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COMMUNICATIONS
DEPARTMENT

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Date: January 17, 2023

To: TOPAZ Regional Wireless Cooperative (TRWC) Board of Directors

Through: Dale Shaw, TRWC Executive Director

From: Chuck Craig, IT Manager

Subject: POLICY UPDATE

RECOMMENDATION

I recommended that the current policy statement be revised to reflect this change of responsibility.

BACKGROUND:

Currently, as described in section 7.5 of the TRWC Maintenance and Support Policy, City of Mesa PD is the point of contact for maintenance and management of Key Maintenance Facility and encryption for subscriber units. This process has moved to the City of Mesa Department of Innovation and Technology (Communications division).

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TOPAZ REGIONAL WIRELESS COOPERATIVE	**Maintenance & Support Policy**	
Owner: See Below	Created: **Sept. 14, 2009**	Applicability: See Below
Category: **Operations & Maintenance**	Revised: **Sept. 14, 2009**	
Page: **1 of 6**	Last Review: **Sept. 14, 2009**	

1.0 Purpose

1.1. The purpose of this policy is to establish the framework:

1.1.1. Necessary to identify, resolve, and report anomalies that occur within TRWC in such a manner as to minimize the operational impact to participating agencies and their subscribers.

1.1.2. Within which all maintenance activities pertaining to TRWC sites and facilities and TRWC infrastructure devices will be tracked and reported, including notification to Area Managers and Members of scheduled and unscheduled service affecting activities.

2.0 Owner

2.1. Administrative Manager

3.0 Applies To

3.1. Area Managers, Members, Associates, Interoperability Participants and Conditional Participants.

3.2. All personnel performing operations and planned or unplanned maintenance of the TRWC network infrastructure.

4.0 Background

4.1. The TRWC infrastructure is a critical enabling technology that supports public safety and public service operations with differing operational requirements. In anticipation of operational anomalies occurring within the network, and realizing that these anomalies must be triaged as expeditiously as possible, it is necessary to have policies in place that ensure network anomalies can be identified, reported, and resolved in a manner that minimizes the impact to Area Managers, Members, Associates, Interoperability Participants, and Conditional Participants that have operational subscribers on the network.

4.2. The operational stability of TRWC may be affected when the configuration of the TRWC network is altered. Proper notification of scheduled and unscheduled service affecting maintenance activities

will allow Members and Area Managers time to make necessary preparations. Conversely, unauthorized disruptions in TRWC operations caused by the lack of notification will create safety issues that must be addressed by the Administrative Manager.

5.0 Policy Statement

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7.0 Responsibilities

7.1. The management of the TRWC infrastructure is the responsibility of the Administrative Manager.
7.2. The Administrative Manager will establish on-call after-hour support for anomaly resolution.
7.3. The Administrative Manager will ensure that TRWC reporting activities for anomalies will be conducted seven (7) days a week and twenty-four (24) hours a day.
7.4. The Administrative Manager will:
7.4.1. Establish and maintain processes and procedures for operations and maintenance of the TRWC infrastructure.
7.4.2. Identify and resolve network anomalies. Field service personnel will be dispatched when problems cannot be resolved remotely.
7.4.3. Log problems and track them to closure.
7.4.4. Analyze all logged problems to ensure network performance standards are maintained.
7.4.5. Ensure that network log files are regularly reviewed and that cases are opened to resolve anomalies as necessary.
7.4.6. Provide system performance reports.
7.4.7. Maintain access to field replaceable units (FRUs) sufficient to mitigate equipment failures in a timeframe agreeable to TRWC Members.
7.4.8. Maintain current software licensing on all TRWC infrastructure components.
7.4.9. Maintain technical support necessary to operate, troubleshoot, and optimize the TRWC infrastructure.
7.4.10. Incident types, response times, and appropriate actions are defined by severity level in accordance with procedures established by the Administrative Manager.
7.4.11. Ensure that all operations and maintenance personnel, and third party support providers, are aware of this Maintenance & Support Policy; are trained in the appropriate processes, procedures, and response times; and have access to the necessary contact information to invoke various levels of support activities.
7.4.12. Perform scheduled maintenance on the TRWC infrastructure in a manner that is consistent with industry best practices and manufacturer recommendations.
7.4.13. Operate the TRWC network in accordance with the Network Security category polices.

7.4.14. Responsible for notifying the Members and Area Managers of scheduled and unscheduled service affecting maintenance activities.

7.5 City of Mesa Communication Division is the point of contact for key management and encryption. Requests for key management and encryption support are to be submitted to City of Mesa Communication Division during normal business hours if possible. After hours, the point of contact for emergency support of key management and encryption is Mesa PD dispatch.

7.6. Area Managers and Members are responsible for providing their own dispatch console maintenance.

7.6.1. Area Managers and Members are responsible for notifying the

TOPAZ
Detail of Operating and Maintenance
Fiscal Year 2022/ 2023

	Year to Date Through November 30, 2022					
Description	**Budget**	**Updated Forecast**	**YTD Forecast***	**YTD Actual**	**$ Var From YTD Forecast Incr/(Decr)**	**% Var From YTD Forecast**
Personnel Services	$ 366,626	$ 366,626	$ 141,010	$ 178,689	$ 37,679	27%
Insurance Premiums	8,994	8,994	3,748	-	(3,748)	-100%
Temp Services	6,349	6,349	2,645	987	(1,658)	-63%
Leases and Rents - Land	26,770	26,770	11,154	-	(11,154)	-100%
Professional Services - Consulting	95,515	95,515	39,798	42,078	2,280	6%
Professional Services - Other-combining legal, consulting	242,322	242,322	100,968	14,870	(86,098)	-85%
Utilities	72,685	72,685	30,285	30,758	473	2%
Telephone	3,598	3,598	1,499	1,542	43	3%
Networking Subscription Costs	12,000	12,000	5,000	-	(5,000)	-100%
Repairs & Maintenance	32,801	32,801	13,667	14,959	1,292	9%
Equipment Usage (Vehicles)	21,162	21,162	8,818	6,502	(2,316)	-26%
All Other Services	40,760	40,760	16,983	575	(16,408)	-97%
Sub-total Services	562,956	562,956	234,565	112,271	(122,294)	-52%
Motorola Contract	975,000	975,000	406,250	850,586	444,336	109%
Juniper Software	67,562	67,562	28,151	-	(28,151)	-100%
Materials & Parts	31,054	31,054	12,939	3,645	(9,294)	-72%
Non Cap Assets	13,226	13,226	5,511	-	(5,511)	-100%
All Other Commodities	-	-	-	-	-	0%
Sub-total Commodities	1,086,842	1,086,842	452,851	854,231	401,380	89%
Subtotal O&M	2,016,424	2,016,424	828,426	1,145,191	316,765	38%
Contingency - 1.5% of total O&M	29,487	29,487	12,286	-	(12,286)	-100%
VHF Operations	55,761	55,761	23,234		(23,234)	-100%
Total	$ 2,101,672	$ 2,101,672	$ 863,946	$ 1,145,191	$ 281,245	33%

*YTD Forecast represents 5 months of operational costs plus any contractual expenses already incurred (i.e. one time payments such as Insurance Premiums, Land Rental and Motorola Contract).

TOPAZ
Detail of Capital Projects **Year to Date Through November 30, 2022**
Fiscal Year 2022/ 2023

Project	Project ID	Budgeted	YTD Forecast*	YTD Actual	$ Var From YTD Forecast Incr/(Decr)	% Var
Site Expansion #1	CP0091	1,764,822	735,343	12,147	$ (723,196)	-98.35%
Site Expansion #2 WOL	CP0754CAP	790,276	329,282	2,932	$ (326,350)	-99.11%
TOPAZ Voice Radio Network Upgrade	CN0022	$ -	-	-	$ -	0.00%
Upgrade Shaw Bute & Florence Gardens to P25 Phase II	CP0906	574,812	239,505	-	(239,505)	-100.00%
Wireless Backhual (Microwave) Network Lifecycle Upgrade	LF0403CAP	167,265	69,694	5,850	(63,844)	-91.61%
Enhanced Data TBD		371,000	154,583	-	(154,583)	-100.00%
System-of-Systems Networking	CP0438	-	-	-	-	0.00%
Fire Hazard Zone System Coverage Improvement & Expansion	CP0907	475,320	198,050	33,291	(164,759)	-83.19%
Fire Hazard Zone System Lifecycle Upgrade	LF0465CAP	147,500	61,458	-	(61,458)	-100.00%
Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade	LF0402POM	43,238	18,016	-	(18,016)	-100.00%
System-of-Systems	CP0905	-	-	-	-	0.00%
Florence Gardens ISR Site Lifecycle upgrade	LF0224	-	-	-	-	0.00%
Radio & Core Sites Battery Backup Lifecycle Upgrade	LF0266	31,910	13,296	-	(13,296)	-100.00%
Radio Sites Emergency Power Upgrade	LF0226	172,533	71,889	86,330	14,441	20.09%
Communications Building UPS Battery Replacement	LF0228	17,700	7,375	-	(7,375)	-100.00%
Internet Protocol Network Routers & Switches Upgrade	LF0248	-	-	-	-	0.00%
Antenna & Transmission Lines Lifecycle Upgrade	LF0282	-	-	-	-	0.00%
Consulting Services for VHF & 7/800 MHz Coverage Expansion		40,000	16,667	-	(16,667)	-100.00%
Total Capital Projects		$ 4,596,376	$ 1,915,158	$ 140,549	$ (1,774,609)	-92.66%
Capital Assessment to Members						
Mesa	67.55%	1,226,380	510,992	92,850	(418,142)	-81.83%
Gilbert	19.60%	355,841	148,267	22,898	(125,369)	-84.56%
Apache Junction	9.22%	167,391	69,746	14,716	(55,030)	-78.90%
Ft McDowell	2.23%	40,486	16,869	2,194	(14,675)	-86.99%
Superstition Fire & Medical	0.72%	13,072	5,447	1,018	(4,429)	-81.31%
Queen Creek	0.65%	11,801	4,917	6,821	1,904	38.72%
Rio Verde	0.03%	545	227	56	(171)	-75.33%
Total Assessment to Members	100.00%	$ 1,815,516	$ 756,465	$ 140,553	$ (615,912)	-81.42%

*YTD Forecast represents 5 months of project costs plus any contractual expenses already incurred (i.e. one time payments).

TRWC Capital Budget Plan	PROJECT ID	Proposed new with Carry over FY 22/23	Final FY 22/23	New Draft FY 23/24	FORCAST Proposed FY 23/24 From last year	New Proposal FY 24/25	Proposed FY 24/25 From last year	New Proposal FY 25/26	Proposed FY 25/26 From last year	New Proposal FY 26/27	Proposed FY 26/27 From last year	New Proposal FY 27/28	Proposed FY 27/28 From last year	New Proposal FY 28/29	Proposed FY 28/29 From last year	FY 29/30	TOTAL 9 Years	23/24 Difference	Project	Personnel	Overhead
ESCALATION FACTOR						7.00%		7.00%		7.00%		7.00%		7.00%		7.00%					
Site Expansion #1 H60 Includes $174,822 roll forward from 21-22	CP0091	1,764,822	1,590,000	570,640	570,640	-	560,000	-	-	-	-	-	-	-	-		$ 2,335,462	$ -	1,424,392	256,391	84,039
Site Expansion #2 WOL	CP0754	790,276	790,276	1,033,111	1,033,111	1,052,740	590,276	-	1,013,847	-	-	-	-	-	-		$ 2,876,127	$ -	637,834	114,810	37,632
Site Expansion #3 QC Land Purchase	CP0779	-	-	475,000		1,375,650	-	1,750,000	-	610,000	-	-	605,703	-	1,040,515		$ 4,210,650	$ 475,000	-	-	-
System-of-Systems Networking Expansion CP0438	CP0905	-	-	-	25,475	-	25,000	-	-	-	-	-	-	-	-		$ -	$ (25,475)	-	-	-
Upgrade Shaw Butte and Florence Gardens to P25 Phase II (TDMA) Includes $287,406 roll forward from 21-22	CP0906	574,812	287,406	-	-	-	-	-	-	-	-	-	-	-	-		$ 574,812	$ -	463,932	83,508	27,372
Radio Sites Emergency Power Upgrade $66,333 roll forward from 21-22	LF0226	172,533	106,200	-	108,218	-	106,200	-	-	-	-	-	-	-	-		$ 172,533	$ (108,218)	139,252	25,065	8,216
Communications Building UPS Battery Replacement	LF0228	17,700	17,700	-	-	-	-	-	-	18,036	-	-	17,700	-	-		$ 35,736	$ -	14,286	2,571	843
Internet Protocol Network Routers & Switches Upgrade (Work in FY25)	LF0248	-	-	-	-	400,000	-	428,000	-	256,800	-	-	-	-	-		$ 1,084,800		-	-	-
Radio & Core Sites Battery Backup Lifecycle Upgrade (CRS) Includes $31,910 roll forward from 21-22	LF0266	31,910	-	-	-	90,000	-	96,300	71,433	103,041	71,433	-	89,292	-	-		$ 321,251	$ -	25,755	4,636	1,520
Radio & Core Sites DC Power Plant Lifecycle Upgrade	LF0267	-	-	-	-			750,000	-	802,500	750,000	-	750,000	-	-		$ 1,552,500	$ -	-	-	-
Enhanced data TBD		371,000	371,000	-													$ 371,000	$ -	299,435	53,898	17,667
Antenna & Transmission Lines Lifecycle Upgrade	LF0282	-	-	-	-	-	-	-	-	-	-	-	-	-	-		$ -	$ -	-	-	-
TOPAZ P25 Voice Radio Network Lifecycle Upgrade (FY28)	New	-	-	-	-	-	-	-	-	-	-	2,038,000	-	-	-		$ 2,038,000	$ -	-	-	-
Wireless Backhaul (Microwave) Network Lifecycle Upgrade (Includes Antennas and tower work 5 microwave shots)	LF0403CAP	167,265	167,265	300,000	170,443	420,000	167,265	-	167,265	-	-	-	-	-	-	187,262	$ 887,265	$ 129,557	135,000	24,300	7,965
Consulting Services for VHF & 7/800 MHz Coverage Expansion includes $40,000 roll forward from 21-22		40,000	-	-	-	-	40,000										$ 40,000	$ -	32,284	5,811	1,905
Sub-total		3,930,318	3,329,847	2,378,751	1,907,887	3,338,390	1,488,741	3,024,300	1,252,545	1,790,377	821,433	2,038,000	1,462,695	-	1,040,515	187,262	$ 16,500,136	$ 470,864			
Fire Hazard Zone System Coverage Improvement and Expansion (Gilbert/Queen Creek) Includes $103,620 roll forward 21-22	CP0907	475,320	371,700	450,000	378,762	481,500	385,959	515,205	393,292	551,269	400,765	589,858	408,379	631,148	416,138	675,328	$ 3,694,300	$ 71,238	383,632	69,054	22,634
Fire Hazard Zone System Lifecycle Upgrade Router Refresh replacement in FY25 (Motorola qoute is $320,000. FY23+FY24 money to complete the project) includes $147,500 roll forward from 21-22	LF0465CAP	147,500	-	150,000		-	-	-	-	-	-	-	-	-	-		$ 297,500	$ 150,000	119,048	21,429	7,024
Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade includes $43,238 roll forward from 21-22	LF0402POM	43,238	-	-													$ 43,238	$ -	36,642	6,596	
	New	-	-	-	-	-	-	-	-	-	-	-	-	-	-		$ -	$ -	-	-	-
Sub-total VHF Special Assessment Projects		666,058	371,700	600,000	378,762	481,500	385,959	515,205	393,292	551,269	400,765	589,858	408,379	631,148	416,138	675,328	$ 4,035,038	221,238			
																	$ -				
Console Upgrade from MCC 7500 to AXS (1)	New			597,326	-	655,221	-	675,197	-	765,773	-	842,966	-	864,795	-	-	$ 4,401,278				
Sub-total AXS Console Upgrade Special Assessment Projects				597,326	-	655,221	-	675,197	-	765,773	-	842,966	-	864,795	-	-	$ 4,401,278	-			
Total Capital & Fire Special Assessment Projects		$ 4,596,376	$ 3,701,547	$ 3,576,077	$ 2,286,649	$ 4,475,111	$ 1,874,700	$ 4,214,702	$ 1,645,837	$ 3,107,419	$ 1,222,198	$ 3,470,824	$ 1,871,074	$ 1,495,943	$ 1,456,653	$ 862,590	$ 24,936,452	$ 692,102			
Capital Assessment to Members																					
Mesa	67.55%	2,654,929	2,249,311	1,606,845	1,288,778	2,255,082	1,005,645	2,042,915	846,094	1,209,400	554,878	1,376,668	988,049	-	702,868	126,496	15,829,283				
Gilbert	19.60%	770,342	652,650	466,235	373,946	654,324	291,793	592,763	245,499	350,914	161,001	399,448	286,688	-	203,941	36,703	4,592,953				
Apache Junction	9.22%	362,375	307,012	219,321	175,907	307,800	137,262	278,840	115,485	165,073	75,736	187,904	134,860	-	95,935	17,266	2,160,563				
Ft McDowell	2.23%	87,646	74,256	53,046	42,546	74,446	33,199	67,442	27,932	39,925	18,318	45,447	32,618	-	23,203	4,176	522,565				
Superstition Fire & Medical	0.72%	28,298	23,975	17,127	13,737	24,036	10,719	21,775	9,018	12,891	5,914	14,674	10,531	-	7,492	1,348	168,720				
Queen Creek	0.65%	25,547	21,644	15,462	12,401	21,700	9,677	19,658	8,142	11,637	5,339	13,247	9,508	-	6,763	1,217	152,318				
Rio Verde	0.03%	1,179	999	714	572	1,002	447	907	376	537	246	611	439	-	312	56	7,030				
Sub-total	100.00%	3,930,316	3,329,847	2,378,750	1,907,887	3,338,390	1,488,742	3,024,300	1,252,546	1,790,377	821,432	2,037,999	1,462,693	-	1,040,514	187,262	23,433,432				
VHF Special Assessment																					
Mesa Fire & Medical	68.68%	457,449	255,284	412,079	260,133	330,693	265,076	353,842	270,112	378,611	275,244	405,113	280,474	433,471	285,803	463,815	3,207,399				
Gilbert Fire	17.16%	114,296	63,784	102,960	64,996	82,625	66,231	88,409	67,489	94,598	68,771	101,220	70,078	108,305	71,409	115,886	801,386				
Superstition Fire & Medical	10.01%	66,672	37,207	60,060	37,914	48,198	38,634	51,572	39,369	55,182	40,117	59,045	40,879	63,178	41,655	67,600	467,476				
Queen Creek Fire	3.22%	21,447	11,969	19,320	12,196	15,504	12,428	16,590	12,664	17,751	12,905	18,993	13,150	20,323	13,400	21,746	150,377				
Rio Verde Fire	0.93%	6,194	3,457	5,580	3,522	4,478	3,589	4,791	3,658	5,127	3,727	5,486	3,798	5,870	3,870	6,281	43,432				
Sub-total	100.00%	666,058	371,701	599,999	378,761	481,498	385,958	515,204	393,292	551,269	400,764	589,857	408,379	631,147	416,137	675,328	4,670,070				
Special Assestment SAU																					
Mesa-$40,825.09 tax added to 23/24				499,529		472,464		486,637		571,237		635,274		650,764			3,315,905				
Gilbert ($400,000 billed directly to Gilbert upon contract signing)$7,069.15 tax added to 23/24	400,000			84,752		120,513		124,974		129,568		134,300		139,174			1,133,280				
Apache Junction PD $1,592.50 tax added to 23/24				19,093		17,500		17,500		17,500		17,500		17,500			106,593				
Ft McDowell $3,926.01 tax added to 23/24				47,366		44,744		46,086		47,468		55,892		57,359			298,916				
	400,000			650,739	-	655,221	-	675,197	-	765,773	-	842,966	-	864,797	-	-	4,854,693				
Total Capital + Fire Special Assessment																					
Mesa		3,112,377	2,504,594	2,518,455	1,548,911	3,058,239	1,270,721	2,883,394	1,116,206	2,159,248	830,122	2,417,055	1,268,523	1,084,235	988,671	590,311	23,267,486				
Gilbert		884,638	716,434	653,947	438,942	857,462	358,024	806,146	312,988	575,080	229,772	634,968	356,766	247,479	275,350	152,589	6,356,211				
Apache Junction		362,375	307,012	238,414	175,907	325,300	137,262	296,340	115,485	182,573	75,736	205,404	134,860	17,500	95,935	17,266	2,267,156				
Ft McDowell		87,646	74,256	100,412	42,546	119,190	33,199	113,528	27,932	87,393	18,318	101,339	32,618	57,359	23,203	4,176	821,481				
Superstition Fire & Medical		94,970	61,182	77,187	51,651	72,234	49,353	73,347	48,387	68,073	46,031	73,719	51,410	63,178	49,147	68,948	769,540				
Queen Creek		46,994	33,613	34,782	24,597	37,204	22,105	36,248	20,806	29,388	18,244	32,240	22,658	20,323	20,163	22,963	345,589				
Rio Verde		7,373	4,456	6,294	4,094	5,480	4,036	5,698	4,034	5,664	3,973	6,097	4,237	5,870	4,182	6,337	62,850				
Total		4,596,373	3,701,547	3,629,490	2,286,648	4,475,109	1,874,700	4,214,701	1,645,838	3,107,419	1,222,196	3,470,822	1,871,072	1,495,944	1,456,651	862,590	33,890,312				

Date: 01/04/2023

To: TOPAZ Regional Wireless Cooperative (TRWC) Board of Directors

Through: Dale Shaw, TRWC Executive Director

From: Chuck Craig

Subject: Administrator Update

Budget Update

The budget request for consoles did not include 9.1% for sales tax. This amount will need to be added to each special assessment and the overall FY24 budget amount. Angie will make sure I include the tax in subsequent fiscal years!

Total additional	$53,412.26
AJ	$1,592.50
Gilbert	$7,069.15
Mesa	$40,825.60
Fort McDowell	$3,926.01

SmartConnect LTE services

We continue to have difficulties with the SmartConnect (LTE→LMR) interconnection. We have network dropouts each week. COM network team, communication and Motorola continue to work the problem. City staff have poured an extraordinary amount of time trying to determine a fix for the continuing outages. While a brief outage may appear to be only an inconvenience, in truth each time it happens after hours, a Mesa radio tech must logon to the system to determine if there is indeed a problem. On-call Staff are paid a minimum of 2 hours OT when this occurs.

Banner

We have received some structural (roof) documentation from Banner Ironwood and have engaged with Shahir Safi, a City of Mesa structural engineer who feels that adding a ~750lb cabinet directly to the Banner Hospital roof will result in additional liability to the City of Mesa and the TRWC. Therefore, there should be discussion within the Exec Committee to determine if it would be more responsible to not implement the Banner receive site and instead have a receive site at the QCA site.

H60 Expansion

The H60 continues to slowly move forward. There have been challenges in the purchasing process, but the work Dave Brunk has done will save the TRWC approximately $700k over the life of the project. There is currently an RFP out for the building, this RFP should close

1/13/2023. At that time, we will review the proposals and choose a contractor. Supply chain challenges are also found in procurement for our UPS/Battery systems for the H60 site.

Wolverine Expansion Site

Document have been submitted to the Forest Service detailing what type of equipment, radio frequencies, and tower height we are looking for to make the most of the location. Approval for these is TBD.

General operations

Mesa Communication team is building a purchasing agreement with a specialty company for tower/antenna installation, as well as normal maintenance for our existing sites. Additionally, regular tower inspections, which were put on hold during covid, are back on track and will continue to be part of ongoing system maintenance. Another part of ongoing maintenance is the radio team's annual inspection of each radio location

Enhanced Data

Enhanced data has been placed on hold until such time as total cost can be determined. Randy Thompson is working with Motorola to get solid quotes on what implementing this process would cost. Bryan Waters is putting a no/low-cost option together.

Router Replacement Project

Motorola has submitted a list of routers they plan on replacing, we are determining what, if any cost there will be to the TRWC. They have also indicated an outage will be necessary when we upgrade our simulcast routers to Juniper calendar in Q2/2023. We have questions around power requirements needed for each router. When we get the details from Motorola, we will put a communication plan together to our partner agencies.

Security Audit

We have begun the City purchasing process of engaging with a IPKeys to perform our Radio system security audit.

Operations Summary

A. As mentioned, we are still working with Motorola and City network engineers to reduce the SmartConnect outages.
B. There was a power outage at the CAP (City Utilities secondary site) which kept the backup system offline for a day. City Facilities quickly corrected to problem
C. From Arthur Gutierrez:

During the period of January 9th to January 31st, Radio shop will be conducting preventive maintenance on the TOPAZ 800 MHz and VHF radio networks. The maintenance schedule for each site is listed below.

- Monday, January 9th 7am to 4pm South Water plant radio site (SWP)
- Tuesday, January 10th 7am to 4pm Range Rider (RAN), 8461 East Teton Circle
- Wednesday, January 11th 7am to 4pm FS 262 radio tower (AJ262), 3955 E. Superstition
- Thursday, January 12th 7am to 4pm FS 205 radio tower (FS205), 730 S. Greenfield
- Tuesday, January 17th 7am to 4pm Twin Knolls Tower (TKN), 8450 E. Main Street
- Wednesday, January 18th 7am to 4pm Rio Verde (RIO) 25608 North Forest Rd. Rio
- Thursday, January 19th 7am to 4pm Central Radio Site (CRS), 300 E. 6th Street
- Thursday, January 23rd 7am to 4pm Shaw Butte (SHA)
- Tuesday, January 24th 7am to 4pm TRW radio tower (TRW), 7144 5. Meridian
- Wednesday, January 25th 7am to 4pm FS 219 (FS219), 3361 S. Signal Butte Rd
- Thursday, January 26th 7am to 4pm FS 264 radio tower (AJ264), 5899 S. Kings ranch
- Monday, January 30th 7am to 4pm Mesa Community College (MCC)
- Wednesday, January 31st 7am to 4pm Florence (FLO), 3953 N. Iowa AV, Florence, AZ

The site will be disabled while the PM procedure is conducted.

This may result in a degradation of radio service within the area served by each transmission site. We will check with MRDC and PD Dispatch prior to disabling the transmitters to ensure there are no major incidents active in the area.

If any major incidents occur during this maintenance window, we will re-establish the TOPAZ site as soon as possible.

If the work takes longer than expected, or there are other problems discovered during the execution of work, an update message will be sent.