Kennebunk Light & Power District
4 Factory Pasture Lane
Kennebunk, Maine 04043
(207) 985-3311
www.klpd.org

BOARD OF TRUSTEES BUSINESS MEETING AGENDA
TUESDAY, APRIL 26, 2022
ZOOM AND IN PERSON MEETING @ 5:00 PM

I.	**CALL TO ORDER**	**5:00**
II.	**RKO PRESENTATION OF FY 2021 AUDIT TO BOARD**	**5:05**
III.	**BOARD REVIEW OF MARCH, 2022 FINANCIALS**	**5:45**
IV.	**BOARD UPDATE ON PROGRESS ON EATON METERING PROJECT**	**5:55**
V.	**GENERAL MANAGER'S REPORT**	**6:10**

- **a. ASPLUNDH PROGRESS**
- **b. CONNECTIVITY COMMITTEE FIBER REPORT FINDINGS**
- **c. PUC/LEGISLATIVE UPDATE**
- **d. FERC NOTIFICATION OF ANNUAL LICENSE RENEWAL PROCESS**

VI.	**PUBLIC COMMENT PERIOD (LIMITED TO 15 MINUTES TOTAL)**	**6:20**
VII.	**NEXT MEETINGS: APRIL 26, 2022, MAY 31, 2022**	**6:35**
VIII.	**BOARD RECOMMENDATION FOR AGENDA ITEMS FOR NEXT MEETING**	**6:35**
IX.	**ADJOURN**	**6:35**

Join Zoom Meeting

https://us02web.zoom.us/j/89246535343?pwd=d0NHSUhkMUI5RHdtV1BWUUNMRFRUZz09

Meeting ID: 892 4653 5343
Passcode: 109227
One tap mobile
+16465588656,,89246535343#,,,,*109227# US (New York)
+13017158592,,89246535343#,,,,*109227# US (Washington DC)

Kennebunk Light and Power District

Financial Overview

Presented By: Casey Leonard
RUNYON KERSTEEN OUELLETTE

INSIDE

About this presentation

This presentation is intended as a tool to assist the Board of Trustees and management in understanding its financial operating results. The information contained in this publication should be read in conjunction with the audited financial statements and related disclosures and should not be used for any other purposes without the expressed consent of *RUNYON KERSTEEN OUELLETTE*.

Please contact us at 207-773-2986 or 1-800-486-1784
20 Long Creek Drive, South Portland, ME 04106

RKO
Runyon Kersteen Ouellette

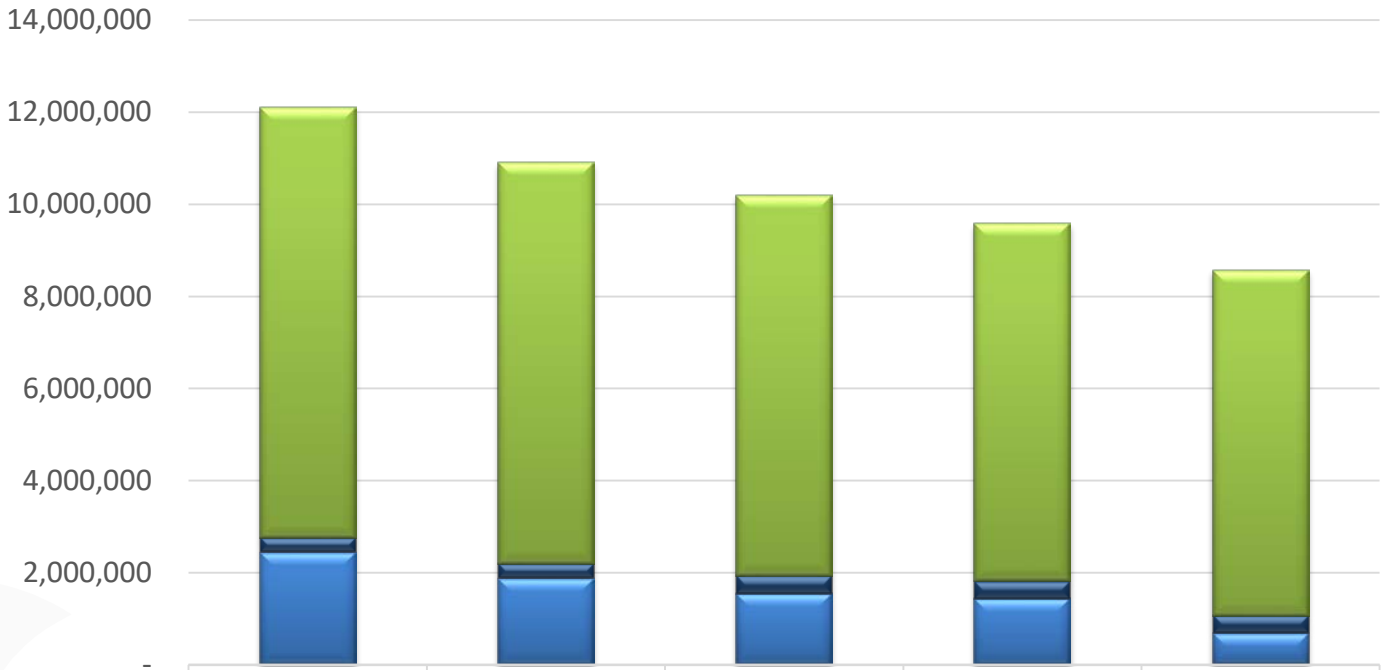
Kennebunk Light and Power District

Summary of Audit Results

- Financial Statement Opinion – Unmodified
- Report Required by *Government Auditing Standards* (GAS)
  - No Material Weaknesses
  - No Significant Deficiencies
- Management Letter
  - Segregation of duties
  - Computerized Capital Asset Records
  - Inventory Management

Kennebunk Light and Power District

Net Position Analysis FY 2017-2021



	2021	2020	2019	2018	2017 (restated)
Net investment in capital assets	9,345,694	8,707,757	8,274,226	7,762,169	7,506,718
Restricted	314,826	314,826	382,671	382,637	382,605
Unrestricted	2,449,870	1,881,434	1,546,878	1,441,058	690,949

Observations:

- **Net investment in capital assets** has been increasing steadily since 2017.
- **Total net position** increased $1,206,373 in fiscal year 2021.

Kennebunk Light and Power District

Revenues 2021 and 2020

	2021	2020	Change
Electricity	7,278,011	7,453,389	(175,378)
Regional network service	1,984,081	1,890,987	93,094
Transmission	562,778	529,846	32,932
Delivery	3,031,239	2,901,785	129,454
Other operating income	47,266	39,790	7,476
Interest revenue	10,678	20,242	(9,564)
Amortization of change in net post-employment benefits	116,223	(967)	117,190
Miscellaneous revenue	204,172	83,849	120,323
Capital contributions	270,592	130,938	139,654
Total	**13,505,040**	**13,049,859**	**455,181**

Observations:

- **Electricity revenues** decreased as KLPD negotiated a lower rate per kWH that was passed along to customers.

- **Delivery, transmission, and RNS revenues** increased in 2021 due to an increase in customer demand.

- The **amortization of change in postemployment benefits** increased due to changes in actuarial assumptions, which ultimately resulted in the recognition of a net pension asset.

- **Miscellaneous revenues** increased primarily due to the receipt of insurance proceeds in 2021 and additional money from CMP as mutual aid.

- **Capital contributions** increased in 2021 due to more large scale projects compared to 2020.

Kennebunk Light and Power District

Expenses 2021 and 2020

	2021	2020	Change
Purchased power	7,278,011	7,453,389	(175,378)
Regional network service	1,984,081	1,890,987	93,094
Transmission costs	562,779	529,846	32,933
Operations	509,458	630,235	(120,777)
Maintenance	88,371	104,736	(16,365)
Customer accounting and collections	185,132	182,547	2,585
General and administrative	1,228,258	1,110,930	117,328
Depreciation	378,806	360,000	18,806
Interest expense	83,771	86,021	(2,250)
Amortization expense	-	926	(926)
Total	**12,298,667**	**12,349,617**	**(50,950)**

Observations:

- **Purchased power** decreased as KLPD negotiated a lower rate per kWH.

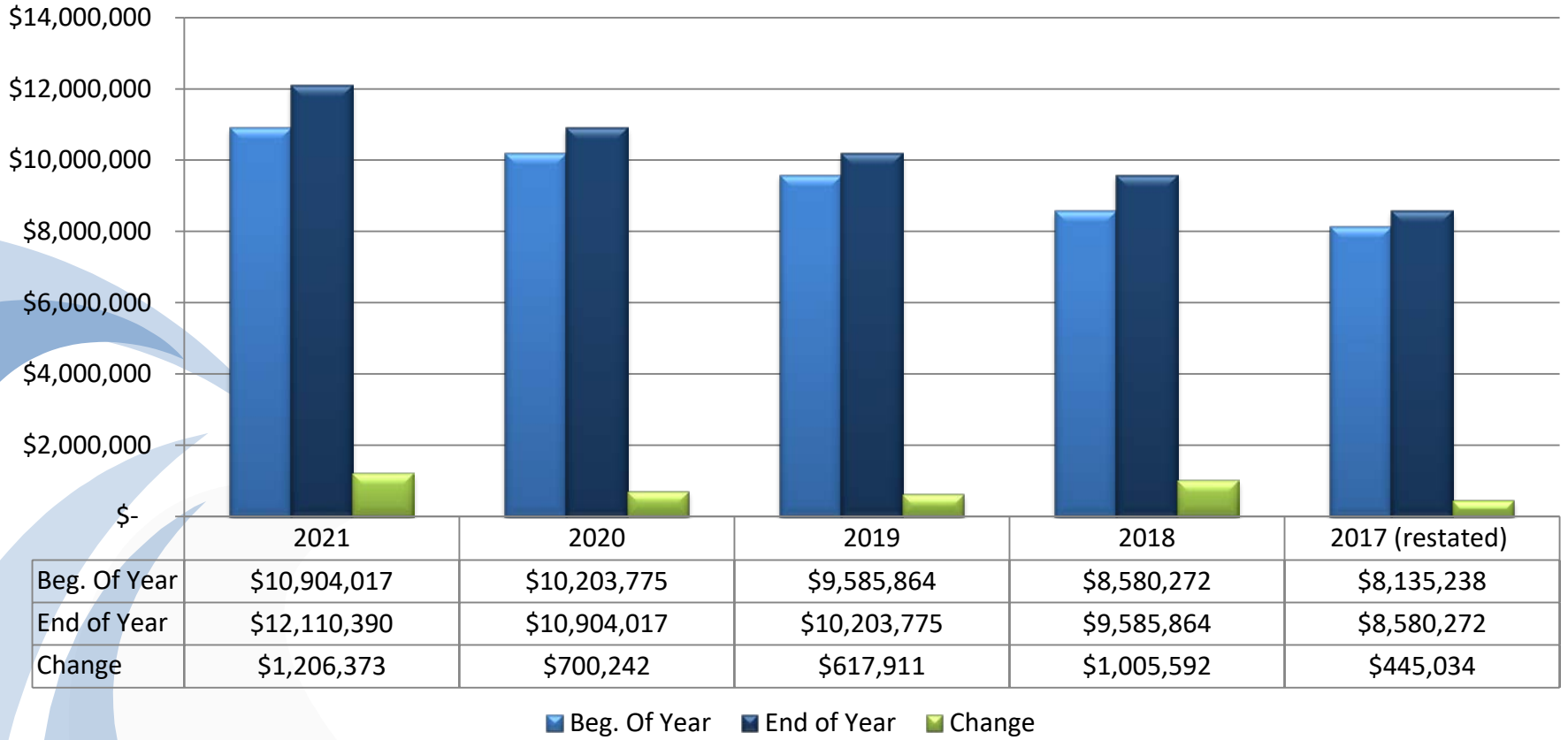
- **Transmission expenses and regional network services** increased in 2021 due to an increase in customer demand.

- **Operations expenses** decreased due a decrease in labor expenses and contracted tree trimming.

- **General and administrative expenses** increased due to an employee related legal issue, increases in office employee salaries and related benefits, and an increase in computer related expenses.

KENNEBUNK LIGHT AND POWER DISTRICT

Change in Net Position FY 2017-2021



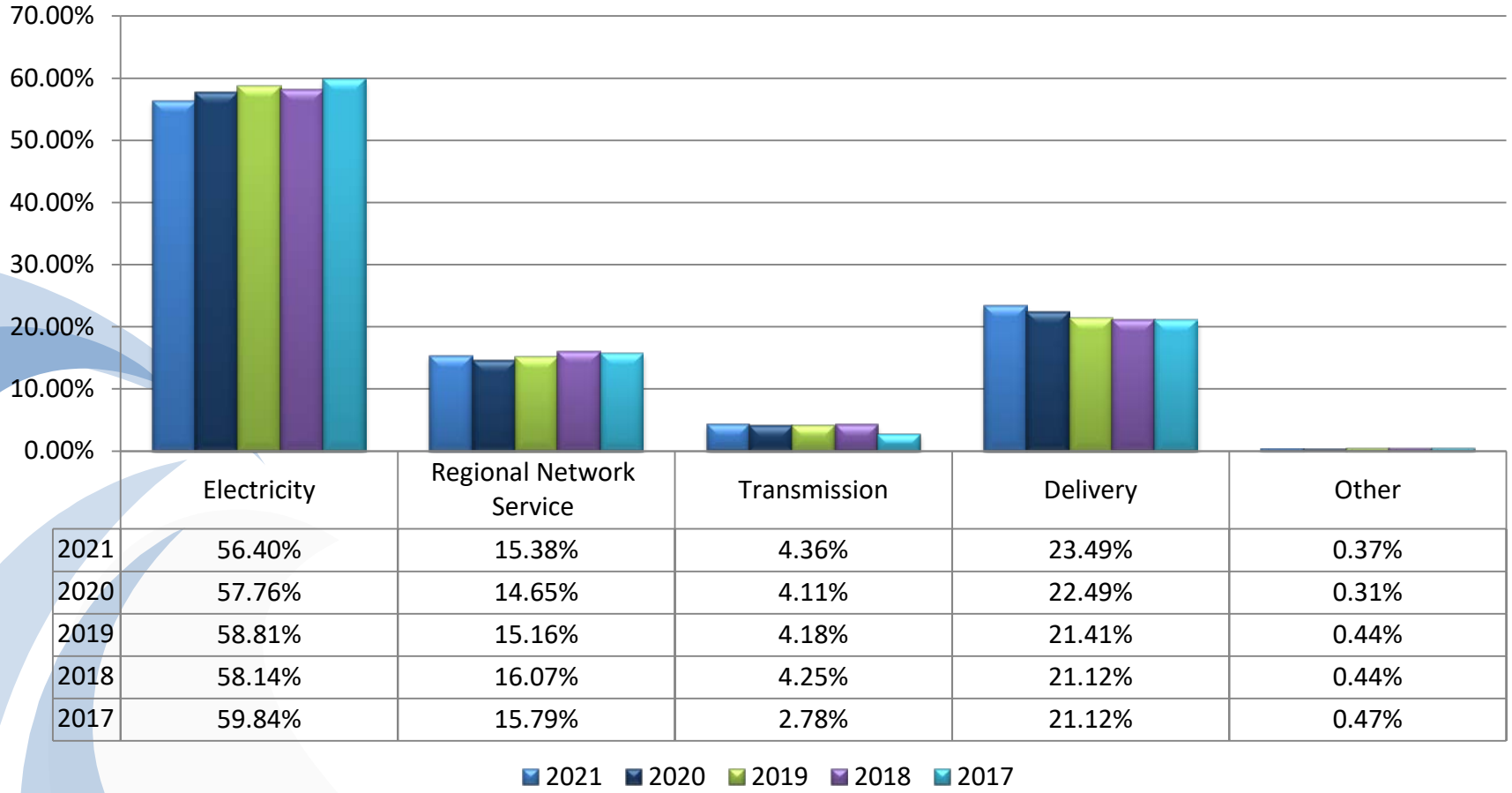
	2021	2020	2019	2018	2017 (restated)
Beg. Of Year	$10,904,017	$10,203,775	$9,585,864	$8,580,272	$8,135,238
End of Year	$12,110,390	$10,904,017	$10,203,775	$9,585,864	$8,580,272
Change	$1,206,373	$700,242	$617,911	$1,005,592	$445,034

Observations:

- **Net position** increased in 2021 by $1,206,373, which was driven by a combination of reduced operating expenses, increased operating revenues, increased non-operating revenues, and capital contributions that amounted to $270,592.

Kennebunk Light and Power District

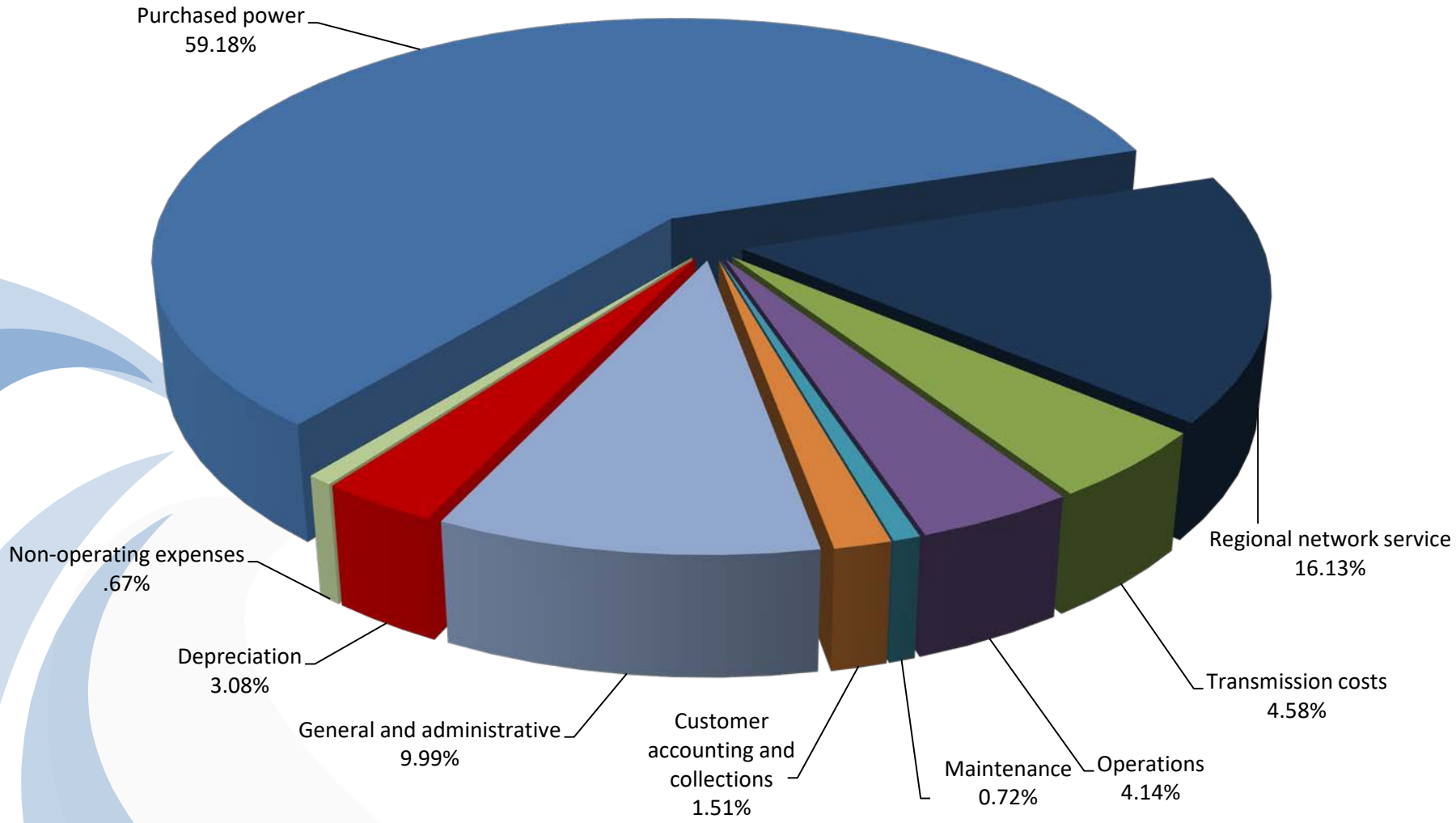
Operating Revenues Distribution FY 2017-2021



	Electricity	Regional Network Service	Transmission	Delivery	Other
2021	56.40%	15.38%	4.36%	23.49%	0.37%
2020	57.76%	14.65%	4.11%	22.49%	0.31%
2019	58.81%	15.16%	4.18%	21.41%	0.44%
2018	58.14%	16.07%	4.25%	21.12%	0.44%
2017	59.84%	15.79%	2.78%	21.12%	0.47%

Kennebunk Light and Power District

Operating Expenses Distribution



EXPENSES

Department	2022 Actual	2022 Budget	Variance
General Operations	$ 44,044	$ 76,750	$ (32,706)
Customer Collections	19,136	20,111	(975)
Administration	110,015	100,001	10,014
Other expense	39,279	36,500	2,779

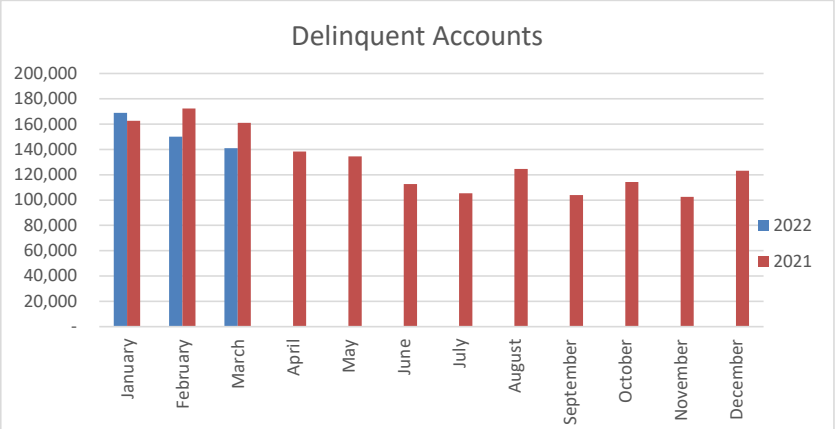
	March 2022	2022 YTD
Photovoltaic Credits	$ 3,529	$ 6,402
KLPD electrical usage	3,779	10,705

	MONTHLY			YTD			ANNUAL
	March 2022	March 2022	March 2021	2022	2022	2021	2022
Revenue	**Actual**	**Budget**	**Actual**	**Actual**	**Budget**	**Actual**	**Budget**
Energy revenue	$ 559,458	$ 523,113	$ 608,826	$ 1,875,548	$ 1,835,135	$ 2,021,395	$ 6,683,484
Energy expense	(596,987)	(523,113)	(590,715)	(1,927,861)	(1,835,135)	(1,830,109)	(6,683,484)
Net energy revenue	(37,528)	-	18,110	(52,313)	-	191,286	-
RNS revenue	207,057	153,555	165,787	679,366	620,796	550,291	2,258,068
RNS expense	(223,194)	(153,555)	(198,481)	(692,041)	(620,796)	(609,343)	(2,258,068)
Net RNS revenue	(16,137)	-	(32,694)	(12,675)	-	(59,053)	-
Transmission revenue	46,930	35,000	46,077	149,819	137,914	150,463	502,355
Transmission expense	(42,450)	(35,000)	(46,620)	(136,174)	(137,914)	(112,997)	(502,355)
Net transmission revenue	4,480	-	(543)	13,645	-	37,466	-
Net Energy/Transmission Revenue	**(49,185)**	**-**	**(15,126)**	**(51,343)**	**-**	**169,700**	**-**
Delivery revenue	215,124	198,000	200,423	687,257	667,062	656,242	2,439,240
Minimum charge revenue	50,914	50,500	50,260	152,139	151,500	150,566	610,230
Other revenue	8,022	5,500	93,794	41,494	24,574	130,060	90,506
Total Operating Revenue	**274,060**	**254,000**	**344,477**	**880,890**	**843,136**	**936,868**	**3,139,976**
Expenses							
General Operations	44,044	76,750	79,165	128,727	167,593	159,981	825,000
Customer Collections	19,136	20,111	16,366	58,286	58,533	43,727	231,677
Administration	110,015	100,001	173,176	349,711	343,261	400,762	1,375,000
Other expense	39,279	36,500	36,981	114,815	112,519	110,943	445,000
Total Operating Expense	**212,473**	**233,362**	**305,687**	**651,538**	**681,906**	**715,413**	**2,876,677**
Net Operating Gain/(Loss)	**61,588**	**20,638**	**38,790**	**229,352**	**161,230**	**221,455**	**263,299**
Total Gain/Loss	**$ 12,403**	**$ 20,638**	**$ 23,663**	**$ 178,009**	**$ 161,230**	**$ 391,155**	**$ 263,299**

KENNEBUNK LIGHT & POWER DISTRICT
STATEMENT OF FINANCIAL POSITION

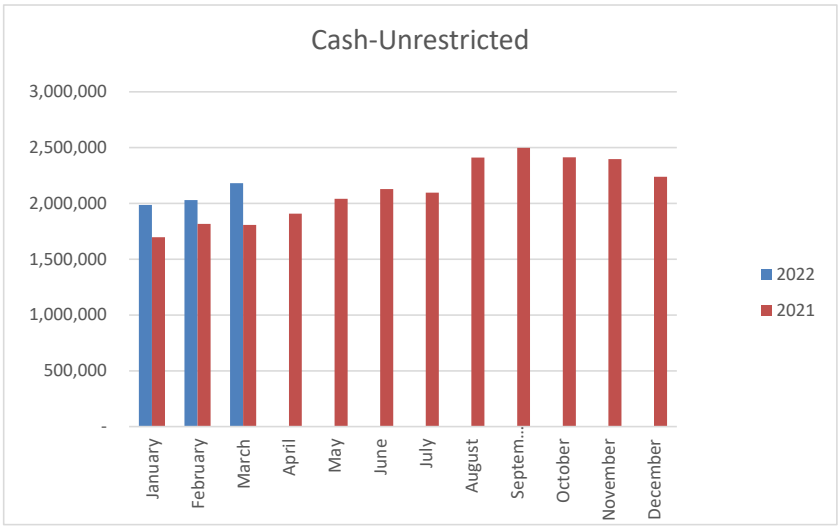
	March 2022	March 2021
Assets		
Cash and short-term investments	3,204,968	2,310,997
Accounts receivable	985,362	1,158,908
Fixed assets and property	10,890,569	10,607,772
Other assets	426,988	721,586
Total assets	**15,507,887**	**14,799,264**
Liabilities		
Accounts payable	898,966	895,154
Payroll liabilities	12,319	10,954
Long-term liabilities	1,561,719	1,778,589
Other liabilities	212,405	839,771
Total liabilities	**2,685,409**	**3,524,468**
Equity		
Surplus	12,644,469	10,883,640
Current year excess revenue	178,009	391,155
Total equity	**12,822,477**	**11,274,796**
Total liabilities & equity	**15,507,887**	**14,799,264**

Kennebunk Light & Power District
March 2022



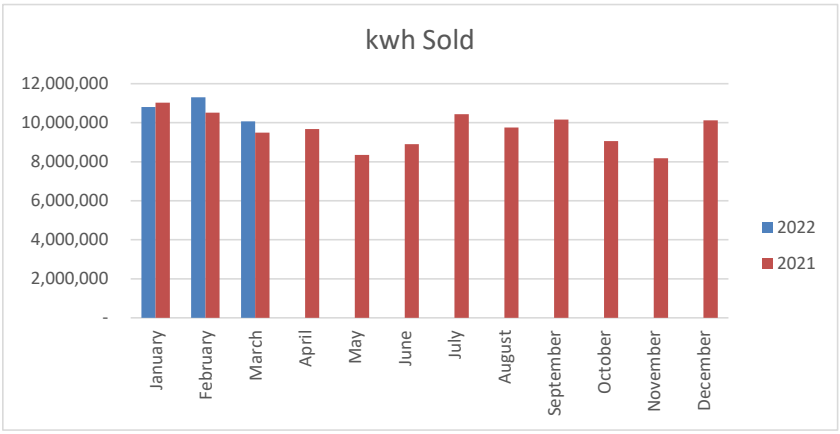
Aging	2022	2021
29 to 60 days	92,651	90,360
61 to 90 days	18,380	22,762
91 days +	30,031	47,802
Total	141,062	160,924

Delinquent accounts as a % of current month's sales:	12.97%	13.81%

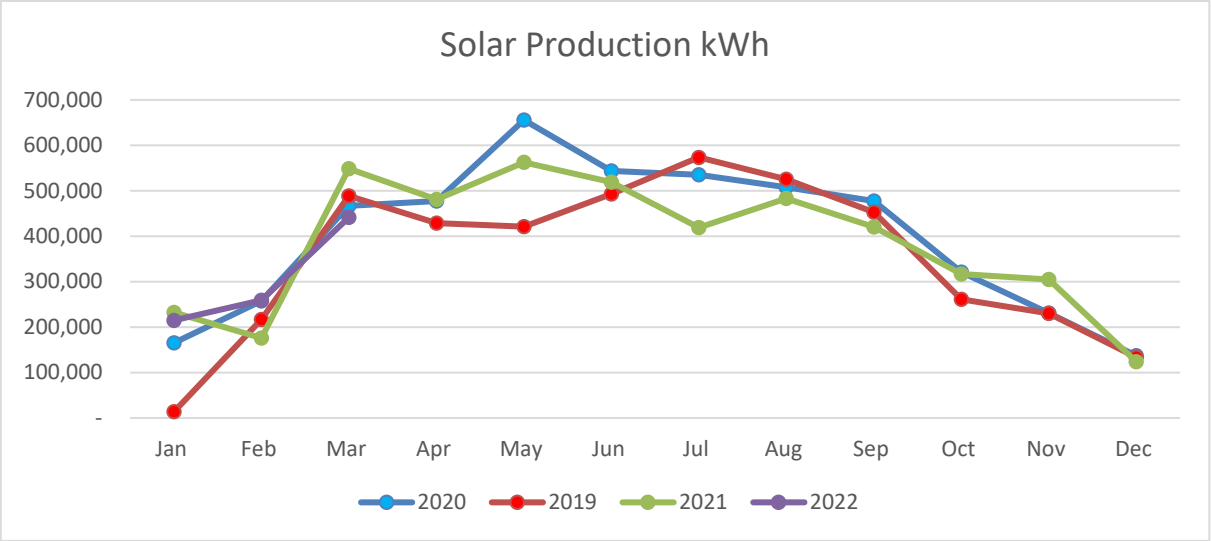


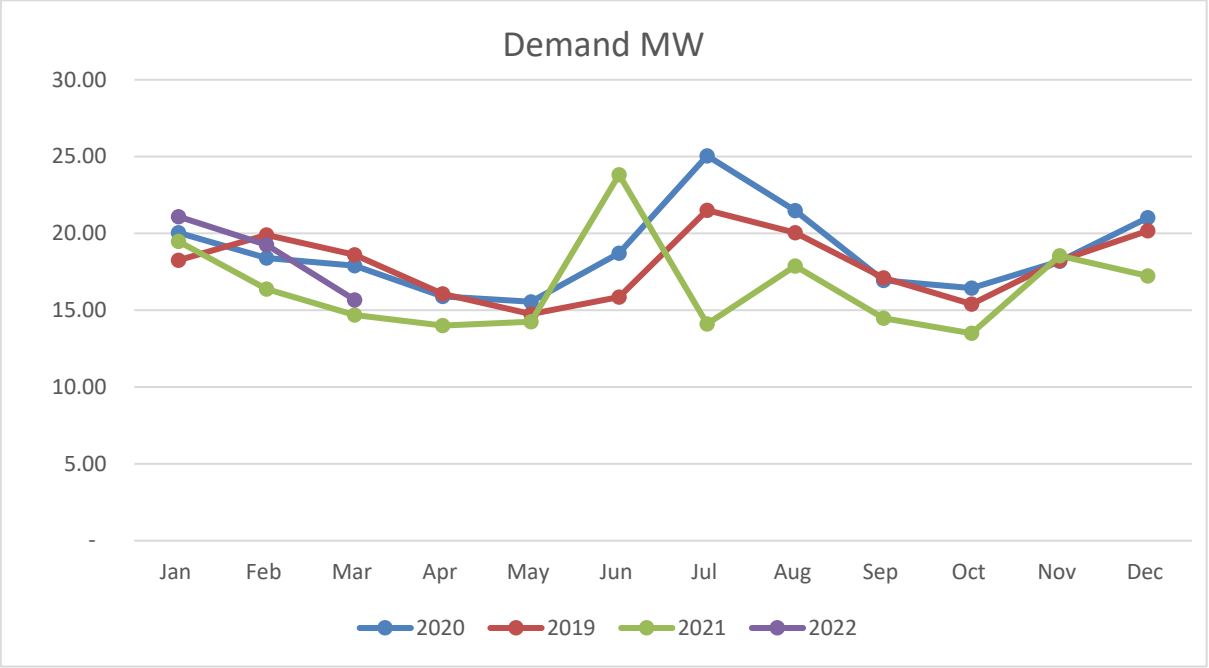
Days of Cash on Hand		Without Bond
Required	90	90
Actual	67	76
Variance	-23	-14

Cash required:	$ 2,950,000
Cash unrestricted	**$ 2,181,547**
Cash-deposits	$ 130,337
Cash-capital	$ 893,084
Cash-Efficiency ME	$ -
Cash-Total	**$ 3,204,968**
Variance	$ (768,453)



March 2022	10,072,980
March 2021	9,491,263
Variance	581,717


Solar Production kWh
700,000
600,000
500,000
400,000
300,000
200,000
100,000
-
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2020
2019
2021
2022


Demand MW
30.00
25.00
20.00
15.00
10.00
5.00
-
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2020
2019
2021
2022

KENNEBUNK LIGHT & POWER DISTRICT
HYDRO STATEMENT OF ACTIVITY

Revenue	March 2022	YTD 2022	2022 Budget
Electrical Production	$ -	$ -	$ -
Total Revenue	**-**	**-**	**-**
Expenses			
Labor	193	713	5,000
Benefits	93	342	2,400
Supplies	308	1,140	5,000
Electrical Use	52	170	1,000
Liability/Property Insurance	600	1,800	7,200
Depreciation	1,343	4,030	22,000
Legal & Professional Fees	-	640	30,000
Total Expenses	**2,589**	**8,835**	**72,600**
Gain/ (Loss)	**$ (2,589)**	**$ (8,835)**	**$ (72,600)**

KENNEBUNK LIGHT & POWER DISTRICT

"Providing the most reliable service at the lowest possible cost"

EATON

Project Kickoff Meeting

KLPD

April 5-6, 2022

Powering Business Worldwide

Agenda

- Project Team Members - Introductions
  - Expectations and Priorities
  - Communication Plan
- System / Project Overview
  - Eaton Overview & RF Mesh Review
  - Propagation Study
  - Deployment Plan
  - Training Plan
- Core Project Team Meeting
  - Scope Review
  - Project Schedule
    - Infrastructure Installation
    - Meter Installation Schedule
    - Training
  - Yukon Setup and Overview
  - Billing System Integration Specs
- Gateway Field Locations – Site Surveys and Review
- Meter Profiles and Configurations
- Review Action Items – Next Steps

Powering Business Worldwide

The Eaton Team

- Dan Smock - System Deployment Manager
- Rena Wang - System Application Engineer
- Rachel Wilmore - Project Coordinator

- Continued on next slide…

Powering Business Worldwide

The Eaton Team

Dan Scrima

Eaton EAS Sales

- Continued on next slide…

Powering Business Worldwide

The Eaton Team

- Jill Skarsten - Internal Sales
- Technical Services - 24/7 Technical Support
  - 800-815-2258
  - EAS-Support@Eaton.com
- My.eaton.com - Documentation Repository
  - Request Access

Powering Business Worldwide

Take A Ways

- Understanding of the Eaton AMI RF System, RF Software, Equipment and Deployment Methodology
- Understand Roles and Responsibilities
- Establish a Communication Plan
- Review the Project Scope and Initial Schedule
- Meter Set up and Configuration (review)
- Review Gateway Locations
- Next Steps

Powering Business Worldwide

Communication Plan

- Eaton Chain of Communication
  - Dan Smock – Primary Contact
  - Rena Wang – Technical Contact
  - Rachel Wilmore – Project Coordinator
  - Jill Skarsten – Orders and Quotes – Delivery Status
- KLPD – Chain of Communication?
- Meetings
  - Bi-Weekly/Monthly Meetings? – Date and Time
    - Status Reports, Action Items, Next Tasks, Schedule/Scope Review
  - Next On-Site Meeting? – Date and Time _____

Powering Business Worldwide

EATON OVERVIEW

Powering Business Worldwide

Eaton is a High Quality, Low Risk, Provider

- **Eaton has been supporting <u>Public Power</u> utilities for over 100 years**
- **300+ existing deployments in North America**
  - AMI, Distribution Automation, Demand Response
- **Eaton is a $17.9B organization**
  - Able to “weather the storms”
  - ZERO Utility employees laid off during the pandemic
  - 90,000+ employees worldwide

FORTUNE WORLD'S MOST ADMIRED COMPANIES 2018

2021 WORLD'S MOST ETHICAL COMPANIES® WWW.ETHISPHERE.COM

THOMSON REUTERS TOP100 GLOBAL INNOVATORS

3BL MEDIA 100 BEST CORPORATE CITIZENS 2020

EATON Powering Business Worldwide

Eaton Company Overview

- **Eaton (HQ in Cleveland)**
  - Electrical Sector HQ in Pittsburgh
  - Smart Grid offices in Minneapolis, Milwaukee, Carrington ND, and Rockville, MD
  - 90,000 employees worldwide
  - 100+ Year Tradition of Quality
  - $17.9B Scale to Invest

Eaton helps the world use electrical, fluid and mechanical power more reliably, efficiently, safely and sustainably

Powering Business Worldwide

Trends shaping the utility industry

US has **700,000+** miles of long-distance transmission lines serving **150 Million** customers

U.S. consumed almost **17%** of the world's energy in 2020

US states have enacted over **50 measures** for grid cybersecurity — a 30% increase over the past years

Renewables and natural gas projected to generate **70%** of US power by 2050

60% of U.S. distribution lines passed 50-year life expectancy; **$1.5-2 Trillion** investment by 2030 for grid modernization

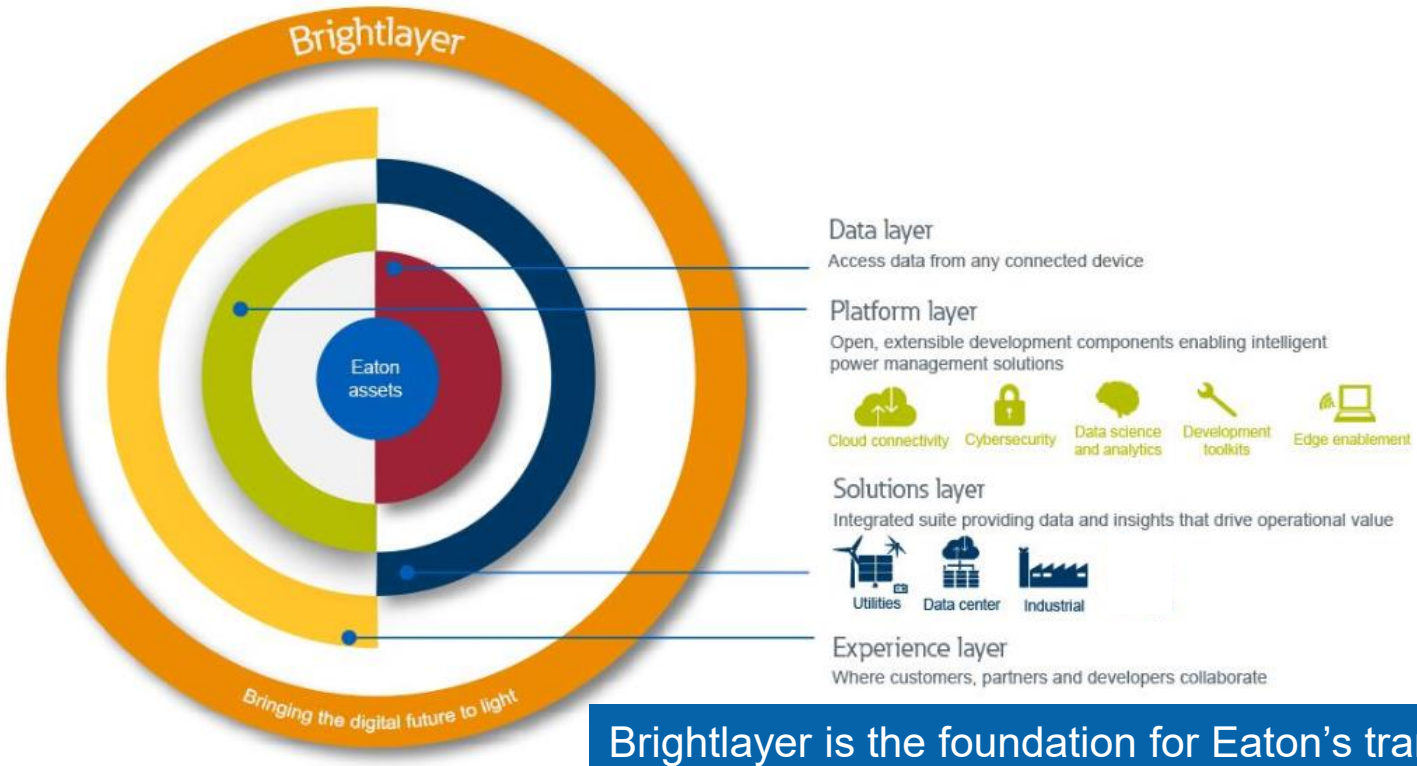
Software and technology solutions are increasingly required to manage grid complexity

EATON
Powering Business Worldwide

Brightlayer: How Eaton is bringing the digital future to light

Powering Business Worldwide

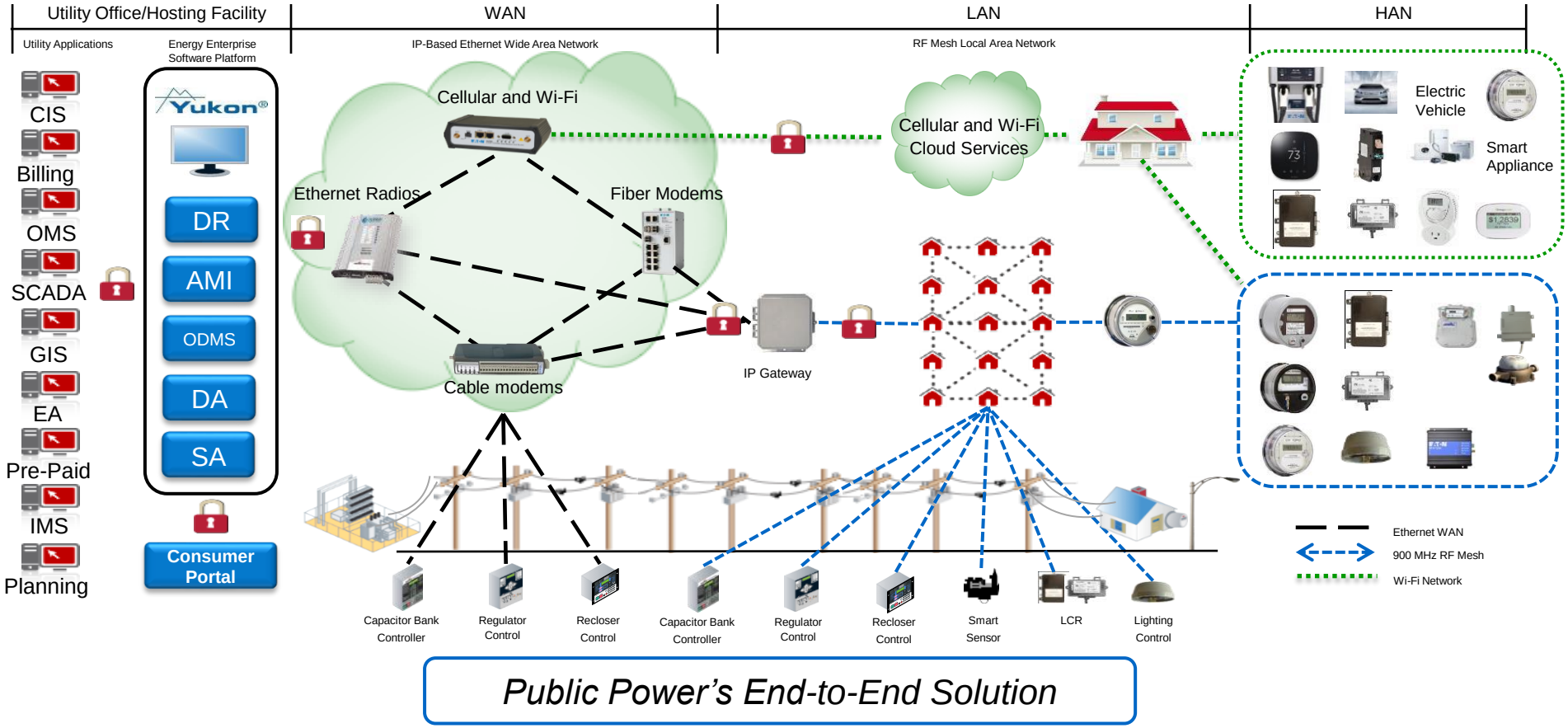
Through Brightlayer, we'll enable customers to leverage data and insights to drive operational value and focus on what matters.



Brightlayer is the foundation for Eaton's transformation to an intelligent power management company by providing new insights from connected and intelligent assets.

Powering Business Worldwide

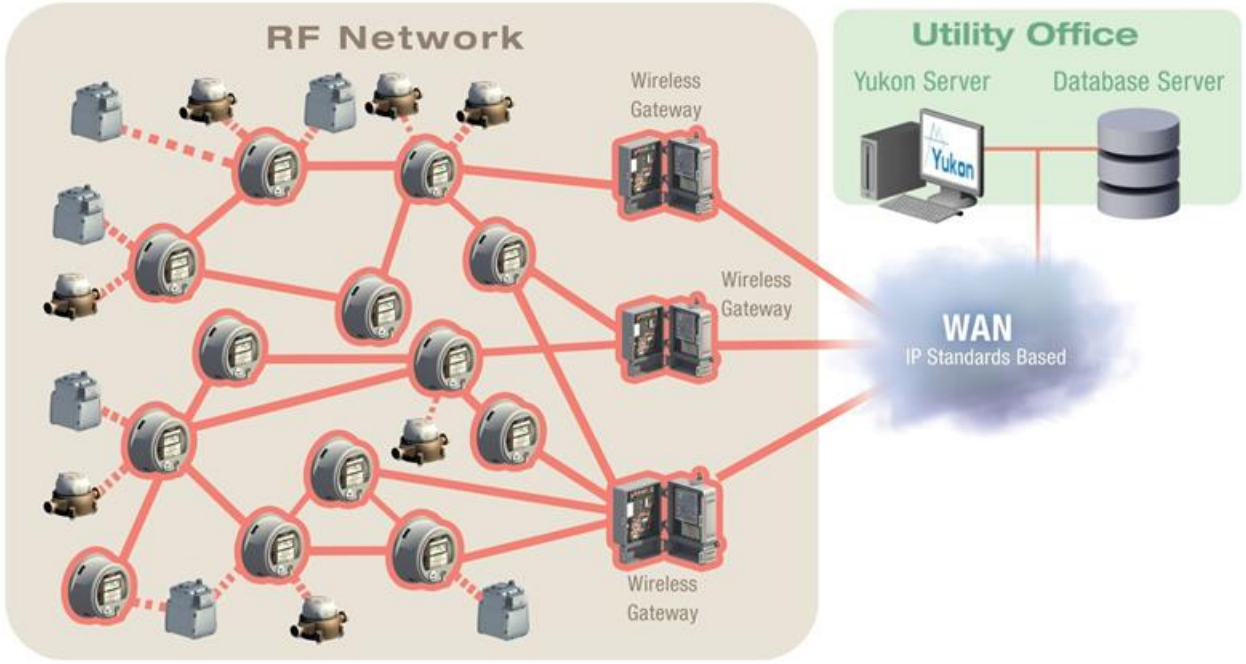
Eaton Smart Grid Architecture



Public Power's End-to-End Solution

Powering Business Worldwide

RF System Overview



Communications network composed of radio nodes

Self-organizing and self-healing mesh network

Nodes communicate through other nodes (or directly*) to RF Gateway

RF Gateway communicates to headend (Yukon)

Solution supports AMI, DR & DA over one comprehensive RF network

*except for water nodes

Powering Business Worldwide

RF Hardware

- Gateways
- Gateway Enclosures
- Relays
- Field Tool
- Meters – Electric and Water
- Demand Response

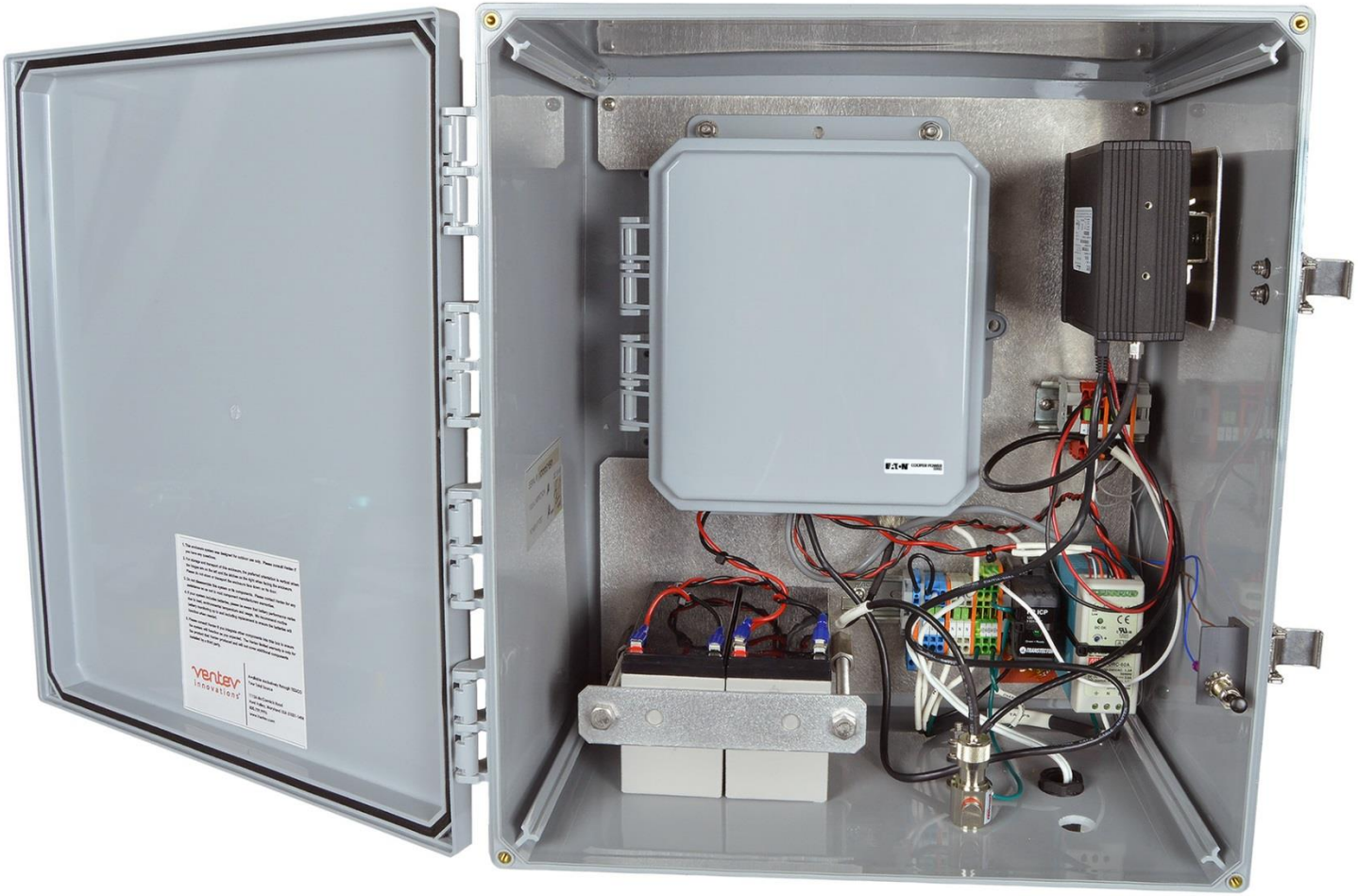
Powering Business Worldwide

RF Hardware

- Gateway 800/801

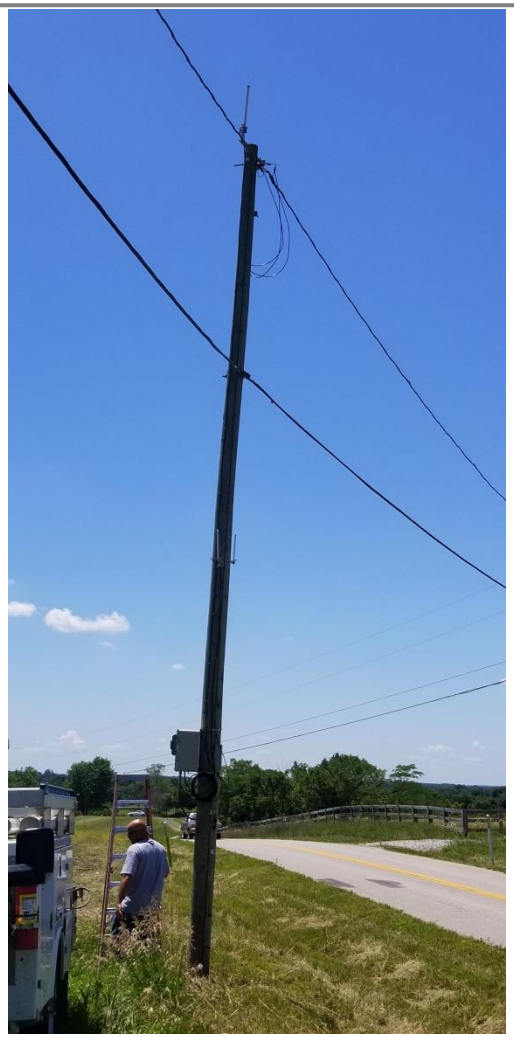
- Primary RF Network Data coordinator/collector between Yukon software and the customer premise

Gateway Enclosure



Powering Business Worldwide

Gateway Installations



Powering Business Worldwide

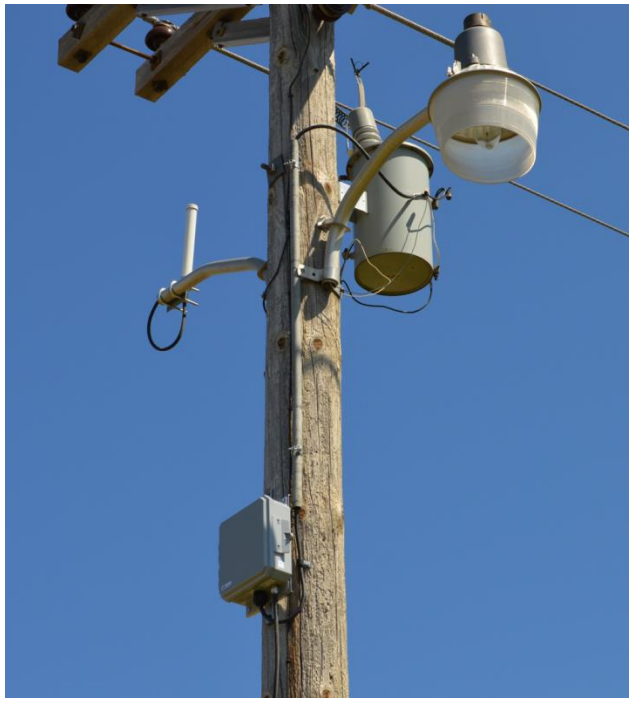
Gateway Installations cont.

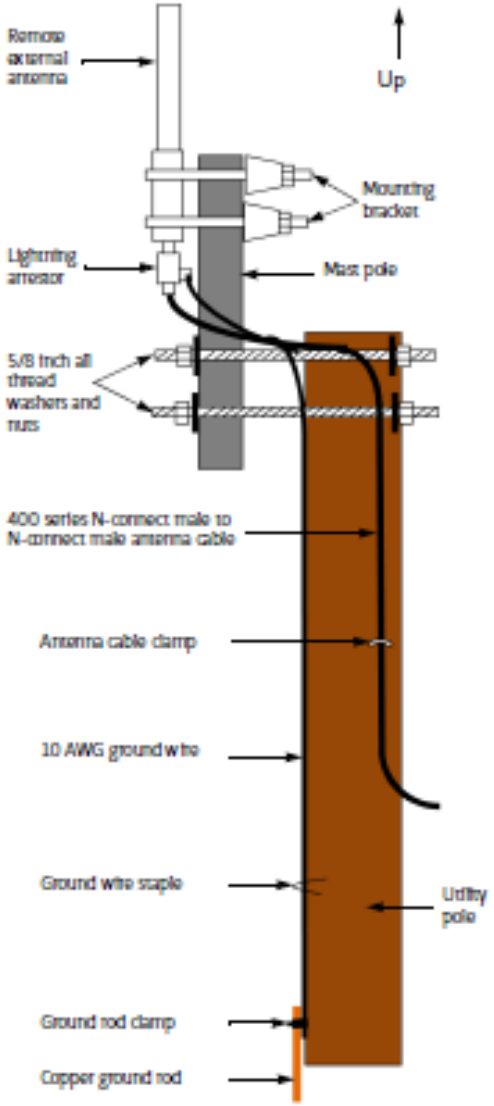
Powering Business Worldwide

Gateway Installations

Powering Business Worldwide

Gateway Antenna Installation





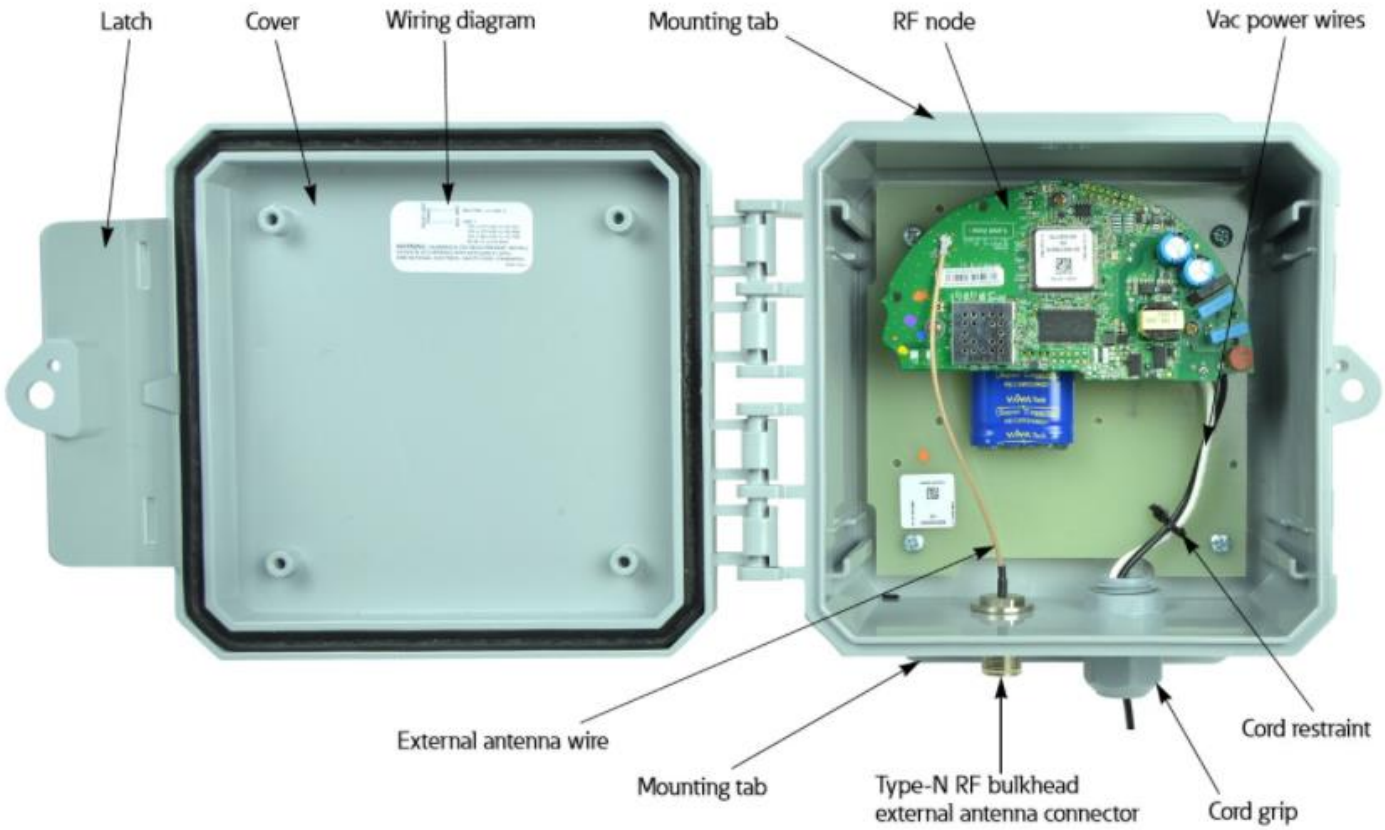
RF Gateway Instructional leaflet provides detail installation instructions. Different antenna lengths are available.

**** Get Antenna ~18 inches out from the pole/structure to help reduce/minimize any RF shadowing of the signal

Powering Business Worldwide

RF Hardware

- Relay 856 – 120-277VAC



- Utilized to optimize the network and reduce isolated nodes and high hop count nodes.

Powering Business Worldwide

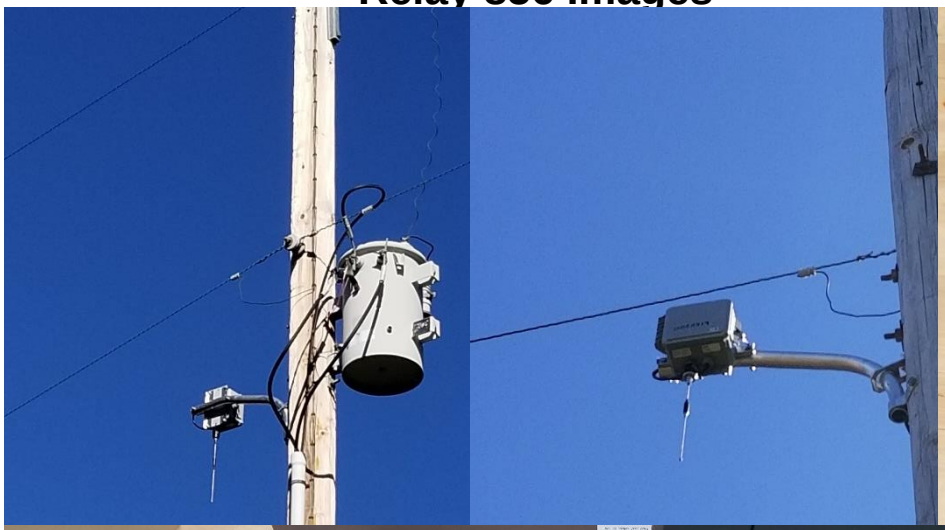
Relay Installation - Hardwired

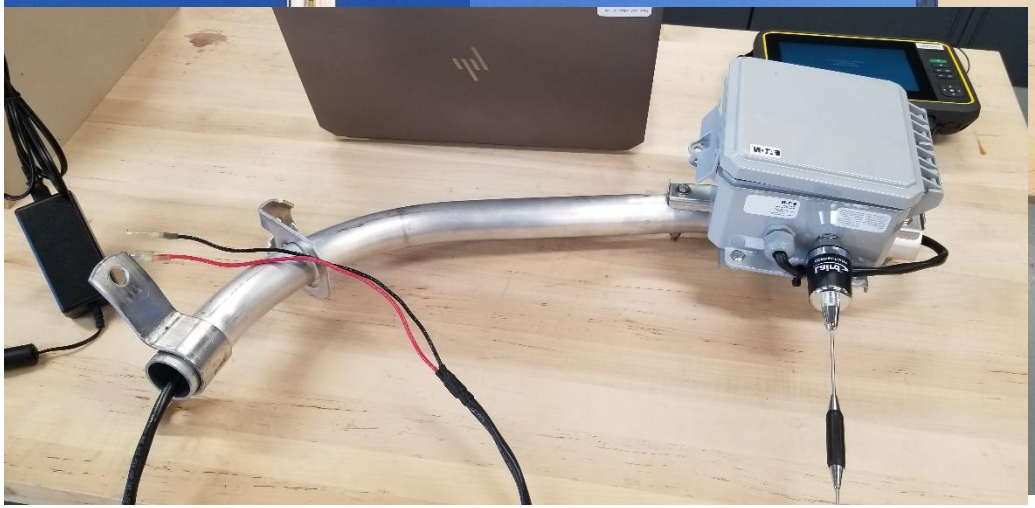
Tied into Secondary Power

Powering Business Worldwide

Relay Installation - Hardwired

Relay 856 Images





Powering Business Worldwide

Relay - Photo Cell Adapter

Midsouth Electronics.com

FP283A Series

https://www.midsouthelectronics.com/Fisherpfp283a.htm

Powering Business Worldwide

RF Field Tool

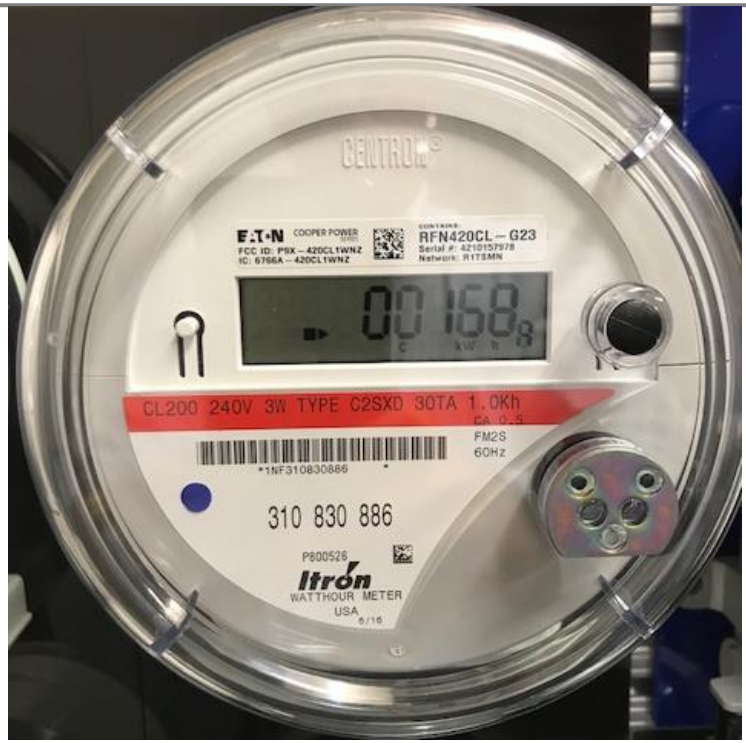
Network Runner

- Installation, diagnosis and testing of field nodes
- Water node field commissioning
- Gateway commissioning
- Field troubleshooting

Powering Business Worldwide

Electric Meter

- Meter / Node
  - Data collection point for customer
  - Interval data consumption, kWh, kW, volts, amps, TOU, outage notification.
  - Collects 15min, 30min or Hourly data
  - Meshes with other electric nodes or direct connection to RF Gateways
  - 45 days of onboard data storage
  - Remote service disconnect option



Powering Business Worldwide

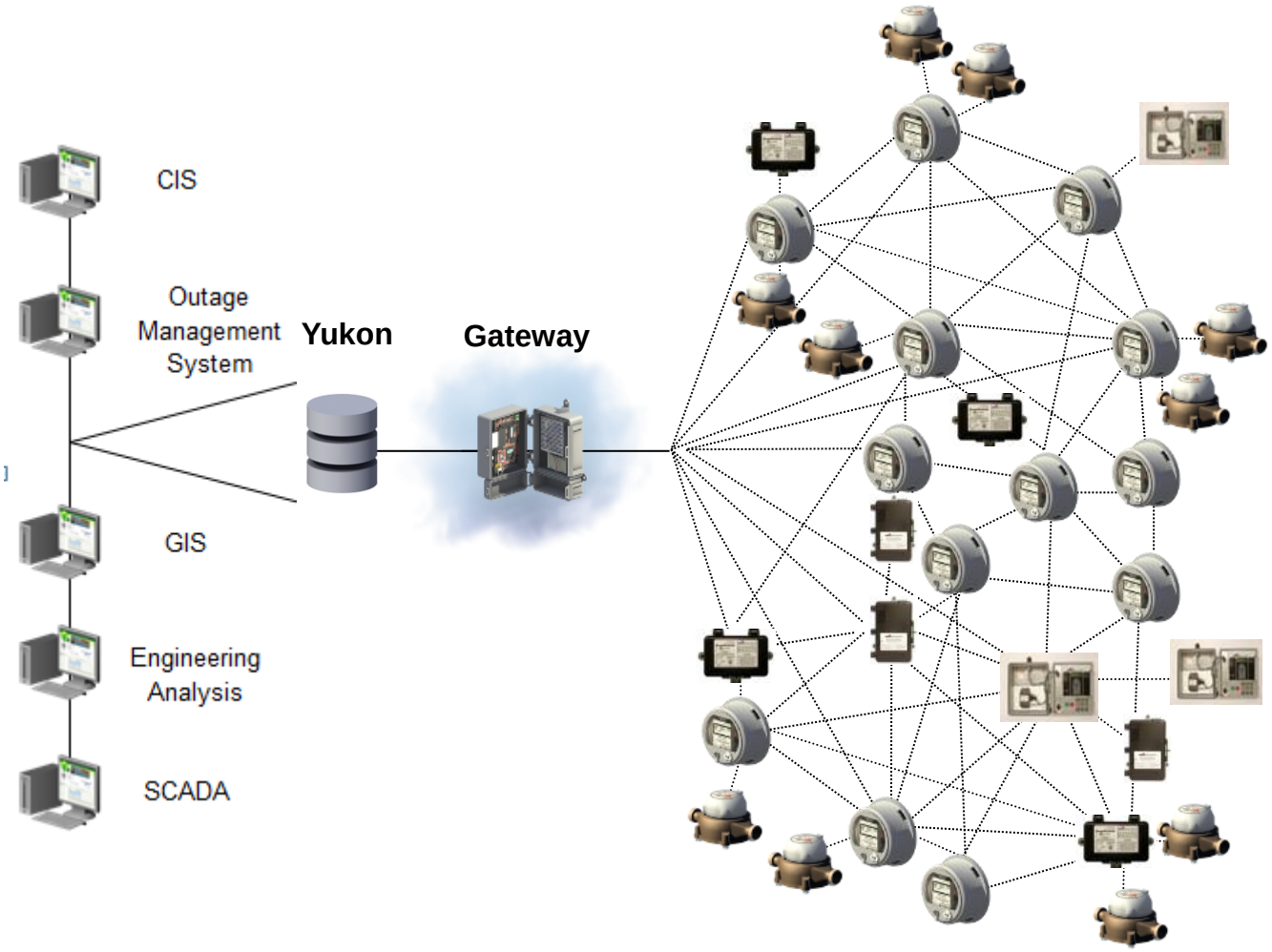
Single-Phase AMI Capabilities

- Energy (kWh)
  - Cumulative Usage
  - Daily Usage
- Demand (kW)
  - Last Interval
  - Peak with Date and Timestamp
  - Daily Peak kW
  - Interval Load Profile Data
    - 5-, 15-, 30-, 60-min
- Voltage
  - Last Interval
  - Min/Max with Date and Timestamp
  - Daily Min/Max with Timestamp
  - Voltage Profile
    - 1-, 5-, 15-, 30-, 60-min
  - Event Flags & OV/UV Alarms
- Meter Temperature Information
- Tamper Indications
  - Zero Usage, Meter Inversion
- Outage Information
  - Outage/Restoration Notification
  - Outage Count
  - Daily Outage Count
  - Outage Duration Logs
- Time of Use (TOU) Information
  - kWh Usage and Peak kW
  - Remotely configurable
- Bi-directional (Net) Metering
  - Delivered (Forward)
  - Received (Reverse)
  - Net (Forward – Reverse)
  - Added/Security (Forward + Reverse)
- Remote Service Disconnect Option

Powering Business Worldwide

How Does It All Fit Together

- ***Self-Organizing & Self-Healing***
  - No field configuration
  - Automatic power output & data rate adjustments for each link (1W radios & variable data rates)
  - Nodes automatically identify and store alternative routes to be used in the event primary communications paths are interrupted
- ***Easily Expandable & Scalable***
  - Easy to add additional gateway when required to expand network
  - Nodes identify new neighbors & relationships automatically
- ***Secure & Interoperable***
  - Mutual authentication & derived encryption keys for each data exchange between nodes
  - RSA Signed OTA Firmware Upgrades

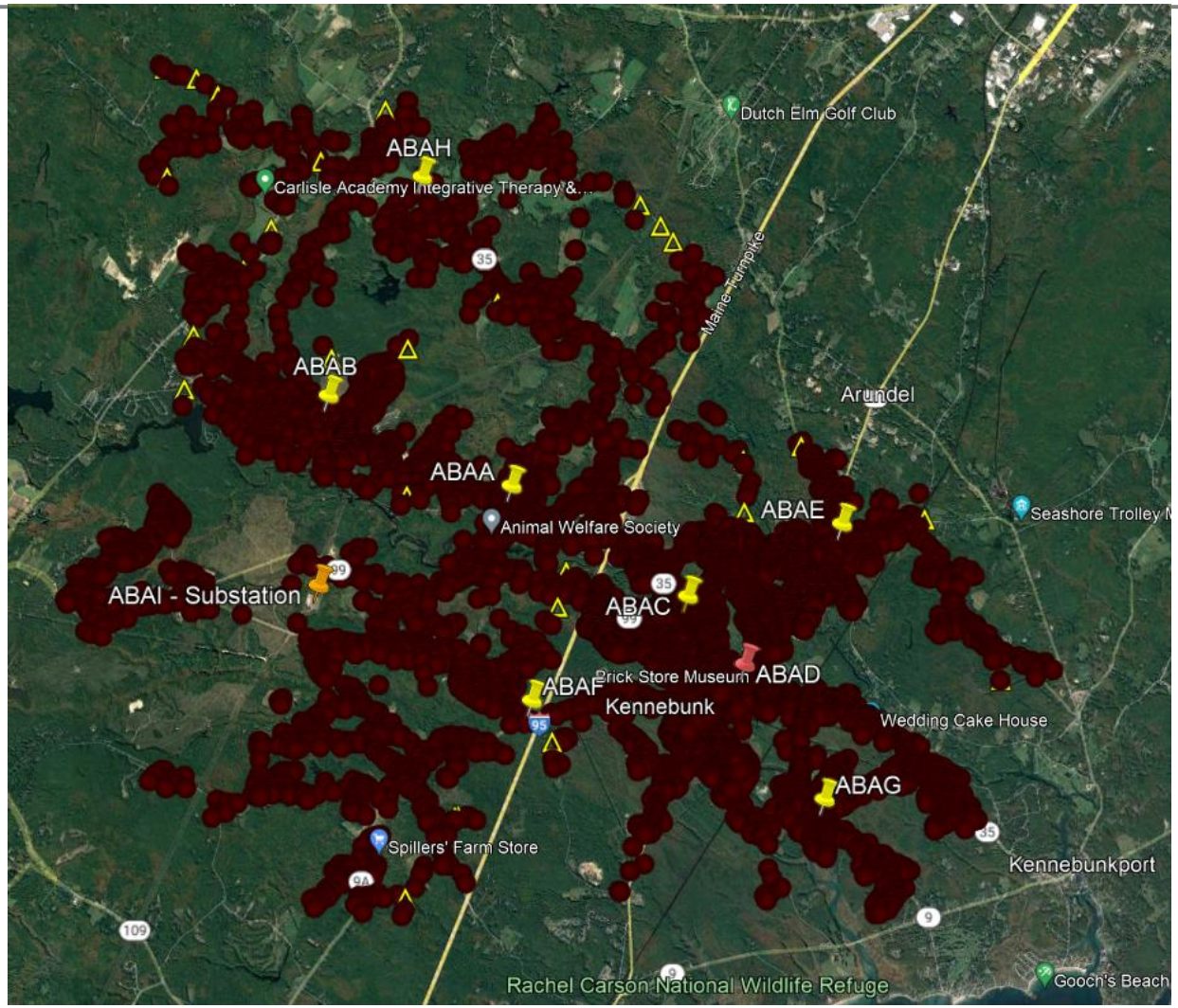


Powering Business Worldwide

Propagation Study Gateways, Relays and Meters

- Discussion
  - Data?
  - Locations for Gateways?
  - Relay installation options? Transformer/poles/streetlights?
  - Water only locations?
  - Is additional prop study needed/required?

Propagation Study Gateways, Relays and Meters – Initial Plan



EATON
Powering Business Worldwide

Propagation Study Gateways, Relays and Meters – Initial Plan

- Results of Initial Study
  - Data input :
    - 7,019 Electric Meter Sites
  - Placed 9 Gateways
    - GWs placed at substations, transformer poles, and street/yard light locations (30-foot GW antenna height assumed). This leaves 1 spare GW
  - 32 Relay sites recommended
    - All relays have an assumed 20-foot installation height
    - Additional relays may be needed depending on clutter or insufficient location data used in study (recommend having at least 5 extra relays on hand deployment, currently on 1 on the order)

Propagation Study Gateways, Relays and Meters

- Drill into Study
  - GW ABAD – possible overloading issue
  - GW ABAI – long hops, can it be moved?
- Open Discussion
- Q&A
- Follow-up Action Items

Deployment Plan

- Servers and Software First
  - Yukon Server Set up
  - Yukon Software Installed
  - Remote Access Established
- Infrastructure Installed
  - Gateways
    - Gateway Backhaul to Servers
  - Relays
  - Training – Software, Hardware
- Meters Installed
  - Residential
  - Commercial
  - Billing Software Integration
  - Training – Software, Hardware
- System Optimization
  - Software – Advanced Training
  - System Troubleshooting

Powering Business Worldwide

Typical Training Sessions

- Quick Start/Yukon 101 – Training I
  - Gateway Commissioning
  - Field Tool
  - Yukon and Network Manager overview
- Best Practices – Training II
  - Monitors
  - Billing and Data Export
  - Users & Groups
- Advanced System Practices– Training III
  - Troubleshooting and review
  - Advanced system features

Powering Business Worldwide

Infrastructure Installation & Yukon/Network Manager Training I

Hardware & Software (IT Required)

- Review Server setup
- Multispeak setup
- Overview of Network Manager and Yukon services

Field Tool

- Network Runner training
- Troubleshooting use cases

Gateway Installation

- Review equipment
- Verify gateway locations
- Assist in backhaul setup (if needed)
- Assist in installation of gateway(s)
- Power up and commission gateways
- GPS Location
- Troubleshooting techniques

Relay Installation

- Verify relay locations
- Assist in installation of gateway(s)
- Power up relay(s)
- GPS Location

Yukon Software Training

- Yukon login setup
- Dashboard setup
- High level overview all Yukon pages
- Meter page introduction
- Adding and monitoring gateways
- Mapping & GPS locations
- Discussion of export files and groups for billing

Powering Business Worldwide

Yukon Training II

Users & Roles

- Login permissions
- Set user security levels – i.e. who can disconnect a meter?

Dashboards

- In-depth discussion of widgets
- Set up dashboard for users

Monitors

- Review available data points
- Set up meter and infrastructure monitors

Data Export/Billing File

- Design a billing file
- Generate/test a billing file
- Billing file integration
- Further device group development

Other Actions

- Collection Actions, Bulk Upload, Reporting, Device Configurations
- What not to do

Develop Training 103

- Discussion of all Yukon menu options to determine deeper dive into those options

Yukon & System Optimization Training III

Hardware (Usually a part of Training II)

- Installing Polyphase / Commercial Meters
- Commercial Meter Programs - Metercat

Yukon Review

- Q&A Yukon session
- Overview of main points from previous trainings

System Optimization

- Review Network Performance
- Review Customer Yukon Experience
- Review lessons learned
- Review best practices
- Troubleshooting

Advanced Yukon Functionality

- Admin menu
- Support Page
- Event logs

Verify Setups

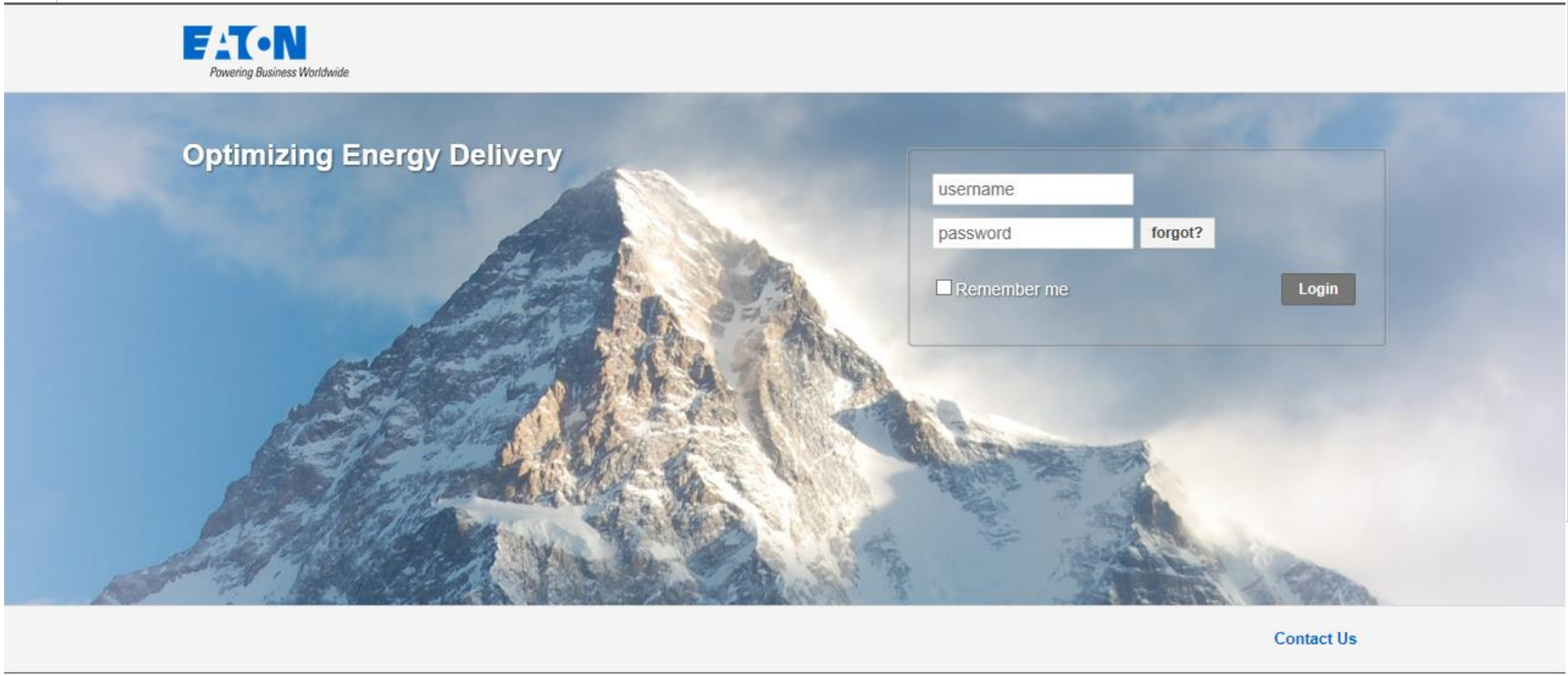
- Verify exports are importing into billing system
- Device configuration updates

System Health & Optimization

- Review Network Performance
- Review Customer Yukon Experience
- Review lessons learned
- Review best practices
- Troubleshooting

Powering Business Worldwide

Questions

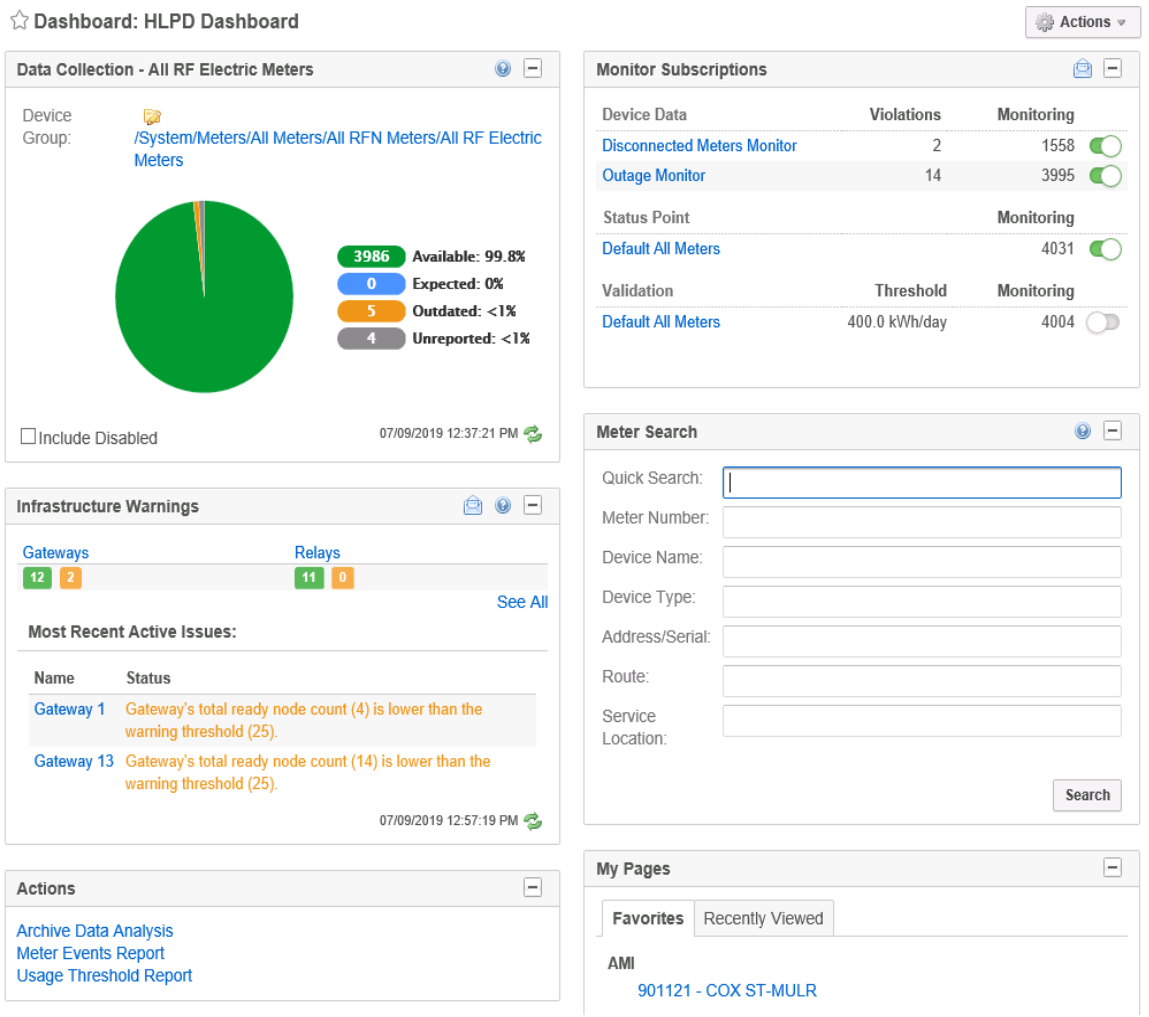


Yukon® Software Overview

Powering Business Worldwide

Yukon - General Layout and Navigation

- Home Page
  - Users - Defined
  - Dashboards
- Site Search
  - Global
- Monitors & Alerts
- Navigation Links

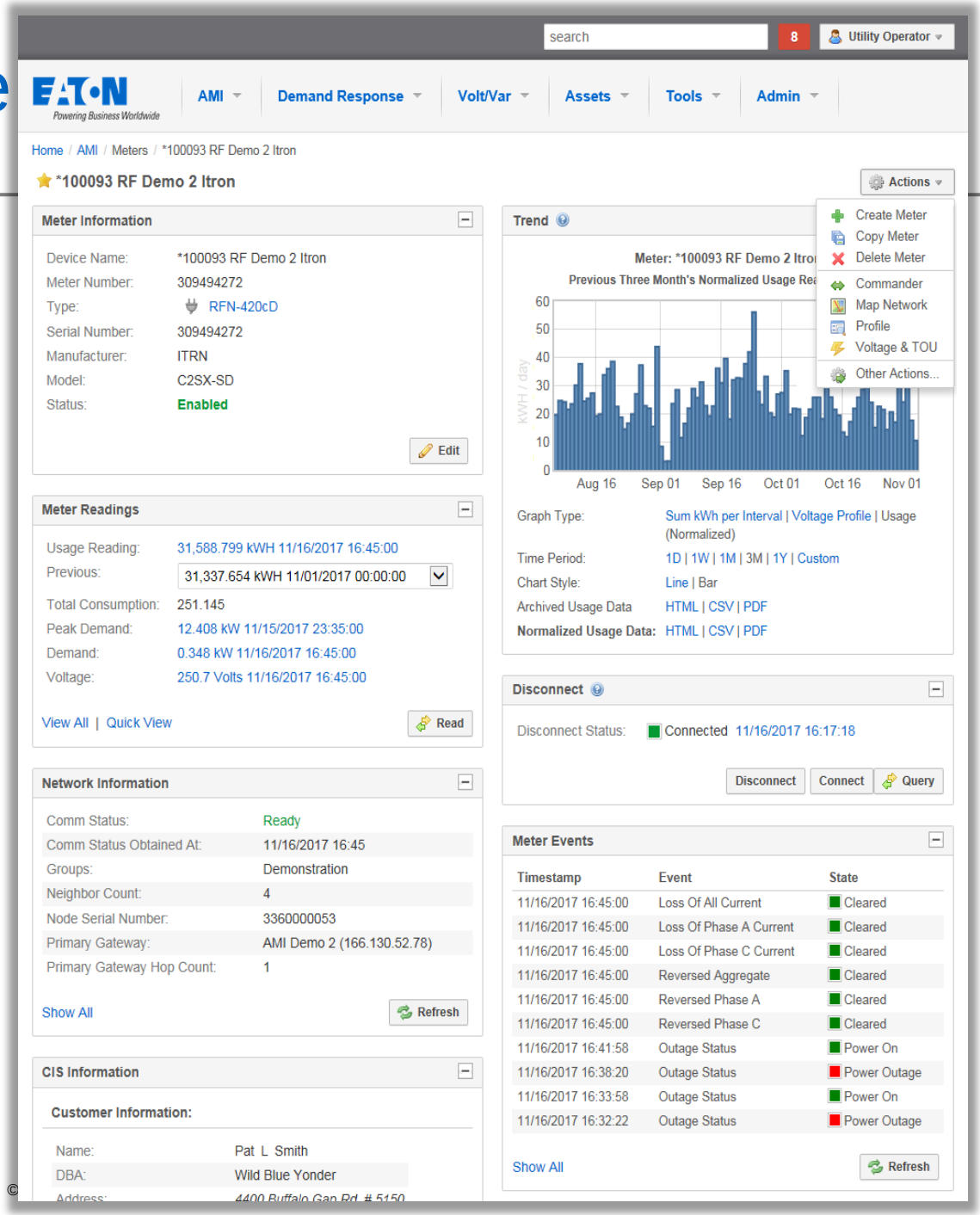


Menus available are based on Roles assigned to User

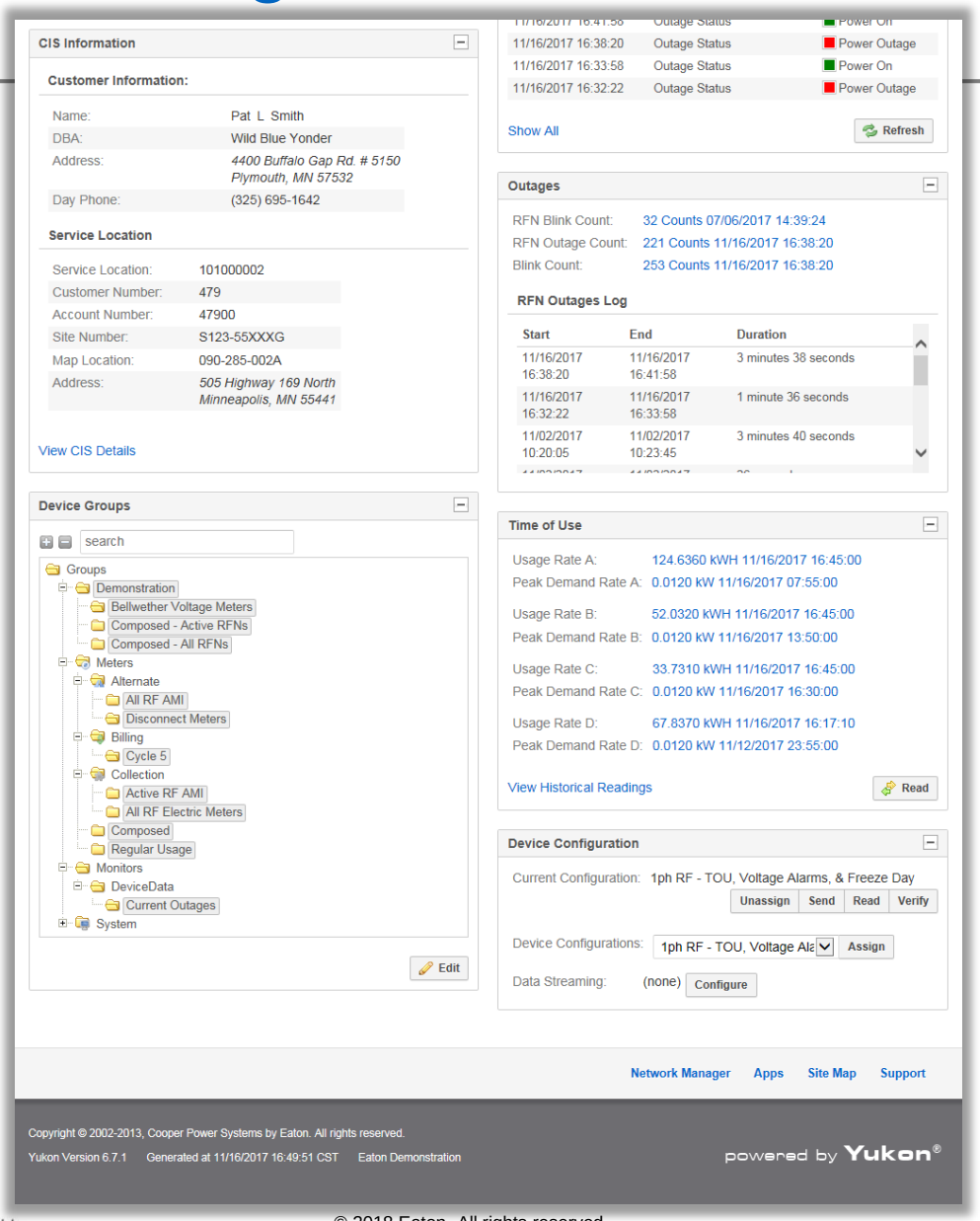
Powering Business Worldwide

Meter Details Page

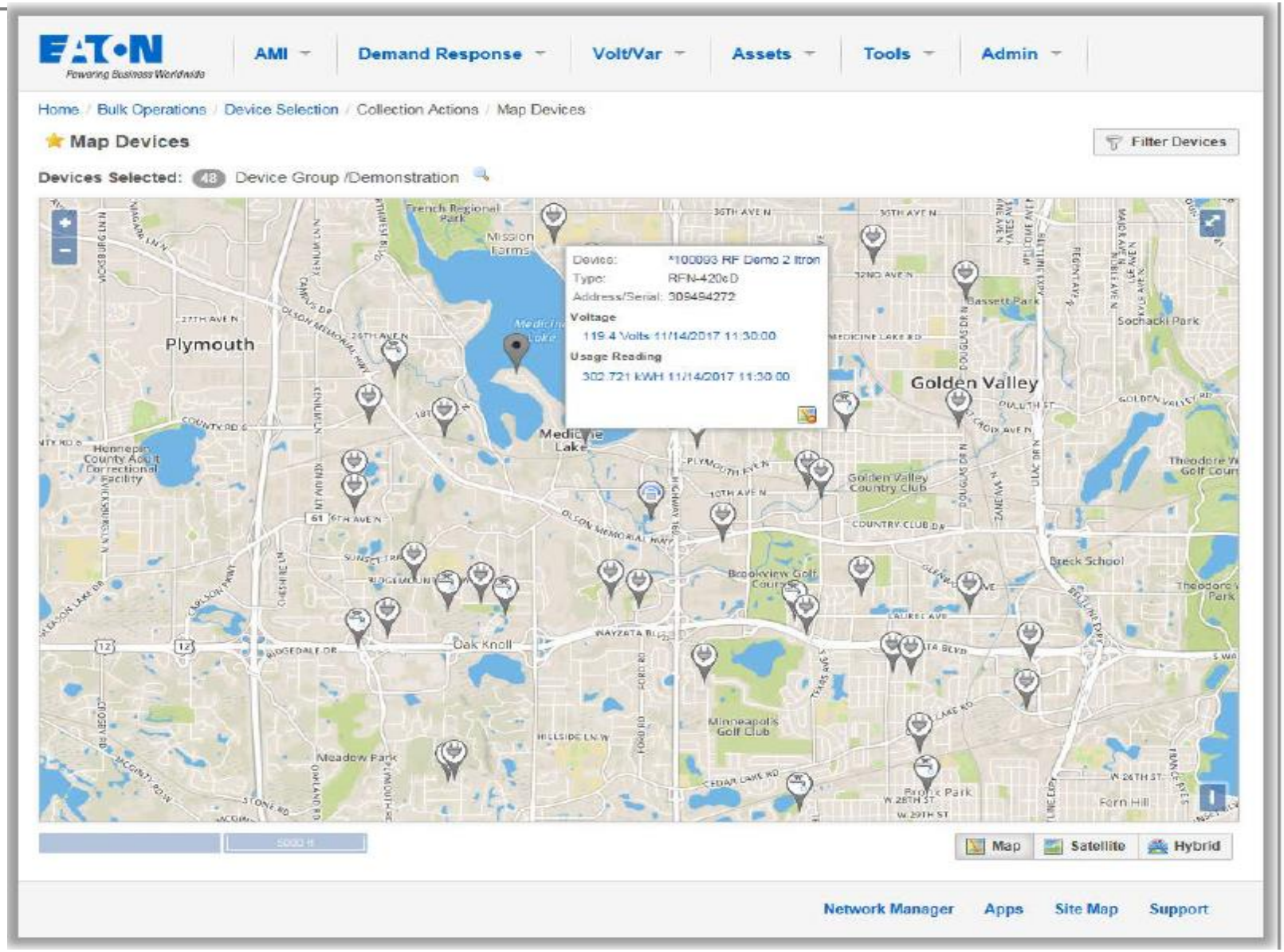
- Meter Information
- Meter Readings
  - Point value and timestamp link - Display historical data for point
  - Show All / Quick View - Display latest value for every data point on the meter
- Device Groups
  - Searchable
- CIS Information (MultiSpeak)
- Trend
- Disconnect, Outages, Time of Use
- Device Configuration
- Actions
  - Move In/Out (PLC)
  - High Bill Complaint (PLC)
  - Profile Data
  - Voltage and TOU
  - Web Commander
  - Route Locate
  - Other Collection Action



Meter Details Page



Meter Mapping Page



Meter Mapping - Nearby

Home / Map Network

Map Network

Meter Information

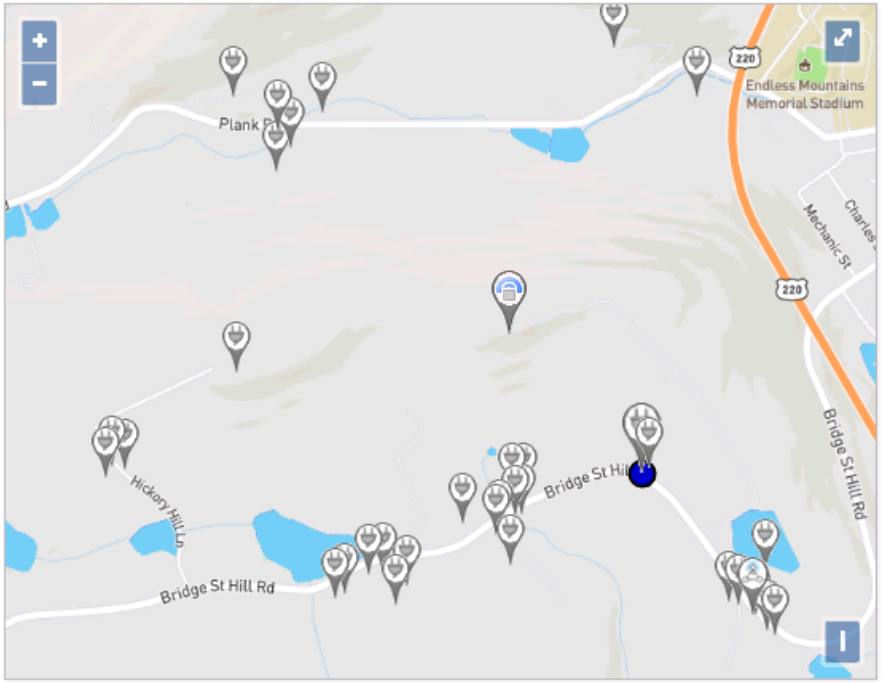
Device Name:	336231803
Meter Number:	336231803
Type:	RFN-420cD
Serial Number:	336231803
Manufacturer:	ITRN
Model:	C2SX-SD
Status:	Enabled

Edit

Location

Latitude: 41.758557 Longitude: -76.458591

Infrastructure: (none)



Miles: 1.0 Nearby Neighbors Primary Route

Powering Business Worldwide

Meter Mapping - Neighbors

Home / Map Network

Map Network

Meter Information

Device Name:	336231803
Meter Number:	336231803
Type:	RFN-420cD
Serial Number:	336231803
Manufacturer:	ITRN
Model:	C2SX-SD
Status:	Enabled

Edit

Location

Latitude: 41.758557 Longitude: -76.458591

Infrastructure: (none)

Miles: 1.0 Nearby Neighbors Primary Route

Neighbors Line Color

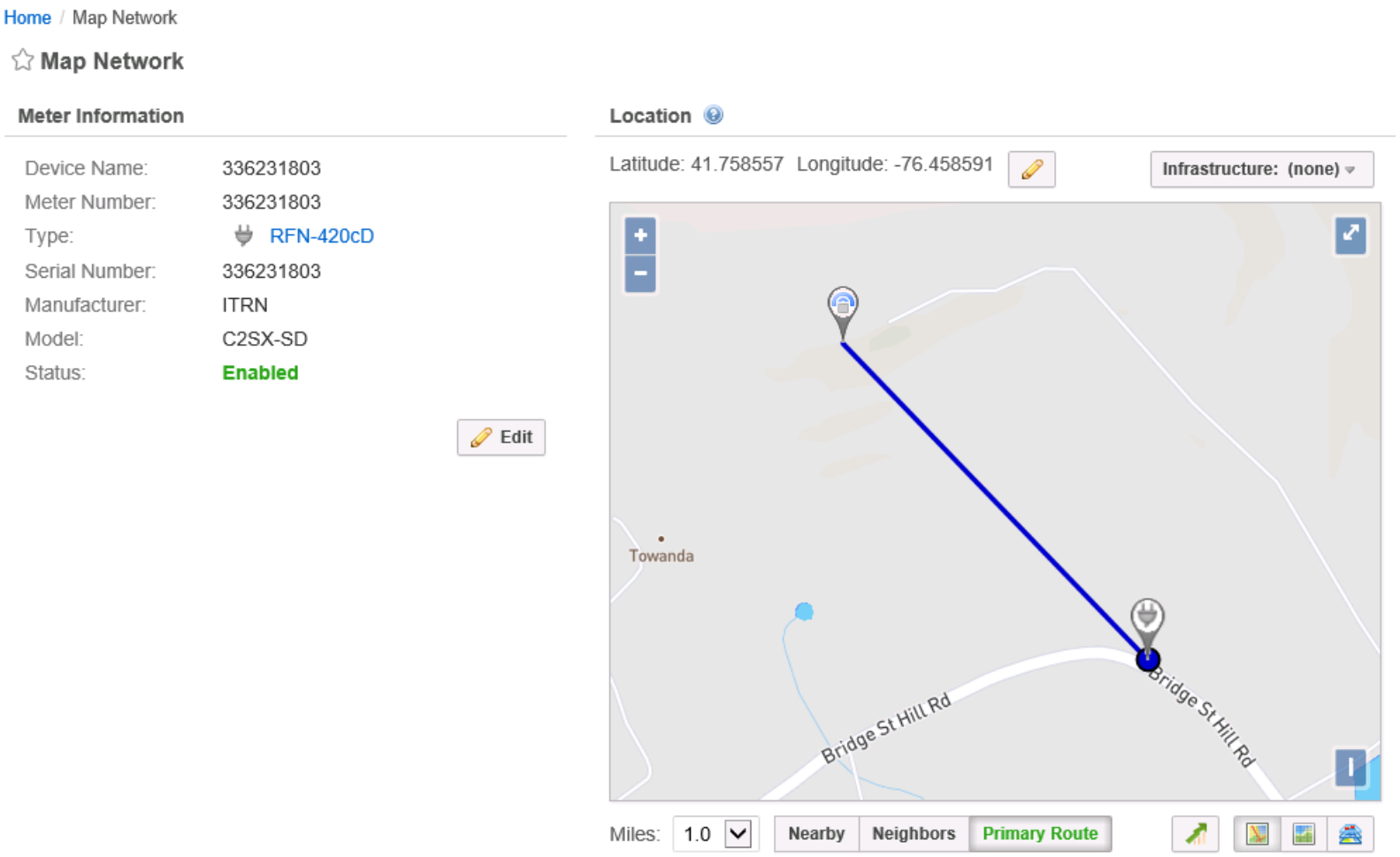
ETX Band 1 ETX Band 2 ETX Band 3
ETX Band 4 ETX Band 5 or more

Neighbors Line Thickness

Samples 0 - 50 # Samples 51 - 500 # Samples Over 500

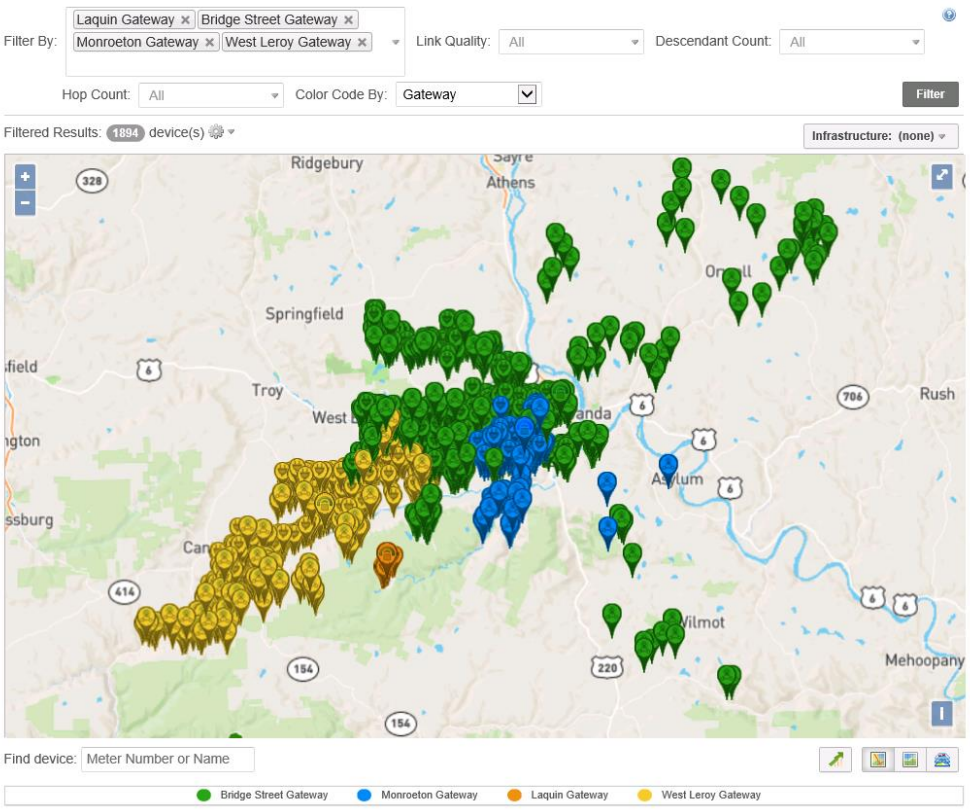
Powering Business Worldwide

Meter Mapping – Primary Route



Powering Business Worldwide

Comprehensive Map



- View Meters by:
  - Link Quality
  - Hop Count
  - Descendant Count
  - Color Code Options
- View up to 5 Gateways
- Great for Optimization and Troubleshooting

Powering Business Worldwide

Project Scope Overview

- IT Discussion
- Review Purchase Order
  - Software & Services
    - Yukon System
    - Interfaces
  - Hardware
    - Infrastructure
    - Gateway Backhaul
    - Meters
  - Installation, Project Management and Training

Powering Business Worldwide

IT Discussion

- On Premis Yukon System Set up
  - Server Setup/Build Process
  - Remote Access
- CIS Vendor
  - – Central Square Asyst CIS (Flat-File I/F)?
- OMS Integration
  - – None?
- Gateway Requirements
  - Network IP
  - Network Mask IP
  - Local **NTP** Server IP
- Comms to Gateways
  - KLPD to provide cellular service for backhaul

Powering Business Worldwide

Billing File

- Who is KLPD's Primary Point Person(s)?
  Electric, RF Network, Yukon, CIS/Billing?
- CIS Vendor – Central Square
- What are your billing cycles? Multiple or can we move to only one (1)?
- What do you bill on:
  - Del, Rec, Sum, Net, Demand, KVA, PF
    - Residential
    - Commercial
- What other points (metrics) do you require the meters to report in Yukon?

Powering Business Worldwide

Review Order: Services and Software

Software/Service	Invoicing/Shipping
Yukon Suite, Network Manager and SQL Software Installation	When Servers and Yukon are Operational
RF AMI Module	When Yukon is operational
Project Management	12 monthly payments?
System Support and Maintenance	TBD
CIS Interface	Once meter billing can occur
Travel Cost – Invoiced per trip	Per Trip

Powering Business Worldwide

Review Order: Infrastructure

Equipment (Invoiced at time of shipment)	Quantity	Lead Times (Est. Weeks)
Gateway 801 with Ethernet Port	9	12
Gateway 801 Enclosures	9	12
Gateway Antenna w/50ft Coax	9	12
Relays 856	32	8
Network Scout Field Tool	1	6
Spare Gateway 801 with Ethernet Port	1	12
Spare Relay 856	1	8

Who is installing the infrastructure, Meters?

Invoiced at time of shipping. 2.5% Shipping cost and applicable taxes will be added to all infrastructure and meter shipments.

Powering Business Worldwide

Review Order: Electric Meters

Equipment (Invoiced at time of shipment)	Quantity	Lead Times (Est. Weeks)
Electric Meters (Residential)		
RFN-410cL 2s CL200	7145	20-24
RFN-410cL 2s CL320	0	20-24
RFN-420cD 2S CL200, Disconnect	0	28
RFN-410cL 3S CL20	0	20-24
RFN-410cL 4S CL20	0	20-24
Electric Meters (C&I)		
RFN-430A3T 8/9S CL20	77	16-18

1. Firm up meter forms and quantities
2. Are active/reactive keys needed for A3 meters?
3. Custom Program for A3's?
4. Complete meter configs
5. Are spare meters accounted for in quantities?

Equipment Administration

Equipment Name	Provides	Installs	Supports
Yukon Installation	Eaton	Eaton	Eaton (per service agreement)
Gateways & Antennas	Eaton	KLPD	Eaton (per service agreement)
Gateway Backhaul	KLPD	KLPD	KLPD
Relays	Eaton	KLPD	Eaton (per service agreement)
Electric Meters	Eaton	KLPD	Eaton (per service agreement)
Field Tool	Eaton	Eaton	Eaton (per service agreement)
Water Meters/Nodes	N/A	N/A	N/A (per service agreement)

No server migration accounted for in this process, is one needed?

Powering Business Worldwide

Deployment Questions

- How are the customers informed of project
  - Door Hangers, Meter Seals, Mailer
- KLPD– Infrastructure and backhaul install plan
- Warehouse Space Planning
- Troubleshooting
  - Mesh vs. linear deployment
  - Network Optimizing – A meter may not read

Powering Business Worldwide

Deployment Expectations

- Deployment Best Practices
  - Start with Gateways and Relays
  - Followed by residential meters close to gateways
  - Followed by commercial meters

- Meter Reporting Expectation
  - It typically takes 5 minutes to 5 days for the meter to display in Yukon.

Meter Reporting - Configuration

- Residential Electric Node
  - Standard
    - 1-hour recording, reporting every 6 hours
- Commercial Electric Node
  - Standard
    - 15-minute recording, Reporting every 2 hours
- Water Nodes
    - 1-hour recording, reporting every 24 hours
- Meter Configuration
  - Meter techs, Billing
  - What points do you want the meter to report?

  - **Who needs to receive meter test data and all shipment files?**

Bi-Weekly Call & Trip Schedule (est)

Meeting	Date/Time
Customer Kick Off Meeting	April 5-6
Meter Set up – Config Meeting	Apr 6, 2022
Bi-Weekly/Monthly Meetings	TBD
Training I	Around Gateway install time
Training II	Around Meter install time
Training III	TBD or as needed

Powering Business Worldwide

Review Project Schedule

Powering Business Worldwide

Project Schedule – Full Rollout – Initial First Pass Estimation

Item	Due By
Equip Ordered	4/11/2022 – 4/22/2022
Kickoff Mtg (Cust)	4/5/2022-4/6/2022
Install Yukon	7/15/2022
Full Infrastructure Ship	7/1/2022
Full Roll Out Begin	10/17/2022
Roll Out Complete	10/31/2023
Performance Reporting	2/15/2024
Transition to Support	5/15/2024

Powering Business Worldwide

Project Scope Recap

- Roles & Responsibilities
- Communication Plan
- IT Requirements
  - Software Installation
  - Remote Access
  - Yukon Integration with Central Square CIS
- Equipment Ordering
  - Infrastructure
  - Meter types and configuration
- Schedule

Powering Business Worldwide

Project Scope Recap Cont.

- Installation
  - Infrastructure
    - Gateway Backhaul - KLPD
  - Meters (Electric & Water)
    - CIS & Yukon Data Integration
  - Training
    - Equipment
    - Yukon
- System Optimization

Eaton Safety Requirements

- Eaton has a “Zero Incident Safety Culture” and stresses the importance of a safe working environment.
- With this culture in mind the following safety requirements will be used by employee on this project:
  - Hard hats to be worn around all bucket truck work areas.
  - Hard hats, safety glasses, cotton shirt to be worn in substations.
- What does Eaton need to know about KLPD Safety Policies?

Powering Business Worldwide

Takeaways

- Understanding of the Eaton AMI RF System, RF Software, Equipment and Deployment Methodology
- Understand Roles and Responsibilities
- Establish a Communication Plan
- Review the Project Scope and Schedule
- Meter Set up and Configuration
- Review Gateway Sites
- Next Steps

Powering Business Worldwide

Questions

Powering Business Worldwide


Powering Business Worldwide

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Kennebec Light and Power District Project No. 5362-000

NOTICE OF AUTHORIZATION FOR CONTINUED PROJECT OPERATION

(April 5, 2022)

On March 31, 2021, Kennebec Light and Power District, licensee for the Lower Mousam Hydroelectric Project No. 5362, filed an application for Surrender of License. The Lower Mousam Hydroelectric Project is located on the Mousam River in York County, Maine

The license for Project No. 5362 was issued for a period ending March 31, 2022. Section 15(a)(1) of the FPA, 16 USC 808(a)(1), requires the Commission, at the expiration of a license term, to issue from year-to-year an annual license to the then licensee(s) under the terms and conditions of the prior license until a new license is issued, or the project is otherwise disposed of as provided in section 15 or any other applicable section of the FPA. If the project's prior license waived the applicability of section 15 of the FPA, then, based on section 9(b) of the Administrative Procedure Act, 5 USC 558(c), and as set forth at 18 CFR 16.21(a), if the licensee of such project has filed an application for a subsequent license, the licensee may continue to operate the project in accordance with the terms and conditions of the license after the minor or minor part license expires, until the Commission acts on its application. If the licensee of such a project has not filed an application for a subsequent license, then it may be required, pursuant to 18 CFR 16.21(b), to continue project operations until the Commission issues someone else a license for the project or otherwise orders disposition of the project.

If the project is subject to section 15 of the FPA, notice is hereby given that an annual license for Project No. 5362 is issued to the Kennebec Light and Power District for a period effective April 1, 2022 through March 31, 2023 or until the issuance of a new license for the project or other disposition under the FPA, whichever comes first. If issuance of a new license (or other disposition) does not take place on or before March 31, 2023, notice is hereby given that, pursuant to 18 CFR 16.18(c), an annual license under section 15(a)(1) of the FPA is renewed automatically without further order or notice by the Commission, unless the Commission orders otherwise.

If the project is not subject to section 15 of the FPA, notice is hereby given that the Kennebec Light and Power District is authorized to continue operation of the Lower Mousam Hydroelectric Project, until such time as the Commission takes final action on the application for Surrender of License.

Kimberly D. Bose,
Secretary.