CITY OF CUYAHOGA FALLS, OHIO

May 9, 2024

ADDENDUM NO. 2

To the Specifications For

The Replacement, Training, and Design of the Cuyahoga Falls Electric SCADA Sytems.

TO ALL BIDDERS:

This Addendum supplements and amends the original specifications for and shall be taken into account in preparing proposals and shall become a part of the contract documents as follows:

- Question Clarification #'s 17 - 40
- Current Network Architecture Model Numbers
- Eleven (11) Supporting Images of Existing Equipment

END OF ADDENDUM #2

Acknowledgement of Receipt of Addendum No. 2

The Replacement, Training, and Design of the Cuyahoga Falls Electric SCADA Sytems.

PLEASE REPLY IMMEDIATELY via e-mail @ electricdept@cityofcf.com, to acknowledge receipt of this addendum.

Sign and print your name below on this acknowledgement sheet.

Addendum No. 2 received by:

_____
Signature Date

_____
Print Name

_____
Company Name

_____
Contact Email

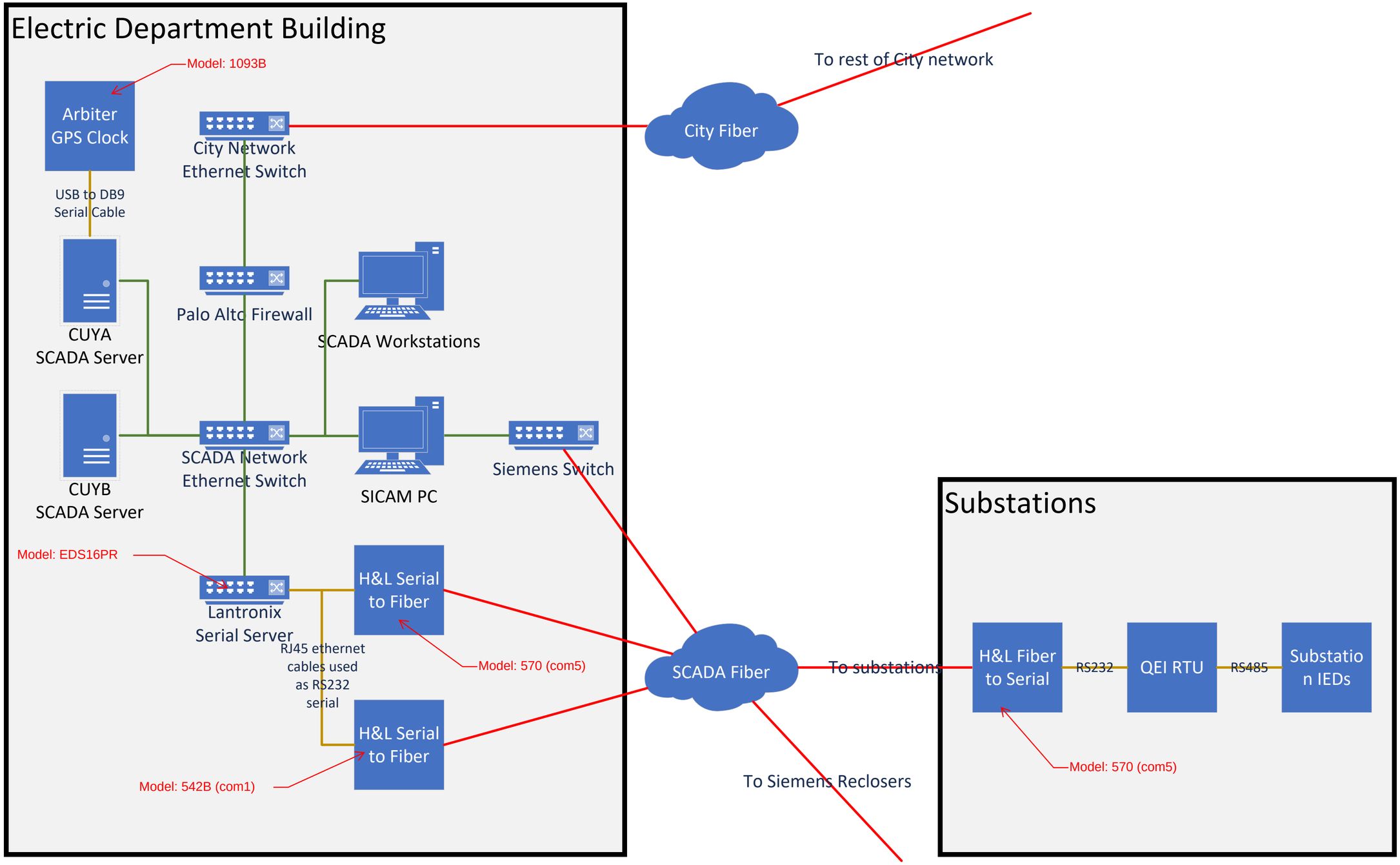
CUYAHOGA FALLS ELECTRIC SYSTEM - SCADA RFP
ADDENDUM #2

Question #	Document	Section/Description	Queries/Clarifications	CFED Responses
17	Cuyahoga Falls – New System Requirements	General	Previous questions asked if all connections to the SCADA Servers are TCP/IP, and the response was yes. The SCADA Servers are TCP/IP to the local SCADA Network Ethernet Switch, but all communications to Substation RTUs are currently serial over fiber and are converted to/from TCP/IP at the Lantronix Server. Is this current communications format to remain in place as-is?	Yes, to remain, if possible. The SCADA servers connect to the RTUs through a serial server, then that serial server connect to fiber media converters, then the communications convert back to serial over copper at the substations. If the vendor wanted to change this then they should include the Ethernet media converters in their quote.
18	Cuyahoga Falls – New System Requirements	General	Will CFED make available a detailed point list and current point mapping to each port of each RTU? Or is bidder expected to pull that data as part of the project? If so, will CFED make available a copy of ConfigWiz or the latest version of configuration software for the RTU?	Yes, after RPF awarded, the vendor chosen can get the point list and mapping.
19	Cuyahoga Falls – New System Requirements	The new SCADA system should allow Cuyahoga Falls to pull the same set of on-demand and scheduled reports that exist on the current system and should allow for direct Excel integration to query archived data.	Please provide a listing of the existing reports so a quantity can be established.	Approximately 10
20	Cuyahoga Falls – New System Requirements	In addition to replacing the existing main SCADA system Cuyahoga Falls wants to integrate the functionality of another existing system that reads data from Siemens recloses using the 61850 GOOSE protocol and can send manual controls to the reclosers. By the conclusion of the implementation, the new SCADA system should replace the core functionality of this recloser-reading system, in addition to replacing the existing SCADA system.	Q1: Is the intent to take the Siemens HMI out of the loop and have the SCADA system directly read the reclosers for status and to issue manual controls? Q2: May we expect that the automated control portions, both recloser sectionalizing/restoration and voltage regulation will still be conducted in a peer fashion between the devices, requiring no interface with the SCADA? Q3: Will the Siemens computer remain in place for DIGSI, configuration of the devices, and to maintain the storage of COMTRADE files?	Q1: Yes, if possible Q2: Yes Q3: Yes, it can remain in place for DIGSI, configsm and COMTRADE files.
21	Cuyahoga Falls – New System Requirements	General	IS it possible to make a site visit in order to view the current system? Please advise.	Yes
22	Cuyahoga Falls – New System Requirements	Legal Notice	May the proposals be delivered electronically or are they expected to be hand delivered?	Must be mailed or hand delivered. Electronically will not be accepted.
23	Cuyahoga Falls – New System Requirements	System Architecture	Is the system architecture intended to stay the same? Assumption is City IT will be responsible for the current network design including switches, firewall, and cybersecurity issues for the network. Please confirm.	Intended to stay the same unless vendor's standard configuration differs greatly from current architecture. Meeting would be needed to discuss. City's IT department would be responsible for maintaining the network.
24	Cuyahoga Falls – New System Requirements	Unless otherwise directed by Cuyahoga Falls, the new SCADA system should perform time-synchronization of the existing RTUs using DNP3, and those RTUs should perform time-synchronization of the IEDs they read using DNP3.	Does the current clock support NTP/SNTP, IRIG-B, or other? Please clarify clock output capabilities.	Per the Arbiter manual, it does support NTP. 1903B Arbuter Clock
25	Cuyahoga Falls – New System Requirements	All points that exist in the current system must be configured and tested in the new system. In the current system, Cuyahoga Falls utilizes 79 calculations and 16 command sequences that produce calculated values. These calculations mainly involve basic operations such as addition, multiplication, and counting. All existing calculations must be replicated in the new SCADA system to ensure their continued functionality.	Will the City provide the calculation and sequence configurations to be used in integration of the new system?	The implementor should pull these from the existing system.
26	Cuyahoga Falls – New System Requirements	Cuyahoga Falls has not observed any issues with limits and reasonability thresholds for any existing SCADA points, so the existing point limits and thresholds should be used on the new system.	Will the City provide the limits and thresholds for the existing points to be used in the new system?	The implementor should pull these from the existing system.
27	Cuyahoga Falls – New System Requirements	Additionally, Cuyahoga Falls will also require a quote for an annual block of 40 hours to be used in assisting with the management of the system. This support should be quoted as both 3-year and 5-year options.	Are the 3-year and 5-year options only for the "annual block of 40 hours"?	Yes, and for the 24x7 tech support, if available.

CUYAHOGA FALLS ELECTRIC SYSTEM - SCADA RFP
ADDENDUM #2

Question #	Document	Section/Description	Queries/Clarifications	CFED Responses
28			Please confirm how many workstations will be used and the CPU that they have.	Workstations: Total 8 **Product name:** HP EliteDesk 705 G5 Desktop Mini PC **CPU:** AMD Ryzen 5 3.3GHz **Memory:** 8 GB DDR4-2666 MHz RAM (1 x 8 GB) **Internal drive:** 256 GB PCIe® NVMe™ TLC M.2 SSD **Ports:** Front 1 headphone; 1 headset connector; 1 SuperSpeed USB 5Gbps signaling rate; 1 SuperSpeed USB 5Gbps signaling rate (charging); 1 SuperSpeed USB Type-C® 10Gbps signaling rate (charging) [6,9,10,11,12,13,36] Rear 1 external antenna connector; 1 power connector; 1 RJ-45; 3 DisplayPort™ 1.2; 4 USB 3.1 Gen 1 Additional 1 DisplayPort™ **Operating System:** Windows 11 Pro 22H2
29			Please confirm how many **Cuyahoga Falls Electric Service** personnel would attend vendor provided admin and engineering training.	3
30			Please provide the list of specifications for the “newer existing server” that **Cuyahoga Falls Electric Service** would like to re-use. a) Additionally, what would **Cuyahoga Falls Electric Service** like to use this for (i.e. one of the host servers, etc.)? b) If the vendor agrees to use this server, would **Cuyahoga Falls Electric Service** be willing to ship it along with the other Hardware to the vendors staging facility?	See answer below. A) One of the host servers. B) Possibly send redundant server to vendor.
31			What is the current make, model, and version of the existing SCADA system?	Cuyahoga Falls’ QEI SCADA system operates on two servers located in the SCADA room of the Electric Department building, referred to as CUYA and CUYB, running the OpenVMS operating system. The CUYA server is an HP RX2800 i6 server installed in 2018 and the CUYB server is an HP RX2660 installed in 2012. The system can be accessed from a desktop located in the SCADA room, and from at least 8 other workstation desktops in the building
32			What RDBMS does **Cuyahoga Falls Electric Service** currently use? a) How many months/years of data must be migrated to the new system?	Database is SQL Express, QEI Enterprise Data Manager and minimum of 4 years.
33			What is the model and version if the SICAM HMI that is used with the Siemens Automatic Transfer System?	Addendum 1 PDF "Siemens Automatic Transfer System"
34			How many concurrent web-view only users would be needed?	10
35			Could **Cuyahoga Falls Electric Service** elaborate on what the “Annual block of 40 hours to be used in assisting with the management of the system” would look like? a) Additional details of specific tasks/requirements for this would be greatly appreciated.	Modifications to screens, database cleanup, calculation assistance.

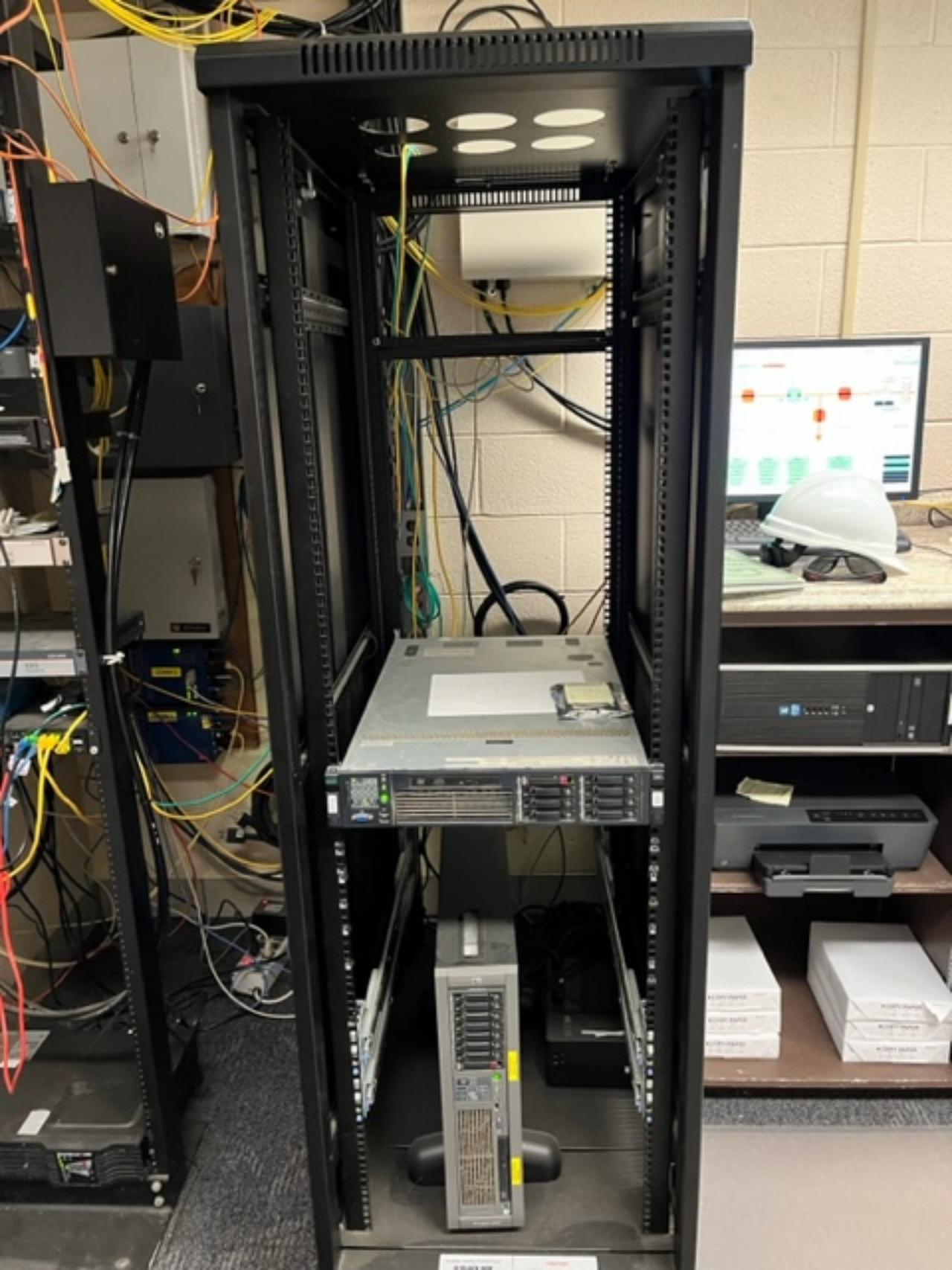
Question #	Document	Section/Description	Queries/Clarifications	CFED Responses
36			Is Secure ICCP required? a) If so, how many total ICCP connections/associations are there to other entities/systems?	No
37			Regarding the project schedule, does **Cuyahoga Falls Electric Service** have any expectations or drivers that pertain to key dates/milestones and/or overall project duration? If so, please elaborate.	Our new electric building will be completed November 2024, so implantation would be as soon as possible in new building. Completion would be expected mid-2025.
38			Please expand on the requirements for networking configuration (e.g., firewall rules, active directory setup, etc.)	Combination of bidder system requirements and then City of Cuyahoga Falls IT department could review and make changes as needed.
39			Will **Cuyahoga Falls Electric Service** allow a follow-up round of questions to be submitted from vendors based on responses received from this round if required?	Yes
40			Would **Cuyahoga Falls Electric Service** be open to a joint proposal, and issuing separate contracts for software licensing and implementation services?	No



Serial

Ethernet

Fiber



CUYAHOGA FALLS ELECTRIC SYSTEM

AMERICAN MUNICIPAL UTILITIES

57.4 DEGREES

SUB 1	NEW SUB 5	SUB 9	SUB 13	FEEDER % LOAD	DEMAND READINGS
SUB 2	SUB 6	SUB 10	SYSTEM	COMM LINES	LOAD READINGS
SUB 3	SUB 7	VALLEY	SUMMARY	RECLOSERS	SCADA EVENTS
SUB 4	SUB 8	THEISS	OLD SUB 5		

SYSTEM TOTAL

45.97 LAST

46.41 TODAY AT 923

68.00 M-T-D ON 5 / 2 AT 1751

68.00 Y-T-D ON 4 / 29 AT 1816

QEI, LLC - WorldView v004.000.004 - [Sub 4 : scada_map]

Home View Edit Map

Zoom Box | Zoom | Zoom In | Zoom Out | Pan View | GoTo Device | GoTo XY Coord | GoTo Line Section — Zoom/GoTo
Previous View | Next View | Default View | Map Views | Map Layers | Birdseye | Full Screen — Views
List Notes | Add Notes | Modify Notes | Delete Notes | Cancel — Notes
Windows — Window

CUYAHOGA FALLS
ELECTRIC SYSTEM
AMERICAN MUNICIPAL UTILITIES

4 - 8 23KV LINE

MAIN MENU
SYSTEM
SUB 4
SUB 8

SUB 4

4-VCB-89	CLOSED
RELAY STATUS	ONLINE
RELAY HEALTH CHECK	NORMAL
RELAY COMMUNICATIONS	NORMAL
TOTAL RECEIPT FAILURE	NORMAL
FIRMWARE MISMATCH	NORMAL
87 DIFFERENTIAL TRIP	NORMAL
87 FAULT PHASE A	NORMAL
87 FAULT PHASE B	NORMAL
87 FAULT PHASE C	NORMAL
87 GROUND FAULT	NORMAL
50/51 OVERCURRENT TRIP	NORMAL
50/51 PICKUP PHASE A	NORMAL
50/51 PICKUP PHASE B	NORMAL
50/51 PICKUP PHASE C	NORMAL
50/51 PICKUP GROUND	NORMAL
BACKUP RELAY STATUS	ONLINE
BACKUP HEALTH CHECK	NORMAL
67/67N TRIP	NORMAL
4-9 LOCKOUT PICKUP	NORMAL

	CURRENT	VOLTAGE
A	126	24.227
B	121	24.283
C	121	24.241
N	6	

SUB 8

8-VCB-45	CLOSED
RELAY STATUS	ONLINE
RELAY HEALTH CHECK	NORMAL
RELAY COMMUNICATIONS	NORMAL
TOTAL RECEIPT FAILURE	NORMAL
FIRMWARE MISMATCH	NORMAL
87 DIFFERENTIAL TRIP	NORMAL
87 FAULT PHASE A	NORMAL
87 FAULT PHASE B	NORMAL
87 FAULT PHASE C	NORMAL
87 GROUND FAULT	NORMAL
50/51 OVERCURRENT TRIP	NORMAL
50/51 PICKUP PHASE A	NORMAL
50/51 PICKUP PHASE B	NORMAL
50/51 PICKUP PHASE C	NORMAL
50/51 PICKUP GROUND	NORMAL

	CURRENT	VOLTAGE
A	0.00	0.00
B	0.00	0.00
	0.00	0.00
N	0.00	

For Help, Please Press F1 — X:534943229 Y:129314362 — 05/08 22:54:30 — SUB6.4XFSMB.604 FEEDER BREAKER — IS CLOSED — Normal 1 2 3 4 5 6 7 8 — 192.168.5.25 — 23100 — 5/9/2024 9:26:44 AM

SYSTEM LOAD SUMMARY

MAIN MENU VOLTAGE

FEEDER	STATUS	MW	% LOAD	øA	øB	øC	øN	%PF
SUB 1								
101		0.62	16.5	100	79	84	28	98
102		0.79	21.1	106	108	120	24	98
103		0.96	9.6	50	41	44	15	99
104		3.21	32.1	154	144	146	18	98
SUB 2								
201		0.18	3.6	24	22	30	14	99
202		1.00	20.1	159	138	125	42	97
203		0.83	16.5	144	125	131	18	-82
204		0.39	7.9	67	73	57	28	-83
SUB 3								
301		0.40	7.9	59	54	53	21	99
302		1.11	22.2	148	161	174	70	-100
303		0.69	13.9	95	114	81	38	-100
304		0.59	11.9	79	85	93	20	-96
323		7.68	33.8	182	196	209		1
SUB 4								
401		0.99	13.2	56	46	47	12	93
402		2.11	28.2	96	100	94	17	100
SUB 5								
T1		1.02	7.7	52	46	52	7	99
T2		2.70	21.2	136	140	137	9	93
501		0.57	6.7	26	19	32	13	-99
502		0.51	6.3	26	25	22	16	94
503		1.64	20.4	75	81	77	9	93
504		1.14	14.2	62	52	49	19	94
SUB 6								
601		0.63	12.6	82	995	78	26	-97
602		0.87	17.4	121	120	114	32	-99
603		0.28	7.5	52	52	57	19	-71
604		1.57	41.8	233	230	226	17	92

FEEDER	STATUS	MW	% LOAD	øA	øB	øC	øN	%PF
SUB 7								
701		0.00	0.0	0	0	0	0	0
702		0.62	16.4	87	91	81	9	99
SUB 8								
801		0.30	12.2	43	46	45	8	96
802		0.50	19.9	69	77	61	25	98
803		0.31	6.2	17	17	9	7	99
804		1.20	24.0	66	66	47	25	-97
SUB 9								
901		0.66	13.2	34	33	39	17	-88
902		1.40	28.0	60	77	72	14	94
923		0.00	0.0	0	0	0		0
SUB 10								
1001		1.46	19.4	66	67	70	0	98
1002		1.68	22.4	84	92	79	0	89
VALLEY								
VALLEY #1		9.5	23.7	237	239	243	3	98
VALLEY #2		8.8	22.0	218	223	227	5	98
VALLEY #3		9.5	23.8	239	240	244	7	98
VALLEY #4		9.5	23.8	236	241	249	13	97
THEISS								
THEISS 9		0.6	1.4	11	14	17	0	100
THEISS 3		6.3	15.8	151	153	163	19	96
SUB 13								
1301		0.55	6.6	17	33	30	18	-96
1302		1.20	13.9	55	57	55	18	99

SYSTEM	INSTANTANEOUS MW
VALLEY SUB	39.23
THEISS SUB	6.89
GENERATION	0.00
TOTAL	46.12

Home

Find a setting

System

Display
Sound
Notifications & actions
Focus assist
Power & sleep
Storage
Tablet
Multitasking
Projecting to this PC
Shared experiences
System Components
Clipboard
Remote Desktop
Optional features
About

About

Your PC is monitored and protected.

See details in Windows Security

Device specifications

HP Z1 Entry Tower G5

Device name	ELPC31
Processor	Intel(R) Core(TM) i5-9500 CPU @ 3.00GHz 3.00 GHz
Installed RAM	16.0 GB (15.8 GB usable)
Device ID	EBEEBF8D-5819-4222-BBC0-8E41A7D87517
Product ID	00330-53106-21064-AAOEM
System type	64-bit operating system, x64-based processor
Pen and touch	No pen or touch input is available for this display

Copy

Rename this PC

Windows specifications

Edition	Windows 10 Pro
Version	22H2
Installed on	9/11/2020
OS build	19045.4170
Serial number	MXL0361XHZ
Experience	Windows Feature Experience Pack 1000.19054.1000.0

Copy

Change product key or upgrade your edition of Windows

Read the Microsoft Services Agreement that applies to our services

Read the Microsoft Software License Terms

Related settings

BitLocker settings

Device Manager

Remote desktop

System protection

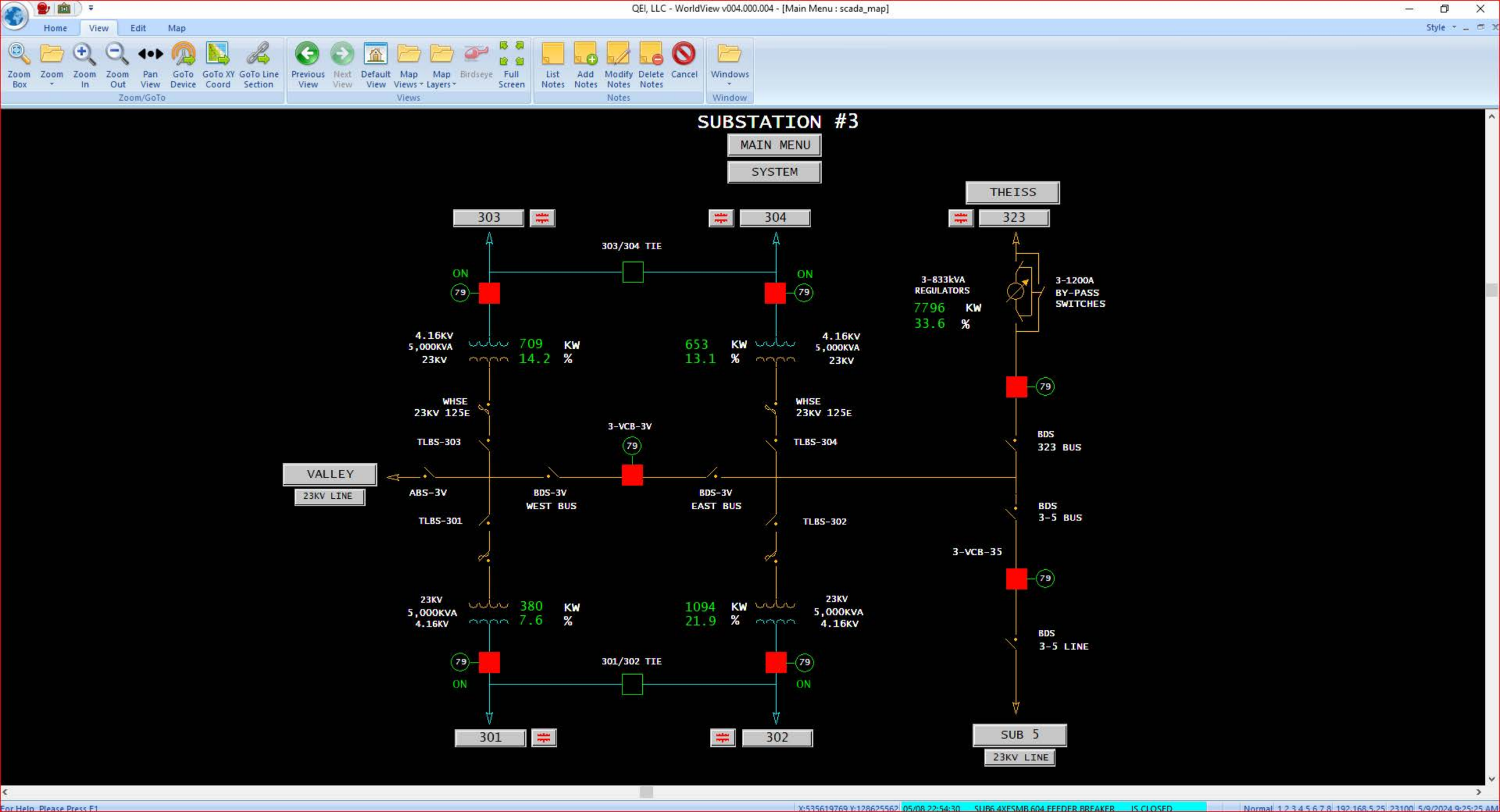
Advanced system settings

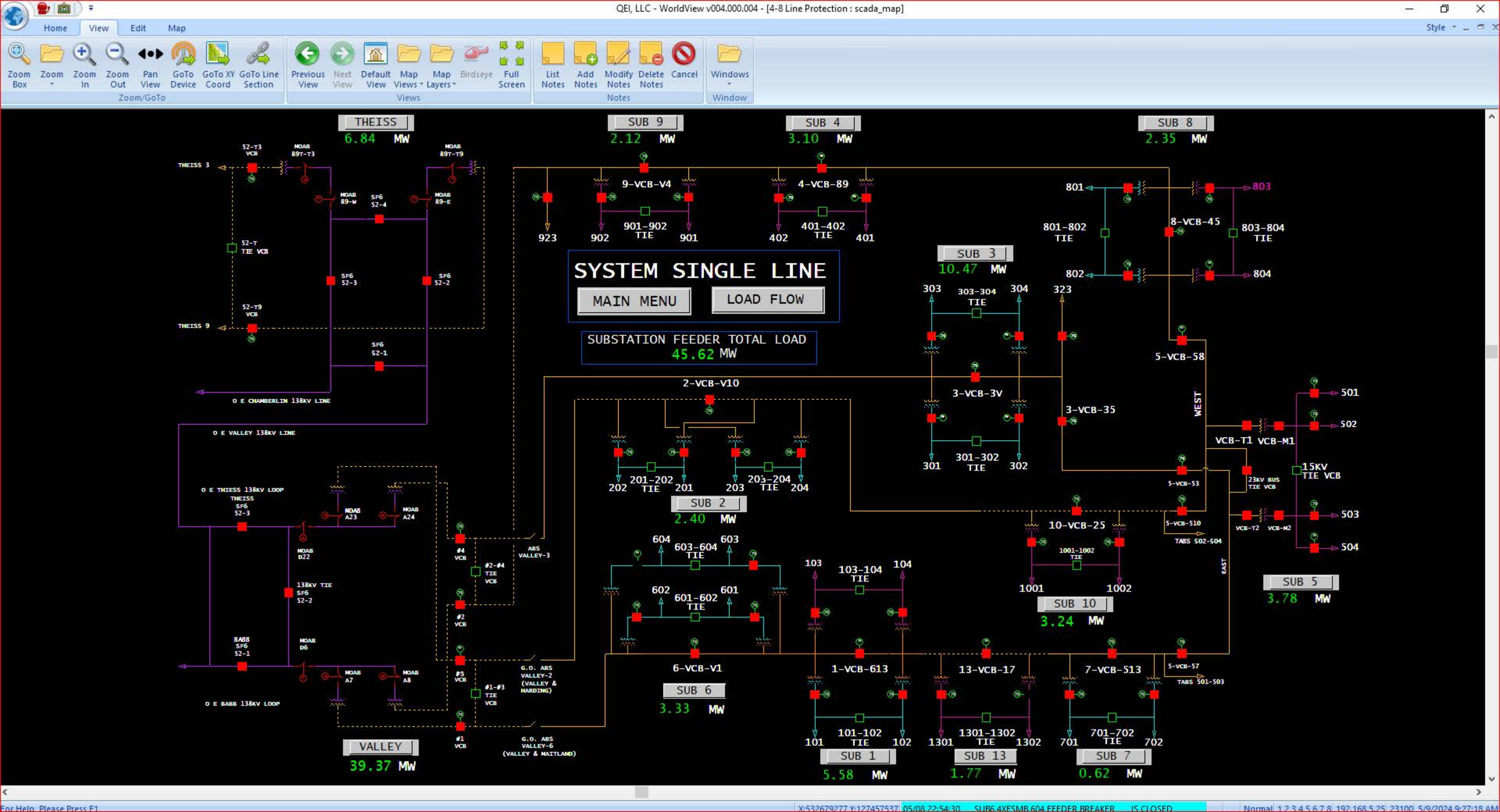
Rename this PC (advanced)

Get help

Give feedback

Support


QEI, LLC - WorldView v004.000.004 - [Main Menu : scada_map]
Home
View
Edit
Map
Style
Zoom Box
Zoom
Zoom In
Zoom Out
Pan View
GoTo Device
GoTo XY Coord
GoTo Line Section
Zoom/GoTo
Previous View
Next View
Default View
Map Views
Map Layers
Birdseye
Full Screen
Views
List Notes
Add Notes
Modify Notes
Delete Notes
Cancel
Notes
Windows
Window
SUBSTATION #3
MAIN MENU
SYSTEM
303
304
303/304 TIE
ON
79
4.16KV
5,000KVA
23KV
709 KW
14.2 %
653 KW
13.1 %
WHSE
23KV 125E
TLBS-303
TLBS-304
3-VCB-3V
VALLEY
23KV LINE
ABS-3V
BDS-3V
WEST BUS
BDS-3V
EAST BUS
TLBS-301
TLBS-302
23KV
5,000KVA
4.16KV
380 KW
7.6 %
1094 KW
21.9 %
301/302 TIE
301
302
THEISS
323
3-833kVA
REGULATORS
7796 KW
33.6 %
3-1200A
BY-PASS
SWITCHES
BDS
323 BUS
BDS
3-5 BUS
3-VCB-35
BDS
3-5 LINE
SUB 5
23KV LINE
For Help, Please Press F1
X:535619769 Y:128625562
05/08 22:54:30
SUB6 4XFSMB 604 FEEDER BREAKER IS CLOSED
Normal
192.168.5.25
23100
5/9/2024 9:25:25 AM


QEI, LLC - WorldView v004.000.004 - [4-8 Line Protection : scada_map]
Home
View
Edit
Map
Style
Zoom Box
Zoom
Zoom In
Zoom Out
Pan View
GoTo Device
GoTo XY Coord
GoTo Line Section
Zoom/GoTo
Previous View
Next View
Default View
Map Views
Map Layers
Birdseye
Full Screen
Views
List Notes
Add Notes
Modify Notes
Delete Notes
Cancel
Notes
Windows
Window
THEISS
6.84 MW
SUB 9
2.12 MW
SUB 4
3.10 MW
SUB 8
2.35 MW
SYSTEM SINGLE LINE
MAIN MENU
LOAD FLOW
SUBSTATION FEEDER TOTAL LOAD
45.62 MW
SUB 3
10.47 MW
SUB 2
2.40 MW
SUB 6
3.33 MW
SUB 10
3.24 MW
SUB 5
3.78 MW
SUB 1
5.58 MW
SUB 13
1.77 MW
SUB 7
0.62 MW
VALLEY
39.37 MW
O E CHAMBERLIN 138KV LINE
O E VALLEY 138KV LINE
O E THIESS 138KV LOOP
O E BABB 138KV LOOP
G.O. ABS VALLEY-2 (VALLEY & HARDING)
G.O. ABS VALLEY-6 (VALLEY & MAITLAND)
ABS VALLEY-3
WEST
EAST
TABS 502-504
TABS 501-503
9-VCB-V4
4-VCB-89
8-VCB-45
3-VCB-3V
3-VCB-35
5-VCB-58
2-VCB-V10
6-VCB-V1
1-VCB-613
13-VCB-17
7-VCB-513
10-VCB-25
5-VCB-53
5-VCB-510
5-VCB-57
VCB-T1
VCB-M1
VCB-T2
VCB-M2
15KV TIE VCB
23KV BUS TIE VCB
901-902 TIE
401-402 TIE
801-802 TIE
803-804 TIE
303-304 TIE
301-302 TIE
201-202 TIE
203-204 TIE
603-604 TIE
601-602 TIE
103-104 TIE
1001-1002 TIE
101-102 TIE
1301-1302 TIE
701-702 TIE
52-T3 VCB
52-T TIE VCB
52-T9 VCB
SF6 52-1
SF6 52-2
SF6 52-3
SF6 52-4
MOAB 89T-T3
MOAB 89T-T9
MOAB 89-W
MOAB 89-E
MOAB A23
MOAB A24
MOAB D22
MOAB D6
MOAB A7
MOAB A8
138KV TIE SF6 52-2
BABB SF6 52-1
#4 VCB
#2-#4 TIE VCB
#2 VCB
#3 VCB
#1-#3 TIE VCB
#1 VCB
THEISS 3
THEISS 9
923
902
901
402
401
801
802
803
804
323
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304
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204
604
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104
1001
1002
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102
1301
1302
701
702
501
502
503
504
For Help, Please Press F1
Normal
192.168.5.25
23100
5/9/2024 9:27:18 AM

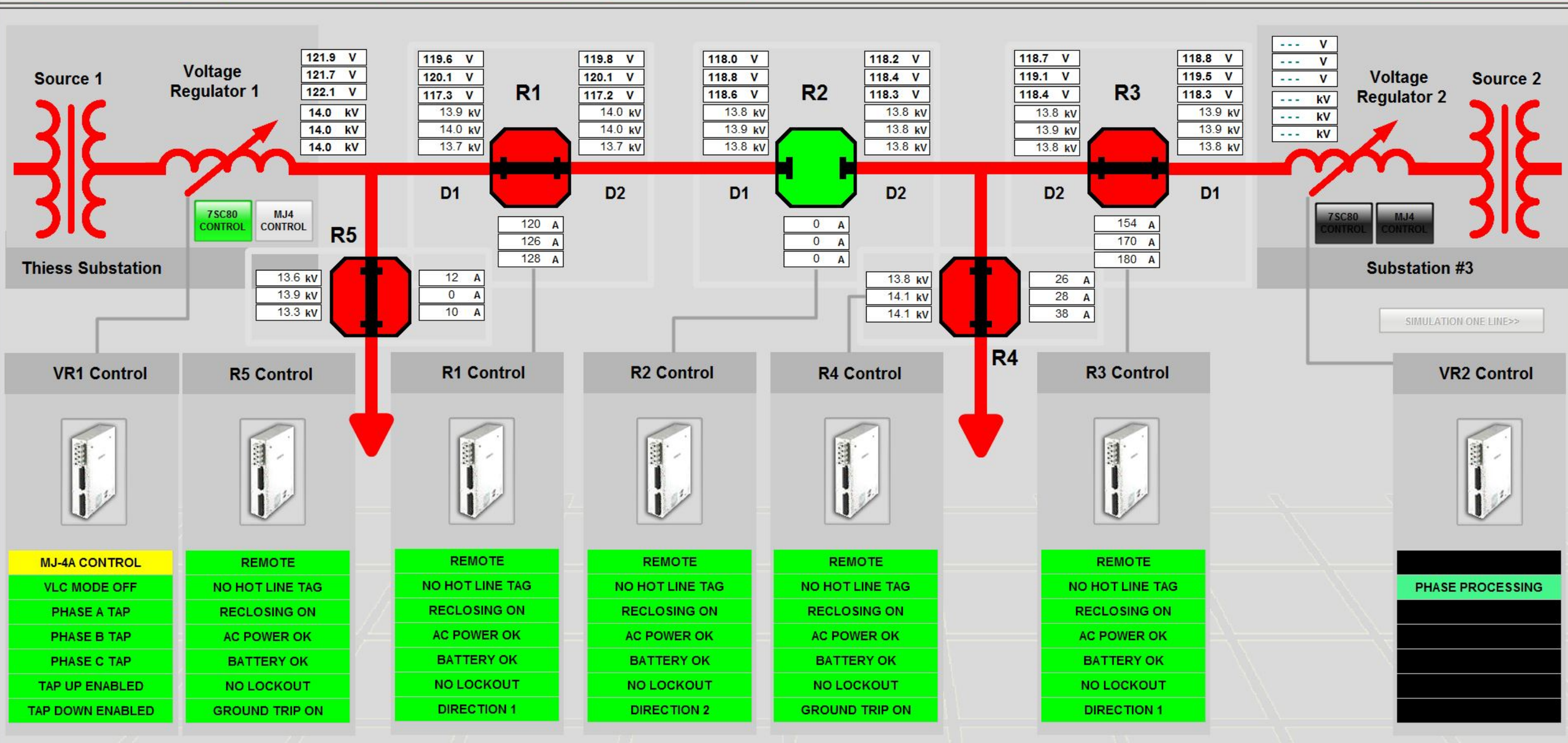
Gamlet

CURRENT USER:

ACKNOWLEDGE | LOCAL | LOGIN | CONTROL ONE LINE OVERVIEW | COMMUNICATION OVERVIEW | EVENT LIST | ALARM LIST | FAULT RECORDS | PROJECT DOCUMENTS | HELP | EXIT

Control one line System Screen

5/9/2024 9:26:52 AM

SIEMENS

AUTO MODE ON | AUTOMATIC RESTORATION | RESTORE | VOLT. LIMIT CONTROL OFF | SIMULATION OFF