

Delivery Point Metering and Meter Data System Update

October 24, 2018 Board Meeting



MDS and Delivery Point Metering Update

- 10 Member Systems
 - 21 Delivery Points
 - 24 Meters
- Substation Facilities
- Member Purchase of Metering PTs and CTs
- Installation of Metering and Communication Equipment
- Installation of Meter Data System

Delivery Points, Metering and Substations

Line No.	KyMEA Member	No. of Delivery Points	No. of Meters	Substation Transformer Ownership
	(a)	(b)	(c)	(e)
1	BARBOURVILLE	1	1	Member
2	BARDWELL	1	1	LGE/KU
3	BENHAM	1	1	LGE/KU
4	BEREA	2	2	Member
5	CORBIN	2	2	Member
6	FALMOUTH	1	1	LGE/KU
7	FRANKFORT	1	3	Member
8	MADISONVILLE	6	6	LGE/KU
9	PARIS	4	5	Member
10	PROVIDENCE	2	2	LGE/KU

Madisonville and Providence are considering the purchase of substation facilities

Metering and Communication

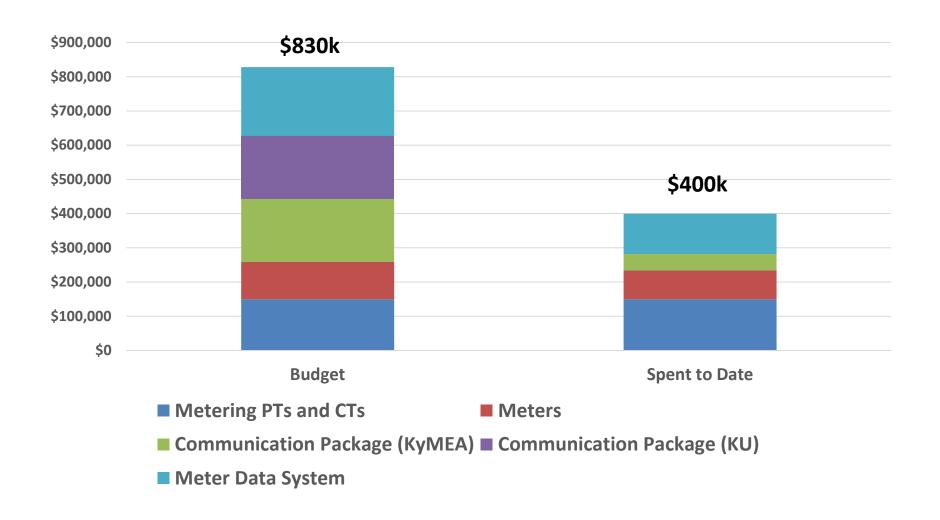
Item	PO Issued To	Amount (\$) ^[1]			
Meters	Schneider Electric c/o Leidy Engineering Sales	\$ 84,443			
Cell Routers	Source, Inc.	\$ 6,674			
Data Plan	Verizon	\$ 450 per month			
Ethernet Switch	Industrial Networking Solutions	\$ 5,056			
Power Supply	Digi-Key Electronics	\$ 1,062			
Total		\$ 97,685			
[1] As of October 2018; All amounts are one-time expenses unless otherwise indicated; at					

or under budget

Meter Data System

ITEM	Amount (\$) ^[1]				
Software	\$ 21,171				
Startup & Commissioning	\$ 18,576				
Annual Support Plan	\$ 30,190 (first 2 years)				
Server Hardware	\$ 13,582				
Total MDS to Date	\$ 83,519				
[1] As of October 2018; All amounts are one-time expenses unless otherwise indicated; at or under budget					

Budget Status – October 2018



Delivery Point Transition Plan

- Delivery Point Metering
 - Benham and Paris metering is complete
 - Madisonville is in progress
 - Remaining meters to be installed by end of year
- Meter Data System
 - Telecommunication and meter data arrangements include communication equipment, data path, and meter signal to LGE/KU and others

Delivery Point Metering, Communication and MDS Schedule

Line No.	Task / Activity	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19
1	Delivery Point Assessment								I			
2	Review Metering and Communication Requirements											
3	Meter Selection											
4	Review/Prepare 3-line Metering, Physical, and Wiring Diagrams											
5	Evaluate Communication Options											
6	Develop Basic Network Diagram											
7	Field Testing to Confirm Communication Selection											
8	Purchase Metering and Communication Equipment								I			
9	Install Metering and Communication Equipment								I			
10	Design Meter Data System (MDS) Software and Servers											
11	Develop MDS Procurement Documents											
12	Issue MDS RFP, Evaluate Responses and Award Equipment											
13	Install MDS in KyMEA office											
14	Develop Points List, Setup Data Communications, and Testing (w/ESP)											
	Other Tasks and Dates								I			

Parallel Operations - Metering, MDS, and Scheduling Transfer PTs/CTs and Equipment from LGE/KU to KyMEA KyMEA begins Day 1 Operations

Jan through Apr 2019 April 30, 2019 May 1, 2019

Delivery Point Meter Installation Schedule

Line No.	Member	No. of Del. Pts.	No. of Meters	Oct-18	Nov-18	Dec-18	Jan-19	Comments	
1	Madisonville	6	6					6 meters, 6 comms	
2	Providence	2	2					2 meters, 2 comms	
3	Bardwell	1	1					1 meter, 1 comm	
4	Benham	1	1*					meter installed; comm from AMP via VPN	
5	Barbourville	1	1					1 meter, 1 comm	
6	Corbin	2	2					2 meters, 2 comms	
7	Berea	2	2					2 meters, comms from AMP via VPN	
8	Paris	4	5 *					5 meters installed, 4 comms to install	
9	Falmouth	1	1					1 meter, 1 comm	
10	Frankfort	1	3					3 meters, 1 comm	
11	Totals	21	24						

^{*} Meters have been installed at these locations

Discussion