

PLUG 2024

Power Logic Users Group

Power Monitoring by an Expert

The EA Group

Presented by: **Mark Neff, P.Eng, ATD**



Agenda

- Introductions
- Schneider Hardware and Software
- EcoXperts to Augment and Implement the Complete Solutions
- EA Group Capabilities and Cool Things We've Done



Schneider Energy and Power Management

What we do

- Power Monitoring Expert: “Complete, interoperable, and scalable purpose built software dedicated to power management that enables you to Improve operational efficiency and reduce energy-related costs , ensure electrical network reliability and optimize equipment utilization and the cost of operations”
- Ongoing measurement of an electrical power distribution system via intelligent, communicating energy and power devices connected to software for data collection, visualization, analysis and reporting
- Just like any other process in your facility your electrical distribution network needs to be monitored and/or managed.

‘I can monitor my facility’s power availability in real time!’

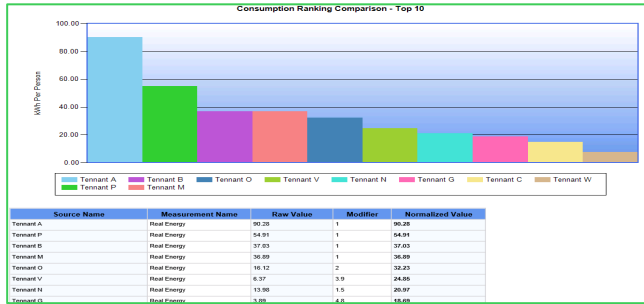
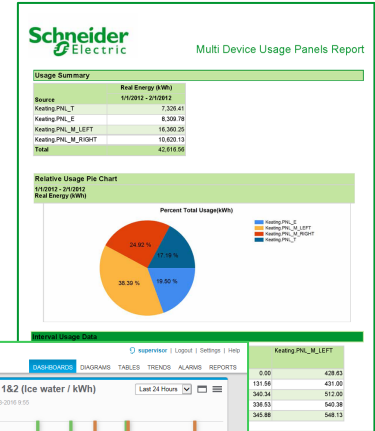
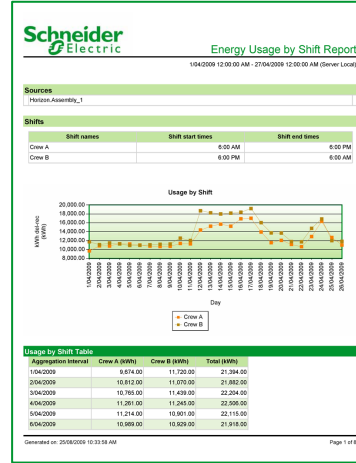
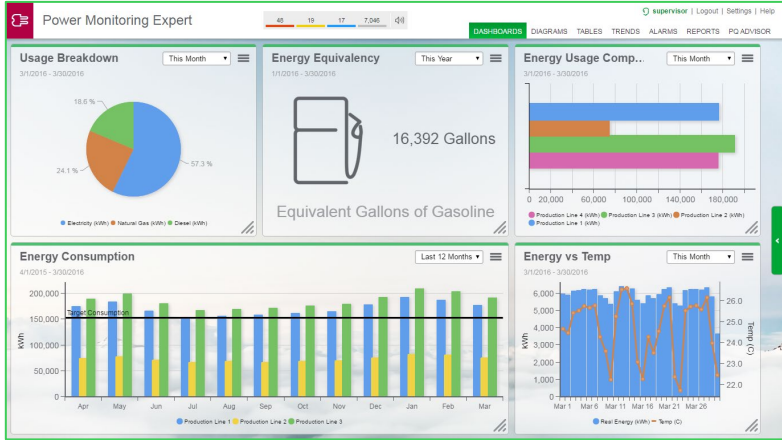
- Factory Manager



Complete System



PME Can Be Configured by You



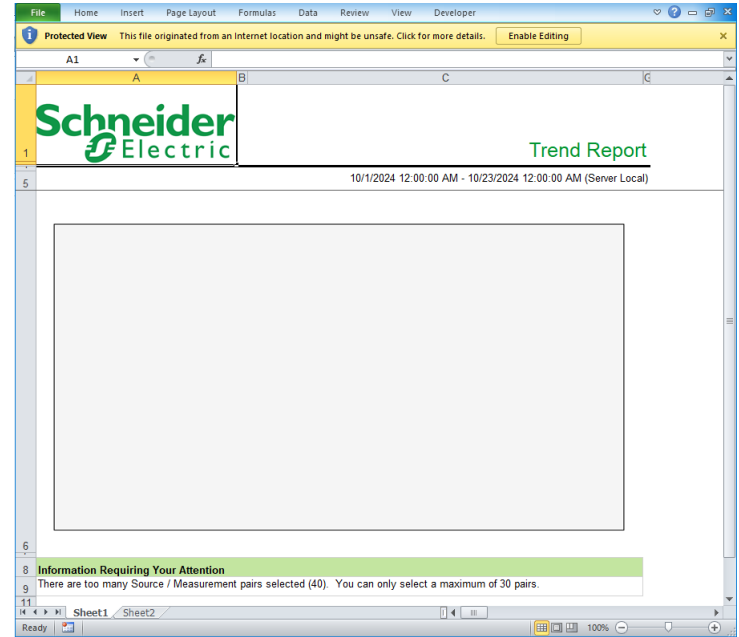
UH-OH!!!

Does Anyone Know What to Do Now?



Computer Terms and Acronyms

- Modbus, OPC, BacNET, SNMP, Ethernet/IP, Devicenet, LonWorks, DNP3, IEC 60870-5, IEC 61850, Comtrade
- Modbus Map, MIB, OID, BBMD
- SMTP, NTP, LLDP, STP, VLAN, NAT, HSRP, ICMP, TLS, DHCP
- HDMI, DP, 802.11, PON, SFP



EcoXperts to the Rescue!

Providing Solutions to your Problems

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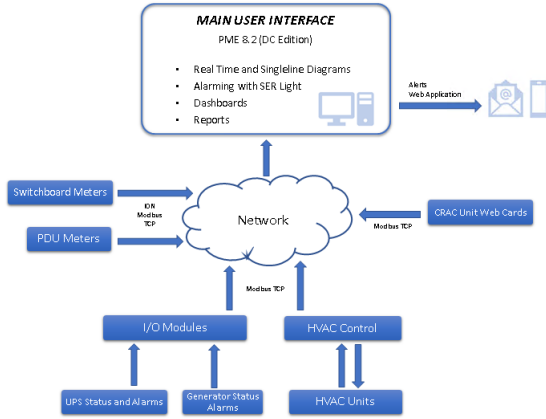
EcoXperts Bring Their Own Skills

- System Design, Maintenance and Expansion
- Installation
- Using Schneider Parts in Customized Ways
- Integrating Non-Schneider Parts
- Handling non-Schneider Hardware and Software support issues

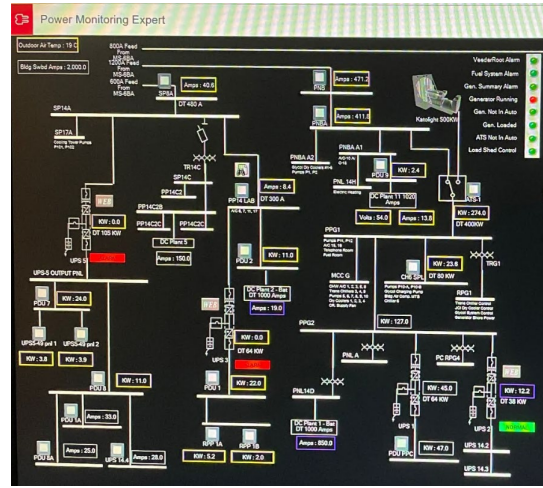


The EA Group for All Challenges

Complete Monitoring Solutions Guaranteed



Monitoring System Design



Custom User Interface



Custom Devices and Protocols

	A	B	C	D	E	F	G	
1	Date:	2022-10-07						
2	Time:	23:20						
3								
4		Food Segment - Cabinets 1 to 22						
5	Row	Row A (Amps)	Row B (Amps)	Row C (Amps)	Row D (Amps)	Row E (Amps)	Row F (Amps)	
6	A	0.0	0.0	0.0	0.0	0.0	0.0	
7	B	18.1	10.7	36.8	6.9	6.0	11.9	
8	C	47.8	47.7	95.2	16.0	16.0	32.0	
9	D	9.4	10.4	19.8	3.0	3.0	6.0	
10	E	26.5	22.9	49.4	9.0	7.8	16.0	
11	F	82.5	86.3	156.7	29.4	23.0	53.5	
12	G	104.6	93.3	195.9	26.1	21.6	47.2	
13	H	85.1	68.4	154.4	29.2	23.2	52.4	
14	I	57.2	121.7	248.0	19.0	12.2	62.0	
15	J	86.7	87.0	173.7	30.0	25.1	59.0	
16	K	33.7	44.3	78.0	11.1	15.0	26.1	
17	L	166.0	109.3	205.9	33.7	35.1	71.8	
18	M	86.7	75.2	162.9	29.9	25.0	56.0	
19	N	25.0	25.0	50.0	8.0	8.0	16.0	
20								
21		Rear Segment - Cabinets 23 to 48						
22	Row	Row A (Amps)	Row B (Amps)	Row C (Amps)	Row D (Amps)	Row E (Amps)	Row F (Amps)	
23	A	0.0	0.0	0.0	0.0	0.0	0.0	
24	B	0.0	0.0	0.0	0.0	0.0	0.0	
25	C	8.9	4.9	9.2	1.6	1.6	3.0	
26	D	31.1	29.6	60.7	10.0	9.0	18.0	
27	E	86.1	86.4	135.5	21.9	22.0	43.9	
28	F	74.5	84.0	154.5	26.0	29.0	55.0	
29	G	16.0	15.6	31.5	6.0	5.5	10.0	
30	H	0.0	0.0	0.0	0.0	0.0	0.0	
31	I	0.0	0.0	0.0	0.0	0.0	0.0	
32	J	0.0	0.0	0.0	0.0	0.0	0.0	
33	K	0.0	0.0	0.0	0.0	0.0	0.0	
34	L	0.0	0.0	0.0	0.0	0.0	0.0	
35	M	0.0	0.0	0.0	0.0	0.0	0.0	
36	N	0.0	0.0	0.0	0.0	0.0	0.0	

Custom Automated Reports



The EA Group for All Challenges

More Complete Solutions Guaranteed

* Infrastructure Power Savings Initiatives

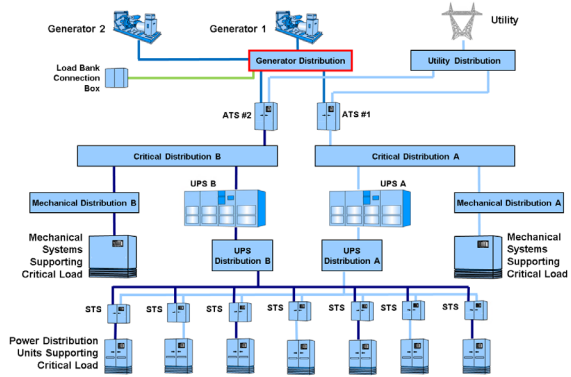


Specializing in critical infrastructure design builds and custom electrical / mechanical distribution systems

Project Overview Prepared for:

Engineering Studies

Ambient:		
Location	Height (ft)	Temp (°C)
Containment Wall	6	26.9
Ceiling (above hottest equipment)	25	26.7
Ceiling (above no equipment)	25	24.4
Light Fixtures	8	38.0
Cold Aisle	4	21.0



Complete System Design

Consulting or Design-Build



Control Rooms



Custom Equipment



Water and Light Features



PLUG 2024

Life Is On

Schneider
Electric

