Proceeding No.: I.08-11-006
Exhibit No.:
Witness: Victor Romero

DIRECT TESTIMONY OF

VICTOR ROMERO

SAN DIEGO GAS & ELECTRIC COMPANY

(WITCH FIRE)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA
June 5, 2009

SDGE

DIRECT TESTIMONY OF
VICTOR ROMERO
SAN DIEGO GAS & ELECTRIC COMPANY

Q: Please state your name and title.

A: Victor Romero. I am the Director of Kearny Maintenance and Operations at San Diego Gas & Electric Company ("SDG&E").

Q: What are your responsibilities as the Director of Kearny Maintenance and Operations?

A: I am in charge of the Transmission and Substation Maintenance and Operations group at SDG&E, which performs transmission and substation construction and maintenance. I have been in this position since late 2005. My detailed qualifications are appended to this testimony.

Q: Do you supervise anyone at SDG&E?

A: Yes. More than 200 employees, most of whom are construction and maintenance field employees, ultimately report to me.

Q: What is the purpose of your testimony in these proceedings?

A: I am testifying regarding SDG&E's inspection and maintenance program for transmission lines such as Tie Line 637 ("TL637") and also specifically regarding SDG&E's inspections of the span between SDG&E poles Z416675 and Z416676.

Q: What is your involvement with SDG&E's inspection and maintenance programs?

A: My group (Kearny Maintenance and Operations) performs inspections and maintenance with respect to SDG&E's transmission lines and substations. From 1998 to 2005, I was also involved in various aspects of SDG&E's Corrective Maintenance Program, which is the distribution inspection and maintenance program pursuant to General Order 165.

Q: Are you qualified to testify as to SDG&E's overhead inspection program with respect to transmission lines such as the lines at issue in this proceeding?

A: Yes. I oversee SDG&E's transmission line inspection and maintenance program, and I am a licensed Professional Electrical Engineer in the State of California. I have over 30

years of experience with SDG&E, the majority of which has been in construction, maintenance, and operations.

Q: What is SDG&E's inspection and maintenance program with respect to overhead transmission lines?

A: SDG&E has developed and implemented a Maintenance Practice, which sets forth SDG&E's procedures for the inspection and maintenance of its transmission system. SDG&E's Maintenance Practice was initially submitted to the California Independent System Operator ("CAISO") on January 1, 1998 and has been approved by CAISO. (California state law AB1890 directed CAISO to adopt inspection and maintenance standards for the transmission facilities under its control which would provide for high quality, safe, and reliable service.) The Maintenance Practice is updated from time to time, and SDG&E's adherence to the Maintenance Practice is reviewed by CAISO on an annual basis. Aerial patrols are performed at least annually, and detailed overhead inspections are performed every three years with respect to transmission facilities. Any conditions noted during inspections are generally remedied within 12 months unless it is determined that the condition presents a safety or reliability hazard, in which case it is remedied right away.

Q: How would you describe the quality of SDG&E's overhead transmission inspection program?

A: The quality of the program is very good. Pursuant to the Maintenance Practice, SDG&E performs detailed overhead inspections of its transmission system more frequently than is required by General Order 165 for inspection of distribution lines. Aerial patrols and detailed overhead inspections are performed by two transmission patrolmen who have extensive experience at SDG&E in performing inspections and working with line crews. Both of SDG&E's full-time transmission patrolmen have been with SDG&E for over 30 years and have been involved in transmission construction and maintenance for 10 to 20 years. The inspections process performed by the transmission patrolmen is overseen by a supervisor.

Q: What kind of training do the transmission patrolmen receive with respect to performing inspections?

A: Transmission patrolmen receive field training with other experienced patrolmen and a supervisor. These patrolmen are generally brought on from SDG&E line crews, so they already have extensive field experience and are familiar with General Order 95 requirements. Patrolmen are also trained on the use of SDG&E's Transmission Inspection and Maintenance System ("TIMS"), the software utilized for inspection records, and the use of Mobile Data Terminals ("MDTs"). Transmission patrolmen attend monthly meetings with their supervisor, and their training is refreshed periodically, for example, when there are General Order 95 rule changes or software updates.

Q: Can you describe generally what transmission patrolmen are looking for in the course of their inspections?

A: The patrolmen are primarily looking for potential General Order 95 infractions and any damage or deterioration to SDG&E's transmission facilities. This would include missing or damaged signage, damaged external components or conditions such as flashed insulators, rust or wood rot, any conductor damage, and any potential General Order 95 infractions with respect to the poles, conductors or right-of-ways.

Q: What do the transmission patrolmen do when they note potential infractions or conditions?

A: They record in TIMS via their MDTs any potential infractions or conditions identified during the inspection and assign a severity rating ranging from 1 through 5 (with 5 being the most severe – i.e., an emergency situation). The severity rating generally determines the timeline for SDG&E to assess and repair the condition. Minor conditions are repaired on site if practical (for example, if a pole tag or guy guard is damaged). If the patrolmen observe potentially severe conditions or infractions, they generally notify a supervisor and/or forward a photograph of the condition at the time of the inspection. As a general matter, a supervisor will go out in the field to assess any conditions or infractions noted by the patrolmen in the course of their inspections, and appropriate steps are taken to remedy the conditions.

Q: You've indicated that the transmission patrolmen record any conditions or potential infractions in TIMS – can you describe how TIMS works?

A: The patrolmen access TIMS via their MDTs. They input information with respect to two categories – (i) structures (poles and attached hardware), and (ii) spans (conductors and related components). Within those two categories, TIMS identifies and graphically depicts the various possible components and lists the potential conditions relating to those components. The patrolmen select the components and conditions identified during the inspection, and, as I described above, they assign a severity rating for each condition noted.

Q: Are there codes in TIMS that relate specifically to potential conductor clearance issues?

A: Yes. Insufficient clearance and improper sag are among the condition codes available in TIMS.

Q: On what recent dates prior to October 21, 2007 did SDG&E perform detailed overhead inspections or aerial patrols of SDG&E poles Z416675 and Z416676 and the conductors in that span?

A: The most recent detailed overhead inspections were performed on November 10, 2005 and October 30, 2002. Aerial patrols were performed on March 7, 2007, May 2, 2006, February 16, 2005 and March 10, 2004.

Q: With respect to the last aerial patrols on March 7, 2007 and May 2, 2006, were any conditions or potential infractions noted?

A: No.

Q: With respect to the last detailed overhead inspection on November 10, 2005, were any conditions or potential infractions noted with respect to poles Z416675 and Z416676 or the conductors in that span?

A: No.

Q: Had any conditions or potential infractions been noted during prior patrols or overhead inspections of those poles and conductors?

A: Yes. According to SDG&E inspection records, with respect to pole Z416675, a broken cross-arm was noted in February 2000, and an unreadable warning sign was noted in October 2002.

Q: Were those conditions remedied?

A: Yes.

Q: Prior to October 21, 2007, were any clearance issues ever noted with respect to the conductors in the span between poles Z416675 and Z416676?

A: No.

Q: During patrols and detailed overhead inspections, how do the transmission patrolmen check the clearance with respect to SDG&E's conductors?

A: The patrolmen visually inspect each span for any ground or radial clearance issues. Any suspected clearance issues are noted in TIMS and assessed by a supervisor. With respect to transmission spans that have a change in conductor configuration, such as a transposition, the patrolmen take extra time to inspect conductor clearances from multiple angles.

Q: Do you believe that SDG&E's transmission inspections are effective in identifying conductor clearance issues?

A: Yes. SDG&E's transmission system has experienced very few issues due to insufficient conductor clearances, and any such clearance issues have historically been identified and remedied promptly. For example, SDG&E inspection records indicate that from January 2000 to October 21, 2007, transmission patrolmen noted just eight clearance-related issues with respect to SDG&E's transmission system. Those noted conditions were assessed by Transmission Construction Supervisors and remedied as appropriate. (One of the reported conditions was assessed and found to be in compliance, so no work was required.) I believe that the existence of relatively few clearance issues confirms that SDG&E has good design and construction standards and practices, and the fact that these clearance issues were noted by SDG&E's inspectors demonstrates to me that clearance issues are caught by SDG&E's experienced inspectors when they exist.

Q: Are you aware that measurements taken after the Witch Fire indicate that there was reduced clearance between the SDG&E conductors in the span between poles Z416675 and Z416676 at the closest points between those conductors?

A: Yes, but we have no reason to think that this clearance issue existed prior to wind event on October 21, 2007.

QUALIFICATIONS

My name is Victor Romero. I am employed by San Diego Gas & Electric Company ("SDG&E") as the Director of Kearny Maintenance and Operations for SDG&E. My business address is 5488 Overland Avenue, San Diego, California, 92123. I received a Bachelor of Science degree in Electrical Engineering from California Polytechnic State University, San Luis Obispo in 1977. I am a licensed professional electrical engineer in the State of California. I have been employed by SDG&E since 1977. I have held various positions throughout my 32 years with SDG&E, including Manager of Beach Cities Construction and Operations, Distribution Standards Manager, and Operations and Engineering Manager. In my current capacity, I am responsible for construction and maintenance of substations and transmission lines. In addition, my organization provides various support activities for the electric distribution organization.