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# Electronic Data Interchange (EDI) and Flat Files

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

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# Electronic Data Interchange (EDI) and Flat Files

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## Important Information – Please Read

The information provided herein is for informational purposes only and does not modify any provision in Transco's FERC Gas Tariff. If a conflict exists between this information and Transco's FERC Gas Tariff, the provisions in Transco's FERC Gas Tariff apply. Transco makes no representation or warranty as to the completeness or accuracy of this information. Transco shall not be liable for any informational errors, incompleteness or delays, or for any actions taken in reliance on this information.

To review the **tariff** language specific to any topic, go to [www.1Line.williams.com](http://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.

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## 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.

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□ 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.

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- **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

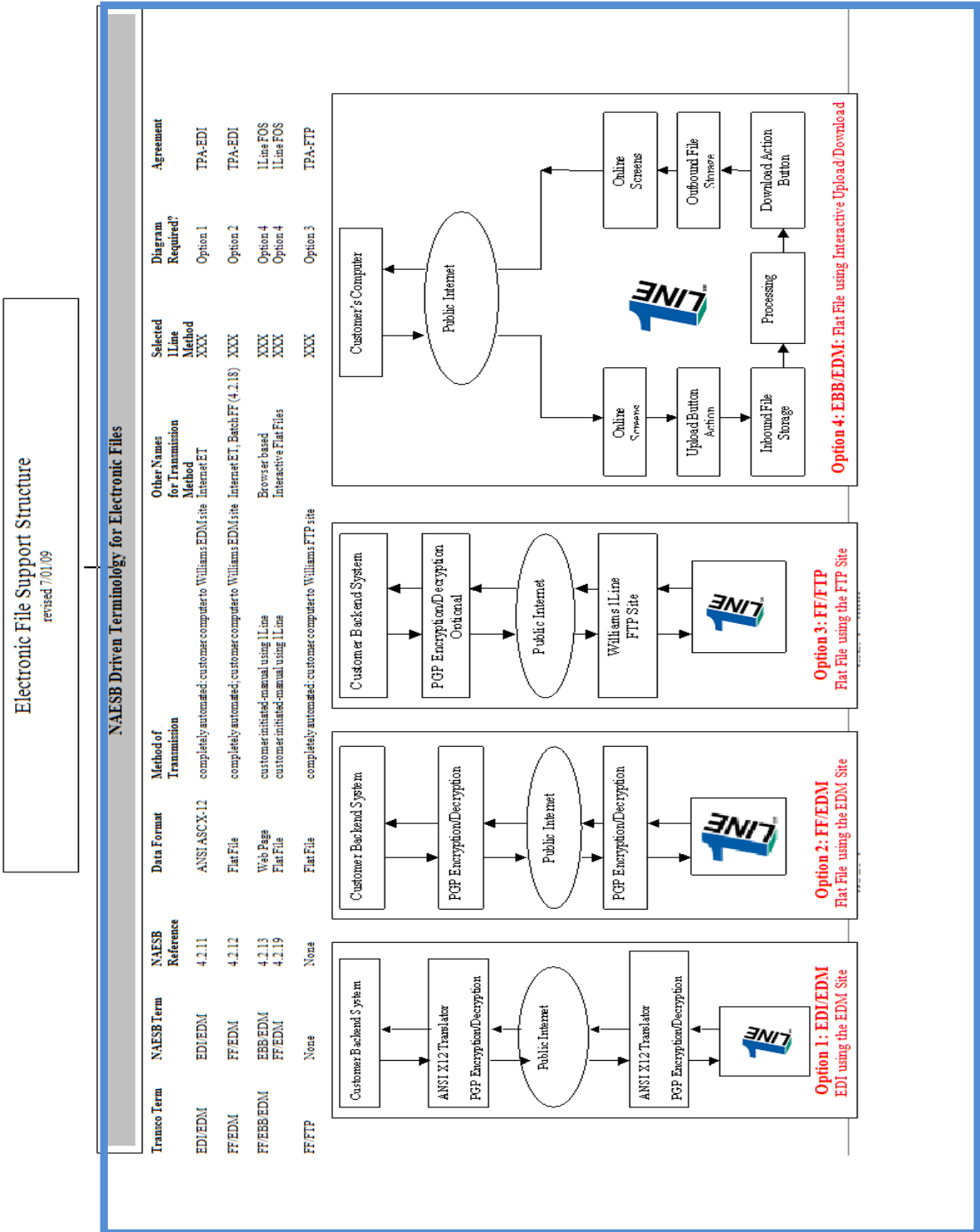
**Pretty Good Privacy (PGP) Encryption** – PGP version 2.6.2 or higher, and its open source 'free' equivalent called OpenPGP, is used to create Public and Private Keys for data privacy/encryption and digital signatures. See <http://www.uk.pgp.net/pgpnet/pgp-faq/>

**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.



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## Steps to Implementing EDI

The following are the steps necessary to implement EDI.

1. Contact your Transco Transportation 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 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 1Line Portal interface. At the top, there is a navigation bar with the date 'FRIDAY - MARCH 30, 2012' and several menu items: '1Line', 'Customer Info', 'Expansions', 'Regulatory', 'Resources', 'Safety', and 'Subscriptions'. Below the navigation bar, there are two main sections. On the left, under 'INFORMATIONAL POSTINGS', there is a list of categories such as Capacity, Gas Quality, Index Of Customers, Notices, Posted Imbalances, Standards of Conduct, Tariff, Transactional Reporting, Capacity Release Indices, Downloads, Search, Customer Activities, and Site Map. The main content area shows a 'Pipeline Conditions' posting dated 03/19/2012 14:24, with details about Park, Loan Payback and ISS, and various injection and withdrawal conditions. Below this, there are two maps: 'Operationally Available Capacity' and 'Swing Service Delivery Points'. On the right side, a dropdown menu is open, showing a list of documents for download, including '1Line Form Of Service', '1Line Testing & Training Agreement', 'Agency Appointment Form', 'Agreements Requiring Electronic Execution', 'Business Associate Online Form', 'Credit Application Online Form', 'Delivery Point Operator Designation', 'Discount Request Form', 'IT Agreement', 'Location Identification', 'Park & Loan - Loaning', 'Park & Loan - Parking', 'Pooling Agreement', 'Service Request Form', 'TPA Agreement - EDM', 'TPA Agreement - FTP', and 'TPA Worksheet'. At the bottom right, there is a link for 'Revised 1Line Training Classes' dated 03/23/2012 01:48:02 PM.

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 shows the Williams Transco 1Line Portal homepage. The top navigation bar includes '1Line', 'Customer Info', 'Expansions', 'Regulatory', 'Resources', 'Safety', and 'Subscriptions'. The 'INFORMATIONAL POSTINGS' menu is open, showing options like 'Changes to 1Line', 'Flat File Upload', 'Login', and 'Technical Resources'. A '24 HOUR PIPELINE EMERGENCY: 1-800-440-8475' notice is visible. A 'Critical Notices' section contains links for 'US/2/17/2012 12:54:11 PM' and 'Market and Production Area IT 03/08/2012 10:07:21 AM'.

The screenshot shows the 'Flat File Upload' web form. It includes a 'Messages' section, a 'Login Information' section with 'User ID' and 'Password' fields, and a 'Select Flat Files' section with three 'File' input fields and 'Browse...' buttons. At the bottom, there are 'Upload', 'Change Password', and 'Flat File Training Materials' buttons. A 'Note' section contains a link to 'Minimum System Requirements'. A 'Terms of Use' section follows, with a list of conditions: 'If you agree to the Terms of Use proceed with the 1Line Flat File Upload above.', 'If you DO NOT agree to the Terms of Use exit this page.', and 'If you need assistance, please contact your Transportation Services Rep.' The footer contains the copyright notice: '© Williams Companies 2002. All rights reserved.'

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## 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.



Cycle Indicators	ID-1	TIMELY	ID-2	EVENING	POST
Gas Day	3/30	3/31	3/30	3/31	3/29
Nomination Cycle	CLOSED	CLOSED	OPEN	OPEN	CLOSED
Confirmation Cycle	CLOSED	OPEN	CLOSED	CLOSED	CLOSED

**Pipeline Conditions**

Posting Date: 03/26/2012 13:49  
Park, Loan Payback and ISS - Service Available beginning 12/14/2011.  
Loan; Take away of Parked gas - Service Available beginning 02/15/2012. **Park/Loan/ISS: For more information, please call Suzie 713.215.4626 or Laurie 713.215.4356**  
Excess WSS Injections - Not Available beginning 04/26/2011

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.

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- 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.
  - **Download** – you have the option to download data in a CSV file.

### **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..
  - Select close to exist back to message board page.

Please contact your Transportation Services Representative with any questions on using EDI or Flat Files to send or receive files when doing business with Transco.