



A  Sempra Energy® utility

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June 30, 2005

Docket Clerk  
California Public Utilities Commission  
505 Van Ness Avenue, Room 2001  
San Francisco, CA 94102

**Re: Electric Distribution Standards Proceeding – SDG&E's General Order 165 Annual  
Corrective Maintenance Report**

Dear Docket Clerk:

Pursuant to California Public Utilities Commission (CPUC) Decision 97-03-070, enclosed please find the original and five (5) copies of San Diego Gas & Electric Company's General Order 165 Annual Corrective Maintenance Report filed at the CPUC's office at 1350 Front Street, San Diego, California 92101.

A copy of this filing is being served electronically to all parties of record in R.96-11-004 as evidenced by the attached Certificate of Service.

Sincerely,

Monica Wiggins  
Regulatory Tariff Manager

Enclosure

cc: Parties of Record in R.96-11-004

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking for Electric )  
Distribution Facility Standard Setting )  
\_\_\_\_\_ )

R.96-11-004  
(Filed November 8, 1996)

SAN DIEGO GAS AND ELECTRIC COMPANY (U 902-E)  
GENERAL ORDER 165 – 2004 COMPLIANCE REPORT  
ON ITS CORRECTIVE MAINTENANCE PROGRAM

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June 30, 2005

**SAN DIEGO GAS & ELECTRIC COMPANY**

**CORRECTIVE MAINTENANCE PROGRAM**

**REPORT FOR**

**2004**

This report contains the results of San Diego Gas and Electric's (SDG&E) General Order (GO) 165 compliance program for inspection and maintenance of electric distribution facilities for the period January 1 through December 31, 2004.

SDG&E's GO 165 compliance program is called the Corrective Maintenance Program (CMP) and is managed through SDG&E's Electric Transmission and Distribution Organization. By coordinating with the Construction & Operations (C&O) Centers' Electric Supervisors, Inspectors, Linemen, and other personnel, the inspections required by GO 165 are performed and follow-up work to correct deficiencies is completed. CMP uses the DIMS (Distribution Inspection Maintenance System) electronic database to schedule, record, and track all inspections and repair work required under GO 165. Monthly status reports are produced to track the progress of the inspections and repair work.

#### **Summary of the 2004 Yearend Report**

In October and November of 2003, destructive firestorms caused severe damage to the San Diego area. This event greatly impacted SDG&E's ability to perform its normal General Order 165 functions of inspection and repair work. In a letter dated November 13, 2003 to William Ahern, Executive Director, California Public Utilities Commission, SDG&E requested a deferral of its GO 165 program for the purpose of dedicating all of our resources toward restoring power to our customers.

Although SDG&E was able to resume its normal schedule of inspection and repair work in March 2004, there remain some rollover inspections and the 12-month repair backlog has not been

completed for that year. SDG&E anticipates that by the end of 2005 we will be able to accomplish the 12-month correction timeframe, which will position our maintenance program completely back on track with General Order 165.

With the exception of the firestorm event, SDG&E continues to have the goal of maintaining a 12-month correction backlog of our maintenance program, which has been geared to rate all infractions to be repaired within that time period. Infractions that present a hazard to the public and to electric distribution line personnel are repaired immediately or within a shorter timeframe. Infractions that are out of the control of SDG&E such as private property and third party utilities issues may require longer time to be resolved. These infractions are noted as "Pending" within our record keeping process and put in the "Deferred" category. Pending infractions in the Deferred status are tracked in the record keeping system and SDG&E's Vegetation Management, Land Department, Legal Department and the Joint Facilities Department continue to work through the process toward resolving these item as outlined in Appendix A. Facilities that are considered for Deferred status must meet strict internal requirements

To assure compliance with GO 165 inspection requirements and SDG&E's 12-month correction backlog for required maintenance, SDG&E has developed an active centralized Quality Assurance Program and a decentralized C&O Center internal audit program. Both of these programs audit past inspections and repairs to assure that company employees are finding what they are trained to find during inspections and fixing what needs to be fixed when maintaining facilities.

During recent 2005 Quality Assurance and internal audits, SDG&E discovered two employees conducting inadequate inspections and repairs. Measures are being taken to identify the full extent of the situation and make appropriate corrections to SDG&E's records. It is possible that these isolated employee incidents, when fully uncovered, may cause minor discrepancies in the 2004 GO 165 statistics reported in this filing. SDG&E will perform all necessary re-inspection and maintenance required to bring SDG&E records up to date. Upon completion of this internal review, SDG&E will update the Commission and provide the necessary corrections to this report

**The following is San Diego Gas & Electric's 2004 General Order 165 Compliance Report.**

***CPUC 2004 Yearend Report\****

<i>District</i>	<i>Inspect Type</i>	<i>Total Structures</i>	<i>Total Structures Scheduled</i>	<i>Percent Structures Scheduled</i>	<i>Total Structures Inspected</i>	<i>Percent Scheduled Inspected</i>	<i>Inspected in 2003 cleared in 2004</i>	<i>Inspected in 2004, cleared in 2004</i>	<i>Inspected in 2004, pending</i>
<i>Beach Cities</i>									
	AGE	11,801	2,860	24.24%	2,860	100.00%	264	2,271	17
	AGI	4,669	1,082	23.17%	1,082	100.00%	64	896	7
	OHVI	23,040	4,222	18.32%	4,222	100.00%	1,762	2,952	477
	POIN	19,861	1,083	5.45%	1,083	100.00%	27	54	95
	SS3	270	103	38.15%	103	100.00%	2	40	8
	SWI	547	190	34.73%	190	100.00%	11	118	43
<i>Eastern</i>									
	AGE	9,895	2,559	25.86%	2,559	100.00%	417	1,954	50
	AGI	2,906	707	24.33%	707	100.00%	62	538	43
	OHVI	58,710	12,125	20.65%	12,125	100.00%	4,878	5,936	1,483
	POIN	50,952	372	0.73%	372	100.00%	1	4	2
	SS3	45	14	31.11%	14	100.00%	2	4	0
	SWI	138	39	28.26%	39	100.00%	2	33	6
<i>Metro</i>									
	AGE	11,719	3,262	27.84%	3,262	100.00%	792	2,428	291
	AGI	3,491	809	23.17%	809	100.00%	25	552	32
	OHVI	43,683	8,791	20.12%	8,791	100.00%	4,066	3,800	1,385
	POIN	38,747	2,599	6.71%	2,599	100.00%	67	1,804	133
	SS3	489	210	42.94%	210	100.00%	0	108	19
	SWI	460	198	43.04%	198	100.00%	3	100	26
<i>North Coast</i>									
	AGE	18,212	5,228	28.71%	4,882	93.38%	1,018	3,971	1,339
	AGI	3,316	851	25.66%	851	100.00%	201	563	204
	OHVI	23,792	4,923	20.69%	4,923	100.00%	2,618	4,560	1,802
	POIN	21,423	139	0.65%	139	100.00%	5	14	2
	SS3	69	46	66.67%	46	100.00%	4	41	27
	SWI	270	102	37.78%	102	100.00%	6	97	37
<i>Northeast</i>									
	AGE	20,313	5,179	25.50%	5,179	100.00%	561	3,567	1,750
	AGI	4,335	1,064	24.54%	1,064	100.00%	181	661	279
	OHVI	64,071	14,158	22.10%	13,762	97.20%	4,542	5,295	3,757
	POIN	59,922	17,303	28.88%	17,303	100.00%	185	18,011	153
	SS3	2	2	100.00%	2	100.00%	0	0	0
	SWI	269	137	50.93%	137	100.00%	21	99	57
<i>Orange County</i>									
	AGE	10,195	2,652	26.01%	2,652	100.00%	430	2,198	672
	AGI	1,995	496	24.86%	496	100.00%	61	385	163
	OHVI	5,613	1,145	20.40%	1,145	100.00%	342	678	163
	POIN	4,892	23	0.47%	23	100.00%	2	0	0
	SS3	217	138	63.59%	138	100.00%	1	85	4
	SWI	156	73	46.79%	73	100.00%	0	62	30

\*(Subject to verification from internal reviews, see discussion on Pages 4 and 5)

## **GO165 REVIEW**

SDG&E is required to inspect its electric distribution system according to the California Public Utilities Commission (CPUC) General Order 165 (GO165). GO 165 establishes inspection cycles and record-keeping requirements for utility distribution equipment. In general, utilities must patrol (walk, drive, or fly by) their systems once a year in urban areas and once every two years in rural areas. Utilities must conduct detailed inspections every 3-5 years, depending on the type of equipment. For detailed inspections, utilities' records must specify the condition of inspected equipment, any problems found, and a scheduled date for corrective action. Utilities are required to make intrusive inspections of distribution wood poles depending on the age and condition of the pole.

General Order 165 states "the purpose of this General Order is to establish minimum requirements for electric distribution facilities, regarding inspection...condition rating, scheduling and performance of corrective action, record keeping, and reporting, in order to ensure safe and high quality electric service..." Furthermore, GO 165 states " the requirements of this order are in addition to the requirements imposed upon utilities under GO 95 and GO 128 to maintain a safe and reliable electric system. Nothing in this General Order relieves any utility from any requirements or obligations that it has under General Orders 95 and 128."



## **Kinetic Divisions of Inspections**

The quantity of equipment is dynamic because of additions and removals of equipment due to various reasons such as replacement, demolition, new customers, and conversion of overhead lines to underground lines. When new equipment is added it is regarded as inspected at date of installation. The new piece of equipment is then scheduled for inspection during the next inspection cycle. All equipment in the current inventory is scheduled for inspection at the required interval.

All facilities scheduled for inspection in 2005 are included as Attachment "A" in accordance with GO 165. Equipment inspections are divided into categories of equipment type, subdivided by district, and further subdivided by geographic region. Actual inspections per month may vary due to operating conditions, weather, administrative shifts in inspection areas, or other unanticipated impacts.

All equipment on a given structure is inspected at the same time and the inspection record is documented in the structure record. The CMP goals for the year are determined by the system-wide counts of facilities in each inspection type, divided by the number of years in the cycle length.

SDGE CMP cycles are designed according to match General Order 165 requirements. The following section describes SDG&E's CMP cycles by equipment.

## Description of Major SDG&E CMP Cycles

### OVERHEAD VISUAL

- OHVI (Overhead Visual, 5-year)

This cycle consists of a detailed walk-around inspection of all pole-mounted facilities on distribution poles with primary and secondary conductors and distribution equipment on transmission poles. These inspections identify conditions out of compliance with GO165, GO95 or SDG&E's Construction Standards. This is a five-year cycle.

### ABOVE GROUND 5 (INTERNAL AND EXTERNAL INSPECTIONS)

This cycle consists of AGE (Above Ground Deadfront) and AGI (Above Ground Livefront) detailed external and internal inspections of deadfront and livefront pad-mounted facilities to identify conditions out of compliance with GO 128.

- AGE (Above Ground Deadfront, 5- year)

This cycle consists of a detailed external and internal inspection of deadfront pad-mounted facilities to identify conditions out of compliance with GO128. This is a five-year inspection cycle. The AGE cycle originated to accommodate those structures which were 'deadfront', and required only an external inspection. This changed in 1999, such that all deadfront pad-mount equipment requires an external and internal inspection. The cycle is still named AGE to separate the deadfront equipment data from livefront equipment data.

- AGI (Above Ground Livefront, 5- year)

This cycle consists of a detailed external and internal inspection of livefront pad-mounted facilities to identify conditions out of compliance with GO165, GO128 or SDG&E's Construction Standards. This is a five-year inspection cycle.

#### SUBSURFACE, WITH EQUIPMENT

- SS3 (Subsurface, 3-year)

This cycle consists of a detailed inspection of subsurface structures (manholes, vaults, primary handholes and subsurface enclosures) containing distribution equipment. (Thus structures with cable taps only or pass throughs only are in the SS10 cycle.) The SS3 cycle consists of a detailed inspection of these facilities to identify conditions out of compliance with GO165, GO128 or SDG&E's Construction Standards. This is a three-year inspection cycle

#### SUBSURFACE, NO EQUIPMENT

- SS10 (Subsurface, 10-year)

Subsurface enclosures, vaults, handholes and manholes without equipment are not required to be inspected under GO 165. However, GO 128, does require that all equipment be in safe condition. Therefore, SDG&E has implemented a 10-year inspection

cycle to address these facilities. This cycle consists of a detailed inspection of these facilities to identify conditions out of compliance with GO128.

## SWITCH

- SW3 (Oil and Gas Switch, 3-year)

This cycle consists of a specialized inspection of all subsurface and pad-mounted oil and gas switches, including Vista switches. This is a three-year cycle. There are approximately 2,300 switches in this cycle. The inspections were performed by Kearny Electric Construction and Maintenance prior to 2002. In 2002, the Districts began performing switch inspections. Oil samples and gas pressure readings are obtained and recorded in the Distribution Inspection and Maintenance System (DIMS). The laboratory performs analysis of oil samples for low dielectric strength and high water content. Since the laboratory can analyze the samples in several days, field dielectric tests have been eliminated. Elimination of the field dielectric test minimizes tagging and retagging of switches if the field and lab results do not agree. DIMS stores these results with the inspection record. DIMS also tracks the status of "Do Not Operate Energized" (DOE) switches for prioritizing replacements. Other conditions out of compliance with GO128 or SDG&E's Construction Standards are identified.

## WOOD POLE INTEGRITY

- Pole (10/20 year)

This inspection is performed on a 10-year cycle. Each pole is inspected visually and if conditions warrant, intrusively. Any pole 15 years of age or older is inspected intrusively.

The form of the intrusive inspection is normally an excavation about the pole base and/or a sound and bore of the pole at ground line. Treatment is applied at this time in the form of ground line pastes and/or internal pastes. The 10 year cycle fulfills the requirements of GO165: 1) all poles over 15 years of age are intrusively inspected within 10 years and 2) all poles which previously passed intrusive inspection are to be inspected intrusively again on a 20 year cycle. The 10-year cycle requirements result in approximately 23,200 poles to be inspected each year.

The wood pole integrity inspections are currently performed by SDG&E's contractor who performs routine inspections for wood pole integrity, applies wood preservative treatments and installs reinforcements (C-truss or Fiberwrap). The type of treatment is dependent upon the age of the pole, the individual inspection history and the condition. Vegetation Management administers the program.

If a pole that appears to need replacement is found on a CMP inspection, SDG&E's contractor for wood pole integrity inspections or the Districts may bore the pole to determine if it needs reinforcement or replacement based on the remaining shell thickness.

The choice to restore a pole rather than replace the pole is based on the strength of the pole which is measured by remaining shell thickness. SDGE's Transmission Engineering and Electric Distribution Standards Specification for Inspection, Treatment and Reinforcement of In-Service Wood Poles (Specification NO. TE-0108 and Specification

NO. 337) specifies the criteria for the rejection of a pole. It also addresses a pole's suitability for C-truss or Fiber-wrap based on the remaining shell thickness for various lengths of pole. If a pole does not have sufficient shell thickness for C-truss or Fiber-wrap, it is rejected and recommended for replacement.

#### PATROL, URBAN

- Patrol 1 (urban patrol, 1 year)

The purpose of the urban patrol is to identify obvious structural problems and hazards. This cycle consists of drive by, fly by, or walk-by patrol of every overhead, underground and streetlight facility in urban areas. Under agreement of interpretation with the CPUC, 'urban' is defined as incorporated areas. (GO165 calls for 'urban' as those areas with 1000 persons or more per square mile). The General Order defines a patrol as a "simple visual inspection, of applicable utility equipment and structures, that is designed to identify obvious structural problems and hazards." Patrol Inspection Record forms are used to identify obvious structural problems and hazards.

#### PATROL, RURAL

- Patrol 2 (rural patrol, 2 year)

The purpose of the rural patrol is to identify obvious structural problems and hazards. This cycle consists of drive by, fly by, or walk-by inspections of every overhead, underground and streetlight facilities in rural areas. Under agreement of interpretation with the CPUC, 'rural' is

defined as unincorporated areas. (GO165 calls for 'rural' as those areas with less than 1000 persons per square mile). The General Order defines a patrol as a "simple visual inspection, of applicable utility equipment and structures, that is designed to identify obvious structural problems and hazards." Patrol Inspection Record forms are used to identify obvious structural problems and hazards

**SDG&E CMP INSPECTION CYCLES**  
**CYCLES FROM SDGE'S FILED COMPLIANCE PLAN**

SDG&E System Inspection Cycles  
(Maximum intervals in years)

	PATROL		DETAILED		INTRUSIVE	
	Urban	Rural	Urban	Rural	Urban	Rural
Transformers						
Overhead	Patrol1	Patrol2	OHVI 5	OHVI 5		
Underground (Subsurface)	Patrol1	Patrol2	SS 3	SS 3		
Pad Mounted (live front)	Patrol1	Patrol2	AGI 5	AGI 5		
Pad Mounted (dead front)	Patrol1	Patrol2	AGE 5	AGE 5		
Switching/Protective Devices						
Overhead	Patrol1	Patrol2	OHVI 5	OHVI 5		
Underground (Subsurface)	Patrol1	Patrol2	SS 3	SS 3		
Pad Mounted (live front)	Patrol1	Patrol2	AGI 5	AGI 5		
Pad Mounted (dead front)	Patrol1	Patrol2	AGI 5	AGI 5		
Oil & Gas switches (above or below surface)	Patrol1	Patrol2	SW 3	SW 3		
Regulators/Capacitors						
Overhead	Patrol1	Patrol2	OHVI 5	OHVI 5		
Underground (Subsurface)	Patrol1	Patrol2	SS 3	SS 3		
Pad Mounted (live front)	Patrol1	Patrol2	AGI 5	AGI 5		
Pad Mounted (dead front)	Patrol1	Patrol2	AGE 5	AGE 5		
Overhead Conductors and Cables	Patrol1	Patrol2	OHVI 5	OHVI 5		
Streetlighting	Patrol1	Patrol2	x	x		
Wood Poles under 15 years	Patrol1	Patrol2	x	x	x	x
Wood Poles over 15 years which have not been subject to intrusive inspection	Patrol1	Patrol2	x	x	Wood Pole Intrusive 10	Wood Pole Intrusive 10
Wood Poles which passed intrusive inspection					Wood Pole Intrusive 20	Wood Pole Intrusive 20



Where the cycles are:

Patrol1 Patrol cycle- one-year  
Patrol2 Patrol cycle- two year  
OHVI 5 Overhead five-year detail inspection  
AGE 5 Above Ground Deadfront external and internal five-year detail inspection  
AGI 5 Above Ground Livefront external and internal five-year detail inspection  
SS 3 Subsurface internal three-year detail inspection  
SW 3 Switch internal three-year inspection  
POLE 10 Wood pole intrusive ten-year inspection

**PROGRAM CYCLE SUMMARY**

Program Cycle	Cycle Interval	Start Year
Overhead Visual	5	1998
Above Ground Deadfront (AGE)	5	1998

**CORRECTIVE MAINTENANCE**

**EQUIPMENT INSPECTION**

**DETAIL**

EQUIPMENT DETAIL OVERHEAD

Overhead Distribution System:

Overhead Visual

Distribution Poles & Distribution Equipment	Inspection Program (in years)			
	Urban	Rural	Detailed	Intrusive
Pole	1	2	5	10, 20
Double Pole	1	2	5	10, 20
Pole Stub	1	2	5	10, 20
Crossarm	1	2	5	
Anchor/Guy	1	2	5	
Conductor	1	2	5	
Connector/Splice	1	2	5	
Transformer	1	2	5	
Switch	1	2	5	
Lightning Arrestor	1	2	5	
Fuse Holder	1	2	5	
Cutout	1	2	5	
Fixed Capacitor	1	2	5	
Switched Capacitor	1	2	5	
Riser	1	2	5	
Cable Terminal/Pothead	1	2	5	
Insulator	1	2	5	
Auto Throw Over	1	2	5	
Service Restorer	1	2	5	
Pole Hardware	1	2	5	

**EQUIPMENT DETAIL ABOVE GROUND DEADFRONT (AGE)**

Underground Distribution System:

Above Ground Deadfront (AGE)

UG Distribution Structure & Distribution Equipment	Inspection Program (in years)		
	Urban	Rural	External
<b>Pad Structure - D Facility ID</b>			
• Pad with no Equip.	1	2	5
• Pad with following Equip.	1	2	5
• 1 Phase Xfmr (Dead)	1	2	5
• 3 Phase Xfmr (Dead)	1	2	5
• Auto Throw Over	1	2	5
• Service Restorer	1	2	5
• Boost/Buck Station (Dead)	1	2	5
• Step Up/Dwn Station (Dead)	1	2	5
• Regulator (Dead)	1	2	5
<b>Manhole - W or Y Facility ID</b>			
• Manhole with following Equip.	1	2	5
• 1 Phase Xfmr (Dead)	1	2	5
• 3 Phase Xfmr (Dead)	1	2	5
<b>Prim. HH - B or W Facility ID</b>			
• Prim. HH with no Equip.	1	2	5
• Prim. HH w/following Equip.	1	2	5
• 1 Phase Xfmr (Dead)	1	2	5
• 3 Phase Xfmr (Dead)	1	2	5
• Auto Throw Over	1	2	5
<b>Subsurface Encl. - S Facility ID</b>			
• Subsurface Encl. w/no Equip.	1	2	5

EQUIPMENT DETAIL ABOVE GROUND LIVEFRONT (AGI)

Above Ground Livefront (AGI)

UG Distribution Structure & Distribution Equipment	Inspection Program (in years)		
	Urban	Rural	Internal
<b>Pad Structure - D Facility ID</b>			
• Pad with following Equip.	1	2	5
• Non-Oil/Gas Switch	1	2	5
• Non-Oil/Gas Group Switch	1	2	5
• 1 Phase Xfmr (Live)	1	2	5
• 3 Phase Xfmr (Live)	1	2	5
• Fixed Capacitor	1	2	5
• Switched Capacitor	1	2	5
• Fuse Cabinet	1	2	5
• Fused Switch Cabinet	1	2	5
• Terminator	1	2	5
• Boost/Buck Station (Live)	1	2	5
• Step Up/Dwn Station (Live)	1	2	5
• Regulator (Live)	1	2	5
<b>Manhole - W or Y Facility ID</b>			
• Manhole with following Equip.	1	2	5
• Non-Oil/Gas Switch	1	2	5
• Non-Oil/Gas Group Switch	1	2	5
• 1 Phase Xfmr (Live)	1	2	5
• 3 Phase Xfmr (Live)	1	2	5
• Fuse Cabinet	1	2	5
• Fused Switch Cabinet	1	2	5
• Terminator	1	2	5
<b>Manhole - M Facility ID</b>			
• Manhole with following Equip.	1	2	5
• Terminator	1	2	5
<b>Prim. HH - B or W Facility ID</b>			
• Prim. HH w/following Equip	1	2	5
• Non-Oil/Gas Switch	1	2	5
• Non-Oil/Gas Group Switch	1	2	5
• 1 Phase Xfmr (Live)	1	2	5
• 3 Phase Xfmr (Live)	1	2	5
• Fuse Cabinet	1	2	5

EQUIPMENT DETAIL ABOVE GROUND LIVEFRONT (AGI) (CONTINUED)

Above Ground Livefront (AGI) (Continued)

UG Distribution Structure & Distribution Equipment	Inspection Program (in years)		
	Urban	Rural	Internal
Prim. HH - B or W Facility ID			
• Fused Switch Cabinet	1	2	5
• Terminator	1	2	5
• Auto Throw Over	1	2	5
Enclosure - E Facility ID			
• Enclosure with following Equip.	1	2	5
• 1 Phase Xfmr (Dead or Live)	1	2	5
• 3 Phase Xfmr (Dead or Live)	1	2	5
• Terminator	1	2	5
• Cable Tap with AGI Equipment	1	2	5
• Step Up/Dwn Station	1	2	5

EQUIPMENT DETAIL SUBSURFACE 3

Subsurface 3

UG Distribution Structure & Distribution Equipment	Inspection	Program	(in years)
	Urban	Rural	Internal
Manhole - M Facility ID			
Manhole with following Equip.	1	2	3
• Non-Oil/Gas Switch			3
• Non-Oil/Gas Group Switch			3
• 1 Phase Xfmr (Dead or Live)			3
• 3 Phase Xfmr (Dead or Live)			3
• Fuse Cabinet			3
• Auto Throw Over			3
• Cable Tap with SS3 equipment			3
Primary Handhole - H Facility ID			
Prim HH with following Equip.	1	2	3
• Non-Oil/Gas Switch			3
• Non-Oil/Gas Group Switch			3
• 1 Phase Xfmr (Dead or Live)			3
• 3 Phase Xfmr (Dead or Live)			3
• Terminator			3
• Step Up/Dwn Station			3
• Service Restorer			3
• Cable Tap with Subsurface 3 Equipment			3
Vault - U Vault – U Facility ID			
Vault with following Equip.	1	2	3
• Non-Oil/Gas Switch			3
• Non-Oil/Gas Group Switch			3
• 1 Phase Xfmr (Dead or Live)			3
• 3 Phase Xfmr (Dead or Live)			3
• Fixed Capacitor			3
• Switched Capacitor			3
• Fuse Cabinet			3
• Step Up/Dwn Station			3
• Auto Throw Over			3
Subsurface Encl.- S Facility ID			
Subsurf. Encl containing	1	2	3
• Non-Oil/Gas Switch			3
• Non-Oil/Gas Group Switch			3
• 1 Phase Xfmr (Dead or Live)			3
• 3 Phase Xfmr (Dead or Live)			3

EQUIPMENT DETAIL SUBSURFACE 10

Subsurface 10

UG Distribution Structure & Distribution Equipment	Inspection Program (in years)		
	Urban	Rural	Internal
Manhole - W or Y Facility ID			
Manhole with no Equipment	1	2	10
Manhole - M Facility ID			
• Manhole with no Equip.	1	2	10
• Manhole with following Equip.	1	2	10
• Cable Tap with no Equipment			10
Primary Handhole - H Facility ID			
• Prim. HH with following Equip.	1	2	10
• Cable Tap with no Equipment			10
Vault - U Facility ID			
• Vault with following Equip.	1	2	10
• Cable Tap with no Equipment			10
Subsurface Encl.- S Facility ID			
• Subsurf. Encl w/following Equip.	1	2	10
• Cable Tap with no Equipment			10



EQUIPMENT DETAIL OIL & GAS SWITCHES

Oil and Gas Switches

UG Distribution Structure & Distribution Equipment	Inspection Program (in years)		
	Urban	Rural	Switch
Manhole - W or Y Facility ID			
Manhole with following Equip	1	2	3
• Oil/Gas Switch	1	2	3
• Oil/Gas Group Switch	1	2	3
Manhole - M Facility ID			
Manhole with following Equip	1	2	3
• Oil/Gas Switch			3
• Oil/Gas Group Switch			3
Prim. HH - B or W Facility ID			
Prim HH with following Equip	1	2	3
• Oil/Gas Switch	1	2	3
• Oil/Gas Group Switch	1	2	3
Primary Handhole - H Facility ID			
Prim. HH with following Equip.	1	2	3
• Oil/Gas Switch			3
• Oil/Gas Group Switch			3
Vault - U Facility ID			
Vault with following Equip.	1	2	3
• Oil/Gas Switch			3
• Oil/Gas Group Switch			3
Subsurface Encl.- S Facility ID			
Subsurf. Encl w/following Equip.	1	2	3
• Oil/Gas Switch			3
• Oil/Gas Group Switch			3

**ATTACHMENT A**

**CORRECTIVE MAINTENANCE**

**SCHEDULE**

**2005**

district	insp_typ	sub_typ	Required Inspections due in 2005
BC	AG	E	2,328
BC	AG	I	921
BC	OH	VI	4,508
BC	SS	10	451
BC	SS	3	89
BC	SW	I	184
CM	AG	E	2,404
CM	AG	I	708
CM	OH	VI	8,667
CM	SS	10	450
CM	SS	3	191
CM	SW	I	175
EA	AG	E	1,770
EA	AG	I	574
EA	OH	VI	11,638
EA	SS	10	321
EA	SS	3	19
EA	SW	I	55
NC	AG	E	3,649
NC	AG	I	635
NC	OH	VI	5,009
NC	SS	10	633
NC	SS	3	5
NC	SW	I	85
NE	AG	E	4,162
NE	AG	I	813
NE	OH	VI	11,302
NE	SS	10	743
NE	SW	I	71
OC	AG	E	1,762
OC	AG	I	353
OC	OH	VI	1,123
OC	SS	10	378
OC	SS	3	29
OC	SW	I	52
<u>Division Total:</u>			<u>66,257</u>

# **APPENDIX A**

## **THIRD PARTY INFRACTION**

### **PROCESS**

### Third Party Infraction Process

Infractions caused by “Third Parties” have been an issue that SDG&E has dealt with since the implementation of General Order 165. On a daily basis our Overhead and Underground Inspectors encounter infractions that were not caused by SDG&E. Rather, they are General Order 95 and 128 infractions that are the result of others (i.e. private property owners, telecommunication companies) not knowing or understanding these codes. For example, private property owners will put forth great effort to make our underground pad-mounted equipment cosmetically aesthetic by building retaining walls and locating plant/shrubs in front of pad-mounted equipment. What the customer does not understand is that, in their attempts to cover up our equipment they have violated the workspace that General Order 128 requires SDG&E to maintain and they have possibly rendered our equipment inaccessible by our inspector and line personnel.

Also, Telecommunication companies often cause General Order infractions that our Inspectors discover during their detailed inspection of our overhead and underground systems. On the Overhead system, violations of General Order 95 Rule 54.7 “Climbing Space” and General Order Rule 37 “Conductor Clearance” are very common. In addition, telecommunication companies placing underground pedestals up against our pad-mounted equipment result in issues that affect our Underground system. Often times the proximity of these pedestals will not allow the transformer to be opened and inspected.

Once SDG&E is aware of such violations, we are obligated to take action even though SDG&E did not cause the problem. SDG&E has developed the "Investigation Order System" that gives notification to the violating parties and attempts to bring about resolution of these types of infractions.

The Process involves:

1. The Inspector upon a detailed inspection observes and records the violation in the Mobile Data Terminal (MDT). This information is uploaded into SDG&E "Distribution Inspection & Maintenance System" (DIMS) where it is officially recorded and tracked.
2. The Inspector records the structure identification number and the address/location.
3. The type of violation/infraction is recorded.
4. A digital picture of the infraction is taken.
5. The Inspector attaches a facility map and forwards the information to SDG&E's Electric Distribution Compliance Management Group (CMG).
6. CMG formulates all information (Map and Picture). The infraction is given a tracking number and recorded in the "Investigation Order Database".
7. CMG then attaches the "General Order 95/128 Infraction Form" requesting that the infraction be resolved in 90 days. Private property issues are forwarded to SDG&E's Land Department for resolution. Infractions caused by telecommunication companies and others are forwarded directly to the company causing the infraction.

In 2003, SDG&E's Corrective Maintenance Program's "Investigation Order System" processed 3,888 "Third Party" Investigation Orders. Of the 3,888 orders, 915 were resolved. In 2004, 3,782 "Third Party" infractions were processed and the violating parties fixed 1,540.

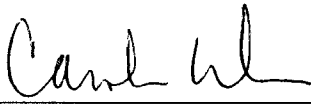
SDG&E strives to be proactive in reducing the amount of "Third Party" infractions. On pad-mounted equipment, we have installed a sign similar to the "High Voltage" warning sign. This sign shows the workspace dimension needed for pad-mounted equipment. This sign is attached on the equipment in a position where all can plainly see the workspace requirements.

In addition to the workspace dimension alert sign, in 2004 SDG&E initiated programs with the telecommunication companies in our service territory in an effort to develop a more common and comprehensive understanding of what is required when constructing our systems under the General Orders 95/128. These programs have proved to be very beneficial for all parties considering the fact that a large number of electric and communication equipment occupy jointly used overhead poles and underground trenches.

SDG&E's vision is that by educating our customers and those that build their system in close proximity to our infrastructures, the number of "Third Party" violations of General Orders 95 and 128 will be reduced as we proceed through the General Order 165 Detailed Inspection cycles.

VERIFICATION

I affirm that the contents of this report, subject to the corrections that will be provided by SDG&E as referenced in paragraph 2 page 4 and paragraph 1 page 5 of this report, are true to the best of my knowledge, signed under penalty of perjury this 30<sup>th</sup> day of June 2005, in San Diego, California.



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**Caroline Winn, Director**

**Electric Transmission & Distribution Planning**

**Prepared by: Gregory L. Walters**

**Craig Holland**