

810 Invoice Implementation Guide

American Electric Power
Version: 4010 Final

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|------------------|-----------------------------------|
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810

Invoice

Functional Group=IN

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. 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.

Heading:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> |
|---------------------|-----------|---------------------------------------|------------|----------------|---------------|--------------|
| 010 | ST | Transaction Set Header | M | 1 | | |
| 020 | BIG | Beginning Segment for Invoice | M | 1 | | |
| 060 | PER | Administrative Communications Contact | O | 3 | | |
| LOOP ID - N1 | | | | | 200 | |
| 070 | N1 | Name | O | 1 | | |
| 090 | N3 | Address Information | O | 2 | | |
| 100 | N4 | Geographic Location | O | 1 | | |
| 130 | ITD | Terms of Sale/Deferred Terms of Sale | O | >1 | | |

Detail:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> |
|----------------------|-----------|------------------------------|------------|----------------|---------------|--------------|
| LOOP ID - IT1 | | | | | 200000 | |
| 010 | IT1 | Baseline Item Data (Invoice) | O | 1 | | |
| LOOP ID - PID | | | | | 1000 | |
| 060 | PID | Product/Item Description | O | 1 | | |

Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> |
|----------------------|-----------|--|------------|----------------|---------------|--------------|
| 010 | TDS | Total Monetary Value Summary | M | 1 | | |
| LOOP ID - SAC | | | | | 25 | |
| 040 | SAC | Service, Promotion, Allowance, or Charge Information | O | 1 | | |
| 070 | CTT | Transaction Totals | O | 1 | | N3/070 |
| 080 | SE | Transaction Set Trailer | M | 1 | | |

Notes:

3/070 Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

ST Transaction Set Header

| | |
|---------------------|-------------|
| Pos: 010 | Max: 1 |
| Heading - Mandatory | |
| Loop: N/A | Elements: 2 |

To indicate the start of a transaction set and to assign a control number

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|--|------------|-------------|----------------|
| ST01 | 143 | Transaction Set Identifier Code | M | ID | 3/3 |
| | | <u>Code</u> <u>Name</u> | | | |
| | | 810 Invoice | | | |
| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
| ST02 | 329 | Transaction Set Control Number | M | AN | 4/9 |
| | | User: Unique w/i transaction set functional group & assigned by originator. | | | |

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

BIG

Beginning Segment for Invoice

| | |
|---------------------|-------------|
| Pos: 020 | Max: 1 |
| Heading - Mandatory | |
| Loop: N/A | Elements: 5 |

To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|--|------------|--------------------|----------------|
| BIG01 | 373 | Date | M | DT | 8/8 |
| BIG02 | 76 | Invoice Number User: Vendor's unique invoice number. | M | AN | 1/22 |
| BIG04 | 324 | Purchase Order Number User: PO Number from AEP order. | M | AN | 1/22 |
| BIG05 | 328 | Release Number User: PO Release Number from AEP order. | O | AN | 1/30 |
| BIG07 | 640 | Transaction Type Code User: Since BIG07 handles all credits for entire invoice, negative symbol (-) should not be sent in IT104 or TDS01. | M | ID | 2/2 |
| | | <u>Code</u> | | <u>Name</u> | |
| | | CN | | Credit Invoice | |
| | | DI | | Debit Invoice | |

Semantics:

1. BIG01 is the invoice issue date.

PER

Administrative Communications Contact

| | |
|--------------------|-------------|
| Pos: 060 | Max: 3 |
| Heading - Optional | |
| Loop: N/A | Elements: 6 |

To identify a person or office to whom administrative communications should be directed

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|-------------------|------------------|---|-------------------|--------------------|-----------------------|
| PER01 | 366 | Contact Function Code User: Mapped back from the PER segment of the original PO. | M | ID | 2/2 |
| | | Code Name | | | |
| | | BD Buyer Name or Department | | | |
| | | CN General Contact | | | |
| | | EA EDI Coordinator | | | |
| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
| PER02 | 93 | Name | O | AN | 1/60 |
| PER03 | 365 | Communication Number Qualifier User: Mapped back from the PER segment of the original PO. | C | ID | 2/2 |
| | | Code Name | | | |
| | | TE Telephone | | | |
| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
| PER04 | 364 | Communication Number User: Mapped back from the PER segment of the original 850. | C | AN | 1/80 |
| PER05 | 365 | Communication Number Qualifier | C | ID | 2/2 |
| | | Code Name | | | |
| | | FX Facsimile | | | |
| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
| PER06 | 364 | Communication Number | C | AN | 1/80 |

Syntax:

1. P0304 - If either PER03,PER04 is present, then all are required
2. P0506 - If either PER05,PER06 is present, then all are required
3. P0708 - If either PER07,PER08 is present, then all are required

Loop N1

| | |
|----------|---------------|
| Pos: 070 | Repeat: 200 |
| Optional | |
| Loop: N1 | Elements: N/A |

To identify a party by type of organization, name, and code

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> |
|------------|-----------|---------------------|------------|----------------|---------------|
| 070 | N1 | Name | O | 1 | |
| 090 | N3 | Address Information | O | 2 | |
| 100 | N4 | Geographic Location | O | 1 | |

N1 Name

| | |
|--------------------|-------------|
| Pos: 070 | Max: 1 |
| Heading - Optional | |
| Loop: N1 | Elements: 3 |

To identify a party by type of organization, name, and code

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|--|------------|-------------|----------------|
| N101 | 98 | Entity Identifier Code User: Party to receive commercial invoice remittance. | M | ID | 2/3 |
| | | <u>Code</u> <u>Name</u> | | | |
| | | RE Party to receive commercial invoice remittance | | | |
| | | ST Ship To | | | |
| N103 | 66 | Identification Code Qualifier | C | ID | 1/2 |
| | | <u>Code</u> <u>Name</u> | | | |
| | | 1 D-U-N-S Number,Dun & Bradstreet | | | |
| N104 | 67 | Identification Code User: DUNS number. | C | AN | 2/80 |

Syntax:

1. R0203 - At least one of N102,N103 is required

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification.

N3

Address Information

| | |
|--------------------|-------------|
| Pos: 090 | Max: 2 |
| Heading - Optional | |
| Loop: N1 | Elements: 2 |

To specify the location of the named party

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|---|------------|-------------|----------------|
| N301 | 166 | Address Information User: If the N101 equals "ST" then the N301, N401, N402, N403 are all mandatory. | C | AN | 1/55 |
| N302 | 166 | Address Information | O | AN | 1/55 |

N4 Geographic Location

| | |
|--------------------|-------------|
| Pos: 100 | Max: 1 |
| Heading - Optional | |
| Loop: N1 | Elements: 4 |

To specify the geographic place of the named party

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|--|------------|-------------|----------------|
| N401 | 19 | City Name User: If the N101 equals "ST" then the N301, N401, N402, N403 are all mandatory. | O | AN | 2/30 |
| N402 | 156 | State or Province Code User: If the N101 equals "ST" then the N301, N401, N402, N403 are all mandatory. | O | ID | 2/2 |
| N403 | 116 | Postal Code User: If the N101 equals "ST" then the N301, N401, N402, N403 are all mandatory. | O | ID | 3/15 |
| N404 | 26 | Country Code | O | ID | 2/3 |

Syntax:

1. C0605 - If N406 is present, then all of N405 are required

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

ITD

Terms of Sale/Deferred Terms of Sale

| | |
|--------------------|-------------|
| Pos: 130 | Max: >1 |
| Heading - Optional | |
| Loop: N/A | Elements: 4 |

To specify terms of sale

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|---------------------------------------|------------|-------------|----------------|
| ITD01 | 336 | Terms Type Code | O | ID | 2/2 |
| | | <u>Code</u> <u>Name</u> | | | |
| | | 05 Discount Not Applicable | | | |
| | | 08 Basic Discount Offered | | | |
| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
| ITD03 | 338 | Terms Discount Percent | O | R | 1/6 |
| ITD05 | 351 | Terms Discount Days Due | C | N0 | 1/3 |
| ITD07 | 386 | Terms Net Days | O | N0 | 1/3 |

Syntax:

1. L03040513 - If ITD03 is present, then at least one of ITD04,ITD05,ITD13 is required
2. L08040513 - If ITD08 is present, then at least one of ITD04,ITD05,ITD13 is required
3. L091011 - If ITD09 is present, then at least one of ITD10,ITD11 is required

Semantics:

1. ITD15 is the percentage applied to a base amount used to determine a late payment charge.

Comments:

1. If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.

Loop IT1

| | |
|-----------|----------------|
| Pos: 010 | Repeat: 200000 |
| | Optional |
| Loop: IT1 | Elements: N/A |

To specify the basic and most frequently used line item data for the invoice and related transactions

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> |
|------------|-----------|------------------------------|------------|----------------|---------------|
| 010 | IT1 | Baseline Item Data (Invoice) | O | 1 | |
| 060 | | Loop PID | O | | 1000 |

User: The eight (8) characters from the PO101 in the 850 should be returned in the IT107.

IT1 Baseline Item Data (Invoice)

| | |
|-------------------|--------------|
| Pos: 010 | Max: 1 |
| Detail - Optional | |
| Loop: IT1 | Elements: 16 |

To specify the basic and most frequently used line item data for the invoice and related transactions

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|---|------------|-------------|----------------|
| IT101 | 350 | Assigned Identification User: Sequential Invoice Line Number (see note) | O | AN | 1/20 |
| IT102 | 358 | Quantity Invoiced User: Whole numbers only, decimals must not be used. | C | R | 1/10 |
| IT103 | 355 | Unit or Basis for Measurement Code User: From PO. | C | ID | 2/2 |
| IT104 | 212 | Unit Price User: Since BIG07 handles all credits for entire invoice, negative symbol (-) should not be sent in IT104. | C | R | 1/17 |
| IT106 | 235 | Product/Service ID Qualifier User: Purchaser's Order Line Number. <u>Code</u> <u>Name</u> PL Purchaser's Order Line Number | C | ID | 2/2 |
| IT107 | 234 | Product/Service ID User: AEP's PO Line Number. | C | AN | 1/48 |
| IT108 | 235 | Product/Service ID Qualifier User: Buyers Part Number. <u>Code</u> <u>Name</u> BP Buyer's Part Number | C | ID | 2/2 |
| IT109 | 234 | Product/Service ID User: AEP's M&E Number. | C | AN | 1/48 |
| IT110 | 235 | Product/Service ID Qualifier User: Manufacturer <u>Code</u> <u>Name</u> MF Manufacturer | C | ID | 2/2 |
| IT111 | 234 | Product/Service ID User: Manufacturer ID | C | AN | 1/48 |
| IT112 | 235 | Product/Service ID Qualifier User: Manufacturers Part Number. <u>Code</u> <u>Name</u> MG Manufacturer's Part Number | C | ID | 2/2 |
| IT113 | 234 | Product/Service ID User: Manufacturers Part Number. | C | AN | 1/48 |
| IT114 | 235 | Product/Service ID Qualifier User: Vendors Catalog Number. <u>Code</u> <u>Name</u> VC Vendor's (Seller's) Catalog Number | C | ID | 2/2 |
| IT115 | 234 | Product/Service ID User: Vendors Catalog Number. | C | AN | 1/48 |
| IT116 | 235 | Product/Service ID Qualifier User: Vendors Part Number. <u>Code</u> <u>Name</u> | C | ID | 2/2 |

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|---|------------|-------------|----------------|
| IT117 | 234 | VP Vendor's (Seller's) Part Number Product/Service ID User: Vendors Part Number | C | AN | 1/48 |

Syntax:

1. P020304 - If either IT102,IT103,IT104 is present, then all are required
2. P0607 - If either IT106,IT107 is present, then all are required
3. P0809 - If either IT108,IT109 is present, then all are required
4. P1011 - If either IT110,IT111 is present, then all are required
5. P1213 - If either IT112,IT113 is present, then all are required
6. P1415 - If either IT114,IT115 is present, then all are required
7. P1617 - If either IT116,IT117 is present, then all are required

Semantics:

1. IT101 is the purchase order line item identification.

Comments:

1. Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
2. IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

User: The eight (8) characters from the PO101 in the 850 should be returned in the IT107.

Loop PID

| | |
|-----------|---------------|
| Pos: 060 | Repeat: 1000 |
| | Optional |
| Loop: PID | Elements: N/A |

To describe a product or process in coded or free-form format

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> |
|------------|-----------|--------------------------|------------|----------------|---------------|
| 060 | PID | Product/Item Description | O | 1 | |

PID

Product/Item Description

| | |
|-------------------|-------------|
| Pos: 060 | Max: 1 |
| Detail - Optional | |
| Loop: PID | Elements: 2 |

To describe a product or process in coded or free-form format

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|---|------------|-------------|----------------|
| PID01 | 349 | Item Description Type User: Free-Form | M | ID | 1/1 |
| | | <u>Code</u> <u>Name</u> F Free-form | | | |
| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
| PID05 | 352 | Description | C | AN | 1/80 |

Syntax:

1. C0403 - If PID04 is present, then all of PID03 are required
2. R0405 - At least one of PID04,PID05 is required

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.

TDS

Total Monetary Value Summary

| | |
|---------------------|-------------|
| Pos: 010 | Max: 1 |
| Summary - Mandatory | |
| Loop: N/A | Elements: 1 |

To specify the total invoice discounts and amounts

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|---------------------|------------|-------------|----------------|
| TDS01 | 610 | Amount | M | N2 | 1/15 |

User: Invoice Total Gross Amount.

Amount should be rounded to fourth (4) decimal place. (example: \$246.0000)

Since BIG07 handles all credits for entire invoice, negative symbol (-) should not be sent in TDS01.

Semantics:

1. TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).

Loop SAC

| | |
|-----------|---------------|
| Pos: 040 | Repeat: 25 |
| Optional | |
| Loop: SAC | Elements: N/A |

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> |
|------------|-----------|--|------------|----------------|---------------|
| 040 | SAC | Service, Promotion, Allowance, or Charge Information | O | 1 | |

SAC

Service, Promotion, Allowance, or Charge Information

| | |
|--------------------|-------------|
| Pos: 040 | Max: 1 |
| Summary - Optional | |
| Loop: SAC | Elements: 4 |

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|--|------------|-------------|----------------|
| SAC01 | 248 | Allowance or Charge Indicator User: Charge | M | ID | 1/1 |
| | | <u>Code</u> <u>Name</u> | | | |
| | | C Charge | | | |
| SAC02 | 1300 | Service, Promotion, Allowance, or Charge Code User: This value can be either D240 (Freight) or H850 (Tax). | C | ID | 4/4 |
| | | <u>Code</u> <u>Name</u> | | | |
| | | A480 Assembly | | | |
| | | A720 Broken Package Charge | | | |
| | | B050 Certification | | | |
| | | B750 Core Charge | | | |
| | | C040 Delivery | | | |
| | | C080 Demurrage | | | |
| | | C480 Drum Cost | | | |
| | | C690 Escalation | | | |
| | | C870 Expediting Fee | | | |
| | | D230 Freight Surcharge | | | |
| | | D240 Freight | | | |
| | | D870 Inspection | | | |
| | | D900 Installation | | | |
| | | D980 Insurance | | | |
| | | E290 Layout/Design | | | |
| | | E320 Leaking Underground Storage Tax (LUST) | | | |
| | | E410 Loading | | | |
| | | F550 Premium Charge | | | |
| | | G200 Reel Deposit | | | |
| | | G470 Restocking Charge | | | |
| | | G760 Set-up | | | |
| | | H850 Tax | | | |
| | | STDT Stopoff at Destination | | | |
| SAC05 | 610 | Amount User: Do not use decimals. Ex - \$123.00 should be 12300 | O | N2 | 1/15 |
| SAC12 | 331 | Allowance or Charge Method of Handling Code User: Charge to be paid by customer. | O | ID | 2/2 |
| | | <u>Code</u> <u>Name</u> | | | |
| | | 06 Charge to be Paid by Customer | | | |

Syntax:

1. R0203 - At least one of SAC02,SAC03 is required
2. P0304 - If either SAC03,SAC04 is present, then all are required
3. P0910 - If either SAC09,SAC10 is present, then all are required
4. L130204 - If SAC13 is present, then at least one of SAC02,SAC04 is required

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.

Comments:

1. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

CTT Transaction Totals

| | |
|--------------------|-------------|
| Pos: 070 | Max: 1 |
| Summary - Optional | |
| Loop: N/A | Elements: 1 |

To transmit a hash total for a specific element in the transaction set

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|----------------------|------------|-------------|----------------|
| CTT01 | 354 | Number of Line Items | M | N0 | 1/6 |

User: The CTT01 contains the total number of IT1's (line items) in the entire invoice.

SE Transaction Set Trailer

| | |
|---------------------|-------------|
| Pos: 080 | Max: 1 |
| Summary - Mandatory | |
| Loop: N/A | Elements: 2 |

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> |
|------------|-----------|--------------------------------|------------|-------------|----------------|
| SE01 | 96 | Number of Included Segments | M | N0 | 1/10 |
| SE02 | 329 | Transaction Set Control Number | M | AN | 4/9 |

Comments:

- SE is the last segment of each transaction set.