Docket:	:	A.12-11-009
Exhibit Number	:	DRA-19
Commissioner	:	Florio
ALJ	:	Pulsifer
Witness	:	Karle

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations for Pacific Gas and Electric Company General Rate Case Test Year 2014

Depreciation Expenses and Reserve

San Francisco, California
May 3, 2013

TABLE OF CONTENTS

DEPRECIATION EXPENSES AND RESERVE

I. INTRODUCTION

This exhibit presents the analyses and recommendations of the Division of Ratepayer Advocates (DRA) regarding Pacific Gas and Electric Company's (PG&E) forecasts of depreciation and amortization expenses and depreciation reserve for Test Year (TY) 2014. DRA addresses PG&E's electric distribution, gas distribution, and electric generation related assets.

Depreciation expense is related to the magnitude of the company's plant-in-service. The level of depreciation for plant in service is inversely proportional to the length of time the plant has been in service. As new plant is placed in service, the level of depreciation expense concomitantly increases. This expense enables the company to recover the original cost of capital investments less any estimated net salvage over the useful life of the asset. The depreciation reserve balances for the test year are calculated in the Results of Operations (RO) model which incorporates the estimated depreciation expenses based on net plant addition forecasts and automatically calculates the reserve requirement for the test year.

II. SUMMARY OF RECOMMENDATIONS

The following summarizes DRA's recommendations:

- PG&E is requesting a number of large increases to net salvage values on various accounts, which could lead to a significant ratepayer impact. DRA recommends that increases to net salvage be capped at -25% for this GRC cycle in order to mitigate the overall impact on rates.

- PG&E's requested depreciation parameters are reasonable, with the exception of those noted below:

  - PG&E's Average Service Lives (ASL) are reasonable, with the exception of asset classes EHP33300, EHH33300, EHP33500, and EHH33500. DRA's recommended values for these asset classes are outlined in Table 19-4.

- PG&E's Net Salvage values are reasonable, with the exception of asset classes ETP35301, ETP35400, ETP35401, EDP36400, EDP36500, EDP36600, EDP36801, EDP36901, EDP37000, EDP 37001, EDP37303, GDP 38000, and GDP38100. DRA's recommended values for these asset classes are outlined in Tables 19-5 and 19-6.

Table 19-1 compares DRA's and PG&E's TY2014 forecasts of Electric Distribution depreciation & amortization expenses, and of weighted average depreciation reserve:

Table 19-1
Electric Distribution
Depreciation & Amortization Expense and Depreciation Reserve for TY2014
(In Thousands of Dollars)

Description	DRA Recommended	PG&E Proposed[1]	Difference PG&E>DRA	Percentage PG&E>DRA
Depreciation & Amortization Expenses	$1,064,890	$1,351,276	$286,386	26.89%
Weighted Average Depreciation Reserve	$10,879,618	$10,971,115	$91,497	0.84%

Table 19-2 compares DRA's and PG&E's TY2014 forecasts of Gas Distribution depreciation & amortization expenses, and of weighted average depreciation reserve:

Table 19-2
Gas Distribution
Depreciation & Amortization Expense and Depreciation Reserve for TY2014
(In Thousands of Dollars)

Description	DRA Recommended	PG&E Proposed[2]	Difference PG&E>DRA	Percentage PG&E>DRA
Depreciation & Amortization Expenses	$375,552	$463,955	$88,403	23.54%
Weighted Average Depreciation Reserve	$4,868,340	$4,867,599	-$741	-0.02%

[1] Ex. PG&E-2, Ch. 10-3.

[2] Ibid.

Table 19-3 compares DRA's and PG&E's TY2014 forecasts of Electric Generation depreciation & amortization expenses, and of weighted average depreciation reserve:

Table 19-3
Electric Generation
Depreciation & Amortization Expense and Depreciation Reserve for TY2014
(In Thousands of Dollars)

Description	DRA Recommended	PG&E Proposed[3]	Difference PG&E>DRA	Percentage PG&E>DRA
Depreciation & Amortization Expenses	$411,490	$451,977	$40,487	9.84%
Weighted Average Depreciation Reserve	$8,250,681	$8,246,327	-$4,354	-0.05%

III. BACKGROUND

Depreciation is the recovery of the original cost of fixed capital assets less the estimated net salvage over the useful life of the property by means of an equitable plan of charges through operating expenses. In ratemaking, recovery of depreciation expense is through a single depreciation rate with components that provides for capital recovery, the cost of removal and salvage. The level of expense is based on the function of the level of plant balance and of the parameters (net salvage value and service life) applied to the gross salvage amount received less the cost of removing the asset.

The Federal Energy Regulatory Commission's (FERC) definition of depreciation is set forth in 18 Code of Federal Regulation (CFR), Part 101:

> "Depreciation, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, and action of the element,

[3] Ibid.

inadequacy, obsolescence, changes in the art, changes in demand and requirements of the public authorities."

The current depreciation accrual rates for PG&E were authorized by the Commission in the utility's 2011 General Rate Case (GRC) Decision (D.) 11-05-018. Consistent with the guidelines described in the January 3, 1961 Commission Standard Practice (SP) U-4, *Determination of Straight-Line Remaining Life Depreciation Accruals,* PG&E utilized the straight-line remaining-life methodology to develop its proposed 2014 depreciation accruals rates. This method uses the following formula to calculate the annual depreciation accruals:

$$\text{Depreciation Expense} = \frac{\text{Plant Balance- Reserve – Gross Salvage + Cost of Removal}}{\text{Remaining Service Life of Asset(s)}}$$

IV. OVERVIEW OF PG&E's REQUEST

PG&E requests that the Commission adopt $1,351.3 million for test year 2014 electric distribution (ED) related depreciation expense, $464 million for gas distribution (GD) related depreciation expense, and $452 million for electric generation (EG) related depreciation expense.[4] Compared to the authorized levels, PG&E's request represents an increase of $820.4 million ($531.8 million for ED, $181.5 million for GD and $107.1 million for EG) and is 47% percent higher than the recorded depreciation expense in 2011.

PG&E attributes the increase to plant growth and changes in accrual rates.[5] Of the total increase in ED depreciation expense, approximately $162 million is related to ED plant growth, and approximately $369.8 million is related to the increase in accrual rates. Of the total increase in GD depreciation expense, approximately $90.4 million is related to GD plant growth, and approximately $91.1 million is related to the increase in accrual rates. Of the total increase in EG

[4] Ex. PG&E-2, p. 10-1.

depreciation expense, approximately $67.2 million is related to EG plant growth, and approximately $34.3 million is related to the increase in accrual rates. Approximately $36.1 million is related to fossil decommissioning. For DRA's discussion and recommendations on fossil decommissioning, please see Exhibit DRA-12 (Energy Supply Capital Expenditures).

For 2014, PG&E requests that the Commission adopt a weighted average depreciation reserve of $10,993.5 million for ED, $4865.2 million for GD, and $8246.4 million for EG related plant.[6] PG&E has provided an updated depreciation study based on plant in service as of December 31, 2011 and new depreciation parameters to support its request for the increased depreciation expense for electric and gas operations. The depreciation study utilized the Straight-Line Remaining Life method as prescribed in CPUC Standard Practice U-4.

V. DISCUSSION / ANALYSIS OF DEPRECIATION AND AMORTIZATION EXPENSE

DRA concludes that the majority of PG&E's depreciation parameters appear to be reasonable. DRA does not contest PG&E's mortality curves. DRA does not contest PG&E's Average Service Life (ASL) proposals with the exception of the following asset classes: EHP33300, EHH33300, EHP33500, and EHH33500. DRA does not contest PG&E's proposed Net Salvage values with the exception of the following asset classes: ETP35301, ETP35400, ETP35401, EDP36400, EDP36500, EDP36600, EDP36801, EDP36901, EDP37000, EDP37001, EDP37303, GDP38000, and GDP38100. DRA's recommended values are summarized below:

(continued from previous page)

[5] Ibid, 10-3.

[6] Ibid, 10-1.

Table 19-4
Average Service Life – DRA Recommendations

Asset Class	FERC ID	Description	PG&E Average Service Life		DRA Proposed (Years)
			Current (Years)	2014 Proposed (Years)	
EHP33300	333	Waterwheels, Turbines and Generators	70	50	70
EHH33300		Waterwheels, Turbines and Generators	70	50	70
EHP33500	335	Miscellaneous Power Plant Equipment	40	40	42
EHH33500		Miscellaneous Power Plant Equipment	40	40	42

Table 19-5
Electric Generation and Distribution Net Salvage – DRA Recommendations

Asset Class	FERC ID	Description	PG&E Net Salvage Rates		DRA Proposed (%)
			Current (Settlement) (%)	2014 Proposed (%)	
ETP35301	353	Station Equipment	-30	-60	-55
ETP35400	354	Towers & Fixtures	-60	-110	-75
ETP35401	354	Towers & Fixtures (Combined Cycle)	-80	-110	-75
EDP36400	364	Poles, Towers, & Fixtures	-80	-150	-105
EDP36500	365	OH Conductors & Devices	-77	-200	-90
EDP36600	366	Underground Conduit	-20	-100	-20
EDP36801	368	Line Transformers-Overhead	-6	-25	-10
EDP36901	369	Services-Overhead	-75	-135	-85
EDP37000	370	Meters	-15	-20	-5
EDP37001		SmartMeters	-5	-20	-5
EDP37303	373	Street Light-Lamps & Equipment	-5	-65	-5

Table 19-6
Gas Distribution Net Salvage – DRA Recommendations

Asset Class	FERC ID	Description	PG&E Net Salvage Rates		DRA Proposed (%)
			Current (Settlement) (%)	2014 Proposed (%)	
GDP38000	380	Services - Gas	-105	-180	-130
GDP38100	381	Meters - Gas	-5	-25	-5

While DRA does not contest the bulk of PG&E's recommended depreciation parameters herein, it should be noted that PG&E's depreciation study shows a disconcerting trend toward sharply escalating removal costs, a trend not reflected in the GRC filings of the other major Investor-Owned Utilities (IOUs). Largely due to the severity of these increases, the depreciation parameters requested by PG&E would contribute significantly to a sudden and considerable rate impact. As such, DRA is recommending a cap of 25% to any increases in negative net salvage for this GRC cycle. This will help to mitigate the shock to rates that would result from the adoption of the depreciation parameters requested by PG&E. There is precedent for such a cap; the Commission has previously limited increases to negative net salvage in order to mitigate the impact of such increases on rates.[7]

In Southern California Edison's (SCE) 2009 rate case, the Commission agreed with DRA's request to freeze net salvage values in order to "mitigate the rate impact of this decision."[8] DRA's proposal herein will similarly mitigate the impact on rates of PG&E's sharply escalating removal costs. The Commission described the freeze to SCE's net salvage rates as "a deferral of the recovery of future net salvage costs."[9] Similarly, in this case the cost of removal will be recovered by the utility in due course regardless, but deferring the increases PG&E has requested will mitigate

[7] D.09-03-025 at 384, CoL 155.

[8] Id.

[9] D.09-03-025 at 354, FoF 238.

the impact of that recovery on current ratepayers without unduly affecting intergenerational equity.

Table 19-7
Total Annual Accrual of Net Salvage and Total Annual Spending on Cost of Removal for Years 2003-2011

Year	Accrual	Spending	Accrual - Spending
2003	$265,492,202	$95,592,129	$169,900,073
2004	$258,337,419	$89,432,939	$168,904,480
2005	$266,489,845	$97,524,517	$168,965,328
2006	$310,281,984	$109,338,517	$200,943,467
2007	$348,731,157	$113,188,545	$235,542,612
2008	$366,755,405	$194,069,780	$172,685,625
2009	$386,699,492	$195,590,050	$191,109,442
2010	$402,769,660	$153,878,447	$248,891,213
2011	$393,835,244	$162,372,897	$231,462,347
Total	$2,999,392,408	$1,210,987,821	$1,788,404,587
Mean	$333,265,823	$134,554,202	$198,711,621

As shown in Table 19-7, PG&E collects annually far more in accruals for removals than it incurs costs for removals. The average over-collection (net accrual) for years 2003-2011[10] was $198,711,621. PG&E's average spending for removal costs during the same timeframe was $134,554,202. During the nine year period for which PG&E provided complete records, only two years show an over-collection that was less than actual spending. In other words, in seven years out of nine PG&E accrued more than twice the amount for removals than it actually spent on removals. PG&E's current accruals are more than enough to cover removal costs for the time being, even with current net salvage rates. Implementing DRA's recommendation to cap and otherwise limit increases to net salvage will not impact PG&E's ability to

[10] This period was chosen due to the availability of recorded net salvage accrual and removal spending from PG&E, as outlined in PG&E's response to data request DRA_220-01.

fund removals. In light of this, it is reasonable to limit increases in net salvage rates in order to mitigate the impact of such increases on customer rates.

Specific discussion of DRA's recommended changes to PG&E's depreciation parameters follows, broken down by parameter and asset class.

A. Average Service Life

DRA does not contest the majority of PG&E's average service lives, with the exception of those summarized in Table 19-4. Specific discussion by asset class follows.

1. Waterwheels, Turbines and Generators - EHP33300 and EHH33300

PG&E requested in initial testimony to decrease ASL on accounts EHP33300 and EHH33300 from 70 to 50 years. In response to DRA discovery requesting the reason for the decrease in ASL, PG&E responded that the requested decrease was due to a mistake in the depreciation study.[11] PG&E corrected the mistake and provided new depreciation parameters for the requested accounts to DRA. These corrected parameters were included in PG&E's errata. PG&E's corrected proposal requests that ASL on this account remain 70 years. DRA recommends that the Commission adopt 70-year ASLs for accounts EHP33300 and EHH33300.

2. Miscellaneous Power Plant Equipment - EHP33500 and EHH33500

PG&E initially requested in testimony that the ASL for accounts EHP33500 and EHH33500 remain at the previous 40 years. As with EHP33300 and EHH33300, PG&E identified a mistake in the depreciation study in response to DRA discovery, and provided DRA with an updated ALS of 42 years.[12] The corrected parameters were included in PG&E's errata. DRA recommends that the Commission adopt a 42-year ASL for accounts EHP33500 and EHH33500.

---

[11] DRA_089-04

[12] Ibid.

B. Net Salvage Rates

DRA does not contest the majority of PG&E's proposed net salvage rates. However as has been mentioned above PG&E's sharply increasing costs of removal relative to regular retirements bears watching going forward. The largest increases were confined to a number of accounts specifically analyzed herein. PG&E has requested smaller increase in negative net salvage rates for many other accounts. The cumulative rate impact of these increases would be significant and as such for the reasons outlined previously DRA recommends a cap on increases to negative net salvage in order to dampen the rate impact which would occur under PG&E's proposal.

DRA's recommended changes to net salvage rates are outlined in Table 19-5 and 19-6, and specific discussion by asset class follows. A comparison of the previous and proposed/adopted net salvage values in the most recent GRC cycle for each of California's three major IOUs is included as Tables 19-8 and 19-9.

1. Station Equipment – ETP35301

The current authorized net salvage rate on this account is -30%; PG&E is proposing a rate of -60%, doubling the amount of net salvage collected for this account. PG&E is currently collecting at a far higher rate of negative net salvage on this account than the other major IOUs; SCE has a rate of -5%, while San Diego Gas & Electric (SDG&E) has a rate of -10%. While the raw data provided in PG&E's depreciation study does lend some support to such a rate, there is a strong inconsistency with removal costs at the other major IOUs. PG&E does not fully explain the drivers of these increasing costs in the depreciation study.

DRA recommends a net salvage value of -55% for this account. This is consistent with DRA's recommendation that increases to negative net salvage be capped at 25%. The proposed DRA figure is only slightly below the PG&E request.

2. Towers and Fixtures – ETP35400

The current authorized net salvage rate on this account is -60%, and PG&E is requesting a rate of -110%. PG&E explains in its depreciation study that "there is a

general increase in cost of removal percents,"[13] but does not further elaborate on the escalation. The -110% rate requested by PG&E is much higher than the net salvage rates collected by the other major IOUs on the same account. SCE collects a rate of -70% on this account, a rate that was not changed in SCE's last GRC. SDG&E collects a rate of -75%, a rate it did not request to change in its test year 2012 rate case.

PG&E's increasing costs of removal are not reflected in data from the same account at the other major IOUs, and PG&E has not provided sufficient information as to the drivers of these increasing costs. As such, DRA recommends that net salvage on this account be increased only to -75% in this GRC, as this is in line with the net salvage values maintained by the other major IOUs in their most recent rate case cycles.

3. Towers & Fixtures (Combined Cycle) – ETP35401

The current authorized net salvage rate for this account is -80%. PG&E is requesting a rate of -110%. This account shares a Federal Energy Regulatory Commission (FERC) account with ETP35400 (Towers and Fixtures) above, and the analysis above applies equally to this account. PG&E did not provide individual data for the separate asset classes included within FERC account 354, and as such individual account analysis is not possible. This being the case, DRA recommends that net salvage on this account be increased to -75%, consistent with DRA's recommendation for asset class ETP35400.

4. Poles Towers and Fixtures – EDP36400

The current authorized net salvage rate for this account is -80%. PG&E is requesting that this rate be increased to -150%. Total plant in service in this account as of December 31, 2011 was $2,797,336,000. PG&E has requested to increase the total depreciation accrual rate on this account from 4.7% to 6.47%.

---

[13] Ex. PG&E-2, WP p. 11-380.

The data provided by PG&E in the depreciation study for this account shows two outlier years not representative of the general trend in cost of removal data. In 2008, PG&E recorded a cost of removal that was 944% of regular retirements. For 2009 the cost of removal was 1200%. Cost of removal in these two years was exceptionally high, and as such these outlier years should be excluded from analysis of this account. DRA removed these 2 years from its analysis, and found that considering the years 1990-2007 results in a net salvage rate of -122%.[14] While this figure is lower than that requested by PG&E, the significant increase in the accrual rate on this account and large amount of plant in service will still result in a substantial increase that would be unduly burdensome to ratepayers.

The high costs of removal reported by PG&E relating to this account are not universal, and in its current rate case SDG&E has requested a 5% reduction in negative net salvage for this account, from -100% to -95%.

Consistent with DRA's recommendation that increases to negative net salvage be capped at 25%, DRA recommends that net salvage on this account be increased to -105%.

5. Overhead Conductors and Devices – EDP36500

The current authorized net salvage rate on this account is -77%. PG&E has proposed an increase to -200%, which is nearly a threefold increase over the current rate. Total plant in service in this account as of December 31, 2011 was $3,380,645,000. PG&E has requested to increase the accrual rate on this account from 4.64% to 8.23%. PG&E proposes to nearly triple the net salvage rate on this account and nearly double the depreciation accrual rate. This is a significant increase on a large amount of plant, and as such should be scrutinized and evaluated accordingly.

The removal costs reflected in PG&E's depreciation study lend some support to the rate requested by PG&E. However PG&E does not explain the reasons for the

[14] See Attachment A for the detailed analysis of EDP36400.

sharp increases in cost of removal for this account, stating only that "cost of removal is extremely high and is continually increasing."[15] These costs are out of line with the cost of removal for this account reported by the other major IOUs. SDG&E proposed a significant decrease in negative net salvage collected on this account from -100% to -70% in its current GRC. SCE proposed and received a slight increase from -100% to -110%. In 2008 PG&E reported that cost of removal was 1012% of the value of regular retirements; in 2009 the reported rate was 1406%. These reported costs are an order of magnitude higher than those reported by the other electric IOUs.

In light of PG&E's inability to explain the sharply escalating removal costs reported in the depreciation study, and in light of DRA's concern with the rate impact of PG&E's requested increases, DRA proposes a net salvage value of -90% for this account. This value is the mean of the net salvage values used by the other major IOUs, and should provide a sufficient increase to the accrual rate to cover current retirements.

6. Underground Conduit – EDP36600

The current authorized net salvage rate is on this account is -20%, while PG&E is requesting a fivefold increase to -100%. Total plant in service in this account as of December 31, 2011 was $2,261,437,000. PG&E has requested to nearly double the accrual rate on this account from 2.42% to 4.46%.

PG&E states in its depreciation study that analysis for the years 1990-2009 "indicated no salvage but very high constant cost of removal."[16] In PG&E's depreciation study, the average net salvage rate for years 1990-2009 is -102%. Removal costs for this account have remained constant despite the fact that regular retirements have dropped sharply in recent years. Between 1990 and 2009, regular retirements averaged $1,103,010, while in the period between 2004-2009, regular

---

[15] Ex. PG&E-2, p. WP 11-484.

[16] Ex. PG&E-2, p. WP 11-494.

retirements averaged $458,731. Asked to explain the escalation in cost of removal, PG&E responded removal that costs had "remained fairly constant."[17] While this is true, cost of removal relative to regular retirements has shown a sharp increase, one PG&E did not explain in discovery or in the depreciation report.

The other major IOUs have not shown similar trends towards increasing removal costs. SCE did not request an increase in net salvage for this account in its 2012 GRC, and SCE's net salvage rate remains at -20%, the same as PG&E's current rate. SDG&E's current net salvage rate is -40% for this account.

Consistent with DRA's recommendation that increases to negative net salvage be capped at 25%, DRA recommends that net salvage on this account be increased to -45%. This value is slightly higher than SDG&E's rate, and more than twice SCE's. A rate of -45% would more than double the current rate and leave PG&E collecting the highest amount for net salvage on this account of the three major IOUs.

7. Line Transformers Overhead – EDP36801

The current authorized net salvage rate on this account is -6%, and PG&E is requesting a rate of -25%. The data provided in the deprecation study do not justify this increase. Average net salvage between 1990 and 2009 is -11%; however 2009 is an unusually high year, with a cost of removal of $12,776,345. In contrast, average cost of removal excluding this year is $2,022,298. Excluding the year 2009 from the analysis results in an average net salvage value of -7%.[18] This is quite close to the current value of -6%.

DRA recommends keeping the current net salvage value of -6% for this account, which is consistent with the historical net salvage rates shown in PG&E's depreciation study.

---

[17] DRA-030-04

[18] See Attachment A for the detailed analysis of EDP36801.

8. Services – Overhead – EDP36901

The current authorized net salvage rate on this account is -75%, PG&E is requesting an increase to -135%. PG&E justifies the requested increase in the depreciation study by pointing out that cost of removal is increasing, and the depreciation study data supports this.[19] However PG&E does not give further elaboration to justify the increase. As PG&E points out in the depreciation study, overall average net salvage is -56%. PG&E explains the requested -135% rate by pointing out that the five year average for net salvage between the years 2005 and 2009 was -177%.

In its current 2012 rate case, SDG&E has requested a substantial reduction of the net salvage rate on this account from -125% to -90%. In SCE's 2012 rate case, the utility received a slight increase, from -75% to -85%. DRA recommends a net salvage rate of -85%. This is consistent with the other major IOUs, and is a substantially higher rate than the average net salvage value of -56% shown in the depreciation study.

9. Meters & Smart Meters – EDP37000 & EDP37001

The current authorized net salvage rate for EDP37000 (legacy meters) is -15%, and for EDP37001 (smart meters) is -5%. PG&E is requesting a single rate of -20% for both accounts. Total plant in service in this account is a combination of legacy meters and smart meters, and amounts to $916,875,000 as of December 31, 2011. PG&E has requested to increase the accrual rate on both accounts from 3.96% and 3.27%, respectively, to 6.36%.

The data provided in PG&E's depreciation study is for the entire FERC account, and is not divided into individual asset classes. The average net salvage value for combined meters/smart meters is -10% including data for years 2010-11 which PG&E provided in response to a DRA deficiency notice.[20]. PG&E claims in its

[19] Ex. PG&E-2, p. WP 11-533.

[20] Deficiency DEF-022-MK3.

depreciation study that these historical values are not accurately representative of the net salvage value of the new smart meters as they differ in cost of removal and in salvage value, and as the historical plant consists largely of legacy meters.[21] The depreciation study identifies 2008 as the start of smart meter deployment; data from this year and later should align more closely with the actual salvage value of the new meters. DRA calculated a net salvage value for only these years using the 2008-9 data in the depreciation study and data for years 2010-11 which PG&E provided in response to DRA's deficiency notice. For years 2008-2011 DRA found that the average net salvage value was -8%. This is quite close to the current -5% rate, as well as the rates used by the other major IOUs. In SCE's 2012 GRC, the utility requested and received a decrease in net salvage for this account from -10% to -5%. SDG&E requested in its current 2012 GRC to maintain its previous rate of 0%.

DRA recommends that net salvage on this account remain at -5%. As shown in DRA analysis[22] a rate of -5% is quite close to both the -10% historical average net salvage and the -8% average net salvage since the start of smart meter deployment in 2008. This rate is comparable to the rates at the other major IOUs. If PG&E can substantiate a more appropriate rate with historical data in a future GRC filing, the issue of an appropriate net salvage rate for the new smart meters can be revisited. At this time the available data supports the rate remaining at -5%.

10. Street Lighting and Signal Systems – Lamps and Equipment – EDP37303

The current authorized net salvage rate on this account is -5%. PG&E is requesting an increase to -65%. PG&E has requested to increase the accrual rate on this account from 1.9% to 6.36%. PG&E explains the requested increase by

---

[21] Ex. PG&E-2, p. WP 11-552.

[22] See Attachment A for the detailed analysis of EDP37000 and EDP37001.

stating in its depreciation study that the five year average net salvage value for the years 2005-2009 was -68%.[23]

The sharp increase proposed by PG&E is not however justified by the whole of the data available in the depreciation study. Using the data from the entire period of years 1990 to 2009 provided by PG&E, DRA determined that the average net salvage amounts to roughly -10%. This average excludes 1996, an outlier year in which PG&E recorded an unusually large amount of positive salvage value.[24] Including 1996, DRA found that the average the net salvage rate is positive, at 5%.

DRA recommends that net salvage on this account be increased to -10%, as this is the average net salvage rate shown in the depreciation study from 1990-2009 excluding the outlier year of 1996.

11. Services – Gas – GDP38000

The current authorized net salvage rate for this account is -105%; PG&E are requesting an increase to -180%. Total plant in service in this account as of December 31, 2011 was $2,625,154,000. PG&E has requested to increase the accrual rate on this account from 3.36% to 5.36%.

According to the data in the depreciation study, cost of removal amounts for this account have been high in recent years relative to retirements. The study does not explain the high costs of removal, saying only that "cost of removal is very high and continues in recent years to get even higher."[25] In response to DRA discovery, PG&E responded that such increases "particularly in years 2005-2009, [are] due primarily to PG&E's copper services replacement project (CSRP) and gas pipeline replacement project (GPRP)."[26]

---

[23] Ex. PG&E-2, p. WP 11-597.

[24] See Attachment A for the detailed analysis of EDP37303.

[25] Ex. PG&E-2, p. WP 11-701.

[26] DRA-030-04

In addition, it is reasonable to limit increases to the net salvage rate on this account given the increased pace of the GPRP during this GRC cycle, as the program will have a strong impact on future cost of removal levels. The impacts of the GPRP on negative net salvage rates can be reevaluated in the next GRC when data is available on how the program is affecting costs.

This is a large account and PG&E's requested increase is significant. As such, DRA recommends that the net salvage rate on this account be increased to -130%, consistent with DRA's recommendation that increases to negative net salvage be capped at 25%.

12. Meters – Gas – GDP38100

The current authorized net salvage rate on this account is -5%, PG&E is requesting an increase to -25%. Average net salvage on this account is -26% given the numbers provided by PG&E in its depreciation study. However the years 2008 and 2009 both show removal costs well outside the norm for the available data, at $7,392,086 and $10,275,918 respectively. The highest cost year previously was 2004, with a total cost of removal of $2,015,285. The average cost of removal excluding these outlier years was $285,796. DRA excluded these years from the analysis, and the result was an average net salvage value of -7%.[27] This value is much closer than PG&E's requested 25% to the net salvage rates used by the other major IOUs, both of which have a net salvage rate of 0% for this account.

In light of the results of excluding outlier years from the depreciation study and of the net salvage rates collected on this account by the other major IOUs, DRA recommends that net salvage on this account remain at the current value of -5%.

[27] See Attachment A for the detailed analysis of GDP38100.

Table 19-8
Comparison of Current and Proposed Net Salvage Rates
in Each IOU's Most Recent GRC Cycle

Asset Class	FERC ID	Description	PG&E Net Salvage Rates			DRA Proposed (%)	SDG&E Net Salvage Rates		SCE Net Salvage Rates	
			Current (Settlement) (%)	2014 Proposed (%)	Current - Proposed		Current (%)	2012 Proposed (%)	Previous (%)	2012 Actual (%)
ETP35301	353	Station Equipment	-30	-60	-30	-55	-	-	5	-5
ETP35400	354	Towers & Fixtures	-60	-110	-50	-75	-75	-75	-70	-70
ETP35401	354	Towers & Fixtures (Combined Cycle)	80	110	30	75	75	75	70	-70
EDP36400	364	Poles Towers & Fixtures	-80	-150	-70	-105	-100	-95	-190	-190
EDP36500	365	OH Conductors & Devices	-77	-200	-123	-90	-100	-70	-100	-110
EDP36600	366	Underground Conduit	-20	-100	-80	-45	-40	-40	-20	-20
EDP36801	368	Line Transformers-Overhead	-6	-25	-19	-10	-30	-45	0	0
EDP36901	369	Services-Overhead	-75	-135	-60	-85	-125	-90	-75	-85
EDP37000	370	Meters	-15	-20	-5	-5	0	0	-10	-5
EDP37001	370	SmartMeters (3)	-5	-20	-15	-5	-	0	-10	-5
EDP37303	373	Street Light-Lamps & Equipment	-5	-85	-80	-5	-30	-70	-15	-20

Table 19-9
Comparison of Current and Proposed Net Salvage Rates
in Each IOU's Most Recent GRC Cycle

Asset Class	FERC ID	Description	PG&E Net Salvage Rates			DRA Proposed (%)	SoCalGas Net Salvage Rates		SDG&E Net Salvage Rates	
			Current (Settlement) (%)	2014 Proposed (%)	Current - Proposed		Current (%)	2012 Proposed (%)	Current (%)	2012 Proposed (%)
GDP36000	360	Services	-105	-180	-75	-130	-85	-95	-90	-75
GDP36100	361	Meters	-5	-25	-20	-5	0	0	0	0

ATTACHMENT A – WORKPAPERS

A. EDP36400

Year	Regular Retirements	Cost of Removal		Gross Salvage				Net Salvage	
				Reuse		Final			
		Amount	Pct	Amount	Pct	Amount	Pct	Amount	Pct
1990	6,984,554	6,999,871	100		0	-939,099	-13	-7,938,970	-114
1991	7,512,393	14,056,180	187		0	3,172,139	42	-10,884,041	-145
1992	6,121,417	4,043,954	66		0	-4,466,857	-73	-8,510,811	-139
1993	4,991,559	6,671,757	134		0	500,428	10	-6,171,329	-124
1994	16,407,312	3,766,943	23		0	327,959	2	-3,438,984	-21
1995	5,470,507	4,041,542	74		0	-759,619	-14	-4,801,161	-88
1996	8,611,564	4,085,964	47		0	2,561,746	30	-1,524,218	-18
1997	10,055,207	11,214,861	112		0	6,252	0	-11,208,609	-111
1998	9,484,930	8,810,034	93		0		0	-8,810,034	-93
1999	9,778,524	6,478,067	66		0	452,663	5	-6,025,404	-62
2000	9,128,448	7,015,572	77		0	1,584,088	17	-5,431,484	-60
2001	8,528,342	9,791,784	115		0	520,966	6	-9,270,818	-109
2002	10,138,993	13,105,514	129		0	44,682	0	-13,060,832	-129
2003	13,492,002	16,165,296	120		0	423,425	3	-15,741,871	-117
2004	3,121,206	12,783,231	410		0	396,366	13	-12,386,865	-397
2005	2,555,296	12,375,648	484		0	286,188	11	-12,089,460	-473
2006	2,866,027	17,147,414	598		0	2,229	0	-17,145,185	-598
2007	3,294,120	15,643,678	475		0	558,901	17	-15,084,777	-458
2008	2,186,618	20,643,634	944		0	718,271	33	-19,925,363	-911
2009	1,927,938	23,128,120	1200		0		0	-23,128,120	-1200
TOTAL	142,656,957	217,969,064	153		0	5,390,729	4	-212,578,335	-149

Mean Excluding 2008 and 2009	Regular Retirements	Cost of Removal				Final Salvage		Net Salvage	Nat Salvage Pct
	7,696,800	9,677,628				274,850		-9,418,047	-122%

B. EDP36801

Year	Regular Retirements	Cost of Removal		Gross Salvage				Net Salvage	
				Reuse		Final			
		Amount	Pct	Amount	Pct	Amount	Pct	Amount	Pct
1990	211,263	21,261	10		0	542,066	257	520,805	247
1991	18,432,499	31,752	0		0	382,023	2	350,271	2
1992	6,750,330	30,372	0		0	274,342	4	243,970	4
1993	85,371,320	42,448	0		0	183,411	0	140,963	0
1994	13,090,428	59,385	0		0	194,570	1	135,185	1
1995	6,197,265	138,931	2		0	193,027	3	54,096	1
1996	8,442,845	36,448	0		0	3,120,201	37	3,083,753	37
1997	12,230,381	2,089	0		0	36,920	0	34,831	0
1998	11,531,878	1,183	0		0	582,538	5	581,355	5
1999	10,055,162	6,359	0		0	589,237	6	582,878	6
2000	8,774,766	11,266	0		0	522,064	6	510,798	6
2001	9,225,647	349,660	4		0	430,501	5	80,841	1
2002	11,324,702	3,185,030	28		0	457,676	4	-2,727,354	-24
2003	13,577,967	4,287,271	32		0	762,475	6	-3,524,796	-26
2004	14,342,200	4,091,723	29		0	1,238,898	9	-2,852,825	-20
2005	9,760,541	4,339,967	44		0	1,507,139	15	-2,832,828	-29
2006	11,937,419	6,398,880	54		0	2,049,616	17	-4,349,264	-36
2007	10,084,026	6,500,950	64		0	2,726,706	27	-3,774,244	-37
2008	9,926,939	8,888,693	90		0	2,819,087	28	-6,069,606	-61
2009	9,699,604	12,776,345	132		0	1,107,869	11	-11,668,476	-120
TOTAL	280,967,181	51,200,013	18		0	19,720,366	7	-31,479,647	-11

Mean Excluding 2009	Regular Retirements	Cost of Removal				Final Salvage		Net Salvage	Nat Salvage Pct
	14,277,241	2,022,298				979,605		-1,042,693	-7%

C. EDP3700 & EDP37001

Year	Regular Retirements	Cost of Removal		Gross Salvage				Net Salvage	
				Reuse		Final			
		Amount	Pct	Amount	Pct	Amount	Pct	Amount	Pct
1990	11,938,093	6,219	0		0	9,208	0	2,989	0
1991	9,874,926	16,871	0		0	5,112	0	-11,759	0
1992	6,079,163	15,744	0		0	2,727	0	-13,017	0
1993	7,314,433	31,858	0		0	5,200	0	-26,658	0
1994	4,497,418	12,407	0		0	628	0	-11,779	0
1995	2,186,729	14,037	1		0	415	0	-13,622	-1
1996	1,104,541	2,723	0		0	-39,633	4	-42,356	-4
1997	2,798,196	52	0		0		0	-52	0
1998	3,605,749	-1	0	-	0		0	1	0
1999	6,495,135	112,736	2		0		0	-112,736	-2
2000	2,606,078	22,037	1		0		0	-22,037	-1
2001	5,474,864	56,805	1		0		0	-56,805	-1
2002	2,008,725	206,548	10		0		0	-206,548	-10
2003	4,548,940	184,035	4		0		0	-184,035	-4
2004	7,264,730	4,385,071	60		0		0	-4,385,071	-60
2005	4,209,960	7,117,496	169		0		0	-7,117,496	-169
2006	2,722,183	4,548,890	167		0		0	-4,548,890	-167
2007	11,251,956	2,657,802	24		0		0	-2,657,802	-24
2008	24,072,564	4,420,000	18		0		0	-4,420,000	-18
2009	147,949,503	20,887,693	14		0		0	-20,887,693	-14
2010	203,726,509	8,715,355	4		0		0	-8,715,355	-4
2011	123,733,276	6,195,807	5		0	161,378	0	-6,034,429	-5
TOTAL	595,463,670	59,610,185	10		0	145,035	0	-59,465,149	-10

Mean	Regular Retirements	Cost of Removal				Final Salvage		Net Salvage	Nat Salvage Pct
	27,066,531	2,709,554				18,129		-2,702,961	-10%

Mean 2008-11	Regular Retirements	Cost of Removal				Final Salvage		Net Salvage	Nat Salvage Pct
	124,870,463	10,054,714				161,378		-10,014,369	-8%

D. EDP37303

Year	Regular Retirements	Cost of Removal		Gross Salvage				Net Salvage	
				Reuse		Final			
		Amount	Pct	Amount	Pct	Amount	Pct	Amount	Pct
1990	70,234	92,079	131		0	1,399	2	-90,680	-129
1991	714,518	103,326	14		0	3,148	0	-100,178	-14
1992	3,304,429	98,891	3		0	759	0	-98,132	-3
1993	5,684,970	95,956	2		0	5,240	0	-90,716	-2
1994	1,199,147	75,276	6		0	15,686	1	-59,590	-5
1995	234,011	106,173	45		0	1,699	1	-104,474	-45
1996	10,397,786	14,734	0		0	3,357,910	32	3,343,176	32
1997	234,871	7,835	3		0		0	-7,835	-3
1998	3,525,820	4,610	0		0		0	-4,610	0
1999	1,881,309	755	0		0		0	-755	0
2000	757,937		0		0		0		0
2001	318,489		0		0		0		0
2002	319,427	7,209	2		0		0	-7,209	-2
2003	266,815		0		0		0		0
2004	3,227,460		0		0		0		0
2005	741,728		0		0		0		0
2006	150,303	215,086	143		0		0	-215,086	-143
2007	458,438	286,382	62		0		0	-286,382	-62
2008	152,599	285,633	187		0		0	-285,633	-187
2009	138,323	334,213	242		0		0	-334,213	-242
TOTAL	33,778,614	1,728,158	5		0	3,385,841	10	1,657,683	5

Mean Excluding 1996	Regular Retirements	Cost of Removal				Final Salvage		Net Salvage	Nat Salvage Pct
	1,230,570	122,387				4,655		-120,392	-10%

E. GDP38100

Year	Regular Retirements	Cost of Removal		Gross Salvage				Net Salvage	
				Reuse		Final			
		Amount	Pct	Amount	Pct	Amount	Pct	Amount	Pct
1990	8,249,077	27,781	0		0	146,469	2	118,688	1
1991	5,048,857	28,740	1		0	88,732	2	59,992	1
1992	4,301,676	31,980	1		0	8,723	0	-23,257	-1
1993	6,390,047	30,900	0		0	27,325	0	-3,575	0
1994	4,022,687	13,244	0		0	31,018	1	17,774	0
1995	3,531,358	9,545	0		0	6,240	0	-3,305	0
1996	1,628,884	9,822	1		0		0	-9,822	-1
1997	2,718,934	319	0		0		0	-319	0
1998	2,311,835		0		0		0		0
1999	2,203,568	-4	0		0		0	4	0
2000	1,793,938	1,958	0		0		0	-1,958	0
2001	5,999,319	13,997	0		0		0	-13,997	0
2002	1,817,283	-1,611	0		0		0	1,611	0
2003	1,654,107	18,690	1		0		0	-18,690	-1
2004	4,593,261	2,015,285	44		0		0	-2,015,285	-44
2005	1,513,205	1,481,251	98		0		0	-1,481,251	-98
2006	2,852,542	1,508,856	53		0		0	-1,508,856	-53
2007	5,996,533	-332,218	-6		0		0	332,218	6
2008	8,550,291	7,392,086	86		0		0	-7,392,086	-86
2009	9,262,786	10,275,918	111		0		0	-10,275,918	-111
TOTAL	84,440,188	22,526,539	27		0	308,507	0	-22,218,032	-26

Mean Excluding 2008 and 2009	Regular Retirements	Cost of Removal				Final Salvage		Net Salvage	Nat Salvage Pct
	3,701,506	285,796				51,418		-267,649	-7%