Application	:	A.05-12-002
Exhibit Number	:	DRA-16
Commissioner	:	Bohn
Admin. Law Judges	:	Kenney, Econome
Witness	:	Ayanruoh

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations Electric and Gas Distribution Electric Generation for Pacific Gas and Electric Company

General Rate Case
Test Year 2007

Depreciation Expenses and Reserve

San Francisco, California
April 14, 2006

DEPRECIATION EXPENSES AND RESERVE

I. INTRODUCTION

This exhibit presents DRA's analysis and recommendations on depreciation and amortization expenses for PG&E's electric and gas distribution-related assets, and generation-related assets for the 2007 test year. The depreciation reserve for 2007 is calculated in the Results of Operation (RO) model which incorporates the estimated depreciation expenses and automatically calculates the reserve requirement for the test year.

The rest of this exhibit is organized as follows:

- Section II provides a summary of PG&E's proposals and DRA's recommendations;
- Section III provides detailed discussion and support for DRA's analyses; and
- Section IV provides DRA's conclusions.

II. SUMMARY OF RECOMMENDATIONS

For 2007, PG&E seeks Commission approval to recover approximately $990.70 million in rates for depreciation and amortization expenses for its electric and gas distribution operations, and its generation-related plants. Of this amount, $677.60 million is attributable to electric distribution, $208.80 million to gas operations, and $104.30 million to generation-related plants (PG&E-2, p.9-1 and PG&E-3, p.9-2). Compared to the authorized levels, PG&E's request represents an increase of approximately $278 million ($198 million for electric, $28.6 million for gas and $51 million for generation) and is 34 percent higher than the recorded depreciation expense in 2004. PG&E attributes the $278 million increase to the net effect of the following factors: (1) negative net salvage is estimated to increase by approximately $200 million primarily due to the increase in the cost of asset removal for electric and gas operations, (2) the average service lives of depreciable assets for electric and gas operations are projected to be longer, thereby reducing the test year depreciation

expense by approximately $41 million, (3) proposed plant growth for electric and gas operations is estimated to increase depreciation expense by $68 million, and (4) proposed plant growth for generation is estimated to increase by approximately $51 million.

PG&E requests that the Commission adopt a weighted average depreciation reserve of $7,189.7 million, $3,612.6 million and $8,974.6 million for electric operations, gas operations and generation–related plants, respectively (PG&E-2, p.9-1 and PG&E-3, p.9-2). PG&E provides an Updated Depreciation Study and new parameters to supports its request for the increased depreciation expense for electric and gas operations. The study utilized the Straight-Line Remaining Life method as prescribed in CPUC Standard Practice U-4. PG&E proposes no changes to the currently authorized depreciation parameters for generation related assets.

The following summarizes DRA's recommendations:

A. Electric Distribution

1. The average service lives for depreciable assets that PG&E is recommending for test year 2007 are reasonable. Therefore, DRA recommends that they be granted.
2. The net salvage ratios that PG&E is recommending for some of the accounts should be denied. Instead, DRA recommends that the Commission adopt DRA's proposed net salvage ratios for a selected number of accounts later discussed in this chapter. Table 16-2 shows the comparison of net salvage rates between PG&E and DRA.

B. Gas Distribution

1. The average service lives for depreciable assets that PG&E is recommending for test year 2007 are reasonable. Therefore, DRA recommends that they be granted.
2. DRA agrees with PG&E's proposed net salvage ratios for most of the gas accounts except for those few accounts that DRA disagrees with, DRA recommends that the Commission adopt DRA's proposed rates. Table 16-2 shows the comparison of net salvage rates between PG&E and DRA.

C. Electric Generation

1. PG&E proposes to change the net salvage rate for generation hydro production plants from the currently authorized rate of -10% to -13% in 2007. DRA recommends that the net salvage rate should be reduced from the existing -10% to -9% in 2007.
2. PG&E acknowledges that it collected more funds for the cost of removal through depreciation rates than the actual cost of removal incurred to decommission six of seven fossil plants. PG&E proposes to refund the over-collected balance to ratepayers over a three year period. DRA agrees with PG&E's proposal of the three year amortization period, however, DRA recommends that in addition, the over-collected balance should be refunded to ratepayers with interest imputed and calculated beginning from the dates the plants were decommissioned.

Table 16-1 shows DRA's recommended depreciation and reserve estimates compared to PG&E's proposed estimates and the differences between them. As shown below, the depreciation expense that DRA recommends for the test year is approximately $86 million lower than PG&E's estimates.

Table 16-1
Depreciation & Amortization Expense
(In Thousands of Dollars)

Description	DRA Recommended	PG&E Proposed	Difference PG&E>DRA	Percentage PG&E>DRA
Depreciation & Amortization	904,792	990,725	85,908	9.49%
Weighted Average Depreciation Reserve	19,778,143	19,776,900	1,243	0.0%

III. DISCUSSION

The purpose of depreciation is to allow a utility recover the original cost (less net salvage) of fixed capital investment over the useful life of the asset by means of an equitable plan of charges through operating expenses. Depreciation expense is an estimate and a function of the level of plant balance and the parameters (net salvage and service life) that are applied to the gross salvage amount received, less the cost of removing the asset. In accordance with Commission Standard Practice U-4, PG&E uses the straight-line remaining life method, net salvage rates, average service lives

and the mortality dispersion pattern developed from its depreciation study to derive the depreciation accrual rates being proposed for 2007.

In PG&E's 2003 GRC Decision 04-05-055, the Commission adopted the average service lives for depreciable assets that PG&E proposed but denied the company's requested changes to net salvage rates. Instead, the Commission adopted DRA's recommendations to retain PG&E's net salvage rates at their existing authorized levels.

DRA has reviewed PG&E's Depreciation Study and the support for its proposed increase for depreciation expense in 2007. The recommendations and conclusions reached by DRA are influenced by a number of factors, including analysis of historical data, comparison of data with industry averages and with other California utilities, and use of informed judgment. This testimony will show that the depreciation and amortization expenses that DRA is recommending for PG&E in 2007 is fair and reasonable and, therefore, should be adopted by the Commission.

A. Depreciation Study

Based on the results of its updated Depreciation Study, PG&E is proposing new rates for depreciable assets in 2007. The study focuses on the two major depreciation parameters -- Average Service Lives and Net Salvage (Gross Salvage less Cost of Removal). In summary, the study concluded the following: (1) The study determines that the future average service lives of the majority of the assets are lengthened, thereby reducing the future annual depreciation expense requirement, and (2) the future net salvage requirements for depreciable assets are projected to be increasing mainly due to estimated rising cost of removal. Below is DRA's analysis of the two parameters.

1. Service Lives for Depreciable Assets for Electric and Gas Operations

Service life represents the estimate of expected life of utility assets. There are three general categories of assets –Mass Property, Life Span Units, and Forecast

Accounts. For large individual facilities, the forecast method or a variation thereof, is used to forecast retirement dates of Life Span Units or Forecast Accounts. For Mass Property, PG&E uses the Simulated Plant Records (SPR) method of life analysis to determine the average service life and the survivor curve to calculate the remaining average life of these assets. For the electric and transmission operations, PG&E proposes to increase the average service lives of 15 accounts from their current levels, decrease the average service live of 1 account, and retain the average service lives of 20 accounts at their currently authorized levels. For gas operations, PG&E proposes to retain the currently authorized average service lives for the majority of the accounts. The net effect of PG&E's analysis of assets average service lives results in lowering depreciation expense estimates for 2007.

DRA accepts the average service lives that PG&E is proposing for electric distribution and gas operations in 2007. As mentioned above, the differences between the existing and the proposed service lives for most of the accounts are small, and their impact on revenue requirement results in lowering test year depreciation expense estimates. Generally, differences resulting from different estimates of average service lives are merely a timing difference issue that eventually provides investors the opportunity to fully recover their investments in utility plants. In this case, a timing difference impact on depreciation expense affects the periodic amount to be recovered which may decrease or increase depending on the account. The end result is that investors are eventually made whole and do recover their full investment in utility assets.

2. Net Salvage Rates

Net salvage represents the gross salvage amount realized when an asset is retired, less the cost of removing the asset. It can either be positive or negative. Net negative salvage results when it costs more to remove and dispose of an asset than the asset is worth. This has been the case with California's largest energy utilities in

recent years. In all cases, the utilities cite the current trends of reduced revenues from **gross salvage** together with increasing **cost of removal** as the reasons for projecting the large increases for test year negative salvage.

As of December 31, 2004, PG&E's recorded plant balance for electric operations is approximately $17 billion. The net salvage rate increases that PG&E is proposing affects twenty major accounts. PG&E proposes to retain the existing authorized net salvage rates for the remaining accounts. Under PG&E's proposed net salvage rates, the company will be able to ultimately recover approximately $9.3 billion for net salvage costs, in addition to the $17 billion plant balance. Because negative salvage is added to gross plant under the cost of service regulation, PG&E's revenue requirement would be increased by approximately $9.3 billion to pay for negative salvage over the remaining lives of the assets above (i.e. in addition to) the recovery of the $17 billion in plant balances. Under DRA's proposed net salvage rates, PG&E will be able to recover approximately $6.9 billion for negative salvage in addition to the $17 billion investments in plants. The future net salvage amount estimated by DRA is approximately $2.4 billion less than PG&E's estimates.

For gas operations, the December 31, 2004, recorded plant balance is approximately $5 billion. The negative salvage rate increases (more negative) that PG&E is proposing for gas operations are to four accounts. PG&E proposes to retain the currently authorized salvage rates for the other accounts. Under PG&E's proposed net salvage rates, the company would be allowed to recover approximately $3 billion for negative salvage in addition to the investment balance of $5 billion over the remaining lives of the assets. Under DRA's proposal, the net salvage is approximately $2.70 billion. The future net salvage amount estimated by DRA is approximately $300 million less than PG&E's estimates.

DRA agrees that PG&E's net salvage rates need to be revised since they have not been revised in over a decade. However, DRA disagrees with PG&E's estimates

because they are too high. Recognizing that the determination of net salvage is based on assumptions for estimating a future cost that may or may not materialize as planned, caution must be taken in the interest of minimizing any rate increase to ratepayers. For example, the past over-collection of the cost of removal by PG&E for six fossil plants which the company now proposes to refund to ratepayers illustrates the fallibility of estimating "future net salvage costs."

Generally, utilities argue that there is danger in not collecting enough net salvage in depreciation rates for future cost of removal. However, much harm could also be done to ratepayers when they are made pay for future services that may not benefit them, especially since PG&E cannot provide specific data to suggest that the net salvage embedded in current rates is inadequate to fund future cost of removal. On the contrary, PG&E's depreciation reserve is adequately funded, with over $2 billion in accumulated depreciation reserve which represents funds that PG&E has collected from ratepayers for future cost of removal that the company has not spent. At the same time, PG&E continues to collect more funds for cost of removal than it actually spends under the existing net salvage rates. For example, under the current rates, PG&E collects an average of about $180 million annually for cost of removal but spends an average of less than $80 million annually for cost of removal. The excess amount goes into accumulated depreciation reserve for future cost of removal. Of course there is need to build a reserve for future cost of removal, however, the company must provide compelling reasons to justify the magnitude of requested build-up, and the Commission should consider all of the factors that influence the need for the build-up.

PG&E failed to show compelling reasons why its sizable increases in proposed net salvage rates should be adopted. The net salvage estimates that DRA is recommending are based on analysis of historical data, informed judgment and the factors below.

a. Differences in the Band of Historical Data Used in Analysis

The number of historical years and data used in the net salvage analysis could have significant impact on the future net salvage estimate. Both DRA and PG&E focused their reviews on the most recent 15-year period, 1990-2004. PG&E's analysis and proposed net salvage rates were based on an averaging methodology focusing on data covering either shorter periods of 3 years rolling band, or longer periods of 15, or 10 years or 5 years bands.

DRA based its analysis on averaging methodology mostly focused on using either a 15-year or 10-year band. The decision to use either a 15 or 10 year historical band in the analysis was influenced by the trend or the degree of fluctuations shown in the account. DRA made no specific adjustments to the accounts, but excluded data from the analysis for those years where the data was unrepresentative of the account.

PG&E's currently authorized depreciation rates were developed over a decade ago. It is therefore necessary to review historical data over a longer period so that the effects from abnormal fluctuations can be normalized and smoothened to help mitigate any adverse impact on ratepayers.

b. Comparison with Other California Utilities and Industry Statistics

For electric and gas operations, PG&E provided comparison data which compares its authorized and proposed net salvage ratios to the authorized or proposed net salvage ratios of other major utilities in California. PG&E also provided industry statistics which give a range of the net salvage ratios that are applicable to other utilities nationwide.

DRA finds all of the information to be useful because it provides additional data for comparing and evaluating the reasonableness of the net salvage rates that PG&E is proposing. Although the industry statistics were useful for certain accounts,

PG&E failed to justify why it should be allowed net salvage rates that are either above or at the top of the industry range.

Some of PG&E's proposed net salvage rates are comparable with the net salvage rates of the other major utilities in California. However, significant differences exist between them in other accounts. For example, the authorized net salvage rates differ significantly among the major utilities for poles ranging from -85% to -190%. Similar differences exist for other accounts. While there are differences in accounting practices, maintenance practices, and differences on how salvage is booked among the utilities, a ratemaking mechanism that caps the amount that PG&E can recover for net salvage is appropriate in some circumstances. Ultimately, DRA performed an account-by-account analyses of net salvage with consideration of various factors in deriving its estimate.

For some of the accounts where the comparison of the estimated net salvage rates between PG&E, DRA and the authorized net salvage for other utilities and industry averages results in significant differences, DRA used informed judgment to develop its estimates.

c. Experience Shows that PG&E Over-Accrued on Fossil Plants

CPUC Standard Practice U-4 provides that current depreciation rates include the future cost of removing an asset that currently provides service, net of the proceeds from salvage. In this filing, PG&E requests that the Commission adopt a reverse amortization which would allow the company to provide refunds to ratepayers because of the over-collection for removal costs from six of seven fossil plants. As mentioned earlier, salvage costs are estimates of a future cost that may or may not occur. The uncertainty that surrounds the determination of an appropriate level of salvage rate, as illustrated by the over-collection of the fossil plants, contradicts the argument against inter-generation inequity in this case. A balanced approach is

needed to ensure that today's ratepayers neither pay more nor less than their fair share of future cost of removal. The current system does not always provide such balance; therefore the Commission should take an approach that minimizes costs to ratepayers, while continuing to ensure the utility a reasonable amount to fund future liabilities.

d. Depreciation Reserve Balance is Not Deficient

In June 2001, the Financial Accounting Standards Board (FASB) issued a new Financial Accounting Standard Number 143 for Asset Retirement Obligations. SFAS No. 143 applies to the legal obligation associated with the retirement of long-lived assets that is applicable to all industries including public utilities. SFAS No.143 provides accounting requirements for costs that are associated with the legal obligations to retire tangible long-lived assets.

On January 1, 2003, PG&E adopted SFAS No.143. Reporting on the impact of adopting SFAS 143 in its Quarterly Report in 2003, PG&E state:

> The Utility collects estimated removal costs in rates through depreciation in accordance with regulatory treatment. These amounts do not represent SFAS No. 143 asset retirement obligations and will continue to be recorded with accumulated depreciation. As of March 31, 2003, the Utility estimated the removal costs recorded in accumulated depreciation were approximately $1.7 billion.

The $1.7 billion represents the amount that PG&E has collected in rates for removal costs through depreciation expenses from ratepayers that it has not spent. Under the currently authorized salvage rates, PG&E continues to collect about $180 million annually for removal costs, while the company actually spends less than $80 million on the average for removal costs. Prior to the issuance of SFAS 143, utilities did not always provide this information arguing that it could not be identified separately from existing depreciation rates. Assuming the Commission adopts PG&E's proposed salvage rates, the company will be collecting over $200 million

more in rates for removal costs. Although salvage costs are an appropriate cost of doing business that ratepayers should fund, the Commission should consider the current disparity between the amount collected and the amount actually spent in addressing this issue. The DRA forecast strikes an equitable balance by assuring that ratepayers contribute a reasonable amount.

All of the factors mentioned above, including informed judgment, influenced DRA recommendations. Table 16-2 shows the comparison of the proposed net salvage rates between PG&E and DRA.

Table 16-2
Net Salvage Percentages

Account No.	Account Description	Currently Authorized	Proposed PG&E	Proposed DRA
	ELECTRIC DEPARTMENT			
	Transmission Plant			
352	Structures and improvements	-10%	-20%	-20%
352	Structures and improvements/equip	-5%	-20%	-20%
353	Station Equipment	0%	-30%	-10%
354	Towers and Fixtures	-40%	-50%	-40%
355	Poles and Fixtures	-50%	-80%	-70%
356	Overhead Conductors & Devices	-31%	-60%	-50%
	Distribution Plant			
361	Structures and improvements	-10%	-20%	-20%
361	Structures and improvements/Equip	0%	-20%	-20%
362	Station Equipment	0%	-30%	-15%
364	Poles, Towers and Fixtures	-35%	-100%	-85%
365	Overhead Conductors & Devices	-49%	-100%	-80%
366	Underground Conduit	10%	-50%	-20%
367	Underground Conductors & Device	-19%	-40%	-35%
368	Line Transformer-Overhead	10%	-10%	0%
368	Line Transformer-Underground	0%	0%	0%
369	Services-Overhead	-60%	-100%	-75%
369	Services-Underground	-40%	-60%	-60%
370	Meters	0%	-5%	-5%
371	Installation on Customer premise	0%	0%	0%
372	Leased Property on Customer Premise	75%	0%	0%
373	Street Lighting -Overhead Conductor	-95%	-90%	-30%
373	Street Lighting-Conduit & Cables	-10%	-10%	-10%
373	Street Lighting -Lamps & Equip	-10%	0%	10%
373	Street Lighting-Electroliers	0%	-10%	0%

Account No.	Account Description	Currently Authorized		Proposed PG&E		Proposed DRA
	General Plant					
390	Structures and improve- Office	-5%		-5%		-5%
391	Office Furnitures & Equip	20%		20%		20%
394	Shop Equipment	10%		10%		10%
395	Lab Equipment	0%		0%		0%
396	Power Operated Equipment	10%		10%		10%
397	Communication Equipment	-4%		-4%		-4%
398	Miscellaneuos Equipment	20%		20%		20%
	GAS DEPARTMENT					
	Local Storage Plant					
361	Structures & Improvements	10%		10%		10%
362	Gas Holders	-15%		-15%		-15%
363	Purification Equipment	0%		0%		0%
363.3	Compressor Equipment	-20%		-20%		-20%
363.4	Measuring & regulating Equip.	10%		10%		10%
363.5	Other Equipment	-5%		-5%		-5%
	Gas Distribution					
375	Structures & Improvements	-20%		-20%		-20%
376	Mains	-45		-50%		-45%
377	Compressor Station Equip.	-10%		-10%		0%
378	Odorizing/Meas & Reg Sta Equipment	-55%		-55%		-55%
380	Services	-85%		-100%		-90%
381	Meters	0%		0%		0%
383	House Regulators	0%		0%		0%
385	Meas & Reg Sta. Equip-Industrial	-15%		-15%		0%
386	Other Property on Customer Premises	0%		0%		0%
387	Other Equipment	0%		5%		5%
	Gas General					
390	Structures & Improvement	-10%		-10%		-10%
391	Office Furnitures & Equip	0%		0%		0%
394	Shop Equipment	9%		9%		9%
395	Lab Equipment	0%		0%		0%
396	Power Operated Equipment	10%		10%		10%
398	Miscellaneous Equipment	20%		20%		20%
399	Other Tangible Property	20%		20%		20%

B. Generation Depreciation Expense and Reserve

PG&E's generation-related plant is divided into 32 functional groups. An estimate of depreciation expense is obtained by multiplying the weighted average

plant in a functional group by the depreciation rate for the functional group. PG&E uses the life-span method for forecasting the remaining life of its generation-related plants.

In general, DRA takes no issue with PG&E's estimated remaining life for generation plants. However, DRA disagrees with PG&E on two basic issues:

- The net salvage calculation for hydroelectric plants; and
- The amortization of over-collected fossil decommissioning costs.

1. Hydroelectric Plant Salvage

The net salvage included in the depreciation rates for 2007 are based on the net salvage rates the Commission adopted in PG&E's 2003 GRC. The authorized net salvage rate for hydroelectric plants is -10%. For 2007, PG&E proposes a net salvage rate of -13% and a depreciation accrual rate of 2.35%. Although PG&E conducted a new depreciation study which supports its proposed salvage rate increases for electric and gas distribution operations, PG&E did not perform a new study for hydroelectric plant.

DRA recommends that the net salvage rate for hydroelectric plants should be reduced from -10% to -9% which amounts to a depreciation accrual rate of 2.10%. First, under the currently authorized accrual rate, PG&E collects about $11 million in rates for hydroelectric net salvage, but spends only about $540, 000 for net salvage on the average. Secondly, for comparison purpose, the accrual rate for Southern California Edison's hydroelectric plant is 1.9%, a lower accrual rate than PG&E's proposed rate of 2.35%. Thirdly, past experience shows that PG&E over-collected in its fossil decommissioning costs. Lastly, PG&E has the burden of proving that the salvage rate increase is justified, but failed to do so. The company provided no support or documentation to justify the proposed net salvage rate increase for

hydroelectric plants. For all these reasons, DRA's forecast for hydroelectric plants is more reasonable.

DRA's -9% net salvage rate is appropriate for PG&E's hydroelectric plants and should be adopted by the Commission. DRA's proposed net salvage is more than adequate to fund future cost of removal for hydroelectric plants.

2. Amortization of Over-Collected Fossil Decommissioning Costs

PG&E had seven fossil plants. Four of the plants were divested between 2003 and 2004. Two additional plants are scheduled to be decommissioned in 2006, and the remaining one, Humboldt Bay, is scheduled for decommissioning in 2010. Similar to hydroelectric plants, PG&E uses the net salvage rates adopted by the Commission in PG&E's 2003 GRC to accrue depreciation expenses for fossil plants that will be decommissioned this year or in a future year.

As of December 31, 2004, PG&E has collected $142.892 million through depreciation rates to decommission the seven fossil plants. According to PG&E, current rates which allow the company to recover additional funds through accruals for 2005 and 2006, less estimated spending for decommissioning and remediation costs, will result in an excess reserve of $90.138 million at the end of 2006. PG&E proposes to refund this balance to ratepayers over a three year period by a reverse amortization of about $30.046 million yearly. The $30.046 million is reflected in PG&E's RO as a reduction to test year revenue requirement. In a response to a DRA's data request (ORA-061-002), PG&E revised the amount of the over-collection from $90.138 million to $82.192 million. In its subsequent errata filing, PG&E again revised the over-collection from $82.192 million to $80.437 million.

PG&E failed to convince DRA that the revision to its original $90.138 million over-collection estimate is necessary. For the purpose of calculating test year revenue

requirement, DRA believes it is appropriate to use the $90.138 million over-collection estimate. PG&E correctly points out that the "over-collection is based on forecasts of future decommissioning costs ……and the actual costs of decommissioning may be different." (PG&E-3, p.1-19) To protect both PG&E and ratepayers from such uncertainty, DRA agrees with PG&E proposal that "if the decommissioning costs exceed current estimates, PG&E will request additional decommissioning funding in the future proceedings. Likewise, if the actual costs of decommissioning are lower, PG&E will make additional refunds to customers." (PG&E-3, p.1-19)

Also, DRA agrees with PG&E's recommendations to refund the over-collected funds over a three year amortization period consistent with the GRC cycle. In addition, DRA recommends that refunds to ratepayers include imputed interest based on the prevailing average bond rate which DRA estimates to be 5%. Interest should be accrued beginning from the date the plants were divested or decommissioned back in 2003 or 2004. PG&E's proposal ignores the time use of ratepayers' funds beginning from 2003 when some of the plants were divested and PG&E had access to the use of the funds. DRA's recommendation is reasonable and consistent with Commission policy on over-collections of funds through rates from ratepayers. DRA estimates the over-collection, including imputed interest to be approximately $101.983 million. Interest is imputed starting from 2003 until the amount is fully refunded to ratepayers in 2009. Amortizing the estimated over-collected balance of $101.983 million over a three-year period results in an annual refunds to $33.994 million to ratepayers.

C. Account-By-Account Analyses of Net Salvage

The section below provides an account-by-account analysis for net salvage rates where DRA's proposed salvage ratios are different from PG&E's proposals.

1. Transmission Plant

PG&E's transmission plants are assigned to either the CPUC or the FERC jurisdiction. According to PG&E the depreciation expense estimated for 2007 includes only portions of transmission plant that is attributable to the CPUC's jurisdiction. As of December 31, 2004, the recorded depreciable gross balance (CPUC and FERC) for transmission assets amounts to approximately $3.4 billion. Of this amount, only 6.4% or approximately $219 million is attributable to the CPUC's jurisdiction while the remaining balance or 93.6% is attributable to the FERC's jurisdiction. However, the salvage analysis that PG&E performed to calculate the estimated net salvage rates for the transmission plant accounts was based on the use of the gross balances (CPUC plus FERC). DRA takes no exceptions to PG&E's methodology since the depreciation expense calculation for transmission plant is limited to the transmission assets used to serve California ratepayers. Although the analysis of the four transmission plant accounts discussed below are provided on a total company-wide basis, the revenue requirement impact on California ratepayers is limited to the utility's investment that is attributable to the CPUC's jurisdiction.

Account 353 (FERC) –Set-up Transformer

This account includes the cost of equipment such as transformers, circuit breakers, switchgears, relays and meters that are located at transmission substations. The authorized salvage for this account is 0%. PG&E proposes a higher negative salvage ratio from 0% to -30%. DRA recommends a negative salvage ratio of -10% in 2007.

As of 2004, PG&E has almost $1.7 billion of investment in this account. Under PG&E's proposal, the company would recover approximately $540 million for negative salvage, in addition to the $1.7 billion of investment over the remaining life of the investment. Under ORA's proposal, PG&E would recover approximately $170

million additional funds for net salvage over the remaining life of the assets in this account.

According to PG&E, the net salvage range used in the electric industry for this account is 15 to (20) percent. The authorized net salvage for the other major electric companies in California falls within this range–SCE and SGD&E at 5% and 15%, respectively.

The 15-year historical data for this account indicates a trend for increasing cost of removal. However, PG&E failed to justify why it should be granted a negative salvage rate of -30%, a significant increase greater than the top of the negative salvage range used in the electric industry. DRA's recommendation for -10% for this account should be adopted because it is reasonable, close to the average negative salvage range used in the industry, and higher than the negative salvage authorized for other California electric utilities which have positive net salvage rates.

Account 354 (FERC) – Tower and Fixtures

This account includes the original costs of installing towers and fixtures used for supporting overhead transmission conductors. The authorized net salvage for this account is -40%. PG&E proposes to increase the net salvage from -40% to –50% in 2007. DRA recommends that the negative salvage rate for the account should be maintained at -40%.

The average plant balance in this account is about $365 million. Under its proposal, PG&E would recover approximately $182 million for negative salvage above recovery of the $365 million of investments over the remaining life of the investment. Under DRA's proposal, PG&E would recover approximately $146 million for negative salvage above recovery of the $365 million of investments balance.

Over the 15-year period of historical data, the recorded data for retirements, cost of removal and gross salvage appear to be small and fluctuated considerably from year to year. In some cases, the fluctuations were moderate and in others cases, they were extremely unrepresentative of an established trend. For example, in 1991 and 2001, the net salvage rates recorded for this account were (542%) and (294%) respectively. DRA considers the salvage reported for the two years to be abnormally high and therefore, excluded them from its analysis. Removing the two years from the analysis supports the -40% net salvage rate that DRA is recommending for this account.

Account 355 (FERC)--Transmission Poles & Fixtures

The account includes the costs of installing all types of transmission line poles and fixtures. The authorized net salvage for this account is –50%. PG&E proposes to increase the net salvage from the -50% to -80% in 2007. DRA recommends that the net salvage be –70%.

As of 2004, the investment book balance in this account is almost $312 million. Under PG&E's proposal, the company would recover approximately $249 million in rates for net salvage above the recovery of the $312 million of investments over the remaining life of the investment. Under DRA's proposal, PG&E would recover about $218 million in rates for net salvage above recovery of the $312 million investments.

The net salvage reported for this account over the 15-period from 1990 to 2004, shows consistent fluctuation ranging from -30% in 2000 to -311% in 2004. Over the 15-year period, there was an established trend for increasing cost of removal which suggests that PG&E's net salvage rate should be revised upward for the test year. The difference between DRA's and PG&E's proposed net salvage rate for the test year is the number of historical years used in the analysis.

PG&E's proposal of -80% is based on a 5-year weighted average of historical net salvage for the years 2000 to 2004. On the other hand, DRA's recommendation of -70% is based on the results a 15-year weighted average of historical data. As previously mentioned, using a longer historical band is more appropriate for this analysis while also adjusting for abnormal occurrences.

For this particular account, DRA considered any recorded net salvage during the 15-years of historical data that was above -200% to be unrepresentative and were excluded from the analysis. Data for three years fell into the category and were excluded from the analysis. DRA's recommendation of -70% net salvage rate is consistent with the authorized net salvage for other major electric utilities in California and more than adequate to fund current and future cost of removal for this account.

Account 356 (FERC) - Transmission Overhead Conductor

This account includes the cost of installing overhead conductors and devices used for electric transmission services. The authorized net salvage for this account is -31%. PG&E proposes to increase the net salvage from -31% to -60% in 2007. Instead, DRA recommends that the net salvage should be -50%.

The average investment balance in this account is approximately $648 million. Under PG&E's proposal, the company would recover approximately $389 million for negative salvage over the remaining life of the investment above recovery of the $648 million. Under ORA's proposal, the company would recover approximately $324 million for net salvage.

According to PG&E, the range of net salvage percents used in the electric industry is negative 30 percent to negative 100 percent. During the 15-year period of historical data, recorded net salvage ranged from a low -19% in 2000 to a high of -578% in 1993. No discernable trend appears to be established as recorded net salvage

fluctuated up and down in no predictable pattern. Although DRA relied on historical data for the entire 15 year period, DRA excluded data for the years 1992, 1993, 1998 and 2002 from its analysis because the net salvage recorded for these years fell outside the acceptable range of -200% that DRA believes is appropriate for this account.

DRA based its recommendation for a net salvage rate of -50% for this account on the weighted average calculation that included 15-year historical data, excluding the four years mentioned above. The -50% net salvage is reasonable, well within the net salvage used in the electric industry.

2. Distribution Plant

Account 362 - Station Equipment

This account includes the cost of installing station equipments at distribution stations. The authorized net salvage for this account is 0%. PG&E proposes to change the net salvage from 0% to -30% in 2007. DRA recommends a net salvage rate of -15%.

As of 2004, this account consists of $1.3 billion in plant investments. Under PG&E's proposal, the company would recover approximately $398 million for net salvage above the $1.3 billion investment over the remaining life of the assets. Under DRA's proposal, PG&E would recover approximately $199 million for net salvage above the $1.3 billion investment.

Over the 15-year historical band, PG&E has retired approximately $110 million, and about $37 million in cost of removal. The historical data shows that PG&E generated a significant amount of money from salvage from this account, which implies that net salvage could be significantly impacted depending on how transaction are accounted for in this account.

The historical data supports an overall negative net salvage for this account. At issue is the percent of negative net salvage that PG&E should be allowed. PG&E failed to provide the range of net salvage percent used in the electric industry for this account. The authorized net salvage for SCE and SDG&E are -10% and 25% respectively. The -15% net salvage that DRA is proposing represents a significant increase, and higher than the authorized net salvage for other California electric utilities. In consideration of these factors, including the potential to generate significant amounts of money from salvage from this account, DRA believes that an increase from 0 to -15% is appropriate.

Account 364 — Poles Towers & Fixtures

The account includes the original cost of installing poles, towers and appurtenant fixtures used to support distribution operations. The authorized net salvage for this account is -35%. PG&E proposes to increase the net salvage from -35% to -100% in 2007. PG&E based its request for a net salvage rate of -100% on an analysis of data for the past 15 years, however concentrated on the most recent 5 years. DRA recommends that the net salvage rate for this account should be increased from -35% to -85%

As of 2004, this account consists of $1.9 billion in plant investments. Under PG&E's proposal, the company would recover approximately $1.9 billion for net salvage above the $1.9 billion investment over the remaining life of the assets. Under DRA's proposal, PG&E would recover approximately $1.7 billion for net salvage above the $1.9 billion investment balance.

DRA's recommendation is based on its analysis of 15 years data, but concentrated on 14 of the 15 years. DRA excluded data for 2004 from its analysis because of the unusual increase from -117% in 2003 to -397% in 2004. DRA believes that it is appropriate to exclude 2004 from the analysis because prior to 2004, the

recorded net salvage for this account ranged between a low of -18% to a high of -145%.

DRA's proposed increase represents a sizable increase of over 143% above the currently authorized net salvage rate for this account. This net salvage rate provides a reasonable increase for the test year in contrast to PG&E's request of a 188% increase. It appropriately aligns PG&E's salvage rate with the authorized net salvage rates for the other major electric utilities in California, is well within the estimated range of the net salvage estimate used in the industry average.

Account 365 -- Overheads Conductors & Devices

This account includes the cost of installing overhead conductors and devices used for distribution operations. The authorized net salvage for this account is -49%. PG&E proposes to increase the net salvage from -49% to -100% in 2007. PG&E based its requested increase on the analysis of 15-year, 5-year and 3-year rolling band averages with all analysis resulting in net salvage rates higher than the -100% that PG&E is recommending. DRA recommends a net salvage rate of -80% for this account.

The investment balance in this account is almost $2.2 billion. Under PG&E's proposal, the company would recover $2.2 billion for net salvage above the $2.2 billion over the remaining lives of the assets. Under DRA's recommendation the company would recover $1.76 billion net salvage over the investment balance.

Since 1990, PG&E has retired approximately $84 million of assets from this account, incurred about $155 million cost of removal and received revenues of $13 million from gross salvage. During the 15 year period, retirements, cost of removal and gross salvage amounts fluctuated from year to year; however, a discernable upward trend was established beginning in 2000. Industry data shows an increasing trend in net salvage for this account. The currently authorized net salvage rates for

the other electric utilities in California are more aligned with the industry averages than PG&E's. Because of the dollar impact of the net salvage associated with this account ($1.76 billion), DRA did not rely entirely on the results of weighted averages, but used informed judgment while also taken other factors into consideration. The overall objective was to mitigate the effect of rising costs to ratepayers, while also allowing PG&E the opportunity to recover sufficient funds in rates to fund future net salvage costs. DRA believes that its proposed increase accomplishes such balance. It increases PG&E's net salvage rates by over 160% higher than PG&E's currently authorized net salvage rate of -49%. It is more aligned with the industry average net salvage rate and is comparable to the authorized rates for SDG&E and SCE which are -70% and -100%, respectively. Therefore, DRA recommends that PG&E's salvage rate for this account should be increased from -49% to -80% which is a significant increase over the current level.

Account 366 — Underground Conduit

This account includes the cost of installing underground conduit and tunnels used for housing distribution cables and wires. The authorized net salvage for this account is 10%. PG&E proposes to increase the net salvage from a positive 10% to a negative -50% in 2007. DRA recommends a net salvage rate of -20%.

The investment balance in this account is almost $1.7 billion. Under PG&E's proposal, the company would recover approximately $850 million for net salvage above the $1.7 billion over the remaining lives of the assets. Under DRA's recommendation the company would recover approximately $340 million net salvage above the investment balance.

During the last 15 years, the recorded annual net salvage was negative, except for two years in 1991 and 1995. Based on the historical data, the net salvage for this account clearly should be revised. However, DRA does not agree with PG&E's proposed increase from 10% of -50% which is a very large increase. The net salvage

range in the electric industry is from 0% to -40%. None of the major electric utilities in California have net salvage rate exceeding the industry range. DRA believes that a net salvage percent of -20% which is the average of the industry range is appropriate for PG&E.

To justify a higher net salvage rate, PG&E has the burden of proving exceptional circumstance, but failed to do so. Therefore, DRA recommends a net salvage rate of –20% is appropriate for this account. The proposed increase represents a significant increase over the current level.

Account 367 — Underground Conductors & Devices

This account includes the cost of installing underground conductors and devices used for distribution operations. The authorized net salvage for this account is –19%. PG&E proposes to increase the net salvage from -19% to –40% in 2007. Instead, DRA recommends that the net salvage should be -35%.

The investment balance in this account is approximately $2.4 billion. The $2.4 billion represents the highest investment amount in a single account among the electric and gas distribution accounts. Under PG&E's proposal, the company would recover approximately $946 million for cost of removal above the $2.4 million over the remaining lives of the assets. Under DRA's proposal, the company would recover $828 million over the remaining lives of the assets.

DRA based its recommendation of a net salvage rate of -35% for this account on the weighted average calculation that included 15-year historical data, excluding data for 1997 that was considered to be unrepresentative of the account. The -35% net salvage is reasonable and represents a significant increase of about 84% above the current level.

Account 368 - Line Transformer

This account includes the cost of installing overhead transformers and other devices directly associated with overhead line transformers. The authorized net salvage for this account is 10%. PG&E proposes to increase the net salvage to -10% in 2006. Instead, DRA proposes a net salvage of 0%.

The investment balance in this account is approximately $996 million. Under PG&E's proposal, the company would recover approximately $99 million for future cost of removal above the $996 million over the remaining lives of the assets in this account. DRA's proposal would result in zero recovery for net salvage for this account.

Prior to 2002, the recorded net salvage for the account remained positive even though retirements were high. Total retirements for this account over the 15 year period were about $230 million and the negative net salvage was about $3 million which amounts to less than 1% negative net salvage over the period. Considering these factors, a zero net salvage is reasonable and appropriate for this account. The 0% net salvage figure also actually represents an increase from the current positive 10% level.

Account 369 - Services Overhead

This account includes the cost of electric distribution overhead services. The authorized net salvage for this account is –60%. PG&E proposes to increase the net salvage from –60% to –100% in 2007. DRA propose that the net salvage should be –75%.

The investment balance in this account is almost $537 million. Under PG&E's proposal, the company would recover approximately $537 million for future cost of removal above the $537 million in plant balance over the remaining lives of the assets

in this account. Under DRA's proposal, the company would recover approximately $402 million.

Over the past 15 years, PG&E has retired about $10 million of assets in this account, incurred about $11 million cost of removal and received about $15 million from gross salvage. Based on the 15 years weighted average for this account, the net salvage is positive 47%. However, DRA finds the data to be misleading because the resulting positive 47% net salvage was skewed by data for 1993 which alone accounted for $14 million out of the $15 million revenue reported for gross salvage reported during the entire 15-year period. Data for other years within the 15-year period could arguably be considered to be unrepresentative of data in the account depending on the judgment of the analyst.

As with PG&E, Edison had an authorized net salvage rate of -60% for this account before seeking a net salvage rate increase in its last GRC. Similar to PG&E's request in this case, Edison requested a net salvage increase from -60% to -100% in its last GRC. In the Edison case, DRA recommended that the net salvage rate increase should be capped at -75% for this account. The capping represents a 25% increase above the current rates.

DRA recommends a similar capping for PG&E. The net salvage for the account should be increased from -60% to -75% in 2007. This is necessary to mitigate the adverse ratepayer impacts that would be associated with the significant increase in negative salvage that PG&E is proposing in this case. Even with the capping, this represents a significant increase in negative salvage for this account.

<u>FERC Account 373 – Street Lighting And Signal Systems (Overhead Conductors)</u>

This account includes the cost of installing overhead wires and cables, insulators and insulating material used primarily for the delivery of current to public outdoor lighting. PG&E proposes to decrease the net salvage rate for this account

from -95% to -90% in 2007. DRA proposes that the net salvage should be reduced from -95% to -30%.

The investment balance in this account is approximately $7.4 million. Under PG&E's proposal, the company would recover approximately $6.6 million for future cost of removal above the $7.4 million over the remaining lives of the assets in this account. DRA's proposal would result in a net salvage of $2.2 million.

PG&E bases its estimated net salvage for this account on data for the most recent five years which suggests a -92% negative salvage. The gross salvage for the account has been zero since 1997; however, the cost of removal and the net salvage fluctuated considerably also.

DRA believes that using either a 10 year average or a 15 year average is a better alternative for estimating the net salvage for this account. The 10 year average is -30% while the 15 year average is -22%. These averages support DRA's recommendation of a net salvage of -30% for this account. It is consistent with the net salvage authorized for other utilities in California.

FERC Account 373 – Street Lighting Electrolier

This account includes the cost of electroliers and ornamental lamp post supporting public outdoor lighting. PG&E proposes to increase the net salvage for this account from 0% to -10% in 2007. DRA proposes that the net salvage should be maintained at 0%.

The investment balance in this account is approximately $24 million. Under PG&E's proposal, the company would recover approximately $2.4 million for future cost of removal above the $24 million over the remaining lives of the assets in this account. DRA's proposal would result to zero recovery for net salvage for this account.

PG&E basis its proposed net salvage increase for this account on the most recent five year trend which supports an increase in net salvage rate. However, both the 15-year and 10-year trends shows positive net salvage results, thus supporting a change for either a positive net salvage or retaining the existing net salvage at 0%. DRA recommends that the current zero percent rate be maintained.

3. Gas Distribution

FERC Account 376 – Mains

This account includes the cost to install distribution system mains. The authorized net salvage for this account is –45%. PG&E proposes to increase the net salvage from –45% to –50% in 2007. DRA proposes that the net salvage rate for this account should remain at -45%.

The investment balance in this account is approximately $1.9 billion. Under PG&E's proposal, the company would recover approximately $962 million for future cost of removal above the $1.9 billion over the remaining lives of the assets in this account. DRA's proposal would result to $866 million recovery for net salvage for this account.

DRA based its recommendation of net salvage rate of -45% for this account on the weighted average calculation that included 15-year historical data, excluding three years when the recorded data were considered to be unrepresentative of the account. The -45% net salvage is reasonable based on the historical data associated with net salvage for this account.

FERC Account 377 - Compressor Station Equipment

This account includes the cost of installing compressor station equipment and associated appliances used in connection with distribution systems. The authorized net salvage for this account is -10%. PG&E proposes to retain the existing net salvage

rate of -10% for this account. DRA proposes that the net salvage for the account should be changed from -10% to 0%.

The investment balance in this account is approximately $867,000. Over the 15 year period, although retirement amounts to about $103,000, the data is sparse and insufficient as a basis for projecting future net salvage for this account. Therefore, DRA recommends that the net salvage should set at 0%.

FERC Account 380 – Service

This account includes the cost to install service pipes and accessories leading to the customers' premises. The authorized net salvage for this account is –85%. PG&E proposes to increase the net salvage from –85% to –100% in 2007. DRA proposes that the net salvage rate for this account should be -90%.

The investment balance in this account is approximately $1.97 billion. Under PG&E's proposal, the company would recover approximately $1.97 billion million for future cost of removal above the $1.97 billion over the remaining lives of the assets in this account. DRA's proposal would result in $1.87 billion recovery for net salvage in this account.

Prior to 1996, the recorded net salvage trend for this account was erratically unsettling ranging from -2,615% to -382%. Beginning in 1995, a discernable trend emerged. Although the recorded net salvage fluctuated from year to year since then, the degree of variability appeared normal and acceptable. Experience from PG&E's prior GRCs illustrates the nature of uncertainty with estimating future net salvage for this account. In a prior GRC (the 1999 TY case), PG&E proposed to change the then existing net salvage for Account 380 from -120% to -350%, which the Commission denied. Then in its 2003 GRC, PG&E requested another change to lower the net salvage estimate from -120% to -85%. Each of these requests was purportedly supported by a depreciation study that PG&E had conducted.

DRA based its net salvage recommendation of -90% on the weighted average of historical data from 1995 through 2004. The estimated industry average for this account is -25% to -200%. A net salvage of -90% is reasonable for this account based on historical data and should be adopted.

FERC Account 385 - Industrial Measuring & Regulating Station Equipment

This account includes the cost of installing special and expensive measuring and regulating station equipment, located on the distribution system, serving large industrial customers. The authorized net salvage for this account is negative -15%. PG&E proposes to retain the net salvage at the existing -15%. DRA recommends that the net salvage should be at 0%.

The investment balance in this account is approximately $35 million as of December 31, 2004. Over the 15-year period, transactions to the account includes retirements of approximately $1.2 million, cost of removal of $165,000 and revenues from gross salvage amounting to approximately $719,000. The weighted net salvage for the account is 45% based on the entire 15 years data.

The data for gross salvage could be considered to be unrepresentative of the account since the whole amount of the gross salvage occurred in 1997. However, DRA believes that the gross salvage should be included in the analysis. The equipments booked to this account are described as special and expensive. Therefore, it is not unusual to see the account experience the type of occasional revenue stream that was shown. The net salvage for other California utilities is zero percent and the industry range is from 10% to -25%. Therefore, DRA believes the zero net salvage for this account is reasonable and should be adopted by the Commission.

V. CONCLUSION

Today, recovery of negative salvage through depreciation rates is one of the most critical ratemaking issues facing all stakeholders because of the increased funding required to fund test year revenue requirement. Utilities must convince

regulators that their requests for negative salvage funding are necessary and justifiable. Regulators should ensure that utilities' requests are reasonable while protecting the interest of ratepayers by mitigating any significant rate increase that is not supported by compelling reasons.

The Commission should be mindful that net salvage is an "estimate" of a future cost that may or may not occur. They are unpredictable; fluctuate considerably from year to year, and from account to account, or in identical accounts from one utility to other. For example, as described above, in PG&E's 1999 TY GRC, PG&E proposed to change the then authorized net salvage percentage for FERC Account No. 380 from -120% to 350% which the Commission denied. Three years later, PG&E requested that the net salvage should be changed from -120% to -85% in the 2003 test year GRC.

Although net salvage is a legitimate cost of doing business, the utilities' interest is not always to minimize rate increases to ratepayers. PG&E's request for the net salvage increase in this case is based on the results of analysis and the use of judgment which is only applied one-way – to maximize the size of its request. Therefore, the Commission should not rely completely on the results of PG&E's depreciation study, but should adopt DRA's positions and the reasoning behind DRA's recommendations.

The Commission should be as concerned with the size of PG&E's requests for negative salvage in this proceeding as it was in PG&E's TY GRC:

> "There are important policy reasons for rejecting revenue requirement increase that are justified on the basis of new depreciation parameters. As TURN observes, depreciation does not affect PG&E's ability to provide safe and reliable service. Even if the proposed or current rates of depreciation are reduced, shareholders will still recover their investments in plant over time. At the same time, we are determined that it is necessary to set the authorized revenue requirement in this GRC at a level that is consistent with the provision of adequate utility service by PG&E. Thus, to carry out our policy position on revenue

> requirement increases, we will make changes in authorized depreciation parameters when presented with compelling reasons for doing so." (D.00-02-046, p.359)

Granted PG&E's authorized net salvage rates were developed over a decade ago, PG&E has over $2 billion sitting in depreciation reserve with funds collected from ratepayers for recovery of cost of removal in net salvage that the company has yet to spend. PG&E's requested increase only increases the amount of reserve unnecessarily. DRA's proposals provide sufficient funding in this GRC to PG&E, while mitigating the rate impact on customers.