

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of

Review of the Emergency Alert System

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Docket No. 04-296

**REPLY COMMENTS OF THE CITY OF MESA, ARIZONA**

The City of Mesa, Arizona wishes to supplement its joint filing with the Municipalities and Municipal Organizations by submitting the following Reply Comments, intended to discuss the experiences of Mesa regarding cable franchise-based local alert systems and to reflect concerns shared by cities in the Phoenix Metro Area and elsewhere.

The local alert system provided for in Mesa's two cable franchises is of great importance to the City's emergency preparedness because it provides the functionality to alert residents to local emergencies independently of the Federal Emergency Alert System ("EAS") delivery system. There is no unique FIPS code corresponding with the City boundaries of Mesa – as a result, this the cable franchise-based local alert system is the only means of reaching Mesa residents viewing cable TV without needlessly interfering with viewers in neighboring communities in Maricopa County (as an alert sent over the Federal EAS would). Additionally, the cable-based local emergency alert system builds in redundancy in the case of a failure in the Federal EAS.

**Description of Cable-Based Local Alert System**

The City of Mesa's cable franchise-based local emergency alert system inserts a text crawl and overrides the audio of all analog and digital channels of the cable TV systems in the

event of a local emergency. The text crawl and audio message direct viewers to the City of Mesa's government channel, Channel 11, for the specifics of the alert. The City uses this method because Channel 11 only goes to City of Mesa residents, while the video crawl and audio overrides go to residents outside City limits. This capability resulted from a joint project of the City and its cable franchisees to satisfy provisions of the cable franchise agreements.<sup>1</sup>

As currently configured, a local EAS encoder is added to the cable operator's emergency alert system. This encoder interfaces with a telephone line, and the system is activated when a City official calls with the access code. The City official selects one of two prepared text messages with its accompanied stored audio message on the cable system to alert the viewing public of an emergency or the testing of the system.

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<sup>1</sup> Excerpted from City of Mesa License Agreement with Cox Communications:

“4.8.1 In accordance with the provisions of FCC Rules and Regulations Part 11, Subpart D, Section 11.51(h)(1), and as such provisions may from time to time be amended, Licensee shall install and maintain an Emergency Alert System (EAS). As allowed by FCC Order FCC 97-338, Paragraph 33, Licensee shall transmit all national, state, and local activations of the Federal EAS, utilizing the four-part message protocol specified in FCC Rules and Regulations Part 11, Subpart B, or successor protocols. This shall include such local and state-wide situations as may be designated to be an emergency by the Local Primary (LP), the State Primary (SP) and/or other authorities identified and defined within FCC Rules and Regulations, Part 11 or the Local and State Plans provided for under those rules.

4.8.2 By December 31, 2003 and thereafter throughout the balance of the Term Licensee shall provide to the City without human intervention by Licensee, in times of a City of Mesa emergency and for periodic (e.g. – monthly) testing by Mesa, the right and the capability to directly access by remote control the video and audio of all channels to create and air one of two pre-established video scroll messages determined by Mesa (such as "Mesa Residents, this is a TEST of the City of Mesa Emergency Alert System. In an actual emergency you will be advised to tune to Mesa Channel 11 for details." Or "Mesa Residents, the City of Mesa is issuing an Emergency Alert. Please tune to Mesa Channel 11 for further details.") and a pre-established audio alert message with the same text as the video scroll message. The messages (1) may be changed by Mesa from time to time, and (2) shall advise Mesa residents to tune to the Mesa government channel, which is currently Channel 11 or the equivalent thereof. Mesa and Licensee will work together to prevent the pre-established video scroll message from interfering with any separate video scroll message on Channel 11 (or the equivalent thereof) containing substantive information about a test or actual emergency, such as by ensuring that the scrolls appear in different places on Subscribers' TV screens. Licensee acknowledges that the City retains the right to review and approve the ability to directly access by remote control all channels prior to acceptance and approval of the capability . . . Federal EAS alerts (meaning national, state and local alerts on the Federal EAS) and tests shall take precedence over and automatically override the Mesa video scroll messages and audio alert messages (including, in each case, test messages) provided for in this Subsection 4.8.2, and Licensee shall obtain and maintain appropriate hardware and software to accomplish the preceding. Licensee agrees that this Subsection 4.8.2 complies with Federal law; and covenants not to sue or otherwise contend to the contrary. . . .”

### **Significance of Local Alert System: Serving Mesa's Emergency Management Needs**

Mesa uses the local emergency alert for emergencies and messages relevant only within the geographical boundaries of the City. In contrast, alerts for emergencies which affect multi-jurisdictional boundaries are sent over the Federal EAS and activated through the State or County authorities designated in the State or Local Plans.

Mesa views the cable franchise-based local emergency alert system as providing needed redundancy in case the Federal Emergency Alert System fails to work. Past tests in Mesa have revealed that the Federal EAS in the Phoenix Metro area has failed to operate as planned, due to problems with the LP1 source in the area. Because of improperly entered header codes by the authorities generating monthly tests of the Federal EAS, the required regular monthly EAS test alerts were not relayed on any digital cable channels. This is of major importance, because currently over half the cable channels are in digital format and soon most or all cable channels will be digital. Had a real emergency occurred before this problem was corrected, digital channels throughout the State of Arizona would not have carried a Federal alert broadcast over the Federal EAS. Bearing in mind past experiences of this sort, Cliff Pucket, the City of Mesa's Emergency Manager has observed: "We all know through past experience that primary systems tend to fail in disaster situations. Building in redundancy into your response system is critical to disaster planning."

Mesa's cable franchise-based local emergency alert system provides City emergency management personnel with an immediate, direct means of communication with Mesa's residents that does not require the cooperation or agreement of third parties (State or County EAS managers) with consequent possible delays, rejections of the alert or changes to the message.

The cable franchise-based local emergency alert system is intended for use in the following types of local emergencies:

- A local unexpected road closing, such as due to a fatal accident, major flooding or train derailment
- Local major hazardous material incident, such as a toxic waste or volatile fuel spill or discharge on to roadways, storm sewers or into a waterway that traverses the community
- Localized severe weather events such as micro-burst that causes severe flash flooding conditions or storms that cause downed power lines and major road restrictions
- Tornadoes or extreme wind damage
- Large scale fires or explosions
- An unexpected major natural gas leak or break event with instructions to residents
- Utility failures - unexpected water problems due to breaks which may make the water unsafe to drink or require restrictions in water usage
- Lost/missing child (where welfare of child is in jeopardy and the Amber Alert System is deemed not to be the best option)
- Local health epidemics & infestations
- Unusual occurrence impacting a large segment of the City of Mesa and other major incidents that impact a large segment of the population
- Emergency management updates in subsequent days following a major event that pertaining specifically to Mesa's residents
- Mass casualty accidents involving local aircraft, rail, or automobile infrastructure
- Brown or black outs (power outage)
- Civil disturbances

- Terrorism.

The cable franchise-based local emergency alert is a component of the City's emergency preparedness strategy, enabling it to quickly notify residents of local emergencies. Mesa implemented this system as a means of reaching local residents for local emergencies and as a backup to the Federal EAS.

Mesa's emergency management personnel participate in Maricopa/Pinal Counties' Federal EAS system and will use the Federal EAS with emergencies that will affect the greater Phoenix metro area. But even then, the local alert system can be useful for providing subsequent updates specific to Mesa's residents in the days that follow.

Mesa's cable-based local alert system also permits the City to avoid the intermediate steps or communications relays between the County and State emergency management system and the cable networks necessary in activating the Federal EAS. The local system's essential features include:

- Video and audio override
- Capability of being activated (by authorized staff) from any telephone
- Override of all analog and digital programming, and alerts to viewers of video-on-demand and set-top digital video recorders provided by the cable operator
- Repeats of the alert a reasonable number of times with acceptable audio quality and legible text
- Capability of storing at least two messages, one for a test and one for an emergency, directing viewers to the government access channel for detailed and up-to-date information.

## **Background on Implementation of System**

The engineering and testing of the cable-based local alert system was a collaborative effort between the cable operator, the equipment manufacturer, and the City which required considerable effort on the part of all parties involved. The challenges were that 1) a new component, a local alert encoder, was required to create an EAS-formatted local-alert message suitable for the Scientific Atlanta digital video system, and 2) the Scientific Atlanta digital video system was not capable of sending the signal only to Mesa residents and, using the software version in the existing system, would send the signal throughout the Phoenix metropolitan area.

As negotiations between the City and the cable operator progressed, the City received support from the National Association of Telecommunications Officers and Advisors (NATOA) and the International Association of Emergency Managers (IAEM) (see attachment).

While significant time and effort were involved in designing and deploying the system for Mesa, the result is a configuration suitable for any cable system that uses the Scientific Atlanta digital video system, and the design can now be mass-produced in the cable industry.

Mesa's cable franchise agreements require the cable operators to automatically turn off Mesa's cable-based local emergency alert in the event a Federal, State or County EAS message is simultaneously transmitted in order to avoid conflict between the local and Federal systems. Mesa has worked extensively with the cable operators in the City to test this function and to ensure that it functions correctly. Mesa's intent is to provide the City with an emergency preparedness tool enabling it to quickly notify residents of local emergencies without conflicting with regional, state or national emergency alert messages.

## **Conclusion**

The City of Mesa calls on the Commission to preserve the City's cable franchise-based local emergency alert system as an essential tool in helping the City to meet its emergency management needs. Over the course of years, Mesa has expended great effort to establish, defend and preserve this public notification tool, working extensively with local cable operators in revising and updating the local alert system as cable technology has changed. In the course of this effort it has become clear that in some instances the Federal EAS has not functioned adequately within the State of Arizona. Should such a malfunction of the Federal system occur during a regional or national emergency, the local alert system could provide a much needed backup to the Federal system, and might prove the only effective way of reaching many local residents. Mesa believes that its experience provides a good model for how local and Federal alert systems can coexist on local cable systems, and the different roles each can play in assisting cities in meeting their emergency management needs.

Respectfully submitted for:

The City of Mesa, Arizona

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## ATTACHMENT



August, 2003

### **Position Paper for the International Association of Emergency Managers in Support of Local Alert Systems on Cable Television**

The International Association of Emergency Managers (IAEM) supports the efforts of local communities to include requirements for cable television licensee participation in a local alert system, and encourages local communities and cable companies to work together to provide this valuable coverage for local emergencies, as well as local backup for the Federal Emergency Alert System.

While the Federal Emergency Alert System (EAS) provides alerts over local cable systems regarding county-wide, state, or national emergencies, purely local emergencies are not commonly carried on the Federal system. Further, under the rules of the Federal Communications Commission (FCC), cable systems' carriage of local alerts is purely voluntary. Local community leaders are also unable to access the Federal system directly, but commonly must send alerts on to county or state officials who then decide if they are appropriate for the Federal EAS.

Because of these difficulties in accessing the Federal system, and the uncertainties over whether an alert issued by local officials will ever be sent out over the Federal EAS, some communities have required in their cable franchises or codes that cable operators provide community officials a means to directly access a local alert that would be broadcast to all cable subscribers within the community. From a public safety perspective, such local alert systems have several benefits.

First, a local alert system can supplement the Federal EAS system by providing an outlet for purely local emergencies not likely to be carried on the Federal system, such as very localized flooding, road closures, and the like. Second, a local system can provide some necessary redundancy for the Federal system, so that in the event of a local failure of the Federal EAS system, a backup system is in place that may be able to carry the alert. Finally, local community leaders are in the best position to know what the needs and concerns are of the local citizens, and under what circumstances they need to be alerted to an emergency. Having a local alert system placed under the control of local officials is the most certain way to ensure that means are available to swiftly organize a response to local emergencies.

Therefore, IAEM strongly supports the efforts of local officials to ensure full access to a local alert system that will broadcast to all cable subscribers in the community.

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