

BLACKOUT PREPAREDNESS

The Office of Emergency Services and the California National Guard Each Have Weaknesses in Their Blackout Preparations

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Office of Emergency Services' response as of October 2002

California National Guard's response as of September 2002

The Joint Legislative Audit Committee asked us to determine whether the California National Guard (CNG) has a plan to deal with blackouts resulting from the State's energy shortage. Our review also includes an evaluation of the Office of Emergency Services' (OES) plan since it is primarily responsible for assuring the State's readiness to respond to and recover from man-made emergencies such as electrical blackouts. Specifically, we found:

Finding #1: The OES has an alternative power source during a blackout but other concerns about its preparedness exist.

In the event of a blackout, the OES has a generator at its headquarters as an alternative power source. The OES headquarters houses its State Operations Center, which is one of the key locations it uses to receive and process local government's requests for assistance. According to the OES, it runs and inspects the generator on a regular basis, which is a reasonable precautionary step to ensure that this critical facility will have power. However, the OES may have other weaknesses that can affect its blackout preparedness.

In March 2001 the OES distributed to its staff an Energy Shortage Response Matrix (response matrix), which provides background and insight into potential public safety impacts, state actions to date, and its policy relating to energy responses. For example, the OES found that an evaluation of its plans for transferring responsibilities for critical functions to unaffected units and relocating staff to an alternative work site was necessary to refine its Business Continuity Plan (continuity plan). It also recognized the need to evaluate its continuity plan and emergency procedures to ensure back-up systems are operating

and whether it could handle a natural disaster during an energy crisis. The OES asserts that it has taken steps to address some of the activities found in the matrix, but we are uncertain if or how it has resolved a few key concerns it raised in its response matrix.

To strengthen its blackout preparedness, the OES should, at a minimum, review and document its efforts to ensure that its relocation and transfer plan, business continuity plan, and emergency procedures address sufficiently the State's energy situation.



OES Action: None.

The OES' one-year response to our recommendations was simply a reiteration of all of its previous response letters. The OES states that weaknesses in blackout-specific preparedness activities were already addressed by pre-existing, all-hazard emergency management practices. We disagree. The OES prepared a response matrix in March 2001 and for certain potential public safety impacts, the OES identified additional steps it should take to minimize disruptions to its operations. For example, it recognized the need to evaluate whether it could handle a natural disaster during an energy crisis. Because the OES identified these concerns itself, it seems clear that they were not already addressed by pre-existing practices as the OES is now claiming.

Further, we disagree with OES' belief that its continuity plan and Relocation and Transfer Plan can address a potential blackout situation. In June 2001 the OES identified concerns with its continuity plan and Relocation and Transfer Plan. Moreover, since the OES did not provide us with any evidence such as changes it made or changes that may be pending during the audit or as part of its most recent response, we question whether it has taken the necessary steps to resolve its concerns about its own preparedness.

Finding #2: The OES has taken steps to inform the emergency response community and others about blackouts but some efforts could be stronger.

In addition to preparing itself for blackouts, the OES has worked with the emergency response community to share information about the energy crisis and assist them in planning for blackouts. The OES has also implemented a notification process that provides for a series of alerts prior to a potential blackout. However, the OES lacks a way to evaluate its effectiveness

and therefore, may overlook necessary changes or improvements. Finally, the OES developed a guide for local governments in planning for power outages. Although this document addresses many critical planning issues, the OES may not be able to assist local governments because it has not designated staff to respond to inquiries nor has it trained its staff on how to use the planning document.

We recommended that the OES establish a method to periodically evaluate its notification process, which includes documenting the results of its evaluations and following up with participants to ensure that all necessary changes are made. In addition, the OES should assign specific staff to be responsible for responding to local governments' inquiries about its power outage planning guide. It should also train these staff on how to use the guide and advise local governments on their planning efforts.



OES Action: None.

The OES' one-year response to our recommendations was simply a reiteration of all of its previous response letters. The OES states that there is no need for it to specifically evaluate its notification process because the OES uses these same tools for all other types of disasters and emergencies daily. We disagree. In a meeting held on August 14, 2001, the deputy director of Emergency Operations, Planning and Training Division agreed that a formal, periodic assessment of how the notification process is working would be beneficial to identify process improvements. The deputy director also told us that the OES' blackout notification process improved upon its prior notification procedures. For example, it allowed for expanded use of its Emergency Digital Information Service and the incorporation of its Response Information Management System. Therefore, we would expect the OES to ensure that these new enhancements are effective.

The OES stated further that even though there are some issues unique to blackouts, there is no need to designate or train staff to respond to local government's inquiries because these capabilities exist within its structure already. We disagree. Because the OES did not designate and train staff to accept these inquiries, there is a potential that when the local governments contact the OES for assistance, they may get passed on to multiple staff and not receive the help they need at all. Moreover, because as the OES states there are issues that are unique to blackouts,

despite their technical expertise in overall emergency management operations, staff may not be able to assist the local government in using OES' Electric Power Disruption Toolkit for Local Government.

Finding #3: Although its communication systems are redundant, the CNG's lack of maintenance weakens these systems.

The CNG's outage plan specifies that the armories are to rely on commercial telephone systems as the primary means of communication. If commercial services are unavailable, the plan directs staff to use two alternative communication methods: high frequency radios (HF radios) and cellular phones. Although the CNG's outage plan appears reasonable in that it provides for redundant methods of communication, because the CNG does not ensure that its HF radios and cell phones are intact and operational, it cannot be certain that these alternatives will be available when necessary.

To strengthen its readiness for blackouts, the CNG should develop a plan that sets forth inspection dates for each location with a HF radio, the person responsible for the inspection, and a date certain for the completion of all repairs; and continue with these maintenance checks on an ongoing basis. In addition, the CNG should establish a process to periodically check that each cell phone is operating and the batteries are fully charged.

CNG Action: Partial corrective action taken.

In its six-month response, the CNG provided us with a maintenance schedule for its 19 HF radios including a party responsible for inspections and an inspection date and stated it planned to inspect all the radios by March 2002. The CNG also provided information demonstrating that it had made six of its planned visits. In its one-year response, the Guard stated it regularly conducts radio operations checks from its headquarters, but is attempting to identify funding to continue the periodic maintenance inspections and repairs. The Guard did not indicate how many radios required repair.

The CNG also reported that it recalled the cell phones it issued to the armories but these phones can and will be issued if necessary.

Finding #4: The CNG does not monitor its tactical generators' operability.

The CNG's outage plan specifies that tactical generators may be used in CNG facilities when power is essential for safety, security, and mission requirements. The CNG normally uses tactical generators when staff are in the field and need a power supply for their equipment. Although these generators cannot be connected to the buildings' electrical system to supplant traditional power sources, they can be used to operate portable light fixtures and radios thereby contributing to the normal operation of a CNG facility during a blackout. However, the CNG does not ensure its facilities periodically test its tactical generators. Therefore, the CNG has limited assurance that it can use these generators in the event of a blackout.

We recommended that the CNG develop policies and procedures for testing and maintaining its tactical generators and include these policies and procedures in its outage plan. In addition, the CNG should continue to monitor the operational status of these generators.

CNG Action: Corrective action taken.

The CNG reports that it has amended its Power Outage Plan, which now includes a requirement for field commanders to test their units' tactical generators monthly. The headquarters staff will also review monthly maintenance reports the units submit in order to monitor the generators' operational status.

Finding #5: The CNG does not include in its plan or adequately monitor its headquarters' back-up generators.

The Department of General Services expects state agency and department emergency plans to address how they will ensure that any back-up generator sources are tested and readily available. Although the CNG's plan addresses tactical generators, it does not address the back-up generator in its headquarters building. According to the Director of Plans, Operations and Security, once a week an automatic timer trips and the back-up generator will start up and run for several minutes to ensure the generator is working properly. Because the back-up generator is critical to the CNG's Joint Operations Center during a blackout, we would expect it to include this generator in its plans and to have policies and procedures in place for tracking the weekly generator test and as part of that test, inspecting the generator

for sufficient fuel, leaks, or other malfunctions. However, according to the Military Support Civilian Authorities Communications Officer responsible for the headquarters' generator, no such policies or procedures exist; he simply listens for the generator to start up each week.

We recommended that the CNG update its outage plan to address its headquarters' back-up generator that it needs to operate its Joint Operations Center, periodically inspect it for leaks, check its fuel levels and other critical elements, and execute a maintenance contract to ensure that more extensive inspections occur on an ongoing basis.

CNG Action: Corrective action taken.

The CNG amended its Power Outage Plan to include weekly tests of its headquarter's back-up generator. In addition, the CNG developed a preventative maintenance inspection checklist to follow when testing the generator. Finally, the CNG noted that a contractor inspects the generator quarterly.