

# **Technical Operating Profile**

## **For Electronic Data Interchange In New York**

### **Supplement 1**

#### **Phase II and III Test Procedures – All Transaction Standards Connectivity Tests**

#### **Test Scenarios Applicable to:**

**TS814E, TS814D, TS814HU, TS867HU, and TS867MU**

**Version 1.8**

**May 31, 2019**

**TABLE OF CONTENTS**

|  |               |
|--|---------------|
| <b>I. PURPOSE .....</b>                            | <b>2</b>      |
| <b>II. OVERVIEW .....</b>                          | <b>2</b>      |
| <b>III. PHASE II TESTING PROCEDURES .....</b>      | <b>4</b>      |
| <b>IV. PHASE III TESTING PROCEDURES.....</b>       | <b>5</b>      |
| <b>V. TEST SCHEDULING.....</b>                     | <b>6</b>      |
| <b>VI. TEST PLAN SCENARIOS.....</b>                | <b>9</b>      |
| <b>A - CONNECTIVITY TEST SCENARIOS.....</b>        | <b>12</b>     |
| <b>B - ENROLLMENT TEST SCENARIOS.....</b>          | <b>24</b>     |
| <b>C - MONTHLY USAGE TEST SCENARIOS.....</b>       | <b>37</b>     |
| <b>D - SPECIAL SITUATION TEST SCENARIOS.....</b>   | <b>39</b>     |
| <br><b>APPENDIX A - PRE-TESTING WORKSHEET.....</b> | <br><b>40</b> |
| <b>APPENDIX B - PHASE I TESTING RULES.....</b>     | <b>43</b>     |

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|--------------------------|--|
|                          | <b>Summary of Changes</b>  |
| <b>November 1, 2001</b>  | <b>Initial Release</b>   |
| <b>February 21, 2003</b> | <b>Version 1.1 Issued</b>  |
|                          | Monthly usage test scenarios were modified to include tests for transmitting meter reading data and actual usage factors (required for Single Retailer model; optional for other billing models) and an Interim Bill Indicator (required for Utility Bill Ready model).  |
| <b>August 23, 2006</b>   | <b>Version 1.2 Issued</b>  |
|                          | <b>Section 1:</b> Corrected reference to the date of a previous order.   |
|                          | <b>Section II:</b> Updated to reflect the name of the document containing Phase I test procedures. New text is added to indicate that utilities may establish test schedules on an "as-needed" basis in addition to batch mode.  |
|                          | <b>Section III &amp; IV:</b> Updated to reflect the complete list of TOP supplements.  |
|                          | <b>Section IV:</b> The scope of item 5 is expanded to pertain to testing on either an "as needed" or "batch mode" basis. Item 11 is deleted as no longer necessary.  |
|                          | <b>Section V:</b> Items 1, 2 and 3 are revised to reflect the fact that Phase III testing may be scheduled on an "as-needed basis".<br>Item 4 is revised to (a) require E/Ms to submit requests to utilities for Phase III testing a minimum of 30 days in advance of their desired test date (where testing is scheduled on an as needed basis) or a scheduled date for batch testing; (b) require utilities to begin testing within 45 calendar days of receipt of an E/Ms Phase III testing request; and (c) permit DPS Staff to resolve disputes involving EDI test schedules. |
| <b>October 23, 2014</b>  | <b>Version 1.3 Issued</b>  |
|                          | Replaced references to Marketer and E/M with ESCO.<br>Elimination of outdated event references.  |
| <b>January 29, 2016</b>  | <b>Version 1.4 Issued</b>  |
|                          | Replaced references to Staff Phase I testing with Phase I testing through utilities.   |
| <b>March 31, 2017</b>    | <b>Version 1.5 Issued</b>  |
|                          | Added references to Phase I testing of utilities with DPS Staff.   |
| <b>October 31, 2017</b>  | <b>Version 1.6 Issued</b>  |
|                          | Alternative definitions added for Phase II and Phase III testing.  |
| <b>March 30, 2018</b>    | <b>Version 1.7 Issued</b>  |
|                          | Modifications to enable DER suppliers to receive data through EDI on a similar basis as ESCOs.   |
| <b>May 31, 2019</b>      | <b>Version 1.8 Issued</b>  |
|                          | Reference to Meter Data Service Provider (MDSP) removed.   |

## I. PURPOSE

This document provides the guidelines and specifications for Phase I, Phase II and III testing for Electronic Data Interchange (EDI) in New York's retail energy marketplace. The specifications were developed by, and in accordance with, the ongoing work of the New York EDI Collaborative group (the Collaborative), that is developing the standards for EDI in New York as directed by the New York Public Service Commission (PSC or Commission)<sup>1</sup>. Testing scenarios for TS814E, TS814D, TS814HU, TS867HU, and TS867MU EDI transactions are specified within this document. The EDI Phase I testing specifications (and other EDI-related technical topics) are detailed in the most current version of the Technical Operating Profile (TOP).

## II. OVERVIEW

The New York EDI Collaborative has adopted a three-phased approach to testing. Phased testing is generally completed by each company only once, as described below, except in cases where Utilities, ESCOs, DER Suppliers or Direct Customers utilize third party EDI Service Providers (EDISPs).<sup>2</sup> In cases where there is a significant change in EDISPs, e.g. an EDISP that not been active in New York, ESCOs, DER Suppliers, Direct Customers and Utilities may be required to re-establish Phase I certification. Trading partner testing and attestations may also have to be demonstrated and completed in these cases.

Within this document, the term EDI Testing Applicant (EDITA) refers to the ESCO, DER Supplier or Direct Customer that is an applicant for Phase I or Phase III certification. Since DER Suppliers are limited to requesting and receiving historical customer required to complete Phase I testing and Phase III testing for applicable transactions. Note that while the Test Plan Scenarios use the term ESCO, that term should be interpreted to include DER Suppliers and Direct Customers, as applicable.

The Phase I Testing Rules, the EDITA Phase I Testing Application and a list of Established EDI Service Providers<sup>3</sup> are available from the New York EDI website.

- ***Phase I – X12 Syntactical Verification***

In Phase I testing, an EDITA<sup>4</sup> submits sample EDI transactions to utilities, who will review them for correct X12 syntax or accept/certify an EDITA's Phase I capability. Each party is "Phase I Certified" once syntactical verification is complete or accepted/certified. The Utility will notify Department of Public Service (DPS) Staff when the EDITA is Phase I certified. DPS Staff will maintain and publish the list of companies that have satisfied Phase I testing requirements for each approved transaction set standard. The Phase I test plan is fully documented in the Collaboratives' Technical Operating Profile.

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<sup>1</sup> New York Public Service Commission Electronic Data Interchange proceeding, Case 98-M-0667.

<sup>2</sup> Utilities have discretion to determine that applicant EDITAs do not need to complete Phase I testing, particularly in cases where Established EDISPs certify to the utility that the applicant ESCO is Phase I capable.<sup>3</sup> Established EDI Service Providers are those EDISPs that currently provide EDI services to Utilities and/or EDITAs in the New York retail market pursuant to New York's EDI Standards.

<sup>3</sup> Established EDI Service Providers are those EDISPs that currently provide EDI services to Utilities and/or EDITAs in the New York retail market pursuant to New York's EDI Standards.

<sup>4</sup> DPS Staff (or their designee) conducts testing of Utilities that need to satisfy Phase I testing requirements.

- ***Phase II : Verification of Utility EDI Readiness***

Prior to 2005, Phase II tests were conducted between each New York Utility and a volunteer ESCOs that had sufficient experience in EDI, and who had obtained Phase I certification in New York.

The primary function of Phase II testing was to ensure that each Utility is ready for full-scale production for those transaction standards that have been approved in New York. DPS Staff will maintain the list of EDI Phase II production-ready Utilities on the New York EDI website. The list also includes some of the transactions available for Phase III testing with interested EDITAs who have been Phase I certified and are now ready to begin trading partner testing with that Utility.

Phase II Testing may also refer to utility-based testing of EDI transaction(s) not specified within the TOP Supplements, e.g. non-mandatory transactions, that a utility may elect to test with an individual or subset of EDITAs and/EDISPs prior to general Phase III testing of the same transaction with all other EDITAs and/or EDISPs.

- ***Phase III: EDITA Verification Process***

Phase III testing will be conducted between each Utility and all eligible EDITAs approved to participate in the particular Utility's gas or electric retail access programs. The purpose of Phase III testing is to ensure that each EDITA is prepared to exchange production EDI data for the relevant commodities and business transactions. The parties will test the New York DTM (data transfer mechanism) and all applicable business scenarios. The Utility has primary responsibility for specifying the volumes and variations of tests to be completed (Utility-specific testing instructions must be made available to each EDITA in an easily accessible manner, such as from the Utility's web site). EDITAs ready for Phase III testing may be placed by the Utility in queued 'batches' to execute test scenarios and frames, within their assigned batch, until all scenarios and frames are successfully completed. Alternatively, utilities may establish test schedules for individual test applicants on an as needed basis. Upon successful completion of all Phase III test requirements, both the Utility and the EDITA will notify each other, and DPS Staff, by email, indicating that both parties have satisfied all test requirements and that the EDITA can move into EDI production. EDITAs will generally not be required to repeat successful Phase III testing, except, as noted above, when there has been a change in their third party EDISP or unless directed to do so by Commission order for example when new standard(s) or major changes in one or more existing New York standards are adopted.<sup>5</sup>

Notwithstanding the above, a shortened version of testing is acceptable when a Utility is testing with an experienced EDITA or third party EDISP. Additionally, utilities may supplement the testing scenarios contained in this or other New York EDI Standards Technical Operating Profile documents in their Utility Maintained EDI Guides. Utilities are encouraged to keep their test plans up-to-date and consistent with their current implementations.

Phase III Testing may also refer to utility-based testing of EDI transaction(s) not specified within the TOP Supplements, e.g. non-mandatory transactions, that a utility may elect to test all EDITAs and/or EDISPs, sometimes following Phase II Testing with an individual or subset of EDITAs and/EDISPs of the same transaction(s).

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<sup>5</sup> As new EDI transaction standards and related test procedures are adopted by the Commission, all parties will be required to successfully complete testing on these new transactions when appropriate. The Change Control Process, administered through New York's EDI Working Group, will be the process to handle EDI standard revisions on a collective, ongoing basis.

### **III. PHASE II TESTING PROCEDURES**

1. This Supplement, applicable only if a utility needed to recertify its EDI readiness, contains Phase II tests for the following transactions: 814 Enrollment Request & Response, 814 Drop Request & Response, 814 Consumption History Request, 867 Consumption History/Gas Profile, 867 Monthly Usage, 824 Application Advice and the 997 Functional Acknowledgement. Phase II tests for other Transaction Set Standards adopted by the PSC are contained in the following TOP Supplements:
  - Supplement 2 - TS814 Change (Account Maintenance)
  - Supplement 3 - TS814 Reinstatement
  - Supplement 4 - TS810 Invoice - Utility Bill Ready Consolidated Billing or  
TS810 Invoice - Utility Rate Ready Consolidated Billing
  - Supplement 5 - TS248 Account Assignment
  - Supplement 6 - TS820 Remittance
  - Supplement 7a TS810 EURC Cycle Invoice (Single Retailer)
  - Supplement 7b TS810 EURC Calendar Month Estimate (Single Retailer)
  - Supplement 7c TS810 ESCO Summary Invoice (Single Retailer)
2. Sufficiently experienced ESCOs will be identified by DPS Staff for Phase II Trading Partner Testing. DPS Staff will approve the final pairings of each Utility with an eligible, experienced ESCO.
3. Completed Pre-Test Worksheets (Appendix A) will be exchanged by each trading partner. The worksheets provide necessary information including contact information, relevant URLs and DUNs numbers, and test exceptions.
4. The Utility is responsible for scheduling an initial meeting with the ESCO to agree on a Phase II testing start date and to discuss test coordination, data exchange procedures, and test exceptions.
5. The test transactions must be exchanged in accordance with the protocols established in New York for Data Transfer Mechanisms. The connectivity tests specified in Section VI of this document must be completed in a thorough manner and prior to executing the business test scenarios.
6. The Utility is responsible for providing sufficient sample data to the ESCO in order for the ESCO to construct the relevant EDI test transactions to execute the Phase II test scenarios.
7. The receiver will process the transactions through its translator and respond with required EDI functional acknowledgments. The receiver will then process the EDI test transactions with their business applications and respond with any required application response transactions.
8. When all test scenarios are successfully completed, both parties will notify each other, and the DPS Staff, by email, indicating that both parties have satisfied all test requirements.

#### **IV. PHASE III TESTING PROCEDURES**

1. This Supplement contains Phase III tests for the following transactions: 814 Enrollment Request & Response, 814 Drop Request & Response, 814 Consumption History Request, 867 Consumption History/Gas Profile, 867 Monthly Usage, 824 Application Advice and the 997 Functional Acknowledgement. Phase III tests for other Transaction Set Standards adopted by the PSC are contained in the following TOP Supplements:
  - Supplement 2 - TS814 Change (Account Maintenance)
  - Supplement 3 - TS814 Reinstatement
  - Supplement 4 - TS810 Invoice - Utility Bill Ready Consolidated Billing or  
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  - Supplement 5 - TS248 Account Assignment
  - Supplement 6 - TS820 Remittance
  - Supplement 7a TS810 EURC Cycle Invoice (Single Retailer)
  - Supplement 7b TS810 EURC Calendar Month Estimate (Single Retailer)
  - Supplement 7c TS810 ESCO Summary Invoice (Single Retailer)
2. The EDITA is responsible for reviewing the Utility's test schedules and contacting the Utility to request testing at least 30 days prior to (a) the date it expects to begin testing (where testing is conducted on an as needed basis) or (b) the published start date for a batch testing queue in which space is available.
3. The Utility is responsible for notifying the EDITA of the date testing will begin or confirming the batch assigned to the EDITA.
4. Completed Pre-Test Worksheets (Appendix A) will be provided by trading partners to each other, prior to the scheduling and commencement of Phase III Testing. The worksheets provide necessary information including contact information, relevant URLs and DUNS numbers, and test exceptions.
5. The Utility is responsible for scheduling an initial meeting for each EDITA prior to the scheduled start date for testing, to coordinate the test execution.
6. Utility-specific testing instructions will be made available to each EDITA in an easily accessible manner (such as from the Utility's web site).
7. The test transactions must be exchanged in accordance with the protocols established in New York for Data Transfer Mechanisms. The connectivity tests specified in Section VI of this document must be completed in a thorough manner and prior to executing the business test scenarios.
8. The Utility will provide test data to the EDITA for use in preparing EDI test transactions to execute the Phase III test scenarios.
9. The receiver will process the transactions through its translator and respond with required EDI functional acknowledgments. The receiver will then process the EDI test transactions with their business applications and respond with any required application response transactions.
10. Upon successful completion of testing, both parties will notify each other, and the DPS Staff, by email, indicating that both parties have satisfied all test requirements and confirming that the EDITA can move into EDI production.

## V. TEST SCHEDULING

1. The Utility will set up a schedule for Phase III testing and publish it on their web site. Schedules will provide for testing of more than one EDITA at a time, by using test batches, if necessary, (with assigned start and end dates) consisting of groups of EDITAs testing at the same time.
2. Where EDITAs are competing for a place in the same batch, or test schedule, the date of Phase I certification will be the 'tiebreaker' in determining ESCO entry into Phase III.
3. The EDITA will proceed through the test scenarios and frames with their batch, where applicable, unless significant errors that cannot be resolved within 2 business days are encountered. Such condition may result in the EDITA being withdrawn from their currently assigned batch. When an EDITA is withdrawn from a batch, the Utility will reassign the EDITA to a new batch or start date. The EDITA will proceed through testing with the newly assigned batch group or in accordance with the new test schedule.
4. During Phase III, parties will strive to complete testing in a prompt and orderly manner.
  - Utilities are expected to schedule testing activities in an equitable manner. EDITAs should review the Utilities published testing schedules and select their preferred testing period from among the available dates. EDITAs must request testing at least 30 calendar days prior to (a) the date it expects to begin testing (where testing is conducted on an as needed basis) or (b) the published start date for a batch testing queue in which space is available.
  - Except for the initial implementation period, and periods in which new transactions are being introduced<sup>6</sup>, Utilities must begin testing within 45-calendar days of receipt of an EDITA's test request.
  - During the initial implementation period, periods in which new transactions are being introduced or instances in which an EDI vendor servicing multiple EDITAs withdraws from a service territory, flexibility in scheduling new Phase III testing is needed in order to ensure that testing with each trading partner is completed in a rigorous and planned manner and that no party is unduly burdened.
  - DPS Staff will direct a resolution of any test scheduling disputes between Utilities and EDITAs, subject only to an appeal to the Commission. Failure of Utilities to abide by the established time frames or to abide by any resolution of a test scheduling dispute directed by DPS Staff will be reported to the PSC.

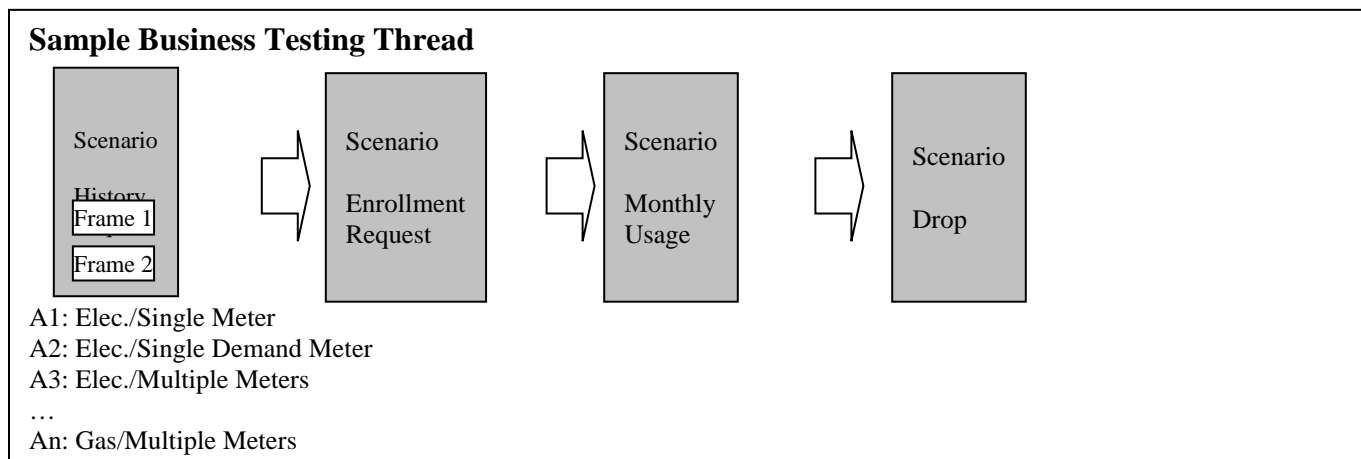
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<sup>6</sup> Initial implementation for most utilities occurred prior to 2004, and was considered the period of time when the first group of transactions was implemented (enrollment, drop, historical and current usage). New transactions may also warrant flexible test schedules when initially implemented.



## VI. TEST PLAN SCENARIOS

This section describes the Phase II and III test plan scenarios. Testing, in general, should be viewed within the context of the defined New York business transactions. A “business testing thread” is a method of conceptualizing the business transactions by the order in which they may occur in the business life cycle of a customer account. A typical sample business testing thread, based on the current New York business transactions, can be described graphically as follows<sup>7</sup>:



When executing tests, the scenarios will generally be sequenced in accordance with a business testing thread. In the graphic above, A1 through An denote various test accounts characterized by commodity and meter configuration. Using the Sample Business Testing Thread shown above as a guideline, an A1 test account (Elec./Single Meter), for example, would initially be tested with the Consumption History Test scenarios, then follow sequentially with the Enrollment Request scenarios, Monthly Usage scenarios, and lastly, the Drop scenarios. Rejected response scenarios should also be tested as part of the general business testing thread.

The appropriate scenarios, and frames<sup>8</sup>, for each step in the business test thread are selected from the scenario templates that follow. The number of frames included in each test scenario is dependent upon the nature of the underlying transaction. For example, most enrollment test scenarios contain two frames – one for the request and a second for the response transaction. However, the test scenarios for Consumption History contain three frames, one for the request, one for the 814 response and one for the 867 response. When testing with a batch of EDITAs each frame in each scenario is stepped through as a group.

### Connectivity Testing

Integral to successful testing, but not directly tied to the business testing thread, are the set of connectivity tests that establish each party’s ability to successfully implement and use the New York DTM. The connectivity tests are to be successfully completed by all parties prior to entering any business test thread phases.

### Provision of Test Data

Utilities will provide the testing accounts to be used by individual EDITAs for each test scenario. Alternatively, Utilities may choose to publish individualized testing plans for each EDITA in a test batch using the hard copy format illustrated in this document by entering data in the space provided.

<sup>7</sup> When executing tests, scenarios may be tested in a sequence other than the Sample Business Test Thread illustrated here.

<sup>8</sup> A frame generally represents activities, within a testing scenario, that must be completed by a trading partner. Each frame typically ends with a set of transactions being sent to the other trading partner.

## First-In Testing

In New York a “first-in” rule has been adopted that specifies the EDITA with the first valid enrollment request enrolls the customer for service. It is each Utility’s responsibility to test their systems to ensure that the first-in rule is followed and can be substantiated in cases of dispute.

## DTM HTTP Post Response

The DTM HTTP post responses occur real time at the time of transmission and indicates that the transmission was successful and the receiver was able to successfully decrypt the message. The DTM post response will not indicate the validity of the EDI X12 document. The EDI X12 functional acknowledgement (997) response indicates whether the translator successfully processed the EDI X12 document and is generated up to two business days after the initial DTM post response.

## Testing Confirmation

Prior to sending email notification (of successful testing), trading partners must ensure their systems can process all transactions correctly. Parties should manually review and verify that all frames and scenarios were completed as intended. In addition, as trading partners move through the testing process, they should confer as needed to confirm that data was processed as intended and that systems have been updated correctly.

## Description of Test Scenario Layout

The scenarios are organized by component or business category being tested. The four primary categories are A) Connectivity Tests, B) Enrollment Tests, C) Monthly Usage Tests, and D) Special Situations. For example, the Connectivity Test Scenarios contain all of the required test scenarios associated with demonstrating connectivity between trading partners. Each test scenario is presented on one or more pages using the following format:

|   |   |
|---|---|
| <b>C001: Connectivity Test</b>  |   |
| <b>Test the</b>   | The header contains the name of the individual test scenario, a summary description, and the test objectives. |
| ability of each party to successfully exchange data over the Internet |   |
| <b><u>Test Objectives:</u></b>  |   |
| <b><u>Frame:</u></b> F1   |   |
| <b><u>Responsible Party:</u></b>                                      |   |
| <b><u>Transaction:</u></b>  |   |
| <b><u>Description:</u></b>  |   |
| <b><u>Expected Results:</u></b>                                       |   |
| <b><u>Actual Results:</u></b>   |   |

Each test scenario includes one or more testing ‘frames’. For each frame, the responsible party and a specific action to be initiated by that party is described. The test scenario also includes the expected results for each frame.

Where EDI transactions are being tested (non-connectivity tests), the expected results include both the DTM HTTP Post Response and the EDI X12 functional acknowledgements. The Utility will provide sufficient data to support each test scenario. The expectation is that the same test conditions will be used for all EDITAs

testing with that Utility, whether testing in Phase II or Phase III. The number of accounts to be employed in each test scenario, and other test variations, will vary based on a number of factors including, but not limited to, the commodities offered, meter configurations and meter measurement values. EDITAs, however, are only required to test the scenarios relevant to the commodities they offer or are authored to receive.

### Summary of Test Scenario Categories

| Category              | Code | Description  |
|-----------------------|------|--|
| A. Connectivity       | Cnnn | Test scenarios primarily aimed at establishing connectivity.   |
| B. Enrollment         | Ennn | Test scenarios primarily aimed at enrollment, drops and history requests.                            |
| C. Usage              | Unnn | Test scenarios primarily aimed at usage validated for billing.                                       |
| D. Special Situations | Snnn | Test scenarios primarily aimed at special situations or unique business processes of some Utilities. |

nnn = test scenarios are numbered sequentially within each segment

## List of Test Scenarios

|   |
|---|
| <b>A: Connectivity Tests</b>  |
| C001: Connectivity Test   |
| C002: Encryption & Certificate Testing  |
| C003: Utility Exception & Error Processing Testing  |
| C004: ESCO Exception & Error Processing Testing   |
| C005: Utility Large File Processing (Stress Test)   |
| C006: ESCO Large File Processing (Stress Test)  |
| C007: Utility Exchange Failure  |
| C008: ESCO Exchange Failure   |
| C009: Utility initiated X12 Translator Reject Test  |
| C010: ESCO initiated X12 Translator Reject Test   |
|   |
| <b>B: Enrollment Tests (applicable to DER Suppliers only as noted)</b>  |
| E001: Enrollment - Accept Response  |
| E002: Enrollment - Reject Response  |
| E003: Consumption History Request - Accept Response (applicable to DER Suppliers)                             |
| E004: Consumption History Request - Reject Response (applicable to DER Suppliers)                             |
| E005: Consumption History Request For Gas Profile – Historic Gas Usage Returned (applicable to DER Suppliers) |
| E006: Consumption History Request For Gas Profile - Gas Profile Returned (applicable to DER Suppliers)        |
| E007: Utility Initiated Drop Request - Accept Response  |
| E008: Utility Initiated Drop Request - Reject Response  |
| E009: ESCO Initiated Drop Request - Accept Response   |
| E010: ESCO Initiated Drop Request - Reject Response   |
| E011: Enrollment Request with Secondary Request for History - Accept Response                                 |
| E012: Enrollment Request with Secondary Request for History - Enrollment Rejected                             |
| E013: Enrollment Request with Secondary Request for History - History Request Rejected                        |
|   |
| <b>C: Monthly Usage Tests (not applicable to DER Suppliers)</b>   |
| U001: Monthly Usage   |
| U002: Monthly Usage – Transaction Is Rejected   |
| U003: Monthly Usage – Transaction is Cancelled  |
|   |
| <b>D: Special Situations (not applicable to DER Suppliers)</b>  |
| S001: Enrollment with Acknowledgement Response  |

## A. Connectivity Test Scenarios

Test scenarios to confirm that protocols compliant with the New York Data Transfer Mechanism standard are in place and are operational.

### C001: Connectivity Test

Test the ability of each party to successfully exchange data over the Internet

**Test Objectives:**

- The ESCO and Utility successfully exchange data.

**Frame:** F1

**Responsible Party:** ESCO

**Transaction:** N/A

**Description:** ESCO sends a message/file to the Utility.

Note: This should be a “small” file/message (no larger than 100kb). The file/message can be in “clear-text” or encrypted and compressed as agreed by the parties and in accordance with their capabilities.

**Expected Results:**

The file is successfully sent to the Utility.

**Actual Results:****Frame:** F2

**Responsible Party:** Utility

**Transaction:** N/A

**Description:** Utility sends the message received in Frame F1 back to the ESCO.

**Expected Results:**

The file is successfully sent to the ESCO.

**Actual Results:****Actual Overall Results:****Date Completed:**

**C002: Encryption & Certificate Testing**

Validates that both parties can successfully sign, encrypt, transmit, decrypt and translate an EDI message

*Note: This testing must be completed in both directions, by the Utility and ESCO*

**Test Objectives:**

- Receiver of the EDI message is able to verify the signature of the document, decrypt the message, translate the EDI message and return a signed and encrypted 997 to the ESCO.
- HTTP Post Response is successfully sent.

**Frame:** F1

**Responsible Party:** ESCO or Utility

**Transaction:** Any

**Description:** Sender signs and encrypts an EDI message containing an X12 compliant payload, and sends the message to the receiver.

**Expected Results:**

- The file is successfully sent.
- HTTP Post Response is returned by the receiver.

**Actual Results:****Frame:** F2

**Responsible Party:** Utility or ESCO

**Transaction:** 997 Functional Acknowledgement

**Description:** After receiving, decrypting and translating the EDI message, receiver generates an EDI 997 transaction, signs and encrypts it, and send the message to the Frame 1 sender

**Expected Results:**

- The 997 Functional Acknowledgement is successfully sent.
- HTTP Post Response is returned by the original Frame 1 sender.

**Actual Results:****Actual Overall Results:****Date Completed:**

**C003: Utility Exception & Error Processing Testing**

Validate the Utility's ability to process communication errors

**Test Objectives:**

- The Utility is able to detect the error and return an appropriate error message back to the ESCO.

**Frame:** F1**Responsible Party:** ESCO**Transaction:** Any**Description:** ESCO signs and encrypts a message containing an intentional error in the communications layer.**Expected Results:**

- The file is successfully sent to the Utility.

**Actual Results:****Frame:** F2**Responsible Party:** Utility**Transaction:** N/A**Description:** Utility detects the error in the package sent in Frame F1 and returns a properly coded error message to the ESCO.**Expected Results:**

- The correct error message is successfully sent to the ESCO.

**Actual Results:****Actual Overall Results:****Date Completed:**

**C004: ESCO Exception & Error Processing Testing**

Validate the ESCO's ability to process communications errors

**Test Objectives:**

- The ESCO is able to detect the error and return an appropriate error message back to the Utility.

**Frame:** F1      **Responsible Party:** Utility

**Transaction:** Any

**Description:** Utility signs and encrypts a message containing an intentional error in the communications layer.

**Expected Results:**

- The file is successfully sent to the ESCO.

**Actual Results:**

**Frame:** F2      **Responsible Party:** ESCO

**Transaction:** Error message

**Description:** ESCO detects the error in the package sent in Frame F1 and returns a properly coded error message to the Utility.

**Expected Results:**

- The error message is successfully sent to the Utility.

**Actual Results:****Actual Overall Results:****Date Completed:**



**C005: Utility Large File Processing (Stress Test)**

Validate the capability of the Utility to handle large ( $\geq 50\text{Mb}$  uncompressed) files

**Test Objectives:**

- The Utility is able to verify the signature of the 'large' document, decrypt the message, translate the EDI message and return a signed and encrypted 997 to the ESCO.

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** Any

**Description:** ESCO signs and encrypts an EDI message containing a valid X12 compliant payload that is equal to or larger than 50Mb (in uncompressed format). The ESCO sends the message to the Utility's server.

**Expected Results:**

- The file is successfully sent to the Utility.

**Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 997

**Description:** After receiving, decrypting, and translating the EDI message, Utility generates an EDI 997 transaction, signs and encrypts it, and sends it to the ESCO's server

**Expected Results:**

- The file is successfully sent to the ESCO.

**Actual Results:****Actual Overall Results:****Date Completed:**

**C006: ESCO Large File Processing (Stress Test)**

Validate the capability of the ESCO to handle large ( $\geq 50$ Mb uncompressed) files

**Test Objectives:**

- The ESCO is able to verify the signature of the 'large' document, decrypt the message, translate the EDI message and return a signed and encrypted 997 to the Utility.

**Frame:** F1      **Responsible Party:** Utility

**Transaction:** Any

**Description:** Utility signs and encrypts an EDI message containing a valid X12 compliant payload that is larger than 50Mb (in uncompressed format). The Utility sends the message to the ESCO's server.

**Expected Results:**

- The file is successfully sent to the ESCO.

**Actual Results:**

**Frame:** F2      **Responsible Party:** ESCO

**Transaction:** 997

**Description:** After receiving, decrypting, and translating the EDI message, ESCO generates an EDI 997 transaction, signs and encrypts it, and sends it to the Utility's server.

**Expected Results:**

- The file is successfully sent to the Utility.

**Actual Results:****Actual Overall Results:****Date Completed:**

**C007: Utility Exchange Failure**

Validate that the ESCO can handle a protocol/exchange failure

**Test Objectives:**

- ESCO is able to notify the Utility's monitoring personnel of the failure.
- Utility is able to notify the ESCO's monitoring personnel that the situation was corrected and the transmission should be retried.
- ESCO is able to retry message.

**Frame:** F1      **Responsible Party:** Utility

**Transaction:** N/A

**Description:** Utility disables DTM server.

**Expected Results:**

- Utility's DTM server is unable to receive data.

**Actual Results:**

**Frame:** F2      **Responsible Party:** ESCO

**Transaction:** Any

**Description:** ESCO signs and encrypts an EDI message containing a valid X12 compliant payload and sends the message to the Utility's server.

**Expected Results:**

- The ESCO detects the inability to transfer the message.
- The ESCO sends a failure e-mail notification to the Utility's monitoring personnel e-mail address.

**Actual Results:**

**Frame:** F3      **Responsible Party:** Utility

**Transaction:** E-mail notification

**Description:** Utility processes the failure e-mail notification from ESCO.

**Expected Results:**

- Utility enables DTM server.
- Utility notifies ESCO monitoring personnel that the situation has been corrected and transmission should be retried.

**Actual Results:**

**Frame:** F4      **Responsible Party:** ESCO

**Transaction:** Any

**Description:** ESCO signs and encrypts an EDI message containing a valid X12 compliant payload and sends the message to the Utility's server.

**Expected Results:**

- The file is successfully sent to the Utility.

**Actual Results:**

**Frame:** F5      **Responsible Party:** Utility

**Transaction:** 997

**Description:** Utility generates an EDI 997 transaction, signs and encrypts it with an X12 compliant payload, and sends the message to the ESCO's server.

**Expected Results:**

- The file is successfully sent to the ESCO.

**Actual Results:**

**Actual Overall Results:**

**Date Completed:**

**C008: ESCO Exchange Failure**

Validate that the Utility can handle a protocol/exchange failure

**Test Objectives:**

- Utility is able to notify the ESCO's monitoring personnel of the failure.
- ESCO is able to notify the Utility's monitoring personnel that the situation was corrected and the transmission should be retried.
- Utility is able to retry message.

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** N/A

**Description:** ESCO disables DTM server.

**Expected Results:**

- ESCO's DTM server is unable to receive data.

**Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** Any

**Description:** Utility signs and encrypts an EDI message containing a valid X12 compliant payload and sends the message to the ESCO's server.

**Expected Results:**

- The Utility detects the inability to transfer the message.
- The Utility sends failure e-mail notification to the designated ESCO's monitoring personnel e-mail address.

**Actual Results:**

**Frame:** F3      **Responsible Party:** ESCO

**Transaction:** E-mail notification

**Description:** ESCO processes the failure e-mail notification from Utility.

**Expected Results:**

- ESCO enables DTM server.
- ESCO notifies Utility monitoring personnel that the situation has been corrected and transmission should be retried.

**Actual Results:**

**Frame:** F4      **Responsible Party:** Utility

**Transaction:** Any

**Description:** Utility signs and encrypts an EDI message containing a valid X12 compliant payload and sends the message to the ESCO's server.

**Expected Results:**

- The file is successfully sent to the ESCO.

**Actual Results:**

**Frame:** F5      **Responsible Party:** ESCO

**Transaction:** 997

**Description:** ESCO generates an EDI 997 transaction, signs and encrypts it with an X12 compliant payload, and sends the message to the Utility's server.

**Expected Results:**

- The file is successfully sent to the Utility.

**Actual Results:**

**Actual Overall Results:**

**Date Completed:**

**C009: Utility initiated X12 Translator Reject Test**

Test to ensure that the ESCO X12 translator rejects non-compliant X12 transaction standards (For example, required segment or element missing, improper ID, etc.)

**Test Objectives:**

- The ESCO successfully processes invalid X12 transactions.

**Frame:** F1      **Responsible Party:** Utility

**Transaction:** Any

**Description:** Utility creates and sends transactions with an X12 syntax error intentionally introduced.

**Expected Results:**

- The transactions are successfully sent to the ESCO.

**Actual Results:**

**Frame:** F2      **Responsible Party:** ESCO

**Transaction:** 997

**Description:** ESCO creates and sends 997 responses indicating rejection of X12 syntax by the translator.

**Expected Results:**

- The 997 rejections are successfully sent to the Utility.

**Actual Results:****Actual Overall Results:****Date Completed:**

**C010: ESCO initiated X12 Translator Reject Test.**

Test to ensure that the Utility X12 translator rejects non-compliant X12 transaction standards. (For example, required segment or element missing, improper ID, etc.)

**Test Objectives:**

- The Utility successfully processes invalid X12 transactions.

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** Any

**Description:** ESCO creates and sends transactions with an X12 syntax error intentionally introduced.

**Expected Results:**

- The transactions are successfully sent to the Utility.

**Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 997

**Description:** Utility creates and sends 997 responses indicating rejection of X12 syntax by the translator.

**Expected Results:**

- The 997 rejections are successfully sent to the ESCO.

**Actual Results:****Actual Overall Results:****Date Completed:**



## B. Enrollment Test Scenarios

Test scenarios to confirm that basic transactions are functional

### E001: Enrollment - Accept Response

Test a successful Enrollment transaction

*Note: Three primary meter configurations (single meter, multiple meter & unmetered) may be tested as part of this scenario.*

#### **Test Objectives:**

- The ESCO sends a successful 814 Enrollment Request
- The Utility sends a successful 814 Accept Response with valid meter configuration data.

**Commodity:** \_\_\_\_\_ (Electric / Gas)

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** 814 Enrollment Request & Response

**Description:** ESCO creates and sends 814 Enrollment Requests for valid Utility customer accounts.

#### **Expected Results:**

- The 814 Enrollment Requests are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction.

#### **Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 814 Enrollment Request & Response

**Description:** Utility creates and sends an 814 Accept Response transaction for each Enrollment Request.

#### **Expected Results:**

- The 814 Accept Responses are successfully sent to ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

#### **Actual Results:**

#### **Actual Overall Results:**

#### **Date Completed:**

**E002: Enrollment – Reject Response**

Test the Reject Response to an 814 Enrollment Request

*Note: Parties will test one or more error conditions to ensure the business logic works correctly.*

**Test Objectives:**

- The Utility generates the correct 814 Reject Response for an 814 Enrollment Request for the condition specified.

**Commodity:** \_\_\_\_\_ (Electric / Gas)

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1

**Responsible Party:** ESCO

**Transaction:** 814 Enrollment Request & Response

**Description:** ESCO creates and sends 814 Enrollment Requests that contain intentional errors (provided by the Utility).

**Expected Results:**

- 814 Enrollment Requests are sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction.

**Actual Results:**

**Frame:** F2

**Responsible Party:** Utility

**Transaction:** 814 Enrollment Request & Response

**Description:** Utility creates and sends an 814 Reject Response with the appropriate reject reason(s)

**Expected Results:**

- The rejected 814 Enrollment responses are sent to ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E003: Consumption History Request - Accept Response**

Test 814 Consumption History Request and Accept Responses

*Note: Three primary meter configurations (single meter, multiple meter & unmetered) may be tested as part of this scenario.***Test Objectives:**

- ESCO sends successful 814 Consumption History Request
- For each 814 Consumption History Request, the Utility generates and sends an 814 Accept Response.
- For each 814 Consumption History Request, the Utility generates and sends the 867 Consumption History/Gas Profile transaction with valid usage data.

**Commodity:** \_\_\_\_\_ (Electric / Gas)**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Frame:** F1      **Responsible Party:** ESCO**Transaction:** 814 Consumption History Request & Response**Description:** ESCO creates and sends 814 Consumption History Requests using valid Utility customer accounts.**Expected Results:**

- The 814 Consumption History Requests are successfully sent to Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction

**Actual Results:****Frame:** F2      **Responsible Party:** Utility**Transaction:** 814 Consumption History Request & Response**Description:** Utility creates and sends an Accept Response to an 814 Consumption History Request.**Expected Results:**

- The 814 Accept Response for an 814 Consumption History Request is successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Frame:** F3      **Responsible Party:** Utility**Transaction:** 867 Consumption History/Gas Profile**Description:** Utility creates and sends an 867 Consumption History/Gas Profile transaction for the account(s) requested in the 814 Consumption History Request.**Expected Results:**

- 867 Consumption History/Gas Profile transactions are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E004: Consumption History Request - Reject Response**

Test the Reject Response for a Consumption History Request

**Test Objectives:**

- The Utility returns an 814 Reject Response for a Consumption History Request with the correct reject reason(s) for the condition specified.

**Commodity:** \_\_\_\_\_ (Electric / Gas)**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Frame:** F1      **Responsible Party:** ESCO**Transaction:** 814 Consumption History Request & Response**Description:** ESCO creates and sends 814 Consumption History Request that contains an intentional error.**Expected Results:**

- The 814 Consumption History Request is successfully sent to Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction

**Actual Results:****Frame:** F2      **Responsible Party:** Utility**Transaction:** 814 Consumption History Request & Response**Description:** Utility creates and sends a rejected 814 Consumption History Request response.**Expected Results:**

- The rejected 814 Consumption History response is successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E005: Consumption History Request for Gas Profile – Historic Gas Usage Returned**

Test Accept Response for a Consumption History Request for a Gas Profile for Utilities that DO NOT support gas profiles.

*Note: This test is not relevant for utilities who do support a gas profile*

**Test Objectives:**

- In response to an 814 Consumption History Request for gas profile data, the Utility generates an 814 Accept Response indicating that gas consumption history will be sent in an 867 transaction.

**Commodity: GAS**

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO**Transaction:** 814 Consumption History Request & Response**Description:** ESCO creates and sends 814 Consumption History Requests for gas profiles using valid Utility customer accounts.**Expected Results:**

- The 814 Consumption History Request is successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction

**Actual Results:****Frame:** F2      **Responsible Party:** Utility**Transaction:** 814 Consumption History Request & Response**Description:** Utility creates and sends an 814 Accept Response indicating consumption history will be provided to satisfy the request for gas profile data.**Expected Results:**

- The accepted 814 Consumption History responses are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Frame:** F3      **Responsible Party:** Utility**Transaction:** 867 Consumption History/Gas Profile**Description:** Utility creates and sends an 867 transaction containing historic usage data.**Expected Results:**

- The 867 Consumption History transactions are successfully sent to ESCO
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E006: Consumption History Request for Gas Profile – Gas Profile Returned**

Test Accept Response for a Consumption History Request for a Gas Profile for Utilities that DO support Gas Profiles

*Note: This test is limited to utilities that indicate whether they support gas profiles in their Utility Maintained EDI Guides.*

**Test Objectives:**

- For each Consumption History Request, the Utility sends a successful 814 Accept Response.
- For each Consumption History Request, the Utility sends a successful 867 Consumption History/Gas Profile transaction with valid gas profile data.

**Commodity:** GAS

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** 814 Consumption History Request & Response

**Description:** ESCO creates and sends an 814 Consumption History Request for gas profile data using valid Utility customer accounts.

**Expected Results:**

- The 814 Consumption History Requests are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction.

**Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 814 Consumption History Request & Response

**Description:** Utility creates and sends an 814 Accept Response.

**Expected Results:**

- The 814 Accept Response for the 814 Consumption History Requests are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:**

**Frame:** F3      **Responsible Party:** Utility

**Transaction:** 867 Consumption History/Gas Profile

**Description:** Utility creates and sends back an 867 Consumption History/Gas Profile containing gas profile data.

**Expected Results:**

- The 867 Consumption History/Gas Profile transaction with gas profile data is successfully sent to ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E007: Utility Initiated Drop Request – Accept Response**

Test an 814 Drop Request initiated by the Utility

**Test Objectives:**

- Utilities will generate and successfully transmit 814 Drop Requests reflecting various drop conditions.

**Commodity:** \_\_\_\_\_ (Electric / Gas)**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Frame:** F1**Responsible Party:** Utility**Transaction:** 814 Drop Request & Response**Description:** Utility creates and sends Drop Requests for valid accounts.**Expected Results:**

- The 814 Drop Requests are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E008: Utility Initiated Drop Request - Reject Response**

Test 814 Reject Response to a Utility-initiated Drop Request

**Test Objectives:**

- The ESCO can generate and successfully transmit an 814 Reject Response, with an appropriate reject reason, for a Drop Request initiated by the Utility.

Commodity: \_\_\_\_\_ (Electric / Gas)

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

**Frame:** F1      **Responsible Party:** Utility**Transaction:** 814 Drop Request & Response**Description:** Utility creates and sends Drop Requests containing account(s) that will reject for one or more valid reject reasons.**Expected Results:**

- The 814 Drop Requests are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Frame:** F2      **Responsible Party:** ESCO**Transaction:** 814 Drop Request & Response**Description:** ESCO sends 814 Reject Responses with appropriate reject code(s).**Expected Results:**

- The 814 Reject Responses for Utility initiated Drop Requests are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction

**Actual Results:****Actual Overall Results:****Date Completed:**



**E009: ESCO Initiated Drop Request - Accept Response**

Test Accept Response for an 814 Drop Request Initiated by the ESCO

**Test Objectives:**

- ESCOs will generate and successfully transmit 814 Drop Requests reflecting various drop conditions.
- The Utility will generate and transmit an 814 Accept Response containing the correct effective date for the Drop.

Commodity: \_\_\_\_\_ (Electric / Gas)

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO**Transaction:** 814 Drop Request & Response**Description:** ESCO creates and sends 814 Drop Requests for valid accounts.**Expected Results:**

- The 814 Drop Requests are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction

**Actual Results:****Frame:** F2      **Responsible Party:** Utility**Transaction:** 814 Drop Request & Response**Description:** The Utility creates and sends an 814 Accept Response for the 814 Drop Request, which contains the correct effective date for the drop.**Expected Results:**

- The 814 Accept Response containing effective date of the drop is successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E010: ESCO Initiated Drop Request – Reject Response**

Test 814 Reject Response to a Drop Request initiated by the ESCO

**Test Objectives:**

- The Utility can generate and successfully transmit an 814 Reject Response, with appropriate reject reason(s), for a Drop Request initiated by the ESCO.

Commodity: \_\_\_\_\_ (Electric / Gas)

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

Account #: \_\_\_\_\_

**Frame:** F1**Responsible Party:** ESCO**Transaction:** 814 Drop Request & Response**Description:** ESCO creates and sends Drop Requests containing accounts that will reject for one or more valid reject reasons.**Expected Results:**

- The 814 Drop Requests are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Frame:** F2**Responsible Party:** Utility**Transaction:** 814 Drop Request & Response**Description:** In response to the ESCO Drop Requests, the Utility creates and sends 814 Reject Responses.**Expected Results:**

- The 814 Reject Responses are successfully sent to the ESCO
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction

**Actual Results:****Actual Overall Results:****Date Completed:**

**E011: Enrollment Request with Secondary Request for History - Accept Response**

Test 814 Enrollment Request containing a secondary request for history and Accept Responses to both the enrollment request and the history request

**Test Objectives:**

- ESCO can generate and successfully transmit an 814 Enrollment Request containing a secondary request for history.
- Utility can generate and successfully transmit an 814 Accept Response for each request (enrollment and history) in an 814 Enrollment transaction.

**Commodity:** \_\_\_\_\_ (Electric / Gas)

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** 814 Enrollment Request & Response

**Description:** ESCO creates 814 Enrollment Request transactions containing multiple requests: a primary request for enrollment with a secondary request for either historic usage or gas profile data.

**Expected Results:**

- The 814 Enrollment Requests containing multiple requests are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction

**Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 814 Enrollment Request & Response

**Description:** Utility creates and sends an 814 Accept Response for the requests contained in the 814 Enrollment Request transaction. Utilities may return one 814 Accept Response transaction with multiple LIN loops corresponding to each request contained in the Enrollment transaction. Alternatively, for each 814 Enrollment Request a Utility may return two 814 Accept Response transactions - one for the enrollment request and one for the consumption history request - each containing a single LIN loop.

**Expected Results:**

- The 814 Accept Responses to the 814 Enrollment Requests are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E012: Enrollment Request With Secondary Request For History - Enrollment Rejected**

Test a Reject Response when an 814 Enrollment Request contains a secondary request and the primary request (enrollment) is rejected

**Test Objectives:**

- Utility can generate and successfully transmit an 814 Reject Response with appropriate reject reason code(s) for each request.

**Commodity:** \_\_\_\_\_ (Electric / Gas)

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** 814 Enrollment Request & Response

**Description:** ESCO creates 814 Enrollment Request transactions containing multiple requests: a primary request for enrollment (containing an intentional error) with a secondary request for either historic usage or gas profile data.

**Expected Results:**

- The 814 Enrollment Requests are successfully sent to the Utility.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 814 Enrollment Request & Response

**Description:** Utility creates and returns 814 Reject Responses, with appropriate reject reason code(s) for each request (Enrollment and History). Utilities may return one 814 Reject Response transaction with multiple LIN loops corresponding to each request contained in the Enrollment transaction. Alternatively, for each 814 Enrollment Request a Utility may return two 814 Reject Response transactions - one for the enrollment request and one for the consumption history request - each containing a single LIN loop.

**Expected Results:**

- The 814 Reject Response(s) to the Enrollment Request are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**E013: Enrollment Request With Secondary Request For History – History Request Rejected**

Test Accept and Reject Response when an 814 Enrollment Request contains a secondary request and the secondary request is rejected

**Test Objectives:**

- Utility can generate and successfully transmit an 814 Accept Response for the primary request contained in an 814 Enrollment Request transaction.
- Utility can generate and successfully transmit an 814 Reject Response with appropriate reject reason code(s) for the secondary request contained in an 814 Enrollment Request transaction.

**Commodity:** \_\_\_\_\_ (Electric / Gas)

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** 814 Enrollment Request & Response

**Description:** ESCO creates 814 Enrollment Request transactions containing multiple requests: a primary request for enrollment with a secondary request for either historic usage or gas profile data.

**Expected Results:**

- The 814 Enrollment Requests are successfully sent to the Utility.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:**

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 814 Enrollment Request & Response

**Description:** Utility creates and sends an 814 Accept Response for the primary request (enrollment) and an 814 Reject Response with appropriate reject reason code(s) for the secondary request (consumption history/gas profile) contained in the 814 Enrollment Request transaction. Utilities may return one 814 Response transaction with multiple LIN loops corresponding to each request contained in the Enrollment transaction. Alternatively, for each 814 Enrollment Request a Utility may return one 814 Accept Response transaction (for the enrollment request) and one 814 Reject Response transaction (for the consumption history request) each containing a single LIN loop.

**Expected Results:**

- The 814 Accept and Reject Responses are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction

**Actual Results:****Actual Overall Results:****Date Completed:**

## C. Monthly Usage Test Scenarios

Test scenarios for sending monthly consumption, usage or an interim bill indicator.

### U001: Monthly Usage

Test Utility capability to send an 867 Monthly Usage transaction

#### **Test Objectives:**

- The Utility can generate and successfully transmit an 867 Monthly Usage transaction containing consumption and/or usage or an Interim Bill Indicator (if applicable) in the proper structure for the specified meter configurations (where applicable).

#### **Notes:**

- 1) *Various meter configurations (single meter, multiple meter and/or unmetered) will be tested as applicable.*
- 2) *Meter configurations are not required for an Interim Bill Indicator.*
- 3) *Meter Reading data and related factors will be tested for the Single Retailer model and may be tested for other models at the discretion of the Utility.*

**Commodity:** \_\_\_\_\_ (Electric / Gas)

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1      **Responsible Party:** Utility

**Transaction:** 867 Monthly Usage

**Description:** Utility creates and sends 867 Monthly Usage transactions (for a variety of usage configurations) for valid accounts.

#### **Expected Results:**

- The 867 Monthly Usage transactions are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction

#### **Actual Results:**

#### **Actual Overall Results:**

#### **Date Completed:**

**U002: Monthly Usage - Transaction Is Rejected**

Test ESCO capability to generate and send an 824 Application Advice to reject an 867 Monthly Usage transaction

**Test Objectives:**

- The ESCO can generate and successfully transmit an 824 Reject Response following receipt of an 867 Monthly Usage transaction.

**Commodity:** \_\_\_\_\_ (Electric / Gas)**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Frame:** F1      **Responsible Party:** Utility**Transaction:** 867 Monthly Usage**Description:** Utility creates and sends 867 Monthly Usage transactions containing intentional errors.**Expected Results:**

- The 867 Monthly Usage transactions are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Frame:** F2      **Responsible Party:** ESCO**Transaction:** 824 Application Advice**Description:** The ESCO creates and sends an 824 Application Advice reject response transaction in response to receipt of 867 Monthly Usage transactions.**Expected Results:**

- The 824 Application Advice reject responses are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**

**U003: Monthly Usage - Transaction Is Cancelled**

Test Utility capability to successfully cancel an 867 Monthly Usage transaction

**Test Objectives:**

- The Utility can generate and successfully transmit an 867 Monthly Usage transaction canceling an original 867 Monthly Usage transaction

**Commodity:** \_\_\_\_\_ (Electric / Gas)**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Account #:** \_\_\_\_\_**Frame:** F1      **Responsible Party:** Utility**Transaction:** 867 Monthly Usage**Description:** Utility creates and sends 867 Monthly Usage transaction.**Expected Results:**

- The 867 Monthly Usage transaction is successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Frame:** F2      **Responsible Party:** Utility**Transaction:** 867 Monthly Usage**Description:** Utility creates and sends 867 Monthly Usage cancel transaction, canceling usage sent in Frame F1**Expected Results:**

- The 867 Monthly Usage cancel transaction is successfully sent by the Utility.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

**Actual Results:****Actual Overall Results:****Date Completed:**



## D. Special Situation Test Scenarios

Test scenarios to confirm certain special situations are processed as expected.

### S001: Enrollment with Acknowledgement Response

Test an enrollment for a Utility account that requires manual processing to enroll a customer with the requesting ESCO

#### Test Objectives:

- The Utility can generate and successfully transmit an 814 Accept Response to an 814 Enrollment Request for an account that would require manual processing to enroll the customer.

**Commodity:** \_\_\_\_\_ (Electric / Gas)

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Account #:** \_\_\_\_\_

**Frame:** F1      **Responsible Party:** ESCO

**Transaction:** 814 Enrollment Request & Response

**Description:** ESCO creates and sends enrollment Requests for valid utility customer accounts.

#### Expected Results:

- The 814 Requests are successfully sent to the Utility.
- A 997 transaction is received from the Utility to acknowledge receipt of the valid X12 transaction

#### Actual Results:

**Frame:** F2      **Responsible Party:** Utility

**Transaction:** 814 Enrollment Request & Response

**Description:** Utility creates and sends 814 responses acknowledging receipt of the Requests for enrollment.

#### Expected Results:

- The 814 responses are successfully sent to the ESCO.
- A 997 transaction is received from the ESCO to acknowledge receipt of the valid X12 transaction.

#### Actual Results:

#### Actual Overall Results:

#### Date Completed:

## Appendix A—Pre-Testing Worksheet

The purpose of the Pre-Testing Worksheet is for trading partners to demonstrate they have met all necessary requirements to engage in Phase II or III EDI testing in New York. Utilities and EDITAs are required to transmit a completed worksheet to their trading partner(s) prior to entering a test queue and beginning testing. Submission of the worksheet indicates that the trading partner has completed internal systems testing and achieved correct and accurate results, including testing with sufficient volumes to assure acceptable throughput to satisfy both trading partners' performance requirements.

| Identification & Contact Information   |
|--|
| Company Name:                          |
| Company ID Number (e.g. DUNS, Tax ID): |
| Contact Name:                          |
| Contact Email:                         |
| Contact Phone:                         |
| Date:                                  |

| Communications Information     |   |
|--------------------------------|---|
| URL/IP Address: _____          | Receiver ID (DUNS #): _____                 |
| Port Number: _____             | PGP Public Keys will be provided via: _____ |
| CGI Program Name: _____        | Protocol Failure E-Mail Address: _____      |
| Authentication ID: _____       | VAN Phone Number, if used: _____            |
| Authentication Password: _____ |   |

**Known Non-Compliance:** Document any known non-compliant transactions or business processes your company is operating with and the expected date of compliance. Add rows if necessary.

| Description of Non-compliance and Transaction Affected | Expected Date of Compliance |
|--|-----------------------------|
|  |                             |
|  |                             |
|  |                             |
|  |                             |
|  |                             |
|  |                             |

**Exceptions to the Test Plan PH2/PH3:** Document any exceptions you will make to the test plan. Add rows if necessary

| Description of Test Plan Exception | Account/Scenarios |
|------------------------------------|-------------------|
|                                    |                   |
|                                    |                   |
|                                    |                   |
|                                    |                   |

**Manual Processes to be Used in Testing and Production:** Document any manual processes you will be using to supplement the EDI automated processes.

| Description of Manual Processes |
|---------------------------------|
|                                 |
|                                 |
|                                 |
|                                 |
|                                 |

**Demonstration of Phase I X12 Certification:** To gain entry to testing queues, each trading partner is required to provide copies of the following transaction files certified X12 compliant by DPS Staff.

| Transaction Required                            | Comments or Exceptions |
|---|------------------------|
| <b><i>TRANSACTION REQUIRED FROM UTILITY</i></b> |                        |
| 814 Enrollment Response                         |                        |
| 814 Drop  |                        |
| 814 Drop Response                               |                        |
| 867 Historical Usage                            |                        |
| 867 Monthly Usage                               |                        |
| <b><i>TRANSACTION REQUIRED FROM ESCO</i></b>    |                        |
| 814 Enrollment                                  |                        |
| 814 Drop  |                        |
| 814 Drop Response                               |                        |
| 824 Application Advice                          |                        |

**Understanding Responsibilities:** Please review the list below and document any exceptions or comments. Submitting this worksheet implies understanding with the item, unless otherwise noted.

| Understanding  | Comments or Exceptions |
|--|------------------------|
| <b><i>ALL PARTIES</i></b>  |                        |
| I understand that transactional testing will be conducted with a minimal amount of human intervention.   |                        |
| I understand that the New York PSC retains dispute resolution responsibilities related to all levels of trading partner testing.   |                        |
| I understand that I must complete Phase I pre-testing certification of all transactions prior to beginning testing with any trading partners.                                      |                        |
| I understand that I must document any areas where I am not compliant with the standards and procedures of the NY EDI Collaborative and provide dates for when I will be compliant. |                        |
| I understand that I must provide trading partner EDI information to my trading partners prior to beginning testing with that trading partner.                                      |                        |
| I understand that I must send 997/Functional Acknowledgements for all tests, and in production.  |                        |
| I understand that I must document any scenarios of the test plan that I will NOT test (exceptions).  |                        |
| <b><i>UTILITY ONLY</i></b>   |                        |
| I understand that I must conduct regular test teleconferences with all EDITAs that I am currently testing with.  |                        |
| <b><i>EDITA ONLY</i></b>   |                        |
| I understand that I must notify the Utility of the billing scenarios that I am currently offering.   |                        |
| I understand that I must be an eligible, Phase I-certified EDITA prior to beginning testing with any Utilities.  |                        |
| I understand that I must keep up with the established test schedule of the Utility while in testing.   |                        |
| I understand that I must participate in regular teleconferences conducted by the Utility while in testing.   |                        |

## Appendix B – Phase I Testing Rules

General: As adopted by the New York State Public Service Commission<sup>9</sup> DPS Staff, in lieu of Phase I testing formerly conducted by Department of Public Service (DPS) Staff, utilities may perform Phase I testing as a prelude to Phase III testing as a part of the EDITA Application process. The following options will be available to complete required Phase I testing:

- If the utility does perform a Phase I test, in such instances where, for example, an EDITA is performing its own in-house EDI services, a fee to cover expenses formerly borne by DPS Staff is reasonable.
  - The utility's fee should be specified in its Utility Maintained EDI Guide.
  - In lieu of conducting Phase I, a utility may direct the ESCO to contract for Phase I EDI Testing Certification from an Established EDI Service Provider.
  - A list of Established EDI Service Providers will be compiled from those currently serving EDITAs in New York and posted to the NY EDI website.
- If the EDITA decides to contract for EDI Services with an Established EDI Service Provider and the utility is satisfied, based upon certification from the EDI Service Provider, that the ESCO is Phase I capable, no utility Phase I test will be required.
  - When determining if the certification is satisfactory, the utility may take into consideration whether or not the Established EDI Service Provider is providing EDI services to other EDITAs in the utility's service territory.
- If an ESCO, DER Supplier or Direct Customer (applicant or active with the utility) wishes to transact EDI via an in-house system, it may request to test with the utility or contract for EDI Testing Certification from an Established EDI Service Provider.
  - If the utility is satisfied, based upon certification from the EDI Service Provider, that the new EDITA is Phase I capable, no utility Phase I test will be required.
  - When determining if the certification is satisfactory, the utility may take into consideration whether or not the Established EDI Service Provider is providing EDI services to other EDITAs in the utility's service territory.
- If an EDI Service Provider wishes to be added to the Established EDI Service Provider list, it may request to test with the utility or contract for EDI Testing Certification from an Established EDI Service Provider.
  - When determining if the new EDI Service Provider has satisfactorily established itself, the utility may take into consideration whether or not the new EDI Service Provider is testing with an Established EDI Service Provider or is providing EDI services to other EDITAs in the utility's service territory. Ideally, the new EDI Service Provider will be providing services to an EDITA.

Whether a Phase I test was performed by the utility or the utility determined the test was unnecessary for the EDITA, the utility would inform DPS Staff that the EDITA has met the Phase I testing requirement of UBP 2.B.2. Once an ESCO has successfully completed Phase I testing with one utility, it will have satisfied the Phase I testing requirement for all utilities and will be including in a list of Active Certified ESCOs, DER Suppliers and Direct Customers (with Phase I Certification) posted to the NY EDI website.

<sup>9</sup> Cases 12-M-0476, 98-M-1343, 06-M-0647 and 98-M-0667, Order Approving Modifications to the Electronic Data Interchange Standards (Issued and Effective December 7, 2015).