

**Market Requirements:**

**PR192-01 SCR786 Retail Market Test Environment**

**Version 1.0**

Document Revisions

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| 1/26/16 | .01 | Initial version by ERCOT | Catherine Meiners |
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# Project Overview

## Background

The Certification (CERT) environment was originally created and is currently used for Market Flight testing to certify Market Participants in the ERCOT retail market.

Texas Data Transport and MarkeTrak System Working Group’s (TDTMS) investigation into the current CERT environment capabilities revealed that it does not meet retail market testing needs. Some of the challenges found during the course of the working group’s investigation are:

* Insufficient for market volume testing and Application Program Interface (API) testing.
* Currently the test scenario uses a Simulated (SIM) date. This makes it difficult to perform ad hoc testing in CERT.
* Restricted availability for additional ad hoc testing outside CERT environment schedules.
* Data is purged after every testing cycle resulting in resending of same data.
* Manual intervention required for validating transaction data set.

## Stakeholders

Competitive Retailers (CRs) and Transmission and Distribution Service Providers (TDSPs) will both be able to use the expanded CERT environment in order to test their internal system changes prior to migrating them to their Production environment. This will decrease the risk of finding defects once in Production.

## Business Drivers

SCR786 was submitted by TDTMS to create a testing environment to provide flexibility and availability for ad-hoc testing requests by Market Participants and to reduce the overall risk to the retail market by allowing Market Participants to test internal projects with ERCOT and other Market Participants before going live in production.

## Anticipated Business and/or IT Benefits

The main benefit from this project is the reduction of risk to the market of defects found in Production. In addition, the CERT environment’s increased stability will decrease duration and hours needed to test in the environment.

## Scope

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| --- | --- | --- |
| In Scope |  |  |
| # | Item | Comments |
| 1 | Improve overall testing capabilities for all retail business processes by increasing capacity of CERT environment |  |
| 2 | Improve transaction processing time through the reduction/elimination of manual intervention at ERCOT |  |
| 3 | Elimination of blackout structure |  |
| 4 | Elimination of SIM date |  |
| 5 | Reduced purging of data to an agreed upon schedule |  |
| 6 | ERCOT support for sandbox testing will be available from 9:00 am to 4:00 pm on Retail Business Days. |  |
| 7 | Ability to sandbox test the following functionality in the CERT environment –   * Transaction and business processing of EDI files * Transaction processing of non-EDI files, such as CBCI and Demand Response for file level validation * MarkeTrak GUI and API testing, including performance testing of API * Browser Compatibility |  |

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| Scope Clarifications – Determine Out of Scope | | |
| # | Item | Comments |
| 1 | Brand new environment separate from the CERT environment |  |
| 2 | ERCOT simulating or mimicking TDSP/CR transactions |  |
| 3 | Ability to handle Prod like volumes from all MPs at the same time |  |
| 4 | Turnaround times that match protocol specifications when large volumes of transactions are submitted |  |
| 5 | Market Participants mimicking other Market Participants |  |
| 6 | Business validations on non-EDI files, such as CBCI and Demand Response |  |
| 7 | Registration data and functions, such as ERCOT disputes |  |

# Requirements Overview

## Protocol Requirements (If Applicable)

Not applicable.

## Process Overview

Updated CERT environment will allow Market Participants an environment to test with other MPs prior to going live. MPs will be able to complete sandbox testing while Flight testing is in progress.

# Functional Business Requirements

## Business Requirements

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| --- | --- |
| Functional Requirement ID | Requirement Description |
|  | Increase capacity of CERT environment so that up to 3 large Market Participants can load test simultaneously. |
|  | Remove manual interaction with transactions at ERCOT to reduce processing time. |
|  | Eliminate blackout structure and complete code migrations on a prod like schedule, when possible. |
|  | Eliminate SIM date so that transactions with current dates can be processed. |

## Data Requirements

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| Functional Requirement ID | Requirement Description |
|  | TDSPs will continue to provide test bed ESIIDs to ERCOT and the CRs in the current .csv format prior to each flight. ESIIDs that are being used in Flight Certification Testing cannot be used in Sandbox Testing. |
|  | On a yearly basis, ERCOT will refresh the CERT environment with a subset of the ESIIDs from Production. |
|  | Any purging of data from the CERT environment will be communicated to the Market in advance. Details of environmental communication plan to be defined in conjunction with TDTMS during the Execution phase of the project. |
|  | When doing high volume testing, Market Participants will aggregate their transactions like they do in production, submitting multiple transactions per file. |

## Certification Environmental Logistics

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| Functional Requirement ID | Requirement Description |
|  | CERT environment will be available for sandbox testing except during code migrations. |
|  | CERT environment will be available for flight testing during designated flight testing windows. |
|  | Issues with the CERT environment should be reported through the ERCOT Helpdesk. IT Support for the CERT environment will be available from 9:00 am to 4:00 pm on Retail Business Days. Make sure to specify “CERT environment” when reporting issues. |
|  | Business support for the CERT environment will be available from 9:00 am to 4:00 pm on Retail Business Days. |
|  | Market Participants requesting business support can submit the request through the Production MarkeTrak application using the “Other” subtype with a comment of “Request for Market Testing Assistance”. Requests should be submitted at least 5 business days in advance. Any requests received with less than 5 business days’ notice may be supported at ERCOT’s discretion.  The following are examples of the types of support that can be requested: |
|  | ERCOT can provide lists of ESIIDs with specific characteristics to requesting Market Participants. |
|  | ERCOT can facilitate the creation of scenarios for transactional and/or MarkeTrak testing. |
|  | ERCOT can facilitate advancement of MarkeTrak workflows during MarkeTrak testing. |
|  | If a Market Participant is planning to do volume testing in the CERT environment, they should inform ERCOT 5 business days ahead of time or as soon as possible.  If ERCOT receives more than 3 requests for volume testing during the same timeframe, the first 3 will be accepted and additional Market Participants will need to wait. |
|  | To facilitate small volume testing (<1000 transactions), Market Participants are encouraged to notify ERCOT to ensure the CERT environment is running as expected. |

## User Documentation and Help Requirements

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| --- | --- |
| Functional Requirement ID | Requirement Description |
|  | Creation of user documentation for sandbox testing will be at the discretion of TDTMS. |
|  | TDTMS will coordinate with TXSET to update existing Flight documentation, as necessary. |

# Appendices

## Supporting Information

References or details.

## Glossary

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| Term | Definition |
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