

From: Allen, Meredith
Sent: 5/1/2013 3:04:17 PM
To: 'Cho, Raymond' (Raymond.Cho@cpuc.ca.gov)
Cc:
Bcc:
Subject: CONFIDENTIAL: Metcalf Sub Questions

Raymond,

Below are the confidential responses. These responses contain confidential security information and therefore should not be released externally. The attachment is also confidential.

If you need additional information or have questions on either the substance or the confidentiality please let me know.

Thanks!

Meredith

1. Does PG&E have any plans to make improvements to their operations to minimize the damage due to such incidents? For example, damage to equipment/surrounding environment and customer service. Yes, PG&E is performing a comprehensive assessment of the incident to identify lessons learned and will develop plans to mitigate the impacts of or prevent the future occurrence of such incidents. Redacted

Redacted

2. Are there any plans to improve security at substations permanently to prevent this from happening again? Are there any plans to improve the alarm response when the parameter

is breached? The fence line of the substation was not breached by the suspect(s). The shooting took place outside the perimeter fence that defines and protects the substation. The damage to the facility was caused by bullet rounds penetrating critical components related to transformers and breakers. The fence detection system activated based on rounds striking the fence and the security control officers responded to these alarms. However, the initial review of CCTV activation did not identify any intruder or related suspicious activity at the time of the event. A closer review of the cameras was conducted following the incident by back tracking the footage which did identify rounds striking the fence line. Security technology deployed at all 500kv substations include card access, fence detection and CCTV that is integrated with fence alarms. The system is designed for intrusion detection, including notification and verification via alarms and video monitoring. The design is configured at the fence line and inward and it does not monitor activities outside the substation fence. The vulnerability/attack vector that was used at the Metcalf Substation has been under review by NERC/FERC; however, until this event transpired, industry had not experienced an attack of this magnitude or well planned.

The Company is currently reviewing all security measures related to critical substations including mitigation strategies focused on this identified attack vector: Ballistic and IED hardening of critical substation components; intrusion detection and alarm technology deployment focused inward and outward from substation fence line; and incident response management. Security recommendations will be identified and implemented based on immediate, midterm and long term strategies. Following the attack, security was immediately elevated for all of the critical substations, which included law enforcement, armed and unarmed security personnel. We will continue to provide enhanced on-site security at our critical substations until physical security/technology mitigations have been identified, tested and installed to address different attack vectors.

3. From a system reliability standpoint, should PG&E have additional spare transformers on hand at each substation? PG&E's general practice is to keep spare transformer on hand at each substation. As a result of this incident PG&E is conducting a comprehensive assessment which will review, among other things the current practices regarding housing spare equipment such as transformer on hand. In addition PG&E's fleet includes mobile transformers and other spare equipment that can be moved between locations to enable facilities repairs.

If you have anything to add as far as lessons learned or planning for the future please feel free to also submit that to me.

I'm sure PG&E already has a procedure/protocol in response to this type of incident, so could you please send me a copy of that document? Please find attached the protocol for Responding to an Access Control System Alarm.

From: Cho, Raymond [mailto:Raymond.Cho@cpuc.ca.gov]
Sent: Friday, April 26, 2013 9:13 AM
To: Allen, Meredith
Subject: Metcalf Sub Questions

Hi Meredith,

Thanks for calling me back, Meredith. Please see questions below:

1. Does PG&E have any plans to make improvements to their operations to minimize the damage due to such incidents? For example, damage to equipment/surrounding environment and customer service.
2. Are there any plans to improve security at substations permanently to prevent this from happening again? Are there any plans to improve the alarm response when the parameter is breached?
3. From a system reliability standpoint, should PG&E have additional spare transformers on hand at each substation?

If you have anything to add as far as lessons learned or planning for the future please feel free to also submit that to me. I'm sure PG&E already has a procedure/protocol in response to this type of incident, so could you please send me a copy of that document? I'll be working on an outline to brief the directors so please provide what you can ASAP or by Wednesday (5/1) so that I can include that in our meeting.

Best Regards,

Raymond Cho

Utilities Engineer

California Public Utilities Commission

Electric Safety and Reliability

415.703.2236

raymond.cho@cpuc.ca.gov