

Electric Choice Supplier Handbook

Chapter 7: Electronic Business Transactions

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7.0 Electronic Business Transactions

Implementing Electric Choice requires Detroit Edison and AESs to transfer large volumes of data on an ongoing basis. A key to seamless data transfer is following consistent communication standards. This chapter provides the required information associated with establishing electronic business transactions (EBT).

AESs entering the Detroit Edison Electric Choice program will use only XML and will be tested for their capability to transfer data in XML.

This chapter includes information on electronic business transactions with Detroit Edison through:

- The Detroit Edison web site
- Extensible Markup Language (XML)
- Electronic Funds Transfer (EFT)
- Information on testing electronic business transactions

7.1 Detroit Edison Website Communications

The Energy Supplier website has been added to the Detroit Edison web site specifically for AESs who want to participate in the Electric Choice Program. This site can be found at www.suppliers.detroitdison.com/internet/index.jsp. The content of this web site is updated regularly.

7.1.1 Web Site Content

The contents of the Energy Suppliers section of the Detroit Edison web site are divided into two subject areas: non-secure and secure. The non-secure area contains information directed to AESs and Marketers regarding Electric Choice Program participation. Any individual who visits the Detroit Edison web site can access this site. The secure area contains information that is accessible only by AESs once they have completed the registration process with Detroit Edison.

The contents of the non-secure area includes information on participation qualifications, AES support components, a glossary of program terms, available downloads and links, and a list of electric choice frequently asked questions.

The secure area of the Detroit Edison web site contains confidential information and applications that allow participating AESs to easily conduct business with Detroit Edison.

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To access this secure area, AESs must register through the online registration page located on the non-secure portion of the web site in the 'How to Qualify' section. Once the registration is received, a login user name and password are assigned to the AES, enabling access to its qualification status. Once qualified, AESs are able to access additional individual account information, change their passwords, enroll customers, update customer information, view billing information, etc.

7.2 EBT Communications

Detroit Edison conducts the communications and data exchanges to and from AESs using standard transaction formats within an XML environment.

7.2.1 Establishing XML with Detroit Edison

AESs will need to establish XML capability with Detroit Edison by contacting the Detroit Edison Electric Choice Supplier Support Center. Support center personnel function as the liaison between AESs and the Detroit Edison XML Administrator. The XML Administrator will assist AESs in understanding the requirements for establishing XML communications with Detroit Edison, identifying the responsibilities of both parties, and compiling the necessary electronic transmission control information for XML communications. The Electric Choice AES Support Center can be reached at 888.830.2170 or 313.235.3796. AESs who are not XML capable should contact the Electric Choice AES Support Center. Support center personnel will work with AESs to help them implement the required XML communication standards.

To communicate using XML, AESs will need to obtain software capable of generating DSA 1024 or RSA 1024 encryption and decryption. Detroit Edison will provide File Transfer Protocol (FTP) accounts for them to download and upload files. This information can be communicated through the Electronic Business Transactions Profile (see Appendix M), which can be found on the Detroit Edison website in the Downloads & Links section.

7.2.2 XML Transactions

Detroit Edison uses McAfee Pretty Good Privacy (PGP) version 8.1 or any version compatible with 8.1. Detroit Edison requires using PGP or PGP compatible DSA 1024 or RSA 1024 to encrypt or decrypt transactions.

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Detroit Edison XML schemas are available on the Detroit Edison web site in the Downloads & Links section.

Standard XML transaction sets include:

- 810 – Invoice Transaction Set. All invoicing between Detroit Edison and AESs is done with the 810 transaction set. Detroit Edison uses this transaction set to notify alternative electric AESs of customer monthly billing and usage charges as well as any direct charges to AESs.
- 814 – General Request, Response, or Confirmation Transaction Set. AESs should submit all enrollment information using transaction set 814. Detroit Edison uses this transaction set to send enrollment confirmation or rejection notices to AESs. This transaction set is also used for customer information changes as well as to communicate Detroit Edison service termination/disconnection information to AESs, when available.
- 820 – Payment Order Transaction Set. Detroit Edison and AESs use this transaction set to communicate remittance data for posting to accounts. Detroit Edison will send the 820 transaction set directly to the AES. The AES must send the 820 transaction set directly to their “Inbound Directory” on the Detroit Edison FTP server.
- 867 – Product Transfer and Resale Report Transaction Set. Detroit Edison uses this transaction set to send customer load data and billing determinants.
- 997 – Functional Acknowledgment. A functional acknowledgement is sent by the receiving party to the sending party in response to the receipt of an XML transaction. The 997 transaction set confirms that a transaction has been received.

7.2.3 Connecting to Detroit Edison via FTP

AESs will transmit XML transaction sets with Detroit Edison via FTP. Detroit Edison FTP server uniform resource locator (URL) is: <ftp://ftp.dteenergy.com>. Detroit Edison will provide a unique user id and password for each AES to assure secure communications and data confidentiality. Each FTP login account will have two subdirectories from their home directory: Inbound and Outbound. Inbound transaction sets to Detroit Edison from AES are written to the Inbound directory. AESs have ‘write’ access to the Inbound directory and will write transaction sets to this directory that Detroit Edison will read and process. AESs

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have ‘read’ access to the Outbound directory under their home directory. AESs download outbound Detroit Edison transaction sets from the Outbound directory.

7.2.4 XML File Naming Conventions

The naming convention for all inbound and outbound XML transaction sets is:

- ftp login id_transactionset_datetime.xml.pgp
 - Transactionset is the XML transactions sets, i.e. IN814Enrollment, OUT814, schemaOUT810CustomerInvoiceValid
 - Datetime is in yyyyymmddHHMMSS format

An example would be: supp1234_IN814Enrollment_200901071217.xml.pgp. In this example, the above transaction set is from a AES with FTP login id of supp1234, for an inbound 814 enrollment created on January 07, 2009 and is PGP encrypted.

NOTE: All inbound and outbound transaction sets must be encrypted using the software specified in Section 7.2.2. This will ensure the identity and security of the contents. Detroit Edison recommends that all transaction sets be compressed to reduce the size for faster exchange.

7.3 Electronic Funds Transfer (EFT)

Establishing EFT with Detroit Edison

Electronic Funds Transfer (EFT) is the electronic processing of financial transactions. Detroit Edison will use ACH (Automated Clearing House) transactions for payment. For the EFT testing process, see Sections 7.6 and 7.7.

7.4 Testing Electronic Communications

Detroit Edison will test all applicable XML transactions with each AES. The test will be performed using the Detroit Edison FTP account (ftp://ftp.dteenergy.com). For all applicable transaction sets, AESs should specify the transaction type as “certification”. The testing will confirm that transactions can be successfully transmitted and that valid data is received and conforms to the schema.

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NOTE: Testing will not begin until the Marketer has been MISO qualified and the AES has received its MPSC license.

7.5 AES XML Testing Procedure

The XML transaction sets to be tested depend upon whether an AES is an Alternative Electric Supplier or a Marketer. Inbound is from AES to Detroit Edison. Outbound is from the Detroit Edison to the AES. Table 7-1 identifies transaction sets each AES and/or Marketer must test.

Table 7-1

Transaction Sets

Transaction Set	AES	Marketer
810 Invoice – Inbound	✓	✓
814 Enrollment – Inbound	✓	✓
814 Enrollment – Outbound	✓	
820 Remittance Advice – Inbound	✓	✓
820 Remittance Advice – Outbound	✓	✓
867 Product Transfer and Resale Report - Inbound	✓	✓
997 Functional Acknowledgment - Inbound/Outbound	✓	✓

Testing procedure steps to be followed by AESs are:

- Step 1 The AES completes the EBT Profile form on the Detroit Edison Website (see Appendix M). This form will automatically be sent to the Detroit Edison XML Administrator.
- Step 2 The AES sends the AES’s public key as an email attachment to xmladm@dteenergy.com
- Step 3 The Detroit Edison XML Administrator contacts the AES’s XML contact (named on the EBT Profile) to confirm the communications information on the EBT Profile, to determine a testing schedule and to initiate testing.
- Step 4 The Detroit Edison XML Administrator requests the AES’s XML contact to send an 814 enrollment transaction set.

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- Step 5 Upon electronic receipt of the 814 transaction set, Detroit Edison checks for XML and content acceptability. In the event of a problem with the transaction, Detroit Edison will contact the AES's XML contact by telephone or e-mail.
- Step 6 Upon receipt of the 814 transaction set, the Detroit Edison automatically sends a 997 functional acknowledgment. Please note that this acknowledgment does not guarantee that the content of the transaction is acceptable.
- Step 7 Repeat steps 4 through 6 until the test is successfully completed.
- Step 8 The test is considered successful when Detroit Edison receives a test with no XML or content errors and the AES receives the 997 functional acknowledgment from Detroit Edison.
- Step 9 Upon confirmation by the Detroit Edison XML Administrator of an acceptable 814 transaction set, Detroit Edison sends the AES an XML 814 enrollment confirmation.
- Step 10 Upon receipt of the 814 transaction set, the AES verifies the data with their translator and application system according to its test procedures. The Detroit Edison XML Administrator is contacted upon verification of the data to confirm acceptance or discuss issues.
- Step 11 Upon receipt of the 814 transaction set, the AES sends a 997 functional acknowledgment.
- Step 12 Repeat steps 9 through 11 until the tests are successfully completed.
- Step 13 The test is considered successful when the AES receives a test with no XML or content errors and Detroit Edison has received the 997 functional acknowledgment from the AES.
- Step 14 Repeat steps 4 through 6 for the balance of the 814 transaction sets from Detroit Edison to the AES.
- Step 15 The tests are considered successful when Detroit Edison receives all tests with no XML or content errors and the AES receives all 997 functional acknowledgments from Detroit Edison.
- Step 16 Repeat steps 9 through 11 for the balance of the 814 transaction sets from the AES to Detroit Edison.

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- Step 17 The tests are considered successful when the AES receives all tests with no XML or content errors and Detroit Edison receives all 997 functional acknowledgments from the AES.
- Step 18 Repeat steps 9 through 11 for the 810 and 867 transaction sets from Detroit Edison to the AES until they are successfully completed.
- Step 19 The tests are considered successful when the AES receives all tests with no XML or content errors and Detroit Edison receives all 997 functional acknowledgments from the AES.
- Step 20 Repeat steps 4 through 6 for the 820 transaction sets the AES sends to Detroit Edison.
- Step 21 The test is considered successful when Detroit Edison receives a test with no XML or content errors and the AES receives the 997 functional acknowledgement from Detroit Edison.
- Step 22 Upon successful completion of all of the above tests and the EFT testing (see Sections 7.6 and 7.7), the Detroit Edison XML Administrator notifies the Electric Choice Supplier Support Center of completion of the XML testing phase.

7.6 AES Electronic Funds Transfer (EFT) Testing Procedure (AES to Detroit Edison)

An EFT test from the AES to the AES's bank to Detroit Edison's concentration bank to Detroit Edison is required. EFT testing procedures to be followed by AESs are:

1. The Detroit Edison Cash Management Coordinator will send a form to the AES's contact detailing Detroit Edison banking information and authorizing the AES to deposit funds in the Detroit Edison bank account. The form includes space for AES banking information. Upon completion, the AES will return the form to Detroit Edison.
2. Detroit Edison requires an XML 820 remittance advice transaction for the payment information directly to Detroit Edison. The AES must use a 9-digit account number on their remittance advice. The AES will send \$1.00 via ACH and the XML 820 to Detroit Edison.
3. Detroit Edison will confirm receipt of the test into their bank with an e-mail to the AES and send the 997 functional acknowledgment.

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4. AES will receive a 997 functional acknowledgment as confirmation.
5. If the test is not successful, the two parties involved at the breakdown point resolve the issues. The test will resume from the breakdown point. If necessary, the test can be restarted from step 2.
6. The EFT test is considered a success when:
 - The \$1.00 is transferred from the AES's bank to the Detroit Edison bank.
 - The \$1.00 is deposited in the proper Detroit Edison bank account.
 - The \$1.00 is forwarded by the Detroit Edison bank to the Detroit Edison cash management system.
 - The \$1.00 is credited to the Detroit Edison billing system account number specified in the invoice referenced in step 2.

7.7 AES Electronic Funds Transfer (EFT) Testing Procedure (Detroit Edison to AES)

A full loop test from Detroit Edison's bank to the AES's bank is required. EFT testing procedures are below:

1. The Detroit Edison Cash Management Coordinator will obtain information from the AES detailing information about the AES's bank. This bank information authorizes Detroit Edison to deposit funds into the AES's bank.
2. The Detroit Edison Cash Management Coordinator will create a \$1.00 test to be paid to the AES. Detroit Edison will notify the AES when the \$1.00 test has been sent.
3. The AES will confirm receipt of the test into their bank with an e-mail to Detroit Edison at xmladm@dteenergy.com
4. The Detroit Edison Supplier Account Manager will send the AES an 820 transaction set for the \$1.00.
5. The AES must confirm receipt of the test into their system by sending back a 997 functional acknowledgement to Detroit Edison.
6. If the test is not successful, the two parties will work to identify and resolve the issues. If needed, the test may be restarted from step 2 above.
7. The EFT test is considered successful when:

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- The \$1.00 is transferred from Detroit Edison's bank to the AES's bank
- The \$1.00 is deposited in the proper AES's bank account.
- Confirmation is made that AES's account has been credited appropriately.
- Detroit Edison receives the 997 functional acknowledgement.