



Fail in the Jail

No Lights, No Camera, No Action?

Summary

On September 28, 2019 an unplanned power failure at the Santa Cruz County Main Jail resulted in the loss of critical capability to provide safe and secure management of the jail. While the risks were known well in advance of the failure event, steps to manage and mitigate the risks were not taken. Established, comprehensive policies for power management in an emergency were in place, but those policies were not followed. Evidence of process improvement and risk management practice after the event is as yet unproven.

Background

The Grand Jury received the *County General Services After-Action Report/Improvement Plan 10/3/2019*^[1] (After Action Report) by document request. The power failure described occurred during the same months as the PG&E Public Safety Power Shut Off (PSPS) events of 2019.^[2] The subject power failure was not related to these planned PSPS events.

The After-Action Report described the events of September 28-29, 2019 as follows:

At approx. 3:49pm PG&E experienced an equipment failure causing a cut of PG&E supplied power to the Main Jail and 701 Ocean Street campuses. Impacted facilities included 141 Blaine Street Women's Jail, Main Jail, 271 (Yellow House) Water Street, 701 Ocean Street, and 691 Ocean Street (Fleet).^[3]

The power failure lasted approximately 26 hours.

As described in the After Action Report, critical services were lost and backup failed to properly operate in several critical areas. Clearly, the safety of inmates and jail personnel was compromised. This cannot be tolerated. Leadership, ownership, and accountability must be evident across the County administration.

Scope and Methodology

Through interviews and document requests, the Grand Jury sought evidence of management of the policies as outlined in the Sheriff's policy manual for detention facilities.^[4] Using the documented After Action Report^[5] we conducted limited interviews of key personnel to confirm or refute the findings of that report and investigate the follow-up actions taken to remove risks and improve operational effectiveness and capability.

Note that while this power outage affected other facilities including the 701 Ocean Street Government Center, these were not covered by this investigation. There is a detailed chronology describing the events and state of emergency throughout the 26-hour power outage. This report will not cover the hour-by-hour events but rather will report on the risk management and mitigation capabilities, which should have been operational and which need to be implemented to ensure safety and security.

The County of Santa Cruz General Services Department and Sheriff's Department were contacted by the Grand Jury to confirm that all critical operation and procedural processes have been repaired to provide secure operation of the jails during power failure events. Proper management oversight and review were probed. The Grand Jury looked for review and financial support decisions, as taken by the Board of Supervisors, required for operations and capital investment. The Grand Jury also examined test and validation of critical operational capabilities.

We sought to confirm that objectives were set for monitoring and management of emergency preparedness. Regarding communications, we investigated how the elected officials were kept informed, before, during, and after the event.

Operationally, reviews and exercises should be regularly conducted to verify progress. The Grand Jury sought confirmation of training of personnel for after-action procedural improvements.

Incomplete Investigation and Interviews

Please note that the Grand Jury was not able to schedule all desired interviews, or receive all requested documents, from the Sheriff's Dept to fully substantiate (inform) our facts, findings, and recommendations. These difficulties predated the March 2020 COVID-19 pandemic restrictions.

Facts and findings in this report may consequently be incomplete or require further investigation in the future.

Investigation

Policy

The Grand Jury examined the "Santa Cruz County Sheriff's Office Correction's Policy Manual", "Policy 403, Emergency Power and Communications."^[6] Specifics in that policy include:

- *403.1: PURPOSE AND SCOPE - guidelines regarding back-up power and communication systems, and the inspection, preventive maintenance and testing of the systems to ensure a seamless transition in the event of a loss of power; ensure that power to critical systems and communications continues to operate within the facility in the event of a loss of power.*
- *403.2.1 PREVENTIVE MAINTENANCE -*
 - *It is the responsibility of the Sheriff and Chief Deputy to ensure that there is sufficient emergency power to operate all essential lighting, security equipment, safety equipment, and communications systems.*
 - *The emergency power system should have sufficient fuel to allow the facility to operate continuously for a three-day period, if necessary, without external resources.*
 - *The emergency power system should be inspected, tested, and maintained as necessary.*
 - *In the event that the system fails, the Chief Deputy or Sergeant should contact the designated maintenance authority or repair company to obtain necessary repairs as soon as practicable.*
 - *If the emergency power system cannot be repaired within eight hours, portable emergency generators should be secured as a temporary emergency power source until the repair or replacement of the primary system occurs.*

- 403.2.2 SAFETY AND SECURITY -
 - *All safety and security equipment will be repaired or replaced in an expedited manner by qualified personnel.*
 - *In the event that safety and security equipment become inoperable or damaged and it is not safe to operate a secure portion of the facility, that portion of the facility should be vacated and the inmates housed elsewhere. Or, staffing should be increased sufficiently for the area to remain safe and secure until the repair can be completed.*
- 403.2.3 INSPECTION AND TESTING -
 - *The Chief Deputy or the authorized designee is responsible for scheduled testing of emergency power systems (15 CCR 1029).*
 - *All emergency equipment and systems should be inspected and tested by a qualified individual at least quarterly.*
 - *Power generators should be inspected and tested by a qualified individual at least weekly.*
 - *All testing and inspections shall be documented and the results included in a report to the Chief Deputy.*

After-Action Report: Issues

The Grand Jury has learned the following regarding these policy specifications: According to the After-Action Report,^[7] Sheriff operations reported

...limited operational abilities due to power outage that had a potential for imminent risk to health and safety of inmates and workers of the Jail facilities. Power Generator was unable to support the following systems:

- *No Ventilation in Main Jail,*
- *No overhead lights in main jail housing units,*
- *no perimeter cameras,*
- *Fire evacuation doors became inoperable,*
- *No lighting in booking area,*
- *no power to kitchen,*
- *pre-book arrests had to be completed via paper method.*

All causing significant threats to safety of inmates and jail personnel.^[8]

These are clear lapses in the compliance with the Policy 403 detail outlined above. We were unable to determine how the jail staff complied with Policy 403.2.2, specifically whether inmates were vacated and moved to another part of the facility, or if staffing was increased.

In addition, the After-Action Report stated that:

- *No Policy or Procedures were identified depicting response timeframes and what to do when response is required. No Policy or Procedures are documented depicting the response or monitoring responsibility of On-call Staff.
Although sufficient levels of fuel were on site, the fuel was not accessible as had been relied on.*
- *Procedures and Policy for obtaining additional fuel are not documented. Systems were not double checked to ensure that all fuel sources were available to maintain 72 hours of operational time and procedures to obtain additional fuel were not documented.*
- *The Main Jail generator does not supply sufficient power to maintain mission critical operations and presents significant health and safety concerns for inmates and staff employed at the Jail facilities. Current generators can only power about 10 – 15% of Jail facilities when in failure backup mode. Based on the mission critical operations, additional power generation is needed to properly power Main Jail Campus services. Extensive engineering is needed to upgrade Emergency Electrical Systems to be effective in maintaining basic mission critical services.*
- *When the fuel shortage was identified at approximately 2 a.m. on-call staff should have immediately elevated the concern to upper management. No procedures are documented identifying when issues should be elevated....
Based on the severity of the event, protocols should be followed to trigger elevated communication.^[9]*

It was notable that during our interviews, we learned that contract personnel responsible for power operations in the jail were unaware of Policy 403. In addition, personnel with responsibility for power infrastructure recovery and redesign at the jail had not seen the After Action Report. And the issues with fuel availability which surfaced throughout the outage were not communicated or elevated to upper management. The Grand Jury found no evidence of written procedures for escalation of emergency conditions. This was also stated as referenced earlier in the After Action Report.

Backup Capability

The Grand Jury interviews explored what was known before, during, and after the outage event concerning the required backup capability as described in Policy 403.2.1.

What was known by General Services engineering staff was that the backup generators could deliver 90% *of minimum systems requirements*, not full power. Thus, even in the best-case scenario, the jail would have had to operate in an impaired state. As we discovered, at the time of the power outage, two of the three backup generators at the jail were down for repair awaiting parts. This state of disability of the backup system existed for 6 months prior to the outage. At the time of the power outage it was believed by those interviewed that if all three generators were available they would have supplied

about 90% of required power. However, reconciling these facts, according to our interviews, the actual backup power capacity was a much lower portion of total power consumption. 90% of the minimum system requirements amount to 45% of the total power consumption of the facility.

The Backup Generators

The jail is backed up by two Capstone natural gas turbines (65 KW each) plus a reciprocating diesel generator (100 KW). (The diesel generator is what provided the 10% of power the jail had during the failure). On September 28, 2019, the Capstone turbines were inoperable. They were configured in a primary/secondary arrangement. The primary went down which therefore left the secondary turbine generator inoperable. As stated above, this failed state existed for 6 months.

Maintenance and Staffing

We learned that the County had problems getting replacement parts for the failed generator. Exacerbating the problem, the number of maintenance staff, who work on these systems across the County, had been reduced over time from 22 down to 12 due to funding, according to management personnel.

Steps Taken

The design of a new generator system has been undertaken under a county contract with Prime Design. This project, including funding for the new generator system, was funded and authorized by the Board of Supervisors in a budget letter approved February 25, 2020. It is estimated that it should take 1 to 1 ½ years to have a proper working generator installed and operable. Data loggers are being added to measure peak and average load in order to monitor and size the required backup capability.

The County now has a maintenance contractor for the main jail, under the purview of the County General Services Department. This maintenance agreement, which includes performance specifications, engages Peterson Power. In addition, the Sheriff's Department now has a contract for an emergency generator in the event that the installed backup generators fail to operate. The Grand Jury was unable to substantiate whether the emergency generators have been fully tested and procedures for connection and operation were fully documented, verified and exercised.

Both Capstone turbine generators are now running, with the diesel system on standby.

Overall, there was insufficient attention by those responsible to risk assessment and management. Gaps in execution of already existing policies were not recognized or addressed. Furthermore, the reliance on the funding and planning of new backup power generators is necessary but by no means sufficient to assure the continuous operation of critical capabilities at the County's correctional facilities. This must be addressed by leadership, methodically, routinely, and throughout all essential infrastructure elements in County correctional facilities.

Findings

- F1.** Contract personnel responsible for power operations at the County jail were unaware of Sheriff's Policy 403, which compromises the ability to reach a memorandum of understanding (MoU) between the County's General Services Department and the Sheriff's Department for operational roles and responsibilities.
- F2.** Some personnel with power infrastructure responsibility at the County jail had never read or reviewed the After-Action Report, so they were unaware of the actions they needed to take.
- F3.** While an emergency generator has been procured, adequate testing of methods of connection and operation has not been done yet.
- F4.** Ongoing communications of status and progress before, during and after an emergency are not in evidence between Jail personnel and County General Services personnel.
- F5.** The County was non-compliant with policy regarding emergency backup at the jail and remained non-compliant for months, including fueling, maintenance, testing, and emergency backup power generation.
- F6.** No policies and procedures were identified depicting response timeframes and what to do when a response is required during an emergency; no policies or procedures are documented depicting the response or monitoring responsibility of on-call staff at the County's correctional facilities.
- F7.** The failure to escalate critical issues by key County General Services and Sheriff's department personnel is very concerning. Procedures for escalation are lacking and this creates unwanted risk.
- F8.** Robust risk management and mitigation is lacking in the County and correctional facility organizations.

Recommendations

- R1.** The Sheriff's Department, in conjunction with the County General Services Department, should analyze and document plans to comply with stated policies by December 31, 2020. (F1, F3)
- R2.** The Sheriff's Department and the County General Services Department should have a documented Memorandum of Understanding (MoU) by December 31, 2020 for roles and responsibilities, particularly and specifically in the event of emergencies. (F3)
- R3.** The Sheriff's Department leadership and the County Administrative Officer and General Services Director should work together to provide regular communications as soon as possible with all personnel (detention, general services, leadership) who have a need to know, to provide status, project planning, and goal completion. (F2, F4)

- R4.** The Sheriff's Department and the County General Services Department should develop a document, updated quarterly, which shows compliance with Policy 403. The signed confirmation should be delivered to the Board of Supervisors by December 31, 2020. (F5, F6)
- R5.** The Sheriff's Department, in conjunction with the County General Services Department, should develop and document policies and procedures for escalation of critical issues by December 31, 2020. (F7)
- R6.** The Board of Supervisors should direct the County Administrative Officer to immediately define a risk management position, hire a qualified individual, and review all risk areas, mitigation plans and capabilities with the Board of Supervisors by June 30, 2021. (F8)

Required Responses

<i>Respondent</i>	<i>Findings</i>	<i>Recommendations</i>	<i>Respond Within/ Respond By</i>
Santa Cruz County Board of Supervisors	F4, F5, F7, F8	R6	90 Days September 17, 2020
Santa Cruz County Sheriff/Coroner	F1, F3–F8	R1–R5	60 Days August 18, 2020

Requested Responses

<i>Respondent</i>	<i>Findings</i>	<i>Recommendations</i>	<i>Respond Within/ Respond By</i>
Santa Cruz County Administrative Officer	F4, F7, F8	R2, R3, R6	90 Days September 17, 2020
Santa Cruz County General Services Director	F1–F7	R2–R5	90 Days September 17, 2020

Sources

References

1. County of Santa Cruz General Services Department. *Government Center/Jail Power Outage 9.28-9.29.2019 After-Action Report/Improvement Plan 10/3/2019*. (Document received by the Grand Jury.)
2. California Public Utilities Commission October 2019 events webpage. <https://www.cpuc.ca.gov/Oct2019PSPS/>
3. County of Santa Cruz General Services Department. *Government Center/Jail Power Outage 9.28-9.29.2019 After-Action Report/Improvement Plan 10/3/2019*, page 2. (Document received by the Grand Jury.)
4. Santa Cruz County Sheriff's Office. Santa Cruz County Sheriff's Office Correction's Policy Manual. https://www.scsheriff.com/Portals/1/RELEASE_20190924_T185521_Santa_Cruz_County_Sheriff_s_Office_Correction_s_Policy_Manual.pdf
5. County of Santa Cruz General Services Department. *Government Center/Jail Power Outage 9.28-9.29.2019 After-Action Report/Improvement Plan 10/3/2019*. (Document received by the Grand Jury.)
6. Santa Cruz County Sheriff's Office. Santa Cruz County Sheriff's Office Correction's Policy Manual, "Policy 403 Emergency Power and Communications," page 135. https://www.scsheriff.com/Portals/1/RELEASE_20190924_T185521_Santa_Cruz_County_Sheriff_s_Office_Correction_s_Policy_Manual.pdf#page=135
7. County of Santa Cruz General Services Department. *Government Center/Jail Power Outage 9.28-9.29.2019 After-Action Report/Improvement Plan 10/3/2019*. (Document received by the Grand Jury.)
8. County of Santa Cruz General Services Department. *Government Center/Jail Power Outage 9.28-9.29.2019 After-Action Report/Improvement Plan 10/3/2019*, page 3. (Document received by the Grand Jury.)
9. County of Santa Cruz General Services Department. *Government Center/Jail Power Outage 9.28-9.29.2019 After-Action Report/Improvement Plan 10/3/2019*, page 7. (Document received by the Grand Jury.)