

From: Hughes, John (Reg Rel)  
Sent: 2/20/2014 12:46:33 PM  
To: Lafrenz, Donald J. (donald.lafrenz@cpuc.ca.gov)  
Cc:  
Bcc:  
Subject: RE: Forecast Incremental Security - update.xlsx

Supervisory Control and Data Acquisition. It is one of the primary tools that system operators used to determine where the outage is located.

**From:** Lafrenz, Donald J. [mailto:donald.lafrenz@cpuc.ca.gov]  
**Sent:** Thursday, February 20, 2014 12:41 PM  
**To:** Hughes, John (Reg Rel)  
**Subject:** RE: Forecast Incremental Security - update.xlsx

Thanks, John. There might be further questions.

What does SCADA stand for?

-Don

**From:** Hughes, John (Reg Rel) [mailto:J8HS@pge.com]  
**Sent:** Thursday, February 20, 2014 12:37 PM  
**To:** Lafrenz, Donald J.  
**Subject:** Forecast Incremental Security - update.xlsx

Don

Attached is an updated spreadsheet that replaces the one that I sent you earlier. This reflects our 2014 GRC request. The prior spreadsheet inadvertently omitted some funding for substation security.

The large amount for “System visibility/Cyber-SCADA” is the upgrade of the IT software

which supports SCADA. This work supports both cyber security and reliability. Unfortunately it's not possible to pull out just the portion that relates to security.

Also note that PGE is planning to spend \$30 M and \$40 M for 2015 and 2016 transmission security upgrades that are not yet in a filed rate case. These costs would be for items like the Martin substation which is FERC jurisdictional.

Please let me know if you have follow questions.

One more matter- Have you given any further thought of having PGE's R/O personnel sign a NDA and assist you on the R/O?

PG&E is committed to protecting our customers' privacy.  
To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>