

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
HAWAIIAN ELECTRIC COMPANY, INC.)
For Approval of Changes in its)
Depreciation Rates and Approval of)
Vintage Amortization Accounting.)

DOCKET NO. 02-0391

DECISION AND ORDER NO. 21331

Filed Sept. 3, 2004
At 8:30 o'clock A.M.

Karen Higashi.
Chief Clerk of the Commission

DIV. OF CONSUMER ADVOCACY
DEPT. OF COMMERCE AND
CONSUMER AFFAIRS
STATE OF HAWAII

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Commission, State of Hawaii.

K. Higashi

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Docket No. 02-0391
Decision and Order No. 21331

DECISION AND ORDER

I.

Introduction

On October 31, 2002, HAWAIIAN ELECTRIC COMPANY, INC. ("HECO") filed an application requesting commission approval to change its depreciation rates and approval of a procedure change to vintage amortization accounting for certain accounts.

HECO served copies of the application on the DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS ("Consumer Advocate") (HECO and the Consumer Advocate are collectively referred to as the "Parties").

On November 1, 2002, HECO filed written direct testimonies and exhibits, including its Book Depreciation Study based on data through December 31, 1999 ("Book Depreciation Study") conducted by Deloitte and Touche LLP.

By its Preliminary Statement of Position, filed on November 20, 2002, the Consumer Advocate advised that it had questions and concerns regarding the relief sought by HECO in its

application, would participate in the instant proceeding, and intended to state its position to the commission upon completion of its investigation.

The commission requested that the Parties meet informally to formulate the issues, procedures, and schedule with respect to this proceeding within thirty (30) days of the filing of Order No. 20057 (i.e., by April 7, 2003).¹ By letter filed on April 7, 2003, the Parties requested an additional week to submit a stipulated prehearing order, as required by Order No. 20057.² On April 14, 2003, the Parties submitted for filing a Stipulated Prehearing Order containing a statement of the issues, a schedule of the proceedings, and the procedures governing this docket, which the commission approved and issued on April 29, 2003 as Stipulated Prehearing Order No. 20162.

The Parties conducted its discovery process pursuant to Stipulated Prehearing Order No. 20162. The Consumer Advocate filed information requests on April 15, 2003, to which HECO responded on May 6, 7, 8, 9, and 30, 2003. The Consumer Advocate filed supplemental information requests on May 23, 2003, to which HECO responded on June 6, 2003. HECO issued information requests to the Consumer Advocate on July 21, 2003, to which the Consumer Advocate responded on August 1, 2003. On September 15, 2003, the

¹Order No. 20057, filed on March 6, 2003, in this docket.

²The Parties' request for an extension of time by which to file their stipulated prehearing order was granted by Order No. 20119, filed on April 14, 2003, in this docket.

Consumer Advocate submitted its rebuttal information requests, to which HECO responded on September 16, 30, and October 1, 2003.

The Parties proposed an amendment to the procedural schedule for the proceeding by letter filed on November 5, 2003. Specifically, in lieu of filing their respective statements of position and reply statements of position, the Parties proposed to inform the commission by December 22, 2003 whether a settlement agreement had been reached, or in the event that a settlement agreement had not been reached, to request an evidentiary hearing on the matter. The commission granted the Parties until February 27, 2004 to advise the commission of the status of their settlement discussions.³

³By Order No. 20638, filed on November 14, 2003, the commission granted the Parties' request to modify Stipulated Prehearing Order No. 20162, and provided them until December 22, 2003 to notify the commission that it had reached a settlement or to request an evidentiary hearing. In addition, the commission scheduled an evidentiary hearing on the matter for February 4, 2004. On December 22, 2003, the Parties requested an extension of time until January 16, 2004 to advise the commission as to the status of its settlement negotiations. By Order No. 20745, filed on January 8, 2004, the commission granted the Parties the requested extension of time. On January 16, 2004, the Parties again wrote to request additional time to continue their discussions and to advise the commission as to the status of the negotiations. The commission granted the Parties until February 4, 2004 to notify the commission that a settlement had been reached or to request an evidentiary hearing by Order No. 20778, filed on January 27, 2004. In addition, the commission cancelled the evidentiary hearing that was scheduled for February 4, 2004. On February 4, 2004, the Parties wrote to the commission to advise that they were close to reaching an agreement, and to request an extension of time until February 13, 2004 to provide an update of their settlement discussions. On February 20, 2004, by Stipulated Procedural Order No. 20810, the commission granted the Parties until February 27, 2004 to submit their settlement agreement.

On March 1, 2004, the Parties filed a Joint Motion for Approval of Settlement Agreement requesting that the commission approve the letter agreement ("Settlement Agreement") between the Parties. Specifically, they request the commission issue an order (1) approving the Settlement Agreement; (2) approving the depreciation rates set forth in Attachment A to the Settlement Agreement; (3) approving the use of vintage amortization accounting for the accounts identified in Attachment D to the Settlement Agreement; (4) ordering the new depreciation rates and use of vintage accounting to become effective upon the commission's decision and order; (5) approving the procedure for determining depreciation rates for future new asset categories as described in the Settlement Agreement; and (6) granting HECO such other and further relief as may be just and equitable in the premises.

II.

Discussion

A.

Background

Pursuant to Decision and Order No. 10911, filed on January 2, 1991, in Docket No. 6379, as amended by Order No. 10925, filed on January 14, 1991, and Order No. 11388, filed on December 17, 1991, HECO calculated and recorded annual depreciation accruals by applying depreciation rates detailed on Attachment I of Order No. 10925. In accordance with Decision and Order No. 10911, HECO continued to study the depreciation of the properties included

in its plant accounts. HECO filed an application for approval to change its depreciation rates, depreciation method, and contributions in aid of construction amortization period and submitted its Book Depreciation Study as of December 31, 1992 on December 30, 1993, in Docket No. 7985. However, on February 11, 1999, HECO, by motion, requested that the commission close Docket No. 7985, because the depreciation study used to support the proposed changes in the docket had become dated ("Motion to Close"). HECO indicated in its Motion to Close the docket that it would prepare a new depreciation study and file a new application requesting approval for changes in depreciation rates by December 2000. The commission approved HECO's Motion to Close on February 12, 1999 in Order No. 16876. HECO represents that due to various circumstances, it was unable to file a new depreciation study until the instant docket.

B.

Book Depreciation Study

HECO conducted the Book Depreciation Study as follows.

1. HECO completed an asset life analysis by studying historical retirement experience and evaluating the applicability of that experience to its surviving property. For the production plant account, this step also entailed the determination of the generating unit retirement dates used in the depreciation rate calculation. Life analysis was accomplished by determining retirement dates, average service lives, and retirement dispersion

characteristics, which were identified either by interim ratios or by standard Iowa-type curves.

2. HECO performed salvage and cost removal analyses by studying salvage value and cost of removal experience and evaluating the applicability of that experience to HECO's surviving property.

3. HECO determined (a) the average service lives for property other than production plant; (b) the retirement dispersion factors identified by interim addition and retirement ratios for production plant and Iowa-type curves for the other property; and (c) the net salvage factors applicable to HECO's surviving property.

4. HECO calculated the recommended depreciation rate applicable to each depreciable property group in light of the results achieved in steps one through three.

The Book Depreciation Study recommends changes in average service lives, net salvage percentages, retirement dispersions, and accounting methodology with respect to selected accounts. The Book Depreciation Study also recommends the adoption of the retirement dates and interim activities applicable to production accounts. After the application of the various recommended changes, the Book Depreciation Study suggested the following changes to the depreciation rates:

<u>Function</u>	<u>Existing Rate</u> (per cent)	<u>Recommended Rate</u> (per cent)
Steam Production	3.286	3.112 ⁴
Other Production	3.428	2.453
Transmission	3.202	2.981
Distribution	3.921	4.352
General	6.113	5.876
Composite Total	3.687	3.763

Based upon the recommended depreciation rates, the depreciation accrual in 2000 would have been \$1,328,261⁵ higher than 2000 depreciation expense of \$64,181,312. Based on the recommended application of vintage amortization, the depreciation accrual in 2000 would have been \$3,032,600 higher than the recorded 2000 depreciation expense of \$2,299,092 for the applicable group of assets. Together, the total increase in 2000 depreciation expense

⁴HECO listed this amount in its Book Depreciation Study and direct testimony as 3.063 per cent. However, HECO corrected the percentage for account 316, Steam Production Plant - Miscellaneous Power Plant, after it noted that an incorrect amount was input for the ending reserve balance as of December 31, 1999. Rebuttal Testimony of Ernest T. Shiraki at 3.

⁵HECO stated in its Book Depreciation Study and direct testimony that based on the December 31, 1999 depreciable plant balances, the recommended depreciation rates would result in an annual increase in depreciation provision of \$1,137,661. Together with the change due to amortization accounting of \$3,032,600, the total increase in 2000 depreciation expense would have been \$4,170,261, a 6.3 per cent increase over the recorded 2000 depreciation expense amount of \$66,480,404. These amounts were changed due to a correction made to the to the ending reserve balance at December 31, 1999 for account 316. Id.

had it utilized the recommended depreciation rates and the proposed vintage amortization would have been \$4,360,860, a 6.6 per cent increase over the recorded 2000 depreciation expense amount of \$66,480,404.

C.

Consumer Advocate's Direct Testimony

The Consumer Advocate's direct testimony disagrees with many of the recommendations made in the Book Depreciation Study.

1. The Consumer Advocate believes HECO's life calculations for its steam and other production plant investment to be unreasonable because it erroneously includes the cost of future plant additions that were not included in HECO's rate base at December 31, 1999.

2. The Consumer Advocate believes the future net salvage and terminal net salvage values should not be included in HECO's depreciation rate calculations.

3. The Consumer Advocate finds HECO's proposed lives in the transmission, distribution, and general plant functions to be too short, thereby overstating the associated depreciation expense.

4. The Consumer Advocate accepts the application of vintage amortization accounting to certain general plant accounts, but does not agree that the application of vintage amortization to certain miscellaneous accounts within the steam and other production plant accounts or the amortization periods developed by

HECO conform to the Federal Energy Regulatory Commission's ruling, upon which they are based.

Based on the depreciation rates calculated by the Consumer Advocate, the depreciation and amortization expense would equal \$39.1 million, or a \$31.8 million reduction.

D.

Settlement Agreement

HECO and the Consumer Advocate agreed to resolve their differences relating to this docket for the purpose of simplifying and expediting this docket. They made the following agreements with respect to the differences briefly described above.

1. HECO will modify its proposed depreciation rates to exclude the interim additions, interim retirements, and interim net salvage in determining the depreciation rates for the steam and other production plant accounts.

2. The Consumer Advocate accepts the explanations provided relating to the salt spray and termite damage experienced by HECO and does not object to the proposed lives for the transmission and distribution accounts.

3. The Consumer Advocate does not object to HECO's use of proposed vintage amortization accounting and the accounts to which vintage amortization accounting is applied in this proceeding.

4. The Parties agree to the following treatment of net salvage amounts:

a. HECO will reclassify as a regulatory liability, on a retroactive basis, the estimated portion of the depreciation expense calculation designed to recover future net salvage (i.e., the cost of removal in excess of salvage value).⁶ HECO's financial statements for the year ended December 31, 2003, and for any previous years presented along with the 2003 financial statements, will reflect these changes in accounting treatment.⁷ On a prospective basis, HECO will separately account for the net salvage component of the depreciation accrual.⁸ If generally accepted accounting principles require additional changes to HECO's accounting for net salvage, HECO and the Consumer Advocate agree to meet within 30 days of the adopted change to determine how such changes should be implemented.

b. HECO will reduce its depreciation rates for the amount of the explicit additional inflation component

⁶HECO indicates that this revised accounting treatment is consistent with guidance from the Securities and Exchange Commission staff provided on February 24, 2004.

⁷HECO advises that as of December 31, 2003, it reflected a regulatory liability of \$118,110,000 for future net salvage.

⁸HECO advises the net salvage component was calculated at \$17,158,716 annually, based on the results of the Book Depreciation Study and on plant balances as of December 31, 1999.

included in the net salvage estimates for the steam and other production plant accounts.

c. Within six (6) months of the commission's approval of the Settlement Agreement, HECO and the Consumer Advocate will discuss the reasonableness of reflecting an inflation component in the estimated net salvage ratio for use in the next depreciation study.

d. The Consumer Advocate will not object to HECO's net salvage estimates in determining the depreciation rates for the transmission, distribution, and general plant accounts.

5. The Parties agree that the proposed new depreciation rates and use of vintage amortization accounting for certain assets should become effective upon the commission's decision and order in this proceeding. They further suggest that utility rates that become effective as a result of HECO's next rate case will consider all of HECO's expenses and other elements in the revenue requirements calculations, including the new depreciation rates and use of vintage amortization accounting.

6. The Parties agree that depreciation rates for new asset categories that are not considered in the instant depreciation study may be determined by comparable asset categories approved in the instant proceeding. HECO proposes to inform the commission and the Consumer Advocate of the new asset category, identify the composite depreciation rate to be applied, and explain

the basis for selecting the rate. The commission and the Consumer Advocate, under this proposal, would have thirty (30) days from the date of notification to state their respective objections to the treatment of the new asset category. If no objection is raised, HECO proposes to proceed to apply the composite depreciation rates until the next depreciation study at which time the depreciation rates for the new category can be determined.

7. Finally, the Parties agree that HECO will file depreciation studies on a regular interval, not to exceed five years from the date of the approval of the instant proceeding, unless there are compelling reasons for different intervals, which would then be discussed with the commission and the Consumer Advocate.

As a result of the Settlement Agreement provisions, the Parties suggest that HECO utilize the following depreciation rates:

<u>Function</u>	<u>Existing Rate</u> (per cent)	<u>Revised Recommended Rate</u> (per cent)
Steam Production	3.286	1.683
Other Production	3.428	1.120
Transmission	3.202	2.981
Distribution	3.921	4.352
General	6.113	5.876
Composite Total	3.687	3.429

E.

Findings and Conclusions

The commission finds that HECO's Book Depreciation Study, as amended by the Settlement Agreement, supports the revised depreciation rates and the use of vintage amortization accounting for the accounts detailed at Attachment D to this decision and order. The commission finds the Settlement Agreement and the depreciation rates, methods, and procedures contained therein to be reasonable, and concludes that the Settlement Agreement should be approved, effective upon the filing of this decision and order.

III.

Orders

THE COMMISSION ORDERS:

1. The Parties' Joint Motion for Approval of Settlement Agreement, filed on March 1, 2004, is granted.
2. The Parties' Settlement Agreement, dated and filed on March 1, 2004, is approved.
3. HECO's request to use vintage amortization accounting for the accounts identified in Attachment D to this decision and order is approved.
4. The new depreciation rates and use of vintage amortization accounting, as described within the Settlement Agreement and detailed in the attachments to this

decision and order, shall become effective upon the filing of this decision and order.

5. The Parties' request to use the procedure for determining the depreciation rates for any future new asset category, as described within the Settlement Agreement and summarized in section II.D.6. of this decision and order, is approved.

6. HECO shall file depreciation studies on a regular interval, not to exceed five years from the date of this decision and order, unless there are compelling reasons for different intervals, which shall then be discussed with the commission and the Consumer Advocate at a time as soon as practicable upon the determination by HECO that it cannot timely file a depreciation study.

7. Within six (6) months of this decision and order, the Parties shall meet informally to discuss the reasonableness of reflecting an inflation component in the estimated net salvage ratio for use in the next depreciation study. Upon the completion of such meeting(s), the Parties shall inform the commission, in writing, of the Parties' decision relating to this matter.

DONE at Honolulu, Hawaii

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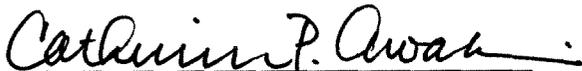
PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By 
Carlito P. Caliboso, Chairman

By 
Wayne H. Kimura, Commissioner

By 
Janet E. Kawelo, Commissioner

APPROVED AS TO FORM:


Catherine P. Awakuni
Commission Counsel

02-0391.eh

Hawaiian Electric Company, Inc.
Depreciation Docket No. 02-0391

ATTACHMENT A
DOCKET NO. 02-0391
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Summary

Proposed Depreciation Expense based on 12/31/99 plant balances

Depreciation accrual (Attachment B)	65,509,572
Accrual based on Vintage Amortization Accounting (Attachment D)	5,331,692
Total Originally Proposed Depreciation Expense	<u>70,841,264</u>
less: Interim Activity and Inflation on Terminal Net Salvage (Attachment B)	<u>(5,822,935)</u>
Total REVISED Proposed Depreciation Expense	<u><u>65,018,329</u></u>
Depreciation accrual:	
Life component (Attachment C, page 1)	42,527,921
Net salvage component (Attachment C, page 1)	17,158,716
Accrual based on Vintage Amortization Accounting (Attachment D)	5,331,692
Total REVISED Proposed Depreciation Expense	<u><u>65,018,329</u></u>
Total recorded 2000 Depreciation Expense per HECO-R-100 Page 1 of 2	66,480,404
Proposed dollar decrease from recorded 2000 depreciation expense	<u><u>(1,462,075)</u></u>
Proposed percentage decrease from recorded 2000 depreciation expense	<u><u>-2.20%</u></u>

ATTACHMENT B
DOCKET NO. 02-0391
PAGE 1 OF 1

HAWAIIAN ELECTRIC COMPANY, INC.
Comparison of Depreciation Rates and Annual Amounts

Account Number	Description	Per HECO-R-100 Page 2 of 2					Proposed per Settlement		[8]=[5]-[7] Reduction due to settlement
		[1] 12/31/99 Balance \$	[2] Existing Rate %	[3]=[1]x[2] Annual Amount \$	[4] Rec. Rate %	[5]=[1]x[4] Annual Amount \$	[6] Revised Rec. Rate %	[7]=[1]x[6] Annual Amount \$	
STEAM PRODUCTION PLANT									
311.00	Structures and Improvements	64,303,246	2.796	1,797,919	3.247	2,087,926	1.927 *	1,239,124	
312.00	Boiler Plant Equipment	189,591,154	3.370	6,389,222	3.036	5,755,987	1.714 *	3,249,592	
314.00	Turbogenerator Units	98,798,416	3.428	3,386,810	2.784	2,750,548	1.362 *	1,345,634	
315.00	Accessory Electric Equipment	24,895,080	3.337	830,749	3.518	875,809	1.737 *	432,428	
316.00	Misc. Power Plant Equipment	13,272,949	3.315	439,998	5.212	691,786	2.337 *	310,189	
	Total Steam Production Plant	390,860,845		12,844,697		12,162,057	1.683	6,576,967	5,585,090
OTHER PRODUCTION PLANT									
341.00	Structures and Improvements	772,161	3.332	25,728	1.113	8,594	0.890 *	6,872	
342.00	Fuel Holders, Producers & Access.	1,401,119	3.332	46,685	1.791	25,094	1.569 *	21,984	
343.00	Prime Movers	7,290,030	3.391	247,205	2.104	153,382	0.876 *	63,861	
344.00	Generators	5,379,111	3.573	192,196	2.551	137,221	1.131 *	60,838	
345.00	Accessory Electric Equipment	2,700,634	3.332	89,985	3.911	105,622	1.776 *	47,963	
346.00	Misc. Power Plant Equipment	290,025	3.291	9,545	2.618	7,593	(0.640) *	(1,856)	
	Total Other Production Plant	17,833,080		611,344		437,506	1.120	199,661	237,845
TRANSMISSION PLANT									
350.10	Rights of Way	1,958,359	2.085	40,832	0.900	17,625	0.900 **	17,625	
352.00	Structures and Improvements	28,965,341	2.501	724,423	2.400	695,168	2.400 **	695,168	
353.00	Station Equipment	166,085,832	2.467	4,097,337	2.560	4,251,797	2.560 **	4,251,797	
354.00	Towers and Fixtures	31,712,128	2.762	875,889	2.570	815,002	2.570 **	815,002	
355.00	Poles and Fixtures	120,220,079	3.611	4,341,147	3.090	3,714,800	3.090 **	3,714,800	
356.00	OH Conductors and Devices	61,975,362	5.821	3,607,586	5.190	3,216,521	5.190 **	3,216,521	
357.00	UG Conduit	21,341,295	2.035	434,295	1.700	362,802	1.700 **	362,802	
358.00	UG Conductors and Devices	26,893,377	2.253	605,908	2.410	648,130	2.410 **	648,130	
359.00	Roads and Trails	2,464,343	2.090	51,505	1.580	38,937	1.580 **	38,937	
	Total Transmission Plant	461,616,116		14,778,922		13,760,783	2.981	13,760,783	
DISTRIBUTION PLANT									
360.10	Rights of Way	284,893	2.015	5,741	2.050	5,840	2.050 **	5,840	
361.00	Structures and Improvements	14,073,704	2.825	397,582	3.350	471,469	3.350 **	471,469	
362.00	Station Equipment	88,304,905	3.402	3,004,133	2.990	2,640,317	2.990 **	2,640,317	
364.00	Poles, Towers and Fixtures	80,335,097	5.709	4,586,331	3.290	2,643,025	3.290 **	2,643,025	
365.00	OH Conductors and Devices	69,570,533	5.360	3,728,981	6.540	4,549,913	6.540 **	4,549,913	
366.00	Underground Conduit	144,615,692	2.219	3,209,022	2.200	3,181,545	2.200 **	3,181,545	
367.00	UG Conductors and Devices	176,250,634	3.930	6,926,650	5.450	9,605,660	5.450 **	9,605,660	
368.00	Line Transformers	100,698,218	2.937	2,957,507	6.050	6,092,242	6.050 **	6,092,242	
369.10	Overhead Services	24,336,673	5.765	1,403,009	7.260	1,766,842	7.260 **	1,766,842	
369.20	Underground Services	67,789,966	5.765	3,908,092	3.950	2,677,704	3.950 **	2,677,704	
370.00	Meters	21,744,167	3.549	771,700	3.050	663,197	3.050 **	663,197	
	Total Distribution Plant	788,004,482		30,898,747		34,297,754	4.352	34,297,754	
GENERAL PLANT									
390.00	Structures and Improvements	17,106,312	2.675	457,594	4.090	699,648	4.090 **	699,648	
392.00	Transportation Equipment	22,295,321	5.371	1,197,482	7.270	1,620,870	7.270 **	1,620,870	
394.00	Tools, Shop & Garage Equipment	1,256,641	2.216	27,847	3.670	46,119	3.670 **	46,119	
395.00	Laboratory Equipment	150,147	3.302	4,958	3.450	5,180	3.450 **	5,180	
397.00	Communication Equipment	41,645,013	8.057	3,355,339	5.940	2,473,714	5.940 **	2,473,714	
398.00	Miscellaneous Equipment	114,707	3.820	4,382	5.180	5,942	5.180 **	5,942	
	Total General Plant	82,568,141	6.113	5,047,601	5.876	4,851,472	5.876	4,851,472	
	Total Depreciable Plant	1,740,882,664		64,181,312		65,509,572		59,686,637	
	Amortization					5,331,692		5,331,692	
						70,841,264		65,018,329	5,822,935

* Rates revised for Steam Production and Other Production Plant to remove interim activity and future inflation on terminal net salvage.

** Rates per HECO-R-100

HAWAIIAN ELECTRIC COMPANY, INC.
Breakdown of Depreciation Rates between the Life and Net Salvage Components

Account Number	Description	---Per HECO-R-100 Page 2 of 2---//				-----Per Settlement-----			
		[1] 12/31/99 Balance \$	[2] Rec. Rate %	[3]=[1]x[2] Annual Amount \$	[4] Revised Rec. Rate %	[5] Net Sal component of Rate %	[4] - [5] = [6] Life component of Rate %	[5] x [1] Annual amt related to Net Sal \$	[6] x [1] Annual amt related to Life \$
STEAM PRODUCTION PLANT									
311.00	Structures and Improvements	64,303,246	3.247	2,087,926	1.927	0.200	1.727	128,606	1,110,517
312.00	Boiler Plant Equipment	189,591,154	3.036	5,755,987	1.714	0.206	1.508	390,558	2,859,035
314.00	Turbogenerator Units	98,798,416	2.784	2,750,548	1.362	0.194	1.168	191,669	1,153,965
315.00	Accessory Electric Equipment	24,895,080	3.518	875,809	1.737	0.195	1.542	48,545	383,882
316.00	Misc. Power Plant Equipment	13,272,949	5.212	691,786	2.337	0.209	2.128	27,740	282,448
	Total Steam Production Plant	390,860,845		12,162,057	1.683			787,119	5,789,848
OTHER PRODUCTION PLANT									
341.00	Structures and Improvements	772,161	1.113	8,594	0.890	0.085	0.805	656	6,216
342.00	Fuel Holders, Producers & Access.	1,401,119	1.791	25,094	1.569	0.096	1.473	1,345	20,638
343.00	Prime Movers	7,290,030	2.104	153,382	0.876	0.085	0.791	6,197	57,664
344.00	Generators	5,379,111	2.551	137,221	1.131	0.091	1.040	4,895	55,943
345.00	Accessory Electric Equipment	2,700,634	3.911	105,622	1.776	0.100	1.676	2,701	45,263
346.00	Misc. Power Plant Equipment	290,025	2.618	7,593	(0.640)	0.067	(0.707)	194	(2,050)
	Total Other Production Plant	17,833,080		437,506	1.120			15,988	183,673
TRANSMISSION PLANT									
350.10	Rights of Way	1,958,359	0.900	17,625	0.900	-	0.900	-	17,625
352.00	Structures and Improvements	28,965,341	2.400	695,168	2.400	0.385	2.015	111,517	583,652
353.00	Station Equipment	166,085,832	2.560	4,251,797	2.560	0.490	2.070	813,821	3,437,977
354.00	Towers and Fixtures	31,712,128	2.570	815,002	2.570	0.600	1.970	190,273	624,729
355.00	Poles and Fixtures	120,220,079	3.090	3,714,800	3.090	1.042	2.048	1,252,693	2,462,107
356.00	OH Conductors and Devices	61,975,362	5.190	3,216,521	5.190	2.286	2.904	1,416,757	1,799,765
357.00	UG Conduit	21,341,295	1.700	362,802	1.700	0.167	1.533	35,640	327,162
358.00	UG Conductors and Devices	26,893,377	2.410	648,130	2.410	0.400	2.010	107,574	540,557
359.00	Roads and Trails	2,464,343	1.580	38,937	1.580	-	1.580	-	38,937
	Total Transmission Plant	461,616,116		13,760,783	2.981			3,928,273	9,832,510
DISTRIBUTION PLANT									
360.10	Rights of Way	284,893	2.050	5,840	2.050	-	2.050	-	5,840
361.00	Structures and Improvements	14,073,704	3.350	471,469	3.350	0.500	2.850	70,369	401,101
362.00	Station Equipment	88,304,905	2.990	2,640,317	2.990	0.851	2.139	751,475	1,888,842
364.00	Poles, Towers and Fixtures	80,335,097	3.290	2,643,025	3.290	1.250	2.040	1,004,189	1,638,836
365.00	OH Conductors and Devices	69,570,533	6.540	4,549,913	6.540	3.125	3.415	2,174,079	2,375,834
366.00	Underground Conduit	144,615,692	2.200	3,181,545	2.200	0.500	1.700	723,078	2,458,467
367.00	UG Conductors and Devices	176,250,634	5.450	9,605,660	5.450	2.250	3.200	3,965,639	5,640,020
368.00	Line Transformers	100,698,218	6.050	6,092,242	6.050	1.111	4.939	1,118,757	4,973,485
369.10	Overhead Services	24,336,673	7.260	1,766,842	7.260	3.750	3.510	912,625	854,217
369.20	Underground Services	67,789,966	3.950	2,677,704	3.950	2.100	1.850	1,423,589	1,254,114
370.00	Meters	21,744,167	3.050	663,197	3.050	-	3.050	-	663,197
	Total Distribution Plant	788,004,482		34,297,754	4.352			12,143,801	22,153,953
GENERAL PLANT									
390.00	Structures and Improvements	17,106,312	4.090	699,648	4.090	1.111	2.979	190,051	509,597
392.00	Transportation Equipment	22,295,321	7.270	1,620,870	7.270	(0.357)	7.627	(79,594)	1,700,464
394.00	Tools, Shop & Garage Equipment	1,256,641	3.670	46,119	3.670	(0.067)	3.737	(842)	46,961
395.00	Laboratory Equipment	150,147	3.450	5,180	3.450	-	3.450	-	5,180
397.00	Communication Equipment	41,645,013	5.940	2,473,714	5.940	0.417	5.523	173,660	2,300,054
398.00	Miscellaneous Equipment	114,707	5.180	5,942	5.180	0.227	4.953	260	5,681
	Total General Plant	82,568,141	5.876	4,851,472	5.876			283,535	4,567,937
	Total Depreciable Plant	1,740,882,664		65,509,572				17,158,716	42,527,921
	Amortization			5,331,692					
	Total Depreciation and Amortization			70,841,264					

HAWAIIAN ELECTRIC COMPANY, INC.
Net Salvage Component of the Rate

[1] Account Number	(Salv/ASL) COMPONENTS OF RATE			
	Life	Salvage	COR	Net Sal
352.0	1.923	-	0.385	0.385
353.0	1.961	-	0.490	0.490
354.0	2.000	-	0.600	0.600
355.0	2.083	-	1.042	1.042
356.0	2.857	-	2.286	2.286
357.0	1.667	-	0.167	0.167
358.0	2.000	-	0.400	0.400
Totals				
361.0	2.500	-	0.500	0.500
362.0	2.128	-	0.851	0.851
364.0	2.500	-	1.250	1.250
365.0	2.500	(0.375)	3.500	3.125
366.0	1.667	-	0.500	0.500
367.0	2.500	(0.125)	2.375	2.250
368.0	3.704	(0.037)	1.148	1.111
369.1	2.500	-	3.750	3.750
369.2	2.000	-	2.100	2.100
Totals				
390.0	2.222	(0.111)	1.222	1.111
392.0		(0.357)		(0.357)
394.0		(0.067)		(0.067)
397.0	8.333	-	0.417	0.417
398.0	4.545	-	0.227	0.227

HAWAIIAN ELECTRIC COMPANY, INC.
Comparison of Depreciation Rates and Annual Amounts
Amortized Accounts

Per HECO-202 page 14 of 47

Account Number	Description	[1]	[2]	[1]x[2]	[3]	[1]x[3]=[4]	[5]	[4]+[5]
		12/31/99 Balance \$	Existing Rate %	Annual Amount \$	Amortization (proposed) Rate %	Annual Amount \$	Unrecovered Amortized Amount \$	Total Amortization Amount \$
STEAM PRODUCTION PLANT								
316.00	Misc. Power Plant Equipment							
	Kahe Plant	1,477,430	3.315	48,977	5.000	73,872	(5,516)	68,356
	Waiau Plant	1,612,700	3.315	53,461	5.000	80,635	42,670	123,305
	Honolulu Plant	408,018	3.315	13,526	5.000	20,401	17,002	37,403
	Subtotal	3,498,148	3.315	115,964	5.000	174,907	54,156	229,063
	Amortization Retirements	2,521,206	3.315	83,578				
	Total Account 316	6,019,354						
OTHER PRODUCTION PLANT								
346.00	Misc. Power Plant Equipment							
	Waiau Units 9 & 10	23,895	3.291	786	5.000	1,195	(2,737)	(1,542)
	Amortization Retirements	744	3.291	24				
	Total Account 346	24,639						
GENERAL PLANT								
391.10	Information System Equipment	10,743,403	9.526	1,023,417	14.286	1,534,803	707,654	2,242,457
391.20	Office Data Handling Equipment	2,605,137	5.458	142,188	8.334	217,112	237,866	454,978
391.30	Office Furniture	7,988,660	3.044	243,175	6.667	532,604	486,076	1,018,680
393.00	Stores Equipment	715,204	2.604	18,624	4.000	28,608	18,759	47,367
394.00	Tools, Shop & Garage Equipmen	6,515,153	2.216	144,376	6.667	434,365	430,669	865,034
395.00	Laboratory Equipment	2,291,788	3.302	75,675	6.667	152,794	188,158	340,952
396.00	Power Operated Equipment	301,705	1.131	3,412	5.556	16,763	15,405	32,168
398.00	Miscellaneous Equipment	1,265,016	3.820	48,324	5.000	63,251	39,285	102,536
	Subtotal	32,426,066	5.240	1,699,190	9.191	2,980,299	2,123,872	5,104,171
	Amortization Retirements	7,624,982	5.240	399,549				
	Total General Plant	40,051,048						
	Total Amortizable Plant	35,948,109	5.052	1,815,940	8.780	3,156,401	2,175,291	5,331,692
	Total Amortized Retirements	10,146,932		483,152		0	0	0
	Total Amortizable Plant (incl. Amortized Retirements)	46,095,041	4.988	2,299,092	6.848	3,156,401	2,175,291	5,331,692

NOTE: Column [5] reflects the annual amount for a 5-year recovery of Net Unrecovered Amortization Amounts. A negative amount means past accruals have been adequate.

HAWAIIAN ELECTRIC COMPANY, INC.
Comparison of Mortality Characteristics

[1] Account Number	[2] Description	[4] Existing Rates			[7] Settlement Rates		
		[3] Average Service Life yrs.	[4] Iowa Curve	[5] Net Salvage %	[6] Average Service Life yrs.	[7] Iowa Curve	[8] Net Salvage %
STEAM PRODUCTION PLANT							
311.0	Structures and Improvements				AYFR 2/		1/
312.0	Boiler Plant Equipment				AYFR 2/		1/
314.0	Turbogenerator Units				AYFR 2/		1/
315.0	Accessory Electric Equipment				AYFR 2/		1/
316.0	Misc. Power Plant Equipment				AYFR 2/		1/
OTHER PRODUCTION PLANT							
341.0	Structures and Improvements				AYFR 2/		1/
342.0	Fuel Holders, Producers & Access.				AYFR 2/		1/
343.0	Prime Movers				AYFR 2/		1/
344.0	Generators				AYFR 2/		1/
345.0	Accessory Electric Equipment				AYFR 2/		1/
346.0	Misc. Power Plant Equipment				AYFR 2/		1/
TRANSMISSION PLANT							
350.1	Rights of Way	50	S2	0	60	R5	1/
352.0	Structures and Improvements	42	R5	0	52	R5	1/
353.0	Station Equipment	46	R0.5	(20)	51	R4	1/
354.0	Towers and Fixtures	45	R1	(20)	50	R2	1/
355.0	Poles and Fixtures	37	SC	(40)	48	R1.5	1/
356.0	OH Conductors and Devices	27	R0.5	(75)	35	R2	1/
357.0	Underground Conduit	50	R3	0	60	R3	1/
358.0	UG Conductors and Devices	37	SC	(5)	50	R3	1/
359.0	Roads and Trails	50	S2	0	60	R5	1/
DISTRIBUTION PLANT							
360.1	Rights of Way	50	S2	0	50	R5	1/
361.0	Structures and Improvements	40	SC	(20)	40	S2	1/
362.0	Station Equipment	37	SC	(40)	47	R2.5	1/
364.0	Poles, Towers and Fixtures	26	SC	(65)	40	R2	1/
365.0	OH Conductors and Devices	29	R0.5	(65)	40	R3	1/
366.0	Underground Conduit	50	R3	(10)	60	S5	1/
367.0	UG Conductors and Devices	30	R1	(25)	40	S5	1/
368.0	Line Transformers	35	S-.5	(5)	27	L1	1/
369.1	Overhead Services	* 34	R1	(110)	40	R3	1/
369.2	Underground Services	* 34	R1	(110)	50	R3	1/
370.0	Meters	30	R4	0	30	R1.5	1/
GENERAL PLANT							
390.0	Structures and Improvements	45	SQ	(20)	45	R5	1/
391.1	Information System Equipment	10	S4	0			
391.2	Office Data Handling Equipment	18	L1	2			
391.3	Office Furniture	32	SC	0			
392.0	Transportation Equipment	10	R0.5	15	14	L1.5	1/
393.0	Stores Equipment	27	SC	2			
394.0	Tools, Shop and Garage Equipment	28	SC	5	30	S0.5	1/
395.0	Laboratory Equipment	30	R3	0	35	R2	1/
396.0	Power Operated Equipment	16	L1	0			
397.0	Communication Equipment	10	SC	(3)	12	R1.5	1/
398.0	Miscellaneous Equipment	22	SC	(3)	22	R1	1/

* Prior study mortality characteristics are based on the total Account 369.

Accounts 391.1, 391.2, 391.3, 393, and 396 ---

"These accounts are being recommended for amortization. See Attachment D for amortization lives."

Accounts 394, 395, and 398 ---

"Some of the asset groups in these accounts are being recommended for amortization. See Attachment D for amortization lives."

1/ See specific annual net salvage component, by account, on Attachments C.

2/ AYFR - Average Year of Final Retirement

HECO STEAM PRODUCTION PLANT
Account 311 - Structures & Improvements
No Interim Activity
Current Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -9.7%
Average Future Net Salvage = -9.7%
Book Reserve Ratio = 52.5%
Age Survivors = 18.77
Average Remaining Life = 29.70
Average Service Life = 48.47
Theoretical Reserve = 27,317,922
Interim Retirement Ratio = 0.0000%
Interim Addition Ratio = -
Depreciation Rate = 1.927%

Year	Interim Retirements	Interim Net Salvage	Terminal Retirements	Terminal Net Salvage	Interim Additions	Ending Balance	Average Balance	Deprec. Amount	Ending Reserve
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1999						64,303,246			33,740,575
2000	-	-	-	-	-	64,303,246	64,303,246	1,239,139	34,979,714
2001	-	-	-	-	-	64,303,246	64,303,246	1,239,139	36,218,853
2002	-	-	-	-	-	64,303,246	64,303,246	1,239,139	37,457,991
2003	-	-	-	-	-	64,303,246	64,303,246	1,239,139	38,697,130
2004	-	-	-	-	-	64,303,246	64,303,246	1,239,139	39,936,269
2005	-	-	-	-	-	64,303,246	64,303,246	1,239,139	41,175,408
2006	-	-	-	-	-	64,303,246	64,303,246	1,239,139	42,414,546
2007	-	-	-	-	-	64,303,246	64,303,246	1,239,139	43,653,685
2008	-	-	-	-	-	64,303,246	64,303,246	1,239,139	44,892,824
2009	-	-	-	-	-	64,303,246	64,303,246	1,239,139	46,131,963
2010	-	-	-	-	-	64,303,246	64,303,246	1,239,139	47,371,101
2011	-	-	-	-	-	64,303,246	64,303,246	1,239,139	48,610,240
2012	-	-	-	-	-	64,303,246	64,303,246	1,239,139	49,849,379
2013	-	-	-	-	-	64,303,246	64,303,246	1,239,139	51,088,518
2014	-	-	-	-	-	64,303,246	64,303,246	1,239,139	52,327,656
2015	-	-	-	-	-	64,303,246	64,303,246	1,239,139	53,566,795
2016	-	-	-	-	-	64,303,246	64,303,246	1,239,139	54,805,934
2017	-	-	-	-	-	64,303,246	64,303,246	1,239,139	56,045,073
2018	-	-	-	-	-	64,303,246	64,303,246	1,239,139	57,284,211
2019	-	-	-	-	-	64,303,246	64,303,246	1,239,139	58,523,350
2020	-	-	-	-	-	64,303,246	64,303,246	1,239,139	59,762,489
2021	-	-	-	-	-	64,303,246	64,303,246	1,239,139	61,001,628
2022	-	-	-	-	-	64,303,246	64,303,246	1,239,139	62,240,766
2023	-	-	-	-	-	64,303,246	64,303,246	1,239,139	63,479,905
2024	-	-	6,123,960	(594,024)	-	58,179,286	61,241,266	1,180,134	57,942,055
2025	-	-	-	-	-	58,179,286	58,179,286	1,121,129	59,063,183
2026	-	-	29,048,483	(2,817,703)	-	29,130,803	43,655,045	841,243	28,038,240
2027	-	-	-	-	-	29,130,803	29,130,803	561,357	28,599,598
2028	-	-	3,903,964	(378,685)	-	25,226,839	27,178,821	523,742	24,840,692
2029	-	-	-	-	-	25,226,839	25,226,839	486,127	25,326,819
2030	-	-	5,823,195	(564,850)	-	19,403,644	22,315,242	430,020	19,368,794
2031	-	-	-	-	-	19,403,644	19,403,644	373,913	19,742,707
2032	-	-	5,747,720	(557,529)	-	13,655,924	16,529,784	318,533	13,755,991
2033	-	-	-	-	-	13,655,924	13,655,924	263,153	14,019,144
2034	-	-	7,914,229	(767,680)	-	5,741,695	9,698,810	186,898	5,524,133
2035	-	-	-	-	-	5,741,695	5,741,695	110,644	5,634,776
2036	-	-	-	-	-	5,741,695	5,741,695	110,644	5,745,420
2037	-	-	-	-	-	5,741,695	5,741,695	110,644	5,856,064
2038	-	-	-	-	-	5,741,695	5,741,695	110,644	5,966,708
2039	-	-	-	-	-	5,741,695	5,741,695	110,644	6,077,352
2040	-	-	-	-	-	5,741,695	5,741,695	110,644	6,187,996
2041	-	-	5,741,695	(556,944)	-	-	5,741,695	110,644	0
Totals	-	-	64,303,246	(6,237,415)	-		1,909,685,232		

HECO STEAM PRODUCTION PLANT
Account 312 - Boiler Plant Equipment
No Interim Activity
Current Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -9.7%
Average Future Net Salvage = -9.7%
Book Reserve Ratio = 58.7%
Age Survivors = 17.41
Average Remaining Life = 29.77
Average Service Life = 47.18
Theoretical Reserve = 76,748,673
Interim Retirement Ratio = 0.0000%
Interim Addition Ratio = -
Depreciation Rate = 1.714%

Year	Interim Retirements	Interim Net Salvage	Terminal Retirements	Terminal Net Salvage	Interim Additions	Ending Balance	Average Balance	Deprec. Amount	Ending Reserve
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1999						189,591,154			111,227,651
2000	-	-	-	-	-	189,591,154	189,591,154	3,250,109	114,477,760
2001	-	-	-	-	-	189,591,154	189,591,154	3,250,109	117,727,868
2002	-	-	-	-	-	189,591,154	189,591,154	3,250,109	120,977,977
2003	-	-	-	-	-	189,591,154	189,591,154	3,250,109	124,228,085
2004	-	-	-	-	-	189,591,154	189,591,154	3,250,109	127,478,194
2005	-	-	-	-	-	189,591,154	189,591,154	3,250,109	130,728,302
2006	-	-	-	-	-	189,591,154	189,591,154	3,250,109	133,978,411
2007	-	-	-	-	-	189,591,154	189,591,154	3,250,109	137,228,520
2008	-	-	-	-	-	189,591,154	189,591,154	3,250,109	140,478,628
2009	-	-	-	-	-	189,591,154	189,591,154	3,250,109	143,728,737
2010	-	-	-	-	-	189,591,154	189,591,154	3,250,109	146,978,845
2011	-	-	-	-	-	189,591,154	189,591,154	3,250,109	150,228,954
2012	-	-	-	-	-	189,591,154	189,591,154	3,250,109	153,479,062
2013	-	-	-	-	-	189,591,154	189,591,154	3,250,109	156,729,171
2014	-	-	-	-	-	189,591,154	189,591,154	3,250,109	159,979,279
2015	-	-	-	-	-	189,591,154	189,591,154	3,250,109	163,229,388
2016	-	-	-	-	-	189,591,154	189,591,154	3,250,109	166,479,497
2017	-	-	-	-	-	189,591,154	189,591,154	3,250,109	169,729,605
2018	-	-	-	-	-	189,591,154	189,591,154	3,250,109	172,979,714
2019	-	-	-	-	-	189,591,154	189,591,154	3,250,109	176,229,822
2020	-	-	-	-	-	189,591,154	189,591,154	3,250,109	179,479,931
2021	-	-	-	-	-	189,591,154	189,591,154	3,250,109	182,730,039
2022	-	-	-	-	-	189,591,154	189,591,154	3,250,109	185,980,148
2023	-	-	-	-	-	189,591,154	189,591,154	3,250,109	189,230,257
2024	-	-	28,201,248	(2,735,521)	-	161,389,906	175,490,530	3,008,385	161,301,873
2025	-	-	-	-	-	161,389,906	161,389,906	2,766,662	164,068,535
2026	-	-	74,044,403	(7,182,307)	-	87,345,503	124,367,705	2,132,001	84,973,826
2027	-	-	-	-	-	87,345,503	87,345,503	1,497,340	86,471,166
2028	-	-	8,084,411	(784,188)	-	79,261,092	83,303,298	1,428,045	79,030,612
2029	-	-	-	-	-	79,261,092	79,261,092	1,358,751	80,389,363
2030	-	-	18,296,100	(1,774,722)	-	60,964,992	70,113,042	1,201,928	61,520,470
2031	-	-	-	-	-	60,964,992	60,964,992	1,045,106	62,565,576
2032	-	-	18,058,963	(1,751,719)	-	42,906,029	51,935,511	890,316	43,645,210
2033	-	-	-	-	-	42,906,029	42,906,029	735,526	44,380,736
2034	-	-	24,865,994	(2,412,001)	-	18,040,035	30,473,032	522,391	17,625,131
2035	-	-	-	-	-	18,040,035	18,040,035	309,255	17,934,386
2036	-	-	-	-	-	18,040,035	18,040,035	309,255	18,243,642
2037	-	-	-	-	-	18,040,035	18,040,035	309,255	18,552,897
2038	-	-	-	-	-	18,040,035	18,040,035	309,255	18,862,152
2039	-	-	-	-	-	18,040,035	18,040,035	309,255	19,171,408
2040	-	-	-	-	-	18,040,035	18,040,035	309,255	19,480,663
2041	-	-	18,040,035	(1,749,883)	-	-	18,040,035	309,255	0
Totals	-	-	189,591,154	(18,390,342)	-		5,644,018,580		

HECO STEAM PRODUCTION PLANT
Account 314 - Turbogenerator Units
No Interim Activity
Current Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -9.7%
Average Future Net Salvage = -9.7%
Book Reserve Ratio = 68.9%
Age Survivors = 20.10
Average Remaining Life = 29.96
Average Service Life = 50.06
Theoretical Reserve = 43,516,049
Interim Retirement Ratio = 0.0000%
Interim Addition Ratio = -
Depreciation Rate = 1.362%

Year	Interim Retirements	Interim Net Salvage	Terminal Retirements	Terminal Net Salvage	Interim Additions	Ending Balance	Average Balance	Deprec. Amount	Ending Reserve
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1999	-	-	-	-	-	98,798,416			68,069,219
2000	-	-	-	-	-	98,798,416	98,798,416	1,345,485	69,414,704
2001	-	-	-	-	-	98,798,416	98,798,416	1,345,485	70,760,189
2002	-	-	-	-	-	98,798,416	98,798,416	1,345,485	72,105,674
2003	-	-	-	-	-	98,798,416	98,798,416	1,345,485	73,451,158
2004	-	-	-	-	-	98,798,416	98,798,416	1,345,485	74,796,643
2005	-	-	-	-	-	98,798,416	98,798,416	1,345,485	76,142,128
2006	-	-	-	-	-	98,798,416	98,798,416	1,345,485	77,487,613
2007	-	-	-	-	-	98,798,416	98,798,416	1,345,485	78,833,098
2008	-	-	-	-	-	98,798,416	98,798,416	1,345,485	80,178,583
2009	-	-	-	-	-	98,798,416	98,798,416	1,345,485	81,524,067
2010	-	-	-	-	-	98,798,416	98,798,416	1,345,485	82,869,552
2011	-	-	-	-	-	98,798,416	98,798,416	1,345,485	84,215,037
2012	-	-	-	-	-	98,798,416	98,798,416	1,345,485	85,560,522
2013	-	-	-	-	-	98,798,416	98,798,416	1,345,485	86,906,007
2014	-	-	-	-	-	98,798,416	98,798,416	1,345,485	88,251,492
2015	-	-	-	-	-	98,798,416	98,798,416	1,345,485	89,596,977
2016	-	-	-	-	-	98,798,416	98,798,416	1,345,485	90,942,461
2017	-	-	-	-	-	98,798,416	98,798,416	1,345,485	92,287,946
2018	-	-	-	-	-	98,798,416	98,798,416	1,345,485	93,633,431
2019	-	-	-	-	-	98,798,416	98,798,416	1,345,485	94,978,916
2020	-	-	-	-	-	98,798,416	98,798,416	1,345,485	96,324,401
2021	-	-	-	-	-	98,798,416	98,798,416	1,345,485	97,669,886
2022	-	-	-	-	-	98,798,416	98,798,416	1,345,485	99,015,370
2023	-	-	-	-	-	98,798,416	98,798,416	1,345,485	100,360,855
2024	-	-	7,369,409	(714,833)	-	91,429,007	95,113,712	1,295,305	93,571,918
2025	-	-	-	-	-	91,429,007	91,429,007	1,245,125	94,817,043
2026	-	-	44,348,511	(4,301,806)	-	47,080,496	69,254,752	943,145	47,109,871
2027	-	-	-	-	-	47,080,496	47,080,496	641,165	47,751,036
2028	-	-	5,588,557	(542,090)	-	41,491,939	44,286,218	603,111	42,223,501
2029	-	-	-	-	-	41,491,939	41,491,939	565,057	42,788,558
2030	-	-	9,577,722	(929,039)	-	31,914,217	36,703,078	499,840	32,781,637
2031	-	-	-	-	-	31,914,217	31,914,217	434,623	33,216,261
2032	-	-	9,453,584	(916,998)	-	22,460,633	27,187,425	370,252	23,215,931
2033	-	-	-	-	-	22,460,633	22,460,633	305,880	23,521,810
2034	-	-	13,016,958	(1,262,645)	-	9,443,675	15,952,154	217,244	9,459,452
2035	-	-	-	-	-	9,443,675	9,443,675	128,609	9,588,060
2036	-	-	-	-	-	9,443,675	9,443,675	128,609	9,716,669
2037	-	-	-	-	-	9,443,675	9,443,675	128,609	9,845,277
2038	-	-	-	-	-	9,443,675	9,443,675	128,609	9,973,886
2039	-	-	-	-	-	9,443,675	9,443,675	128,609	10,102,494
2040	-	-	-	-	-	9,443,675	9,443,675	128,609	10,231,103
2041	-	-	9,443,675	(916,036)	-	-	9,443,675	128,609	0
Totals	-	-	98,798,416	(9,583,446)	-		2,960,141,339		

HECO STEAM PRODUCTION PLANT
Account 315 - Accessory Electric Equipment
No Interim Activity
Current Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -9.7%
Average Future Net Salvage = -9.7%
Book Reserve Ratio = 58.2%
Age Survivors = 20.10
Average Remaining Life = 29.63
Average Service Life = 49.73
Theoretical Reserve = 11,038,645
Interim Retirement Ratio = 0.0000%
Interim Addition Ratio = -
Depreciation Rate = 1.737%

Year	Interim Retirements	Interim Net Salvage	Terminal Retirements	Terminal Net Salvage	Interim Additions	Ending Balance	Average Balance	Deprec. Amount	Ending Reserve
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1999	-	-	-	-	-	24,895,080			14,501,219
2000	-	-	-	-	-	24,895,080	24,895,080	432,318	14,933,537
2001	-	-	-	-	-	24,895,080	24,895,080	432,318	15,365,855
2002	-	-	-	-	-	24,895,080	24,895,080	432,318	15,798,172
2003	-	-	-	-	-	24,895,080	24,895,080	432,318	16,230,490
2004	-	-	-	-	-	24,895,080	24,895,080	432,318	16,662,808
2005	-	-	-	-	-	24,895,080	24,895,080	432,318	17,095,126
2006	-	-	-	-	-	24,895,080	24,895,080	432,318	17,527,443
2007	-	-	-	-	-	24,895,080	24,895,080	432,318	17,959,761
2008	-	-	-	-	-	24,895,080	24,895,080	432,318	18,392,079
2009	-	-	-	-	-	24,895,080	24,895,080	432,318	18,824,397
2010	-	-	-	-	-	24,895,080	24,895,080	432,318	19,256,715
2011	-	-	-	-	-	24,895,080	24,895,080	432,318	19,689,032
2012	-	-	-	-	-	24,895,080	24,895,080	432,318	20,121,350
2013	-	-	-	-	-	24,895,080	24,895,080	432,318	20,553,668
2014	-	-	-	-	-	24,895,080	24,895,080	432,318	20,985,986
2015	-	-	-	-	-	24,895,080	24,895,080	432,318	21,418,303
2016	-	-	-	-	-	24,895,080	24,895,080	432,318	21,850,621
2017	-	-	-	-	-	24,895,080	24,895,080	432,318	22,282,939
2018	-	-	-	-	-	24,895,080	24,895,080	432,318	22,715,257
2019	-	-	-	-	-	24,895,080	24,895,080	432,318	23,147,575
2020	-	-	-	-	-	24,895,080	24,895,080	432,318	23,579,892
2021	-	-	-	-	-	24,895,080	24,895,080	432,318	24,012,210
2022	-	-	-	-	-	24,895,080	24,895,080	432,318	24,444,528
2023	-	-	-	-	-	24,895,080	24,895,080	432,318	24,876,846
2024	-	-	2,021,056	(196,042)	-	22,874,024	23,884,552	414,769	23,074,517
2025	-	-	-	-	-	22,874,024	22,874,024	397,221	23,471,738
2026	-	-	11,762,824	(1,140,994)	-	11,111,200	16,992,612	295,087	10,863,006
2027	-	-	-	-	-	11,111,200	11,111,200	192,953	11,055,959
2028	-	-	1,678,535	(162,818)	-	9,432,665	10,271,933	178,378	9,392,984
2029	-	-	-	-	-	9,432,665	9,432,665	163,804	9,556,788
2030	-	-	2,177,373	(211,205)	-	7,255,292	8,343,979	144,898	7,313,108
2031	-	-	-	-	-	7,255,292	7,255,292	125,992	7,439,100
2032	-	-	2,149,152	(208,468)	-	5,106,140	6,180,716	107,332	5,188,812
2033	-	-	-	-	-	5,106,140	5,106,140	88,671	5,277,484
2034	-	-	2,959,240	(287,046)	-	2,146,900	3,626,520	62,977	2,094,174
2035	-	-	-	-	-	2,146,900	2,146,900	37,282	2,131,456
2036	-	-	-	-	-	2,146,900	2,146,900	37,282	2,168,738
2037	-	-	-	-	-	2,146,900	2,146,900	37,282	2,206,021
2038	-	-	-	-	-	2,146,900	2,146,900	37,282	2,243,303
2039	-	-	-	-	-	2,146,900	2,146,900	37,282	2,280,585
2040	-	-	-	-	-	2,146,900	2,146,900	37,282	2,317,867
2041	-	-	2,146,900	(208,249)	-	-	2,146,900	37,282	(0)
Totals	-	-	24,895,080	(2,414,823)	-		737,589,852		

HECO STEAM PRODUCTION PLANT
Account 316 - Misc. Power Plant Equipment
No Interim Activity
Current Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -9.7%
Average Future Net Salvage = -9.7%
Book Reserve Ratio = 30.9%
Age Survivors = 12.79
Average Remaining Life = 33.70
Average Service Life = 46.49
Theoretical Reserve = 4,005,348
Interim Retirement Ratio = 0.0000%
Interim Addition Ratio = -
Depreciation Rate = 2.337%

Year	Interim Retirements	Interim Net Salvage	Terminal Retirements	Terminal Net Salvage	Interim Additions	Ending Balance	Average Balance	Deprec. Amount	Ending Reserve
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1999	-	-	-	-	-	13,272,949			4,107,002
2000	-	-	-	-	-	13,272,949	13,272,949	310,146	4,417,148
2001	-	-	-	-	-	13,272,949	13,272,949	310,146	4,727,295
2002	-	-	-	-	-	13,272,949	13,272,949	310,146	5,037,441
2003	-	-	-	-	-	13,272,949	13,272,949	310,146	5,347,588
2004	-	-	-	-	-	13,272,949	13,272,949	310,146	5,657,734
2005	-	-	-	-	-	13,272,949	13,272,949	310,146	5,967,881
2006	-	-	-	-	-	13,272,949	13,272,949	310,146	6,278,027
2007	-	-	-	-	-	13,272,949	13,272,949	310,146	6,588,174
2008	-	-	-	-	-	13,272,949	13,272,949	310,146	6,898,320
2009	-	-	-	-	-	13,272,949	13,272,949	310,146	7,208,467
2010	-	-	-	-	-	13,272,949	13,272,949	310,146	7,518,613
2011	-	-	-	-	-	13,272,949	13,272,949	310,146	7,828,760
2012	-	-	-	-	-	13,272,949	13,272,949	310,146	8,138,906
2013	-	-	-	-	-	13,272,949	13,272,949	310,146	8,449,052
2014	-	-	-	-	-	13,272,949	13,272,949	310,146	8,759,199
2015	-	-	-	-	-	13,272,949	13,272,949	310,146	9,069,345
2016	-	-	-	-	-	13,272,949	13,272,949	310,146	9,379,492
2017	-	-	-	-	-	13,272,949	13,272,949	310,146	9,689,638
2018	-	-	-	-	-	13,272,949	13,272,949	310,146	9,999,785
2019	-	-	-	-	-	13,272,949	13,272,949	310,146	10,309,931
2020	-	-	-	-	-	13,272,949	13,272,949	310,146	10,620,078
2021	-	-	-	-	-	13,272,949	13,272,949	310,146	10,930,224
2022	-	-	-	-	-	13,272,949	13,272,949	310,146	11,240,371
2023	-	-	-	-	-	13,272,949	13,272,949	310,146	11,550,517
2024	-	-	1,195,868	(115,999)	-	12,077,081	12,675,015	296,175	10,534,824
2025	-	-	-	-	-	12,077,081	12,077,081	282,203	10,817,027
2026	-	-	231,656	(22,471)	-	11,845,425	11,961,253	279,496	10,842,398
2027	-	-	-	-	-	11,845,425	11,845,425	276,790	11,119,187
2028	-	-	6,255,197	(606,754)	-	5,590,229	8,717,827	203,708	4,460,944
2029	-	-	-	-	-	5,590,229	5,590,229	130,626	4,591,570
2030	-	-	29,475	(2,859)	-	5,560,754	5,575,492	130,281	4,689,518
2031	-	-	-	-	-	5,560,754	5,560,754	129,937	4,819,455
2032	-	-	31,858	(3,090)	-	5,528,896	5,544,825	129,565	4,914,071
2033	-	-	-	-	-	5,528,896	5,528,896	129,193	5,043,264
2034	-	-	66,227	(6,424)	-	5,462,668	5,495,782	128,419	5,099,031
2035	-	-	-	-	-	5,462,668	5,462,668	127,645	5,226,677
2036	-	-	-	-	-	5,462,668	5,462,668	127,645	5,354,322
2037	-	-	-	-	-	5,462,668	5,462,668	127,645	5,481,967
2038	-	-	-	-	-	5,462,668	5,462,668	127,645	5,609,612
2039	-	-	-	-	-	5,462,668	5,462,668	127,645	5,737,257
2040	-	-	-	-	-	5,462,668	5,462,668	127,645	5,864,902
2041	-	-	5,462,668	(529,879)	-	-	5,462,668	127,645	0
Totals	-	-	13,272,949	(1,287,476)	-		447,362,035		

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HECO OTHER PRODUCTION PLANT
Depreciation Rate Calculation
Account 341 - Structures & Improvements
Waiiau Units 9 & 10
No Interim Activity
Uninflated Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -4.6%
Average Net Salvage = -4.6%
Average Age of Survivors = 23.11
Average Remaining Life = 31.00
Average Service Life = 54.11
Book Reserve Ratio = 76.998%
Interim Retirement Ratio = 0.00%
Interim Addition Factor = 0.0
Depreciation Rate = 0.890%

[1] Year	[2] Interim Retirements \$	[3] Interim Net Salvage \$	[4] Terminal Retirements \$	[5] Terminal Net Salvage \$	[6] Interim Additions \$	[7] Ending Balance \$	[8] Average Balance \$	[9] Deprec. Accrual \$	[10] Ending Reserve \$
1999						772,161			594,549
2000	-	-			-	772,161	772,161	6,875	601,424
2001	-	-			-	772,161	772,161	6,875	608,299
2002	-	-			-	772,161	772,161	6,875	615,175
2003	-	-			-	772,161	772,161	6,875	622,050
2004	-	-			-	772,161	772,161	6,875	628,925
2005	-	-			-	772,161	772,161	6,875	635,800
2006	-	-			-	772,161	772,161	6,875	642,675
2007	-	-			-	772,161	772,161	6,875	649,551
2008	-	-			-	772,161	772,161	6,875	656,426
2009	-	-			-	772,161	772,161	6,875	663,301
2010	-	-			-	772,161	772,161	6,875	670,176
2011	-	-			-	772,161	772,161	6,875	677,051
2012	-	-			-	772,161	772,161	6,875	683,927
2013	-	-			-	772,161	772,161	6,875	690,802
2014	-	-			-	772,161	772,161	6,875	697,677
2015	-	-			-	772,161	772,161	6,875	704,552
2016	-	-			-	772,161	772,161	6,875	711,428
2017	-	-			-	772,161	772,161	6,875	718,303
2018	-	-			-	772,161	772,161	6,875	725,178
2019	-	-			-	772,161	772,161	6,875	732,053
2020	-	-			-	772,161	772,161	6,875	738,928
2021	-	-			-	772,161	772,161	6,875	745,804
2022	-	-			-	772,161	772,161	6,875	752,679
2023	-	-			-	772,161	772,161	6,875	759,554
2024	-	-			-	772,161	772,161	6,875	766,429
2025	-	-			-	772,161	772,161	6,875	773,304
2026	-	-			-	772,161	772,161	6,875	780,180
2027	-	-			-	772,161	772,161	6,875	787,055
2028	-	-			-	772,161	772,161	6,875	793,930
2029	-	-			-	772,161	772,161	6,875	800,805
2030	-	-	772,161	(35,519)	-	-	772,161	6,875	(0)
Totals	-	-	772,161	(35,519)	-		23,936,991		

HECO OTHER PRODUCTION PLANT
Depreciation Rate Calculation
Account 342 - Fuel Holders, Producers & Accessories
Waiau Units 9 & 10
No Interim Activity
Uninflated Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -4.6%
Average Net Salvage = -4.6%
Average Age of Survivors = 16.80
Average Remaining Life = 31.00
Average Service Life = 47.80
Book Reserve Ratio = 55.976%
Interim Retirement Ratio = 0.00%
Interim Addition Factor = 0.0
Depreciation Rate = 1.569%

[1] Year	[2] Interim Retirements \$	[3] Interim Net Salvage \$	[4] Terminal Retirements \$	[5] Terminal Net Salvage \$	[6] Interim Additions \$	[7] Ending Balance \$	[8] Average Balance \$	[9] Deprec. Accrual \$	[10] Ending Reserve \$
1999						1,401,119			784,296
2000	-	-			-	1,401,119	1,401,119	21,977	806,273
2001	-	-			-	1,401,119	1,401,119	21,977	828,249
2002	-	-			-	1,401,119	1,401,119	21,977	850,226
2003	-	-			-	1,401,119	1,401,119	21,977	872,202
2004	-	-			-	1,401,119	1,401,119	21,977	894,179
2005	-	-			-	1,401,119	1,401,119	21,977	916,156
2006	-	-			-	1,401,119	1,401,119	21,977	938,132
2007	-	-			-	1,401,119	1,401,119	21,977	960,109
2008	-	-			-	1,401,119	1,401,119	21,977	982,085
2009	-	-			-	1,401,119	1,401,119	21,977	1,004,062
2010	-	-			-	1,401,119	1,401,119	21,977	1,026,039
2011	-	-			-	1,401,119	1,401,119	21,977	1,048,015
2012	-	-			-	1,401,119	1,401,119	21,977	1,069,992
2013	-	-			-	1,401,119	1,401,119	21,977	1,091,968
2014	-	-			-	1,401,119	1,401,119	21,977	1,113,945
2015	-	-			-	1,401,119	1,401,119	21,977	1,135,922
2016	-	-			-	1,401,119	1,401,119	21,977	1,157,898
2017	-	-			-	1,401,119	1,401,119	21,977	1,179,875
2018	-	-			-	1,401,119	1,401,119	21,977	1,201,851
2019	-	-			-	1,401,119	1,401,119	21,977	1,223,828
2020	-	-			-	1,401,119	1,401,119	21,977	1,245,805
2021	-	-			-	1,401,119	1,401,119	21,977	1,267,781
2022	-	-			-	1,401,119	1,401,119	21,977	1,289,758
2023	-	-			-	1,401,119	1,401,119	21,977	1,311,734
2024	-	-			-	1,401,119	1,401,119	21,977	1,333,711
2025	-	-			-	1,401,119	1,401,119	21,977	1,355,687
2026	-	-			-	1,401,119	1,401,119	21,977	1,377,664
2027	-	-			-	1,401,119	1,401,119	21,977	1,399,641
2028	-	-			-	1,401,119	1,401,119	21,977	1,421,617
2029	-	-			-	1,401,119	1,401,119	21,977	1,443,594
2030	-	-	1,401,119	(64,451)	-	-	1,401,119	21,977	0
Totals	-	-	1,401,119	(64,451)	-		43,434,689		

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HECO OTHER PRODUCTION PLANT
Depreciation Rate Calculation
Account 343 - Prime Movers
Waiau Units 9 & 10
No Interim Activity
Uninflated Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -4.6%
Average Net Salvage = -4.6%
Average Age of Survivors = 22.84
Average Remaining Life = 31.00
Average Service Life = 53.84
Book Reserve Ratio = 77.455%
Interim Retirement Ratio = 0.00%
Interim Addition Factor = 0.0
Depreciation Rate = 0.876%

[1] Year	[2] Interim Retirements \$	[3] Interim Net Salvage \$	[4] Terminal Retirements \$	[5] Terminal Net Salvage \$	[6] Interim Additions \$	[7] Ending Balance \$	[8] Average Balance \$	[9] Deprec. Accrual \$	[10] Ending Reserve \$
1999						7,290,030			5,646,481
2000	-	-			-	7,290,030	7,290,030	63,835	5,710,316
2001	-	-			-	7,290,030	7,290,030	63,835	5,774,151
2002	-	-			-	7,290,030	7,290,030	63,835	5,837,987
2003	-	-			-	7,290,030	7,290,030	63,835	5,901,822
2004	-	-			-	7,290,030	7,290,030	63,835	5,965,657
2005	-	-			-	7,290,030	7,290,030	63,835	6,029,492
2006	-	-			-	7,290,030	7,290,030	63,835	6,093,327
2007	-	-			-	7,290,030	7,290,030	63,835	6,157,162
2008	-	-			-	7,290,030	7,290,030	63,835	6,220,998
2009	-	-			-	7,290,030	7,290,030	63,835	6,284,833
2010	-	-			-	7,290,030	7,290,030	63,835	6,348,668
2011	-	-			-	7,290,030	7,290,030	63,835	6,412,503
2012	-	-			-	7,290,030	7,290,030	63,835	6,476,338
2013	-	-			-	7,290,030	7,290,030	63,835	6,540,173
2014	-	-			-	7,290,030	7,290,030	63,835	6,604,009
2015	-	-			-	7,290,030	7,290,030	63,835	6,667,844
2016	-	-			-	7,290,030	7,290,030	63,835	6,731,679
2017	-	-			-	7,290,030	7,290,030	63,835	6,795,514
2018	-	-			-	7,290,030	7,290,030	63,835	6,859,349
2019	-	-			-	7,290,030	7,290,030	63,835	6,923,184
2020	-	-			-	7,290,030	7,290,030	63,835	6,987,020
2021	-	-			-	7,290,030	7,290,030	63,835	7,050,855
2022	-	-			-	7,290,030	7,290,030	63,835	7,114,690
2023	-	-			-	7,290,030	7,290,030	63,835	7,178,525
2024	-	-			-	7,290,030	7,290,030	63,835	7,242,360
2025	-	-			-	7,290,030	7,290,030	63,835	7,306,196
2026	-	-			-	7,290,030	7,290,030	63,835	7,370,031
2027	-	-			-	7,290,030	7,290,030	63,835	7,433,866
2028	-	-			-	7,290,030	7,290,030	63,835	7,497,701
2029	-	-			-	7,290,030	7,290,030	63,835	7,561,536
2030	-	-	7,290,030	(335,341)	-	-	7,290,030	63,835	0
Totals	-	-	7,290,030	(335,341)	-		225,990,930		

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HECO OTHER PRODUCTION PLANT
Depreciation Rate Calculation
Account 344 - Generators
Waiau Units 9 & 10
No Interim Activity
Uninflated Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -4.6%
Average Net Salvage = -4.6%
Average Age of Survivors = 19.46
Average Remaining Life = 31.00
Average Service Life = 50.46
Book Reserve Ratio = 69.536%
Interim Retirement Ratio = 0.00%
Interim Addition Factor = 0.0
Depreciation Rate = 1.131%

[1] Year	[2] Interim Retirements \$	[3] Interim Net Salvage \$	[4] Terminal Retirements \$	[5] Terminal Net Salvage \$	[6] Interim Additions \$	[7] Ending Balance \$	[8] Average Balance \$	[9] Deprec. Accrual \$	[10] Ending Reserve \$
1999						5,379,111			3,740,402
2000	-	-			-	5,379,111	5,379,111	60,843	3,801,245
2001	-	-			-	5,379,111	5,379,111	60,843	3,862,089
2002	-	-			-	5,379,111	5,379,111	60,843	3,922,932
2003	-	-			-	5,379,111	5,379,111	60,843	3,983,776
2004	-	-			-	5,379,111	5,379,111	60,843	4,044,619
2005	-	-			-	5,379,111	5,379,111	60,843	4,105,463
2006	-	-			-	5,379,111	5,379,111	60,843	4,166,306
2007	-	-			-	5,379,111	5,379,111	60,843	4,227,150
2008	-	-			-	5,379,111	5,379,111	60,843	4,287,993
2009	-	-			-	5,379,111	5,379,111	60,843	4,348,837
2010	-	-			-	5,379,111	5,379,111	60,843	4,409,680
2011	-	-			-	5,379,111	5,379,111	60,843	4,470,524
2012	-	-			-	5,379,111	5,379,111	60,843	4,531,367
2013	-	-			-	5,379,111	5,379,111	60,843	4,592,211
2014	-	-			-	5,379,111	5,379,111	60,843	4,653,054
2015	-	-			-	5,379,111	5,379,111	60,843	4,713,898
2016	-	-			-	5,379,111	5,379,111	60,843	4,774,741
2017	-	-			-	5,379,111	5,379,111	60,843	4,835,585
2018	-	-			-	5,379,111	5,379,111	60,843	4,896,428
2019	-	-			-	5,379,111	5,379,111	60,843	4,957,272
2020	-	-			-	5,379,111	5,379,111	60,843	5,018,115
2021	-	-			-	5,379,111	5,379,111	60,843	5,078,959
2022	-	-			-	5,379,111	5,379,111	60,843	5,139,802
2023	-	-			-	5,379,111	5,379,111	60,843	5,200,646
2024	-	-			-	5,379,111	5,379,111	60,843	5,261,489
2025	-	-			-	5,379,111	5,379,111	60,843	5,322,333
2026	-	-			-	5,379,111	5,379,111	60,843	5,383,176
2027	-	-			-	5,379,111	5,379,111	60,843	5,444,020
2028	-	-			-	5,379,111	5,379,111	60,843	5,504,863
2029	-	-			-	5,379,111	5,379,111	60,843	5,565,707
2030	-	-	5,379,111	(247,439)	-	-	5,379,111	60,843	0
Totals	-	-	5,379,111	(247,439)	-		166,752,441		

HECO OTHER PRODUCTION PLANT
Depreciation Rate Calculation
Account 345 - Accessory Electric Equipment
Waiau Units 9 & 10
No Interim Activity
Uninflated Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -4.6%
Average Net Salvage = -4.6%
Average Age of Survivors = 14.87
Average Remaining Life = 31.00
Average Service Life = 45.87
Book Reserve Ratio = 49.553%
Interim Retirement Ratio = 0.00%
Interim Addition Factor = 0.0
Depreciation Rate = 1.776%

[1] Year	[2] Interim Retirements \$	[3] Interim Net Salvage \$	[4] Terminal Retirements \$	[5] Terminal Net Salvage \$	[6] Interim Additions \$	[7] Ending Balance \$	[8] Average Balance \$	[9] Deprec. Accrual \$	[10] Ending Reserve \$
1999						2,700,634			1,338,250
2000	-	-			-	2,700,634	2,700,634	47,955	1,386,205
2001	-	-			-	2,700,634	2,700,634	47,955	1,434,161
2002	-	-			-	2,700,634	2,700,634	47,955	1,482,116
2003	-	-			-	2,700,634	2,700,634	47,955	1,530,071
2004	-	-			-	2,700,634	2,700,634	47,955	1,578,026
2005	-	-			-	2,700,634	2,700,634	47,955	1,625,982
2006	-	-			-	2,700,634	2,700,634	47,955	1,673,937
2007	-	-			-	2,700,634	2,700,634	47,955	1,721,892
2008	-	-			-	2,700,634	2,700,634	47,955	1,769,847
2009	-	-			-	2,700,634	2,700,634	47,955	1,817,803
2010	-	-			-	2,700,634	2,700,634	47,955	1,865,758
2011	-	-			-	2,700,634	2,700,634	47,955	1,913,713
2012	-	-			-	2,700,634	2,700,634	47,955	1,961,668
2013	-	-			-	2,700,634	2,700,634	47,955	2,009,624
2014	-	-			-	2,700,634	2,700,634	47,955	2,057,579
2015	-	-			-	2,700,634	2,700,634	47,955	2,105,534
2016	-	-			-	2,700,634	2,700,634	47,955	2,153,489
2017	-	-			-	2,700,634	2,700,634	47,955	2,201,445
2018	-	-			-	2,700,634	2,700,634	47,955	2,249,400
2019	-	-			-	2,700,634	2,700,634	47,955	2,297,355
2020	-	-			-	2,700,634	2,700,634	47,955	2,345,311
2021	-	-			-	2,700,634	2,700,634	47,955	2,393,266
2022	-	-			-	2,700,634	2,700,634	47,955	2,441,221
2023	-	-			-	2,700,634	2,700,634	47,955	2,489,176
2024	-	-			-	2,700,634	2,700,634	47,955	2,537,132
2025	-	-			-	2,700,634	2,700,634	47,955	2,585,087
2026	-	-			-	2,700,634	2,700,634	47,955	2,633,042
2027	-	-			-	2,700,634	2,700,634	47,955	2,680,997
2028	-	-			-	2,700,634	2,700,634	47,955	2,728,953
2029	-	-			-	2,700,634	2,700,634	47,955	2,776,908
2030	-	-	2,700,634	(124,229)	-	-	2,700,634	47,955	0
Totals	-	-	2,700,634	(124,229)	-		83,719,654		

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HECO OTHER PRODUCTION PLANT
Depreciation Rate Calculation
Account 346 - Misc. Power Plant Equipment
Waiiau Units 9 & 10
Reflects Amortization
No Interim Activity
Uninflated Terminal Net Salvage

Interim Net Salvage = 0.0%
Terminal Net Salvage = -4.6%
Average Net Salvage = -4.6%
Average Age Survivors = 37.92
Average Remaining Life = 31.00
Average Service Life = 68.92
Book Reserve Ratio = 124.451%
Interim Retirement Ratio = 0.00%
Interim Addition Factor = 0.0
Depreciation Rate = -0.640%

[1] Year	[2] Interim Retirements \$	[3] Interim Net Salvage \$	[4] Terminal Retirements \$	[5] Terminal Net Salvage \$	[6] Interim Additions \$	[7] Ending Balance \$	[8] Average Balance \$	[9] Deprec. Accrual \$	[10] Ending Reserve \$
1999						290,025			360,938
2000	-	-			-	290,025	290,025	(1,857)	359,081
2001	-	-			-	290,025	290,025	(1,857)	357,224
2002	-	-			-	290,025	290,025	(1,857)	355,367
2003	-	-			-	290,025	290,025	(1,857)	353,509
2004	-	-			-	290,025	290,025	(1,857)	351,652
2005	-	-			-	290,025	290,025	(1,857)	349,795
2006	-	-			-	290,025	290,025	(1,857)	347,938
2007	-	-			-	290,025	290,025	(1,857)	346,081
2008	-	-			-	290,025	290,025	(1,857)	344,224
2009	-	-			-	290,025	290,025	(1,857)	342,366
2010	-	-			-	290,025	290,025	(1,857)	340,509
2011	-	-			-	290,025	290,025	(1,857)	338,652
2012	-	-			-	290,025	290,025	(1,857)	336,795
2013	-	-			-	290,025	290,025	(1,857)	334,938
2014	-	-			-	290,025	290,025	(1,857)	333,081
2015	-	-			-	290,025	290,025	(1,857)	331,223
2016	-	-			-	290,025	290,025	(1,857)	329,366
2017	-	-			-	290,025	290,025	(1,857)	327,509
2018	-	-			-	290,025	290,025	(1,857)	325,652
2019	-	-			-	290,025	290,025	(1,857)	323,795
2020	-	-			-	290,025	290,025	(1,857)	321,938
2021	-	-			-	290,025	290,025	(1,857)	320,081
2022	-	-			-	290,025	290,025	(1,857)	318,223
2023	-	-			-	290,025	290,025	(1,857)	316,366
2024	-	-			-	290,025	290,025	(1,857)	314,509
2025	-	-			-	290,025	290,025	(1,857)	312,652
2026	-	-			-	290,025	290,025	(1,857)	310,795
2027	-	-			-	290,025	290,025	(1,857)	308,938
2028	-	-			-	290,025	290,025	(1,857)	307,080
2029	-	-			-	290,025	290,025	(1,857)	305,223
2030	-	-	290,025	(13,341)	-	-	290,025	(1,857)	0
Totals	-	-	290,025	(13,341)	-		8,990,775		

CERTIFICATE OF SERVICE

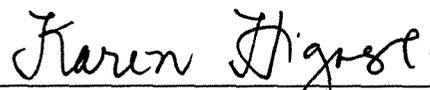
I hereby certify that I have this date served a copy of the foregoing Decision and Order No. 21331 upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
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Karen Higashi

DATED: SEP 03 2004