# Data Exchange and Protocol Process Flows for Electric Deregulation in The State of New Jersey

Prepared by:
**The Consumer Process Working Groups**
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**Version 1.0 Notes**

The intent of this Data Exchange and Protocol Process Flow report is to document the process flows required to support Electric Deregulation. Combined with the Implementation Guides and Data Dictionaries, this represents the documentation required to understand and implement the EDI standards.

This report was created from a similar document in Pennsylvania. There are a few terms that have varied between the states. In this document, the acronyms have been changed, but some of the terms that appear are the ones that were used in Pennsylvania.

- In New Jersey,  Local Distribution Company (LDC) is the same as Electric Distribution Company (EDC) in Pennsylvania
- In New Jersey,  Third Party Supplier (TPS) is the same as Electric Generation Supplier (EGS) in Pennsylvania

**Completed and in Progress Standards**

| Name | Description |
|---|---|
| 814 Enrollment Request | Data Dictionary and EDI Standards |
| 814 Enrollment Response | Data Dictionary and EDI Standards |
| 814 Drop Request | Data Dictionary and EDI Standards |
| 814 Drop Response | Data Dictionary and EDI Standards |
| 814 Change Request | Data Dictionary and EDI Standards |
| 814 Change Response | Data Dictionary and EDI Standards |
| 814 Historical Usage Request | Data Dictionary and EDI Standards |
| 814 Historical Usage Response | Data Dictionary and EDI Standards |
| 814 Reinstatement Request | Data Dictionary and EDI Standards |
| 814 Reinstatement Response | Data Dictionary and EDI Standards |
| 867 Monthly Historical Usage | Data Dictionary and EDI Standards |
| 867 Monthly Usage | Data Dictionary and EDI Standards |
| 810 Billing (Bill Ready) | Data Dictionary and EDI Standards |
| 810 Billing (Rate Ready) | Data Dictionary  and EDI Standards |
| 867 Interval Usage | Data Dictionary and EDI Standards |
| 820 Payment and Remittance | Data Dictionary and EDI Standards |
| 568 Collections | Data Dictionary and EDI Standards |
| 824 Notification | Data Dictionary and EDI Standards |
| 248 Write-offs | Account Write-off Data Dictionary and EDI Standards |

# 1. Business Relationships

These relationships as described herein are intended to serve as a general guide for the purpose of establishing information standards. In order to establish a set of mutually agreed upon standards, there first must be a mutual understanding of the business relationships to which the standards will be applied in accordance with the Board's orders. The following represents the current understanding of these relationships.

It should be noted that in an effort to remain consistent with the Utility Industry Group's terminology, and for the purposes of this document, the term enrollment is used for the transaction involving a customer signing up or canceling generation services from an Electric Generation Supplier (TPS).

**Customers will:**
♦ Give authorization for enrollment.
♦ Be responsible for evaluating and securing services from TPS.
♦ Be responsible for notifying the TPS and/or Electric Distribution Company (LDC) for any concerns regarding energy supply.
♦ Notify LDC of move or disconnect.

**Electric Generation Suppliers (TPS's) will:**
♦ Obtain authorization from customers for customer enrollment and release of historical usage information.
♦ Exchange information electronically with LDC for enrollment, changes or discontinuance of service, etc.
♦ Render bills for service when a customer selects separate bills.
♦ Provide the LDC with the necessary billing information when the customer selects one bill.
♦ Resolve customer payment problems for relevant TPS charges.
♦ Maintain records on customer payments and fees.
♦ Participate in electronic systems testing as defined herein.
♦ Provide a point of contact to facilitate business and technical communications.
♦ Abide by applicable rules issued by the Board.
♦ Implement and maintain data transmission standards as recommended within this document.
♦ Communicate and resolve customer disputes.

**Electric Distribution Companies (LDC's) will:**
♦ Provide customers with the Board's list of TPS's as per Board orders.
♦ Exchange information electronically with TPS for enrollment, changes or discontinuance of service, etc.
♦ Maintain an Internet site for customer choice information for access by licensed suppliers.
♦ Release rate class load profiles to TPS's where available.
♦ Provide billing information to TPS's.
♦ Provide customers with the bill option that has been communicated by the TPS's.
♦ Provide a point of contact to facilitate business and technical communications.

- ♦ Implement and maintain data transmission standards as recommended within this document.
- ♦ Provide beginning and ending meter readings as well as kilowatt-hour consumption, and demand information (if appropriate) to the TPS.
- ♦ Provide customer payment data on behalf of the TPS to the TPS when not making the other party whole.
- ♦ Forward funds collected on behalf of the TPS to the TPS in accordance with each LDC supplier agreement.
- ♦ When "making the other party whole" as defined in section 3.E. herein the LDC will forward funds to the TPS within a set number of days of receipt of billing data as defined in their LDC supplier agreement.
- ♦ Communicate and resolve customer disputes.

## 2. Electronic Data Interchange Concepts and UIG Standard Formats

The Data Exchange and Protocol Working Group was charged with establishing practical, operational, electronic standards for the transaction of business between LDC's and TPS's for the implementation of Customer Choice in New Jersey. After consideration of standards that are available and those being used by other states, the DEPWG, by consensus, recommends the use of ASC X12 Electronic Data Interchange (EDI) Standards using a subset of Utility Industry Group (UIG) guidelines as outlined in published Implementation Guides and Data Dictionaries.

### What is EDI?

Electronic Data Interchange (EDI) is the computer to computer exchange of business documents in standard, machine-readable formats. The following diagram depicts a simple example of a one-way exchange using EDI for customer billing information:

**Note:** *In this chart, EDC equates to LDC (Distribution Company) and EGS equates to TPS (Generation Supplier).*
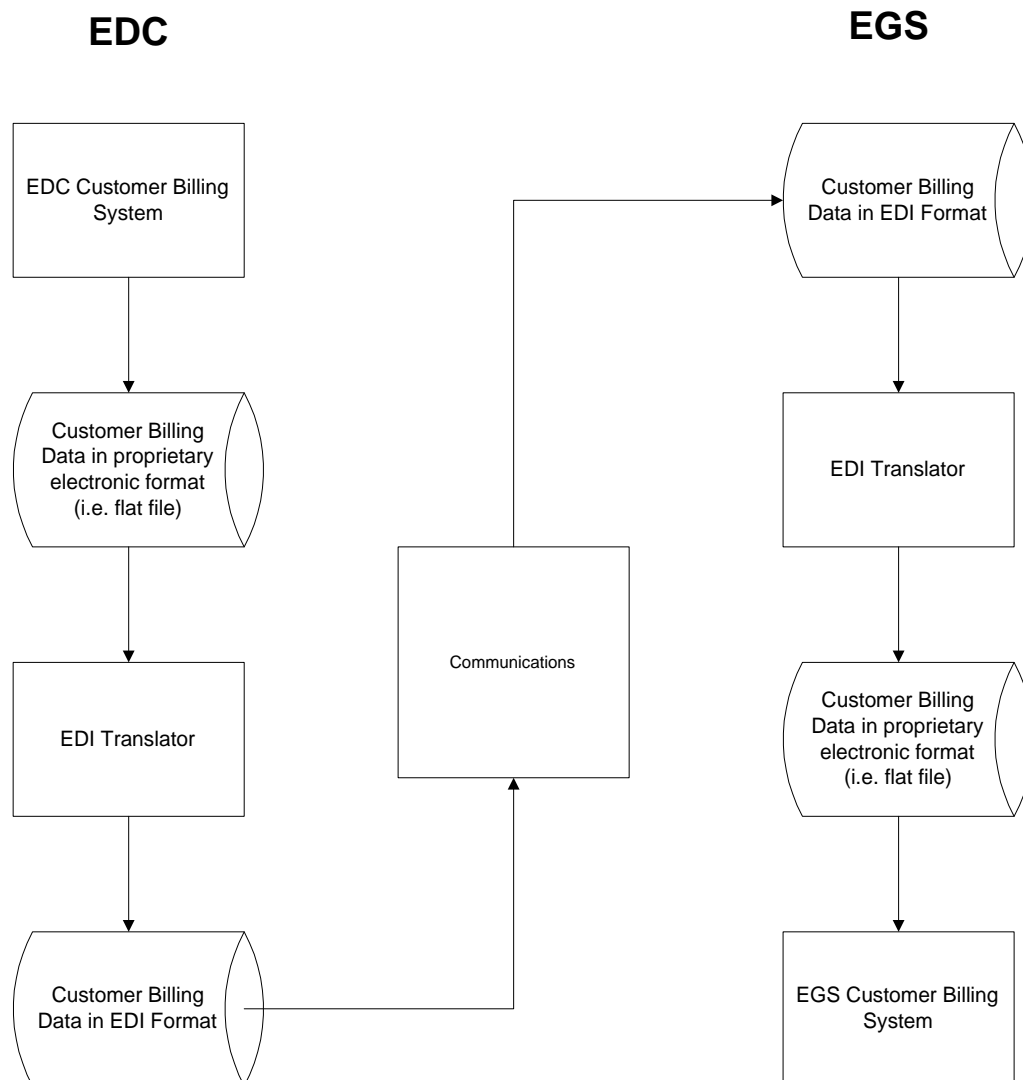
The use of standard formats will allow all parties to develop the business processes and automated systems needed to facilitate the exchange of business information in the restructured electric industry.

Proven benefits of EDI include:
- ♦ Uniform communications with trading partners
- ♦ Reduced errors, improved error detection
- ♦ Better auditability and control
- ♦ More timely communications
- ♦ Rapid exchange of business information
- ♦ Reduced paperwork and associated costs
- ♦ One time data entry
- ♦ On-line data storage
- ♦ Faster management reporting
- ♦ Reduced clerical workload

**What is ASC X12?**

The American National Standards Institute (ANSI) chartered the Accredited Standards Committee (ASC) X12 to develop uniform standards for inter-industry electronic interchange of business transactions.  ASC X12 develops, maintains, interprets, publishes and promotes the proper use of American National Electronic Data Interchange Standards. The X12 standards facilitate transactions by establishing a common, uniform business language for computers to communicate.

**What is the UIG?**

The Utility Industry Group (UIG) is an industry action group dedicated to the advancement of EDI within the electric, gas, and combination utility industry.  The UIG encourages, promotes, and establishes implementation conventions for the use of ASC X12 standards as the recommended method of EDI, in order to promote the growth and timely implementation of EDI within the utility industry.   The UIG also provides a forum for the exchange of ideas related to Electronic Commerce/EDI and its influence on the business needs of the industry.

The effectiveness of an industry's EDI program depends on how well the accepted standards support that industry's specific needs. For the electric and combination utility industry those needs are being addressed, within the ASC X12 standards, by the active involvement of the Utility Industry Group.  The UIG represents the Edison Electric Institute (EEI) on the ASC X12 committee to facilitate implementation of EDI in the utility industry.

The UIG does not set standards. It participates in the ASC X12 process that sets the cross-industry standards.  The UIG provides guidelines that assist utilities using these standards to benefit more fully from EDI.  UIG membership is open to electric and combination utilities, their customers, suppliers and supplier group representatives.

**What Transaction Sets will be used?**

Transaction Set is an EDI term for a business document, such as an invoice. There are a number of EDI transaction sets that will be used to transact business in New Jersey for Customer Choice. They are defined below.

### 814 General Request, Response or Confirmation

ASC X12 definition, "This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed."

In New Jersey, this transaction set will be used to communicate enrollment information in addition to customer/TPS relationship information between the LDC and the TPS. Each 814 request requires an 814 response. The following scenarios have been addressed:

A. Enrollment (Supplier Selection)
   1. Customer Contacts TPS to Initiate TPS Selection
   2. Customer Contacts New TPS to Switch TPS's
   3. Customer Contacts LDC to Reverse a TPS Selection
   4. Customer Contacts LDC to Drop a TPS
   5. Customer Contacts TPS to Drop TPS
   6. TPS Drops Customer
   7. Customer Contacts LDC to Reverse a Customer Initiated Drop

B. Customer Account Maintenance
   1. Customer Contacts LDC to Relocate
   2. Customer Data Changes from LDC
   3. Customer Data Changes from TPS

C. Historical Usage Requests
   1. TPS Request Historical Usage for an Eligible Customer to other than Supplier of Record
   2. TPS Requests Historical Usage as part of or after Enrollment (Supplier Selection)

### 810 Invoice – Between Electric Generation Suppliers and Electric Distribution Companies

ASC X12 definition, "The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided."

In New Jersey, the 810 will provide applicable monthly usage and billing components, and charges used to generate actual customer invoice. The following scenarios have been addressed:

**Customer Billing Scenarios**

    **Statewide Billing Scenarios:**

1. LDC Consolidated Billing (Rate Ready)
2. LDC Consolidated Billing (Bill Ready)
3. Dual Billing (No 810 Necessary)

**Unbundled Billing and Metering Scenarios**

**Note:** *These processes will not be used in New Jersey during the first year of Competition*

    **867 Product Transfer and Resale Report**

    ASC X12 definition, "The transaction set can be used to: (1) report information about product that has been transferred from one location to another, (2) report sales of product from one or more locations to an end customer, or (3) report sales of a product from one or more locations to an end customer, and demand beyond actual sales (lost orders). Report may be issued by either buyer or seller."

    In New Jersey, the 867 will provide customer usage information needed for billing for all customers regardless of the billing scenario.  This transaction set will also be used to communicate monthly or totalized historical usage from an LDC to TPS.  The following scenarios have been addressed:

1. LDC provides usage history upon request to TPS
2. Transmission of usage information as captured from the meter for both monthly and interval metered data, and unmetered usage for non-metered accounts

    **820 Payment Order/Remittance Advice**

    ASC X12 definition, "The transaction set can be used to make a payment, send a remittance advice, or make a payment and send a remittance advice.  This transaction set can be an order to a financial institution to make a payment to a payee. It can also be a remittance advice identifying the detail needed to perform cash application to the payee's accounts receivable system. The remittance advice can go directly from payer to payee, through a financial institution, or through a third party agent."

    In New Jersey, the billing party will send an EDI 820 to the party on whose behalf they are collecting payment.  The EDI 820 will contain remittance/financial information and credit/credit adjustment information by account, with funds transfers as defined in the LDC Supplier Tariff/Contract.  The following scenarios have been addressed:

**Statewide Scenarios:**

1. LDC Consolidated Billing (Rate Ready)
2. LDC Consolidated Billing (Bill Ready)

3. Dual Billing (No 820 Necessary)

**Unbundled Billing and Metering Scenarios:**

**Note:** *These processes will not be used in New Jersey during the first year of Competition*

### 568 Contract Payment Management Report

ASC X12 definition, "This transaction set can be used to enable the transmission of a management report to provide the details of payments and collections made against funds obligated on contracts, orders, and other services."

In New Jersey, to facilitate payment reconciliation, the following rules apply:
- If the billing party is not making the other party whole (see Section 3. E. for definition), in addition to the 820, they will send an EDI 568 to the party on whose behalf they are collecting, containing collections information by account. However, the 568 is not required if the billing party is remitting payment to the non-billing party within 5 days of receipt of payment.
- If the billing party is making the other party whole, the 568 is optional.

The following scenarios have been addressed:

**Statewide Scenarios:**

1. LDC Consolidated Billing (Rate Ready)
2. LDC Consolidated Billing (Bill Ready)
3. Dual Billing  (No 568 Necessary)

**Unbundled Billing and Metering Scenarios – Customer Receives One Bill**

**Note:** *These processes will not be used in New Jersey during the first year of Competition*

### 248 Account Assignment/Inquiry and Service/Status

ASC X12 definition, "The transaction set can be used for two-way, multi-transactional purposes of assigning accounts for collection, reporting status inquiries and inquiry responses and to update accounts between entities."

In New Jersey, this transaction set will be used by the billing party to notify the party on whose behalf they are collecting that they will no longer pursue remittance activities for the customer's outstanding TPS charges. This transaction is not applicable if the billing party is making the other party whole. When not making the other party whole, it is required when the

billing party is maintaining the non-billing party balance, and optional if the billing party is not maintaining the non-billing party balance. Refer to the Implementation Guide for for what each company's specific plan is.  The following scenario has been addressed:

1.  LDC Provides Consolidated Bill


### 824 Notification

ASC X12 definition, "The transaction set can be used to provide the ability to report the results of an application system's data content edits of transaction sets. The results of editing transaction sets can be reported at the functional group and transaction set level, in either coded or free-form format.  It is designed to accommodate the business  need of reporting acceptance, rejection or acceptance with change of any transaction set."

**Note:** The rules for the use of this transaction in New Jersey will be determined after the 867 and 810 transactions are finalized. This transaction will not be part of the October 1999 implementation of Customer Choice. The implementation timeline is still being determined.

Some **potential** uses of the 824 transaction have been identified. The 824 is designed to either request a resend, or be a notification only. The following situations have been identified and will need to be evaluated:

1.  867 Rejection or Notification
2.  810 Rate Ready Rejection or Notification
3.  810 Bill Ready Rejection or Notification
4.  Bill Ready Bill issued with no supplier charges
5.  *Should we send notification when Bill Ready bill issued with supplier charges?*
6.  248 Rejection or Notification
7.  568 Notification
8.  820 Notification


### 650 Meter Site Profile

**Note:** *These processes will not be used in New Jersey during the first year of Competition*

ASC X12 definition, "This transaction set provides a uniform, singular medium for the exchange of maintenance related information among organizations involved in the reporting, requesting, scheduling, planning, estimating, coordinating and performing of maintenance actions.  It provides the structure to convey maintenance-related information, including maintenance action directives, maintenance actions, cost estimates, maintenance action status, and completion reports."

**997 Functional Acknowledgment**

This functional acknowledgment provides for verification of receipt of data and reports the extent to which the syntax complies with the standards.  This, in addition to the archiving of all EDI transmissions, provides the audit trail necessary to verify receipt of all EDI transmissions by TPS and LDC.  This information may be utilized to resolve customer, LDC, or TPS inquiries or disputes.

**Glossary of EDI Terms**

**Attribute:**  Characteristic of data element or segment.

> *Mandatory (M):* A data element/segment requirement designator, which indicates that the presence of a specified data element/segment is required.

> *Optional (O):* A data element/segment requirement designator which indicates that the presence of a specified data element/segment is at the option of the sending party or is based on the mutual agreement of the interchange parties.

> *Conditional (X):* A data element/segment requirement designator, which indicates that the presence of a specified data element is dependent on the value or presence of other data elements in the segment.

**Data Element:** One or more characters that represent numeric or alphanumeric fields of data.  A related group of elements make up a segment.

**Data Element Separator:** A special character used to separate elements in a segment.

**Delimiter:**  A special character used to separate fields of data.

**Document:**  A transaction set.

**EDI Translator:** Computer software used to perform the conversion of application data to and from the X12 standard format.

**Electronic Data Interchange (EDI):** The computer application to computer application exchange of business information in a standard format.

**EDI Standard/Format:** A format for transmitting business documents between business entities in a non-proprietary environment.

**Electronic Envelope:** An electronic envelope consists of codes that mark the boundaries of electronic documents.  The electronic envelope contains the EDI documents and sender/receiver information.

**Electronic Mailbox:** A term used to refer to the place where an EDI transmission is stored for pick-up or delivery within a third party service system, such as a Value Added Network (VAN).

**Functional Acknowledgment:** A transaction set (997) transmitted by the receiver of an EDI transmission to the sender, indicating receipt and syntactical acceptability of data transmitted according to the ASC X12 standards. The functional acknowledgment allows the receiving party to report back to the sending party any problems encountered by the syntax analyzer as the data is interpreted. It is not intended to serve as an acknowledgment of data content.

**Industry Guideline:** Defines the EDI environment for using conventions within an industry. It provides assistance on how to implement the X12 standard. The Utility Industry Group (UIG) establishes Industry Guidelines for the utility industry.

**Interchange Control Structure:** The interchange header and trailer segments envelope one or more functional groups or interchange related control segments and perform the following functions: (1) define the data element separators and the data segment terminators, (2) identify the sender and receiver, (3) provide control information for the interchange, and (4) allow for authorization and security information.

**Mapping:** The process of identifying the relationship of standard data elements to application data elements.

**Qualifier:** A data element that identifies or defines a related element, set of elements, or a segment. The qualifier contains a code taken from a list of approved codes.

**Segment:** A combination of related data elements in a specific sequence. A segment consists of a segment identifier, one or more data elements, each proceeded by an element separator, and a segment terminator.

**Segment Identifier:** A unique identifier for a segment, composed of a combination of two or three uppercase letters and digits. The segment identifier occupies the first character position of the segment.

**Segment Terminator:** A unique character appearing at the end of a segment to indicate the termination of the segment.

**Trading Partner:** The sending and/or receiving party involved in the exchange of electronic data interchange transmissions.

**Transaction Set:** The EDI term for a business document, such as an invoice.

**Transaction Set ID:** A three digit numerical representation that identifies a transaction set.

**Translation Software:** Software that is used to translate EDI data to a corporate proprietary format and vice versa.

**Value Added Network (VAN):** A service provider providing mailbox access and related services.

**Version/Release:** Identifies the edition of the standard being used for the generation or the interpretation of data in the X12 standard format.

### 3. Data Interchange Transactions

**EDI Transactions**

This section proposes a set of EDI transactions corresponding to the anticipated business relationships described in Section 1. It also defines the transaction rules that govern the use of the transactions.

In cases where other Electric Choice requirements (such as rescission letters to customers) affect our transactions, they are included in these scenarios. There are other Electric Choice requirements not included in these scenarios.

A functional acknowledgment (997) will follow all EDI transmissions. This functional acknowledgment provides for verification of receipt of data and reports the extent to which the syntax complies with the standards. This, in addition to the archiving of all EDI transmissions, provides the audit trail necessary to verify receipt of all EDI transmissions by TPS and LDC. This information may be utilized to resolve customer, LDC, or TPS inquiries or disputes. Functional Acknowledgements can be done at the EDI group, set, and segment levels. Best practice is to send a functional acknowledgement at the segment level for rejected transactions.

Some scenarios also provide for a response to be sent after a request. The response provides for further validation of the contents of the request against the standard and indicates whether the request was successfully processed. The response contains a code indicating whether the request was accepted or rejected. If rejected, the response will also provide a reason(s) why.

### A.      Volunteering

**Note:** *The* **Volunteering** *process will not be used in New Jersey.*

### B.      Enrollment (Supplier Selection)

The following is a list of scenarios and procedures to be followed to ensure proper management of customer Electricity Supplier selections and changes to those selections. Several variations of the EDI 814 transaction are used for these scenarios. A customer contract effective date/time has been included in each variation as a required data element and is critical to assure that the customer is enrolled with the last TPS with which the customer has entered into a contractual relationship.

In all following scenarios, the customer can at any time choose to go back to their Basic Generation Service (BGS). Each LDC may have specific rules that affect a customer's ability to shop if they have returned to BGS. The specific rules that apply to the LDC will be relayed to the customer in their confirmation letter.

# 1. Customer Contacts TPS to Initiate TPS Selection

The following represents the steps necessary for an LDC to process a customer's request for service from a specific TPS when the TPS initiates the request electronically and the customer isn't currently receiving service or doesn't have any pending service with another TPS.  Should the customer contact the LDC to initially enroll with a TPS, the LDC will tell the customer to contact that TPS.

```
                814 Enrollment Request (814E)
  ( TPS )  ------------------------------------>  ( LDC )
           814 Enrollment Response (814E)
           <------------------------------------
                                                         Confirmation
                                                         Letter
                                                              |
                                                              v
                                                        ( Customer )
```
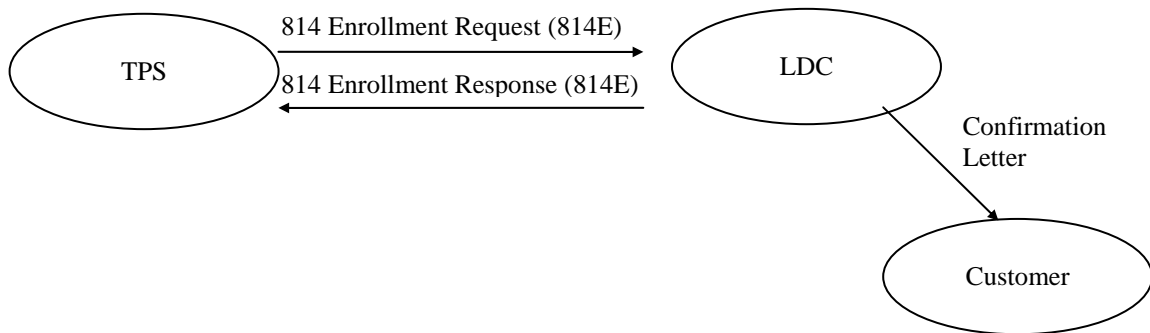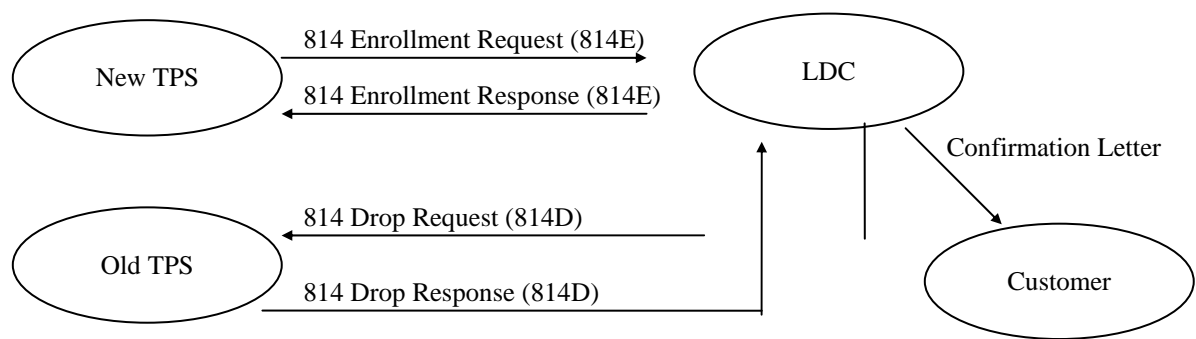
a) TPS sends EDI 814 Enrollment Request (814E) to LDC
   It is assumed that the TPS has obtained authorization from the customer prior to sending their Enrollment.
b) LDC sends EDI 814 Enrollment Response (814E)  to TPS
   If accepted, the response will include the expected start date (anticipated date the customer will start receiving generation from the new TPS) and other information the TPS needs to prepare to do business with that customer.
c) If accepted, the LDC sends the customer a confirmation letter notifying them of their selected TPS and the expected start date. If the customer does not respond within 14 days, the enrollment shall go forward.

The customer's ability to reverse the enrollment begins on the day the confirmation letter was sent.  The customer must contact the LDC to reverse.  This process is described in #3 below.  Should the customer contact another supplier during this period and enter an agreement, the change from the initial supplier to the new supplier will be treated as a switch as described in # 2 below.

# 2. Customer Contacts New TPS to Switch TPS's

The following represents the steps necessary for an LDC to process a customer's request to switch service from a TPS when the customer is currently receiving service from another TPS, or has pending service with another TPS.   In this scenario, the customer must contact the new TPS to initiate the change.  Should the customer contact the LDC to switch to another TPS, the LDC will tell the customer to contact the new TPS.

a)  New TPS sends EDI 814 Enrollment Request (814E) to LDC
       It is assumed that the TPS has obtained authorization from the customer prior
       to sending their Enrollment.
b)  LDC sends EDI 814 Enrollment Response (814E) to New TPS
       If accepted, the response will include the expected start date (anticipated date
       the customer will start receiving generation from the new TPS) and other
       information the TPS needs to prepare to do business with that customer.
c)  If accepted, LDC sends EDI 814 Drop Request to Old TPS
d)  If accepted, the LDC sends the customer a confirmation letter notifying them of
       their selected TPS and the expected start date. If the customer does not respond
       within 14 days, the enrollment shall go forward.
e)  If the Old TPS receives an EDI 814 Drop Request (814D), they will send an EDI
       814 Drop Response  (814D) to the LDC.
       In this case, a rejection should only occur if the old TPS couldn't determine the
       customer to be dropped, either because the customer account number is invalid
       or the customer is not in their system.


The customer's ability to reverse the enrollment begins on the day the confirmation
letter was sent.  The customer must contact the LDC to reverse.  This process is
described in #3 below.  Should the customer contact another supplier during this
period and enter an agreement, the change from the initial supplier to the new
supplier will be treated as another switch.



3.  **Customer Contacts LDC to Reverse a TPS Selection**

After a customer selects a TPS or switches from one TPS to another, the customer
will receive a confirmation letter from the LDC notifying them of the change in their
TPS selection and the effective date. The customer may reverse this selection by
contacting the LDC during the reversal period.  There are two scenarios regarding
reversals:

**1. A reversal of a pending TPS when there is no previous pending TPS. (i.e. a single switch occurred for the customer within a 14 day period)**

If the customer reverses the switch, the corresponding transactions are voided, as if they never occurred.  The customer is returned to their current active supplier, which may be a TPS or Basic Generation Service.

**2. A reversal of a pending TPS when there is a previous pending TPS. (i. e. multiple switches occurred for the customer prior to the end date of the previous reversal period)**

If the customer reverses the switch, the corresponding transactions are voided, as if they never occurred.  The customer is returned to their current active supplier, which may be a TPS or Basic Generation Service.

The following describes the data exchanges needed to process a reversal.
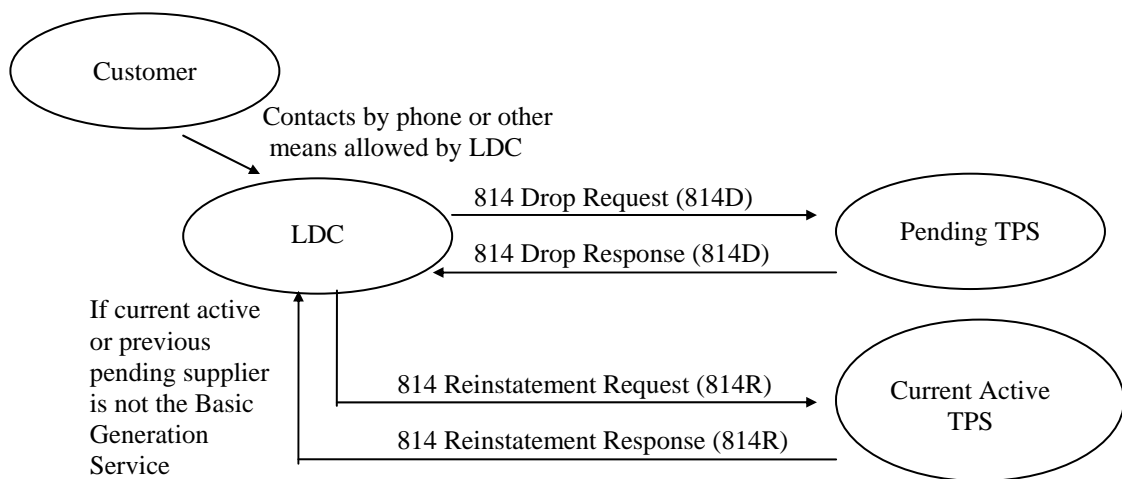


a)  Customer contacts LDC to reverse a TPS selection
b)  LDC sends EDI 814 Drop Request (814D) to Pending TPS
c)  The LDC sends an EDI 814 Reinstatement Request (814R) to the current active TPS
     (If the current active supplier is Basic Generation Service, no further action is required)
d) The TPS receiving a Drop Request sends EDI 814 Drop Response (814D) to LDC.
     A rejection should occur only if the TPS couldn't determine the customer to be dropped, either because the customer account number is invalid or the customer is not in their system.
e) If an EDI 814 Reinstatement Request (814R) was sent, the recipient TPS sends EDI 814 Reinstatement Response (814R) to LDC.
     A rejection should occur only if the TPS could not determine the customer to be reinstated, either because the customer account number is invalid or the customer is not in their system.  If the TPS no longer

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wishes to supply this customer, they must accept this reinstatement, then issue a drop to the LDC as described in #6 below.

## 4. Customer Contacts LDC to Drop a TPS

The following represents the steps necessary for an LDC to process a customer's request to cancel service from a specific TPS when the customer contacts the LDC. In this case, the LDC will return the customer to the Basic Generation Service. If the customer wishes to select another TPS, they must contact that TPS.
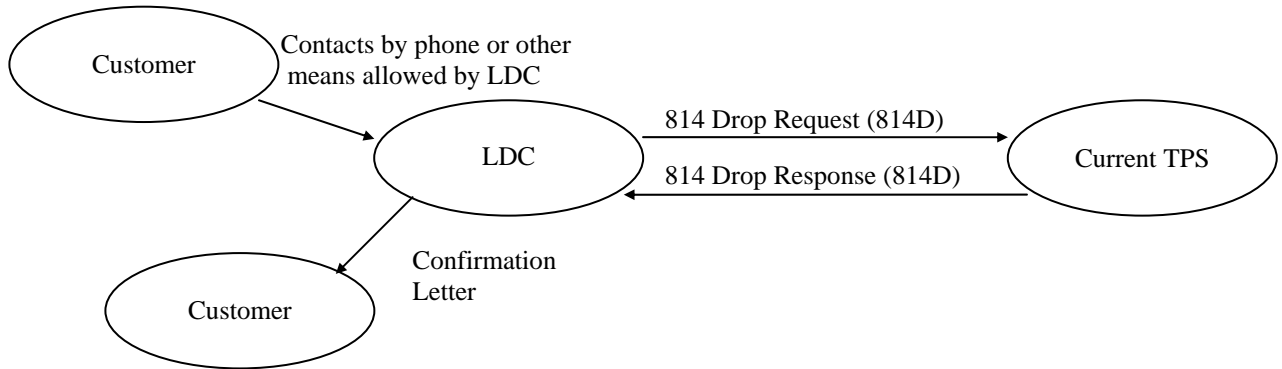


a) Customer contacts LDC to drop TPS
b) LDC sends EDI 814 Drop Request (814D) to TPS
c) TPS sends EDI 814 Drop Response (814D) to LDC
    A rejection should only occur if the TPS couldn't determine the customer to be dropped, either because the customer account number is invalid or the customer is not in their system.
d) LDC sends Confirmation Letter to Customer

The customer's right of reversal begins on the day the confirmation letter was sent. A customer can reverse a drop when the customer contacted the LDC. The customer must contact the LDC to rescind.  This process is described in #3 above.

## 5. Customer Contacts TPS to Drop TPS

The following represents the steps necessary for an LDC to process a customer's request to cancel service from a specific TPS when the customer initiates the request through the TPS. In this case, the LDC will return the customer to the Basic Generation Service. If the customer wishes to select another TPS, they must contact that TPS.

```
  ┌──────────┐  Contacts by phone or other
  │ Customer │  means allowed by TPS
  └──────────┘
        │
        ▼
                   ┌────────┐   814 Drop Request (814D)    ┌────────┐
                   │  TPS   │ ──────────────────────────▶  │  LDC   │
                   │        │ ◀──────────────────────────  │        │
                   └────────┘   814 Drop Response (814D)   └────────┘
                                                                │
                                                     Confirmation
                                                     Letter
                                                                │
                                                                ▼
                                                          ┌──────────┐
                                                          │ Customer │
                                                          └──────────┘
```

a) Customer contacts TPS to drop that TPS
b) TPS sends EDI 814 Drop Request (PA 814D) to LDC
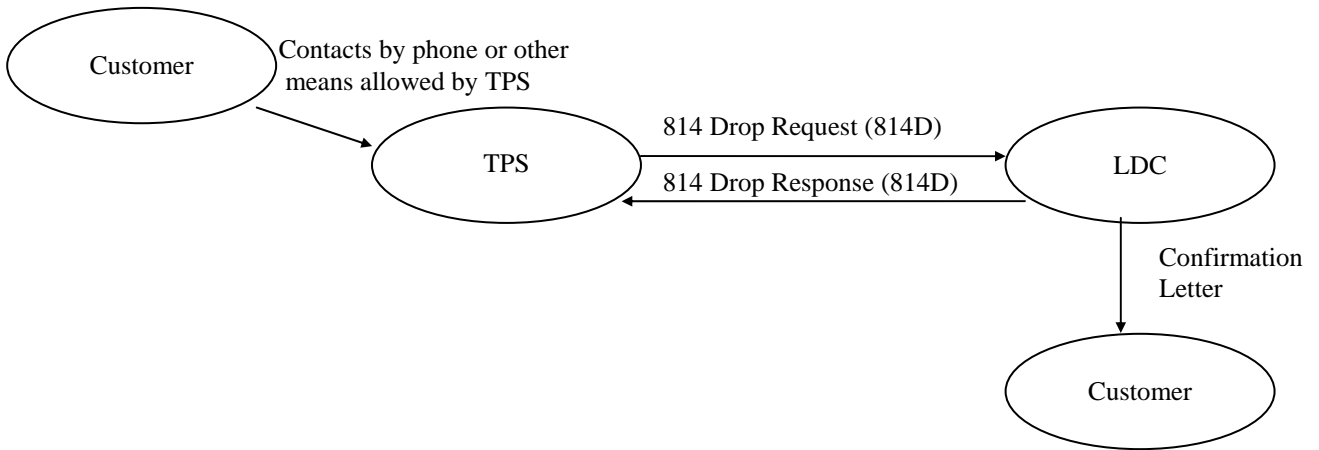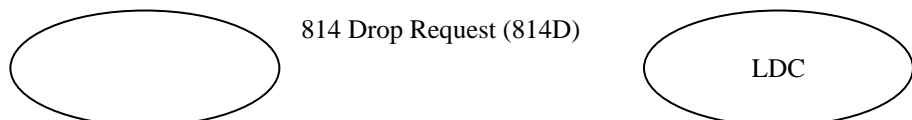c) LDC sends EDI 814 Drop Response (814D) to TPS
   A rejection should only occur if the TPS couldn't determine the customer to be dropped, either because the customer account number is invalid or the customer is not in their system.
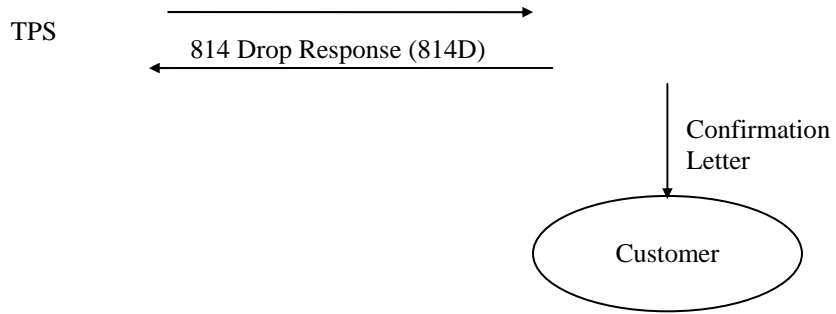d) LDC sends Confirmation Letter to Customer

A customer cannot reverse a drop when it has been initiated through the TPS. Should the customer wish to reinstate the TPS, they must contact the TPS and enter a new agreement. The TPS should then submit an 814 Enrollment Request (814E) as described in #1 above.

## 6. TPS Drops Customer

The following represents the steps necessary for an LDC to process a TPS's request to cancel supply for a customer. In this case, the LDC will return the customer to the Basic Generation Service.
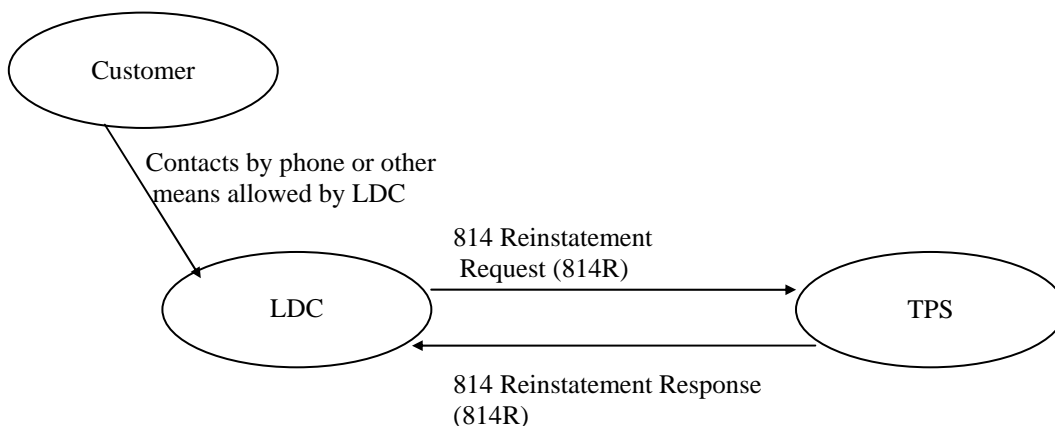
```
  ┌──────────┐   814 Drop Request (814D)    ┌────────┐
  │          │ ──────────────────────────   │  LDC   │
  └──────────┘                              └────────┘
```

TPS

814 Drop Response (814D)

Confirmation Letter

Customer

a)  TPS sends EDI 814 Drop Request (814D) to LDC
b)  LDC sends EDI 814 Drop Response (814D) to TPS
    A rejection should only occur if the LDC couldn't determine the customer to be dropped, either because the customer account number is invalid or the customer is not in their system.
c)  LDC sends Confirmation Letter to Customer

A customer cannot reverse a drop by a TPS.  Should the customer wish to reinstate the TPS, they must contact the TPS and enter a new agreement.  If the TPS accepts the customer, they should then submit an 814 Enrollment Request (814E) as described in #1 above.

## 7. Customer Contacts LDC to Reverse a Customer Initiated Drop

The following represents the steps necessary for an LDC to process a customer's request to reinstate a drop request. In this case, the LDC will return the customer to the supplier of record.



Customer

Contacts by phone or other means allowed by LDC

LDC

814 Reinstatement Request (814R)

TPS

814 Reinstatement Response (814R)

a)  Customer contacts LDC to reverse a Customer Initiated Drop
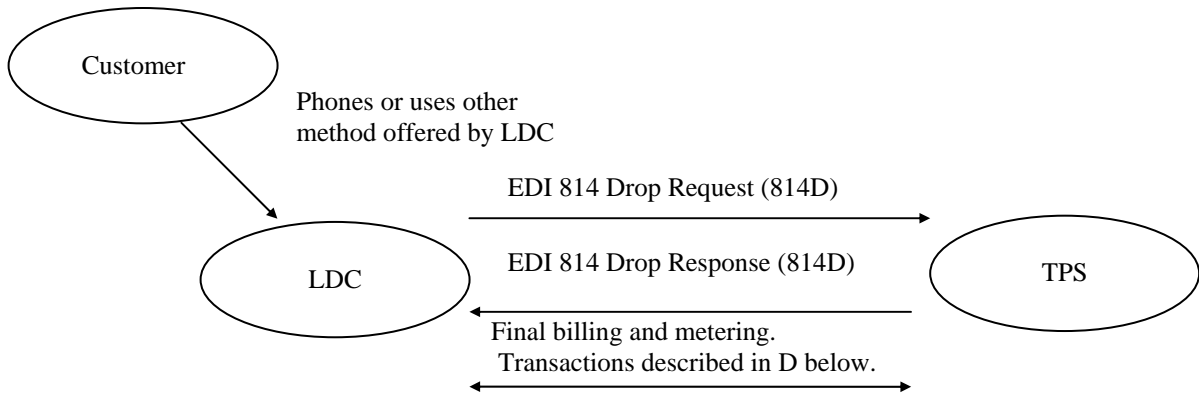b)  LDC sends EDI 814 Reinstatement Request (814R) to TPS

c)  TPS sends EDI 814 Reinstatement Response (814R) to LDC
    A rejection should occur only if the TPS could not determine the customer to be
    reinstated, either because the customer account number is invalid or the
    customer is not in their system.  If the TPS no longer wishes to supply this
    customer, they must accept this reinstatement, then issue a drop to the LDC as
    described in #6 above.

## C.   Customer Account Maintenance

The following scenarios describe changes to a customer's account that require
information exchange between the LDC and TPS.

### 1.  Customer Contacts LDC to Relocate

The following represents the steps necessary to final an account for a customer when
the customer relocates or closes an account. This process will be followed regardless
of whether the customer relocates within or outside of the LDC's service territory.

Customer

Phones or uses other
method offered by LDC

EDI 814 Drop Request (814D)

EDI 814 Drop Response (814D)

LDC

TPS

Final billing and metering.
Transactions described in D below.

a)  Customer contacts LDC to Relocate
b)  LDC sends EDI 814 Drop Request (814D) to TPS
c)  TPS sends EDI 814 Drop Response (814D) to LDC
d)  Final billing and usage information is exchanged between LDC and TPS as
    described in D below.

### 2.  Customer Data Changes from LDC

The following represents the steps necessary for an LDC to notify a TPS of a change
in customer information.

814 Change Request (814C)

LDC

814 Change Response (814C)

TPS
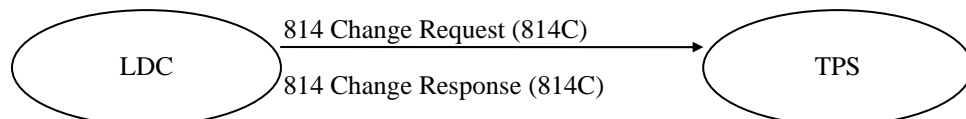
a) LDC sends EDI 814 Change Request (814C) to TPS.
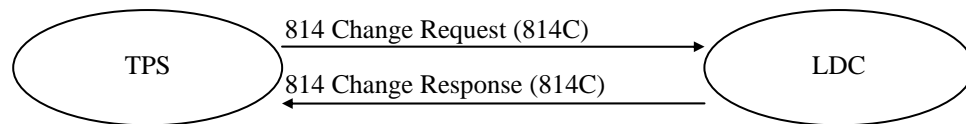b) TPS sends EDI 814 Change Response (814C) to LDC

Initially, the LDC will be required to notify the TPS of the following changes:
- Change in LDC account number
- Change in customer's metering or billing cycle
- Change in Capacity Obligation
- Change in Transmission obligation

The LDC may notify the TPS of other changes also. These changes will be prioritized by the Board and the Working Groups, and are documented in the Implementation Guide for the 814 Change transaction.

## 3. Customer Data Changes from TPS

The following represents the steps necessary for an LDC to process a request to change customer information when it is initiated by the TPS.



a) TPS sends EDI 814 Change Request (814C) to LDC.
b) LDC sends EDI 814 Change Response (814C) to TPS.

The TPS may send a "change" transaction to the LDC for the following items:
- TPS Account number
- Tax exemption percent (Rate Ready only)
- Billing option
- Supplier Rate code (Rate Ready)

**D.    Customer Billing Scenarios**

The EDI 867 transaction is used to transmit usage information as captured from the meter for both monthly and interval metered customers. The EDI 867 is also used to transmit unmetered usage for non-metered accounts. The EDI 867 must be sent in all cases. For monthly metered customers, an EDI 867MU will be sent.  For interval metered customers, an EDI 867IU will be sent.   The EDI 867MU and EDI 867IU must contain billing summary information. Once the metering party implements Interval Data, the EDI 867IU will also contain interval values with the following rules being met (as a minimum):

♦   Actual Hourly KW Demand by Account is provided. (For a customer account with multiple meters the data will be combined).
♦   Each interval data will be date and time stamped. Intervals will be estimated where data gaps exist and will be so marked.
♦   Interval data will be bill quality.
♦   Interval readings will be raw meter data at the minimum interval that is bill quality.

**Note:** The charts below state EDI 867 Usage. It is assumed for interval meters, this will be an EDI 867IU, and for non-interval meters and unmetered, and EDI 867MU.

The EDI 810 transaction is used to transmit monthly usage and billing components used to generate a customer invoice.  The following is a list of scenarios and procedures to ensure proper sharing of billing, sales tax, and consumption information. The scenarios incorporate the possibility of either the LDC or TPS doing any of the following: metering, calculating the bill, or providing a bill to the customer.

The scenarios below use the terms "Bill Ready" and "Rate Ready".
•        "Bill Ready" means the company doing the billing receives calculated results from the other party for the other party's charges and prints them on a consolidated bill.
•        "Rate Ready" means the company doing the billing knows the rates of the other party, calculates the other party's charges, and prints them on a consolidated bill.

Under all of the scenarios listed below, when a customer receives a final bill or a final meter reading the EDI 810 and/or EDI 867(future addition) should indicate final.

Under all consolidated billing scenarios below, when the billing party is converting the customer from the consolidated bill to a dual bill option for non-payment, the billing party transmits an EDI 814 change to the non billing party and a letter of notification to the customer.

**NJ Statewide Billing Scenarios - Customer Receives One Bill**

**1.  LDC Consolidated Billing  (Rate Ready)**

   LDC reads meter, LDC calculates both LDC and TPS charges,

LDC provides a consolidated bill to customer
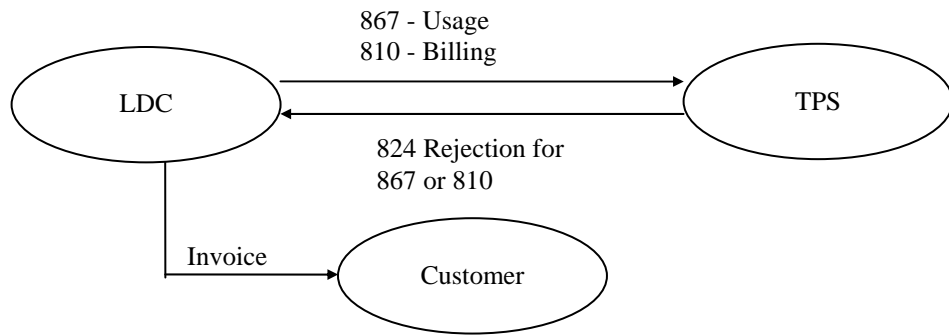


a) LDC sends EDI 867 Usage Data to TPS
b) TPS may send 824 Rejection of 867 information to LDC if needed
c) LDC sends EDI 810 Billing to TPS
d) TPS may send 824 Rejection of 810 information to LDC if needed
e) LDC invoices customer

## 2. LDC Consolidated Billing  (Bill Ready)
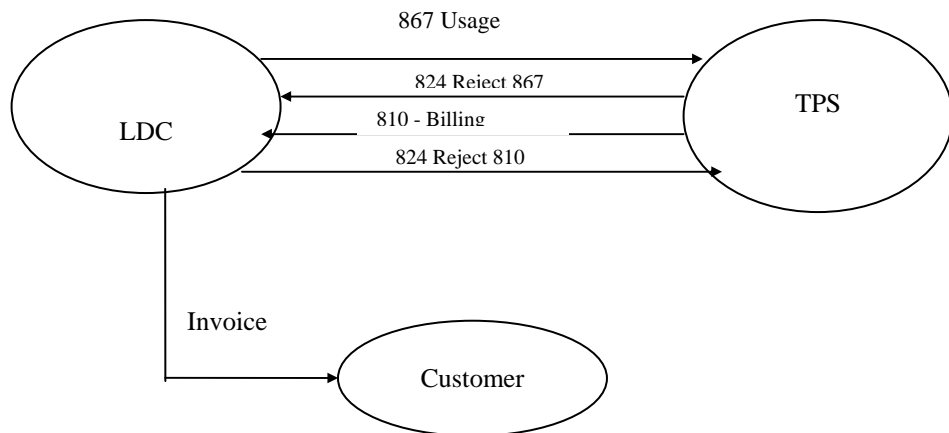
LDC reads meter, LDC and TPS each calculate their own charges, LDC provides a consolidated bill to customer



a) LDC sends EDI 867 Usage to TPS
b) TPS may send 824 Rejection of 867 information to LDC if needed
c) TPS sends EDI 810 Billing to LDC containing TPS portion of charges
d) LDC may send 824 Rejection of 810 information to TPS if needed
e) LDC Invoices Customer

**NJ Statewide Scenarios - Customer Receives Two Bills**

**3. Dual Billing**

LDC reads meter, LDC and TPS each calculate their own charges, LDC and TPS each provide a bill to customer with their own charges
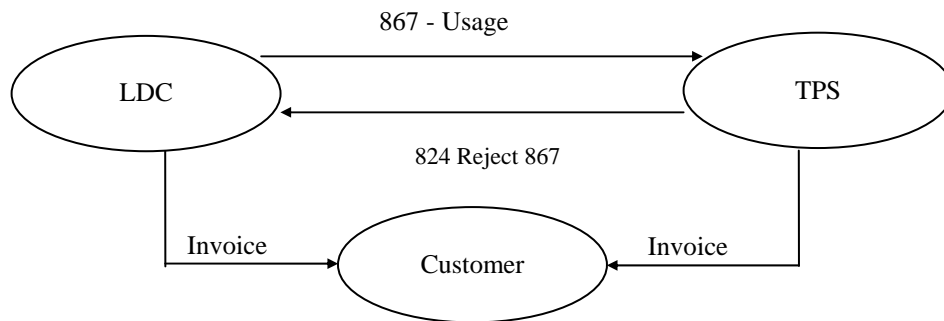


a) LDC sends EDI 867 Usage to TPS
b) TPS may send 824 Rejection of 867 information to LDC if needed
c) LDC Invoices Customer for LDC portion of bill
d) TPS Invoices Customer for TPS portion of bill

**Unbundled Billing and Metering Scenarios - Customer Receives One Bill**

*None of the Unbundled Billing and Metering Scenarios will be used in New Jersey during the first year of competition.*

### E. Customer Payment and Remittance Scenarios

For transfer of payment and remittance information, the EDI 820 and 568 transactions are used. The EDI 820 is used for the billing party to pay the other party on whose behalf they are billing. There are two alternatives considered. First, the billing party can remit only payments actually received. Second, the billing party can remit all undisputed charges on behalf of the other party, regardless of whether the billing party has been paid in full. In this second alternative, we refer to this as "making the other party whole". If making the other party whole, no other transaction than the EDI 820 is required. If not making the other party whole, the billing party uses an EDI 568 to report to the other party what they have collected from the customer on the other party's behalf. The following is a list of scenarios and procedures for payment and remittance that relate to the corresponding billing scenarios in B above.

**Note:** The actual payment may be made via other electronic means (such as ACH as wire transfer), rather than via an EDI 820 payment. In all cases, the remittance advice will be sent via an EDI 820.

**Note:** Use of 568 transaction:
Required if not making the other party whole and not remitting payment within 5 days, optional for all other scenarios.

**NJ Statewide Scenarios - Customer Receives One Bill**

### 1. LDC Consolidated Billing (Rate Ready)

LDC reads meter, LDC calculates both LDC and TPS charges, LDC provides a consolidated bill to customer

568 – Collections (Required if not making the other party whole and not remitting payment within 5 days, optional for all other scenarios)

LDC          820 - Payment Order and Remittance          TPS

Payment          Customer
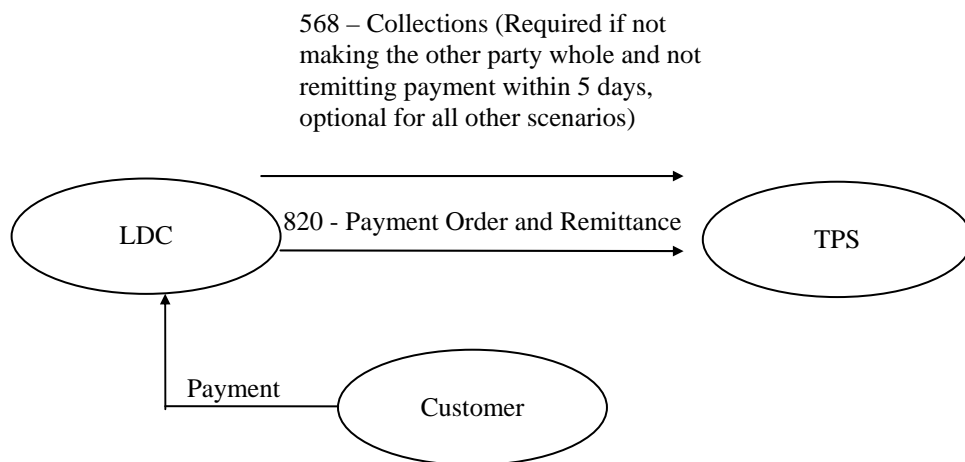
a) Customer sends payment to LDC
b) Required if not making the other party whole and not remitting payment within 5 days; otherwise optional, LDC sends EDI 568 Collections to TPS
c) LDC sends EDI 820 Payment Order and Remittance to TPS.

## 2. LDC  Consolidated Billing (Bill Ready)

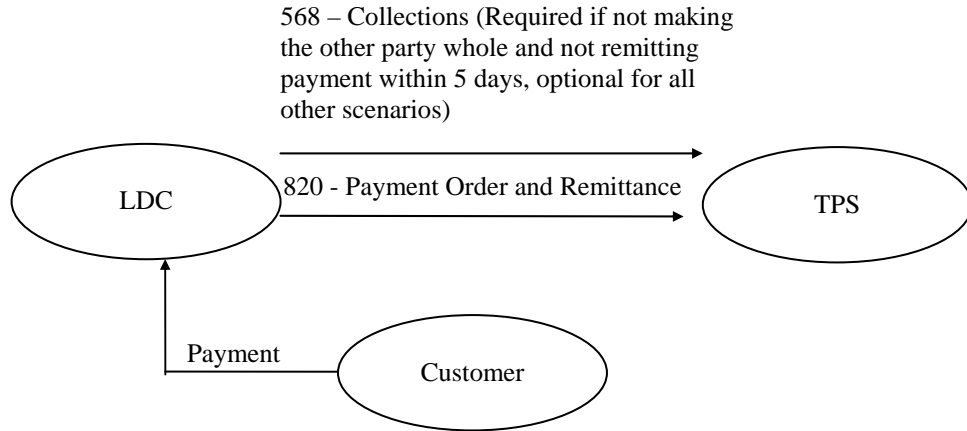LDC reads meter, LDC and TPS each calculate their own charges, LDC provides a consolidated bill to customer



a) Customer sends payment to LDC
b) Required if not making the other party whole and not remitting payment within 5 days; otherwise optional, LDC sends EDI 568 Collections to TPS
c) LDC sends EDI 820 Payment Order and Remittance to TPS.

## NJ Statewide Scenarios - Customer Receives Two Bills

## 3. Dual Billing

LDC reads meter, LDC and TPS each calculate their own charges, LDC and TPS each provide a bill to customer with their own charges
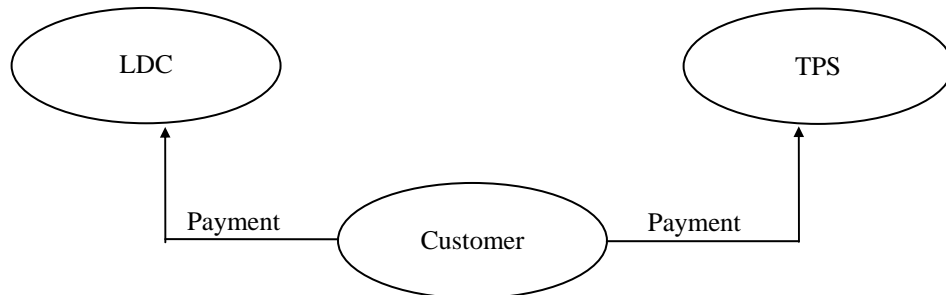


a) Customer sends payment for LDC's bill to LDC
b) Customer sends payment for TPS's bill to TPS

## Unbundled Billing and Metering Scenarios - Customer Receives One Bill

*None of the Unbundled Billing and Metering Scenarios will be used in New Jersey during the first year of competition.*

## F. Historical Usage Request by TPS

The TPS may request Historical Usage for a customer in any of the scenarios listed below.  In each case, the data returned contains values for the previous 12 months regardless of the way the customer is metered.  If the LDC does not have 12 months of data for the customer, the LDC will send the TPS data for the number of months the customer has been in their service.  Currently, there is no requirement for the LDC to provide Historical Interval Data through an EDI Transaction. If a TPS wishes to receive Historical Interval data, they must contact the LDC and make arrangements for this data.

### 1. TPS Requests Historical Usage for an Eligible Customer to other than Supplier of Record

**Note:** This section documents the projected approval from the Board to allow LDCs to release Historical Usage via EDI to a supplier other than the supplier of record.



814 Historical Usage Request

814 Historical Usage Response

867 Historical Usage

TPS

824 Reject 867

LDC
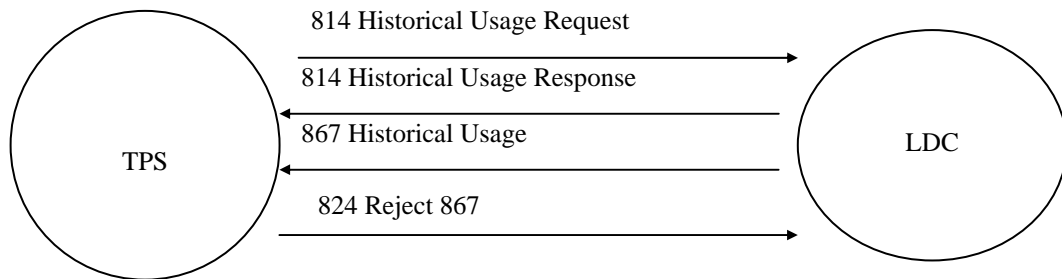
a) TPS obtains authorization from customer to receive Historical Usage and TPS sends EDI 814  Historical Usage Request to LDC
b) LDC sends EDI 814 Historical Usage Response (814) to TPS.  If historical data is available for this customer, the request will be accepted.
c) If accepted and data is available, the LDC sends an EDI 867 Historical Usage to TPS
d) TPS may send 824 Rejection of 867 information to LDC if needed

### 2. TPS Requests Historical Usage After Enrollment (Supplier Selected)

814 Historical Usage Request

```
                              ──────────────────────────────►
                              814 Historical Usage Response (814C)
          TPS                 ◄──────────────────────────────
                              867 Historical Usage                    LDC
                              ◄──────────────────────────────

                              824 Reject 867
                              ──────────────────────────────►
```
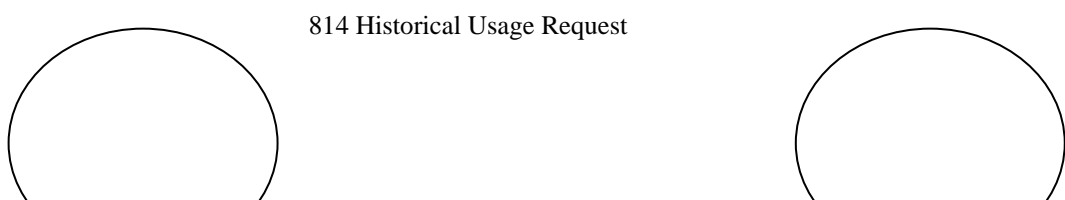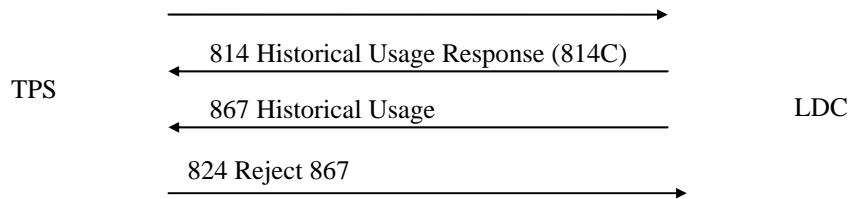
a) TPS sends EDI 814 Historical Usage Request (814) to LDC
b) LDC sends EDI 814 Historical Usage Response (814) to TPS.  If historical data is available for this customer, the request will be accepted.
c) If accepted, the LDC sends an EDI 867 Historical Usage (867) to TPS
d) TPS may send 824 Rejection of 867 information to LDC if needed

Once a customer is enrolled with a TPS, that TPS is no longer considered a third party and is entitled to the customer's Historical Usage.

## G.    Meter Information Request by TPS

*None of the Unbundled Billing and Metering Scenarios will be used in New Jersey during the first year of competition.*

## H.    Write-Offs

The following represents the steps necessary for the billing party to notify the non-billing party that they will no longer pursue remittance activities for the non-billing party's charges.

Use of 248 transaction:
- If making the other party whole as defined in 3.E. above, no 248 transaction is required.
- Companies not maintaining the supplier balance may optionally use the 248 transaction. Refer to the 248 Implementation Guide for what each company's specific plan is.

## 1. LDC Provides Consolidated Bill



**EDI 248 Write-Off**

TPS ← LDC

a) LDC sends EDI 248 Write-Off to TPS

## 2. TPS Provides Consolidated Bill

*None of the Unbundled Billing and Metering Scenarios will be used in New Jersey during the first year of competition.*

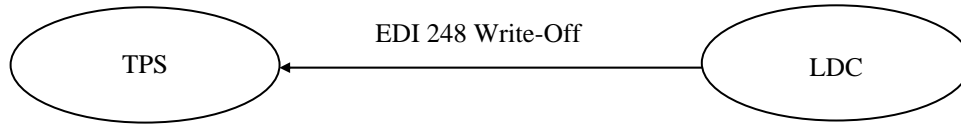## I.     Energy Scheduling and Reconciliation

LDC's and TPS's must exchange customer usage data to advance schedule energy capacity and to reconcile actual metered usage.  NJ utilities that are PJM members accomplish this via PJM standard processes.  Rockland Electric uses NY Power Pool methodology.

## J.     Customer Disputes

In the future, the NJ Customer Working groups may investigate and recommend an EDI transaction for the communication and monitoring of customer disputes.

## K.     Non-EDI Data Requirements

The following guidelines will be used regarding non-EDI information.  The below listed information is to be posted on the World Wide Web and will be available in a common, standard format for each LDC to be outlined in Appendix C.  The release of customer specific information will be consistent with Board orders or tariffs.

1)     Load Profiles - posted on web
   - Contains historical load information relating to a specific class of customer. Information may include typical week day and average weekend day load information by class, by month.
                                                    .

2)     Eligible Customer List - posted on web

- Contains a list of customers that are eligible to select a licensed TPS.

*The Eligible Customer List is not valid in New Jersey since there is not a volunteering process.*

3) Meter Reading Schedules - posted on web
   - Contains lists of scheduled monthly meter reading dates.

4) Daily Operations Schedule – posted on web
   - Specifies dates and times incoming Enrollment, and Customer Change requests are processed. Specifies dates and times billing and remittance transactions are processed. Also specifies date and times the information posted on their Web site is updated. Schedules indicate when normal processes will not occur such as holidays or non-work day, etc.

   - LDC's shall post their Daily Operations Schedule on their Web sites.

5) LDC rates – posted on web (per LDC tariffs)

6) Other codes (such as LDC Rate Class Codes and LDC Rate SubClass Codes, Strata Codes, etc) – posted on web
   - A variety of LDC codes are posted for general use

## L. EDI Transaction Timelines

The following represents the maximum allowable time standards that an LDC or TPS has to respond to any EDI transmission.

**After production transmission dates as agreed to by the Working Groups**

- 997s within 1 business day or receipt of transmission
- Rate Ready 810s within 3 business days from billing process
- Bill Ready 810s must be sent within 48 hours from receipt on TPS VAN of 867 data to be included on the LDC bill
- 814s within 1 business day of receipt
- 867 Historical Usage within 1 business day (subject to data availability) of receipt of request
- 867 Interval Usage within 1 business day of meter reading (or according to supplier tariff if different)
- 568s within 1 business day from payment receipt
- 820 Remittance and associated payment is transmitted in accordance with TPS Agreements referencing customer payment allocation
- 248s within 1 business day from write-off
- 867 Monthly Usage within 1 business day of meter reading (or according to supplier tariff if different)

**Note:** Receipt of request means placed in receiver's mailbox.

**M.  Conclusion**

The Data Exchange and Protocol Working Group notes that the above transactions are intended to resolve most questions about the anticipated business relationships. However, there are many unusual and irregular situations that will occur in the normal course of business.  In those instances where the standard transactions contained herein are not adequate to resolve a specific situation, the business and/or business contact provided by the LDC/TPS and/or the customer will be contacted directly in an effort to resolve the situation.  Furthermore, it is recognized that unanticipated situations may surface as customer choice progresses.  In an ongoing effort to resolve any issue that may arise, the Data Exchange Protocol Working Group has committed to continue their efforts (see Section 7).

## 4. Electronic Transmission

**Proposed Standard Approach**
The Data Exchange and Protocol Working Group has reviewed the standards, technologies and services available for defining transaction sets and transport mechanisms.  It has used the agreements reached by the Consumer Working Groups and the Pennsylvania standards as a starting point in developing these standards.  Based on this work, the Data Exchange and Protocol Working Group recommends that data transmission protocols be standardized so that all parties can develop the business processes and automated systems to insure an efficient and flexible business environment.

For a data transfer method to be recommended, it must be shown that it meets certain minimum criteria in the following key areas:

- ♦ Security and/or encryption of transactions and customer information
- ♦ Proof of transmission and receipt
- ♦ Positive identity of sender and recipient (non-repudiation)
- ♦ Reliability
- ♦ Data and file integrity
- ♦ Network performance and availability
- ♦ Recoverability and archiving of data

It has been established that a primary means of transferring the data should be mandated for use by all parties.  The recommendation adopted by the Board is the use of a Value Added Network (VAN). After competition has been in place, a single Internet file transfer protocol will be evaluated to improve the efficiency and lower the cost of transaction processing related to the competitive market.

**Value Added Network**
The endorsement of a Value Added Network (VAN) is the default and primary transport medium for the opening of competition.  VAN's provide reliable and proven technology for business data transfers, an audit trail, and they specialize in providing services in the key areas identified above.

The Data Exchange and Protocol Working Group recommends that the allocation of the transaction costs associated with the VAN be shared between the TPS and the LDC.  This means the party sending or picking-up from their own mailbox on the VAN will pay only those transaction charges, except as recommended below.

**Internet File Transfer**
The Data Exchange and Protocol Working Group will evaluate the various Internet file transfer protocols after the market has been established. It is recognized that devoting resources to this effort prior to the opening of the market is not cost effective and may increase the risk of a successful implementation. The Data Exchange and Protocol Working Group realizes that there are financial and operational efficiencies to be gained through the use of an Internet file transfer protocol. The Data Exchange and Protocol Working Group recommendation will be presented to the Board for approval.

## 5. Computer Operations Considerations

Other sections of this document address essential standards for business transactions, data formats and electronic transmission of data.  This section deals with the operational issues (both manual and automated) that, while primarily technical in nature, can have a significant effect on the efficiency and consistency of business processes.  The Data Exchange Protocol Working Group identified the following principles for computer operations:

- ♦ Processing of data must be reliable, predictable, accurate and efficient
- ♦ Transaction processing must be equitable and verifiable
- ♦ Trading partners' daily operational schedules should be accommodated
- ♦ The entire process must be designed to detect and report errors without intervention
- ♦ There must be a clear assignment of responsibility

Computer operations issues have been categorized into the following topics:

1. Scheduling
2. File Handling
3. Error Handling
4. Recovery

### Scheduling

Each LDC will have daily schedules that should be accommodated to the extent possible.  Operating schedules cannot be standardized because of differences in daily transaction volumes, processing techniques, technology, etc.  At the same time, there should be a baseline schedule that all trading partners can rely on that does not place an undue burden on any trading partner.

The Data Exchange and Protocol Working Group has reviewed the daily computer operation schedules of the LDCs in order to develop a proposed baseline schedule.  Section 3 reviews the maximum acceptable time frames for electronic transactions.

Each LDC will publish their daily operation schedule as a guideline to Suppliers.  The schedule should include cycle reading and billing dates, processing "work days" and "no work" days (i.e., holidays, weekends).

### File Handling

The operational guidelines pertaining to file handling are based on the recommendations elsewhere in this document concerning transaction standards and data transmission.  It should be considered that changes to those recommendations could impact file handling.  The Data Exchange Protocol Working Group agreed that:

- ♦ LDCs will attempt to process all files sent by TPSs unless specific action is taken by the TPSs to avert processing (i.e., delete files, replace files).  Refer to the Error Handling section for additional information.
- ♦ The creator of a file is responsible for the accuracy and authenticity of the contents.
- ♦ The recipient of a file has the right to reject the file in whole or in part due to format or protocol errors.   In the event that a file is rejected, the recipient will provide reasons for the rejection.

- All data exchanges will be done in a pre-established manner to ensure data security and integrity (see Section 4 Electronic Transmission).
- Each file will have one recipient, and should contain transactions intended only for that recipient. A file may contain multiple transactions of the same or different type for the same customer account as permitted in the guidelines.
- Files will be processed by the recipient according to the recipient's operating schedule. The recipient will sweep the input queue at least once each business day and will process all files that are available by the cut-off and up to the time of the last sweep.
- Files will be processed in chronological order. To ensure accurate and consistent posting of individual transactions files will be processed in date/time sequence as presented on the input files.
- Errors and confirmations will be returned in accordance to the timelines contained herein.
- Transaction exchanges between TPSs and LDCs will generally not be limited in terms of the total number of files or transactions processed on a daily basis.

**Error Handling**

The Data Exchange and Protocol Working Group recommends the TPS's and the LDC's provide a point of contact to facilitate business and technical communications. The TPS's and the LDC's will establish appropriate procedures for problem resolution in a timely manner.

**Recovery**

A sound operation includes data recovery procedures that can be invoked in the event of unexpected situations that require transactions to be recreated or resubmitted for any reason. The primary purpose of these recovery procedures is to protect the originator of a file from damages related to loss of the data.

Regardless of the specific transmission method used, the originator must have the ability to recreate a file, retransmit a file, and simply omit a file from a job stream (unreadable data, invalid header, file control error, etc.). TPS's will have to coordinate with the LDC's in order to omit a file (dictated by LDC operational schedules); re-submit a file or handle other atypical conditions.

The Data Exchange and Protocol Working Group agreed that it is the responsibility of the originator of a file to maintain the ability to recover or recreate the data. In light of current regulations, each trading partner will retain three years of transaction files, which may be utilized for re-transmission or complaint resolution.

## 6. Transaction Testing Requirements

Among other requirements, LDC's and TPS's must demonstrate their capability and readiness to participate in the deregulated marketplace using the electronic business transactions and standards described in this report. Any LDC or TPS that cannot meet the electronic commerce requirements of the marketplace would slow down the overall development of the deregulated marketplace.

The purpose of the testing is to verify that TPS's and LDC's are capable of complying with the data transfer standards specified in this document and have the necessary software and hardware required to send, receive, and translate the standard transactions required to do business in the Commonwealth.

Prior to performing a specific function, a TPS/LDC must demonstrate its capability to electronically send and receive transactions relating to that function with an LDC/TPS. For example, prior to volunteering customers, the TPS/LDC must successfully test transactions relating to volunteering. Prior to enrolling customers (supplier selection), the TPS/LDC must successfully test all 814 transactions relating to the enrollment process. Prior to providing power supply service to any retail Customer in the Commonwealth, a TPS and LDC must test transactions relating to billing and payment remittance functions. If a TPS wishes to request other information from the LDC such as Historical Usage or Meter Information or perform optional functions such as changing out a meter or doing consolidated billing, it must successfully test transactions relating to those functions. Successful testing must be completed prior to the scheduled implementation of transactions. After 10/1/98, LDC's must be ready to test each transaction 30 days prior to the scheduled implementation of the transaction. LDC's can refuse to perform such functions with a supplier unless the supplier has successfully tested the transactions.

Compliance testing for TPSs will be accomplished by exchanging a set of applicable test transactions (Appendix B – EDI Testing Process) with **each** LDC with which it intends to do business.

The test utilizes transactions from the EDI and Non-EDI standard formats described herein by both LDC's and TPS's as required.

**7. Further Data Exchange and Protocol Working Group Initiatives**

The Data Exchange Protocol Working Group has accomplished many of its original goals; however, several important issues arose that require further consideration. The Data Exchange Protocol Working Group has identified these issues and set them aside as requiring additional discussion, investigation or clarification.

Future Issues Identified
♦ Development of guidelines for 824 transaction
♦ Prioritization of other 814 Change transactions
♦ After successful market implementation, recommendation of Internet Protocol
♦ When required, development of Competitive Billing and Metering process flows and EDI standards
♦ Coordinate timing for changes in any of the protocols.

### 8. Standards Change and Version Control Process

**Introduction**

The **Change Control** process outlined herein accomplishes the Data Exchange Protocol Working Group's (DEP) objective of establishing a change control process that accommodates changes within the New Jersey Electronic Data Exchange Standards.

It is anticipated that these standards will be expanded and modified to accommodate market or regulatory requirements on an ongoing basis. It is understood that **Change Control** is vital in order to allow the market to function successfully on a daily basis. Each participant will rely on established, documented and tested transactions, yet must have a process by which to modify, test and implement changes in an efficient, effective, timely, and well-coordinated manner. This change control document provides the process by which changes to the standards may be discussed, reviewed, accepted and implemented.

In order to accommodate the Change Control Process, the Data Exchange Protocol Working Group in conjunction with the NJ BPU will maintain, publish, and post the standards and the ongoing modifications/enhancements to these standards on the NJ BPU website. The Data Exchange Protocol Working Group will notify the designated contacts of each market participant of anticipated modifications or enhancements to the standards and of the anticipated timing thereof.

A consolidated new release of the standards will be published and electronically posted at 180-day intervals. The consolidated new release publication will encompass all changes implemented during the prior 180-day period and will be forwarded to the NJ BPU for electronic posting. It is the intent of the Data Exchange Protocol Working Group to comply with the UIG guidelines as the industry and the data standards evolve.

The Data Exchange Protocol Working Group has committed to meet through 1999 on a regular basis and will continue to be comprised of LDC's and TPS's or their representatives.

After October 1, 1999, when new modifications and/or enhancements are introduced to the group, the proponent of said modification/enhancement should strive to build consensus for the change among all Data Exchange Protocol Working Group participants. This is important for the market to move forward, to maintain viable regional standards and compliance with the UIG national guidelines adopted by the Data Exchange Protocol Working Group.

**Priority Classifications**

All modifications and enhancements should be classified in one of the following three categories:

Emergency Priority

    Changes must be implemented within 10 days or as otherwise directed by the Data Exchange Protocol Working Group.

High Priority

    Changes/Enhancements implemented within 30 days, the Next Release, or as otherwise directed by the Data Exchange Protocol Working Group.

<u>Low Priority</u>

Changes/Enhancements implemented no earlier than 90 days, Future Release, or as otherwise directed by the Data Exchange Protocol Working Group.

**Emergency Priority**

For a change to be classified as *Emergency Priority*, the initiating party must demonstrate in writing to the Data Exchange Protocol Working Group that:

- ♦ The current standards cannot accommodate Customer Choice
- ♦ If the problem is left unattended, it could have a detrimental affect to an Data Exchange Protocol Working Group participant, or Customer Choice in general
- ♦ Bilateral agreements between TPS's and LDC's cannot solve the problem efficiently
- ♦ An urgent modification of the standards is required
- ♦ All Data Exchange Protocol Working Group participants affected by the problem will accommodate said modification

In addition the initiating party must:

- ♦ Document in advance the scope of the modification and the affected standards
- ♦ Document why the modification should not be classified as Next Release or a Low Priority change
- ♦ Provide cost justification if appropriate
- ♦ Document the proposed amendments and provide a test plan, test cases, and standards. This documentation shall be presented to the Data Exchange Protocol Working Group.

**High Priority**

For a change to be classified as *High Priority*, the initiating party must demonstrate in writing to the Data Exchange Protocol Working Group that the suggested modifications/enhancements:

- ♦ Will better the industry as a whole
- ♦ Bilateral agreements between TPS's and LDC's cannot solve the problem efficiently
- ♦ Addresses immediate regulatory and competitive market issues and mandates
- ♦ Affects all participants.

In addition the initiating party must:

- ♦ Document in advance the scope of the modification/enhancements and the affected standards
- ♦ Document why the modification should not classified as Low Priority
- ♦ Provide cost justification if appropriate
- ♦ Document the proposed amendments and provide a test plan, test cases and standards. This documentation shall be presented to the Data Exchange Protocol Working Group.

**Low Priority**

For a change to be classified as future release *Low Priority*, the initiating party must demonstrate in writing to the Data Exchange Protocol Working Group that the suggested modifications/enhancements:

- ♦ Will meet changes as prescribed by the UIG, or
- ♦ Bilateral agreements between TPS's and LDC's cannot solve the problem, or
- ♦ Will address regulatory and competitive market issues and mandates, which affects all participants and have not been prescribed by the UIG.

In addition the initiating party must:

- ♦ Document in advance, the scope of the modification/enhancements and the affected standards
- ♦ Document the proposed amendments and provide a test plan, test cases, and standards. This documentation shall be presented to the Data Exchange Protocol Working Group.

**Notification Requirements**

### Emergency Priority

The party proposing the change/modification shall notify the Data Exchange Protocol Working Group chairperson(s) who will verify that the change/modification is an Emergency Priority in accordance with the Change Control Process. The Data Exchange Protocol Working Group Chairperson(s) will notify by phone and/or email, both TPS's and LDC's, in as expeditious a manner as feasible.

### High and Low Priority

The initiating party will notify by phone or email the Data Exchange Protocol Working Group Chairperson(s) and both TPS's and LDC's, at least 30 days prior to the next scheduled Data Exchange Protocol Working Group meeting. The Data Exchange Protocol Working Group Chairperson(s) shall add the change/modification request to the meeting agenda.