

Utility Industry Group Implementation Guideline

for

Electronic **D**ata **I**nterchange

TRANSACTION SET

867

Product Transfer and Resale Report

Ver/Rel 003060

Acid Rain Allowance Transfer Reporting to the U.S. EPA

Summary of Changes

June 16, 1998

Initial release.

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867 Product Transfer and Resale Report

Introduction

The function of the Utility Industry Group is

To represent Electric, Gas, and Combination Utilities, their suppliers, their customers, and other interested parties as an Industry Action Group to the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12, specifically in the standards-setting process, for their Electronic Data Interchange business needs.

To encourage, promote, and establish conventions for the use of ASC X12 standards as the "recommended" method of EDI. To develop and coordinate, as required, implementation guidelines and tools to promote the growth and timely implementation of Electronic Commerce/EDI within the industry.

To provide a forum for the exchange of ideas related to Electronic Commerce/EDI and its influence on the business needs of the industry.

The UIG will represent the Edison Electric Institute (EEI) and its members to facilitate implementation of Electronic Commerce/EDI in the Utility Industry.

Purpose

This Utility Industry Group (UIG) Implementation Guideline contains the format and establishes the data contents of the Product Transfer and Resale Report Transaction Set (867) as adopted by the UIG for use within the context of an Electronic Data Interchange (EDI) environment.

Notes

This implementation of the transaction set is used by the utility industry to report the transfer of acid rain allowances between Allowance Tracking System (ATS) accounts. The report is transmitted to the [U.S. Environmental Protection Agency Acid Rain Division](#), which records the transfer of allowances between accounts. The intent of this transaction is to replace the paper form used to report such transfers, EPA Form 7610-6. Consequently, only those segments and elements necessary to convey the information required by the paper form have been included in this guideline.

Guidance for Allowance Tracking System Account Holders

Introduction

Currently, the Environmental Protection Agency (EPA) receives Acid Rain Allowance Transfer transactions on a standard paper form, EPA Number 7610-6. These are sent from Allowance Tracking System (ATS) account holders to EPA. The forms are filled out by the Transferor and Transferee and sent to EPA's Acid Rain Division in Washington, D.C. There, the data is entered into an EPA database.

Over the past year, EPA has been preparing an alternative to the paper forms. This alternative method eliminates the paper and transmits the Allowance Transfer Transactions via Electronic Data Interchange (EDI).

To establish EDI for Allowance Transfers, EPA and representatives from the Utility industry have worked together to create this *Utility Industry Group Implementation Guideline for EDI Transaction 867*. This Implementation Guideline describes the data fields that EPA must receive and shows their layout in the EDI format.

The Utility Industry Group selected the Transaction 867 format from among the several hundred transactions currently defined for Electronic Data Interchange. The generic purpose of Transaction 867 is the Product Transfer and Resale Report and therefore the segments and data fields of this transaction fit the Allowance Transfer function very closely. The purpose of this Utility Industry Implementation Guideline is to define the specific segments and fields that should be used to transmit an Allowance Transfer, and the codes that should be put into those fields.

The Current Paper Form for Allowance Transfers

The current method of sending Allowance Transfer data to EPA is via a two-sided paper form, EPA No. 7610-6. This is completed by Authorized Account Representatives for the transferor and transferee, and sent to the Acid Rain Division for data entry. The form identifies the ATS account numbers of the transferor and transferee — the two trading partners. For each partner, the form includes the Authorized Representative's name, the Representative's ID Number, and the Representative's signature and phone numbers. On the back side of the form (Page 2 of the form), the main feature is a grid where Allowance serial numbers are written. This grid includes the starting and ending serial number in each block traded, and a "total" field where the count of Allowances is written. Near the top of Page 2 is the "perpetuity indicator," which shows whether the serial numbers written in the grid are being traded only for the year shown or for all future years as well.

Development of Electronic Data Interchange for Allowance Transfers

Electronic Data Interchange transactions are created and maintained as national standards by the X12 Committee of the American National Standards Institute. To tailor a general-purpose transaction for a specific use, a design committee must select a subset of all the data segments and data fields available within the formal transaction definition, and specify exactly what values should be stored in each field, and what those values mean in the specific application. These instructions are then written up into an "Implementation Guideline."

EDI transaction 867 is titled *Product Transfer and Resale Report*. It was selected for communicating Allowance Transfer transactions because its segments and data fields closely match what is needed for Allowance Transfers. The Utility Industry Group created the *Implementation Guideline for EDI 867*. A number of electric power generating companies participate in this Group, along with EPA. A copy of the current version of the Implementation Guideline can be found on the Utility Industry Group web site at <http://www.uig.org>.

Using Transaction Set 867 to Send Allowance Transfers to EPA

As of January 1998, EPA is seeking ATS account holders who would like to participate in Phase 1 of production use of EDI 867. Candidate companies are expected to already possess and operate EDI software, and to have EDI-knowledgeable staff members who can assist the Allowance Transfer Department in setting up Electronic Data Interchange for this purpose.

A participating company must have some way to generate the data for an Allowance Transfer Transaction, in a computer-readable format. This could be done with a PC-based tool such as Sterling Gentrans Smartforms, where the transaction is created on a PC, or the company may already have their transactions recorded on a mainframe or a UNIX-based system. After the data is originated on a PC, workstation, or mainframe, an Applications Interface must be set up to deliver the Allowance Transfer data to the company's Electronic Data Interchange Translator. The Translator software may run on a mainframe, workstation, or PC. After the data is translated into EDI 867 format, it must be put into a mailbox for transmission over a Value-Added EDI network (VAN). The VAN will deliver the transactions to EPA's EDI mailbox.

EPA currently uses AT&T as its Value-Added Network (VAN). All EDI transactions bound for EPA travel over the AT&T network, to a mailbox whose contents are regularly downloaded to EPA's IBM mainframe. On the network, EPA's EDI qualifier is **16** and EPA's ID code is **057944910002P**. At this time, EPA is able to receive transactions only via VANs.

During Phase 1 of production use, EPA will print incoming EDI 867 transactions and merge them with data transfer requests coming in via the existing paper forms. Phase 1 might continue for approximately six months, while EPA evaluates industry interest in sending Allowance Transfer data electronically. EPA may then undertake a Phase 2 development process which will further automate the process of taking data received via EDI and moving it into storage in the ATS database on the mainframe.

To assist utilities or brokers in setting up the EDI 867 process, the EPA has published a *Guide for Allowance Tracking System Account Holders and Guide for Daily Operations at EPA*. For further information or to begin sending EDI 867 transactions to EPA contact:

Mr. Alex Salpeter, Acid Rain Division of the U.S. EPA, at (202) 564-9157, or at salpeter.alex@epamail.epa.gov, or at the U.S. EPA, Mailstop 6204J, 401 M Street SW, Washington, D.C., 20460.

867 Product Transfer and Resale Report

Best Practices

Global Best Practices

Use of Text Segments

- The UIG recommends that the note (NTE) segment be avoided because this segment is not machine-readable. Other text segments, such as MSG and PID, may be used if their use will lead to machine processable information in subsequent applications.

Use of ZZ Qualifier

- The use of data fields to transmit uncoded or textual information should be avoided. This practice is usually associated with the use of the ZZ qualifier as a normal course of doing business.

997 - Functional Acknowledgment

- The purpose of the 997 is to verify receipt of a transmitted document only, not the acceptance of the document. For example, the acceptance of a purchase order (850) is accomplished through the use of the purchase order acknowledgment transaction (855).

Interchange Control Number

- A unique and sequential interchange control number should be used on every envelope that is transmitted to a trading partner. This approach will allow the receiver to audit the interchange for any duplicate or missing transmissions.

Use of Dun & Bradstreet (D-U-N-S) Number

- Dun & Bradstreet assigns a nine-digit identification number to every business entity. This number, known as the D-U-N-S number, should be used to identify the trading partners. A trading partner may append a four-digit suffix to the D-U-N-S number to uniquely identify a specific location within the entity; this number is referred to as a D-U-N-S + 4 number

Banking Transactions

- Guidelines that outline the use of transactions relating to interactions between a sender and the sender's financial institution are available from the Bankers EDI Council and the NACHA EDI Council. Other publications that address the use of financial payment transactions include Technical Report 1 (TR1) and Technical Report 2 (TR2); both of these publications are available from DISA.

Capitalization

- The use of all upper case (capital) letters is preferred over the use of mixed upper and lower case letters.

Document-Specific Best Practices

General Usage

- This transaction is initiated by the Transferor of the allowances and is transmitted directly to the U.S. EPA. A duplicate copy of the transaction should be transmitted to the Transferee also.

Use of The PTD Segment

- PTD06 is used to indicate whether the block of allowances is being transferred for only one "use year" (not in perpetuity) or for a "use year" and all subsequent "use years" (in perpetuity). A single 867 transaction set may address only one type of transfer; i.e., a transfer in perpetuity **OR** a transfer not in perpetuity. It is not permissible to attempt to transmit both types of transfers within one transaction set.

Use of The LIN Segment

- LIN03 and LIN05 are used to identify the beginning and ending serial numbers respectively for a block of allowances. Beginning and ending serial numbers must be sent in all cases, even if only one allowance is being transferred. Repeat the PTD/QTY loop as necessary if multiple, non-contiguous blocks of allowance serial numbers are being transferred.

Use of the CTT Segment

- The hash total of CTT02 is the sum of all of the QTY02 values and represents the total number of allowances being transferred.

867 Product Transfer and Resale Report

Functional Group ID=**PT**

Heading

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
Must Use	010	ST				
		Transaction Set Header	M	1		
Must Use	020	BPT				
		Beginning Segment for Product Transfer and Resale	M	1		
					LOOP ID - N1	5
Must Use	080	N1				
		Name	O	1		
					LOOP ID - PER	>1
Must Use	130	PER				
		Administrative Communications Contact	O	1		

Detail

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
					LOOP ID - PTD	>1
Must Use	010	PTD				
		Product Transfer and Resale Detail	M	1		
					LOOP ID - QTY	>1
Must Use	110	QTY				
		Quantity	O	1		
Must Use	120	LIN				
		Item Identification	O	1		

Summary

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
					LOOP ID - CTT	1
Must Use	010	CTT				
		Transaction Totals	O	1		n1
Must Use	030	SE				
		Transaction Set Trailer	M	1		

Transaction Set Notes:

1. The number of line items (CTT01) is the accumulation of the number of LIN segments. The hash total (CTT02) is the total number of allowances being transferred, which is equal to the sum of the QTY02 quantities.

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 867 X12.33 Product Transfer and Resale Report	M ID 3/3
Must Use	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

Segment: **BPT** Beginning Segment for Product Transfer and Resale
Position: 020
Loop:
Level: Heading:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of the Product Transfer and Resale Report Transaction Set and transmit identifying data

Syntax Notes:
Semantic Notes: 1 BPT02 identifies the transaction number.
 2 BPT03 identifies the transaction date.

Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BPT01	353	Transaction Set Purpose Code Code identifying purpose of transaction set	M ID 2/2
			00 Original Used when transmitting a report to the U.S. EPA	
			07 Duplicate Used when transmitting a copy to the Transferee	
Used	BPT02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	O AN 1/30
			A unique transaction identification number assigned by the transferor.	
Must Use	BPT03	373	Date Date (YYMMDD)	M DT 6/6
			The transaction creation date.	

Segment: **PER Administrative Communications Contact**
Position: 130
Loop: PER
Level: Heading:
Usage: Must Use
Max Use: 1
Purpose: To identify a person or office to whom administrative communications should be directed

- Syntax Notes:**
- 1 If either PER03 or PER04 is present, then the other is required.
 - 2 If either PER05 or PER06 is present, then the other is required.
 - 3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:

Comments:

Notes: Two occurrences of this segment must be sent - one in the transferor N1 loop to identify the transferor's Authorized Account Representative and one in the transferee N1 loop to identify the transferee's Authorized Account Representative.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named AA Authorized Representative	M ID 2/2
Must Use	PER02	93	Name Free-form name Full name of the Authorized Account Representative.	O AN 1/35
Must Use	PER09	443	Contact Inquiry Reference Additional reference number or description to clarify a contact number US EPA-issued identification number for the Authorized Account Representative.	O AN 1/20

Segment: **PTD** Product Transfer and Resale Detail
Position: 010
Loop: PTD
Level: Detail:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes:
 1 If either PTD02 or PTD03 is present, then the other is required.
 2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:
Comments:

Notes: A transaction may address only one type of transfer; i.e., a transfer in perpetuity OR a transfer not in perpetuity. It is not permissible to attempt to transmit both types of transfers within one transaction set.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code Code identifying the type of product transfer	M ID 2/2
			BJ Relocation Reallocation among sources within a business entity.	
			BR Exchange An exchange with no consideration.	
			CS Contract Sale A sale for consideration.	
Must Use	PTD06	486	Product Transfer Movement Type Code To indicate the type of product transfer movement	O ID 2/2
			This element is used to transmit the perpetuity indicator.	
			AO Adjustment Out This code is used to indicate that the transfer IS NOT in perpetuity.	
			TO Transfer Out This code is used to indicate that the transfer IS in perpetuity.	

Segment: **QTY** Quantity
Position: 110
Loop: QTY
Level: Detail:
Usage: Must Use
Max Use: 1
Purpose: To specify quantity information
Syntax Notes:
Semantic Notes:
Comments:
Notes:

Repeat the PTD/QTY loop as necessary if multiple, non-contiguous blocks of allowance serial numbers are being transferred.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier Code specifying the type of quantity V3 Transfer Quantity	M ID 2/2
Must Use	QTY02	380	Quantity Numeric value of quantity	M R 1/15
Must Use	QTY03	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken EA Each	M ID 2/2

Segment: **LIN** Item Identification
Position: 120
Loop: QTY
Level: Detail:
Usage: Must Use
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes: 1 If either LIN04 or LIN05 is present, then the other is required.
Semantic Notes: 1 LIN01 may be used as a line counter.
Comments:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
	LIN01	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set May be used as a line counter.	O AN 1/20
Must Use	LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SN Serial Number	M ID 2/2
Must Use	LIN03	234	Product/Service ID Identifying number for a product or service Starting allowance serial number.	M AN 1/40
Must Use	LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SN Serial Number	X ID 2/2
Must Use	LIN05	234	Product/Service ID Identifying number for a product or service Ending allowance serial number. Beginning and ending serial numbers must be sent in all cases, even if only one allowance is being transferred.	X AN 1/40

Segment: **CTT** Transaction Totals
Position: 010
Loop: CTT
Level: Summary:
Usage: Must Use
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes:
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Notes: The number of line items, CTT01, is the number of LIN segments. The hash total, CTT02, is the total number of allowances being transferred, which is equal to the sum of the QTY02 quantities.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	CTT01	354	Number of Line Items Total number of line items in the transaction set Number of LIN segments.	M NO 1/6
Must Use	CTT02	347	Hash Total Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element.	O R 1/10

Example:

-0018	First occurrence of values being hashed.
.18	Second occurrence of values being hashed.
1.8	Third occurrence of values being hashed.
<u>18.01</u>	Fourth occurrence of values being hashed.

18+18+18+1801=1855 Hash total prior to truncation.

Sum of the QTY02 quantities.

Segment: **SE** Transaction Set Trailer
Position: 030
Loop:
Level: Summary:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:
Semantic Notes:
Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M NO 1/10
Must Use	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

Example Transaction Data

ST~867~0001

This is the start of an 867 transaction with a control number of 0001.

BPT~00~1234567~980616

This is an original transaction. The reference number for this transaction is 1234567. The transaction was created on June 16, 1998.

N1~Z6~~EP~999988880333

The transferring utility's ATS account number is 999988880333.

PER~AA~JOHN ADAMS~~~~~101010

The transferor's Authorized Account Representative is John Adams. His identification number is 101010.

N1~TT~~EP~999977770222

The transferee's ATS account number is 999977770222.

PER~AA~THOMAS JEFFERSON~~~~~989898

The transferee's Authorized Account Representative is Thomas Jefferson. His identification number is 989898.

PTD~CS~~~~AO

This transaction is a sale of allowances for consideration. The transfer is for one "use year" only, not in perpetuity.

QTY~V3~500~EA

500 allowances are being transferred in this block.

LIN~001~SN~2010-00000001~SN~2010-00000500

The serial numbers for this block of 500 allowances start at 2010-00000001 and end at 2010-00000500.

PTD~CS~~~~AO

A second PTY/QTY/LIN loop is necessary because the blocks of allowances are not contiguous.

QTY~V3~176~EA

176 allowances are being transferred in this block.

LIN~002~SN~2010-00000525~SN~2010-00000700

The serial numbers for this block of 176 allowances start at 2010-00000525 and end at 2010-00000700.

CTT~2~676

The number of line items (LIN segments) is 2. The hash total (sum of the QTY02s) is 676.

SE~14~00001

There are fourteen segments in the transaction. The control number is 0001.