Customer Choice related transactions between ComEd and Retail Electric Suppliers (RESs) are handled electronically via Electronic Data Interchange (EDI). A Communication Protocols Working Group (CPWG) is comprised of Illinois utilities, Retail Electric Suppliers (RESs), customers, and Illinois Commerce Commission (ICC) staff. This chapter describes the following aspects of this communication method:

- What electronic data exchange is
- How ComEd uses EDI over the Internet
- RES requirements for electronic transactions
- Electronic transaction sets and their use

The posting of information on the ComEd web site is also covered in this chapter.

Most of the requirements and procedures described here result from the Communication Protocols Working Group, which has responsibility for developing common electronic data exchange standards for utilities and RESs operating in Illinois.

**Documentation:**

<table>
<thead>
<tr>
<th>Document</th>
<th>Where Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDI Trading Partner Agreement</td>
<td>ComEd’s Electric Supplier Services Department (ESSD)</td>
</tr>
<tr>
<td>EDI Implementation Guides</td>
<td><a href="http://www.choiceinillinois.com">www.choiceinillinois.com</a></td>
</tr>
<tr>
<td>EDI Certification Test Scripts for ComEd</td>
<td><a href="http://www.choiceinillinois.com">www.choiceinillinois.com</a></td>
</tr>
<tr>
<td>EDI Implementation Guides for ComEd inbound SBO 810 and outbound SBO 820</td>
<td><a href="https://www.comed.com/MyAccount/MyService/Pages/RESResources.aspx">https://www.comed.com/MyAccount/MyService/Pages/RESResources.aspx</a></td>
</tr>
</tbody>
</table>
Chapter 5
Retail Electric Suppliers Handbook

**ELECTRONIC DATA INTERCHANGE**

Some information exchanged include customer enrollment and drop requests and responses, historical summary data, meter status changes, monthly meter usage, and bill-ready invoice data and payments. Given the volume of data that is exchanged, automated electronic processes are the best means of handling these transactions in a timely manner.

Definitions of the following key concepts relating to electronic data exchange can be found in Chapter 1:

- Electronic Data Interchange (EDI)
- EDI Transaction
- EDI Transaction Set
- Electronic Funds Transfer (EFT)
- Trading Partner
RES REQUIREMENTS

RESs must fulfill the following requirements to ensure that they can perform electronic transactions with ComEd:

- Obtain a Dun & Bradstreet number
- Sign an EDI Trading Partner Agreement with ComEd
- Establish EDI capability
- Establish EFT capability, as applicable
- Establish appropriate computer operations procedures
- Complete the EDI testing program

❖ Obtain Dun & Bradstreet Number

Each RES is required to obtain a Dun & Bradstreet number (DUNS) for use on all EDI transactions with ComEd. The DUNS number is a common company identifier in EDI and global electronic commerce transactions. The DUNS+4 number allows for additional identifiers for the company, allowing suppliers to have multiple unique DUNS+4 and ARES ID numbers, but retain the same supplier name. A DUNS number can be obtained by calling 1-877-753-1444 or by visiting Dun & Bradstreet’s website at www.dnb.com.

❖ Sign EDI Trading Partner Agreement with ComEd

A RES doing business with ComEd must execute an Electronic Data Interchange (EDI) Trading Partner Agreement. This agreement lays out the requirements and responsibilities of both the trading partner and ComEd with respect to electronic data exchanges. The EDI Trading Partner Agreement is executed during the RES certification process with ComEd, along with the other applicable agreements. A ComEd ESSD Account Manager assists the RES in executing this agreement.

❖ Establish EDI Capability

ComEd’s method of communication for EDI is the Internet. ComEd requires the trading partner to complete EDI certification testing to qualify the Trading Partner in the use of Internet for EDI communication.
Establish Electronic Funds Transfer (EFT) Capability

This is required for RESs taking service under Rider SBO – Single Bill Option (SBO) or Rider PORCB – Purchase of Receivables with Consolidated Billing (PORCB)

RESs taking service under Rider SBO in order to provide the billing of ComEd’s delivery service must remit funds paid by customers for ComEd services using EFT. RESs must provide an electronic file matching the ComEd-defined format of detailed billing account numbers, associated payment amounts, and receipt and processing dates associated with the remittance of EFT transactions. An EFT is accompanied by a remittance advice (EDI 820). The ComEd ESSD Account Manager coordinates the set up or change of EFT capability with the RES if the RES is taking service under the Rider SBO and places its customer(s) on single bill option.

For each RES taking service under Rider SBO ComEd requires the RES complete EDI tests for customer invoices (EDI 810) and customer remittances (EDI 820). ComEd expects all customer remittances from RESs to be made through ComEd’s bank using EFT with the remittance advice (EDI 820). The EFT and EDI 820 must be sent to ComEd through ComEd’s bank.

For each RES taking service under Rider PORCB, ComEd requires the RES complete EDI certification testing for PORCB, including sending ComEd a Bill Ready UCB invoice (EDI 810), receiving a UCB/POR Remittance Advice (EDI 820) and Application Advice (EDI 824) from ComEd and receiving EFT payments from ComEd’s bank (“penny test”).

Complete EDI Testing Program

Testing Requirements

ComEd requires each trading partner to successfully complete a series of EDI certification tests for each of the transaction scenarios used by ComEd. Successful completion of these tests ensures that the trading partners can properly communicate electronically via EDI. The tests also ensure that the EDI translators and computer applications can create, send, receive, and respond to messages appropriately.

ComEd created EDI testing scripts that are available on the CPWG web site at www.choiceinillinois.com. The ComEd outbound SBO 810 and Inbound 820 Implementation Guides specific to ComEd can be found on the ComEd website.
PERFORMING EDI TRANSACTIONS

Electronic Data Interchange (EDI)

Many types of transactions are performed repeatedly by all utilities and trading partners in Illinois. Because of this, the Illinois Communications Protocol Working Group (CPWG) established standard processes (Illinois EDI Standards) for handling these transactions via EDI. ComEd’s EDI transactions with RESs are specified by the Illinois EDI standards (except for SBO 810 and 820 transactions which are covered later in Chapter 5). The EDI Implementation Guides describing these standards can be found on the CPWG website: www.choiceinillinois.com

Click on the link to the “Illinois EDI Implementation Guides” to find the Implementation Guides ComEd uses, which are posted under the “Ameren and ComEd” column. The following highlights the information provided by the EDI standards. The listing is organized by transaction set. Because the list is not inclusive, it is important to review the Illinois EDI Implementation Guides on the CPWG website. The EDI Implementation Guides include a Notes page summarizing the transaction and examples of the transaction format. Be sure to note differences denoted for ComEd and Ameren utilities.

Transaction Sets

The following chart shows the transaction sets used by ComEd to communicate with a RES:

<table>
<thead>
<tr>
<th>Transaction Set</th>
<th>Use</th>
<th>To/From</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDI 814</td>
<td>Customer enrollments and account maintenance, including drops, rescinds, changes, reinstatements, and requests for historical data</td>
<td>From ComEd and trading partner</td>
</tr>
<tr>
<td>EDI Inbound 810</td>
<td>Bill-ready invoice data</td>
<td>To ComEd (Rider PORCB only)</td>
</tr>
<tr>
<td>EDI Outbound 810</td>
<td>Bill-ready invoice data</td>
<td>To trading partner (Rider SBO only)</td>
</tr>
<tr>
<td>EDI Inbound 820</td>
<td>Remittance advice</td>
<td>To ComEd (Rider SBO only)</td>
</tr>
<tr>
<td>EDI Outbound 820</td>
<td>UCB/POR remittance advice</td>
<td>To trading partner</td>
</tr>
<tr>
<td>EDI 867</td>
<td>Monthly meter reading and usage</td>
<td>To trading partner</td>
</tr>
<tr>
<td>EDI 824</td>
<td>Application advice</td>
<td>From ComEd and trading partner</td>
</tr>
<tr>
<td>EDI 997</td>
<td>Functional acknowledgement (i.e., that the transaction was received)</td>
<td>From ComEd and trading partner</td>
</tr>
</tbody>
</table>
Chapter 5
Retail Electric Suppliers Handbook

❖ EDI 997 Functional Acknowledgement

The EDI 997 is a functional acknowledgement of an EDI transaction. It is automatically created when a transaction is processed through the EDI translator and may indicate acceptance (data is valid EDI syntax) or rejection (invalid EDI syntax). The EDI 997 does not indicate that the data itself is valid; rather it verifies compliance with EDI standards. The EDI 997 is generated for all transactions and establishes an audit trail of the transactions by both ComEd and the trading partners.

❖ EDI 814 Request or Response

These transaction sets are used to communicate enrollment information as well as other customer relationship information. The EDI 814 transaction sets are two-way transactions. An EDI 814 request (or notification) requires that an EDI 814 response be sent back to the originator of the request. Some examples of EDI 814 transactions are:

- Request/Response to a customer enrollment
- Notify/Acknowledge a drop in service (RES drop or account final)
- Notify/Acknowledge a rescind of pending drop or pending enrollment
- Notify/Acknowledge a reinstatement of service
- Notify/Acknowledge changes in customer information
- Request for historical summary data or interval data

Some change requests may be initiated by the RES, for example a change in RES account number. Change requests used by both the RES and ComEd include bill option. Many other change requests will be initiated by ComEd. See the EDI 814 Change Request Implementation Guide for examples and additional information.

EDI Historical Usage Request

If a RES submits an 814 historical interval usage data request ComEd will send an 814 response containing a link to the interval data. For an account that does not have interval meters, an 867 response with historical summary data will be provided. Refer to the EDI 814 Historical Usage Request Implementation Guide for more information.

EDI 814 Drop

RESs must submit an enrollment rescission and drop rescission (cancel drop) request via an EDI 814D Drop for pending switches. This may only be submitted by the RES that submitted the enrollment or drop request. Refer to the EDI 814 Drop Implementation Guide for the code to use for a rescind request as well as other information related to drop transactions.

Rejection Reason Codes for DASRs.

When enrollment or drop DASRs are rejected, the sender is notified via an 814 response and the appropriate reason code is provided. Rejection reason codes can be found in the EDI Implementation Guides.
Chapter 5  
Retail Electric Suppliers Handbook

❖ **EDI 867 Meter Reading and Usage**

ComEd uses the EDI 867 transaction set to provide historical summary data upon receipt of an EDI 814- historical usage request and to provide monthly usage for all residential and non-residential customers regardless of the bill option. Examples of EDI 867 transactions include the following:

- Provide historical summary data for non-interval meters (see Chapter 3 – Information About and For Residential and Non-residential Customers)
- For any customer, provide current billing usage.
- In the event of a cancel/rebill, multiple 867’s can be sent out for a single account in a single day.

❖ **EDI 810 Invoice - Bill Ready UCB**

Under bill ready Utility Consolidated Billing (used in ComEd’s Rider PORCB bill option) the RES calculates its charges and sends them to ComEd. ComEd includes the RES charges with its delivery service charges on one bill to the customer. ComEd only supports bill ready consolidated billing. The 810 transaction set has a cross reference number that ties it to the corresponding EDI 867 and 820 transactions. If ComEd cancels and rebills usage, the RES’ charges are automatically cancelled. ComEd will send an 867 cancel but there is not an 810 cancel. The RES can cancel and rebill its charges by sending an 810 cancel and then an 810 reissue. The cancel must be sent first otherwise the reissued 810 will be rejected. An 810 cancel can be sent by the RES at anytime. If the RES sends an 810 reissue outside the 3 day shelf period, ComEd will reject the 810. The RES will have to wait until the next open shelf period to send that 810. The supply charges on a cancelled 810 are displayed as an “Adjustment” in the Miscellaneous section of the ComEd bill. There can be only 7 charge line items plus one line item displaying the total charges on the 810. Charge line items can be negative, but the total line item must be positive. If zero, it must be in the 0.00 monetary format, otherwise the transaction will be rejected. The maximum number of 810s that will be processed for one account each day is 24. RESs can submit up to two (2) messages, each 80 characters in length. Refer to the EDI 810 Invoice Bill Ready UCB Implementation Guide for additional information.

❖ **EDI Outbound 820 UCB/POR Remittance Advice**

The 820 UCB/POR Remittance is used to transmit payment information from ComEd to the RES under Rider PORCB. Unlike the inbound 820 for SBO, the outbound 820 is not attached to the ACH payment to the bank. The 820 is sent to the RES’ EDI vendor. The payment is sent by ComEd’s bank to the RES bank. The 820 transaction set has a cross reference number that ties it to the corresponding EDI 810 and 867 transactions. Multiple accounts can be included on a single 820. The 820 specifies the invoiced amount for each account (matches amount in the 810), the discount amount for each account and the account payment (reflecting the discount). The total payment in the 820 sums the individual account payments. 820 remittance advices are sent everyday. If an 820 is negative for one day, the negative value will not be sent. The negative amount will be deducted from the next day’s 820 amount. The 820 payment to the RES is made net 32 days of bill issuance. Refer to the EDI 820 UCB/POR Remittance Advice Implementation Guide for additional information.
**EDI 824 Application Advice**

The 824 Application Advice is used by ComEd to confirm that RES charges were billed or if there is a problem with a UCB/POR related transaction. When ComEd bills the customer for the amount the RES sent on the 810, an 824 is sent confirming that RES charges were billed. The 824 also notifies the RES that no current charges were included on the customer’s bill, for example when the 3 day shelf period closes and ComEd has not received an 810. The 824 is also used to notify the RES or ComEd of rejected 867, 810 and 820 transactions.

The following examples show when the 824 Application Advice will be used:

- RES Rejects 867 Usage transaction
- RES or Utility Rejects 810 Invoice
- RES Rejects 820 UCB Remittance Advice (single account or entire transaction)
- RES Charges Disputed – Utility Rejects Bill Ready 810
- Notification of No Current RES Charges – when the bill window closes and ComEd has not processed an 810 Bill Ready Invoice for the current period, ComEd will notify the RES that No Current RES Charges were included on the customer’s bill.
- Confirmation of RES Charges Billed – When the Utility bills the customer, and the RES charges are included, the Utility will provide details to the RES for each Bill Ready Invoice that was included on the customer’s bill. The Utility will also send this transaction to confirm that RES charges were cancelled.

Refer to the EDI 824 Application Advice Implementation Guides for additional information.

**Cross Reference Number**

The cross reference number (CRN) is used to tie together corresponding 867, 810 and 820 transactions. The 867 initially specifies the CRN. The CRN then appears in the 810 Invoice (Bill Ready). It is important that the correct CRN number be provided on the EDI Inbound 810 from the RES. An incorrect CRN number can result in a rejection of the EDI Inbound 810 causing the RES to miss the shelf period. The CRN is provided in the 820 Remittance transactions for UCB/POR. The 824 Application Advice also includes the Cross Reference Number.

**EDI 810 (Bill Ready) Invoice for SBO**

ComEd uses the EDI 810 transaction to transmit ComEd delivery service billing information to RES who have elected Rider Single Bill Option (SBO). The RES includes ComEd’s delivery service charges with its supply charges on a single bill to the customer. The ComEd outbound 810 includes a lighting component box and a deferred payment agreement box and is Illinois Administrative Code 410.210 compliant (note: this Administrative Code is applicable to both utilities and RESs). The billing data ComEd sends on the 810 is required to be presented to the customer; data items are not optional for presentment. The 810 Invoice – Single Bill Option EDI Implementation Guide can be found on the CPWG website (www.choiceinillinois.com).
Chapter 5
Retail Electric Suppliers Handbook

- **EDI Inbound 820 Remittance Advice for SBO**

  The 820 SBO remittance is used to transmit payment information from the RES to ComEd under Rider SBO. The inbound 820 is attached to the ACH payment from the RES’ bank to ComEd’s bank. ComEd’s bank separates the 820 remittance from the payment and sends the 820 to ComEd’s EDI vendor. The 820 provides a detailed listing of payments by customer account as well as the ACH payment amount and the trace number of the payment. The total dollar amount in the 820 must match the sum of the individual account payments in the 820. Account payments cannot be negative, and all amounts (including zero amounts) must be in the monetary format (zero amount must be 0.00). The EDI Implementation Guide for the 820 SBO Remittance guide can be found on the Retail Electricity and Metering page on ComEd’s website www.comed.com.

- **Change-control Process**

  The CPWG was created in 1998 to promote consistent EDI communications among Customer Choice trading partners in Illinois. It established a rigorous change-control process to ensure that all changes to the implementation guides and all trading partners in Illinois implement data dictionaries at the same time. The change-control process ensures consistency in EDI transactions.
Chapter 5
Retail Electric Suppliers Handbook

EDI PROCESSING EXCEPTIONS

The EDI transactions described in this chapter are designed to provide standard, automated methods for exchanging data between trading partners. ComEd also recognizes that unforeseen circumstances may arise that requires a trading partner to use manual processes in lieu of the standard electronic processes. For instance, the emergency DASR process as described in Chapter 4 Customer Switching and Direct Access Service Requests.

❖ Non-transactional Data

Some types of data are provided for informational purposes only and are not transaction based; therefore not part of the EDI data transfers. ComEd stores this information on its web site, www.comed.com. The data may include, but may not be limited to, the following:

- Load profile information (generic and settlement)
- ComEd scheduled meter reading calendars
- ComEd rates and tariffs

This web site is updated in a timely manner as the information changes.