

PA Smart Meter Data

Met-Ed, Penelec, Penn Power, West Penn Power

Supplier Webinar

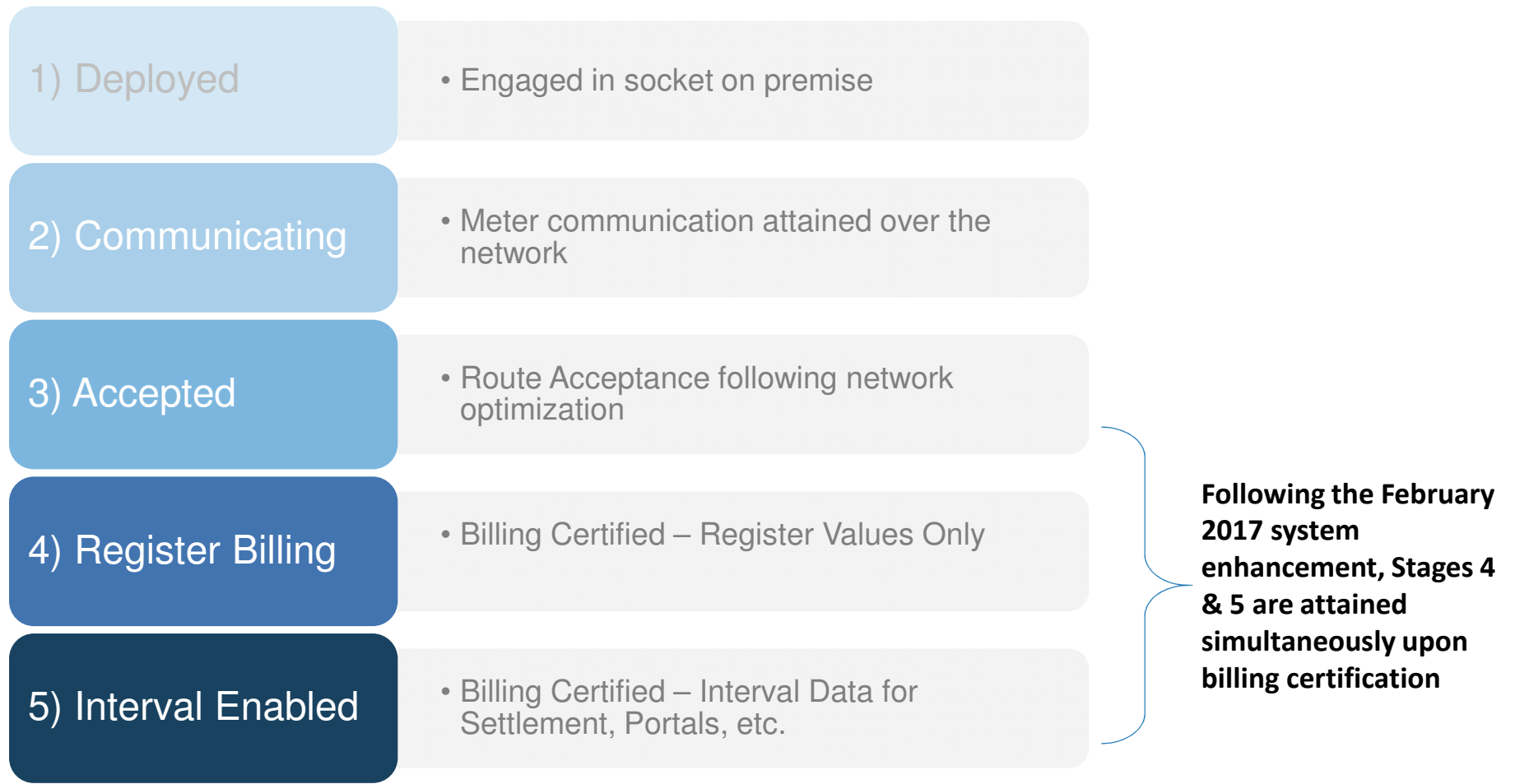


Agenda

- ❖ **FirstEnergy Interval Data Implementation Plan**
- ❖ **PJM Settlements Utilizing Interval Data**
- ❖ **Interval Data Availability**
 - ❖ Eligible Customer List
 - ❖ EDI
 - ❖ Web Portals
 - ❖ SU-MR
 - ❖ Rolling 10 Day
 - ❖ StS Historical Interval Usage
- ❖ **Questions**

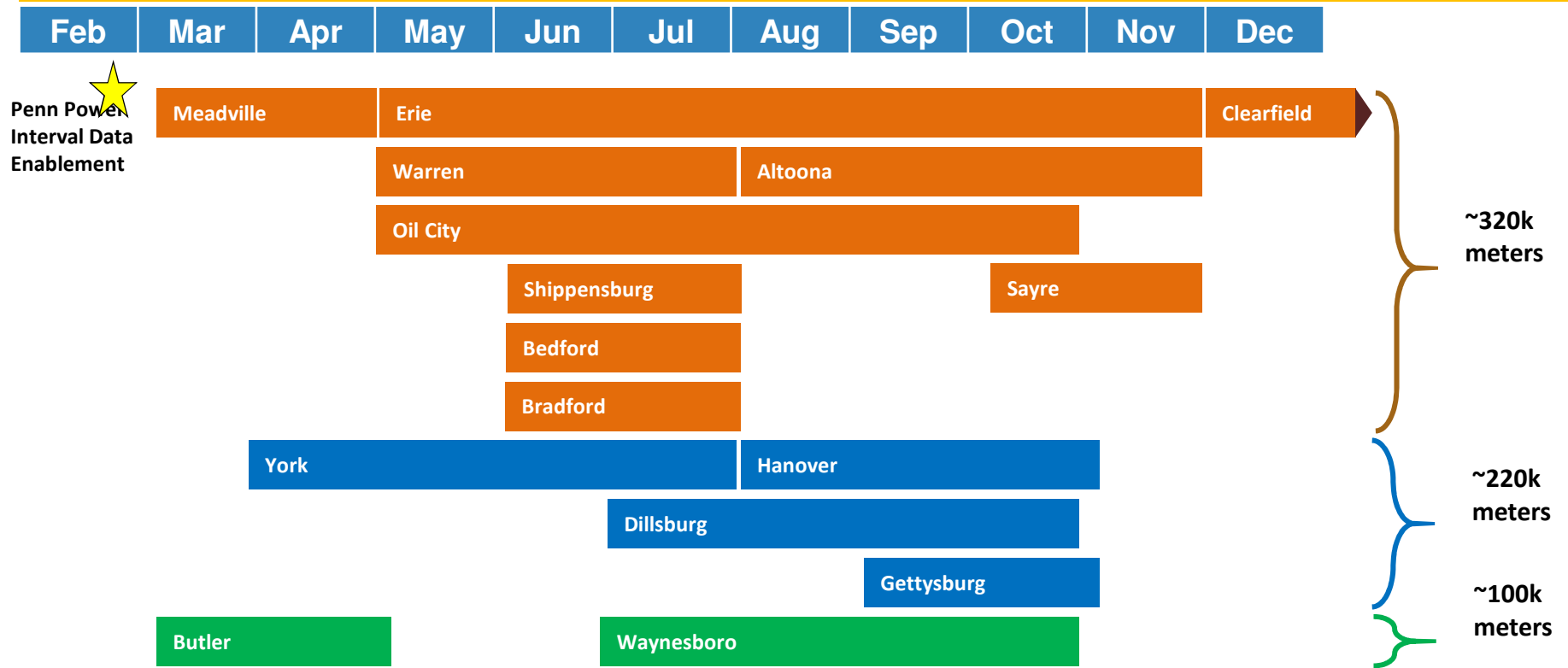
Smart Meter Stages | Deployment through Interval Enablement

Progress is performed on a meter reading route by route basis for all routes within a meter reading district, while progressing in parallel across multiple districts in multiple OpCos



Stages 4 & 5 Billing Certification | 2017 PA Schedule for ME, PN, WPP

Bill Certification will begin in Met-Ed, Penelec, and West Penn Power Meter Reading Districts in March 2017 following the Interval Data Enablement release. ~640k meters across 16 districts encompassing all three OpCos are scheduled to be certified in 2017 with the remaining ~1.2M meters throughout 2018-19



Legend

- Penelec
- Met-Ed
- West Penn Power
- ▶ Extends to 2018

Deployment maps are available at:
<https://www.firstenergycorp.com/help/pa-smartmeter/schedule.html>

AMI Impacts to PJM processes

- ❖ **AMI interval data will be used in the daily Settlement A**
 - ❖ All validated meter data received by 8 am on day of processing will be included in Settlement A
 - ❖ Any missing meter data will be estimated using the assigned class profile and its respective usage factor. (same estimation routine as used when non-interval meter)
 - ❖ Missing data will be replaced with actual data for 60-day Settlement B processing.
- ❖ **Penn Power February Settlement B**
 - ❖ All available AMI data will be included for Feb 20 through 28
- ❖ **AMI data for West Penn, Penelec and Met Ed will be incorporated into the Settlement A and Settlement B processes beginning in March and continuing on a rolling basis throughout the remainder of the smart meter deployment.**
- ❖ **AMI interval data will be used in the 2018 NSPL and PLC calculations**

Eligible Customer List

- ❖ **The Eligible customer list will now include a new field “SM”.**
 - ❖ This field will have a “Y” to denote that interval data is available.
 - ❖ This field will have a “N” to denote that the account does not yet have interval data.
 - ❖ The ECL is run each month on the 3rd Sunday of the month.
 - ❖ We ran this off cycle last Sunday to pull in all eligible Penn Power interval data customers.

contract_acct(12)
capacity_pls_future(20)
net_metering_ind(1)
tax_exempt(1)
sm (1)

Smart meter. “Y” indicates that smart meter interval data is available for the customer.

- ❖ **<https://www.firstenergycorp.com/supplierservices/pa/pp/data.html>**

EDI Changes

- ❖ **Suppliers can now begin to request monthly interval usage data utilizing EDI.**
 - ❖ This can be requested upon a new enrollment or via an 814C requesting monthly interval usage.
 - ❖ If the request is accepted, we will begin providing interval usage data via the 867 starting the first month where we have only interval data.

- ❖ **Planned for May 2017 implementation, Suppliers will be able to request historical interval usage.**
 - ❖ These request will only be fulfilled under the following scenarios:
 - ❖ The customer has at least 12 months of interval data.
 - ❖ We do not have the ability to provide a combination of HU & HIU.
 - ❖ The customer has received interval data from the point of their move in.

Web Portal - Background

- ❖ **PA PUC requires utilities with smart meter requirements to have a web portal.**
 - ❖ Final Order Sept 3th, 2015 (Regarding SU-MR)
 - ❖ Final Order June 30th, 2016 (Regarding StS)
- ❖ **The web portal will have 3 unique functionalities**
 - ❖ Single User – Multiple Request (SU-MR)
 - ❖ System-to-System Rolling 10 Day (StS Rolling 10 Day)
 - ❖ System-to-System Historical Interval Usage (StS HIU)
- ❖ **We are implementing functionality in accordance with the solution framework document.**
 - ❖ http://www.puc.pa.gov/utility_industry/electricity/edewg_files_for_download.aspx.

SU-MR

- ❖ **The SU-MR method requires a web-based platform allowing for an authorized user to manually log into a secure portal, request, and receive smart meter interval usage for one or more account numbers as part of a single request. The results are rendered within the web portal interface itself or exported to the user in a predefined file format.**
 - ❖ Supplier must enter the 20 digit customer number.
 - ❖ Unmetered and a non smart interval meter (MV90) accounts not eligible.
- ❖ **We will allow up to 10 accounts to be loaded at one time.**
 - ❖ These can be viewed via the web.
 - ❖ They can also be downloaded to a CSV file.
 - ❖ You can download each account separately or together in one file.

SU-MR

A user can either upload **ten** accounts using a CSV file format or enter accounts manually in the Account Numbers box as seen in the example below.

Account Numbers *

Upload File

Verify

Account Information

Account	Status	Have LOA? ?
	Valid Account	N/A

Submit

Rejection Reason	Summary of Rejection
Missing Account Number	Input is missing 20-digits
Invalid Account	Input has 20-digits but are invalid, input is for a non-PA EDC and or input is for an interval meter that is not a smart meter (MV90)
Account Exists but is not Active	Account number exists but a move out date is pending
Unmetered Account	Unmetered Account
Account Pending Active	Account number exists but request is made before the customer's move-in date
Historical Usage Unavailable	No historical usage data is available

SU-MR (Web View)

Account Number: [Download](#)

Customer Name:

Bill Cycle: 61

EDC Name: Met-Ed

Load Profile: RTHT

Meter Config: ←→ Only populates 'Net Meter' if applicable

Net Service Peak: 2.1191000

Peak Contribution: 1.7014000

Rate Class: ME_RS_01D

Usage Start Date: 11/08/2013

Usage End Date: 11/25/2014

Use Download to save as a CSV File.

Account Usage ←→ Data will be either Account or Meter level usage.

Start Date	End Date	kWh	kWh QTY	Registered kW	Registered kW QTY	Billed kW
10/29/2014	11/25/2014	721	QD	0.0	QD	0.0
09/26/2014	10/28/2014	738	KA	0.0	KA	0.0
08/28/2014	09/25/2014	1070	QD	0.0	QD	0.0
07/29/2014	08/27/2014	708	KA	0.0	KA	0.0
06/28/2014	07/28/2014	1245	QD	0.0	QD	0.0
05/30/2014	06/27/2014	405	KA	0.0	KA	0.0
04/29/2014	05/29/2014	42	QD	0.0	QD	0.0
03/29/2014	04/28/2014	808	KA	0.0	KA	0.0
02/28/2014	03/28/2014	655	QD	0.0	QD	0.0
01/29/2014	02/27/2014	860	KA	0.0	KA	0.0
12/31/2013	01/28/2014	1365	QD	0.0	QD	0.0
11/27/2013	12/30/2013	409	KA	0.0	KA	0.0
11/08/2013	11/26/2013	199	QD	0.0	QD	0.0

SU-MR (File View) – No Interval Data

CSV view of an account's data response:

Customer Identifier	12345678901234500000					
Customer Name	Abe L Customer					
Report Title	Account-Level Usage	← Data will be either Account or Meter level usage.				
EDC	Met-Ed					
Usage From Date	11/8/2013					
Usage To Date	11/25/2014					
Current Capacity PLC	1.7014					
Current Transmission NSPL	2.1191					
Current Rate Class	ME_RS_01D					
Current Rate Subclass						
Current Bill Cycle	61					
Current Load Profile	RTHT					
Special Meter Configuration		← Only populates 'Net Meter' if applicable				
Summarized Monthly Billed Usage						
Reading From Date	Reading To Date	kWh	kWh QTY	Registered kW	Registered kW QTY	Billed kW
10/29/2014	11/25/2014	721	QD	0	QD	0
9/26/2014	10/28/2014	738	KA	0	KA	0
8/28/2014	9/25/2014	1070	QD	0	QD	0
7/29/2014	8/27/2014	708	KA	0	KA	0
6/28/2014	7/28/2014	1245	QD	0	QD	0
5/30/2014	6/27/2014	405	KA	0	KA	0
4/29/2014	5/29/2014	42	QD	0	QD	0
3/29/2014	4/28/2014	808	KA	0	KA	0
2/28/2014	3/28/2014	655	QD	0	QD	0
1/29/2014	2/27/2014	860	KA	0	KA	0
12/31/2013	1/28/2014	1365	QD	0	QD	0
11/27/2013	12/30/2013	409	KA	0	KA	0
11/8/2013	11/26/2013	199	QD	0	QD	0
Detailed Interval Usage						
Reading Date		100 100 QTY	200 200 QTY	200 DST	200 DST Q	
No Data Found	← Interval data will only present once a meter is interval enabled.					

SU-MR (File View) – Interval Data

15 MPI

Detailed Interval Usage										
Reading Date	15 0015 QTY	30 0030 QTY	45 0045 QTY	100 0100 QTY	115 0115 QTY	130 0130 QTY				
2/7/2017	0.845 QD	0.935 QD	1.008 QD	0.894 QD	0.997 QD	0.88 QD				
2/6/2017	0.717 QD	0.98 QD	0.798 QD	0.983 QD	0.868 QD	0.872 QD				
2/5/2017	1.245 QD	1.064 QD	1.277 QD	1.025 QD	1.101 QD	1.184 QD				
2/4/2017	1.186 QD	1.064 QD	1.064 QD	1.118 QD	1.008 QD	1.16 QD				
2/3/2017	0.868 QD	1.208 QD	0.957 QD	1.096 QD	1.065 QD	0.875 QD				
2/2/2017	1.089 QD	1.072 QD	1.173 QD	1.051 QD	1.133 QD	1.177 QD				
2/1/2017	1.034 QD	1.111 QD	1 QD	0.937 QD	0.988 QD	1.11 QD				
1/31/2017	0.949 QD	1.065 QD	1.119 QD	1.015 QD	1.079 QD	1.061 QD				
1/30/2017	0.999 QD	0.944 QD	1.06 QD	1.07 QD	0.948 QD	1.041 QD				
1/29/2017	1.023 QD	1.2 QD	0.938 QD	1.178 QD	0.928 QD	1.115 QD				
1/28/2017	1.079 QD	1.146 QD	1.031 QD	1.187 QD	1.065 QD	0.994 QD				
1/27/2017	1.061 QD	0.91 QD	0.903 QD	1.005 QD	1.112 QD	1.019 QD				
1/26/2017	0.813 QD	0.879 QD	0.815 QD	0.827 QD	0.84 QD	0.798 QD				
1/25/2017	1.048 QD	1.022 QD	0.901 QD	1.055 QD	1 QD	0.821 QD				
1/24/2017	0.877 QD	0.983 QD	0.929 QD	0.853 QD	1.083 QD	0.81 QD				

60 MPI

Detailed Interval Usage											
Reading Date	100 100 QTY	200 200 QTY	200 DST	200 DST QTY	300 300 QTY	400 400 QTY	500 500 QTY	600 600 QTY			
2/7/2017	0.145 QD	0.078 QD			0.135 QD	0.07 QD	0.126 QD	0.093 QD			
2/6/2017	0.044 QD	0.116 QD			0.156 QD	0.075 QD	0.151 QD	0.136 QD			
2/5/2017	0.143 QD	0.093 QD			0.085 QD	0.14 QD	0.154 QD	0.154 QD			
2/4/2017	0.13 QD	0.137 QD			0.132 QD	0.133 QD	0.147 QD	0.145 QD			
2/3/2017	0.101 QD	0.151 QD			0.159 QD	0.142 QD	0.141 QD	0.16 QD			
2/2/2017	0.143 QD	0.141 QD			0.094 QD	0.092 QD	0.135 QD	0.137 QD			
2/1/2017	0.15 QD	0.148 QD			0.064 QD	0.134 QD	0.152 QD	0.072 QD			
1/31/2017	0.104 QD	0.099 QD			0.155 QD	0.148 QD	0.114 QD	0.118 QD			
1/30/2017	0.113 QD	0.141 QD			0.157 QD	0.042 QD	0.133 QD	0.168 QD			
1/29/2017	0.066 QD	0.136 QD			0.15 QD	0.096 QD	0.069 QD	0.148 QD			
1/28/2017	0.127 QD	0.11 QD			0.137 QD	0.151 QD	0.097 QD	0.089 QD			
1/27/2017	0.134 QD	0.092 QD			0.095 QD	0.134 QD	0.114 QD	0.15 QD			
1/26/2017	0.08 QD	0.083 QD			0.129 QD	0.08 QD	0.137 QD	0.067 QD			
1/25/2017	0.13 QD	0.105 QD			0.104 QD	0.105 QD	0.06 QD	0.158 QD			
1/24/2017	0.051 QD	0.097 QD			0.1 QD	0.146 QD	0.026 QD	0.141 QD			
1/23/2017	0.039 QD	0.09 QD			0.142 QD	0.077 QD	0.026 QD	0.065 QD			
1/22/2017	0.077 QD	0.16 QD			0.073 QD	0.089 QD	0.139 QD	0.072 QD			
1/21/2017	0.141 QD	0.085 QD			0.121 QD	0.087 QD	0.11 QD	0.228 QD			
1/20/2017	0.148 QD	0.138 QD			0.069 QD	0.147 QD	0.145 QD	0.071 QD			

StS Rolling 10 Day

- ❖ According to the Web Portal Working Group Technical Implementation Standards System-to-System (StS) Rolling 10-day is a “provide-and-park” approach for sharing smart meter data. The EDC publishes a file that includes all available detailed bill-quality meter-level interval usage in hour ending format for the set of accounts served by a particular EGS DUNS(+4) number on a specific usage delivery date.
- ❖ **Smart Meter interval enablement was available as of 2/23/17.**
- ❖ **We will provide a daily list that includes:**
 - ❖ Customer Number, Meter Number, Meter Multiplier
 - ❖ The file will also include kWh data for each interval for that particular day.

StS Rolling 10 Day

Supplier Customer File Download

Download Customer File -

- 007912736_ [REDACTED]_P20170227_IU20170224_60_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170224_15_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170223_60_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170223_15_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170222_60_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170222_15_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170221_60_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170221_15_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170220_60_1.zip
- 007912736_ [REDACTED]_P20170227_IU20170220_15_1.zip

15 MPI

#EDI_ACCT_NO	METER_NUMBER	METER_MULTIPLIER	USAGE_DATE	E_015	E_030	E_045	E_100	E_115
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/20/2017	0.01	0.01	0.01	0.01	0.01
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/20/2017	0.013	0.013	0.06	0.059	0.013
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	40	2/20/2017	4.186	4.4	4.226	4.346	4.32
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/20/2017	0.523	0.277	0.329	0.343	0.27
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	80	2/20/2017	4.96	4.88	4.88	4.96	4.88
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/20/2017	0.19	0.186	0.185	0.185	0.186
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	80	2/20/2017	3.28	3.28	3.44	3.36	3.36

60 MPI

#EDI_ACCT_NO	METER_NUMBER	METER_MULTIPLIER	USAGE_DATE	E_100	E_200	E_300	E_400	E_500	E_600	E_700	E_800	E_900
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/24/2017	0.487	0.474	0.485	0.822	0.478	2.851	2.791	0.639	0.66
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/24/2017	0.663	0.665	0.664	0.663	0.663	0.65	0.632	0.621	0.619
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/24/2017	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.005
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/24/2017	0.028	0.027	0.028	0.027	0.027	0.027	0.027	0.026	0.027
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/24/2017	0.562	0.566	0.57	0.557	0.571	0.565	0.568	0.384	0.4
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	1	2/24/2017	0.115	0.114	0.115	0.115	0.114	0.113	0.112	0.113	0.113

StS Historical Interval Usage

- ❖ According to the Web Portal Working Group Technical Implementation Standards the StS Historical Interval Usage (HIU) is a method that utilizes a platform which allows an authorized user's IT systems to communicate directly with the web portal system of the EDC without requiring a user to manually log into the web portal itself and leverage the user interface. The requestor connects to the EDC's system exchanging data via XML transactions.
- ❖ **Smart Meter interval enablement was available as of 2/23/17.**
- ❖ **We will provide the follow upon request:**
 - ❖ Customer attribute information as well as interval data
 - ❖ A valid reject reason
- ❖ **NOTE: We will provide up to 12 months of data. If less than 12 months, we will return what interval data is available.**

How to Receive Rolling 10 Day & HIU

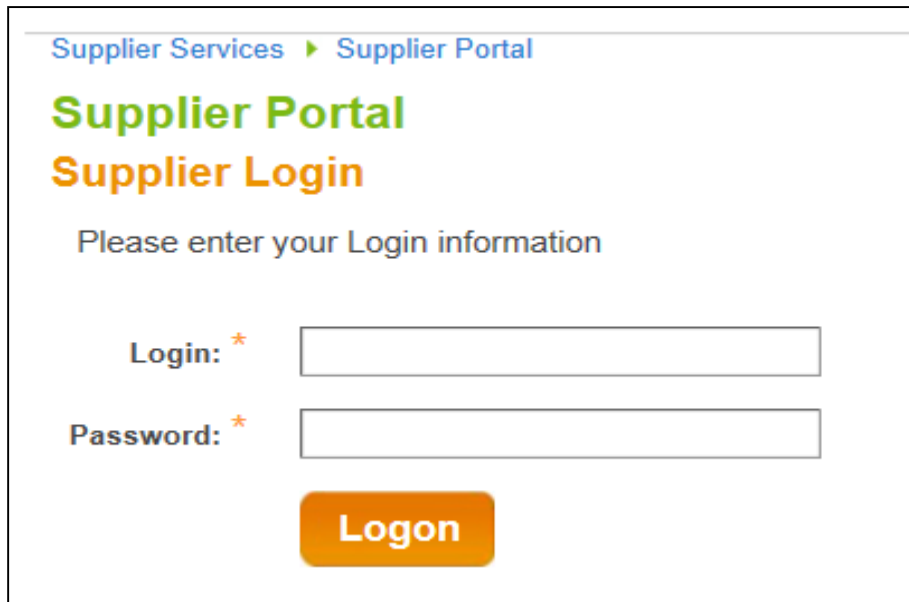
- ❖ **Suppliers will need to contact us if they would like to utilize either the Rolling 10 Day files or the StS HIU**
 - ❖ Rolling 10 Day files will be received once a supplier sets up the DUNS+4 for each entity they would like to receive files for.
 - ❖ The admin must submit a request to the Supplier Services mailbox to initiate the request. The request must include each DUNS+4 that we should provide daily files for.
 - ❖ StS HIU will require a form to be filled out and coordination between the supplier and FE IT dept. This will be included in User Guide.
 - ❖ Send the completed form to the Supplier Services mailbox to begin the process.
- ❖ **User Guide version 2 including updates related to interval billing will be posted to our portal on February 28th.**
 - ❖ The user guide will include instructions on accessing Rolling 10 Day and StS HIU.

Administration

- ❖ **In order to utilize any of the three functionalities outlined, each supplier must have an administrator.**
 - ❖ If a supplier already has an administrator, they will be able to view SU-MR but must contact Supplier Services for Rolling 10 Day and HIU.
- ❖ **Administrative Functions:**
 - ❖ Ability to create, edit and remove users.
 - ❖ Must attest that all users for their organization have proper access.
 - ❖ Ability to deactivate user sessions when a user locks themselves out.
 - ❖ Will be able to view an activity log of users and export the information to Excel.

Access

- ❖ <https://www.firstenergycorp.com/supplierservices/supplierportal.html>



Supplier Services ▶ Supplier Portal

Supplier Portal

Supplier Login

Please enter your Login information

Login: *

Password: *

Logon

Quarterly Review Process

- ❖ **Each administrator is required to validate the accuracy of the users of the portal.**
 - ❖ We will prompt the admin upon initial login, to attest to the accuracy of the users of the tool.
 - ❖ The administrator must sign off that the list of users is complete and accurate on a quarterly basis.
 - ❖ Administrators can attest as frequently as they would like, however we will prompt them at login as they get close to the 3 month limit.
 - ❖ If the administrator does not attest for a period of 3 months, we will lock the admin and all users of the tool.
 - ❖ The administrator must reach out to supplier support to unlock the portal.

Attest

Last Attest Time: 10/19/2016


I attest that all users for FirstEnergy - PA have the proper access *

Audit Log

Activity Log

[Back to Admin](#) | [Logout](#)

Search for user by login or name then filter by clicking on the icons on each column. To retrieve a list of all users leave the search field blank and click search.

 Export to Excel

Date/Time	User ID	Action Code	Action Text
2016/10/13 09:26 AM	FirstEnergy	Access	Login success for username: Firstenergy
2016/10/13 09:26 AM	FirstEnergy	Attest	Supplier Attested Access
2016/10/13 09:38 AM	FirstEnergy	Query	Account: [REDACTED] Message: Valid Account LOA Required: false
2016/10/13 09:38 AM	FirstEnergy	Result	Account: [REDACTED] LOA Provided: N/A
2016/10/13 09:58 AM	FirstEnergy	Access	Login success for username: Firstenergy
2016/10/13 09:58 AM	FirstEnergy	Query	Account: [REDACTED] Message: Valid Account LOA Required: false
2016/10/13 09:59 AM	FirstEnergy	Result	Account: [REDACTED] LOA Provided: N/A
2016/10/13 10:20 AM	FirstEnergy	Access	Login success for username: FirstEnergy
2016/10/13 10:20 AM	FirstEnergy	Query	Account: [REDACTED] Message: Valid Account LOA Required: false
2016/10/13 10:20 AM	FirstEnergy	Result	Account: [REDACTED] LOA Provided: N/A
2016/10/13 10:24 AM	FirstEnergy	User Logout	Successful logout for login: FirstEnergy

Questions

Q1: Will monthly usage change to interval data?

A1: No, we will continue to send MU data until we receive a request for IU.

Q2: Is the change to IU requested through ref line 17?

A2: Yes

Q3: How can I tell if a customer is interval enabled?

A3: You will see that on the ECL file under SM indicator, through, SU-MR, Rolling 10 Day, or HIU.

Q4: How do we know if a customer is 15 minute or 60 minute.

A4: We will pass back data at the interval the customer is metered. Also, it will match our utility rate schedules. Therefore, as a rule of thumb, all residential and GS-Small will be 60 min interval with the remaining rate classes 15 min.

Q5: Does the 814C have any special characters to denote receiving meter level vs. account level.

A5: We will only pass back account level data in PA.

Q6: Will the various REF lines which indicate the Meter Type in an enrollment response reflect MON or Minutes Per Interval (015 or 060).

A6: We will provide back “MON”.

Q7: Will we receive the presentation?

A7: We will send out after our Thursday March 2nd webinar.