

**Conceptual Design:**

**PR010\_01 MarkeTrak Phase 3**

**Version 2.0**

Document Revisions

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# Overview

## Development Purpose

This project will add needed functionality to the MarkeTrak tool to support changes in the Market related to PUC rulings and the implementation of TX Set 4.0. In addition, the MarkeTrak Task Force (MTTF) has continuously worked with the Market to identify potential enhancements that would benefit all users of MarkeTrak. This project will incorporate those identified enhancements into the MarkeTrak application.

## Design Approach

MarkeTrak is a GUI based application that implements problem/resolution workflows to solve and help settle the electrical market. It is written using a Serena product called TeamTrack. In addition to the previously stated application GUI interface reached via an external facing URL, the application has an API and Bulk Insert interfaces. The API interface allows the exchange of XML documents as if it were a user hitting the GUI interface. Both the GUI and API interfaces require a digital certificate. The Bulk Insert interface allows a GUI user to submit CSV files for issue/incident ticket creation.

### System functional capabilities:

* GUI interface to resolve Problem/Resolution electrical market issues
* API interface to allow automated GUI functionality
* Bulk Insert interface to allow a GUI user to easily create bulk issues
* Application users require Digital Certificate authentication
* Ability to post Application generated reports
* Ability for application to send issue emails
* Ability for application to validate issue data

### Data Flow Overview

Same dataflow as used in MarkeTrak Phase 1 and MarkeTrak Phase 2

1. GUI User connects to External MarkeTrak server via URL
2. MarkeTrak external server which interacts to authenticate user
3. User writes data onto MarkeTrak GUI
4. MarkeTrak external server writes/reads/updates data in the MarkeTrak database



### General constraints:

* Internal resources in critical Departments will be involved in TX Set 4.0, TX Set 4.0 Flight, etc.
* MarkeTrak DEV resources involved in priority items that will impact these resources. Risk will be reduced by augmenting with Serena resources as needed.

### Assumptions:

* Serena supplied resource(s) are knowledgeable on upgrading to MarkeTrak and can easily adapt to ERCOT SDLC
* All necessary requirements will include fully detailed Use Cases as agreed by business and development
* Resources are available including Serena contractors for upgrade
* Automated testing will be conducted by contractors and/or a team other than business
* Testing environments are available
* Updates to existing documentation will be made to reflect changes

## Delivery Mechanism & Schedule

### Application Development Tool – Serena TeamTrack

#### Introduction

Serena TeamTrack is a Web-architected, secure and highly configurable process and issue management solution that gives you control, insight, and predictability in your Application Lifecycle and Business Process Management throughout the enterprise. TeamTrack is a process-oriented application that uses the flexibility and power of the internet to enable teams of people from within an organization and from different areas of an organization to work together more productively. The TeamTrack product suite enhances communication and collaboration with customers, vendors, and partners.

#### TeamTrack - Out of the Box Development

TeamTrack will be used as the base development software to tackle most of the primary business objectives:

* Improve reporting functionality
* Improve tracking/metrics functionality
* Create usable issue status
* Create usable issue types and sub-types
* Create a method to allow users to interface easily
* Improve search functionality
* Improve monitoring and response capabilities
* Improve usability

### Customizing Application Development Tool – Serena Team Script

#### Introduction

Serena Team Scripts:

* ESIID validation
* Submit multiple row issues per parent issue
* Warning about duplicate Global Ids
* Display row issue counts on parent issue
* Auto Close functionality

# Functional Requirements

## MTTF1 – PMVI Fee Reversal Subtype –

### Description

* Background
  + Task Force participants have requested changes to IAG workflows to allow for “efficient and verifiable approval for Transmission and/or Distribution Service Providers (TDSPs) to reverse priority Move-In Request charges from the losing Market Participant to the gaining Market Participant”.
  + These changes could be achieved with a new subtype.
  + This subtype would be entitled *Redirect Fees*
  + Issues under this subtype can only be submitted by the Losing CR.
    - If an open MarkeTrak issue within the *Inadvertent Losing* or *Inadvertent Gaining* subtype already exists, an issue under this subtype will be filed an addition to it.
    - If there is no open issue under either of the IAG subtypes, this issue type would be filed by itself.
  + Issues under this subtype should only be submitted when a lights out situation occurs
    - Otherwise, the normal IAG subtypes should be used
  + The transitions “Agree” or “Unexecutable” will be used to indicate whether or not the Gaining CR agrees an inadvertent gain has occurred and the TDSP should reverse PMVI fees in response to a lights out situation.
* Problems with Current Workflow
  + The current workflow requires the Losing CR to use a specific comment requesting reversal of PMVI fees in the event of a lights out situation.
    - TDSPs may have difficulty reporting and identifying these issues if comments are not exact
  + The transition “Send to Losing CR” is currently used alongside agreement from the Gaining CR, but does not always *necessarily* indicate agreement from the Gaining CR. Therefore, the TDSP is often left having to ask for specific agreement to the IAG in instances where the transition is used, but the Gaining CR’s comments are unclear.
* New Functionality
  + In contrast to the existing *Inadvertent Losing* workflow, the Losing CR will not be able to send the issue straight to the TDSP if “Send to Losing CR” is chosen. This transition will only be used for information requests from the Gaining CR. The Gaining CR must select “Agree” to give the TDSP a clear signal that the Gaining CR is now willing to allow for the Losing CR to regain the premise, and accept all fees (PMVI and otherwise) related to the return of this issue. This transition in the current workflow has been a source of confusion in the past, as it does not necessarily indicate agreement on the part of the Gaining CR.

### GUI Updates

* + Add new Workflow to application Workflow list (Submit Tree)
  + Add new Workflow to permission groups
  + Add new Workflow to existing report selection lists
  + Implement new Workflow (transitions and states)
  + Add/define new fields
  + Add/define new Transitions to workflow
  + Add new Issue States to workflow
  + Update workflow transitions

### Bulk Insert Updates

* + The template (Appendix A) needs to be updated to allow for the following fields to be populated prior to submission
  + New Bulk Insert scripts to validate and process fields
  + Update Bulk Insert Workflow by adding workflow to list

### API Updates

* + Add new fields to WSDL
  + Add new Transitions to workflow WSDL permitted values
  + Add new Issue States to workflow WSDL permitted values
  + Add new Workflow to WSDL, remove old Workflow
  + Update MarkeTrak API Adapter with new mappings

## MTTF13 Usage and Billing Dispute AMS LSE Interval Data –

### Description

- MarkeTrak tool will copy the current D2D Usage and Billing workflow into 2 separate workflows – this one will consist of fields for AMS LSE Interval Data Disputes only.

### GUI Updates

* + Add new Subtype Usage and Billing Dispute LSE Interval Data under D2D using the existing D2D Usage and Billing Dispute workflow as a template.
  + Remove some fields that are in current Usage and Billing workflow but are not applicable to this new workflow.
  + Add New Field: UIDAMSINTERVAL – located in ERCOT’s AMSINTERVAL table. This field uniquely identifies the specific interval being disputed**.**
  + Update Usage and Billing workflow scripts to handle new field and only identified fields pertaining to this workflow

### Bulk Insert Updates

* + The template (Appendix A) needs to be updated to allow for the following fields to be populated prior to submission
  + New Bulk Insert scripts to validate and process fields
  + Update Bulk Insert Workflow by adding workflow to list

### API Updates

* + Add new fields to WSDL
  + Add new Transitions to workflow WSDL permitted values
  + Add new Issue States to workflow WSDL permitted values
  + Add new Workflow to WSDL, remove old Workflow
  + Update MarkeTrak API Adapter with new mappings

## MTTF13 Usage and Billing Missing AMS LSE Interval Data –

### Description

- MarkeTrak tool will copy the current “D2D Usage/Billing Issues” workflow into 2 separate workflows – this one will consist of fields for AMS LSE Interval Data Missing only.

### GUI Updates

* + Add new Subtype Usage and Billing Missing LSE Interval Data under D2D using existing D2D Usage and Billing workflow as a template
  + Remove some fields from current Usage and Billing workflow that are not applicable to this new subtype:

### Bulk Insert Updates

* + The template (Appendix A) needs to be updated to allow for the following fields to be populated prior to submission
  + New Bulk Insert scripts to validate and process fields
  + Update Bulk Insert Workflow by adding workflow to list

### API Updates

* + Add new fields to WSDL
  + Add new Transitions to workflow WSDL permitted values
  + Add new Issue States to workflow WSDL permitted values
  + Add new Workflow to WSDL, remove old Workflow
  + Update MarkeTrak API Adapter with new mappings

## MTTF18 Customer Rescission following completion of Switch transaction –

### Description

* Background:
  + In Summer 2009, several changes were made to PUCT rule 25.474, including an expedited timeline for the processing of 814\_01 switch transactions
  + Despite the new switching timelines, the period for customer rescission of an order did not change, meaning the customer’s rescission period could actually overlap the completion of a switch
  + In such an instance, the rule allows the customer to return to its previous CR without incurring any charges normally associated with the inadvertent gain process
  + An interim solution was developed using the *Inadvertent Gaining* subtype
    - The issue must be submitted within 25 calendar days of the switch, or it is processed as an inadvertent gain with the Gaining CR incurring all charges
    - The Losing CR cannot refuse to regain the location, and must regain to date of loss
* Problems with Current Workflow
  + Issue relies on specific comments to differentiate issues from regular issues within the *Inadvertent Gaining* subtype
    - TDSPs may have trouble identifying issues, and all MPs may not be able to accurately report based on comments.
    - No built in validations to ensure correct regain date or that issue is being filed within the timeframe allowed by Market guidelines.
    - No validation to ensure the initiating transaction was an 814\_01.
* New Functionality
  + Add validations to ensure the issue is being submitted within the RMG-specified timelines. Error message to display if issue not submitted within 25 days of Inadvertent Gain:
    - “This issue is unable to proceed because the effective date of the originating transaction at this premise was more than 25 calendar days in the past. Please enter a different ESIID or consult the Retail Market Guide to determine the proper course of action.”
  + Proposed (required) regain date automatically populated once ESIID has been validated
  + Validation that initiating transaction is an 814\_01, and the following error message to display which disallows further progress:
    - “This issue is unable to proceed because the tran type for this Global ID is not an 814\_01” Please enter a different ESIID/Original Tran ID or consult the Retail Market Guide to determine the proper course of action.”

* Assumption:
  + The IAG workflow will be used as the foundation for the new Customer Rescission workflow with modifications identified below.

### GUI Updates

* + Add new Workflow to application Workflow list (Submit Tree)
  + Add new Workflow to permission groups
  + Add new Workflow to existing report selection lists
  + Implement new Workflow (transitions and states)
  + Add/define new fields
  + Add/define new Transitions to workflow
  + Add new Issue States to workflow
  + Update workflow transitions

### Bulk Insert Updates

* + The template (Appendix A) needs to be updated to allow for the following fields to be populated prior to submission
  + New Bulk Insert scripts to validate and process fields
  + Update Bulk Insert Workflow by adding workflow to list

### API Updates

* + Add new fields to WSDL
  + Add new Transitions to workflow WSDL permitted values
  + Add new Issue States to workflow WSDL permitted values
  + Add new Workflow to WSDL, remove old Workflow
  + Update MarkeTrak API Adapter with new mappings

## MTTF19 Removal of Switch Hold –

### Description:

* Background:
  + To meet requirements for the switch hold removal process described in PUCT Subst. Rule 25.126(h)(5), the Meter Tampering Task Force developed an interim process within MarkeTrak using the *Other* subtype.
  + Effective June 1, 2011, use of the switch hold process will expand to include ESIIDs of customers who have entered into deferred payment plans, with the REP of Record becoming the party who initiates the switch hold. The number of MarkeTrak issues which will need to be filed for switch hold removal could increase significantly.
  + A new subtype specifically for this purpose would feature improvements in several areas, when compared to the current workflow.
* Problems with Current Workflow/Process
  + The *Other* workflow requires the submitting CR (who is requesting the switch hold removal) to continuously monitor the issue and assign parties for the issue’s entire duration.
    - Failure to do so by the submitting CR means that one or more MPs may not receive the proper time to review the issue as required by the RMG.
  + Without certain transitions, issues often rely on comments, leading to delayed resolution.
    - This also prevents effective reporting of some statistics.
  + Accidental use of the “Return to Submitter” transition can prevent issues from being worked to completion.
  + One hour (two separate 30 minute periods) of the total four hours is set aside for the Requesting CR to use the Re-Assign transition.
* New Functionality
  + Upon creation of the issue, it would transition directly from the submitting CR to TDSP to REP of Record (except when unexecuted by the TDSP). For the interim process, one half-hour of the total four hours is used for the submitting CR to re-assign the issue to the REP of Record. This time can now be used elsewhere.
  + Following agreement or disagreement by the REP of Record, the issue is transitioned directly to the TDSP. For the interim process, one half-hour of the total four hours is used for the submitting CR to re-assign the issue to the TDSP after this step. This time can now be used elsewhere.
  + There will be a new state (“In Progress (TDSP) - Final Review”) to reflect the TDSP’s final evaluation of the switch hold removal request.
  + There will be new dropdowns added for TDSP Unexecutable reasons upon first review.

### GUI Updates

* + Add new Workflow to application Workflow list (Submit Tree)
  + Add new Workflow to permission groups
  + Add new Workflow to existing report selection lists
  + Implement new Workflow (transitions and states)
  + Add/define new fields
  + Add/define new Transitions to workflow
  + Add new Issue States to workflow
  + Update workflow transitions
  + Add ability to reassign parties involved

### Bulk Insert Updates

* + The template (Appendix A) needs to be updated to allow for the following fields to be populated prior to submission
  + New Bulk Insert scripts to validate and process fields
  + Update Bulk Insert Workflow by adding workflow to list

### API Updates

* + Add new fields to WSDL
  + Add new Transitions to workflow WSDL permitted values
  + Add new Issue States to workflow WSDL permitted values
  + Add new Workflow to WSDL, remove old Workflow
  + Update MarkeTrak API Adapter with new mappings

## MTTF29 Market Rules Subtype –

### Description:

* Background:
  + The need for a flexible catch-all subtype has been identified as a pro-active measure for accommodating any future PUC rulings that cannot be worked thru existing workflows in MarkeTrak.
  + The new catch-all subtype will include a broader range of optional fields and will include functionality to enable an assignee to add a third party to the issue.

### GUI Updates

* + Add new Workflow to application Workflow list (Submit Tree)
  + Add new Workflow to permission groups
  + Add new Workflow to existing report selection lists
  + Implement new Workflow (transitions and states)
  + Add/define new fields
  + Add/define new Transitions to workflow
  + Add new Issue States to workflow
  + Update workflow transitions
  + Add ability to reassign parties involved

### Bulk Insert Updates

* + The template (Appendix A) needs to be updated to allow for the following fields to be populated prior to submission
  + New Bulk Insert scripts to validate and process fields
  + Update Bulk Insert Workflow by adding workflow to list

### API Updates

* + Add new fields to WSDL
  + Add new Transitions to workflow WSDL permitted values
  + Add new Issue States to workflow WSDL permitted values
  + Add new Workflow to WSDL, remove old Workflow
  + Update MarkeTrak API Adapter with new mappings

# Technical / Infrastructure Requirements

## Security Requirements

Existing MarkeTrak application security will be used with this project. No changes are anticipated.

## Performance Requirements

No performance requirements have been specified. We will be operating under the

Performance Requirements as loosely defined under MarkeTrak Phase 1.

## Support Requirements

## Training and Documentation Requirements

Normal SDLC training and documentation requirements will be adhered to. The project itself does not impose any training and documentation requirements outside the normal SDLC.

## Purchased Components

# We will be using previously purchased software and hardware currently in existence and installed. Interfaces

## Hardware Interfaces

We will be using existing hardware interfaces developed and implemented in MarkeTrak Phase 1.

## Software Interfaces

We will be using existing software interfaces developed and implemented in MarkeTrak Phase 1. Some of the interfaces will be expanded to include additional functionality.

## Services Interfaces

## Database Interfaces

Both internal and external servers will interface with a database server and database tables as detailed previously in MarkeTrak Phase 1.

## Licensing Requirements

# Project Logistical Requirements

## Cost Estimate

Refer to Execution Cash Flow

## Make/Buy Decision

Product currently in house, we are just extending functionality of an implemented application using existing software and hardware

## Location/Staffing

## Other

NA

# Issues and Assumptions

## Outstanding Issues

|  |  |  |  |
| --- | --- | --- | --- |
| Issue Description | Action | Owner | ETC |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Scope Clarification

|  |  |
| --- | --- |
| Change Control | Assumption |
|  |  |
|  |  |
|  |  |
|  |  |

# Appendices

## Supporting Information