



Mobile Access to R*TIME Data

Sciencetech August
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Overview

- Standardized LAN/PSS configuration
- Exelon Mobile initiatives
- R*Time Viewer via Citrix for mobile
- Demo
- Results/Conclusions
- Questions?

Exelon Midwest LAN/PSS Standardized setup

- ✓ All Exelon Midwest sites are configured on the business LAN such that each site has a 'J:' drive that maps to a site specific server, each user gets this mapping for their userid
- ✓ At each site R*Time displays and INI files are stored in a common location under the 'J:' drive. For example: J:\ngg\rtime_v410
- ✓ We have the ability to update displays/configuration in one place without touching all the desktops
- ✓ Exelon uses LANDesk Portal Manager for client software distribution
- ✓ We have built LANDesk 'packages' for various versions of R*Time viewer as needed. These packages install pre-configured to point to the common shared drive location via setting the RTIMEWMMASTER environmental variable.
- ✓ Once users are added to specific active directory groups, the LANDesk package becomes available for that user to install without administrative privileges
- ✓ This allows for clean site to site configuration and installation method

Exelon Mobile Data Initiative

- ✓ In 2014 a company wide method for access to company data on personal devices was started
- ✓ Citrix Worx Home was the chosen solution
- ✓ Supports IOS and Android
- ✓ Access to company email was migrated to this solution from Mass360
- ✓ Exelon 'App Store' was created to publish Exelon specific applications
- ✓ More options became available utilizing Citrix Receiver with Worx Home

Could this work for R*Time Viewer?

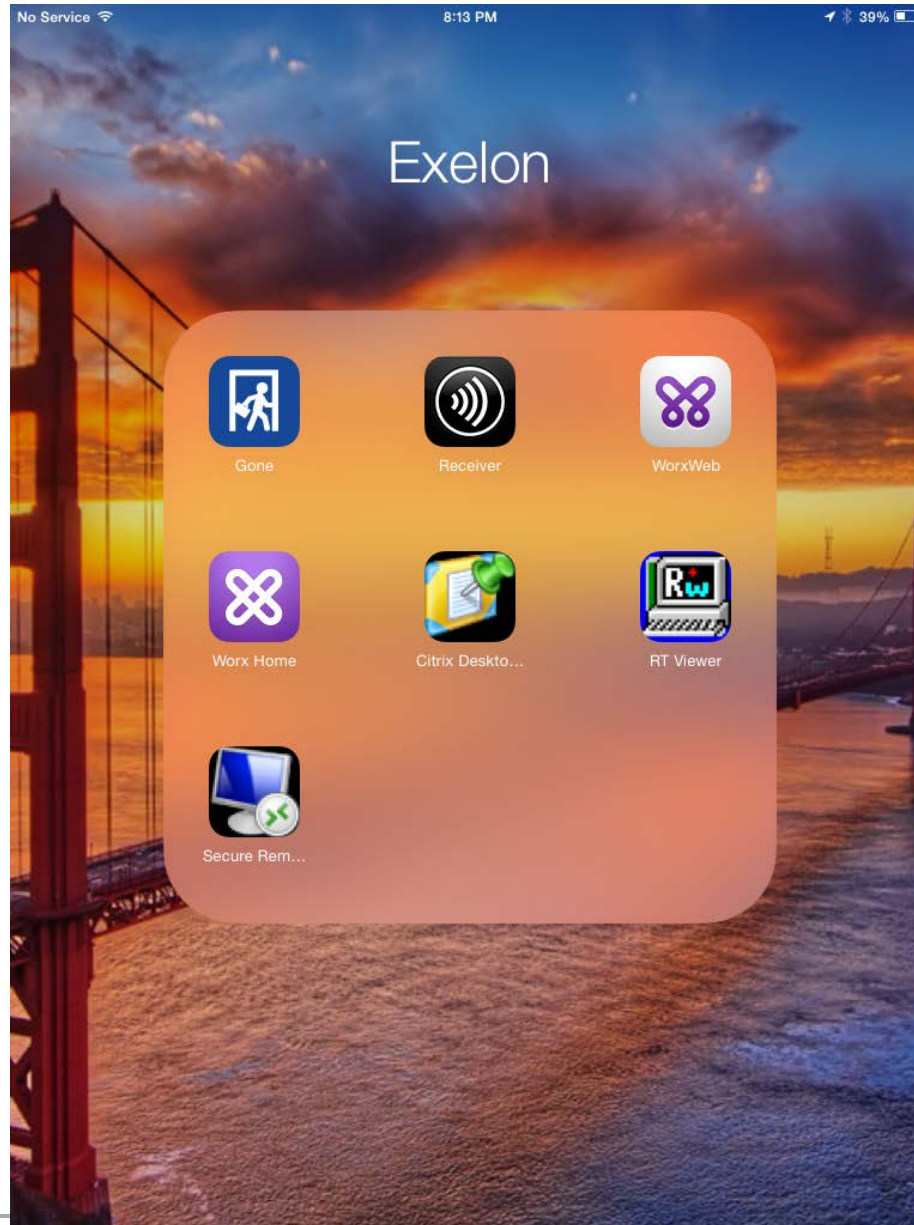
- ✓ In early 2015 an engineering manager at LaSalle asked if he could access plant data from his mobile device
- ✓ After discussions with Citrix team, it appeared it would work
- ✓ Initial testing of the Citrix solution was via non-company PC accessing Exelon Citrix server

Mobile R*Time Viewer?

- ✓ The 'standard' Exelon Citrix desktop solution already provides for mapping in a user's standard LAN drives to the virtual Citrix session when the session is created, so...
- ❖ Since we had displays/INI files in a standard location, the virtual Citrix session would have access to these files
- ❖ Since we had an installable Windows 7 desktop package that was pre-configured for our environment, that package was installed on the Citrix server
- ✓ Presto...we have R*Time Viewer available on a mobile device



iPad showing RT Viewer icon



iPad screen capture of Midwest Fleet

R*TIME Data Viewer - [master_menu.dis]

File Edit View Display Viewer Security Window Help

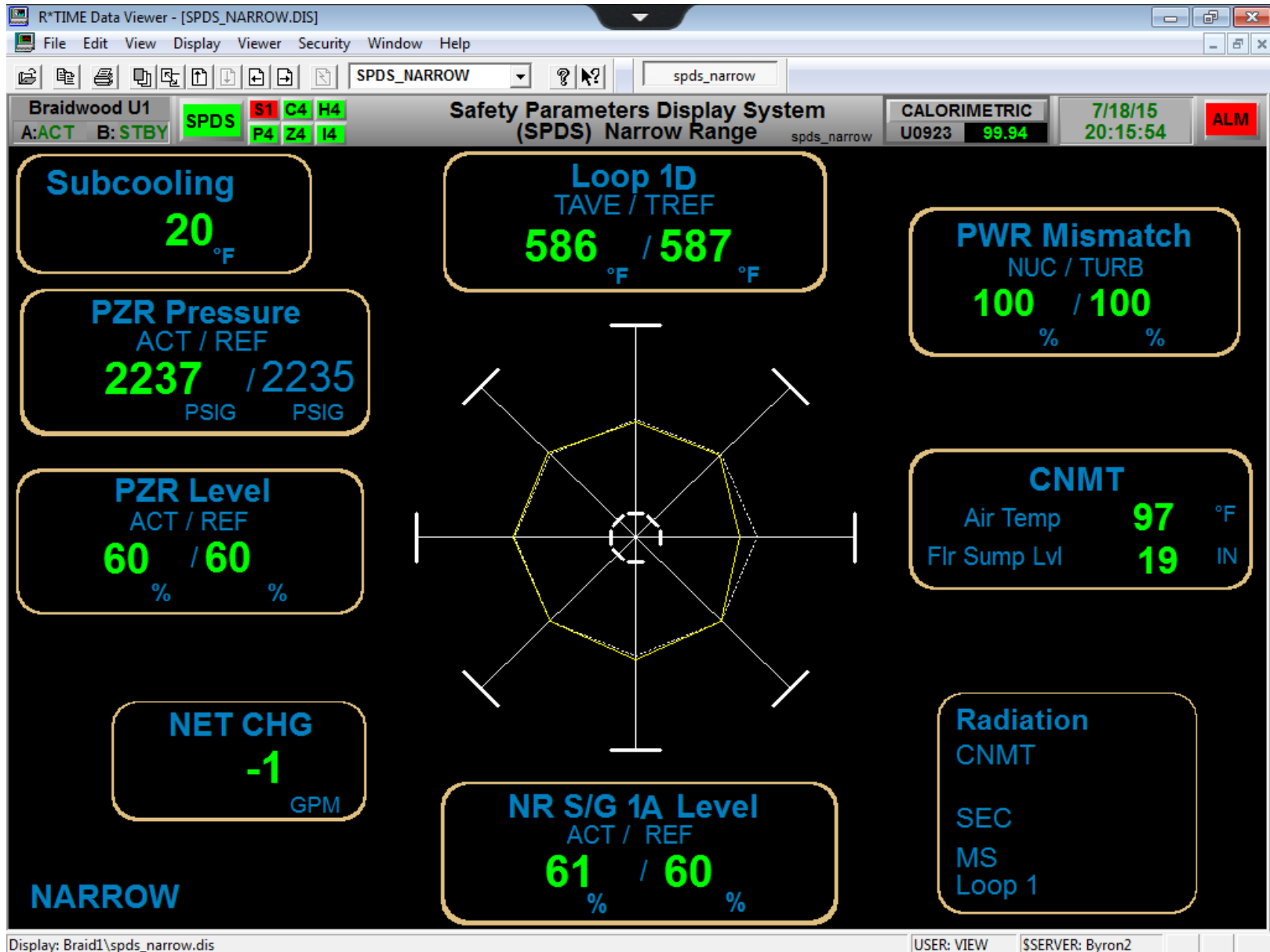
master_menu master_menu

Midwest R*TIME Data

Data Source	Rx Power %	MWe	Data Source	Rx Power %	MWe
Braidwood PPC U1	99.93	1246.23	La Salle PPC U1	99.35	1165.96
Braidwood PPC U2	99.90	1212.68	La Salle PPC U2	100.11	1171.87
Braidwood PMAX			LaSalle PMAX		
Byron PPC U1	99.93	1224.47	Quad Cities PPC U1	99.59	949.24
Byron PPC U2	99.95	1194.10	Quad Cities PPC U2	99.81	949.99
Byron PMAX			Quad Cities PMAX		
Dresden PPC U2	99.43	956.78	Clinton PPC	99.07	1113.95
Dresden PPC U3	99.34	953.32	Clinton PMAX		

USER: VIEW \$SERVER: Byron2

iPad screen capture of Braidwood SPDS



iPad screen capture of Byron Alarm Summary

R*TIME Data Viewer - [SUMMARY_ORIG.DIS]

File Edit View Display Viewer Security Window Help

SUMMARY_ORIG summary_orig

Byron U1 SPDS S1 C4 H4 P4 Z4 I3 Alarm Summary summary CALORIMETRIC U0923 99.94 7/18/15 20:16:41 ALM

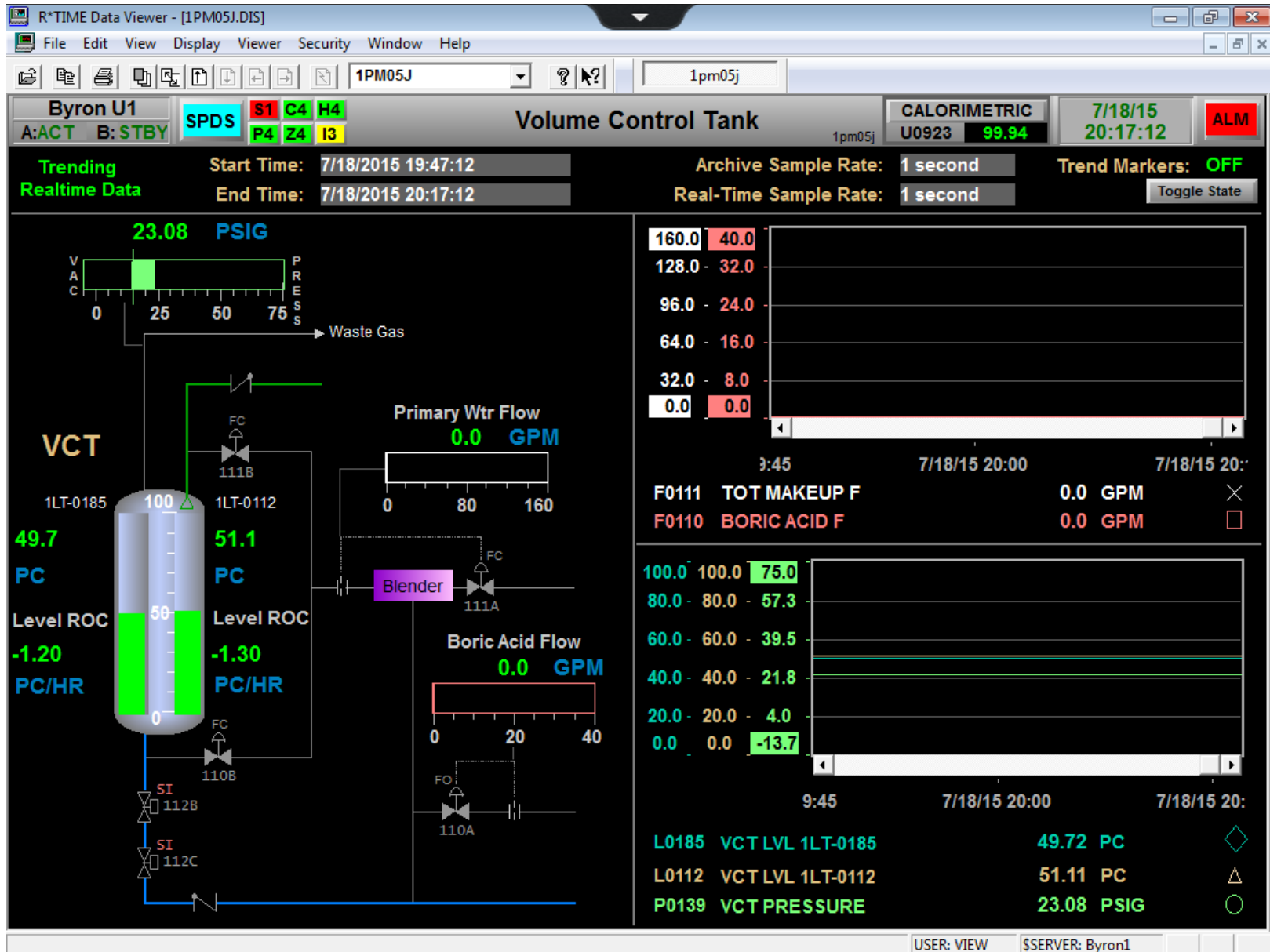
PRI	POINT	DESCRIPTION	STATUS	VALUE	UNITS	LIMIT EXCEEDED	DATE TIME
7	X0141	WD RAD HI LIMIT	**	??????????????			20:16:39.2
7	X0142	FUEL HANDLING RAD STATUS	**	??????????????			20:16:39.2
7	X0140	WD RADIATION ICONIC SPOKE	**	??????????????	FRACTI		20:16:39.2
2	T2203	FW PUMP 1C DSCH T	**	106	DEGF	380	20:16:27.0
7	F2002	HOT REHEAT STM F TO FW PP 1C		109.3	KBH		20:16:24.2
7	T0531	RVLIS TC#6 DELTA T CH A		0.0	DEGF		20:12:46.7
7	F0127	RCP 1C SEAL INJECTION WTR F		9.83	GPM		20:11:20.7
7	PDMC11	PDMS OPER DELTA I HI LIMIT		9.9	PC		19:09:18.3
7	PDMC10	PDMS OPER DELTA I LO LIMIT		-14.8	PC		19:09:18.3
7	U1169	PWR RNG NUCL CHANNEL RMP AVG Q		100.43	PC		19:09:18.2
7	YD0104	VALVE CV111B POSITION		CLOSED			17:30:14.4
7	T2279	1ST STG RHTR DRN TK 1A DRAIN T	**	??????????????	DEGF		16:46:28.9
2	F2001	HOT REHEAT STM F TO FW PP 1B		111.6	KBH	110.0	12:32:02.6
2	F2221	CNDSR EMER MAKEUP F		74	KBH	70	10:52:38.3
7	PN1729	SX PUMP 1B DISCHARGE HEADER TEMP		HIGH		HIGH	03:37:10.0
7	PN1085	SX PUMP 1A DISCHARGE HEADER TEMP		HIGH		HIGH	00:45:06.4
7	F2223	CNDSR NORM M/U F LO RANGE		7	KBH		00:30:46.7
7	F2222	CNDSR NORM M/U F HI RANGE		0	KBH		00:27:52.3

Report Priority Ack Page Ack Priority Ack All Unack / All UNACK'd Large Font Page 1

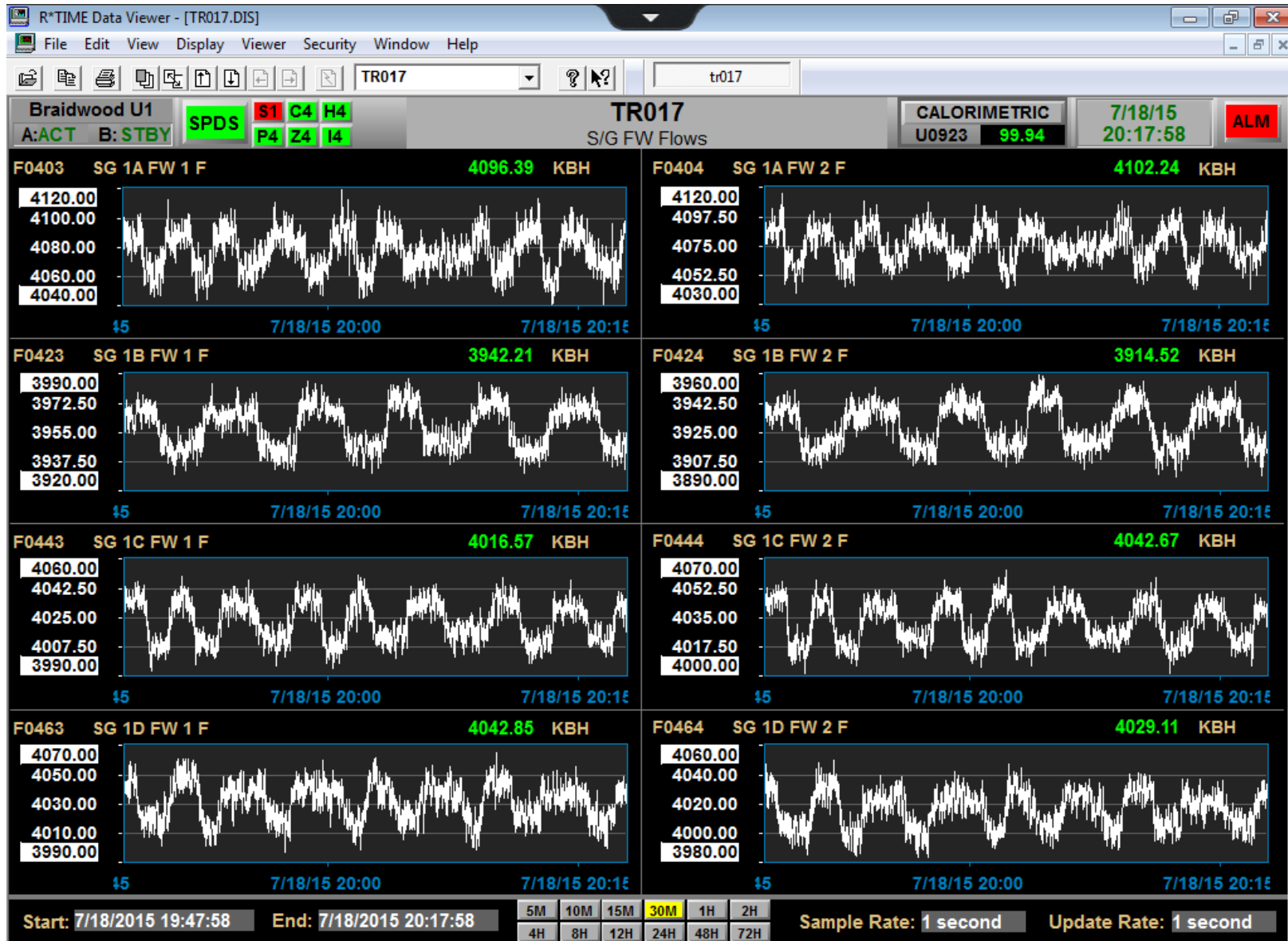
Messages Toggle Date Unack Alarms Only 5 more alarm(s) Page 1 of 2

USER: VIEW \$SERVER: Byron1

iPad screen capture of Byron VCT



iPad screen capture of Braidwood trends



Point: F0463 Description: SG 1D FW 1 F Units: KBH

USER: VIEW

SSERVER: Braid1

iPad screen capture of LaSalle SPDS



Display: LaSalle1\spds_primary.dis

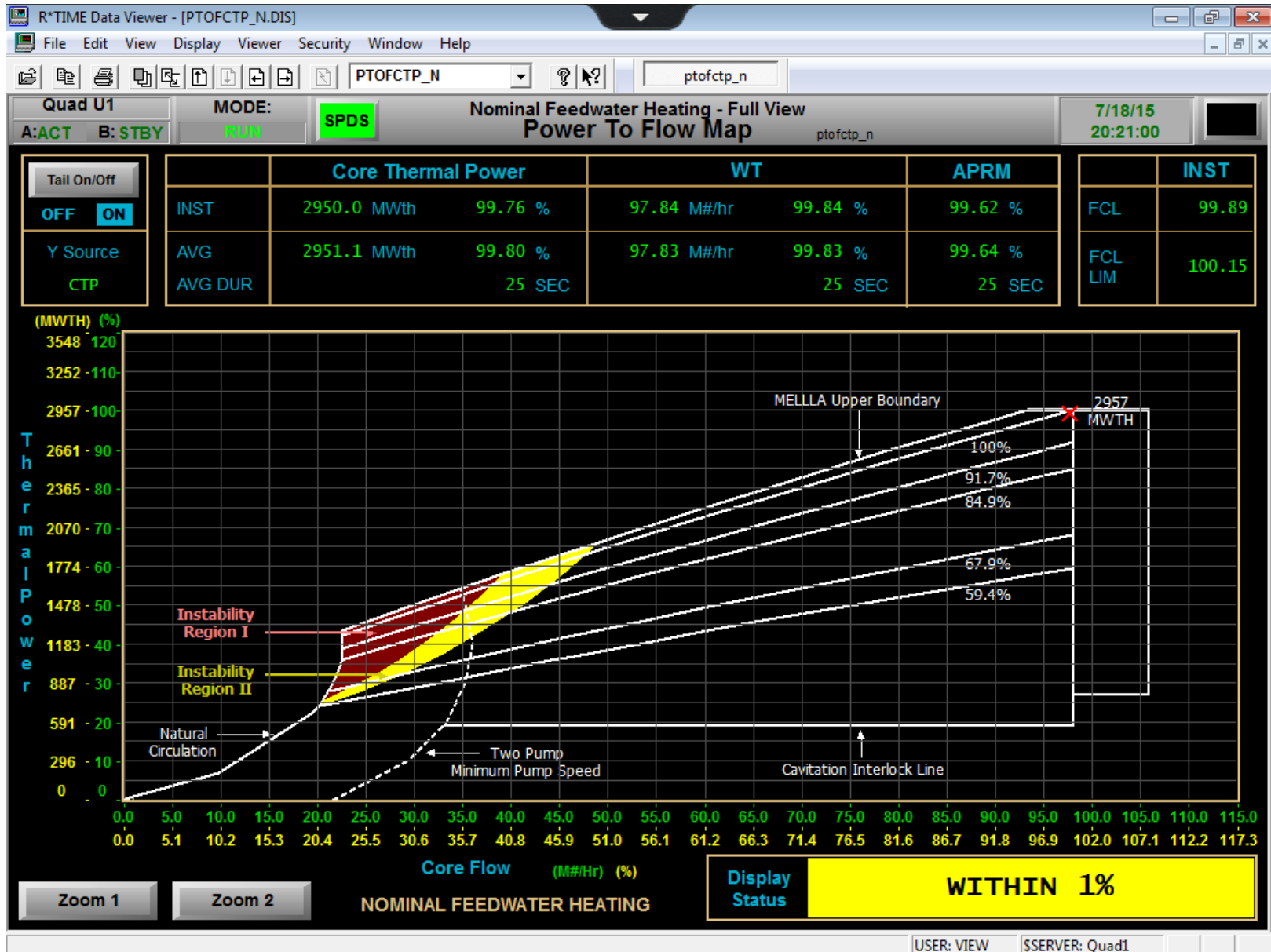
USER: VIEW

\$SERVER: Braid1

iPad screen capture of very busy display



iPad screen capture of Quad Cities display



Conclusions/Results

- ✓ Have only released this to a few people so far, more will be added
- ✓ Have an active directory group setup that can be used to enable access to the application
- ✓ The speed/performance is way better than expected
- ✓ Since all the various back end components were in place it was much easier to setup than expected
- ✓ Usable on iPhone, but small, completely usable on iPad without any display changes

Questions or Comments?

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