



**EXECUTIVE CHAMBERS**  
HONOLULU

**LINDA LINGLE**  
GOVERNOR

# **Recommendations for Improving Public Communications During Emergencies**

**Presented by the Governor's Comprehensive Communications Review Committee**

**January 5, 2007**  
**(FINAL REPORT)**

## **INTRODUCTION**

Following the October 15, 2006 earthquakes that caused extensive damage on the Big Island and led to widespread power blackouts primarily on O`ahu, Governor Linda Lingle recognized the urgent need to improve emergency communication procedures so residents and visitors receive accurate and timely information from government agencies and the news media during natural disasters and other times of crisis.

To bring this about, the Governor quickly formed the Comprehensive Communications Review Committee, chaired by Lenny Klompus, senior advisor – communications. Co-chairing the committee are two other Cabinet members: Major General Robert Lee, state adjutant general and director of State Civil Defense; and Marsha Wienert, state tourism liaison.

Also serving on the statewide committee are more than 70 government officials from federal, state and county agencies; owners, general managers and publishers from print and broadcast media organizations; representatives from cellular phone providers; and editor and reporters from print, broadcast and Internet media who were “on the ground” gathering information and reporting on the day of the earthquake (see attachment for complete list of members).

At a series of four meetings (one each on Oct. 24 and Oct. 26 and two on Nov. 9), participants engaged in open and honest discussions about the challenges they faced on Oct. 15, and offered suggestions on how they could more efficiently and effectively communicate with the public during future emergencies. This report summarizes those discussions and presents 15 key recommendations for improving the State of Hawai`i's emergency communications plan.

The Governor asked the committee to report back within 60 working days on its findings. The committee co-chairs submitted a preliminary report to the Governor and all committee members for their input and additional recommendations on December 21, 2006. This final report incorporates the committee members' additional comments and recommendations.

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Going forward, in the interest of maximizing public safety, it is vital to continue updating the emergency communications plan in response to changing conditions and technological advancements. This will help assure that government agencies and the news media do the best possible job of reaching out to the public during times of crisis with potentially lifesaving information.

## **OCTOBER 15 EVENTS**

A major earthquake struck off the Big Island's Kona coast on Sunday, October 15, 2006 at 7:08 a.m. HST. Within minutes the O`ahu-based Pacific Tsunami Warning Center alerted State Civil Defense (SCD) that no tsunami was generated as a result of the earthquake. This information was received simultaneously by all County Emergency Operations Centers and Warning Points (police departments) over the Hawai`i Area Warning System (HAWAS) voice broadcasting system.

Following are some important developments that took place on Oct. 15, as discussed by committee members:

### **Official Communications**

- At 7:08 a.m., a 6.7 magnitude earthquake occurred in the vicinity of Kiholo Bay, Hawai`i.
- At 7:15 a.m., Pacific Tsunami Warning Center issued a Tsunami Information Bulletin for the State of Hawai`i, advising: "NO TSUNAMI IS EXPECTED. REPEAT. NO TSUNAMI IS EXPECTED. HOWEVER, MANY AREAS MAY HAVE EXPERIENCED STRONG SHAKING."
- At 7:20 a.m., Hawai`i County Mayor Harry Kim, as head of the Hawai`i County Civil Defense, contacted KKBG and advised the radio station that there had been an earthquake but no tsunami was generated. KKBG was broadcasting at that time.
- O`ahu Civil Defense Agency (OCDA) attempted to use the Emergency Alert System Live Broadcast Mode to air emergency messages through radio stations operating with backup power. The EAS was not received by the stations. Clear Channel Communications said its system never showed any message from OCDA.
- At 7:57 a.m., State Civil Defense public information officer Ray Lovell contacted KSSK - which had begun live coverage a few minutes earlier when off-duty personnel reached the station - and advised the station's listeners that there had been an earthquake but no tsunami was generated.
- Civil defense sirens were not sounded, as some members of the media and the general public suggested should have occurred. The threshold magnitude to trigger an automatic tsunami warning is 6.9. That threshold was not met on Oct. 15. The larger of the two quakes was 6.7. The sirens are to warn people that a tsunami or other disaster is about to happen. The sirens are not meant to tell the public that something is not going to happen. Sounding the alarm in this case would have created confusion and panic. It is important that civil defense not lose the trust of the people by sounding an alarm when there is no imminent danger.

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- At 9:57 a.m., SCD issued a civil emergency message (CEM) through the emergency alert system asking people to stay off the roads due to traffic lights not working and to use the phones only for emergencies. The high volume of calls in the minutes/hours following the quake jammed telecommunications systems, making it difficult for emergency responders, government officials and the media to communicate.
- Throughout the day, State officials including Governor Lingle, Lt. Governor Aiona, State Transportation Director Rod Haraga, State Tourism Liaison Marsha Wienert, Civil Defense Vice Director Ed Teixeira, and Civil Defense Public Information personnel conducted numerous telephone interviews with radio stations to provide updates on the situation, as well as to relay information from airlines regarding outbound flights.
- A news conference was held at 3:00 p.m. by Governor Lingle and Lt. Governor Aiona, their cabinet, SCD officials and other emergency responders.

### **Media Communications Disrupted by Power, Phone Outages**

- According to a survey conducted by SCD, 80 percent of media stations statewide were off-the-air immediately following the crisis due to a lack of emergency power sources.
- KITV 4 studio facilities remained operational, but their transmitter was down due to lack of power at the transmitter site. KHVO, their transmitter site on Hilo, was the only one that remained up. They were also able to uplink their programming via satellite, allowing their programming to be viewed on the mainland. The KITV Web site had 405,000 page views from the 808 area code that day.
- The KHNL TV 8 was off the air due to no emergency generator at their broadcast tower which is located in the Hilton Hawaiian Village. KFVE 5 television station remained on air the entire day, employing a backup generator at their Palehua transmitter site. The biggest concern was the station's inability to obtain updated information in a timely fashion so viewers could be alerted.
- KHON-TV 2 was off the air on O`ahu, but their neighbor island transmitter sites were up.
- KGMB-TV 9 was off the air because the station does not have a generator.
- Oceanic Time Warner Cable reported that all of its operation centers were active during the emergency. While these centers were operational, TWC/Oceanic customers were unable to receive television, telephone or data service since the infrastructure which powers the TWC/Oceanic signal out to user locations are not backed up with emergency power.
- While two O`ahu television stations were on the air, only those residents who were using external television antennas and televisions powered by batteries or portable generators would be able to receive the programming. All others on O`ahu who view television over cable television could not see the programming due to the power outage.

- LeSEA Broadcasting's (KWHE TV 14) satellite truck was mobilized by NBC, Fox News, and ZDF German TV as early as 8:30 a.m. on the day of the earthquake, providing television feeds to networks/stations outside of Hawai'i.
- There was some confusion regarding Emergency Alert System Local Primary (LP) radio stations and their role and capability to operate during a power outage. On O`ahu, KSSK (LP1) and KRTR (LP2) are the designated stations. They are equipped with emergency backup power. KIPA radio station on the Big Island was still listed as a Local Primary station on the Big Island, despite the fact that it had been off the air due to sale of the station. The plan has been updated to remove KIPA as a Local Primary. Pacific Radio Group's KKBG-FM is now the LP1 for the Big Island. New West Broadcasting Corp.'s KWXX is the official LP2 for the Big Island.
- KKBG-FM on the Big Island announced the earthquake by 7:15 a.m. This was followed by Pacific Radio Group's sister stations in East Hawai'i: KAPA FM (also serves South Point) which went on the air by 7:45 a.m., KPVS-FM by 8:00 a.m., and KHLO-AM by 8:30 a.m.
- Due to loss of electricity, Pacific Radio Group's four West Hawai'i stations (KLEO FM, KAGB FM, KLUA FM and KKON AM) that simulcast its four East Hawai'i stations were not able to get on the air until around 10:00 a.m. Once on the air, the four West Hawai'i stations were manned throughout the day and provided updates about road closures, damages and announcements from Civil Defense.

Note: Since the October 15 earthquake, Pacific Radio Group has installed working generators at its West Hawai'i Kaloko site for three of its FM station transmitters (KAGB, KLEO and KLUA). The company is currently working with the Royal Kona Resort to install a generator at its Kona studios which are located at the Royal Kona Resort.

- New West Broadcasting Corp.'s KWXX, KNWB, and KPUA Hilo were on the air within about 40 minutes of the earthquake but were in contact with Civil Defense within about 10-15 minutes of the event.

Note: New West Broadcasting has contracted and is in the process of installing backup power for its Hilo and Kona transmitters for all four stations (KWXX, KAOY, KNWB, and KPUA).

- On O`ahu, KSSK had a trained operator in the studio who made an announcement about the earthquake at 7:28 a.m. By 7:40 a.m., eight staff people were in the studio and on-air.
- The public affairs officer from the State Department of Defense was sent to KSSK to serve as a liaison; however it was difficult to provide him with updated information via cell phone and the radio station's "hotline" was continually busy.
- COX Radio's six O`ahu stations (KRTR 96.3 FM, KCCN 100.3 FM, KINE 105.1 FM, KPHW 104.3 FM, KRTR 650 AM, and KKNE 940 AM) were on the air intermittently.

Note: Since the earthquake, COX has replaced its KRTR generator at WiliWilnui Ridge with a 25,000 watt Caterpillar generator. Cox has 550 gallons of LP fuel which will last six or seven days.

- Hawai'i Public Radio reported that their station was staffed and was prepared to broadcast, but did not have electric power or phone service.
- On Maui, Pacific Radio Group's KPOA 93.5 aired its first report at 7:25 a.m. Its sister stations, KJKS, KJMD and KLHI, were on air shortly thereafter, with 15 staff members arriving in the offices in Kahului. Pacific Group's two AM stations, KMVI and KNUI, run on separate generators and were also brought on line.
- To serve its Japanese-speaking listeners, KZOO radio station contacted KSSK to convey information. KZOO also broadcasted information to 36 stations in Japan around 10:30 a.m. HST.
- KSSK received calls from bilingual persons who asked to go on-air to deliver messages in various languages. It was difficult for KSSK to verify whether the information was accurate, however, and recommended alerting the international consulates as a source of bilingual speakers.
- Most print and television media posted information about the emergency throughout the day on their Web sites.

### **Telecommunications**

- The ability to communicate was severely hindered by the fact that cellular phone service did not work for many service providers that day. In addition, the high volume of calls stressed wireless phone systems statewide. Wireless push-to-talk service used by State leadership and emergency management personnel remained operational, and generally available.
- Hawaiian Telcom's land-line phone service or plain old telephone service (POTS) was not interrupted. Hawaiian Telcom's locally based Network Operations Center was fully operational, providing uninterrupted management of services and call traffic.
- T-Mobile reported that 59 percent of its network was operational and that the volume of calls was two times larger than normal. Also, the availability of diesel fuel for backup power generators was a concern if the blackout had continued for an extended amount of time.
- Cingular reported that it lost close to 50 percent of its cellular sites, and that if subscribers traveled a mile from their homes, they may have been able to complete their calls.
- Verizon Wireless reported a 250 percent increase in call volume, and noted that many technicians deployed to fix cell sites were stuck in traffic.

## **Visitor Industry Communications**

- For the visitor industry, the biggest challenge was relaying emergency communications via cell phone, when network reliability was marginal at best.
- It was noted that hotels are aware of their responsibility for the safety and well-being of guests during emergencies and therefore have necessary equipment on hand. The hotels have emergency plans, and the majority of them implemented those plans.

## **COMMITTEE RECOMMENDATIONS**

Based on input from committee members, the following key recommendations for improving the emergency communications plan were formulated:

1. Update the State of Hawai'i Emergency Alert System plan which was last updated on March 31, 2004. An interim change has been distributed among emergency managers and the broadcast industry on November 6, 2006. As part of the updating of the plan, the Local Primary stations will be verified on a monthly basis, to ensure they have the ability to broadcast in emergencies.
2. Establish a "media center" or Joint Information Center in the (soon-to-be-acquired) SCD emergency operations center annex in Diamond Head Crater to provide reporters a working area, telephone lines, Internet access, electrical access, and a place to obtain timely information from State and Federal officials.
3. Install dedicated phone lines for various, accredited electronic and print news organizations. The cost of installing these "hard lines" or "red phones" would be covered by the individual broadcasting outlets. The cost could possibly be reduced by using federal funds from the Department of Homeland Security via future grants. In addition, a call-in line or dedicated web access site will be established for media outlets that do not have dedicated phones at emergency operations centers (EOCs).
4. Provide media organizations with updates every 30 minutes or as frequently as possible in person as well as via conference calls and/or video conferences, based on current level of emergency at that half-hour mark. This would improve the flow of information to the public and help refute unsubstantiated rumors and other sources of false information.
5. In order to increase efficiency in disseminating information, a State DOD or SCD public affairs officer will be assigned as a liaison who will be dedicated to the media at any activation of the State EOC. (This will be a function of the soon-to-be-established Joint Information Center in Diamond Head Crater). The public affairs officer's main responsibilities, in conjunction with Governor's Communications Team, will be to respond to media requests for information or interviews; coordinate informational briefings; release information to the media and public; and correct misinformation.

6. Explore the possibility of television and radio stations automatically transmitting approved messages through the Emergency Alert System, as is the case during hazardous weather conditions. Broadcast representatives asked for an EAS code that will activate receivers at broadcast stations for events that are not covered under present codes. SCD, working with the State Emergency Communication Committee and other federal agencies, has assigned a "civil emergency" (CEM) code that will be used for this purpose. This would apply in the case of an earthquake that does not meet the 6.9 magnitude threshold to trigger a tsunami. An EAS would inform the public that an earthquake has struck, but there is no tsunami threat. This was successfully used during the recent earthquake aftershock off the Big Island on Thanksgiving morning November 23, 2006.
7. Establish a dedicated SCD Web site to provide the media with updates online. This would assist media organizations that are unable to send a reporter to SCD or who are unable to use a phone system. To minimize the possibility of islandwide or statewide service disruptions, as was the case on Oct. 15, the Internet server could be located at a site with backup power.
8. In most cases, cell phone text messaging functions were more reliable than regular voice service. The ability to text message emergency alerts to all cell phones was discussed by the committee. The cellular providers agreed to assess the feasibility and technological capability of using the text messaging function for emergencies. The providers are looking into whether this would violate any customer confidentiality policies.
9. Explore the possibility of communicating via electronic message signs on the freeways. The State Department of Transportation Highway's Deputy said it is possible to use the permanent electronic signs. Deploying the portable message signs would require additional logistics that the department would need to look into. Similar signs are located outside of the Aloha Stadium and can also be activated.
10. Increase public awareness about emergency preparedness and what to do in the event of an emergency. In the aftermath of an emergency it is incumbent on individuals, families, businesses, and organizations to have an appropriate preparedness plan. The committee recommended enhancing existing public education campaigns to inform people about how to prepare for various emergencies that could occur in the State of Hawai'i, and what they should do when an emergency happens. Print and broadcast news outlets agreed to participate in this type of public education (PSA) campaign. The education component would also be tied into the monthly emergency broadcast/siren test.
11. Work with the Hawai'i consular corps so they can inform foreign citizens about the nature of the emergency. KZOO (Japanese) and KNDI (all other foreign languages) will broadcast the emergency messages to non-English speaking residents and visitors in the State. KZOO and KNDI will be assisted in their efforts to establish backup power generators.

12. Identify sign language translators and other individuals who can assist in communicating information to individuals who are hearing impaired or have other special needs, including closed captioning capabilities.
13. News outlets requested priority in restoration of power during an outage. While SCD is bringing this to the attention of Hawaiian Electric Company, it should be noted the order of power restoration is based on HECO's plans.
14. News outlets and telecommunications providers requested assistance in obtaining diesel fuel for backup power generators during extended blackout periods. While many of the organizations have generators, the amount of fuel that can be stored is limited due to safety concerns. Transporting the fuel is also a concern. The National Guard also has fueling units that could help restock gasoline supplies where needed. The State Adjutant General will explore this possibility further.
15. Continue convening communications committee meetings on a quarterly or as-needed basis to make additional refinements to the emergency communications plan and track the progress of recommendations 1 thru 14 above. In addition, include the media in an emergency response drill once the recommendations above have been implemented.

## **CONCLUSION**

While the lives of many residents and visitors were temporarily disrupted on Oct. 15, primarily due to widespread loss of electrical power, it is fortunate that no deaths or serious injuries occurred as a result of the earthquakes. That said, the emergency situation that occurred served as an urgent wake-up call to government agencies, the news media, telecommunications providers and electric company that the current emergency communications system can be improved.

The present Emergency Alert System was instituted in 1996, and the State's Emergency Satellite Communications System became operational in 1998. EOC telephone conferencing systems were installed and upgraded in 1998 and 2001, respectively. The State Video Conference network was established in 2004 and is currently being upgraded to provide for additional users to be included in the conference. In 2005, State Civil Defense established a Virtual Joint Information System using a web-based PC video collaboration tool connecting to county EOCs, the Governor's and Mayors' communications officers, the Department of Health, Department of Land and Natural Resources, and the National Guard Joint Operations Center. In 2006, KU Band satellite systems have been purchased to improve emergency communications on a mobile van and the State EOC. This capability is currently being tested.

Looking ahead, SCD will continue to work closely with federal officials in improving the State Emergency Plan, taking into account lessons learned from major disasters in other parts of the country. It is the committee's desire to improve communications beyond the traditional communications methods to include multiple non-traditional communications means to disseminate information.