

City of Los Angeles

California



ANTONIO R. VILLARAIGOSA
MAYOR

April 17, 2012

The Honorable Members of the:
Public Safety Committee
Information Technology and General Services Committee
c/o City Clerk Office
Room 395, City Hall
200 North Spring Street
Los Angeles, CA 90012

MT. LEE POWER OUTAGE

On April 4, 2012, your Honorable Committee directed the Department of General Services (GSD) to report on the power outage at the Mt. Lee communications site.

BACKGROUND

Mt. Lee serves as a communications center for a number of Public Safety agencies, including both the LAPD 911 Metropolitan Communications Dispatch Center and Valley Communications Dispatch Center.

GSD is responsible for routine monthly testing and maintenance of emergency back up power generators at all City locations, including Mt. Lee and other communications sites. These power generators are needed to maintain the power service when the Department of Water and Power (DWP) power is interrupted. GSD testing of the power generators occurs on a monthly basis to ensure these systems are functioning properly and are ready at all times. GSD notifies the Information Technology Agency (ITA), as the lead agency, of such tests at communications facilities to facilitate any required planning or coordination efforts. This testing procedure has been in place for at least 15 years.

On April 3, 2012, GSD conducted a routine monthly emergency generator test at Mt. Lee. The generator functioned properly, but the Uninterrupted Power Supply (UPS) system dropped power momentarily, which in turn, impacted the facility. ITA is responsible for maintaining the service contracts for the UPS systems at Mt. Lee and immediately responded to the incident. More detailed findings are provided below.

FINDINGS

- On April 3, 2012, GSD conducted an emergency generator test at Mt. Lee. The test involved a simulated power outage. All electrical components operated as designed, the emergency backup generator started within seconds, and the Automatic Transfer Switch (ATS) transferred the electrical load from the main electrical feeder to the emergency backup generator.
- During the test, the UPS system experienced a failure that dropped the power service for a few seconds. An assessment performed by ITA with GSD and the UPS manufacturer, has determined that a power level synchronization and need for calibration most likely caused the quick power drop. Both primary and back-up UPS system failed and did not maintain the power load during the ten-second or less transfer period between when power was turned off and the backup generators initiated. The reason for the failure has yet to be determined. Electrical power was restored to Mt. Lee in less than one minute.
- The UPS systems power drop caused the primary systems to fail, however, the secondary systems were operational.
- The other communication systems were restored between 5 minutes and 4 hours. The Valley Communication Dispatch Center was not affected by these events due to a planned closure for preventative maintenance activities.

ACTIONS Completed

- Investigated root causes: ITA is working to determine the likely cause of the UPS failure and developed a plan to correct any design deficiencies in the system with the assistance of UPS system manufacturer, Gruen Associates (electrical engineering consultant), General Services and Bureau of Engineering (BOE).
- Installation of redundant systems: to mitigate and lessen the impact of further incident of this type, ITA has installed dedicated portable 4 rack mounted UPS systems.

ACTIONS In Process

- Tune-up and Preventative Maintenance of UPS units: ITA has been working with GSD, the UPS manufacturer (Liebert) and Gruen, to develop a plan to perform deep diagnostics and PM services to the UPS system hardware. Liebert believes that this work will correct the conditions that caused the power to drop. The work involves maintenance services on both UPS units and the attached components.

- Fortify and add redundancy for MT. Lee : ITA requested and was granted funding in this fiscal year to perform various power upgrades to the Mt Lee facility. Recently, Gruen Associates was awarded the contract for these upgrades. BOE has been assigned to manage this project. The contract with Gruen has been changed to include an additional service to assist ITA and GSD in the coordination efforts of the current PM work efforts.
- Enhanced interagency coordination: As directed by the Mayor on April 5, 2012, GSD implemented a revised procedure for notification of all future generator tests. ITA, the lead agency at Mt. Lee, along with City departments supported by Mt. Lee, will receive the annual schedule of monthly generator tests. Each agency will also be notified via email and telephone, one week prior to each scheduled test. GSD has contacted each agency to determine who the appropriate contacts should be.

GSD, ITA, LAPD, BOE, the Mayor, and your Committee will continue to work together, to ensure that priority public safety communication service facilities remain fully functional and accessible at all times, within the boundaries of the city budget.



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