

From: Cherry, Brian K  
Sent: 12/10/2010 4:11:25 PM  
To: mpl@cpuc.ca.gov (mpl@cpuc.ca.gov); Brown Carol (cab@cpuc.ca.gov) (cab@cpuc.ca.gov)  
Cc:  
Bcc:  
Subject: FW: Cornerstone Reliability - Status Report - December 10, 2010

FYI - in case you are interested in what is happening with Cornerstone. We are making good progress.

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**From:** Redacted  
**Sent:** Friday, December 10, 2010 3:51 PM  
**To:** Martinez, P.J. (ET); Kress, Michael A; Sellheim, Laura; Swanson, Michael; Parks, John; Dasso, Kevin; Lemler, Gregg; Johnson, Mark S; Owens, Crawford (ET); Hamilton, Gayle; Redacted Deal, Jeffrey; Delisle, Alynn; Redacted Salas, Edward A (ET); Williams, Geisha; Arndt, William; Redacted Wells, Kenneth (ET); Redacted Buchholz, Kristine (ET); Turner, Chris (ET); Jawed, Ferhaan (ET); Redacted Rose, Scott; French, Tom; Birdsall, Thomas H; Redacted Beasia, Raj S; Wells, Kenneth (ET); Woerner, Bob; Redacted Redacted Wolf, Malia; Abrahamson, Brian J  
**Cc:** Redacted Redacted Redacted  
**Subject:** Cornerstone Reliability - Status Report - December 10, 2010

**Team:**

Here is a update on our efforts to improve electric service reliability through the Cornerstone Improvement program. As you may recall, work began this past August with the formation of the Cornerstone Reliability team and initiation of all three major work streams; rural reliability improvements, substation bank capacity additions, and "self-healing" distribution automation systems. This three year program includes over \$350M of strategic capital investments in new plant and equipment targeted at improving electric service reliability throughout our service territory.

Provided below is a progress report on all three major work components:

**Rural Reliability Work**

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We are pleased to report that both the electric planning and estimating teams are continuing to make great progress on developing the necessary job packages to execute our rural line fusing work. System Planning groups are focusing on specifically targeted improvement zones and utilizing online maps to effectively identify proposed equipment locations. As shown in the table above, job packages containing more than 3000 sets of line fuses have already been generated by our engineers. The majority of these jobs have already been electronically routed to our electric estimating team who has made excellent progress during the past month in completing estimates for over 500 work units. Furthermore, electric construction of this work is expected to start next week in the Northern Region with approximately 100 units planned for construction by year's end.

## **Substation Improvements-**

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In addition to the rural reliability work, all nine 2011 substation emergency capacity projects are also progressing on schedule. As noted above, on-site project kickoff meetings have already been held for five of the nine projects with the remaining four scheduled for next week. In addition, Engineer-Procure-Construct (EPC) contractors have already been selected for all seven project being executed with outside resources. Furthermore, long leadtime material such as substation power transformers has also been ordered for projects involving the installation of new banks.

## **Distribution Automation**

Since our last update, our automation technology selection team has made significant progress in evaluating various cutting edge automation systems and has recommended piloting a new software based product in one of our distribution operating centers. The team tasked with implementing this system on a pilot basis has been working closely with our ISTS partners to setup, thoroughly test, and physically deploy a new feeder automation tool at our Auburn switching center. The new system being piloted will leverage both our existing SCADA controlled devices and SCADA software to implement a high-level "self healing" grid solution to address distribution outages. Installation of new servers and configuration of software is now taking place with a goal of having the system operational in January 2011.

In addition, a separate team is working on plans to significantly reinforce our 900 MHz radio communication systems for both existing SCADA equipment and newly planned devices being deployed in the field. Over the next three years, over 1500 new line switches/reclosers will be installed to further sectionalize circuits and remotely restore service. These devices will require robust communication systems in order to function properly and collaboratively work with other devices to automatically isolate outages. The team is currently reviewing proposed equipment installations and developing targeted communication system reinforcements / upgrades necessary to meet our Cornerstone project requirements.

Going forward, we will continue to provide these updates on a regular basis to keep you informed on the progress of this important reliability improvement work. In the meantime, please feel free to contact me if you have any questions regarding our program.

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Cornerstone Reliability  
Office Redacted

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