

Application: \_\_\_\_\_  
(U 39 M)  
Exhibit No.: (PG&E-3)  
Date: December 21, 2009  
Witness: Various



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07-22-10  
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**PACIFIC GAS AND ELECTRIC COMPANY**

**2011 GENERAL RATE CASE**

**EXHIBIT (PG&E-3)  
GAS AND ELECTRIC DISTRIBUTION**

**WORKPAPERS SUPPORTING**

**CHAPTERS 6, 7, 8 AND 9**

**VOLUME 2 OF 3**

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**2011 GENERAL RATE CASE****CAPITAL PROJECT SUMMARY**

**TITLE:** Oakland D 4kV Swgr Replacement Study  
**ORDER NO:** 5720394  
**MAJOR WORK CATEGORY:** 48  
**OPERATIVE DATE:** 6/1/2008  
**AFUDC ELIGIBLE:** YES x or NO \_\_\_  
**LAND PERCENTAGE:** 0 %

**ESCALATED FINANCIAL EXPENDITURES**  
**(\$000)**

|                             |  | 2009 | 2010 | 2011    | 2012 | 2013 |
|-----------------------------|--|------|------|---------|------|------|
| Total Capital Expenditures: |  | \$0  | \$0  | \$4,000 | \$0  | \$0  |

**DESCRIPTION**

This project will replace the 4kV indoor switchgear at Oakland D to be completed in 2011. This project cost was based on similar scope of previously completed projects.

**JUSTIFICATION**

In early 1998 a reinvestment strategy study of San Francisco and East Bay indoor substations was conducted by PG&E in collaboration with two consultants CH2MHILL & ADA, and a PG&E cross-functional team comprised of maintenance electricians, field supervisors, distribution operators, division planning engineers, substation engineers, and directors familiar with these substations. The study identified and prioritized a set of indoor substation upgrade projects to address the substation vulnerabilities and improve the overall of service and dependability for the San Francisco and East bay service areas. The condition of the equipment in these stations is evaluated yearly and re-prioritized for replacement if necessary.