DCSI – NISC MultiSpeak Integration at Pioneer Electric Cooperative

MultiSpeak User's Conference 2007

Presented by: John Hickman
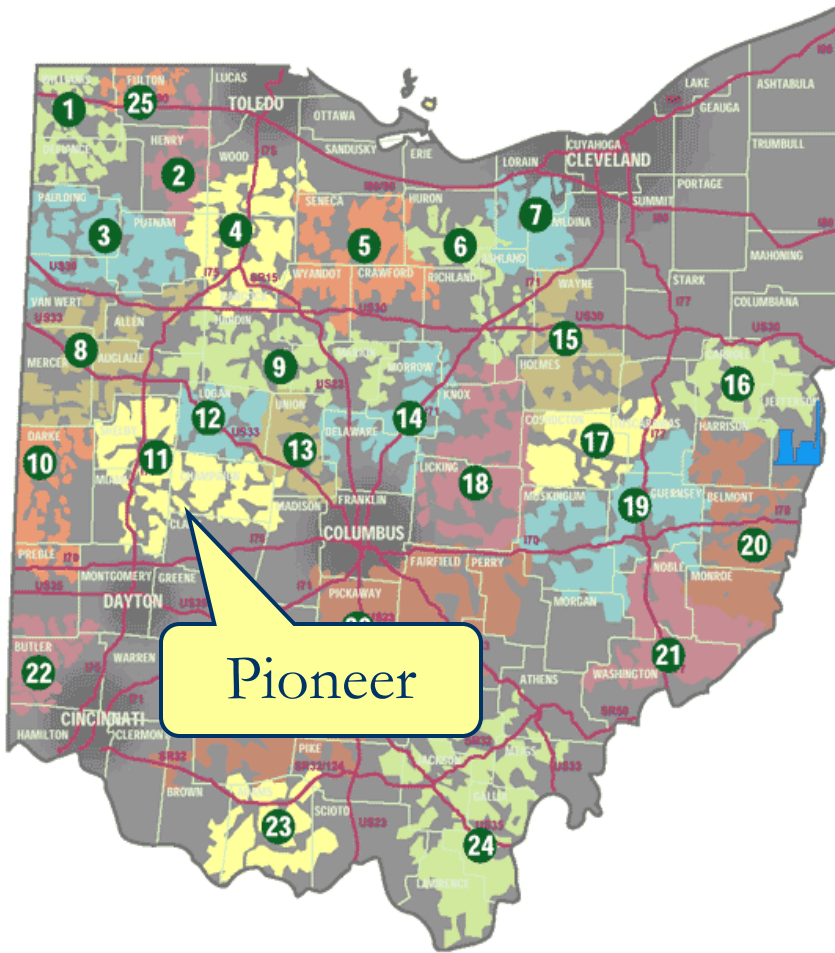
About Pioneer

- 2,580 miles of line
- 16,200 meters
- 107 MW Demand

Pioneer as a Beta Site

- Started testing the MultiSpeak integration efforts between DCSI and NISC in July 2006
- Work was done on both the CIS and the OMS interfaces
- Served the role of working between the two venders
  - Troubleshooting
  - Educating the programmers on the other system

AMR at Pioneer

- Started installing a DCSI's TWACS system August 2005

- New AMR system is an extension of Pioneer's Distribution Automation out to the meter

- Used NISC's Mobile Data Solution for paperless meter exchange
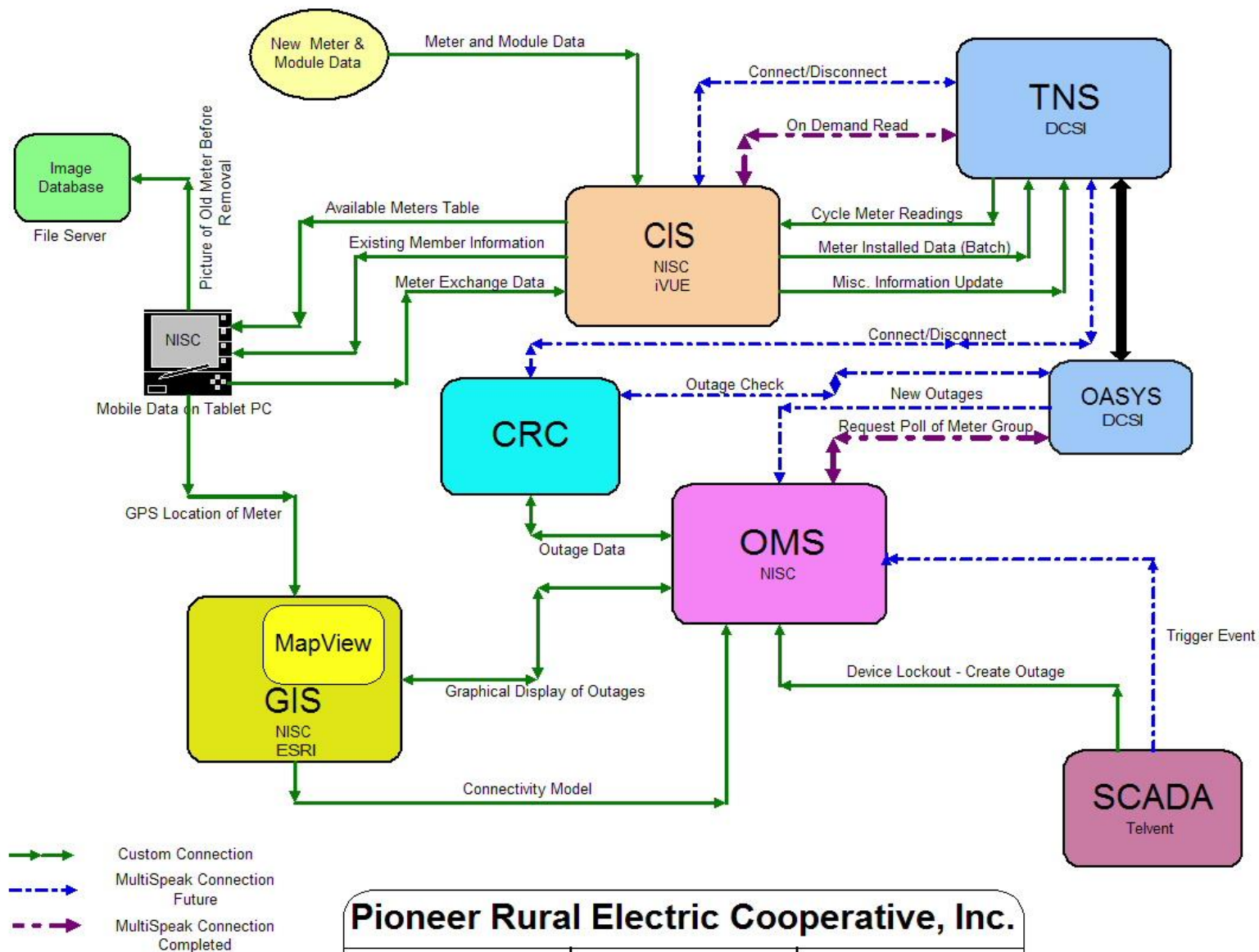
Integration of AMR into Pioneer's Business Systems

- Single entry of data

- Paperless system

- NISC's Mobile Data solution

- AMR meter exchange process has been a non-event for office staff

- Estimated 2 man-years of labor savings ($84,000)

Proposed AMR Data Flow

New Meter & Module Data

Meter and Module Data

Picture of Old Meter Before Removal

Image Database

File Server

NISC

Mobile Data on Tablet PC

Available Meters Table

Existing Member Information

Meter Exchange Data

CIS
NISC
iVUE

Connect/Disconnect

On Demand Read

TNS
DCSI

Cycle Meter Readings

Meter Installed Data (Batch)

Misc. Information Update

Connect/Disconnect

Outage Check

New Outages

OASYS
DCSI

Request Poll of Meter Group

CRC

Outage Data

GPS Location of Meter

MapView

GIS
NISC
ESRI

Graphical Display of Outages

OMS
NISC

Device Lockout - Create Outage

Trigger Event

SCADA
Telvent

Connectivity Model

Custom Connection

MultiSpeak Connection Future

MultiSpeak Connection Completed

Pioneer Rural Electric Cooperative, Inc.

| John Hickman | 8/30/2006 | Piqua, OH |

CIS Integration

- On demand meter reading

- Meter add in AMR system real time from iVUE (Work in progress)

- Updating of Substation, Feeder and Phase information from AMR system to CIS

File View Application My Favorites Tools Help

Back Forward Jump Job Manager Work Queue Auto Outage E-Bill Create Contact Auto Create Contact Zoom MapView

Find:

Search Type: Name   Last: JOHNSON   First: JAMES   [Search]

Customer Management
  Agreements/Charges
  Billing/Accounts Receiva
  Capital Credits
  Credit/Collections
  Customer Contacts
  Payments/Readings
    E-Bill Payments/Reading
    EFT - (0)
    Payments/Readings
    Readings
  Transaction History
  Equipment Management
  Location Management
  Work Management
  Administration
  Reports
  Processes

Readings : JOHNSON   JAMES, Cust#: 43575

Customer Level [Set Aside] Retrieve (0)

Account	Service	Provider	Serv Loc #	Primary Desc ▲	Mtr Pos	Meter #	Sec Meter #	Stat	Meter Type	Config	Conn Mtr Pos	Description	Emer Addr
271202	ELEC	COOP	2712	089-08-002	1	39650492		1 - ...	0 - KWH	- Nor...	0	NO LARGE APPL - NO ELEC HEAT	6133 E
1509300	ELEC	COOP	15093	090-00-004	1	39650364		1 - ...	0 - KWH	- Nor...	0	NO LARGE APPL - NO ELEC HEAT	6895 E

Readings | Meter Service | Posted History | AMR/Interval History

AMR Type: DCSI   [Read Now]
Meter ID: 9164175   Port Number:

Interval Reading Date/Time	Pres Rdg Dt	Reg Set	Reading	Demand Rdg	KVAR Reading	AMR Rdg	Blink Count	Post Process Date/Time	Usage/Day	Billable Rdg	Meter #	Rdg #	Rdg Activity
11/02/2006 15:27:21	11/02/2006 15:27:21	1	43731	0.000	0.00	WS		11/02/2006 15:27:21	0	✓	39650492	0	R - Regular
11/02/2006 14:47:16	11/02/2006 14:47:16	1	43731	0.000	0.00	WS		11/02/2006 14:47:16	1	✓	39650492	0	R - Regular
11/02/2006 14:25:00	11/02/2006 14:25:00	1	43730	0.000	0.00	WS		11/02/2006 14:25:00	0	✓	39650492	0	R - Regular
11/02/2006 14:24:20	11/02/2006 14:24:20	1	43730	0.000	0.00	WS		11/02/2006 14:24:20	30	✓	39650492	0	R - Regular
11/02/2006 00:14:19	11/02/2006 00:14:19	1	43700	0.000	0.00	WS		11/02/2006 00:14:19	0	✓	39650492	0	R - Regular
11/02/2006 00:14:00		1	43700	0.000	0.00	OK			61	✓	39650492	0	R - Regular
11/01/2006 00:14:00		1	43639	0.000	0.00	OK			68	✓	39650492	0	R - Regular
10/31/2006 00:14:00		1	43571	0.000	0.00	OK			47	✓	39650492	0	R - Regular
10/30/2006 00:29:00		1	43524	0.000	0.00	OK			65	✓	39650492	0	R - Regular
10/29/2006 00:15:00		1	43459	0.000	0.00	OK			69	✓	39650492	0	R - Regular
10/28/2006 00:14:00		1	43390	0.000	0.00	OK			62	✓	39650492	0	R - Regular
10/27/2006 00:14:00		1	43328	0.000	0.00	OK			63	✓	39650492	0	R - Regular
10/26/2006 00:14:00		1	43265	0.000	0.00	OK			73	✓	39650492	0	R - Regular
10/25/2006 00:15:00		1	43192	0.000	0.00	OK			77	✓	39650492	0	R - Regular
10/24/2006 00:14:00		1	43115	0.000	0.00	OK			52	✓	39650492	0	R - Regular
10/23/2006 00:14:00		1	43063	0.000	0.00	OK			82	✓	39650492	0	R - Regular
10/22/2006 00:14:00		1	42981	0.000	0.00	OK			55	✓	39650492	0	R - Regular
10/21/2006 00:19:00		1	42926	0.000	0.00	OK			79	✓	39650492	0	R - Regular
10/20/2006 00:14:00		1	42847	0.000	0.00	OK			58	✓	39650492	0	R - Regular
10/19/2006 00:14:00	10/19/2006 00:14:00	1	42789	0.000	0.00	OK		10/19/2006 15:22:37	68	✓	39650492	0	R - Regular
10/18/2006 00:15:00		1	42721	0.000	0.00	OK		10/19/2006 15:22:37	74	✓	39650492	0	R - Regular
10/17/2006 00:17:00		1	42647	0.000	0.00	OK		10/19/2006 15:22:37	76	✓	39650492	0	R - Regular
10/16/2006 00:20:00		1	42571	0.000	0.00	OK		10/19/2006 15:22:37	82	✓	39650492	0	R - Regular
10/15/2006 00:18:00		1	42489	0.000	0.00	OK		10/19/2006 15:22:37	100	✓	39650492	0	R - Regular
10/14/2006 00:15:00		1	42389	0.000	0.00	OK		10/19/2006 15:22:37	23	✓	39650492	0	R - Regular
10/13/2006 11:25:22	10/13/2006 11:25:22	1	42366	0.000	0.00	WS		10/13/2006 11:25:22	0	✓	39650492	0	R - Regular
10/13/2006 11:24:42	10/13/2006 11:24:42	1	42366	0.000	0.00	WS		10/13/2006 11:24:42	25	✓	39650492	0	R - Regular
10/13/2006 00:15:00		1	42341	0.000	0.00	OK		10/19/2006 15:22:37	50	✓	39650492	0	R - Regular
10/12/2006 00:14:00		1	42291	0.000	0.00	OK		10/19/2006 15:22:37	71	✓	39650492	0	R - Regular
10/11/2006 00:14:00		1	42220	0.000	0.00	OK		10/19/2006 15:22:37	61	✓	39650492	0	R - Regular
10/10/2006 00:14:00		1	42159	0.000	0.00	OK		10/19/2006 15:22:37	49	✓	39650492	0	R - Regular
10/09/2006 00:14:00		1	42110	0.000	0.00	OK		10/19/2006 15:22:37	78	✓	39650492	0	R - Regular
10/08/2006 00:14:00		1	42032	0.000	0.00	OK		10/19/2006 15:22:37	77	✓	39650492	0	R - Regular
10/07/2006 00:15:00		1	41955	0.000	0.00	OK		10/19/2006 15:22:37	47	✓	39650492	0	R - Regular
10/06/2006 00:14:00		1	41908	0.000	0.00	OK		10/19/2006 15:22:37	70	✓	39650492	0	R - Regular
10/05/2006 00:14:00		1	41838	0.000	0.00	OK		10/19/2006 15:22:37	76	✓	39650492	0	R - Regular
10/04/2006 00:13:00		1	41762	0.000	0.00	OK		10/19/2006 15:22:37	76	✓	39650492	0	R - Regular
10/03/2006 00:14:00		1	41686	0.000	0.00	OK		10/19/2006 15:22:37	57	✓	39650492	0	R - Regular
10/02/2006 00:14:00		1	41629	0.000	0.00	OK		10/19/2006 15:22:37	73	✓	39650492	0	R - Regular

Navigation | My Favorites

Alerts

[Related ▼]

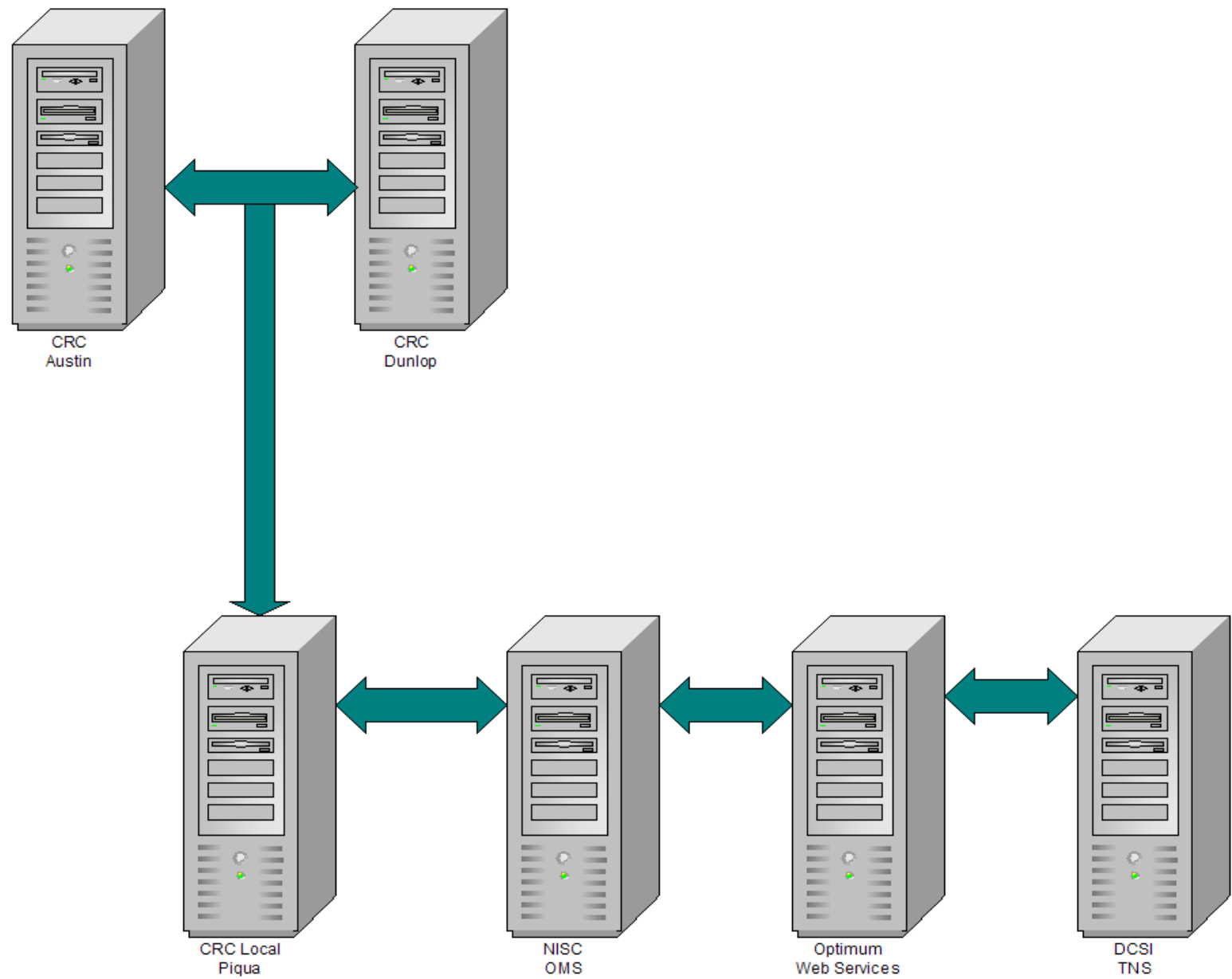Query interfaced AMR for current readings.

Data Mapping

- About 20 data fields are shared between the CIS and the AMR system
- Each utility maps their data differently in TWACS AMR database
- About half of the data fields are coming across with the 3.0 integration
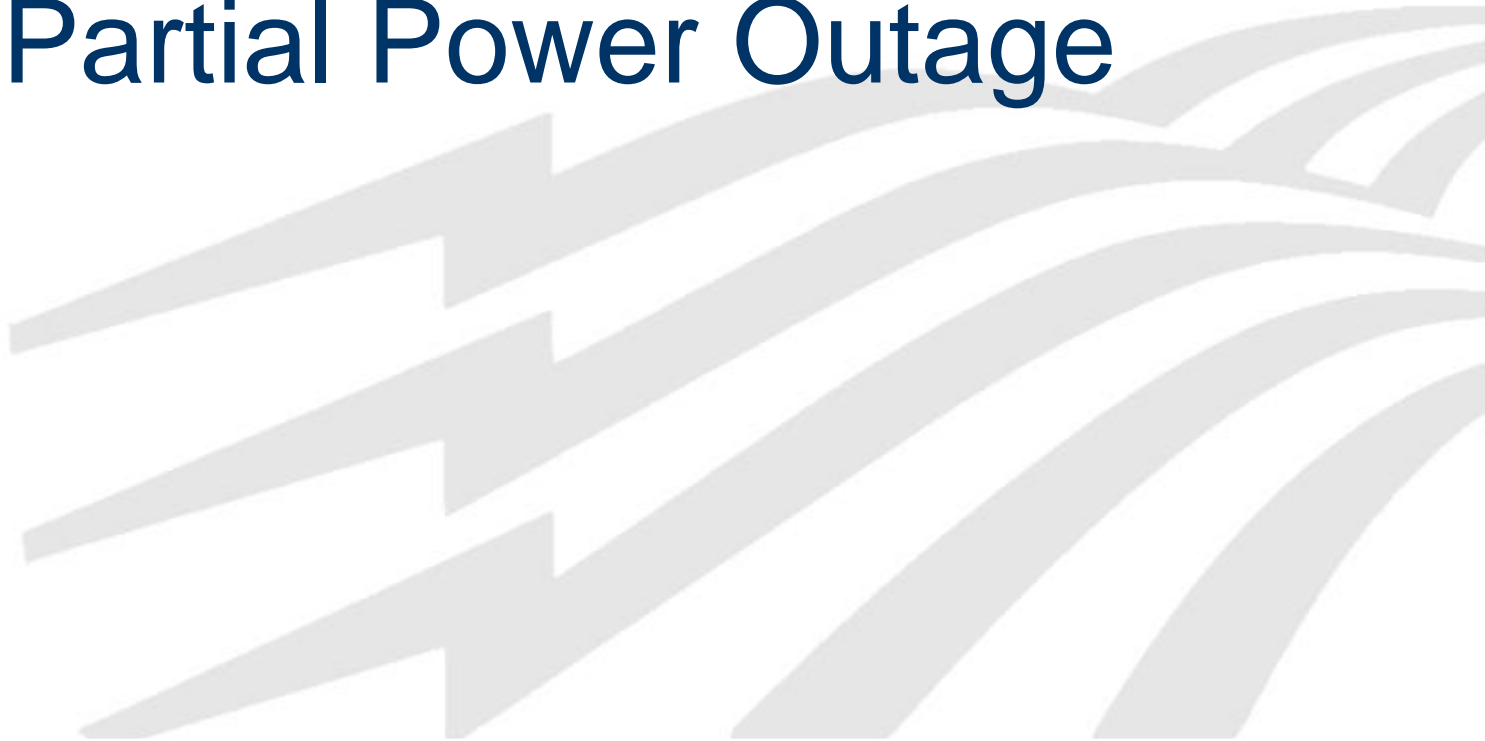- Rest of the fields are being updated with a custom batch process

OMS Integration

- Verify meter outage once call has been received
- Check other meters upstream to determine the extent of the outage
- Check all meters that has been a part of an outage once this outage has been restored
- Uses DCSI's Oasys software for fast pings

CRC
Austin

CRC
Dunlop

CRC Local
Piqua

NISC
OMS

Optimum
Web Services

DCSI
TNS

Partial Power Outage

File   Admin   Tools   Look and Feel   Help

Outage Entry | Outage Manager | Outage Phone Calls | Crew Manager

Filter by Substation: [ ] ▼   Feeder: [ ] ▼   District Code: [ ] ▼   Custom Filter: [ ] ▼   [Edit]

Category:	# Outages:	# Calls:	# Out:	Filter Outag...	Filter Calls:	Filter Out:
Restored	4	3	469	4	3	469
Crew Not Assigned	2	1	468	2	1	468
Open	0	0	0	0	0	0
All	4	3	469	4	3	469
Crew Assigned	2	2	1	2	2	1

*	Outage:	Status:	Type:	Time Off:	Line Sect.:	Location:	Phs:	Sub:	Fdr:	# Out:	# Calls:	Comments	Crew:	Medical Alert:	Priority:	Gener...	Disp Not...	Dist ...	Pro Dvc:
	43182	Restored	Meter	4:59:09 AM 11/2/2006	2049	092-75-011	B	20	3	1	1	💬					💬		VSA-5203
	43181	Restored	Meter	1:26:00 PM 11/1/2006	2448	067-96-003	C	24	3	1	1	💬	(23)				💬		RECLOSER-2448
	43180	Restored	Linesection	10:50:40 AM 11/1/2006	5122		ABC	12	2	467	0			✚	🚩		💬		5120
	43179	Restored	No Outage	10:18:00 AM 11/1/2006	2245	2245	A	32	2	0	1		(23)				💬		SECTZR-2245

☑ Include Blinks

[New] [Edit] [Delete] [Save] [Cancel]   [Weather] [Report] [Merge] [Split]

Custom | File Watcher | Prediction

Outage#: 43182
Number Out: 1

Date/Time Off: 11/02/2006 04:59 AM
Date/Time On: 11/02/2006 06:29 AM

Connectivity Type: OH
Account #: 920703

Status: Restored
Type: Meter
Phase: B
Location: 092-75-011

Cause: ACCIDENTS, OTHER
Equipment: ANCHOR OR GUY
Section Name: 2049
Tap: 0
Actual Nbr Out:

Meter #: 46208990
Transformer #: 811053621
Trf Bank Id: 0
District Cd:
Weather:
Temperature:
Windy: ☐
Major Storm: ☐

Connectivity

Phase:	Sub Cd:	Fdr Cd:	Pro Dvc:
B	20	3	VSA-5203

Set Device

Dispatch Comments

Time:	Comments:	User:

Add   Delete

Crew Info

Crew:	Outage:	Time Assigned:	Time On-Site:	Time Off-Site:	User:

Add   Delete

Save   Close

Report   Outage Ticket

*	*	First Name:	Last Name:	Time Called:	User:	Line Sect.:	Phs:	Trf:	Meter:	Service Map Lo...	Comments:
✔		COLUMBUS	JACKSON	4:59:09 AM 11/2/2006	CRC	2049	B	811053621	46208990	092-75-011	SAME ACCT HAS NO POWER TO LIGHT IN GARAGE, HEAT -- OTHER AREA

📞 1 ● Phone Calls
➕ 0 ○ Medical Alert
🚩 0 ○ Priority
👥 1 ○ All Consumers
✍ 0 ○ Call Back

Select Outage Event

User	▽ Started	Completed	Outage Event Name	Status	Detection
NISC	2-Nov-2006 6:29:48 AM	2-Nov-2006 6:30:06 AM	OD_OA-ping	Complete	Ping
NISC	2-Nov-2006 5:02:36 AM	2-Nov-2006 5:02:51 AM	OD_OA-ping	Complete	Ping
NISC	2-Nov-2006 5:02:36 AM	2-Nov-2006 5:06:12 AM	OD_OA-ping	Complete	Ping
Pioneer	2-Nov-2006 3:30:04 AM	2-Nov-2006 3:36:30 AM	East Sidney Feeder 4	Complete	Blink Coun
Pioneer	2-Nov-2006 3:00:22 AM	2-Nov-2006 3:12:09 AM	East Casstown Feeder 4	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:21 AM	2-Nov-2006 3:24:27 AM	McCarytvilleFd3Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:21 AM	2-Nov-2006 3:19:38 AM	McCarytvilleFd2Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:20 AM	2-Nov-2006 3:22:33 AM	EagleFdr3Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:19 AM	2-Nov-2006 3:21:42 AM	EagleFdr2Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:19 AM	2-Nov-2006 3:12:44 AM	EagleFdr4Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:18 AM	2-Nov-2006 3:14:40 AM	East Sidney Frd3 Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:18 AM	2-Nov-2006 3:05:04 AM	McCarytvilleFd1Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 3:00:17 AM	2-Nov-2006 3:09:18 AM	HaltermanFdr3Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 2:30:12 AM	2-Nov-2006 2:37:00 AM	East Sidney Fdr 2 Blinks	Complete	Blink Coun
jhickman	2-Nov-2006 2:30:12 AM	2-Nov-2006 2:39:37 AM	HaltermanFdr2Blinks	Complete	Blink Coun

Show only Events beginning with:

[OK] [Refresh] [Cancel Job] [Delete Job] [Cancel]

Outage Event: OD_OA-ping

Job Status: Complete

Time Job Started: 2-Nov-2006 5:02:36 AM

Time Job Finished: 2-Nov-2006 5:06:12 AM

- ● Outage Display   ● Current Status
- ○ Blink Display   ○ Previous Status
- ○ Voltage Display   ○ Original Status

Refresh
- ☐ Auto Refresh
- Every [1]   ○ Seconds   ● Minutes
- Refresh Now
- Cancel Job

Hierarchy | **List**

Substation	Bus	Feeder	Phase	⚠ Sta...	Meter Number	Customer Acct.	Premises ID	Protective Device	Transformer Grid	User1
GIVENS (20)	BUS	FDR3	B	✖ Offline	46208990	920703	092-75-011	VSA-5203	811053621	COLUMBUS

Outage Event: OD_OA-ping

Job Status: Complete

Time Job Started: 2-Nov-2006 5:02:36 AM

Time Job Finished: 2-Nov-2006 5:02:51 AM

- Outage Display
- Blink Display
- Voltage Display

- Current Status
- Previous Status
- Original Status

Refresh
- Auto Refresh
- Refresh Now

Every 1
- Seconds
- Minutes

Cancel Job

Hierarchy | **List**

Substation	Bus	Feeder	Phase	⚠ Status	Meter Number	Customer Acct.	Premises ID	Protective Device	Transformer Grid	User1	User2
GIVENS (20)	BUS	FDR3	B	Online	46208991	947900	092-75-012	VSA-5203	811053621	JOHN E LONG	154 E D

NISC Outage Client - Modify Outage

Outage#:	43182	Date/Time Off:	11/02/2006 04:59 AM	Connectivity Type: OH
Number Out: 1		Date/Time On:	11/02/2006 06:29 AM	Account #: 920703
Status:	Restored	Cause:	ACCIDENTS, OTHER	Meter #: 46208990
Type:	Meter	Equipment:	ANCHOR OR GUY	Transformer #: 811053621
Phase:	B	Section Name:	2049	Trf Bank Id: 0
Location:	092-75-011	Tap:	0	District Cd:
		Actual Nbr Out:		Weather:
				Temperature:

Connectivity

Phase:	Sub Cd:	Fdr Cd:	Pro Dvc:
B	20	3	VSA-5203

Set Device

Windy: ☐
Major Storm: ☐

Dispatch Comments

Time:	Comments:	User:
	BAD SECONDARY URD	CRC

Add   Delete

Crew Info

Crew:	Outage:	Time Assigned:	Time On-Site:	Time Off-Site:	User:

Add   Delete

Save   Close

Report   Outage Ticket

*	*	First Name:	Last Name:	Time Called:	User:	Line Sect.:	Phs:	Trf:	Meter:	Service Map Lo...	Comments:
✔		COLUMBUS	JACKSON	4:59:09 AM 11/2/2006	CRC	2049	B	811053621	46208990	092-75-011	SAME ACCT HAS NO POWER TO LIGHT IN GARAGE, HEAT -- OTHER AREA

1 ⦿ Phone Calls
0 ○ Medical Alert
0 ○ Priority
1 ○ All Consumers
0 ○ Call Back

Outage Event: OD_OA-ping

Job Status: Complete

Time Job Started: 2-Nov-2006 6:29:48 AM

Time Job Finished: 2-Nov-2006 6:30:06 AM

- ● Outage Display   ● Current Status
- ○ Blink Display   ○ Previous Status
- ○ Voltage Display   ○ Original Status

Refresh

☐ Auto Refresh   Refresh Now

Every [1]   ○ Seconds

         ● Minutes   Cancel Job

Hierarchy   **List**

Substation	Bus	Feeder	Phase	⚠ Status	Meter Number	Customer Acct.	Premises ID	Protective Device	Transformer Grid	User1
GIVENS (20)	BUS	FDR3	B	Online	46208990	920703	092-75-011	VSA-5203	811053621	COLUMBUS JACK

Another Partial Power Outage

NISC Outage Client - Modify Outage

Outage#: 43179

Number Out: 0

Status:	Restored
Type:	No Outage
Phase:	A
Location:	2245

Date/Time Off: 11/01/2006   10:18 AM
Date/Time On: 11/01/2006   10:37 AM

Cause:	NO CAUSE CODE
Equipment:	NO EQUIP CODE
Section Name:	2245
Tap:	0
Actual Nbr Out:	

Connectivity Type:	OH
Account #:	1585301
Meter #:	45754337
Transformer #:	294867
Trf Bank Id:	0
District Cd:	
Weather:	
Temperature:	
Windy:	☐
Major Storm:	☐

Connectivity

Phase:	Sub Cd:	Fdr Cd:	Pro Dvc:
A	32	2	SECTZR-2245

Set Device

Dispatch Comments

Time:	Comments:	User:
10:37:25 AM 11/1/2006		kjohnsona
10:20:35 AM 11/1/2006		kjohnsona
10:19:06 AM 11/1/2006	MEMBER SAID SHE HAS PARTIAL POWER	dwebb

Add   Delete

Crew Info

Crew:	Outage:	Time Assigned:	Time On-Site:	Time Off-Site:	User:
23	43179	10:19:57 AM 11/1/2...	10:20:00 AM 11/1/2...	10:37:29 AM 11/1/2...	kjohnsona

Add   Delete

Save   Close

Report   Outage Ticket

*	*	First Name:	Last Name:	Time Called:	User:	Line Sect.:	Phs:	Trf:	Meter:	Service Map Lo...	Comments:
☑		EDGAR	BRADFORD	10:18:00 AM 11/1/2006	dwebb	2245	A	294867	45754337	082-41-005	

1 ● Phone Calls
0 ○ Medical Alert
0 ○ Priority
0 ○ All Consumers
0 ○ Call Back

Select Outage Event

User	▽ Started	Completed	Outage Event Name	Status	Detection
jhickman	1-Nov-2006 10:30:13 AM		Route 66 FDR2 Blinks	Running	Blink Coun
jhickman	1-Nov-2006 10:30:12 AM		HaltermanFdr2Blinks	Running	Blink Coun
jhickman	1-Nov-2006 10:30:11 AM	1-Nov-2006 10:36:45 AM	EastCassF2Blinks	Complete	Blink Coun
jhickman	1-Nov-2006 10:30:11 AM	1-Nov-2006 10:36:54 AM	East Sidney Fdr 2 Blinks	Complete	Blink Coun
NISC	1-Nov-2006 10:18:52 AM	1-Nov-2006 10:19:10 AM	OD_OA-ping	Complete	Ping
NISC	1-Nov-2006 10:18:49 AM	1-Nov-2006 10:19:04 AM	OD_OA-ping	Complete	Ping
NISC	1-Nov-2006 10:16:43 AM	1-Nov-2006 10:17:07 AM	OD_OA-ping	Complete	Ping
NISC	1-Nov-2006 10:16:43 AM	1-Nov-2006 10:17:01 AM	OD_OA-ping	Complete	Ping
jhickman	1-Nov-2006 10:00:15 AM	1-Nov-2006 10:10:34 AM	Route 66 FDR1 Blinks	Complete	Blink Coun
Pioneer	1-Nov-2006 10:00:15 AM	1-Nov-2006 10:06:23 AM	East Sidney Fdr 1Blinks	Complete	Blink Coun
jhickman	1-Nov-2006 10:00:14 AM	1-Nov-2006 10:15:48 AM	Halterman Fdr 1 Blinks	Complete	Blink Coun
jhickman	1-Nov-2006 10:00:13 AM	1-Nov-2006 10:07:14 AM	ECassFdr1Per	Complete	Blink Coun
NISC	1-Nov-2006 8:52:16 AM	1-Nov-2006 8:59:01 AM	OD_OA-ping	Complete	Ping
Pioneer	1-Nov-2006 3:30:22 AM	1-Nov-2006 3:34:26 AM	East Sidney Feeder 4	Complete	Blink Coun
Pioneer	1-Nov-2006 3:00:23 AM	1-Nov-2006 3:12:36 AM	East Casstown Feeder 4	Complete	Blink Coun

Show only Events beginning with:

OK   Refresh   Cancel Job   Delete Job   Cancel

Outage Event: OD_OA-ping

Job Status: Complete

Time Job Started: 1-Nov-2006 10:18:52 AM

Time Job Finished: 1-Nov-2006 10:19:10 AM

- ◉ Outage Display
- ○ Blink Display
- ○ Voltage Display

- ◉ Current Status
- ○ Previous Status
- ○ Original Status

Refresh

☐ Auto Refresh

Every [1] ○ Seconds ◉ Minutes

Refresh Now

Cancel Job

List

Substation	Bus	Feeder	Phase	⚠	Status	Meter Number	Customer Acct.	Premises
EAGLE (32)	BUS	FDR2	A	💡	Online	45754407	190001	081-79-00
EAGLE (32)	BUS	FDR2	A	💡	Online	45754409	190102	082-50-00
EAGLE (32)	BUS	FDR2	A	💡	Online	45754412	190202	082-50-00

Outage Event: OD_OA-ping

Job Status: Complete

Time Job Started: 1-Nov-2006 10:18:49 AM

Time Job Finished: 1-Nov-2006 10:19:04 AM

- (•) Outage Display
- ( ) Blink Display
- ( ) Voltage Display

- (•) Current Status
- ( ) Previous Status
- ( ) Original Status

Refresh

- [ ] Auto Refresh
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Hierarchy | List

Substation	Bus	Feeder	Phase	⚠	Status	Meter Number	Customer Acct.	Premises
EAGLE (32)	BUS	FDR2	A	💡	Online	45754337	1585301	082-41-00

File   Edit   View   Help

LAST NAME   CLEAR QUERY   RQST UPDT   CLEAR   UP   DOWN

AERIAL VIEW   DIST   TEXT   MISC   CLEAR EDIT   SETUP   Manual   Lat Long   Log   Clear   Place   AMR

URBANA - WOODST...
URBANA - WOODSTOCK ROAD
BRAND ROAD
RADIO TOWER
RADIO TOWER
SCHOOLHOUSE ROAD
MCAB
YOCUM ROAD
PERRY ROAD
EVANS ROAD
MUTUAL - UNION ROAD
PARKVIEW ROAD
STATE ROUTE 36
YOCUM ROAD
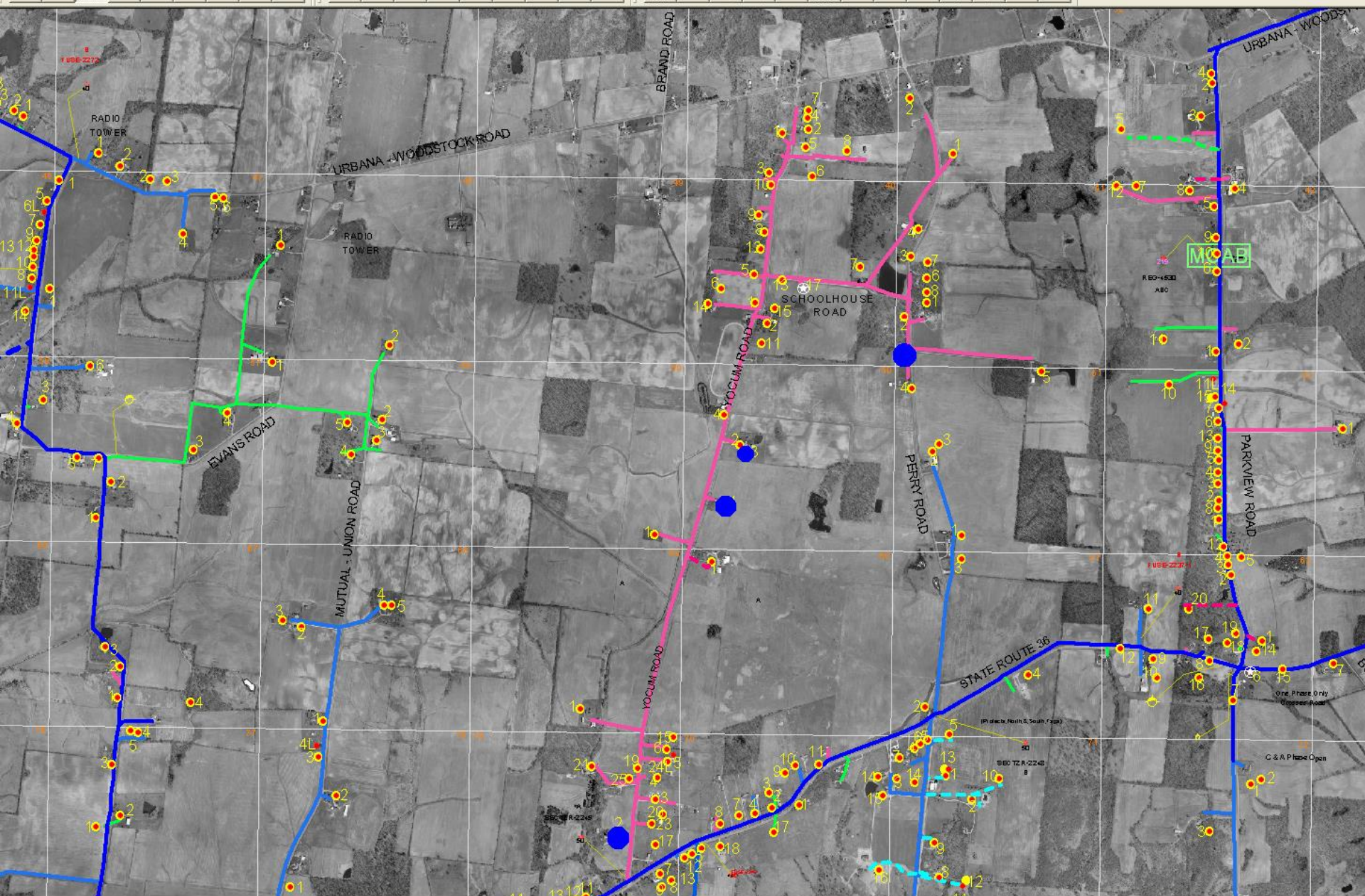
Cost Savings on the Outage Management Side

- Crew call out after hours - $350 per occurrence

- After an outage has been restored all meters are immediately checked – crew does not have to return to the area later

- With AMR integration the scope of the outage is more quickly determined

In Summary

- During early stages of development only some of the data fields are being sent across by MultiSpeak

- Business processes need to become more real time in the utility

- Databases need to compare occasionally to make sure that they are synchronized

- Utilities must play an active role as venders do their development work

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