

PASCOAG Utility District Annual Meeting – Dec.2013

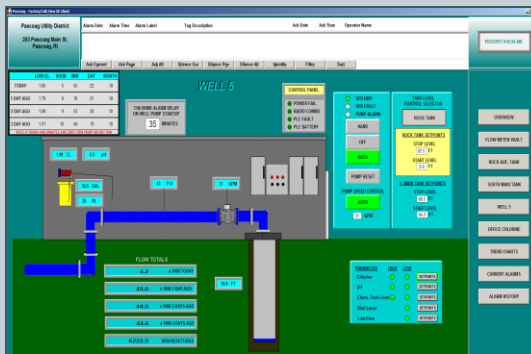


Valve Replacement on Reservoir Road

2013 Green Festival



**2013 John H. Chafee
Outstanding Conservation Project
for PUD Green Festival**



Well 5 Control Screen - SCADA



**Pascoag Utility District &
Burrillville Parks and Recreation
- 2013 Green Festival -**



Repairs of Nemo damage–Feb 2013

Major Accomplishments - 2013



- **Installed new Water Department data and control system (SCADA)**
 - Provides both real-time and historical data for intelligent operation of the system.
 - Saved 50% on installation by our operations staff doing electrical and telemetry work (\$75k instead of \$150k)
- **Completed Water Storage Tank rehab (Rock Ave. & S. Main St.)**
 - Both tanks are now complete and good for another 20-30 years
 - Low bid was \$500,000 less than highest bid
 - Contractor provided excellent work
- **Managed expenses very closely during a difficult economic climate**
 - Very close attention to capital spending and minimization of operating and administrative expenses
 - Able to lower Standard Offer rate dramatically in 2013 as PUD reimbursed customers for previous year over-collection.
 - 2014 Standard Offer rates will rise to be more reflective of current energy costs
- **Began implementation of successful LED streetlight replacement program**
 - Public comments are very positive about “look and feel” of these lights
 - Public Utility Commission is supportive and has allowed us to use DSM funds to subsidize purchases

Major Accomplishments—2013— cont'd



- **Purchased new bucket truck, replacing our oldest 1994 truck**
 - Able to maintain a highly reliable fleet due to PUD Board's foresight to fund Capital Reserve account
 - PUD had previously delayed this purchase due to cash flow issues
- **Selected new vendor, NISC, for our customer billing and accounting system.**
 - State of the art technology to provide a much more efficient business tool, with a better customer experience.
 - This purchase will also be funded through Capital Reserve account
 - Implementation should be completed in 2014
- **Revamped our PUD Website for efficiency and cost-savings**
 - Now able to maintain and edit website completely with in-house staff, saving outside contractor \$\$
- **Continued Water Exploration activities for water supply independence**
 - Funded from 2012 ExxonMobil Settlement funds
 - Cautiously optimistic we will find adequate supply
- **Social media tools continue to provide great customer feedback**
 - Great forum for customer Q&A
 - Excellent media tool to get information out quickly, such as outages and maintenance information (example: hydrant flushing)

SCADA Monitoring – Overview Page



Pascoag - FactoryTalk View SE Client
10/22/2013 9:40:45 AM

Pascoag Utility District

253 Pascoag Main St.
Pascoag, RI

Alarm Date	Alarm Time	Alarm Label	Tag Description	Ack Date	Ack Time	Operator Name

Ack Current
Ack Page
Ack All
Silence Cur
Silence Pge
Silence All
Identify
Filter
Sort

OVERVIEW

FLOW METER VAULT

ROCK AVE. TANK

SOUTH MAIN TANK

WELL 5

OFFICE CHLORINE

TREND CHARTS

CURRENT ALARMS

ALARM HISTORY

0 GPM FMV

0.19 CL

REPEATER SITE

80.8 FT

79 PSI

0.28CL

35.2 FT

16 PSI

31 GPM

8.6 pH

1.96 CL

10.8 FT

43 PSI

Imagery Date: 4/22/2013 1995
41°57'03.72" N 71°41'43.34" W, elev. 434 ft

SCADA Monitoring – Interconnect data



Pascoag - FactoryTalk View SE Client

Pascoag Utility District
253 Pascoag Main St.
Pascoag, RI

10/22/2013 9:42:11 AM

Alarm Date	Alarm Time	Alarm Label	Tag Description	Ack Date	Ack Time	Operator Name
[Empty Alarm List]						

Ack Current Ack Page Ack All Silence Cur Silence Pge Silence All Identify Filter Sort

HOT BOX - CHEMICAL INJECTION

FLOW METER VAULT

CHEM TANK SETPOINTS AND STATUS

HIGH	55.0 GAL	LOW	20.0 GAL
	60 SEC.		30 SEC.
ENABLED		ENABLED	
NORMAL		NORMAL	

FLOW ALARM SETPOINTS AND STATUS

HIGH	300.0 GPM	LOW	10.0 GPM
	60 SEC.		60 SEC.
ENABLED		DISABLED	
NORMAL		NORMAL	

OFFICE CHLORINE: 0.19 PPM

31 INCH 50.9 GAL

0 GPM

45995.8 NON-RESETTABLE FLOW TOTALS

6.7E-3	x 1000 TODAY
274.9	x 1000 1 DAY AGO
234.5	x 1000 2 DAYS AGO
257.3	x 1000 3 DAYS AGO

OVERVIEW

FLOW METER VAULT

ROCK AVE. TANK

SOUTH MAIN TANK

WELL 5

OFFICE CHLORINE

TREND CHARTS

CURRENT ALARMS

ALARM HISTORY

Display "Flow Meter Vault" Clear Clear All

SCADA Monitoring – Well 5 data



Pascoag Utility District
253 Pascoag Main St.
Pascoag, RI

Alarm Date	Alarm Time	Alarm Label	Tag Description	Ack Date	Ack Time	Operator Name
<div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> Ack Current Ack Page Ack All Silence Cur Silence Pge Silence All Identify Filter Sort </div>						

10/22/2013 9:42:54 AM

LOW CL	HOUR	MIN	DAY	MONTH	
TODAY	1.85	5	55	22	10
1 DAY AGO	1.79	0	18	21	10
2 DAY AGO	1.89	9	53	20	10
3 DAY AGO	1.91	10	49	19	10

NOTE: IF HOURS AND MINUTES ARE ZERO THEN PUMP DID NOT RUN

WELL 5

CHLORINE ALARM DELAY ON WELL PUMP STARTUP

35

MINUTES

CONTROL PANEL

- POWER FAIL
- RADIO COMMS
- PLC FAULT
- PLC BATTERY

VFD RUN

VFD FAULT

PUMP ALARM

HAND

OFF

AUTO

PUMP RESET

PUMP SPEED CONTROL

AUTO

31 GPM

TANK LEVEL CONTROL SELECTOR

ROCK TANK

ROCK TANK SETPOINTS

STOP LEVEL 87.5 FT

START LEVEL 0.0 FT

S. MAIN TANK SETPOINTS

STOP LEVEL 68.5 FT

START LEVEL 64.3 FT

OVERVIEW

FLOW METER VAULT

ROCK AVE. TANK

SOUTH MAIN TANK

WELL 5

OFFICE CHLORINE

TREND CHARTS

CURRENT ALARMS

ALARM HISTORY

FLOW TOTALS

4.2	x 1000 TODAY
45.0	x 1000 1-DAY AGO
44.5	x 1000 2-DAYS AGO
44.6	x 1000 3-DAYS AGO
6222.5	NON-RESETTABLE

10.8 FT

PARAMETER	HIGH	LOW	SETPOINTS
Chlorine	<input checked="" type="radio"/>	<input checked="" type="radio"/>	SETPOINTS
pH	<input checked="" type="radio"/>	<input checked="" type="radio"/>	SETPOINTS
Chem. Tank Level	<input checked="" type="radio"/>	<input checked="" type="radio"/>	SETPOINTS
Well Level	<input checked="" type="radio"/>	<input checked="" type="radio"/>	SETPOINTS
Low Flow	<input checked="" type="radio"/>	<input checked="" type="radio"/>	SETPOINTS

Display "Well 5"

Clear Clear All

SCADA Monitoring – Storage Tank History



Pascoag Utility District
253 Pascoag Main St.
Pascoag, RI

Alarm Date	Alarm Time	Alarm Label	Tag Description	Ack Date	Ack Time	Operator Name

Ack Current
Ack Page
Ack All
Silence Cur
Silence Pge
Silence All
Identify
Filter
Sort

10/22/2013 9:44:45 AM

ROCK AVE. TANK Tuesday, October 15, 2013 - Tuesday, October 22, 2013

Caption	9:44:40 AM	Min	Max
ROCK TANK LEVEL	80.70	0.00	110.00
SYSTEM PRESSURE	79.00	0.00	100.00
CHLORINE	0.28	0.00	5.00

- Flow Meter Vault
- Rock Ave Tank
- South Main Tank
- Well 5
- Water Storage Tank Levels
- Water Storage Tank Pressures
- System Flows
- Office Chlorine

- OVERVIEW
- FLOW METER VAULT
- ROCK AVE. TANK
- SOUTH MAIN TANK
- WELL 5
- OFFICE CHLORINE
- TREND CHARTS
- CURRENT ALARMS
- ALARM HISTORY

Time Span

1 Hr. Span

4 Hr. Span

8 Hr. Span

24 Hr. Span

7 Day Span

Isolated Graph

Non-Isolated Graph

Pen Masking

Display Pen 1

Display Pen 2

Display Pen 3

Display Pen 4

Display Pen 5

Display Pen 6

Display All Pens

SCADA Monitoring – Well 5 History



Pascoag Utility District
253 Pascoag Main St.
Pascoag, RI

Alarm Date	Alarm Time	Alarm Label	Tag Description	Ack Date	Ack Time	Operator Name
<div style="border: 1px solid black; padding: 2px; display: inline-block;">10/22/2013 9:43:43 AM</div>						
<input type="button" value="Ack Current"/>	<input type="button" value="Ack Page"/>	<input type="button" value="Ack All"/>	<input type="button" value="Silence Cur"/>	<input type="button" value="Silence Pge"/>	<input type="button" value="Silence All"/>	<input type="button" value="Identify"/>
<input type="button" value="Filter"/>						<input type="button" value="Sort"/>

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Caption	9:43:42 AM	Min	Max
WELL 5 CHEM TANKLEVEL	26.0	0.0	35.0
WELL 5 CHLORINE	2.0	0.0	5.0
WELL 5 FLOW	31.0	0.0	150.0
WELL 5 WELL LEVEL	10.8	0.0	348.0
WELL 5 PH	8.6	0.0	14.0
WELL 5 PRESSURE	43.0	0.0	100.0

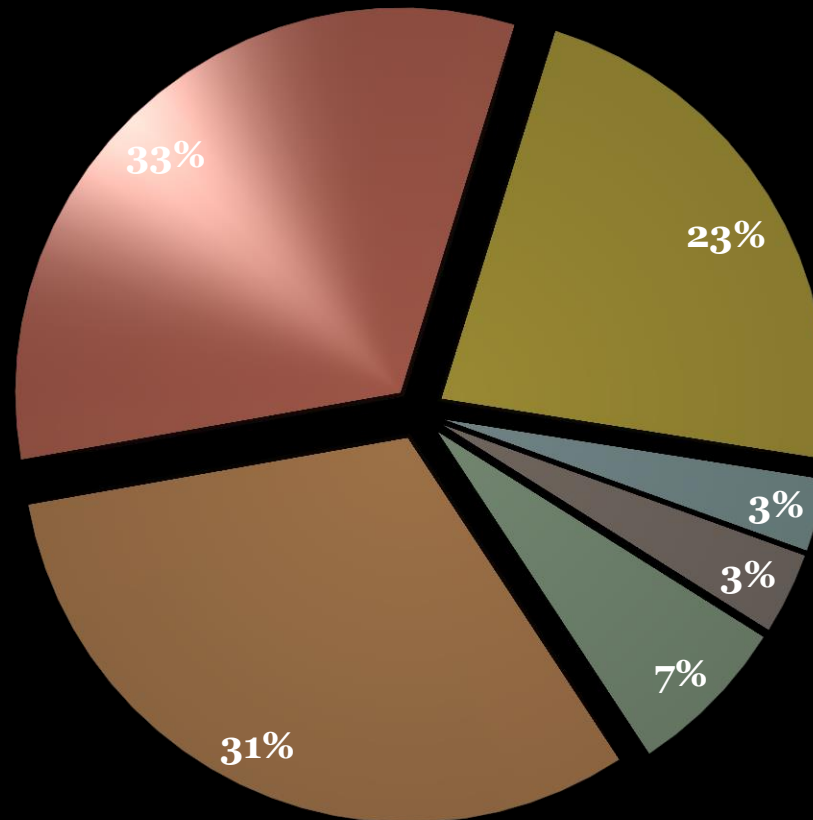
Time Span:

Pen Masking:

Display Trend Well 5

2013 Power Supply

Pascoag's 2013 Power Supply Resources



■ PASNY ■ Seabrook ■ Miller Hydro ■ Spruce Mountain ■ NextEra Rise ■ Constellation

62% of our supply is non-carbon based (hydro, wind, solar, nuclear)

2014 Focus



- **Effectively use Water Dept. capital reserve and Settlement Funds**
 - Continue exploration for new clean water supply using Settlement Funds
 - Continue to improve Water operations using SCADA information
 - Have professional leak detection survey performed
- **Implement new Customer/Billing system successfully**
 - Installation and training will be key for transparent implementation from customer view
- **Continue focus on technology to become more efficient, cost effective and customer-friendly**
 - Continue to increase use of Facebook, Twitter and our new Website as effective communication tools
 - Continually evaluate business software and tools for efficiency gains and improved customer experience (example: possible Automated Meter Reading for electric department similar to water dept. metering)

Senator Paul Fogarty on Pascoag Utility:



- **RI Senator Paul Fogarty, in response to a water crisis in South County, said:**

“Water utilities have a unique responsibility. When they have a problem, it is absolutely vital to public health that they have a way to get the word out to the people they serve right away. Automated phone messages are the fastest way to do that, and systems for them are now widely available. All water suppliers should be using them,” said Senator Fogarty.”

“Pascoag Utility District’s measures are exactly what [I] want[] all Rhode Island water utilities, large and small, to have.”