|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sect. | Header |  | Updated | Location of Content in Previous TMTP |
| 1 | Overview |  | 6/18/2015 | 1.1 & 1.3 |
|  | | Certification Plan | 6/18/2015 |  |
| Revision | 6/18/2015 |  |
| 2 | Flight Requirements |  | 6/18/2015 | 1.2, 2, & Section 5, Section 3 |
|  | | TEXAS SET Release | 7/7/15 | New |
| New MP | 7/7/15 | Build Content |
| Bank Change | 7/7/15 | 3.2.7 |
| Change of Service Provider | 7/7/15 | 3.2.2, 3.2.3 |
| NOIE | 7/7/15 | Build Content |
| System Change | 7/7/15 | 3.4, 3.4.1, 3.4.2, 3.4.3, 3.4.4 |
| New Service Territory | 7/7/15 | 3.2.4 |
| New Functionality | 7/7/15 | 3.2.6 |
| 3 | Flight Responsibilities |  | 6/18/2015 | Sections 4 & 6 |
|  | | Prior to Certification Testing |  |  |
| During Certification Testing |  |  |
| Post Certification Testing |  |  |
| App |  |  |  |  |

Texas Market Test Plan

1. **Overview** 
   * Certification Plan

Market Participants must be certified to conduct business in the Texas Electric Choice Market. The purpose of this document is to define the market plan for testing commercial operations systems and business processes to support the Texas Electric Choice Market. This document covers all testing requirements and procedures between ERCOT and the Market Participants (MPs) and Point-to-Point testing between MPs. In an effort to diminish the potential risks that could be introduced into the Texas Electric Choice Market from new unproven systems or MPs or from the effects of new TX SET/ANSI X12 EDI Version Releases, the Texas Market Test Plan provides the mechanism for ensuring that the systems operated by ERCOT are functioning properly, and that the systems operated by MPs interface properly with both ERCOT’s systems and other MPs’ systems.

The Texas Market Test Plan addresses the following:

Flight Requirements for Market Participants and ERCOT

Flight Administrator and Success Criteria

Flight Guidelines

Flight Details and Phases

Appendices--??Testing Scenarios for Certification in the Texas Market

Entities are obligated to comply with the Texas Market Test Plan.  In the event of a conflict between the Texas Market Test Plan and the ERCOT Protocols or Public Utility Commission of Texas (PUCT) Substantive Rules, the ERCOT Protocols and PUCT Substantive Rules take precedence over the Texas Market Test Plan.

Additional certification requirements that fall outside the scope of this document may be specified by the PUCT and/or ERCOT.

* + Revision

The Texas Standard Electronic Transaction (Texas SET) Working Group monitors and reviews metrics on production environments looking for opportunities to improve existing testing procedures. Revisions to the Texas Market Test Plan shall be reviewed by the Texas SET Working Group and approved by the Retail Market Subcommittee.

1. **Flight Requirements**

**TEXAS SET Release**

All market participants, including ERCOT, shall complete required certification through Texas Retail Market testing as defined by Texas SET when a new TX SET/ANSI X12 EDI Version Release is approved by the Market. On occasion, a Version Release will not consist of any system or transaction changes to the Market or its participants. In that instance, Texas SET and RMS may determine that additional testing is not necessary.

**New Market Participant**

**Bank Changes**

Trading partners shall be notified when changes occur with the banking institutions they use. The changes may be caused by any number of reasons including bank mergers or upgrades to newer releases of ANSI standards. These changes may result in new routing codes, account numbers, format changes to the remittance advice or other changes that would affect one party’s ability to deliver and/or reconcile invoices and payments. When such changes occur, it the responsibility of the party whose bank made the change to initiate testing with their trading partners.

Testing shall use one or more of the following methods to verify that payments and remittances between trading partners remain timely and accurate.

• Penny test

• Invoice/Remittance

**Change of Service Provider**

Testing for Contingency EDI Provider cannot be done during a TX SET Version Release. A CR does not have to acquire an alternate DUNS number for testing with a Contingency EDI Provider. One CR cannot test with two different EDI Providers in same flight.

Certified Market Participant Changes to a Non-Established Service Provider

A Market Participant who is certified in the Texas Marketplace with the current TX SET version may choose to move from their Market Interface Service Provider to another Market Interface Service Provider. If the new Market Interface Service Provider has not successfully completed certification testing for another Market Participant in the service territory in question this “Non-Established Service Provider” is required to execute tests during a scheduled market test flight. Market Interface Service Provider is a term used to refer to an MP’s internal organization or an outsourced company that provides both connectivity and translation services for an MP .

An MP that chooses to use a Market Interface Service Provider that has not successfully completed certification testing is required to contact the Flight Administrator to determine what Connectivity and Translator tests they are responsible for executing during the next scheduled market test flight.

An MP may not switch to a Non-Established Market Interface Service Provider as an “Emergency” without the express permission of the Flight Administrator. A switch to a Non-Established Market Interface Service Provider by an MP is not considered a “Specified Ad Hoc Testing” and does require Texas Retail Market testing.

**Non Opt In Entity**

Content to be determined

**System Change**

During the normal course of Marketplace operations, companies will need to make changes to their systems, including connectivity systems, translation systems, and other back-end systems including billing, metering, customer information, etc. Once a party has qualified and is in production in the Marketplace, changes to systems can have a significant impact on trading partners and the Marketplace.

System Change Assumptions:

* System changes made by one MP can have an impact on trading partners (TPs) of that MP.
* An MP shall do sufficient internal testing, including regression testing, to minimize the impact of changes on its TPs.
* An MP shall communicate to its TPs clearly and early regarding changes to systems. This includes advance notice of the change and planned implementation date.
* An MP shall identify a ‘back-out’ strategy where appropriate in case problems as a result of changes cannot be resolved quickly.
* ‘Translator systems’ include any hardware, software, and system configuration used to create the ANSI X12-compliant files sent to TPs. It does not include mapping.
* ‘Connectivity systems’ include any hardware, software and system configuration used to deliver files to and from a TP. It includes the NAESB-based electronic delivery mechanisms (EDM).
* ‘Service Provider’ is a vague term that can refer to many different types of entities used by MPs in the Marketplace. These could include connectivity, translation, testing, billing, metering, etc.
* Market Interface Service Provider is a term used to refer to an MP’s internal organization or an outsourced company that provides both connectivity and translation services for an MP.
* While many changes to systems will be intentional and planned, there are emergency scenarios, such as a system failure, where advanced planning and notice are not possible.

System Change Categories

Connectivity System Changes and/or Updates

Connectivity is defined as the systems used to send and/or receive files to/from your trading partners. These include NAESB EDM for CR/TDSP/ERCOT communications as well as changes in security keys, IP addresses, DNS names, and DUNS numbers.

Connectivity Change Checklist

1. Communicate the planned changes of communication systems to the Market Participant testing contact listed in the Testing Worksheet (TW) on the website, in accordance with sign-up for an approved Texas Retail Market testing.
2. Send new Testing Worksheet (TW) and new Trading Partner Agreements to TPs where necessary, including changes to DUNS, IP address, name change, or any other change to the information on the Testing Worksheet (TW).
3. Complete the change during the approved In-Flight Texas Retail Market testing or in accordance with the Out-of-Flight Texas Retail Market testing requirements set forth above and schedule migration date with each trading partner. If connectivity is the only change for that trading partner the migration date is not dependent upon the end of the Texas Retail Market testing.

Major changes to communication protocols may require more rigorous testing. Specific requirements for testing these changes will be defined within the specifications for the new communication protocol.

Translator System Changes and/or Updates

Translators or systems used to perform the data transformation that create EDI ANSI X12 files may be changed or require upgrades. These changes pose significant risks to individual participants and the marketplace as a whole. All participants in the market shall therefore address these changes with a clear understanding that;

* ERCOT and market participants shall take responsibility for any changes they make in their data transformation system(s) and test with trading partners when they perceive a risk.
* ERCOT and market participants shall do internal testing to help minimize the risk to the market.
* Best practices include regression testing of translator changes using historical data.

Translator Change Checklist

1. Provide new Testing Worksheets (TW) to all trading partners (as required by test flight).
2. Complete the Connectivity Test Scripts as defined by Texas SET.
3. Complete the Penny Test Script as defined by Texas SET.
4. Complete the Basic Enrollment Scripts as defined by Texas SET.

Back-end System Changes and/or Updates

A company’s “back-end system” is defined as any part of an MP system that exists behind the connectivity protocol (NAESB, FTP, HTTPS, etc.) and the Market Interface Service Provider. Once the data passes through the communication interface and the Market Interface Service Provider, the data enters the back-end system. Because each MP's back-end system architecture is different, back-end systems could include, but are not limited to the business process management system, billing system, or the data management system (database).

ERCOT and other MPs are required to take responsibility for any changes they make in their back-end system(s) and, if a potential risk is perceived, shall test with trading partners to minimize that risk. MPs shall follow change management best practices, including extensive internal testing, regression testing on historical data, etc.

ERCOT and MPs are not required to test when changes are made to their back-end system(s). As part of the company’s internal testing procedures, they may request to test with all, some, or none of their trading partners; however, it is considered good business practice for MPs and ERCOT to communicate any changes, replacements, and/or upgrades to their trading partners.

Back-end System Change Checklist

1. Where appropriate, notify TPs and the Flight Administrator of the planned changes to back-end systems. Notification needs to be provided to the Market Participant testing contact listed in the Testing Worksheet (TW) on the website.
2. Where appropriate, communicate testing plans to TPs including cut-over, migration and back-out plans.
3. Where appropriate, coordinate and agree on plan schedules/milestones with TPs.
4. Complete the change and confirm successful migration with each trading partner.

**New Service Territory/ New Trading Partnership**

All new trading partnerships shall go through the “In-Flight” testing process as prescribed in the TMTP during a scheduled market test flight. The only exceptions are clearly set forth in the Out-of-Flight section.

**New Functionality**

Marketplace functional changes can include the following:

* New tracks, such as
  + Continuous Service Agreement (CSA)
  + Service Order Option 1
  + New TX SET versions, including normal and emergency change controls
  + New transactions
  + New Connectivity Options (NAESB EDM)

1. **Flight Responsibilities**

Responsibilities specific to testing and validating Market Participant’s systems and processes are contained in this section. The following responsibilities shall be met before a Market Participant receives certification that its systems are ready to go into production with its trading partners.

Prior to Certification

* MPs who wish to participate in the market using NAESB EDM for conducting retail operations in the Texas Marketplace will refer to this document for guidelines on these processes.
* Testing shall occur during Business Hours on a Retail Business Day which are documented in ERCOT Protocols Section 2, Definitions and Acronyms.
* MPs may elect to not participate in testing optional processes as identified in this document but will inform their trading partners (TPs) and the Flight Administrator in advance. However, an MP does not have the option to refuse to test the basic processes necessary to ensure that their retail systems interface properly with both ERCOT’s and other MPs’ systems. All entities attempting to certify in the Texas Retail Market, will use dedicated test environments that are representative of their production environments. Automated internal processes are required when testing. The Flight Administrator may deny participation if manual interaction or data manipulation compromises the integrity of flight testing. Any areas that require manual interaction or data manipulation shall be communicated to all testing partners prior to the start of flight testing.
* The Flight Administrator is the final authority on all levels of Business Process Certification among trading partners. At any time during flight testing, a MP that is not meeting testing expectations may be advised by the Flight Administrator to withdraw from the flight.
* The Flight Administrator will follow escalation procedures set forth in the TMTP. If at the end of the flight the MP has not withdrawn and the Flight Administrator determines the MP has failed flight testing, the testing certificate shall not be granted and the MP must complete testing in a future flight.
* The Flight Administrator will moderate testing and report on test status including progress and issues to ERCOT, Retail Market Subcommittee (RMS), Texas SET, other appropriate committees, and/or the PUCT.
* Functional Acknowledgements provide a critical audit trail. All parties will send Functional Acknowledgements (FA/997) for all EDI transactions (except for the receipt of a 997, which would create an endless cycle) during testing. Parties shall monitor acknowledgements sent and received, but are not a checklist item for flight success.

### Prior to Testing

Competitive Retailer

* Apply for PUCT REP Certification (not applicable to MOU/ECs).
* Obtain DUNS number for testing entity.
* Adhere to Protocol 15 – Customer Registration.
* Adhere to Protocol 16 – Registration and Qualification of Market Participants.
* Adhere to Protocol 19 - Texas Standard Electronic Transaction.
* Implement a dedicated test system that closely resembles production.
* Complete the Testing Worksheet online; include specific details on required features that are not supportetest exceptions, manual bill scenarios (MOU/ECs only).
* Receive, review, and load test ESI IDs and associated zip codes from TDSP.
* Review Testing FAQs (see Appendix B). Review the TX SET Implementation Guidelines.

### TDSP

* Adhere to Protocol 15 – Customer Registration.
* Adhere to Protocol 16 – Registration and Qualification of Market Participants.
* Adhere to Protocol 19 - Texas Standard Electronic Transaction.
* Implement a dedicated test system that closely resembles production.
* Complete and submit the Testing Worksheet online; include specific details on required features that are not supported, test exceptions, manual processes.
* Establish Test Bed of ESI IDs and zip codes; include enough ESI IDs to cover all required scripts for each of the CRs (See Appendix D).
* Provide ERCOT and CRs with all required Test Bed data.
* Review Testing FAQs prior to testing (see Appendix B).
* Review the TX SET Implementation Guidelines.

### ERCOT

* Adhere to Protocol 15 – Customer Registration.
* Adhere to Protocol 16 – Registration and Qualification of Market Participants.
* Adhere to Protocol 19 - Texas Standard Electronic Transaction.
* Establish a dedicated test system that closely resembles production.
* Update the online Testing Worksheet.
* Review Testing FAQs prior to testing (see Appendix B).
* Review the TX SET Implementation Guidelines.
* Establish technical connectivity with all testing Market Participants.

During Certification Testing

Competitive Retailer

* Establish technical connectivity with ERCOT and TDSP trading partner.
* Participate in scheduled testing conference calls with the Market Flight Administrator, ERCOT and MPs. Adhere to the established test schedule by sending transactions on the given day in accordance with the corresponding Test Script. If the CR cannot complete its assigned tasks, the CR will need to contact their ERCOT testing team representative and/or trading partner testing representative.
* Notify trading partner testing representative(s) via email when transactions are sent and received.
* MP shall contact the ERCOT testing team representative and/or trading partner testing representative in the event transactions are not received in accordance with the corresponding Test Script.
* Update status on the testing checklist.

### TDSP

* Establish technical connectivity with ERCOT and CR trading partners.
* Participate in scheduled testing conference calls with the Flight Administrator and MPs. Adhere to the established test schedule by sending transactions by the given day inaccordance with the corresponding Test Script. If the TDSP cannot complete its assigned tasks, the TDSP will need to contact its ERCOT testing team representative and/or trading partner testing representative.
* Notify trading partners via email when you send and receive test transactions.
* Update status on the testing checklist.
* Contact its ERCOT testing team representative and/or trading partner testing representative in the event transactions are not received in accordance with the corresponding Test Script.

### ERCOT

* Participate in scheduled testing conference calls with the MPs.
* Adhere to the established test schedule.
* ERCOT testing team representative will contact the affected MPs in the event they are unable to send transactions in accordance with the corresponding Test Script.
* Notify the MPs via email when you send and receive transactions.
* ERCOT testing team representative will contact the affected MPs in the event they did not receive transactions in accordance with the corresponding Test Script.
* Update status on the testing checklist.

Production

### CR

* Receive Certification letter from ERCOT.
* Continue to work with the PUCT, TDSPs, and ERCOT Retail Client Services to complete any additional requirements prior to going into production.

### TDSP

 Receive Certification letter from ERCOT.

* Continue to work with the PUCT, MPs, and ERCOT Retail Client Services to complete any additional requirements prior to going into production.

### ERCOT

* Develop Texas Retail Market testing Lessons Learned.
* Distribute certification letters.
* Assist MPs with production migration.

Trading partner agreements will not be required for a party to begin testing but may be required prior to moving into production. This will be determined by individual TDSPs.

Each MP in the Texas Electric Choice Market has specific requirements that shall be met before it will be allowed to begin production processing. The ERCOT Protocols and PUCT rules specify many of these requirements in detail. Market Participants shall thoroughly understand these requirements.

## **Flight Administrator Requirements**

The Flight Administrator will act as a neutral facilitator throughout the testing effort. Primary duties for the Flight Administrator will be to:

* Maintain a testing contact list on the Texas Retail Testing Website.
* Verify testing eligibility of MPs with ERCOT.
* Ensure TW is completed online by all testing MPs by signup deadline.
* Email MPs with a reminder to update each of their TWs at the beginning of the year.
* Company Contacts
* NAESB Information
* Ensure that MPs participating in the Flight have completed all Requirements necessary Prior to Testing, as found in Section 5.2.1 of this document.
* Develop a consolidated list of testing FAQs and post on the Texas Retail Testing Website.
* Attend Texas SET meetings or send appropriate representation.
* Review and provide input to Texas SET agenda prior to meetings.
* Assist in facilitation of Texas SET meetings.Assist Texas SET in developing a standard Test Plan for Point-to-Point and End-to-End business processes.
* Assist Texas SET in developing Test Scripts.
* Facilitate End-to-End testing between ERCOT and MPs and Point-to-Point business processes between trading partners.
* Facilitate testing conference calls with MPs and ERCOT and document results.
* Ensure MPs meet critical date deadlines and/or checkpoint success.
* Act as an issue resolution agent for technical and process issues between all MPs.
* Confirm that MPs have completed certification testing.
* Verify adherence to TX SET standards by all MPs.
* Maintain current flight testing status on the Texas Retail Testing website.
* Adhere to RMS approved flight tasks/timelines.

**Testing Website**

* + The Flight Administrator maintains a Texas Retail Testing website (RTW) that details the current status of the testing process. The URL address for this website can be found in Appendix B.
  + This website includes:
    - Link to the Texas Market Test Plan (TMTP)
    - Test Scripts
    - Link to the Approved Texas Retail Market Test Flight Schedule Timelines

Daily agenda and minutes of each conference call

* + - Link to Texas SET page of the ERCOT website containing Texas SET meeting schedule
    - Testing contact lists
    - Frequently Asked Questions (FAQs) on the Testing Process
    - Testing Status - Each organization will be able to obtain a status of the testing process, including its own status. Information will be secured by organization.
    - Market Links
    - File Cabinet for significant testing materials
    - Testing Worksheet (TW)
  + **2.1 Testing Worksheet (TW)**
  + Each MP completes a Testing Worksheet (TW) online. This worksheet includes basic contact information, as well as specific testing communications information, required for effective testing The Testing Worksheet also contains production data. It also identifies processes that will be tested including optional functions that the MP will use in their business plan and which they plan to test.
  + The TW link can be found in Appendix A.
  + **2.1.1 Contacts**
  + Parties shall provide daily and emergency contact information for the test lead and the test lead alternate. Issue Resolution procedures require that an executive level contact also be provided.
  + At least one Business Contact shall be an employee of the Market Participant, not a vendor or service provider.
  + **2.1.2 Exceptions to the Test Plan**
  + Parties cannot arbitrarily require other parties to test certain features, scenarios or scripts, nor can they arbitrarily refuse to test certain features, scenarios or scripts. This Test Plan details full-testing requirements for MPs. There are legitimate scenarios where a party will not support a feature or scenario that is identified in a test script. In these cases, a party can claim an ‘exception to the Test Plan’. These exceptions shall be documented in the TW, and shall be approved by the Flight Administrator. The Flight Administrator will review exceptions on a case-by-case basis to determine the impact on the Marketplace. Parties that claim “approved” exceptions will not be required to test those features. Once approved, this information will be shared with trading partners.
  + **2.1.3 Manually-Assisted Processes**
  + Each party shall identify the different processes that directly support data exchanges that require manual intervention. Manual intervention increases the risk of errors or process failures and could serve to conceal systemic problems that might introduce transaction errors or hazards into the Market. ANSI X12-formatted files shall never be altered manually. This information will be documented in advance on the Testing Worksheet and shared with trading partners.
  + **2.1.4 Testing Responsibilities**
  + The ‘Testing Responsibilities’ section details the responsibilities each party has in the testing process. This Test Plan is focused on testing the most significant features of the marketplace. Also, each party has certain obligations prior to, during, and after testing which are outlined in the ‘Testing Responsibilities’ section.
  + **2.1.5 Connectivity Schedules**
  + Connectivity schedules are arranged by the dates stated in the approved Texas Retail Market Test Flight Schedule, located on the Retail Testing Website and ERCOT.com
  + If a New MP chooses to use a Service Provider they must communicate their choice of Service Provider to the Flight Administrator by the signup deadline. (see approved Texas Retail Market Test Flight Schedule. ) No Service Provider changes will be made after the Flight Administrator has sent the testing matrix unless all testing partners have agreed to the change.

1. Appendices

## **Appendix A - Testing Worksheet**

The Testing Worksheet can be found online at:

<https://etod.ercot.com/tw/TestingWorksheetOverview.asp>

## **Appendix B - Resources**

The Texas Retail Testing website (RTW) can be found online at:

[https://etod.ercot.com/](https://etod.ercot.com/tw/TestingWorksheetOverview.asp)

The TX SET Implementation Guidelines, Transaction Names and Swimlane Diagrams can be found online at:

<http://www.ercot.com/mktrules/guides/txset/index.html>

Protocols can be found at:

<http://www.ercot.com/mktrules/nprotocols/>

ERCOT Registration information can be found at:

<http://www.ercot.com/services/rq/index.html>

The Master Flight Calendar can be found online at:

<https://etod.ercot.com/DailyAgenda.asp?Method=E2E>

The FAQ spreadsheet provides questions and answers relating to Retail Testing and it can be found online at:

<https://etod.ercot.com/FAQs.xls>

**Appendix C - Marketplace Issue Resolution Form**

|  |  |
| --- | --- |
| Issue Title: | |
| Date Identified: |  |
| Date Submitted: | Submitted by: |
| Parties Affected by Issue: | |

|  |
| --- |
| **Position 1** |
| Parties supporting Position 1: |
| Position 1 Summary of Supporting Logic (include any legislation, standards, etc.) |
| Position 1 Recommendations: |
| **Position 2** |
| Parties supporting Position 2: |
| Position 2 Summary of Supporting Logic (include any legislation, standards, etc.) |
| Position 2 Recommendations: |
| **Flight Administrator Position** |
| Comments: |
| Recommendation: |
| Status: |

## **Appendix D - Texas Retail Market Test Bed Load Form**

The Texas Retail Market Test Bed Load form can be found online (login required) at:

<https://etod.ercot.com/FileCabinet.asp>

## **Appendix E - Testing Requirements Matrix**

The Testing Requirements Matrix can be found online (login required) at:

<https://etod.ercot.com/FileCabinet.asp>

## **Appendix F – Glossary of Terms & Acronyms Used in this Document not defined in Section 2 of the ERCOT Protocols**

* Additional DUNS by Certified REP – determined by a Market Participant who is certified in the Texas Marketplace with the current TX SET version; involves adding a new trade name and DUNS Number for a Market Participant in a specific service territory.
* Existing Market Participant, Existing CR, and Current Market Participant - for use in the TMTP is defined as an MP that has successfully completed a previous flight test for the current TX SET release and has not terminated their relationship with ERCOT.

New Market Participant or New CR for use in the TMTP is defined as a MP that has not successfully completed a previous flight test for the current TX SET release or has terminated their relationship with ERCOT.

* ANSI X12 - The American National Standards Institute X12 standard relates to shared ways of defining formats and procedures for exchanging documents.
* EDI Provider - used for testing purposes by a Market Participant who is certified in the Texas Marketplace with the current TX SET version.
* Established Service Provider - an organization or company that provides both connectivity and translation services to another Market Participant in the same service territory and that has successfully tested in the Marketplace provided they tested using the current TX SET version.
* Market Interface Service Provider - refers to a Market Participant’s internal organization or an outsourced company that provides both connectivity and translation services for an MP.
* NAESB EDM – North American Energy Standards Board Electronic Delivery Mechanism
* Non-Established Market Interface Service Provider - refers to a Market Participant’s internal organization or an outsourced company that provides both connectivity and translation services for an MP that has not successfully completed certification testing for another Market Participant in the service territory in question.
* Specified Ad Hoc Testing – refers to “emergency” testing to institute a particular change to a Market Participant’s systems or processes; these changes cannot impose undue risk to the Market.
* Trading Partner - TP – Companies which exchange EDI documents

## **Appendix G – Approved Test Flights Schedule**

The schedule for Approved Test Flights can be found online at:

<https://etod.ercot.com/>