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Exhibit Number : DRA-06
Commissioner : Sandoval
ALJ : Kim
Witness : Ezekwo



**DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**Report on the Results of Operations
for
Southwest Gas Corporation
General Rate Case
Test Year 2014**

Intangible, Distribution and General Plant

San Francisco, California
June 3, 2013

TABLE OF CONTENTS

CHAPTER 1.....	1-1
SOUTHERN CALIFORNIA DIVISION.....	1-1
I. INTRODUCTION.....	1-1
II. SUMMARY OF RECOMMENDATIONS.....	1-1
III. GENERAL DISCUSSION.....	1-4
IV. DISCUSSION/ANALYSIS OF DISTRIBUTION PLANT.....	1-4
A. FERC Account 376 – MAINS.....	1-7
B. FERC Account 378 – MEASUREMENT & REG. STATION.....	1-9
C. FERC Account 380 – SERVICES.....	1-10
D. FERC Account 381 – METERS.....	1-11
E. FERC Account 385 – INDUSTRIAL MEASURING & REG. STATION.....	1-12
V. DISCUSSION/ANALYSIS OF GENERAL PLANT.....	1-13
CHAPTER 2.....	2-1
NORTHERN CALIFORNIA DIVISION.....	2-1
I. INTRODUCTION.....	2-1
II. SUMMARY OF RECOMMENDATIONS.....	2-1
III. GENERAL DISCUSSION.....	2-4
IV. DISCUSSION/ANALYSIS OF DISTRIBUTION PLANT.....	2-4
A. FERC Account 376 - MAINS.....	2-7
B. FERC Account 380 - SERVICES.....	2-9
C. FERC Account 381 - METERS.....	2-10
D. FERC Account 385 - INDUSTRIAL MEASURING & REG. STATION.....	2-11
V. DISCUSSION/ANALYSIS OF GENERAL PLANT.....	2-12
CHAPTER 3.....	3-1
SOUTH LAKE TAHOE DISTRICT.....	3-1
I. INTRODUCTION.....	3-1
II. SUMMARY OF RECOMMENDATIONS.....	3-1
III. DISCUSSION/ANALYSIS.....	3-4

QUALIFICATIONS

- 1 • 2012 Distribution Plant additions of \$17.58 million compared to SWG's
2 estimate of \$18.53 million as shown in Table 1-6;
- 3 • 2013 Distribution Plant additions of \$12.03 million compared to SWG's
4 estimate of \$19.52 million as shown in Table 1-7;
- 5 • 2013 End-of-Year Distribution Plant In-Service estimate of \$326.53 million as
6 compared to SWG's estimate of \$336.63 million;
- 7 • 2014 Distribution Plant additions of \$16.44 million compared to SWG's
8 estimate of \$12.80 million as shown in Table 1-8; and
- 9 • 2014 End-of-Year Distribution Plant In-Service estimate of \$341.54 million as
10 compared to SWG's estimate of \$348.00 million.

11 Table 1-1 below compares DRA's recommended with SWG's proposed Southern
12 California Division End-of-Year gas plant-in-service (GPIS) estimates for 2012-2014:

13 **Table 1-1**
14 **Southern California Division**
15 **2012-2014 End-of-Year Gas Plant-in-Service**
16 **(In Thousands of Dollars)**

Description (a)	DRA Recommended (b)	SWG Proposed ³ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
2012 End-of-Year GPIS	\$339,245	\$344,140	\$4,895	1.40%
2013 End-of-Year GPIS	\$350,840	\$363,227	\$12,387	3.41%
2014 End-of-Year GPIS	\$366,900	\$375,650	\$8,750	2.32%

17 Tables 1-2 through 1-4 below provide a comparison similar to that of Table 1-1,
18 but with further breakdowns by functional area per year.
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³ *Id.*

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Table 1-2
Southern California Division
End-of-Year 2012 Forecasted Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed ⁴ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$34	\$34	\$0.0	0.0%
Distribution Plant	\$315,931	\$318,545	\$2,614	0.8%
General Plant	\$23,280	\$25,561	\$2,281	8.9%
Total	\$339,245	\$344,140	\$4,895	1.4%

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Table 1-3
Southern California Division
End-of-Year 2013 Forecasted Gas Plant-in-Service
(in Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed ⁵ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$34	\$34	\$0.0	0.0%
Distribution Plant	\$326,528	\$336,633	\$10,107	3.00%
General Plant	\$24,279	\$26,560	\$2,281	8.59%
Total	\$350,841	\$363,227	\$12,386	3.41%

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Table 1-4
Southern California Division
End-of-Year 2014 Forecasted Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed ⁶ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$34	\$34	\$0.0	0.0%
Distribution Plant	\$341,538	\$348,007	\$6,469	1.86%
General Plant	\$25,328	\$27,609	\$2,281	8.26%
Total	\$366,900	\$375,650	\$8,750	2.33%

13 Table 1-5 provides a comparison between DRA's and SWG's forecasted plant
14 additions for 2012-2014:

⁴ *Id.* at 19 (col. f).

⁵ *Id.* at 21 (col. f).

⁶ *Id.* at 23 (col. f).

Table 1-5
Southern California Division
2012-2014 Forecasted Gas Plant Additions
With Overheads & Escalation
(In Thousands of Dollars)

Description	DRA Recommended			SWG Proposed ²		
	2012	2013	2014	2012	2013	2014
Intangible Plant	\$0	\$0	\$0	\$0	\$0	\$0
Distribution Plant	\$17,582	\$12,024	\$16,438	\$18,531	\$19,515	\$12,801
General Plant	\$5,548	\$2,077	\$2,127	\$6,838	\$2,077	\$2,127
Total	\$23,130	\$14,101	\$18,565	\$25,369	\$21,592	\$14,928

III. GENERAL DISCUSSION

For the Southern California Division, DRA uses SWG’s recorded 2012 plant additions as its forecast in contrast to the utility’s forecasts. Due to the cumulative nature of plant additions from year-to-year, it is preferable to eliminate a year of project estimates if more recent recorded data provides an appropriate basis for the plant forecast. This is generally consistent with DRA’s approach in other rate cases, such as those involving Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company and Southern California Edison Company.

DRA does not take issue with SWG’s estimates of 2012–2014 salvage and removal costs, retirements and transfers. SWG relied on five-year averages from 2007-2011 to derive its 2012–2014 estimates. Considering that salvage and removal costs, retirements and transfers are not easily predicted from year-to-year, in this case relying on a multi-year average is reasonable.

IV. DISCUSSION / ANALYSIS OF DISTRIBUTION PLANT

SWG’s Distribution Plant Additions estimating methodology is as follows:

(a) For 2012, 2013 and TY 2014, SWG projected additions for Distribution Plant In Service, which includes: land and land rights, right of way, structures and improvements, mains, measuring and regulating stations, services, meters, industrial and other equipment. There are four methods SWG used for projecting distribution

² *Id.* at 19, 21 and 23 (col. d).

1 plant additions: 1) customer growth related; 2) special projects; 3) regulatory mandated
2 replacements and 4) historical average. Retirement and transfers for distribution plant
3 used to derive the projected years 2012 and 2013 and TY 2014 additions were based
4 on the five-year average of historical period 2007 through 2011. Also, salvage and
5 removal cost for distribution used in the projected years 2012, 2013 and TY 2014 were
6 based on the five-year average of the historical period 2007 through 2011. DRA does
7 not take issue with SWG's estimates of salvage and removal costs, retirements and
8 transfers.

9 (b) Construction overheads, labor and non-labor loadings are added to each
10 2012 projected additions.

11 (c) The 2012 projected additions with overheads, labor and non-labor loadings
12 are escalated using an appropriate escalation factor.

13 (d) The 2012 escalated additions (see Table 1-6) are added to the 12/31/2011
14 Distribution Plant In-Service.

15 (e) Then the 2012 retirements/transfers are subtracted to yield 12/31/2012
16 Distribution Plant In-Service.

17 (f) The 2013 escalated additions (see Table 1-7) are added to 12/31/2012
18 Distribution Plant In-Service.

19 (g) Then the 2013 retirements/transfers are subtracted to yield 12/31/2013
20 Distribution Plant In-Service.

21 (h) The 2014 escalated additions (see Table 1-8) are added to 12/31/2013
22 Distribution Plant In-Service.

23 (i) Then the 2014 retirements/transfers are subtracted to yield 12/31/2014
24 Distribution Plant In-Service.

25 DRA does not take issue with SWG's estimating methodology for plant additions
26 in 2012 and 2014.

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Table 1-6
Southern California Division
2012 Forecasted Plant Additions with Overheads & Escalation
(In Thousands of Dollars)

Distribution Plant	FERC Account Number	Southwest Additions⁸	DRA Additions	Difference
Mains	376	10,982	13,796	(2,814)
Measuring & Reg. Stat. Equip./General	378	405	294	111
Services	380	3,811	1,217	2,594
Meters	381	2,782	2,182	600
Industrial Measuring & Reg. Station	385	551	92	459
TOTAL		18,531	17,581	950

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Table 1-7
Southern California Division
2013 Forecasted Plant Additions with Overheads & Escalation
(In Thousands of Dollars)

Distribution Plant	FERC Account Number	Southwest Additions⁹	DRA Additions	Difference
Mains	376	15,233	7,742	7,491
Measuring & Reg. Stat. Equip./General	378	869	869	0.0
Services	380	2,093	2,093	0.0
Meters	381	1,248	1,248	0.0
Industrial Measuring & Reg. Station	385	72	72	0.0
TOTAL		19,515	12,024	7,491

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⁸ *Id.* at 19 (col. d).

⁹ *Id.* at 21 (col. d).

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Table 1-8
Southern California Division
2014 Forecasted Plant Additions with Overheads & Escalation
(In Thousands of Dollars)

Distribution Plant	FERC Account Number	Southwest Additions¹⁰	DRA Additions	Difference
Mains	376	8,232	11,868	(3,636)
Measuring & Reg. Stat. Equip./General	378	424	424	0.0
Services	380	2,770	2,770	0.0
Meters	381	1,302	1,302	0.0
Industrial Measuring & Reg. Station	385	74	74	0.0
TOTAL		12,802	16,438	(3,636)

5 **A. FERC Account 376 – MAINS**

6 This Account consists of about seventy percent of all proposed distribution
7 additions from 2012 through 2014. Figure 1-1 shows the historical additions to this
8 Account. Note that there is a steady decline of additions from 2007 through 2010, and a
9 substantial increase in 2011 and 2012.

10 Southwest’s estimate of additions for this account is based on historical
11 averages, special projects, new customers and a 13-year regulatory mandated pipeline
12 replacement project.¹¹

13 For this Account, Southwest is requesting additions of \$10.98 million for 2012;
14 \$15.23 million for 2013; and \$8.23 million for 2014. In response to a DRA data
15 request,¹² Southwest provided the actual additions of \$13.8 million for 2012. This
16 amount is 12.5 percent more than Southwest’s forecast for 2012 additions. DRA uses
17 this \$13.8 million in actual recorded expenditures as its forecast for 2012.

¹⁰ *Id.* at 23 (col. d).

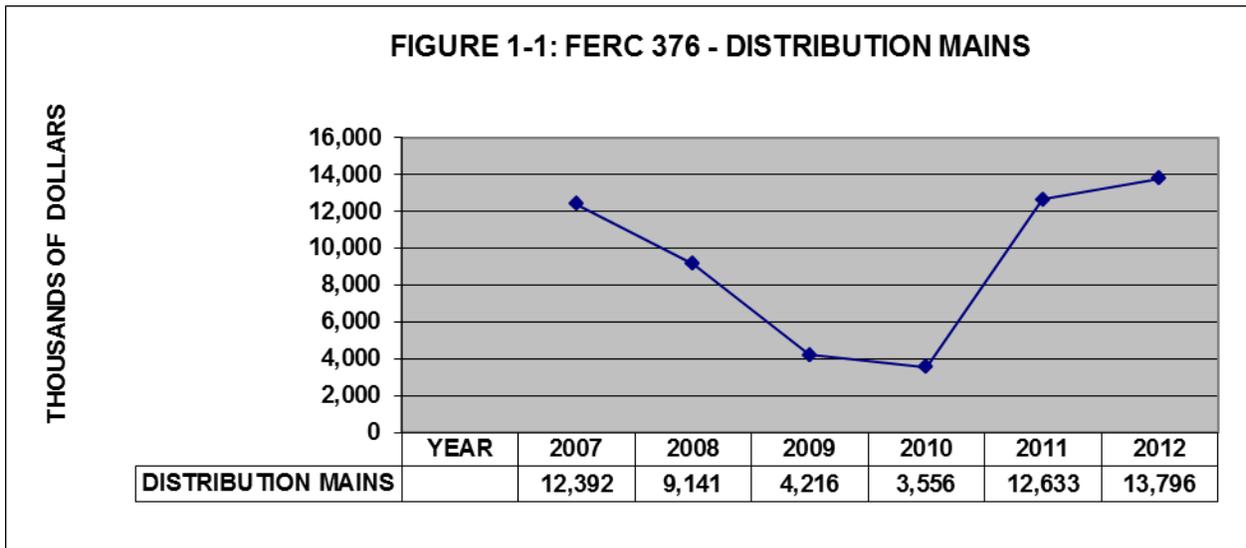
¹¹ *Id.* at 1-3.

¹² Response to DRA data request DRA-SWG-28-GIE, Q.1.

1 SWG provided new, updated information that the projected cost of \$7.1 million
 2 for the Victor Valley Transmission System (VVTS) for 2013 be moved to 2014. Based
 3 on this new information, DRA is subtracting \$7.1 million from 2013 for this Account.
 4 SWG proposed to abandon the VVTS steel pipe and install new distribution line over an
 5 18–24 month period at a cost of \$7.1 million. A proposed decision (PD)¹³ concluded that
 6 shareholders should be responsible for \$3.75 million in estimated pressure testing
 7 costs, which must be deducted from the \$7.1 million in replacement costs, leaving \$3.4
 8 million to be recorded in the plant-in-service for inclusion in revenue requirement. In
 9 accordance with the PD, DRA accepts the adjusted cost of \$3.4 million for the VVTS
 10 project, instead of \$7.1 million for 2014.

11 Table 1-9 shows detailed calculations of 2013 and 2014 customer additions.
 12 DRA agrees with SWG’s customer related plant additions. DRA recommends mains
 13 additions of \$7.74 million for 2013 as compared with SWG’s estimate of \$15.23 million.
 14 DRA recommends mains additions of \$11.87 million for 2014 as compared with SWG’s
 15 forecast of \$8.23 million. The difference in forecasts is related entirely to the timing and
 16 adjustment associated with the VVTS project.

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¹³ Proposed Decision, R.11-02-019, April 8, 2013.

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Table 1-9
Southern California Division
2013 and 2014 DRA Additions for Mains, Services & Meters
Without Overheads & Escalation
(In 2011 Dollars)

YEAR	FERC	Description	SWG New Customer	DRA New Customer	Cost per Customer	Additions
2013	376	Mains	800	800	\$499.05	\$399,240
2013	380	Services	800	800	\$574.12	\$459,296
2013	381	Meter	800	800	\$133.81	\$107,048
2014	376	Mains	950	950	\$499.05	\$474,098
2014	380	Services	950	950	\$574.12	\$545,414
2014	381	Meter	950	950	\$133.81	\$127,120

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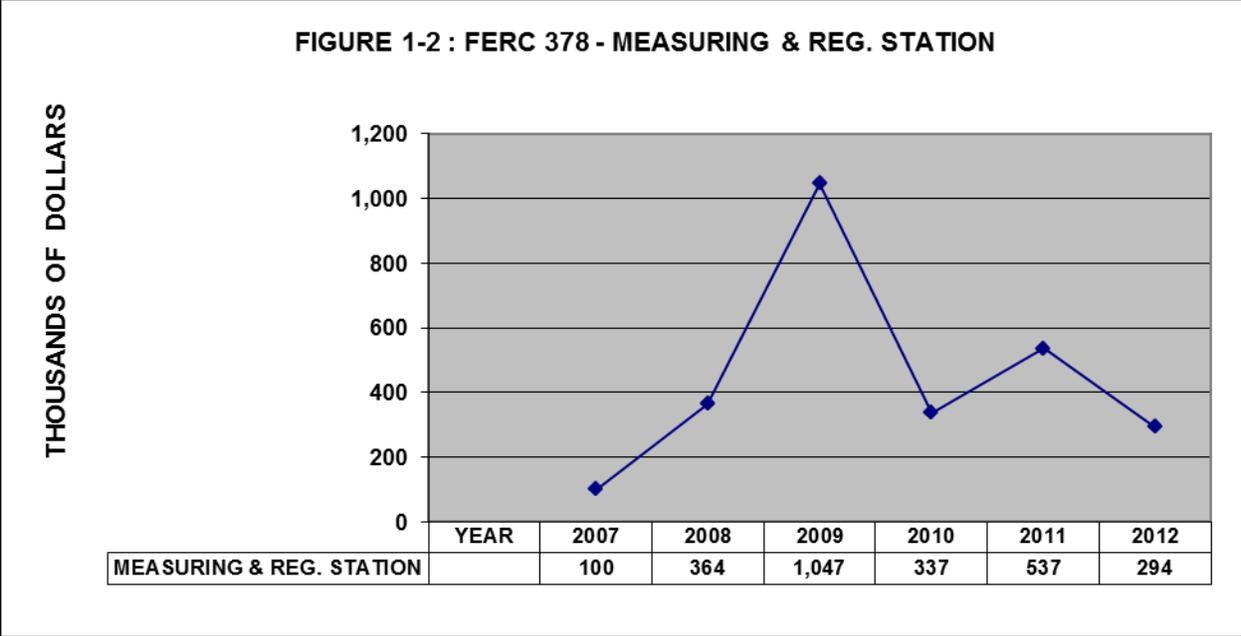
B. FERC Account 378 – MEASUREMENT & REG. STATION

This Account consists of about three percent of all proposed distribution additions from 2012 through 2014. Figure 1-2 below shows the historical additions of this account. Southwest’s estimate of additions for this Account is based on a five-year historical average from 2007–2011.¹⁴

For this Account, Southwest is requesting additions of \$405,350 for 2012; \$868,683 for 2013 and \$423,911 for 2014. In response to a DRA data request,¹⁵ Southwest provided the actual additions of \$294,492 for 2012. This amount is 27.4 percent less than Southwest’s forecast for 2012 additions. DRA uses the \$294,492 in actual recorded expenditures as its 2012 forecast.

DRA accepts Southwest’s additions estimate of \$868,683 for 2013 and \$423,911 for 2014, because they are consistent with the average amount of additions for this Account for 2007-2011.

¹⁴ SWG Appl., vol. II-A, Ch. 17 at 3.
¹⁵ Response to DRA data request DRA-SWG-28-GIE, Q.1.



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C. FERC Account 380 – SERVICES

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4 This Account consists of about seventeen percent of all proposed distribution
5 additions for 2012 through 2014. Figure 1-3 below shows the historical additions of this
6 Account in 2011 dollars. Southwest’s estimate of additions for this Account is based on
7 historical averages, new customers, and a 13-year regulatory mandated pipeline
8 replacement project.¹⁶

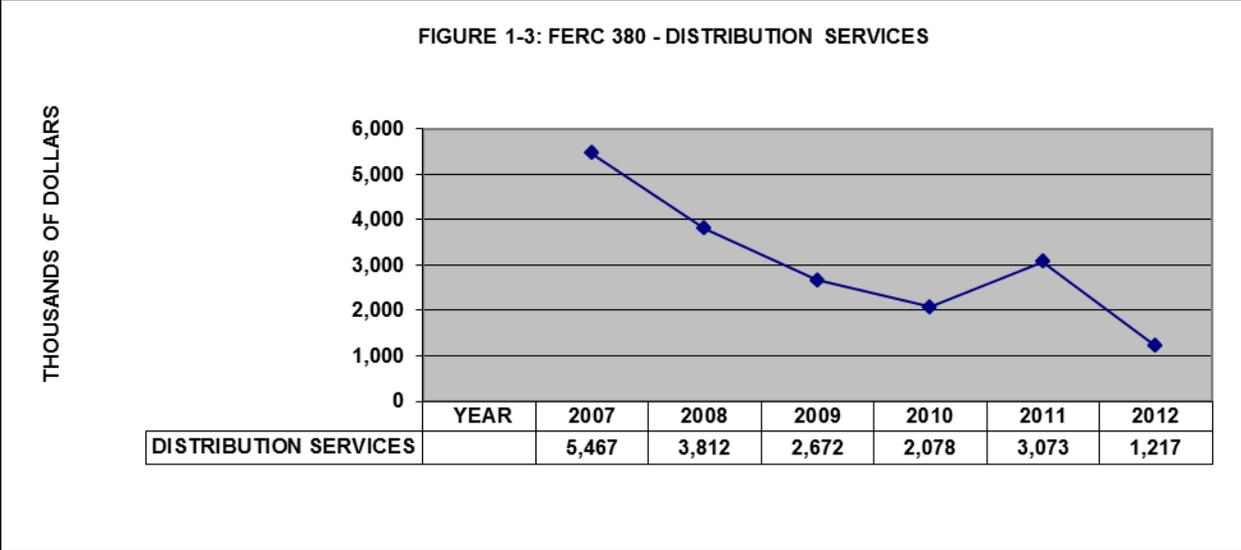
9 For this Account, Southwest is requesting additions of \$3.8 million for 2012; \$2.1
10 million for 2013 and \$2.8 million for 2014. The corresponding DRA estimate is \$1.22
11 million in 2012; \$2.1 million in 2013 and \$2.8 million in 2014. In response to a DRA
12 data request,¹⁷ Southwest provided the actual additions of \$1.22 million for 2012. DRA
13 uses the \$1.22 million of actual recorded expenditures as its 2012 forecast.

14 Table 1-9 shows detailed calculations of 2013 and 2014 customer additions.
15 DRA agrees with SWG’s customer related plant additions.

16 DRA evaluated SWG’s 2013 and 2014 forecasts and agrees with the estimates.

¹⁶ *Supra* note 16.

¹⁷ Response to DRA data request DRA-SWG-28-GIE, Q.1.



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3 **D. FERC Account 381 – METERS**

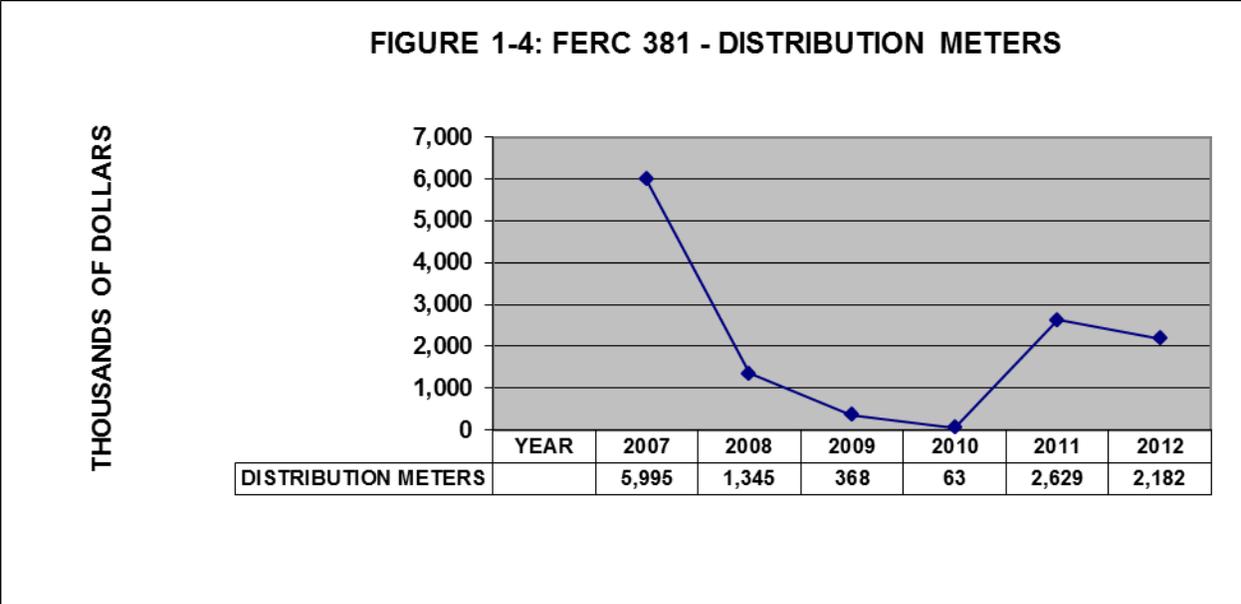
4 This Account consists of about eleven percent of all proposed distribution
 5 additions for 2012 through 2014. Figure 1-4 below shows the historical additions to this
 6 Account in 2011 dollars. DRA notes that there is a steady decline in additions from 2007
 7 through 2010; then the additions increased significantly in 2011 and 2012. SWG’s
 8 estimate of additions for this Account is based on a historical average cost per customer
 9 and forecasts of new customers.¹⁸

10 For this Account, Southwest is requesting additions of \$2.8 million for 2012;
 11 \$1.25 million for 2013 and \$1.3 million for 2014. In response to a DRA data request,¹⁹
 12 Southwest provided the actual additions of \$2.2 million for 2012. This amount is 14.3
 13 percent less than Southwest’s forecast for 2012 additions. DRA uses the \$2.2 million of
 14 actual recorded expenditures as its 2012 forecast.

15 Table 1-9 shows detailed calculations of 2013 and 2014 customer additions.
 16 DRA agrees with SWG’s customer related plant additions.

17 DRA agrees with SWG’s meter additions of \$1.25 million for 2013 and SWG’s
 18 meter additions of \$1.30 million for 2014.

¹⁸ SWG Appl., vol. II-A, Ch. 17 at 1–2.
¹⁹ Response to DRA data request DRA-SWG-GIE-8, Q.1.



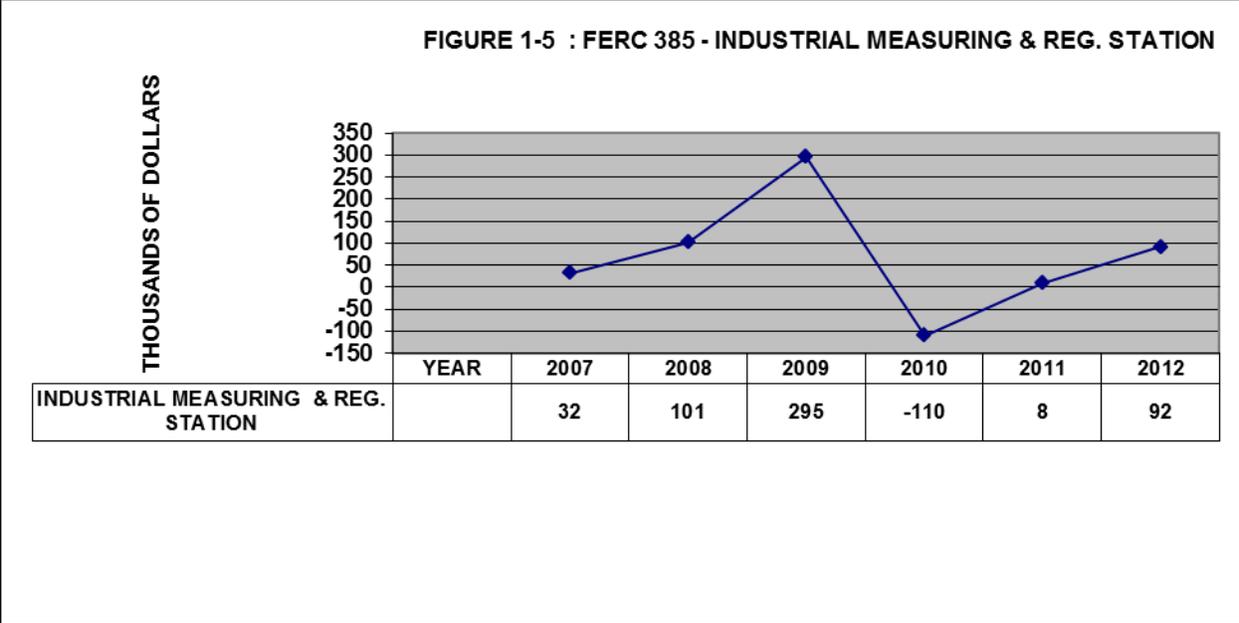
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E. FERC Account 385 – INDUSTRIAL MEASURING & REG. STATION

This Account is less than one percent of all proposed distribution additions from 2012 through 2014; Figure 1-5 shows the historical additions of this account in 2011 dollars. SWG’s estimate of additions for this account is based on a five-year historical average from 2007-2011.

For this account, Southwest is requesting additions of \$550,837 for 2012; \$72,154 for 2013 and \$73,886 for 2014. In response to a DRA data request,²⁰ Southwest provided the actual additions of \$91,707 for 2012. This amount is 83.5 percent less than Southwest’s forecast for 2012 additions. DRA uses the \$91,707 of actual recorded expenditures as its 2012 forecast. DRA accepts Southwest’s estimate of \$72,154 for 2013 and \$73,886 for 2014 plant additions, because they are consistent with average historical levels of additions for this account.

²⁰ Response to DRA data request DRA-SWG-GIE-8, Q.1.



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V. DISCUSSION/ANALYSIS OF GENERAL PLANT

General plant includes structures and improvements, transportation equipment or motor vehicles, office furniture, computer hardware and various equipment (e.g., stores, laboratory, communication, shop and garage). Southwest’s estimates for 2012 and 2013 general plant additions were based on a five-year (2007 through 2011) average of plant additions (see Table 1-10) and on a budgeted special project. The estimate for 2014 additions was based only on the five-year average of additions. Since the averages were in 2011 dollars, SWG applied escalation factors to arrive at the portion of 2012-2014 General Plant additions based on historical averages.²¹ Southwest is requesting General Plant additions of \$6.84 million for 2012; \$2.08 million for 2013 and \$2.13 million for 2014. In response to a DRA data request,²² Southwest provided the actual General Plant additions of \$5.55 million for 2012. The 2012 actual General Plant additions are lower than Southwest’s forecast. DRA uses the recorded figure as its 2012 forecast. Therefore, DRA recommends General Plant Additions of \$5.55 million

²¹ SWG Appl., supra note 22.

²² Response to DRA data request DRA-SWG-GIE-8, Q.1.

1 for 2012. DRA accepts Southwest's General Plant Additions estimate for 2013 and
 2 2014, because they are consistent with recent levels of additions for this account.

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Table 1-10
Southern California Division
2007-2011 Actual General Plant Additions²³
(In Thousands of 2011 Dollars)

General Plant	2007	2008	2009	2010	2011	5-Year Average
Land and Land Rights	0	0	0	1,340	0	268
Structures & Improvement/Owned	949	455	23	0	528	391
Structures & Improv./Leasehold	0	0	0	0	0	0
Office Furniture & Fixtures	98	30	13	0	52	37
Computer Software & Hardware	178	586	159	43	349	263
Transportation Equip.	1,082	473	354	567	1,704	836
Stores Equip,	0	0	0	0	0	0
Tools, Shop, & Garage Equip.	141	18	642	63	48	182
Laboratory Equip.	0	0	0	0	0	0
Communication Equip.	161	0	13	0	0	32
Power Operated Equip.	93	290	203	397	97	216
Miscellaneous Equip.	28	25	15	12	32	22
Total General Plant	\$2,730	\$1,877	\$1,422	\$ 2,422	\$2,810	\$2,257

²³ SWG Appl., vol. II-A, Ch. 17 at 2.

1 **CHAPTER 2**
2 **NORTHERN CALIFORNIA DIVISION**
3 **INTANGIBLE, DISTRIBUTION AND GENERAL PLANT**

4 **I. INTRODUCTION**

5 This Chapter presents DRA's analyses and recommendations regarding SWG's
6 Northern California Division distribution and general plant for 2012, 2013, and Test Year
7 (TY) 2014.

8 General plant includes structures and improvements, transportation equipment or
9 motor vehicles, office furniture, computer hardware and various equipment (e.g., stores,
10 laboratory, communication, shop and garage). Southwest is proposing End-of-Year
11 General Plant In-Service of \$3,839,024 for 2012; \$3,787,672 for 2013 and \$3,738,113
12 for 2014.

13 Gas distribution plant includes land and land rights, rights of way, structures and
14 improvements, mains, measuring and regulating stations, services and meters.

15 Southwest is proposing End-of-Year Distribution Plant In-Service of \$106,641,337 for
16 2012; \$116,236,500 for 2013 and \$126,094,158 for 2014.

17 **II. SUMMARY OF RECOMMENDATIONS**

18 The primary differences between DRA's and SWG's plant forecasts are as
19 follows:

20 1) For 2012, DRA uses recorded figures compared to the Southwest estimate.

21 DRA recommends the following:

- 22 • A 2012 End-of-Year Plant In Service estimate of \$112.05 million as compared
23 to SWG's estimate of \$110.511 million resulting from DRA's use of recorded
24 2012 data;
- 25 • Distribution Plant additions of \$11.86 million in 2012 compared to the SWG's
26 estimate of \$10.638 million as shown in Table 2-6;
- 27 • A 2013 End-of-Year Plant In Service SWG's estimate of \$121.60 million;
- 28 • SWG's 2013 Distribution Plant additions estimate of \$10.038 million as shown
29 in Table 2-7; and

1 • SWG's 2014 Distribution Plant additions of \$10.300 million as shown in Table
2 2-8.

3 In Table 2-1 below, DRA's recommended is compared with SWG's proposed
4 Northern California Division End-of-Year gas plant-in-service (GPIS) estimates for 2012-
5 2014:

6 **Table 2-1**
7 **Northern California Division**
8 **2012-2014 End-of-Year Gas Plant-in-Service**
9 **(In Thousands of Dollars)**

Description (a)	DRA Recommended (b)	SWG Proposed ²⁴ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
2012 End-of-Year GPIS	\$112,052	\$110,512	(\$1,540)	(1.4%)
2013 End-of-Year GPIS	\$121,596	\$120,056	(\$1,540)	(1.28%)
2014 End-of-Year GPIS	\$131,404	\$129,864	(\$1,540)	(1.19%)

10 Tables 2-2 through 2-4 provide a comparison similar to that of Table 2-1, but with
11 further breakdowns by functional area per year.

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²⁴ SWG Appl., vol. II-B, Ch. 17 at 19, 21 and 23 (col. f, line 29).

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Table 2-2
Northern California Division
End-of-Year 2012 Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed ²⁵ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$31	\$31	\$0.0	0.0%
Distribution Plant	\$107,989	\$106,642	(\$1,347)	(1.3%)
General Plant	\$4,032	\$3,839	(\$193)	(5.0%)
Total	\$112,052	\$110,511	(\$1,540)	(1.4%)

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Table 2-3
Northern California Division
End-of-Year 2013 Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed ²⁶ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$31	\$31	\$0.0	0.0%
Distribution Plant	\$117,584	\$116,237	(\$1,347)	(1.16%)
General Plant	\$3,981	\$3,788	(\$193)	(5.10%)
Total	\$121,596	\$120,056	(\$1,540)	(1.28%)

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Table 2-4
Northern California Division
End-of-Year 2014 Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed ²⁷ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$31	\$31	\$0.0	0.0%
Distribution Plant	\$127,441	\$126,094	(\$1,347)	(1.07%)
General Plant	\$3,931	\$3,738	(\$193)	(5.16%)
Total	\$131,403	\$129,863	(\$1,540)	(1.19%)

²⁵ *Id.* at 19 (col. f).

²⁶ *Id.* at 21 (col. f).

²⁷ *Id.* at 23 (col. f).

1 Table 2-5 provides a comparison between DRA's and SWG's forecasted plant
2 additions for 2012-2014:

3 **Table 2-5**
4 **Northern California Division**
5 **2012-2014 Forecasted Plant Additions**
6 **With Overheads & Escalation**
7 **(In Thousands of Dollars)**

Description	DRA Recommended			SWG Proposed ²⁸		
	2012	2013	2014	2012	2013	2014
Intangible Plant	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Distribution Plant	\$11,864	\$10,038	\$10,300	\$10,639	\$10,038	\$10,300
General Plant	\$176	\$75	\$76	\$73	\$75	\$76
Total	\$12,040	\$10,113	\$10,376	\$10,712	\$10,113	\$10,376

8 **III. GENERAL DISCUSSION**

9 For the Northern California Division, DRA accepts SWG's recorded 2012 plant
10 additions in lieu of the utility's forecasts. Due to the cumulative nature of plant additions
11 from year-to-year, it is preferable to eliminate a year of project estimates if more recent
12 recorded data provide a more appropriate basis for the plant forecast. This is generally
13 consistent with DRA's approach in other rate cases, such as those involving Pacific Gas
14 and Electric Company, San Diego Gas & Electric Company, Southern California Gas
15 Company and Southern California Edison Company,

16 In addition, DRA does not take issue with SWG's estimates of 2012-2014
17 salvage and removal costs, retirements and transfers. SWG relied on five-year
18 averages from 2007-2011 to derive its 2012-2014 estimates. Considering that salvage
19 and removal costs, retirements and transfers are not easily predicted from year-to-year,
20 DRA recommends that relying on a multi-year average is reasonable.

21 **IV. DISCUSSION/ANALYSIS OF DISTRIBUTION PLANT**

22 The SWG Distribution Plant Additions estimating methodology is as follows:

²⁸ *Id.* at 19, 21 and 23 (col. d).

- 1 (a) SWG projected additions for Distribution Plant In-Service, which includes:
2 land and land rights, right of way, structures and improvements, mains,
3 measuring and regulating station, services, meters, industrial and other
4 equipment, for 2012, 2013 and TY 2014. There are four methods SWG used
5 for projecting distribution plant additions: 1) customer growth-related; 2)
6 special projects; 3) regulatory mandated replacements and 4) historical
7 average. Retirement and transfers for distribution plant used to derive the
8 projected years 2012 and 2013 and TY 2014 additions were based on the
9 five-year average of historical period 2007 through 2011. Also, salvage and
10 removal cost for distribution used in the projected years 2012, 2013 and TY
11 2014 were based on the five-year average of the historical period 2007
12 through 2011. DRA does not take issue with SWG's estimates of salvage
13 and removal costs, retirements and transfers.
- 14 (b) Construction overheads, labor and non-labor loadings are added to each
15 2012 projected additions.
- 16 (c) The 2012 projected additions with overheads, labor and non-labor loadings
17 are escalated using an appropriate escalation factor.
- 18 (d) The 2012 escalated additions are added to the 12/31/2011 Distribution Plant
19 In-Service.
- 20 (e) Then the 2012 retirements/transfers are subtracted to yield 12/31/2012
21 Distribution Plant In-Service.
- 22 (f) The 2013 escalated additions are added to 12/31/2012 Distribution Plant In-
23 Service.
- 24 (g) Then the 2013 retirements/transfers are subtracted to yield 12/31/2013
25 Distribution Plant In-Service.
- 26 (h) The 2014 escalated additions are added to 12/31/2013 Distribution Plant In-
27 Service.
- 28 (i) Then the 2014 retirements/transfers are subtracted to yield 12/31/2014
29 Distribution Plant In-Service.

1 DRA does not take issue with SWG's estimating methodology for plant additions
 2 in 2013 and 2014.

3 **Table 2-6**
 4 **Northern California Division**
 5 **2012 Forecasted Plant Additions with Overheads & Escalation**
 6 **(In Thousands of Dollars)**

Distribution Plant	FERC Account Number	Southwest Additions ²⁹	DRA Additions	Difference
Mains	376	9,178	9,422	(244)
Measuring & Reg. Stat. Equip./General	378	0	185	(185)
Services	380	1,326	1,683	(357)
Meters	381	133	438	(305)
Industrial Measuring & Reg. Stat. Equip.	385	2	136	(134)
TOTAL		10,639	11,864	(1,225)

7 **Table 2-7**
 8 **Northern California Division**
 9 **2013 Forecasted Plant Additions with Overheads & Escalation**
 10 **(In Thousands of Dollars)**

Distribution Plant	FERC Account Number	Southwest Additions ³⁰	DRA Additions	Difference
Mains	376	8,464	8,464	0.0
Measuring & Reg. Stat. Equip./General	378	0.0	0.0	0.0
Services	380	1,433	1,433	0.0
Meters	381	138	138	0.0
Industrial Measuring & Reg. Stat. Equip.	385	2	2	0
TOTAL		10,037	10,037	0.0

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²⁹ *Id.* at 19 (col. d).

³⁰ *Id.* at 21 (col. d).

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Table 2-8
Northern California Division
2014 Forecasted Plant Additions with Overheads & Escalation
(In Thousands of Dollars)

Distribution Plant	FERC Account Number	Southwest Additions³¹	DRA Additions	Difference
Mains	376	8,671	8,671	0.0
Measuring & Reg. Stat. Equip./General	378	0.0	0.0	0.0
Services	380	1,483	1483	0.0
Meters	381	144	144	0.0
Industrial Measuring & Reg. Stat. Equip.	385	2	2	0.0
TOTAL		10,300	10,300	0.0

5 **A. FERC Account 376 - MAINS**

6 This Account consists of about eighty-five percent of all proposed distribution
7 additions from 2012 through 2014. Figure 2-1 below shows the historical additions to
8 this Account. Note that the additions are relatively flat from 2007 through 2011; then
9 increased in 2012.

10 Southwest’s estimate of additions for this Account is based on historical
11 averages, special projects, new customers and a 14-year regulatory mandated pipeline
12 replacement project.³²

13 For this Account, Southwest is requesting additions of \$9.2 million for 2012; \$8.5
14 million for 2013 and \$8.7 million for 2014. In response to a DRA data request,³³
15 Southwest provided the actual additions of \$9.4 million for 2012. Although this amount
16 is 2.1 percent more than Southwest’s forecast for 2012 additions, DRA accepts the \$9.4
17 million of recorded expenditures for 2012.

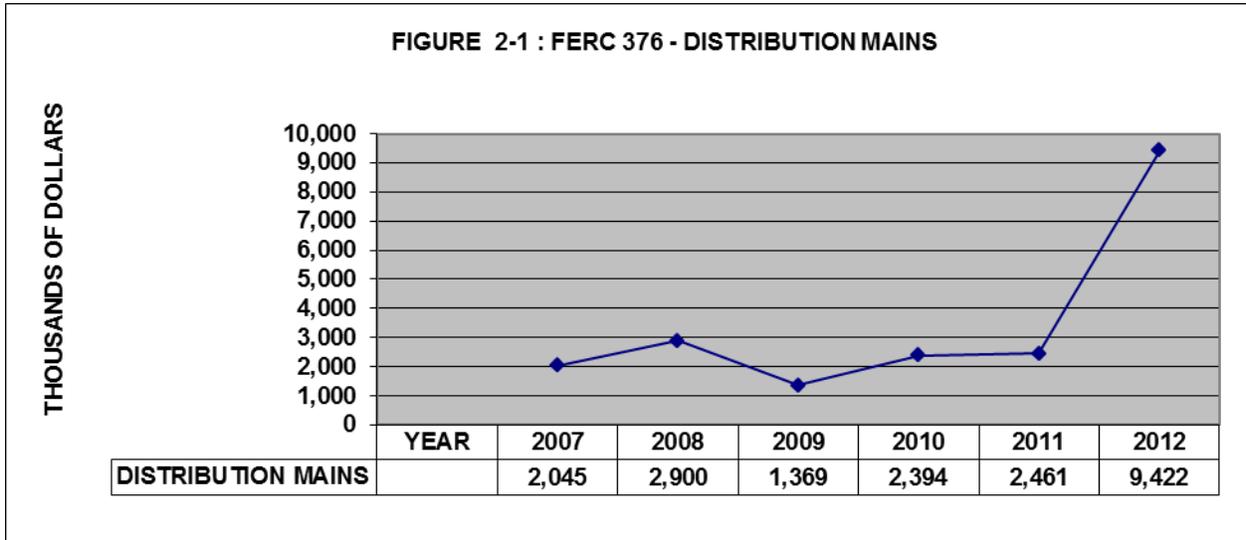
18 Table 2-9 shows detailed calculations of 2013 and 2014 customer additions.
19 DRA agrees with SWG’s customer related plant additions.

³¹ *Id.* at 23 (col. d).

³² *Id.* at 1–3.

³³ Response to DRA data request DRA-SWG-GIE-8, Q.1.

1 DRA agrees with SWG's estimate of \$8.5 million for 2013 and SWG's estimate of
2 \$8.7 million for 2014.



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Table 2-9
Northern California Division
2013 and 2014 DRA Adjustments for Mains, Services & Meters
Without Overheads & Escalation
(In 2011 Dollars)

YEAR	FERC	Description	SWG New Customer	DRA New Customer	Cost per Customer	New Customer Additions
2013	376	Mains	251	251	\$679	\$170,429
2013	380	Services	251	251	\$1,569	\$393,819
2013	381	Meter	251	251	\$488	\$122,488
2014	376	Mains	256	256	\$679	\$173,824
2014	380	Services	256	256	\$1,569	\$401,664
2014	381	Meter	256	256	\$488	\$124,928

6

7

B. FERC Account 380 - SERVICES

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This Account consists of about fourteen percent of all proposed distribution additions for 2012 through 2014. Figure 2-2 below shows the historical additions to this Account in 2011 dollars.

10

11

Southwest's estimate of additions for this Account is based on historical averages, new customers and a 13-year regulatory mandated pipeline replacement project.³⁴

13

14

For this Account, Southwest is requesting additions of \$1.33 million for 2012; \$1.43 million for 2013 and \$1.48 million for 2014. In response to DRA data request,³⁵ Southwest provided the actual additions of \$1.68 million for 2012. Although this amount is higher than Southwest's forecast for 2012 additions, DRA uses the \$1.68 million of actual recorded expenditures as its 2012 forecast.

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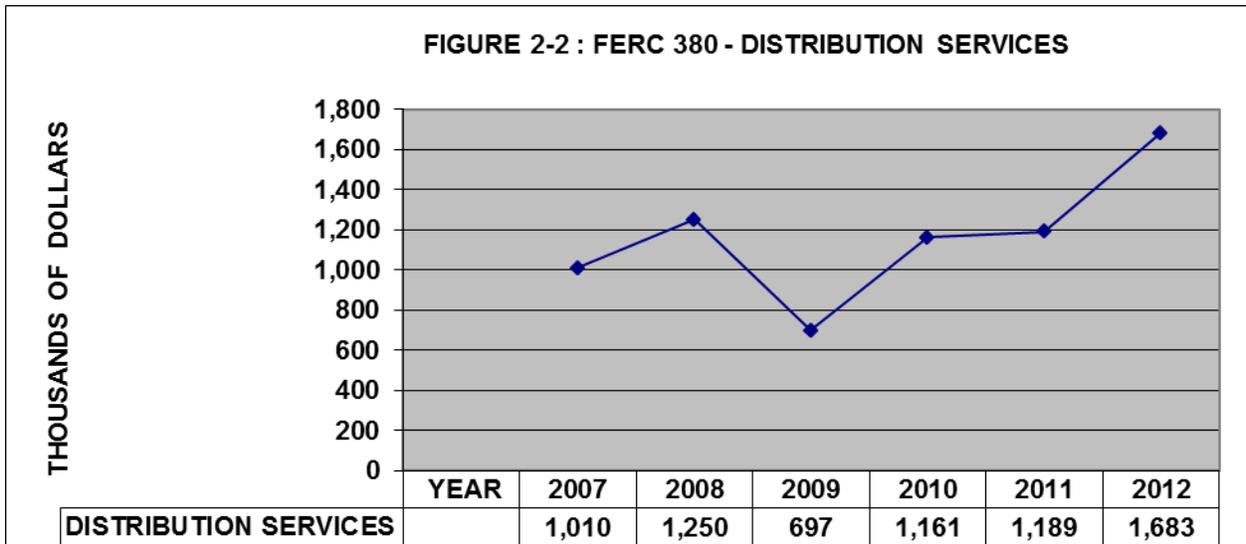
Table 2-9 shows detailed calculations of 2013 and 2014 customer additions. DRA agrees with SWG's customer related plant additions.

20

³⁴ Northern California Division Results of Operations, Vol. II-B, Ch. 17, sheets 1-3.

³⁵ Response to DRA data request DRA-SWG-GIE-8, Q.1.

1 DRA agrees with SWG’s estimate of \$1.43 million for 2013 and SWG’s estimate
 2 of \$1.48 million for 2014.



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C. FERC Account 381 - METERS

5 This Account consists of about one percent of all proposed distribution additions
 6 from 2012 through 2014 and Figure 2-3 shows the historical additions to this Account in
 7 2011 dollars. Southwest’s estimate of additions for this Account is based on historical
 8 average cost per customer and new customers.³⁶

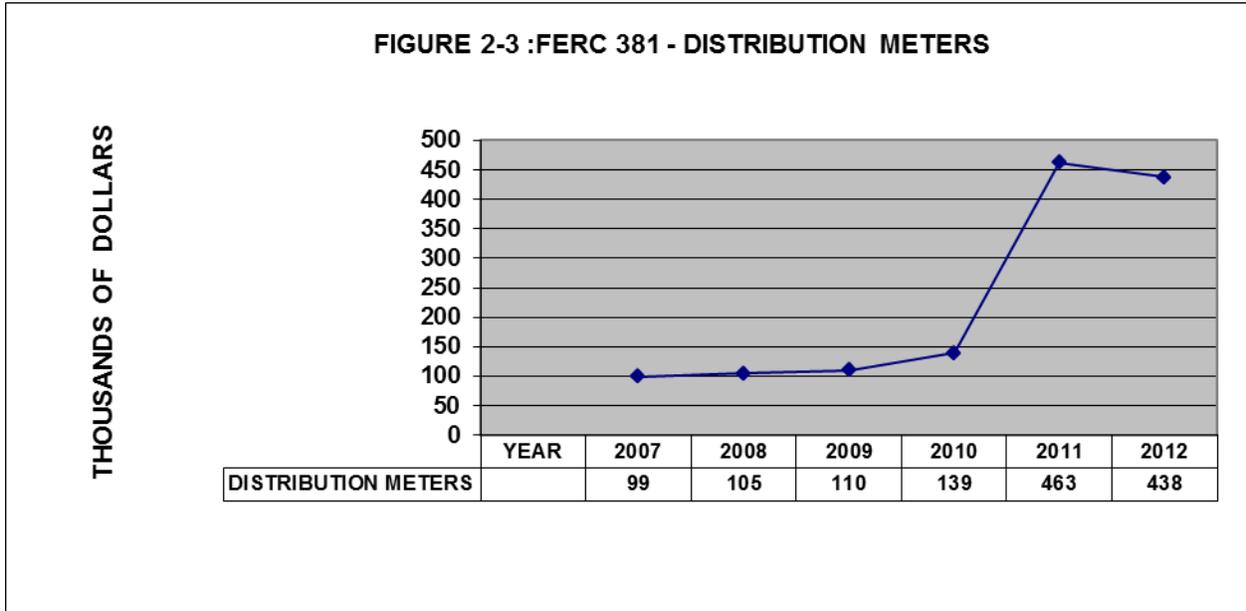
9 For this Account, Southwest is requesting additions of \$132,849 for 2012;
 10 \$138,426 for 2013 and \$144,572 for 2014. In response to a DRA data request,³⁷
 11 Southwest provided the actual additions of \$438,299 for 2012. Although this amount is
 12 more than Southwest’s forecast for 2012 additions, DRA uses the \$438,299 of actual
 13 recorded expenditures as its 2012 forecast.

14 Table 2-9 shows detailed calculations of 2013 and 2014 customer additions.
 15 DRA agrees with SWG’s customer related plant additions.
 16

³⁶ SWG Appl., at Vol. II-B, Ch. 17 at 1–2.

³⁷ Response to DRA data request DRA-SWG-GIE-8, Q.1.

1 DRA agrees with SWG's estimate of \$138,427 for 2013 and SWG's estimate of
 2 \$144,572 million for 2014.



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D. FERC Account 385 - INDUSTRIAL MEASURING & REG. STATION

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7 This Account is less than one percent of all proposed distribution additions from
 8 2012 through 2014 and Figure 2-4 shows the historical additions to this account.

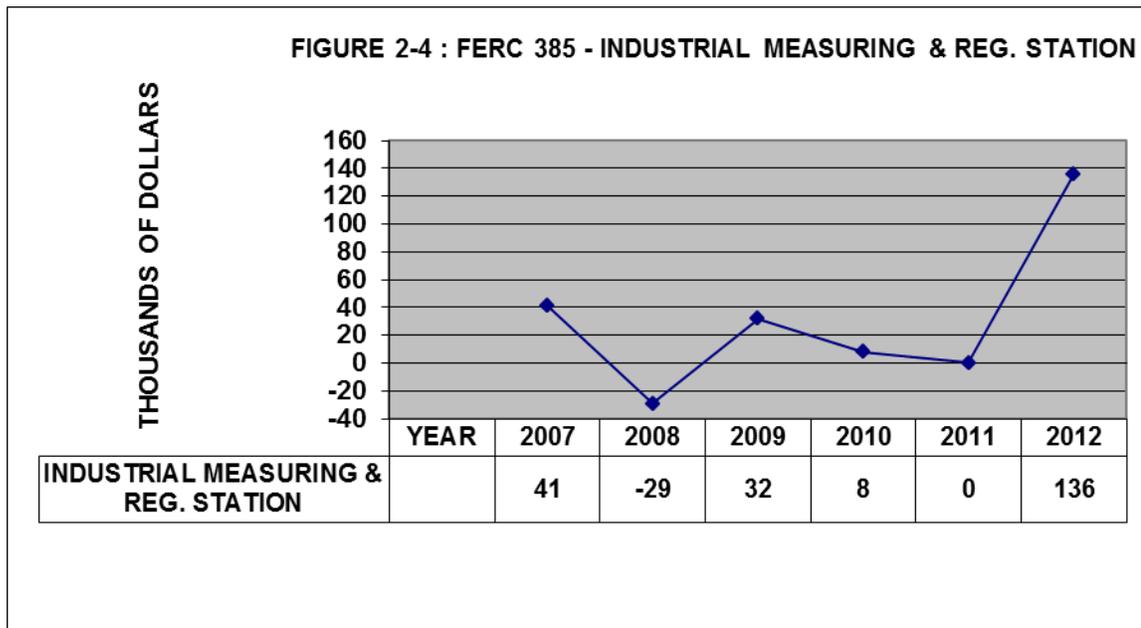
9 Southwest estimate of additions to this account is based on a five-year (2007 through
 10 2011) historical average.³⁸

11 For this Account, Southwest is requesting additions of \$1,650 for 2012, \$1,888
 12 for 2013 and \$1,774 for 2014. In response to DRA data request,³⁹ Southwest provided
 13 the actual additions of \$135,543 for 2012. Although this amount is higher than
 14 Southwest's forecast for 2012 additions, DRA uses the \$135,543 of actual recorded
 15 expenditures as its 2012 forecast. DRA also accepts Southwest's estimate of \$1,888
 16 for 2013 and \$1,774 for 2014 plant additions because they are comparable to the
 17 average level of additions for this account from 2007-2011.

³⁸ SWG Appl., *supra* at note 46.

³⁹ Response to DRA data request DRA-SWG-GIE-8, Q.1.

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3 **V. DISCUSSION / ANALYSIS OF GENERAL PLANT**

4 General plant includes structures and improvements, transportation equipment or
 5 motor vehicles, office furniture, computer hardware and various equipment (e.g., stores,
 6 laboratory, communication, shop and garage).

7 Southwest’s estimate for 2012, 2013 and 2014 plant additions was based on a
 8 five-year (2007 through 2011) average of expenditures (see Table 2-10). Since the
 9 average was in 2011 dollars, SWG applied escalation factors to arrive at 2012, 2013,
 10 and 2014 General Plant additions. Southwest is requesting General Plant additions of
 11 \$73,200 for 2012; \$74,754 for 2013 and \$76,548 for 2014. In response to a DRA data
 12 request,⁴⁰ Southwest provided the actual General Plant additions of \$176,539 for 2012.
 13 Although the 2012 recorded amount is higher than SWG’s projected 2012 amount, DRA
 14 recommends General Plant Additions of \$176,539 for 2012. DRA accepts Southwest
 15 General Plant Additions estimate for 2012 through 2014.

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⁴⁰ Response to DRA data request DRA-SWG-GIE-8, Q.1.

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Table 2-10
Northern California Division
2007-2011 Actual General Plant Additions⁴¹
(In 2011 Dollars)

General Plant	2007	2008	2009	2010	2011	5-Year Average
Structures & Improvement/Gen	(29,441)	23,972	5,705	0	0	47
Structures & Improv./Leasehold	0	0	0	0	0	0
Office Furniture & Equipment	0	0	0	0	0	0
Computer Software & Hardware	0	34,877	683	4,806	13,528	10,779
Transportation Equip.	28,396	35,089	37,704	0	86,805	37,599
Stores Equip,	0	0	0	0	0	0
Tools, Shop, & Garage Equip.	0	0	7,814	0	0	1,563
Communication Equip.	0	0	0	0	0	0
Power Operated Equip.	0	0	20,602	86,472	0	20,815
Communication Equipment	0	0	0	3,229	0	646
Land & Land Rights	0	0	0	0	0	0
Total General Plant	(\$1,045)	\$93,938	\$72,507	\$91,507	\$100,332	\$71,448

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⁴¹ SWG Appl., Vol. II-B, Ch. 17 at 2.

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Table 3-1
South Lake Tahoe District
End-of-Year 2012-2014 Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed⁴³ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
2012 End-of-Year GPIS	\$35,753	\$35,753	\$0.0	0%
2013 End-of-Year GPIS	\$38,229	\$38,229	\$0.0	0%
2014 End-of-Year GPIS	\$40,792	\$40,792	\$0.0	0%

5 Tables 3-2 through 3-4 provide a comparison similar to that of Table 3-1, but with
6 further breakdowns by functional area per year.

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Table 3-2
South Lake Tahoe District
End-of-Year 2012 Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed⁴⁴ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$1.6	\$1.6	\$0.0	0%
Distribution Plant	\$35,135	\$35,135	\$0.0	0%
General Plant	\$616	\$616	\$0.0	0%
Total	\$35,753	\$35,753	\$0.0	0%

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⁴³ *Id.* at 18, 20 and 22 (col. f).

⁴⁴ *Id.* at 18 (col. f).

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Table 3-3
South Lake Tahoe District
End-of-Year 2013 Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed⁴⁵ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$1.6	\$1.6	\$0.0	0%
Distribution Plant	\$37,690	\$37,690	\$0.0	0%
General Plant	\$537	\$537	\$0.0	0%
Total	\$38,229	\$38,229	\$0.0	0%

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Table 3-4
South Lake Tahoe District
End-of-Year 2014 Gas Plant-in-Service
(In Thousands of Dollars)

Description (a)	DRA Recommended (b)	SWG Proposed⁴⁶ (c)	Amount SWG>DRA (d=c-b)	Percentage SWG>DRA (e=d/b)
Intangible Plant	\$1.6	\$1.6	\$0.0	0%
Distribution Plant	\$40,329	\$40,329	\$0.0	0%
General Plant	\$461.4	\$461.4	\$0.0	0%
Total	\$40,792	\$40,792	\$0.0	0%

9 Table 3-5 provides a comparison between DRA's and SWG's forecasted plant
10 additions for 2012-2014:
11

⁴⁵ *Id.* at 20 (col. f).

⁴⁶ *Id.* at 22 (col. f).

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Table 3-5
South Lake Tahoe District
2012-2014 Forecasted Plant Additions
(In Nominal Dollars)

Description	DRA Recommended			SWG Proposed ⁴⁷		
	2012	2013	2014	2012	2013	2014
Intangible Plant	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Distribution Plant	\$1,568	\$3,399.1	\$3,484.1	\$1,568	\$3,399.1	\$3,484.1
General Plant	\$86.4	\$88.2	\$90.3	\$86.4	\$88.2	\$90.3
Total	\$1,654.4	\$3,487.3	\$3,574.4	\$1,654.4	\$3,487.3	\$3,574.4

5 **III. DISCUSSION / ANALYSIS**

6 DRA reviewed the total 3-year, 2012-2014, level of plant additions that SWG
7 forecasts for the South Lake Tahoe District and finds the forecasts reasonable.

8 DRA does not take issue with SWG’s estimates of 2012-2014 salvage and
9 removal costs, retirements and transfers. SWG relied on five-year averages from 2007-
10 2011 to derive its 2012-2014 estimates. Considering that salvage and removal costs,
11 retirements and transfers are not easily predicted from year-to-year, DRA recommends
12 that relying on a multi-year average is reasonable.

13

⁴⁷ *Id.* at 18, 20 and 22 (col. d).

1 **QUALIFICATIONS AND PREPARED TESTIMONY**
2 **OF**
3 **GODSON EZEKWO, P.E.**

4 Q.1 Please state your name and address.

5 A.1 My name is Godson Ezekwo. My business address is 505 Van Ness Avenue,
6 San Francisco, California.

7 Q.2 By whom are you employed and in what capacity?

8 A.2 I am employed by the California Public Utilities Commission as a Utilities
9 Engineer in the Division of Ratepayer Advocates Energy Cost of Service and
10 Natural Gas Branch.

11 Q.3 Briefly describe your educational background and work experience.

12 A.3 I have a Bachelor of Science degree in Chemical Engineering from Cleveland
13 State University; a Master of Science degree in Chemical Engineering from
14 Columbia University; and Master of Business Administration degrees in Project
15 Management and General Management from Golden Gate University. I am a
16 certified pipeline safety inspector (certified by the Department of Transportation).
17 Before joining the Commission in 1987, I was employed as a process engineer
18 by Bechtel Corporation. I have twelve years of experience in process design,
19 and startup assistance for petroleum refining, nuclear waste processing, and
20 natural gas utilities maintenance and operations.

21
22 Since joining the Commission in 1987, I have performed economic and technical
23 analysis on complex issues relating to natural gas and electric plants. I have
24 been responsible for the administration of General Orders 95, 112D, and 128. I
25 sponsored testimony for DRA in San Diego Gas & Electric Company (SDG&E),
26 Southern California Edison Company (Edison), Pacific Gas and Electric
27 Company, and Southwest Gas rate proceedings. I was a project manager for the
28 1995 and 1996 Edison ECAC proceedings. I also sponsored testimony on
29 Edison's CTC, SDG&E Performance Indicators in PBR proceedings, SDG&E
30 Capital Additions, SDG&E Generation Divestiture, and Southwest Gas and Sierra
31 Pacific general rate cases.

32
33 Q.4 Are you a registered professional engineer?

34 A.4 Yes, I am a registered Professional Engineer in Chemical Engineering in the
35 State of California.

36 Q.5 What is your area of responsibility in this proceeding?

37 A.5 I am responsible for Exhibit DRA-06, which addresses Southwest Gas
38 Company's Intangible, Distribution and General Plant.

39 Q.6 Does that complete your prepared testimony?

40 A.6 Yes, it does.