



EDI Flat File

Training Module

This module describes the procedures necessary to begin testing and implementing electronic transactions via EDI and Flat File formats.



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Important Information – Please Read

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To review the **tariff** language specific to any topic, go to www.1Line.williams.com>click on **Info Postings** under the Transco heading to access the Informational Postings Page, and then select **Tariff** from the left hand navigation menu.

Introduction

Electronic Data Interchange (EDI) is defined in the Trading Partner Agreement (TPA) as the computer-to-computer exchange of information. A Trading Partner organizes functional data (Nominations, Scheduled quantity, etc), packages it in a standard file format(s) and then sends the data electronically, to the other Trading Partner to facilitate business transactions.

Customers doing business via Transco's gas management system, 1Line, utilizing EDI, can do so by using both the Accredited Standards Committee X12, ASC X12 (NAESB WGQ EDI/EDM), and the NAESB WGQ Flat File (NAESB WGQ FF/EDM) file formats.

EDI Data Transmission Mechanisms Available

- **File Transfer Protocol (FTP)** – FTP is an internet protocol data standard used to send and receive data between two computers over the public internet. As a customer service, Transco offers FTP. However, NAESB does not endorse the use of FTP as a valid file transfer so there are no official NAESB standards governing its use. Transco has a unique version of the Trading Partner Worksheet (TPW) that covers specific technical specifications in order to setup an FTP exchange for requesting Trading Partners. Transferring files using FTP uses programs called the "client" and another called the "server." The FTP client program initiates a connection to a remote computer running FTP server software. After the connection is established, the client can choose to send and/or receive copies of files, singly or in groups. To connect to an FTP server, a client requires a username and password as set by the administrator of the FTP server. These two software packages are unique although many vendors package these together. Since the FTP protocol does not use a two-way handshake for confirmed delivery of the file (NAESB WGQ FF/EDM), the customer assumes all liability for mis-directed FTP transmissions.
- **Internet Electronic Transport (Internet ET)/WGQ Quadrant Electronic Delivery Mechanism (WGQ QEDM)** – The NAESB WGQ Internet ET and QEDM standards manuals, numbers 10 and 4 respectively, outline specific protocols to setup a computer to send and receive data over the public internet in an efficient and secure manner. The NAESB WGQ Trading Partner Worksheet (TPW) is a technical worksheet that contains technical details necessary to setting up the specific parameters for Internet ET/QEDM data transport between two Trading Partners. Several industry vendors support NAESB compliant Internet ET/QEDM transport systems. These systems can include integrated solutions that use software encryption for data security, ASC X12 data translation software and custom back-office interfaces to integrate with a Trading Partner's specific business software systems. Transco and many other Transportation Service Providers (TSP) has written custom Internet ET/QEDM solutions using the NAESB Internet ET and QEDM standards.

Trading Partner Agreement (TPA) – The TPA is a legal contract that specifies what functions Trading Partners should perform in the process of exchanging data using EDI.

- **Interactive Flat File Transfer** - The NAESB WGQ Interactive Flat File transfer is done using a NAESB approved browser while logged into a TSP's Customer Activities website. The Customer Activities website is protected by Secure Socket Layer encryption and allows a user to send and receive files directly from the TSP's website.

Data Formats Available

The two different NAESB compliant formats that may be used to exchange data with Transco's 1Line system are:

- **Flat File data format (FF/EDM)** – FF/EDM is a spreadsheet-compatible, comma separated values (CSV) file format whose content is specified by NAESB standards. The FF format can be read and written directly by many back-office systems, and can be used in an ad-hoc environment with any spread sheet type program. A TPA is required for flat file transmittal via Internet ET/QEDM & FTP. A TPA is not necessary for interactive flat files (using an NAESB approved internet browser to upload and download files from a TSP's Customer Activities website.)
- **ASC X12 data format (EDI/EDM)** – EDI/EDM is a data file that is created using an industry standard ASC X12 translator (software) that organizes data in a specific pattern as defined by the ASC X12 organization and further customized by NAESB by business function (Nominations, Scheduled Quantity, etc.) The detailed mapping of the ASC X12 data structure can be found in the NAESB WGQ Booklet 2 of 2. Each data dictionary that uses the ASC X12 mapping will contain a column titled "EDI / FF Usage". Following these data dictionaries will be a detailed explanation of how each of the data dictionary data elements are "mapped" to complimentary ASC X12 data structures. Using the EDI/EDM data format does require a TPA and the use of the Internet ET/QEDM transport.

Definitions

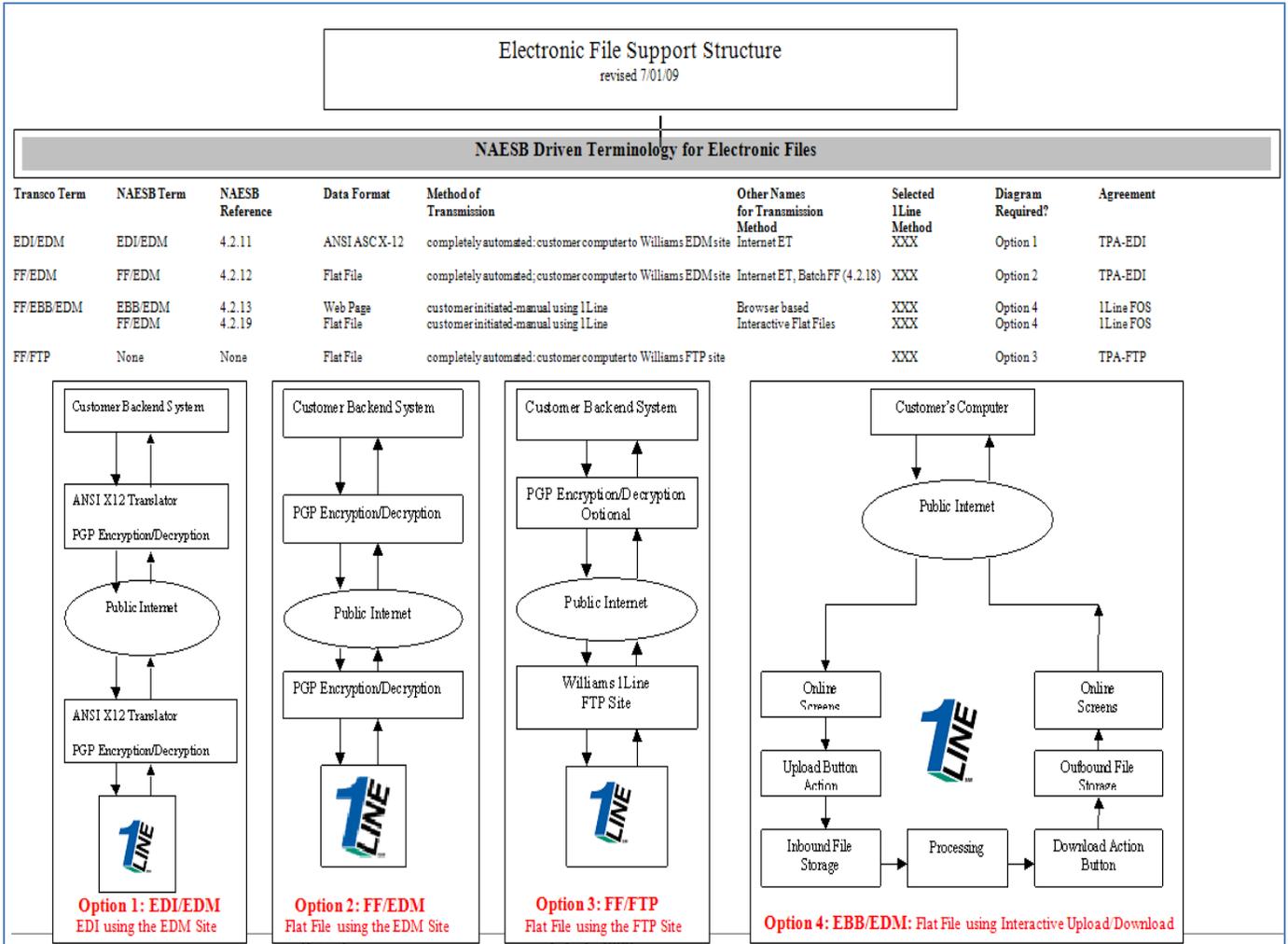
Pretty Good Privacy (PGP) Encryption – PGP version 2.6.2 or higher, and its open source 'free' equivalent called OpenPGP, is used to create Public and Private Keys for data privacy/encryption and digital signatures. See <http://www.uk.pgp.net/pgpnet/pgp-faq/>

Trading Partner Agreement (TPA) - The TPA is a legal contract that specifies what functions Trading Partners should perform in the process of exchanging data using EDI.

Trading Partner Worksheet (TPA worksheet) - The TPA worksheet outlines basic technical information (URL addresses, security specs, data sets requested, etc) between Trading Partners. Both the TPA and TPW constitute the entire understanding between trading partners regarding EDI. The specifications in the TPW should be tested before reliance on the production implementation for business transactions.

Electronic File Transfer Methods

The following diagram illustrates Electronic File Transfer methods available for EDI and Flat File exchange with 1Line.



Steps to Implementing EDI

The following are the steps necessary to implement EDI.

1. Contact your Commercial Services Representative to set up meetings to begin the process for testing between companies including IT departments.
2. Prior to setup and testing, each party must execute a TPA agreement and TPA worksheet for all EDI/EDM data transmissions and those FF/EDM transmissions using Internet ET/QEDM, prior to setup and testing.
3. Once the TPA agreement and TPA worksheet have been signed and executed, testing between companies will follow to ensure that information is electronically exchanged in a satisfactory manner.
4. Communication testing and data comparison are done between Trading Partners. Below is an example of the confirmation process.
 - Scheduled volumes are sent to a customer.
 - The confirmed volumes received from the customer are applied to the Confirmed Quantity field on the Confirmation page.
 - The Confirmed Quantity field reflects the confirmed volumes that were received via a Confirmation Response or RRFC file with one exception.
 - The exception is if the confirmed volume is below Elapsed-Prorated-Scheduled-Quantity (EPSQ), then the confirmed volume is then raised to EPSQ before being applied.
5. Once both Trading Partners agree that testing is successful and an implementation date has been determined, EDI may begin in the production environment.

TPA and TPA Worksheet Documents

All EDI users must have executed a TPA agreement (EDM or FTP) and TPA worksheet prior to setup and testing.

Within the 1Line system, interactive file transfers (uploads/downloads) do not require an executed TPA and TPA worksheet. To download a TPA agreement and TPA worksheet:

Go to [Transco's Info Postings page](#).

Select **Resources > Agreements/Forms > TPA Agreement** (EDM or FTP) depending on file transfer preference and **>TPA Worksheet**

The screenshot displays the Williams Transco 1Line Portal. At the top, there is a navigation bar with the date 'WEDNESDAY - FEBRUARY 22, 2023' and several dropdown menus: '1Line', 'Customer Info', 'Expansions', 'Resources', 'Safety', and 'Subscriptions'. The 'Resources' dropdown is open, showing a list of options including 'Agreements / Forms', 'Cross References', 'Glossary', 'Master Location List', and 'System Maps'. Under 'Agreements / Forms', there is a sub-menu with 'Agency Appointment Form', 'Agreements Requiring Electronic Execution', 'Business Associate Online Form', 'Online Credit Application Form', 'Delivery Point Operator Designation Form', 'Discount Request Form', 'IT Agreement', 'Location Identification Form', 'Park & Loan - Loaning Agreement', 'Park & Loan - Parking Agreement', 'Pooling Agreement', 'Service Request', 'TPA Agreement - EDM', and 'TPA Worksheet'. The 'TPA Agreement - EDM' and 'TPA Worksheet' options are highlighted. Below the navigation bar, the main content area is titled 'INFORMATIONAL POSTINGS' and shows a 'Pipeline Conditions' posting from 02/17/2023. The posting text includes information about Park, Loan, ISS and Payback availability, OBA Party/Shipper Makeup Transactions, and various injection and withdrawal constraints. At the bottom of the page, there are 'Operationally Available Tools' including maps for 'Operational Capacity' and 'Nom/HBLV Delivery Based Constraints', and a 'Non-Critical Notices' section with several recent notices.

After downloading the TPA and TPA worksheet documents, the following steps are required for an executed agreement between Trading Partners.

- Complete the TPA and TPA worksheet documents and send it to your Transportation Services Rep.
- Negotiation between Trading Partners occurs and the TPA and TPA worksheet documents are updated to reflect the agreed upon terms and conditions and technical details.
- An authorized executive from both companies must sign the TPA document. The TPA worksheet document can be signed by an executive and/or an employee/manager that is responsible for the technical aspects set forth in the TPA worksheet.

Electronic Files Resource Documents for ASC X12 & Flat File Formats

Transco's 1Line supported NAESB WGQ data sets and the associated file formats can be requested from your Transportation Services Representative.

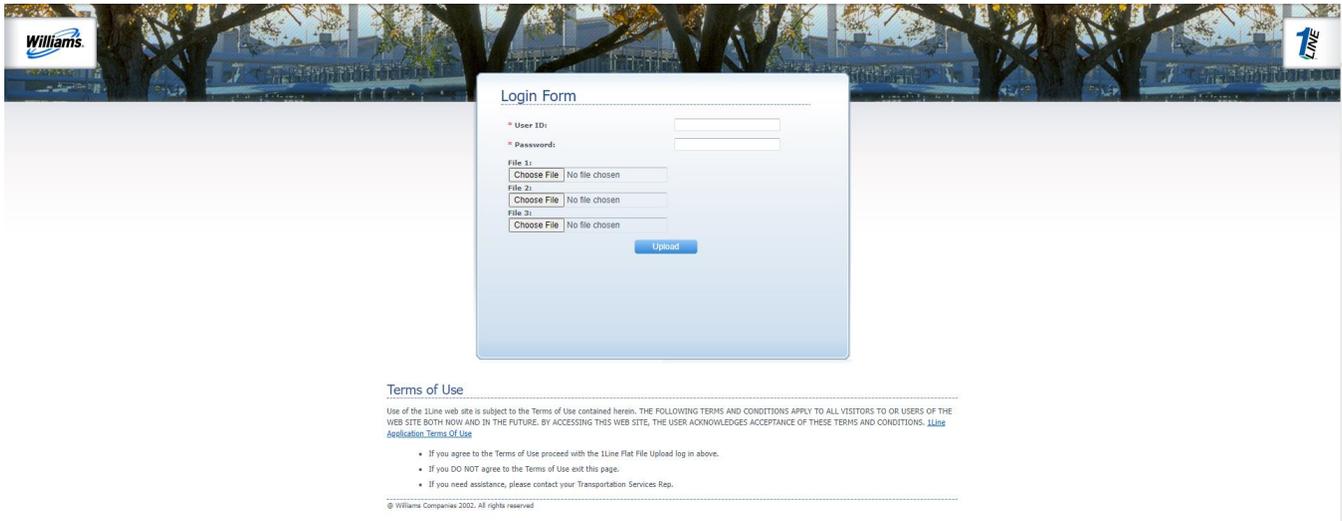
Flat File Upload from the Informational Postings Page

Flat files can be uploaded from [Transco's Informational Postings page](#) at:

1Line > Flat File Upload

The screenshot displays the Williams Transco 1Line Portal interface. At the top, there is a navigation bar with the date 'WEDNESDAY - FEBRUARY 22, 2023' and several menu items: '1Line', 'Customer Info', 'Expansions', 'Resources', 'Safety', and 'Subscriptions'. Below this is a secondary navigation bar with 'INFORMATIONAL POSTINGS' and 'OPEN IN NEW WINDOW'. The main content area is divided into several sections:

- INFORMATIONAL POSTINGS:** A list of categories including Capacity, Gas Quality, Index Of Customers, Locations, Notices, Posted Imbalances, Regulatory, Standards of Conduct, Tariff, Transactional Reporting, Capacity Release Indices, Downloads, Search, Customer Activities, and Site Map.
- Pipeline Postings:** A dropdown menu is open, showing options: 'Flat File Upload', 'Login', 'Technical Resources', and 'Training'. The 'Flat File Upload' option is highlighted.
- Operational Postings:** A list of notices and updates, including 'Park, Loan, ISS and Payback - availability here', 'Excess WSS Injection - Not Available beginning 11/12/2019', 'Excess GSS Injection - Not Available beginning 04/28/2021', 'Excess GSS Withdrawal - Not Available beginning 11/16/2020', 'Excess WSS Withdrawal - Not Available beginning 11/16/2020', 'WSS/GSS/OBA: For more information, please call your Commercial Services representative', 'Pool tolerance - 1% beginning with the intraday 2 nomination cycle for 07/17/2014', 'Transco force balances the pool during the ID 3 cycle', and 'As of 02/17/2023 Transco's EIA Form 912 Reported Storage Balance: 58.11% Hydrocarbon Content for Pentane and Heavier Components (C5+): not to exceed 0.23 mol% or processed prior to mainline delivery For OFO information - Watch Critical Notices'.
- Operational Capacity:** A map showing the pipeline route across the United States.
- Nom/HBLV Delivery Based Constraints:** Another map showing the pipeline route with constraints.
- Critical Notices:** A list of notices including 'for 02/21/2023 ID1 Cycle until further notice', 'Job # 881024 2023 Planned Outage and Maintenance Summary', and 'Update - Market and Production Constraints'.
- Constraint Points:** A list of dates and times for constraint points, such as '02/17/2023 08:10:23', '02/16/2023 07:29:39', '02/14/2023 07:57:56', '02/10/2023 07:56:50', and '02/03/2023 10:39:01'.
- Non-Critical Notices:** A list of notices including 'Firm Transportation Service Available on Transco - Zone 3 - to - Zone 5' and 'EIA Reported Storage Balance'.



Upload/Download Files in 1Line

Data files can be both downloaded and then uploaded in some 1Line areas, including Nominations, Confirmations and PDAs. Downloading allows you to save data for your own records, and to input new data into existing spreadsheet templates for upload to 1Line. It is strongly recommended that you periodically download files from 1Line to ensure that you are working with the latest data and data elements (valid column headings).

Below are some of the areas in Transco's 1Line system that can be used to access Flat File Upload/Download:

Upload a File

From the **Retrieve Nominations** page:

- **Navigation > Nominations > Nomination > Retrieve Nominations**
 - **Actions > Upload NMST**

From the **Banner Menu** on the 1Line Customer Activities Home page:

Tools > Upload

Download a File

From the **Customer Activities Home** page, several data files can be created from their related pages.

Select **Navigation > Downloads >** and one of the following:

- Nomination (NMST)
- Scheduled Quantity (SQTS)
- Scheduled Quantity for Operator (SQOP)
- Confirmation Response (RRFC)
- Request for Confirmation (RQCF)

From the **Retrieve Nominations** page:

- **Navigation > Nominations > Nomination > Retrieve Nominations**
 - **Actions > Download NMST**

Flat File Tips

- After uploading flat files to 1Line, a “quick response” message is provided on the 1Line Message Board.
 - To find the “quick response” message, specify the applicable file extension (i.e. .PDAL for PDA files, .NMST for nominations, etc.) in the **Description** Filter and select Retrieve.
 - Information will be displayed indicating whether or not your files were uploaded successfully, and if any contained errors.
- Format every field as “text” to protect leading zeros (especially important for DUNS numbers).
- Use all column headings in your file structure, whether or not a value exists for that data element.
- To ensure that your files are processed in a timely manner, it is recommended that you not wait until the last minute to upload large files. If you are waiting on some last minute information for a limited number of transactions, upload all completed information and then upload any last-minute data.

1Line Message Board

Messages generated from within the 1Line system can be found on the 1Line Customer Activities Home page banner menu under the “Tools” tab.

The screenshot shows the Williams 1Line System interface. At the top, there is a navigation bar with tabs for Home, My Dashboard, Navigation, Gas Measurement (GM), Pipelines, Tools, Reports, Print, and Logout. Below this, there is a banner image with the Williams logo and a '1LINE' logo. The main content area is divided into several sections:

- Cycle Indicators:** A table with columns for ID1, TIMELY, ID2, EVENING, ID3, and POST. The rows represent Gas Day, Nomination Cycle, and Confirmation Cycle.
- Monthly Status:** A section providing various status updates and notices, such as 'Allocations Data is available through 10/30/2022' and 'November trading is Open until 11:59 PM on Friday 11/25'.
- Pipeline Conditions:** A section detailing various pipeline conditions and notices, including 'Park Loan ISS and Pipback - availability', 'WSS/ISS: For more information regarding availability, any shipper interested in receiving daily park and loan to scheduling, please call: Suzie 713.215.4626', and 'Hydrocarbon Content for Pentane and Heavier Components (C5+): not to exceed 0.23 mol% or processed prior to mainline delivery'.

The following filters are provided:

- **Post Date Range** - defaults to 30 days back to current day. The required date range filter will pull all messages posted within the given range, including the expired messages.
- **Read Indicator** – status all, yes or no.
 - The **“All”** status will display all read and un-read messages.
 - The **“Yes”** status will display all messages that have been read.
 - The **“No”** status will display all un-read messages.
- **Description** – returns all messages where the entered text is anywhere in the message description; i.e. bid number, BAID number, user ID, etc.
- **Type of Message** – a list of message types including: ALL, BA Credit, Capacity Release, Confirmations, Invoicing, Measurement information, Nominations, PDA Upload, Retro Requests, Storage, Trades, and Intraday Bump Critical Notices will display information indicating whether or not your files were uploaded successfully, and if any contained errors.

To access your messages:

For example: To access your messages for nominations:

1. Login to 1Line

2. Select: **Tools>Messages**
3. Enter **>Post Date Range** (default is 30 days)
4. Select **>Read Indicator** (Defaults to ALL)
5. Select **>Type of Message:** (i.e. Nominations)
6. Select **> Retrieve**
 - A list of messages for nominations will be retrieved based on your filters.
7. Highlight Message
 - A message will display a popup window with message detail.
 - Close to exit back to message board page.

Please contact your Commercial Services Representative with any EDI questions.