

Case No. 12-M-0476 et al.
EDI Business/Technical Working Groups
Workpaper – 867IU/HIU Development
12/2/2016

I. Proposed supporting changes to 814C

Segment:	LIN Item Identification
Position:	010
Loop:	LIN Optional (Must Use)
Level:	Detail
Usage:	Optional (Must Use)
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	1 If either LIN04 or LIN05 is present, then the other is required. 2 If either LIN06 or LIN07 is present, then the other is required. 3 If either LIN08 or LIN09 is present, then the other is required. 4 If either LIN10 or LIN11 is present, then the other is required. 5 If either LIN12 or LIN13 is present, then the other is required. 6 If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required. 8 If either LIN18 or LIN19 is present, then the other is required. 9 If either LIN20 or LIN21 is present, then the other is required. 10 If either LIN22 or LIN23 is present, then the other is required. 11 If either LIN24 or LIN25 is present, then the other is required. 12 If either LIN26 or LIN27 is present, then the other is required. 13 If either LIN28 or LIN29 is present, then the other is required. 14 If either LIN30 or LIN31 is present, then the other is required.
Semantic Notes:	1 LIN01 is the line item identification
Notes:	Request : Required Response: Required Each change at the Account Level must be sent in a separate LIN Loop. The LIN03 specifies the product (electric or gas) and the LIN05 specifies the action event. LIN~AACCDD0102004A~SH~EL~SH~CE This change pertains to electric service

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LIN01	350	Assigned Identification	O AN 1/20
			The identifier supplied in this element either by itself or in conjunction with the BGN02 element from the BGN segment must uniquely identify each LIN request item over time. The LIN01 identifier sent in a Request transaction must be returned in the transaction containing the response to that request (see examples).	
Mand.	LIN02	235	Product/Service ID Qualifier	M ID 2/2

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			SH	Service Requested A numeric or alphanumeric code from a list of services available to the customer	
Mand.	LIN03	234	Product/Service ID	M AN 1/48	
				Commodity - there may be only one commodity (Electric or Gas) for each 814 transaction.	
			EL		
			GAS		
Mand.	LIN04	235	Product/Service ID Qualifier	M ID 2/2	
			SH	Service Requested A numeric or alphanumeric code from a list of services available to the customer	
Mand.	LIN05	234	Product/Service ID	M AN 1/48	
			CE	Customer Enrollment Request for change in customer account information.	
			<u>SI</u>	<u>Summary Interval</u> <u>Used only when changing the level of detail at which the 867 Interval data will be sent (REF*17).</u>	

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Segment: **REF Reference Identification (17=Summary Interval)**
Position: 030
Loop: LIN
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify identifying information
Syntax Notes: 1 REF02 is required.
 2 If either C04003 or C04004 is present, then the other is required.
 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes: 1 2.
Comments:

Notes:	When changing the indicator to receive both Interval Detail and Summary, or to only receive Summary level information, the LIN05 must have a value of "SI".
LDC to ESP Request:	Not Used
Response:	Not Used
ESP to LDC Request:	Optional
Response:	Optional
Examples:	REF*17*SUMMARY REF*17*DETAIL REF*17*METERDETAIL

Data Element Summary

Ref.	Data			
Des.	Element	Name		X12 Attributes
Must Use	REF01	TBD	Reference Identification Qualifier	M ID 2/3
		Code qualifying the Reference Identification		
		17	Client Reporting Category	
			Used to convey whether the ESP will receive summary only information, or detail and associated summary information for this interval account.	
Must Use	REF02	TBD	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			When REF01 is 17, valid values for REF02 are:	
			SUMMARY – Metering party will send only summary level data for this interval account.	
			DETAIL – Metering party will send both summary and detail data for this interval account. For PECO this will interpret as account-level detail.	
			METERDETAIL – Metering party will send interval details for each meter on the account	

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II. Proposed supporting change to 814E

Segment:	LIN Item Identification
Position:	010
Loop:	LIN Optional (Must Use)
Level:	Detail
Usage:	Optional (Must Use)
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	<p>1 If either LIN04 or LIN05 is present, then the other is required.</p> <p>2 If either LIN06 or LIN07 is present, then the other is required.</p> <p>3 If either LIN08 or LIN09 is present, then the other is required.</p> <p>4 If either LIN10 or LIN11 is present, then the other is required.</p> <p>5 If either LIN12 or LIN13 is present, then the other is required.</p> <p>6 If either LIN14 or LIN15 is present, then the other is required.</p> <p>7 If either LIN16 or LIN17 is present, then the other is required.</p> <p>8 If either LIN18 or LIN19 is present, then the other is required.</p> <p>9 If either LIN20 or LIN21 is present, then the other is required.</p> <p>10 If either LIN22 or LIN23 is present, then the other is required.</p> <p>11 If either LIN24 or LIN25 is present, then the other is required.</p> <p>12 If either LIN26 or LIN27 is present, then the other is required.</p> <p>13 If either LIN28 or LIN29 is present, then the other is required.</p> <p>14 If either LIN30 or LIN31 is present, then the other is required.</p>
Semantic Notes:	1 LIN01 is the line item identification
Notes:	<p>Request : Required</p> <p>Response: Required</p> <p>Request only one action event per LIN Loop. The LIN01 contains a unique identifier for the action event. The LIN03 specifies the product (electric or gas) and the LIN05 specifies the type of service request.</p> <p>The enrollment request (LIN05=CE) is considered the primary service request when present. "Secondary" action event(s) must be requested in separate LIN loops.</p> <p>LIN~AACCCDD0102004A~SH~EL~SH~CE Electric Enrollment</p> <p>LIN~AACCCDD0102005A~SH~EL~SH~HU Usage History</p> <p>LIN~AACCCDD0102006A~SH~GAS~SH~GP Gas Profile</p>

Data Element Summary

Ref.	Data	Attributes
Des.	Element Name	
Must Use	LIN01 350 Assigned Identification	O AN 1/20
	The identifier supplied in this element either by itself or in conjunction with the BGN02 element from the BGN segment must uniquely identify each LIN request item over time.	
Mand.	LIN02 235 Product/Service ID Qualifier	M ID 2/2
	SH Service Requested	
Mand.	LIN03 234 Product/Service ID	M AN 1/48
	Only one commodity (Electric or Gas) may be indicated for each 814 transaction.	
	EL Electric	

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Must Use	LIN04	235	GAS Product/Service ID	Gas Service Qualifier	X	ID 2/2
Must Use	LIN05	234	SH Product/Service ID	Service Requested	X	AN 1/48
			CE	Customer Enrollment Request to enroll this customer for Energy Services. A Request for enrollment is considered the primary request when present.		
			GP	Gas Profile Request a 12 month forecasted gas delivery profile. Valid only when LIN03=GAS. Gas Profiles are not supported by all utilities. If a Gas Profile request is sent to a Utility that does not support gas profiles, the Utility will return Historic Usage, if available, in the 867 sent in response to the Gas Profile request. When supported, a GP request may still be rejected if there is insufficient data to develop a gas profile for that customer.		
			HU	Historic Usage Request for Usage History. GAS note: Some utilities support a Gas Profile in lieu of actual history and will return a Gas Profile, if sufficient data exists, in the 867 sent in response to the request for Historic Usage.		
			<u>IU</u>	<u>Historic Interval Usage</u> <u>Indicates an ESP request to obtain historical interval usage information for this customer. If historical interval not available, a REF*1P will be sent with "HIU". Note - PHI companies –If HI request on a non-interval account, the request is accepted, the response remains REF*1P*HIU and the 867HU is sent.</u>		
			<u>SI</u>	<u>Summary Interval</u> <u>Indicates an ESP request to obtain interval data at the level requested in the REF*17 segment. This must be sent with a Generation/Renewable Energy Certificate Enrollment or after a Generation / Renewable Energy Certificate Enrollment.</u> <ul style="list-style-type: none"> <u>If this service is not provided, the associated REF*1P is "SNP".</u> <u>If this service is not provided at an account level (i.e., the meter agent requires that a decision be made for all accounts for the ESP), the associated REF*1P is "SNP".</u> 		

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Segment: **REF** Reference Identification (Response Information or Warnings)

Position: 030

Loop: LIN Optional (Must Use)

Level: Detail

Usage: Optional

Max Use: >1

Purpose: To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Notes:

Request: Not used

Response: Optional

REF~1P~I01

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	REF01	128	Reference Identification Qualifier	M ID 2/3
			1P	Accessorial Status Code
				Warnings or information associated with an accepted status notification
Must Use	REF02	127	Reference Identification	X AN 1/30
			A13	Other
				See REF03.
			API	Application Incomplete
				Required Information Missing. See REF03 for details.
			FRB	Failed to Release Billing
				Incorrect Billing option requested.
			HUL	Historic Usage Limited
				May be sent when a secondary request for usage history is received along with an enrollment request to indicate that the 867HU will not contain any usage data.
			I01	Off System Account
			I02	Partial Requirements Customer
			<u>NIA</u>	<u>Not Interval Account</u>
			<u>NIM</u>	<u>Not Interval Marketer</u>
				<u>ESCO does not request or is not approved to receive Interval Data.</u>
Cond.	REF03	352	Description	X AN 1/80
				Additional text information may be sent in REF03 to clarify the details of an Accept Response. REF03 must be sent when REF02 in this segment contains A13 or API.

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Segment: **REF** Reference Identification (17=Summary Interval)

Position: 030

Loop: LIN

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify identifying information

Syntax Notes: 1 REF02 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 .

Notes:

- Every utility must provide the ability for a supplier to receive interval data at either the summary level or the detail level. The default is that an ESP will receive interval data at the summary and the detail level. If an ESP wants interval data at both the summary and the detail level the ESP does not need to take any action.
- For PPL EU, because nearly all customers have interval meters, the default is for the ESP to receive summary data only. If an ESP wants interval data at both the summary and detail levels, the ESP must submit "SI" and include the REF*17*DETAIL segment.
- For PECO, the default is also for the ESP to receive summary data only. If an ESP wants interval data at the detail level, the ESP must submit "SI" and specify account-level versus meter-level detail via the REF*17 segment. Please note that, unlike PPL EU, PECO does not provide interval data for billing at both the summary and detail levels; The ESP may receive either summary or detail, but not both
- If an ESP wants to receive interval data at only the summary level, the ESP must:
 - Contact the LDC to determine if the LDC supports summary level data by account or by ESP
 - If the LDC supports summary level interval data by account, the ESP must submit "SI" in the LIN05 to indicate that only summary level interval data is requested for the account.
 - If the LDC supports summary level interval data by ESP, the "SI" in the LIN05 is not used. The ESP must call the supplier interface group at the LDC to request summary level interval data. The LDC will then return summary level interval data for ALL accounts for that ESP.
 - For PPL EU, the default is summary. If an ESP wants interval data at both the summary and detail levels, the ESP must submit "SI" and include the REF*17*DETAIL segment.

Responses to a Summary Interval Request (LIN05=SI):

- If the utility does not provide this capability at the account level, they will accept the request, but respond with a Status Reason code (1P) of SNP for "Service Not Provided".

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- If the utility provides this service at the account level, but the account is not an interval account, they will accept the request, but respond with a Status Reason code (1P) of UMA for “Unmetered or non-interval account”.
- If Utility provides this service at the account level, but not at the meter level, they will accept the request but respond with a Status Reason code (1P) of MNP for “Meter detail Not Provided”
- If Utility provides this service, but ESP declines service, they will accept the request but respond with a Status Reason Code (1P) of SD for “Service Declined”

If the utility provides this service at the account level, and the account is an interval account, the utility will accept this request, and in their response send a **REF*17*DETAIL**

SI Request:	Required in the LIN loop where LIN05=SI if the ESP wants to receive Interval Details
SI Accept Response:	Required if service was requested and will be provided.
SI Reject Response:	Not Used
All other Requests:	Not Used
All other Accept Responses:	Not Used
All other Reject Responses:	Not Used

Data Element Summary

Ref.	Data			
Des.	Element	Name	X12 Attributes	
<u>Must Use</u>	<u>REF01</u>	<u>128</u>	<u>Reference Identification Qualifier</u>	<u>M</u> <u>ID 2/3</u>
		<u>Code qualifying the Reference Identification</u>		
		<u>17</u>	<u>Client Reporting Category</u>	
			<u>Used to convey whether the ESP will receive summary only information, or detail and associated summary information for this interval account.</u>	
<u>Must Use</u>	<u>REF02</u>	<u>127</u>	<u>Reference Identification</u>	<u>X</u> <u>AN 1/30</u>
			<u>Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier</u>	
			<u>When REF01 is 17, valid values for REF02 are:</u>	
			<u>SUMMARY</u> – Metering party will send only summary level data for this interval account.	
			<u>DETAIL</u> – Metering party will send interval details for this account. For PECO this will interpret as account-level detail.	
			<u>METERDETAIL</u> – Metering party will send interval details for each meter on the account	

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Segment:	REF Reference Identification (Measurement Type and Reporting Interval)
Position:	130
Loop:	NM1 Optional (Dependent)
Level:	Detail
Usage:	Optional (Dependent)
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	<ol style="list-style-type: none"> 1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 REF04 contains data relating to the value cited in REF02.
Notes:	<p>Enrollment Requests: Conditional.</p> <p>Enrollment Accept Responses: Required</p> <p>Other Requests/Responses: Not Used.</p> <p>This segment is sent to describe the measurement types and reporting intervals associated with the service delivery point(s) identified in the NM109 segment. It may be sent on an Enrollment Request when the bill option is Utility Rate Ready consolidated billing and the ESCO wants to associate different rate codes (see REF~RB) with different measurement types and/or reporting intervals. When an Enrollment Request is being accepted, this segment is used by the Utility to describe the type of consumption and reporting interval for each service delivery point(s) identified in the NM109 segment for the account being enrolled.</p> <p>REF~MT~KHMON REF~MT~TDMON REF~MT~COMBO REF~MT~KH030 REF~MT~KHTOU</p>

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
Mand.	REF01	128	Reference Identification Qualifier
		MT	Meter Ticket Number
			Meter type.
			Used to identify the type of consumption measured by a meter and the interval between measurements or the type of consumption and reporting interval applicable to the un-metered service delivery points on the account.

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Must Use	REF02	127	<p>Reference Identification X AN 1/30</p> <p>The type and reporting interval for consumption measurements are described in a five-character field. The first two characters are used to describe the type of consumption. The last three characters describe the reporting interval.</p> <p>The literal "COMBO" is sent in the REF02 element of this segment when the service delivery point(s) identified in the NM109 are capable of providing different measurement types AND/OR measurements for more than one time period in a day.</p> <p>When the REF~MT contains "COMBO" multiple REF~TU segments may be necessary to describe the types of consumption being measured for the service delivery point(s) identified in the NM109 element. A REF~TU segment must also be sent, even when there is only one type of consumption being measured, when multiple time periods are being measured during a day.</p> <p>When only one measurement type is applicable to the metered or un-metered service points identified in the NM1 segment, the REF02 in this segment should contain one of the following codes as the first two characters to describe the type of consumption:</p> <p>K1 Kilowatt Demand (kW) K2 Kilovolt Amperes Reactive Demand (kVAR) K3 Kilovolt Amperes Reactive Hour (kVARH) K4 Kilovolt Amperes (kVA) K5 Kilovolt Amperes Reactive (kVAR) KH Kilowatt Hour (kWh) HH Hundred Cubic Feet (CCF) TZ Thousand Cubic Feet (MCF) TD Therms</p> <p>The following codes are sent as the last three characters of the REF02 element to document the interval capabilities of the metered or un-metered service delivery point(s) identified in the NM1 segment. If that capability is not known then the interval that should be reported is the scheduled meter reading interval.</p> <p>BIM Bi-Monthly DAY Daily MON Monthly QTR Quarterly TOU Time of Use</p> <p>001-999 - Reporting Intervals. (015 indicates 15 minute intervals, 060 indicates 60 minute intervals, etc.)</p>
Optional	REF03	TBD	<p>Description X AN 1/80</p> <p><u>A free-form description to clarify the related data elements and their content</u></p> <p><u>When REF01 is MT, valid values for REF03 are:</u> <u>I – Interval data available</u> <u>M – Interval data NOT available</u></p>

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III. Proposed supporting changes to 814HU

Segment: **LIN** Item Identification

Position: 010

Loop: LIN Optional (Must Use)

Level: Detail

Usage: Optional (Must Use)

Max Use: 1

Purpose: To specify basic item identification data

Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: 1 LIN01 is the line item identification

Comments:

- 1 See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: Request : Required
Response: Required

Request only one action event per LIN Loop. The LIN01 contains a unique identifier for the action event. The LIN03 specifies the product (electric or gas) and the LIN05 specifies the type of service request.

LIN~AACCDD0102005A~SH~EL~SH~HU Request for Historic Usage
LIN~AACCDD0102006A~SH~EL~SH~GP Request for Gas Profile

Data Element Summary

Ref.	Data		Attributes
Des.	Element	Name	
Must Use	LIN01	350 Assigned Identification	O AN 1/20

The identifier supplied in this element either by itself or in conjunction with the BGN02 element from the BGN segment must uniquely identify each LIN request. This identifier must be unique over time to ensure no ambiguity between requests and responses.

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Mand.	LIN02	235	Product/Service ID Qualifier	M	ID 2/2
			SH Service Requested		
Mand.	LIN03	234	Product/Service ID	M	AN 1/48
			Commodity - there may be only one commodity (Electric or Gas) for each 814 transaction.		
			EL		
			GAS		
Must Use	LIN04	235	Product/Service ID Qualifier	X	ID 2/2
			SH Service Requested		
Must Use	LIN05	234	Product/Service ID	X	AN 1/48
			GP		
			Gas Profile		
			Request a 12 month forecasted gas delivery profile. Valid only when LIN03=GAS.		
			Gas Profiles are not supported by all utilities. If a Gas Profile request is sent to a Utility that does not support gas profiles, the Utility will return Historic Usage, if available, in the 867 sent in response to the Gas Profile request. When supported, a GP request may still be rejected if there is insufficient data to develop a gas profile for that customer.		
			HU		
			Historic Usage		
			Request for Usage History.		
			GAS note: Some utilities support a Gas Profile in lieu of actual history and will return a Gas Profile, if sufficient data exists, in the 867 sent in response to the request for Historic Usage.		
			IU		
			<u>Historic Interval Usage</u>		
			<u>Request for Interval Usage History. Indicates an ESP request to obtain historical interval usage information for this customer. If historical interval not available, request will be rejected</u>		