considerations:

- The NMMS is considered a black box. Files inside NMMS only indicate that the request made by the ERCOT or TSP planner causes NMMS to make this data available to the ERCOT user for his private use in user areas (workspace).
- The user must be able to execute the NMMS functions for creation of an IDV file.
- The NMMS must allow the TSP direct access to use the functions described above.

Examples of model changes are:

- The ERCOT or TSP planner wants to create a planning model modification for a period six months in the future.

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

NONE

Normal Sequence:

Use Case Step	Description	From - To	Information Content
Step 1	ERCOT or TSP Planner selects the desired planning model from the MIS website/or builds a model using the "Create Planning Model" use case.	ERCOT or TSP planner to MIS Secure Area	A copy of the selected Annual Planning Model is made available to the ERCOT or TSP planner for down load.
Step 2	ERCOT or TSP Planner downloads Annual Planning Model into computer, or the model created using the "Create Planning Model" use case.	ERCOT or TSP planner to MIS Secure area	Annual Planning Model in PSS/E RAWD format
Step 3	ERCOT or TSP Planner requests a list of PMCRs. This request is made by defining a date range.	ERCOT or TSP planner to NMMS	List of all requested PMCRs
Step 4	NMMS returns the requested PMCRs to the ERCOT or TSP Planners computer	NMMS to ERCOT or TSP Planner	Files with the requested PMCRs
Step 5	ERCOT or TSP Planner uses his own software to study candidate changes. At the end of the study,	ERCOT or TSP Planner	PMCR data

	the equipment additions are described in PSS/E formats (RAWD, IDVs, Python etc) and uploaded to the NMMS. User fills out data screens in NMMS which are used for identification and management/reporting the status of PMCRs	to NMMS	
Step 6	NMMS stores the PMCR form and data in the NMMS tracking system.	NMMS to NMMS	PMCR form and data are stored.
Step 7	The NMMS notifies the NMG staff and the ERCOT Planner of PMCR arrival.	NMMS-to NMG staff and ERCOT planner	Information about the new PMCR

Exceptions / Alternate Sequences: Using MOD GUI

Use Case Step	Description	From - To	Information Content
Step 1	ERCOT or TSP Planner selects the desired planning model from the MIS website/or builds a model using the "Create Planning Model" use case.	ERCOT or TSP planner to MIS Secure Area	A copy of the selected Annual Planning Model is made available to the ERCOT or TSP planner for down load.
Step 2	ERCOT or TSP Planner uses model created using the "Create Planning Model" use case.	ERCOT or TSP planner to MIS Secure area	Annual Planning Model in PSS/E RAWD format
Step 3	ERCOT or TSP Planner selects a list of PMCRs. The selection is made by defining a date or selection from PTC UI.	ERCOT or TSP planner to NMMS	List of all requested PMCRs
Step 4	ERCOT or TSP Planner uses MOD GUI tabular entry to enter text data for his PMCR. The user can view a one line diagram that shows the effect of the PMCR. No graphical editing is available. The PMCR may be validated at the time of entry using MOD GUI. At the end of the validation, the equipment additions are available as PSS/E files (RAWD, IDVs, Python etc). The user then logs in to NMMS (PTC) thin client and fills out the data screens in PTC UI, attaches the PMCR files and submits the validated PMCR.	ERCOT or TSP Planner to NMMS	PMCR data
Step 5	NMMS stores the PMCR form and data in the NMMS tracking system.	NMMS to NMMS	PMCR form and data are stored.
Step 6	The NMMS notifies the NMG staff and the ERCOT Planner of PMCR arrival.	NMMS-to NMG staff and ERCOT planner	Information about the new PMCR

Deleted: NONE

Deleted: downloads Annual Planning Model into computer, or the

Deleted: requests

Deleted: is request is

Deleted: range

Deleted: Step 4 ... [1]

Formatted: English (U.S.)

Deleted: 5

Deleted: get

Deleted: the

Deleted: (view only)

Deleted: of the PMCR

Deleted: but n

Deleted: facility

Deleted: is

Deleted: described

Deleted: in

Deleted: formats

Deleted: and uploaded to the MOD

Deleted: U

Deleted: and submits the validated PMCR

Deleted: ing

Deleted: which are used for identification and management/reporting the status of PMCR

Deleted: s

Deleted: 6

Deleted: 7

Post-conditions:

- PMCR is in NMMS, ready for download and evaluation by ERCOT.

References:

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

- CPPS.P01_PlanFutureBaseCases_UC_CreatePlanningModel
- CPPS.P01_PlanFutureBaseCases_UC_ProcessPMCR

The following Standards and documents are referenced by this case:

- IEC 61970-503, 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.	TSP planner must be able to access NMMS and the MIS secure area	Open

Revision History:

No	Date	Author	Description
0	08/04/06	J. Waight	Initial draft for internal review
1	08/08/06	J. Moseley	Initial Review
2	08/26/06	M. Goodrich	Added Use Case Formatting, accepted changes, added revisions and clarifications and changed the title to match the naming convention.
3	09/11/06	M. Goodrich	Added edits from NMG
4	10/13/06	M. Sengupta	Added alternative path for PMCR creation where MOD GUI is used, based on ERCOT new requirement

Page 3: [1] Deleted **mspwaja2** **10/13/2006 11:24:00 AM**

Step 4	NMMS returns the requested PMCRs to the ERCOT or TSP Planners computer	NMMS to ERCOT or TSP Planner	Files with the requested PMCRs