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DIVISION OF CONSUMER ADVOCACY
Department of Commerce and
Consumer Affairs
335 Merchant Street, Room 326
Honolulu, Hawaii 96813
Telephone: (808) 586-2800

PUBLIC UTILITIES
COMMISSION

2005 JUN 22 A 10:45

FILED

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
HAWAIIAN ELECTRIC COMPANY, INC.)
For Approval of Rate Increases and Revised)
Rate Schedules and Rules.)

DOCKET NO. 04-0113

DIVISION OF CONSUMER ADVOCACY'S
INFORMATION REQUESTS

Pursuant to the agreed upon Schedule of Proceedings approved in Order No. 21727 the Division of Consumer Advocacy hereby submits its **FIRST THROUGH TWENTY-SECOND SUBMISSION OF INFORMATION REQUESTS** in the above docketed matter which were informally filed with Applicant on the following dates:

- | | |
|--------------------|-------------------|
| First Submission | December 14, 2004 |
| Second Submission | January 25, 2005 |
| Third Submission | February 1, 2005 |
| Fourth Submission | February 8, 2005 |
| Fifth Submission | February 10, 2005 |
| Sixth Submission | February 18, 2005 |
| Seventh Submission | February 25, 2005 |

Eighth Submission	March 1, 2005
Ninth Submission	March 4, 2005
Tenth Submission	March 11, 2005
Eleventh Submission	March 18, 2005
Twelfth Submission	March 22, 2005
Thirteenth Submission	March 24, 2005
Fourteenth Submission	March 29, 2005
Fifteenth Submission	April 1, 2005
Sixteenth Submission	April 5, 2005
Seventeenth Submission	April 8, 2005
Eighteenth Submission	April 15, 2005
Nineteenth Submission	April 22, 2005
Twentieth Submission	April 29, 2005
Twenty-first Submission	May 3, 2005
Twenty-second Submission	May 10, 2005

DATED: Honolulu, Hawaii, June 22, 2005.

Respectfully submitted,

By *Cheryl S. Kikuta*
CHERYL S. KIKUTA
Utilities Administrator

DIVISION OF CONSUMER ADVOCACY

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FIRST SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FIRST SUBMISSION OF INFORMATION REQUESTS

General Information Requests

CA-IR-1

For each of the HECO witnesses who sponsor test period budgeted labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted staffing and associated labor direct expense amounts included in the witnesses' portion of the rate case test period budget.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response to part (a), documenting all work done to determine required staffing levels and overtime hours by Department, RA, Activity and NARUC Account.
- c. Describe the actual force level that existed at the date the budget was prepared or otherwise served as a base for purposes of preparing the budget level.
- d. For each budgeted employee position that is added to existing actual force levels (as of the date the budget was prepared), **explain** the analyses undertaken to determine

that each added position was necessary and should be filled in order to meet present or anticipated work requirements. Also, please explain how the anticipated work requirements were defined and determined.

- e. Describe and, to the extent possible, quantify the backlog of work, unfinished projects, deferred maintenance and other labor requirements unfulfilled at present staffing levels, that will be satisfied by adding the employee positions identified in your response to part (d).
- f. Provide complete copies of all studies, analyses, workpapers, projections, notes, correspondence, assumptions and other documents associated with your responses to parts (d) and (e) above.

CA-IR-2

For each of the HECO witnesses who sponsor test period budgeted non-labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted non-labor direct expense amounts included in the rate case test period budget and sponsored by the witness.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response to part (a), indicating the amounts by Department, RA, Activity and NARUC Account that such calculations support.

- c. For each budgeted non-labor amount in the test period forecast that exceeds \$50,000, please describe the basis for determining the budgeted amount (for example, bid solicitation, price times quantity estimation, historical cost escalated, etc.)
- d. For each item in your response to part (c), where specific quantities and prices were discretely forecasted, explain the basis for and source of the budgeted quantity inputs and budgeted prices for each such item. Provide complete copies of all studies, reports and other documents that were relied upon.
- e. For each item in your response to part (c) where historical costs were escalated, provide all historical cost information that was considered and explain how such data was evaluated and escalated to derive test year proposed levels.
- f. For each item in your response to part (c) where a bid solicitation or other special analysis was conducted, explain what was done and provide complete copies of all supporting reports, bid solicitations, proposals, analyses, workpapers and other documents associated with such efforts.
- g. Provide complete copies of all other information required to completely support and document the test year projected

expense levels being proposed by the Company, including general assumptions and forecasting instructions that were employed.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SECOND SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SECOND SUBMISSION OF INFORMATION REQUESTS

General Information Requests.

- CA-IR-3 Please provide a complete copy of the most current available HECO management organization chart, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department.
- CA-IR-4 Please provide a complete copy of the most current available Hawaiian Electric Industries (“HEI”) management organization chart, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department, with an explanation of which departments are supportive of HECO operations and the services/activities provided.
- CA-IR-5 Please provide in hard copy and electronic media a complete table of HECO and HEI Departmental and Responsibility Area “RA” reporting structure documentation, showing RA descriptions and indicating how each department/RA is aligned with the HECO and HEI organization charts provided in response to the preceding two information requests.

CA-IR-6

Please provide a chart showing each separate legal entity within HEI and provide the following additional information:

- a. Explain and quantify the types of recurring and non-recurring affiliate transactions that took place in 2003 and 2004 (to-date) between HECO and each affiliated entity.
- b. Describe the basis of pricing each form of affiliate transaction listed in your response to part (a) of this information request, for example fully distributed cost, market price, appraised value, etc.
- c. If any affiliate service agreements exist in connection with HECO affiliate transactions, please provide complete copies of same.
- d. Identify and describe each affiliate relationship of HECO for which Hawaii PUC notification and/or approval has been sought or received.
- e. Provide complete copies of any documents associated with your response to part (d) of this information request.

CA-IR-7

Please provide complete copies of the consolidating financial statement workpapers (income statements and balance sheets) for the HEI financial statements issued publicly for calendar 2003 and for the quarter ended September 30, 2004. Include in your response the most detailed available stand-alone income

statements and balances sheets for each legal entity within HEI for each period/date, as well as details regarding elimination entries and any reclassifications made in preparing consolidated public financial statements.

CA-IR-8

Please provide a complete and detailed description of the HEI/HECO budget process and cycle, indicating the time line for each individually significant budget activity/step throughout a typical year and identifying the documents produced at each step of such process/cycle. Provide specimen copies of each type of document routinely created within the most recently completed budget cycle, including but not limited to budget assumption statements, calendars, input forms, staffing documentation, presentation graphics and budget review/approval documentation.

CA-IR-9

Please provide a detailed statement of HECO and HEI actual employee levels on a quarterly basis for each year 2001 through 2004, indicating the numbers of full-time, part-time and temporary employees in each department and responsibility area ("RA") and/or other reportable work groups and the comparable numbers of authorized, but unfilled positions of each type within each department, RA or work group.

CA-IR-10 Please provide a complete copy of the most recently filed Federal and State income tax returns for HEI, including all supporting schedules.

CA-IR-11 Please provide a complete copy of employee benefit documentation associated with each existing employee health, welfare or retirement plan, in the form currently provided to employees to advise them of such benefits.

CA-IR-12

- a. Has the Company initiated any individually significant efficiency or cost reduction programs since January 1, 2002?
- b. If affirmative, please identify and describe each such program and provide copies of all reports analyses, projections, workpapers and other documentation related to same.

CA-IR-13 **Ref: Electronic Workpaper Files Submitted by HECO.**

The Company provided certain electronic spreadsheet files titled, Copy of Hours Extract.xls, heco2005 datafile (nonlabor), and heco 2005 datafile (labor), which contained actual data for the years 1999 through 2003, budget data for 2004 and budgeted data for 2005 (test year). Please append 2004 actual data throughout each

of these electronic files and provide such updates in electronic media.

Witness T-1 Mr. Alm.

CA-IR-14

Ref: T-1, page 25, lines 2-9.

- a. Does HECO intend to employ the same annual budget for operational purposes in 2005 that was developed and filed with the PUC for rate case purposes?
- b. If your response is anything but an unqualified “yes,” please identify and describe each different type of budget that is developed in the normal course of business and explain the differences between HECO’s 2005 rate case budget and each of its other 2005 operating budget(s).

CA-IR-15

Ref: T-1, page 25, lines 16-25.

Please provide complete copies of all documents developed and circulated among HECO employees to inform them of common budget assumptions to be employed in the development of the rate case projections.

CA-IR-16

Ref: T-1, page 18, line 14.

Please identify and describe each of the Company’s “operating plan” iterations that were developed or employed during 2001

through 2004 to-date, and provide the following information regarding each such “plan:”

- a. A complete copy of the “operating plan.”
- b. A statement of the “specific sales forecast and [a] level of O&M expenses” within each such “plan.”
- c. Identify the known reasons for differences in each new “operating plan,” relative to the assumptions and estimates within the immediately previous “plan.”
- d. State with specificity the staffing changes implemented with each new “operating plan,” if any.
- e. Explain the numbers of unfilled employee vacancies in each department provided for in each iteration of the “operating plan.”

CA-IR-17

Ref: HECO 106 Proposed Rate Schedules.

Please provide the Company’s proposed rate schedules in electronic Word format, indicating by “track changes” or other editing markups each change being proposed to the existing tariffs.

CA-IR-18

Ref: HECO 108 Proposed Rules Sheets.

Please provide the Company’s proposed rules in electronic Word format, indicating by “track changes” or other editing markups each change being proposed to the existing rules.

CA-IR-19

Ref: HECO 110 Proposed Rule No. 7 Changes.

Please provide the Company's proposed Rule 7 pages in electronic Word format, indicating by "track changes" or other editing markups each change being proposed to the existing Rule 7.

CA-IR-20

Ref: T-1, page 19, line 14.

According to the testimony, "HECO is slowly getting back to an optimal staffing level." Please provide the following information:

- a. Explain and quantify precisely how many employees within each department of HEI and HECO represent "an optimal staffing level."
- b. Identify and describe all efforts by HECO to determine its optimal staffing.
- c. Provide complete copies of all studies, analyses, workpapers, projections, reports and other documents associated with HECO's efforts to determine "optimal staffing levels."
- d. State with specificity the "certain work [that] will not get done" or that has not gotten done with less than optimal staffing (line 13).
- e. Provide statistical information indicating how far HECO's staffing has departed from "optimal levels" and illustrating

the progress made to-date in “getting back to an optimal staffing level.”

CA-IR-21

Ref: T-1, page 19, line 11.

The referenced testimony states “[h]owever, such reduction in the level of spending and unfilled positions can not continue for an indefinite period of time.” Please respond to the following:

- a. Specifically state and quantify which spending reductions and which unfilled positions cannot be sustained.
- b. Identify and describe with specificity each known instance where service quality has suffered, maintenance has been deferred, customer demands have been unmet or other negative conditions have arisen as a result of HECO cost reductions or unfilled positions.
- c. Provide complete copies of all studies, projections, analyses, workpapers, reports, correspondence and other documents associated with your response to part (b) of this information request.

Witness T-2 Ms. Hazama.

CA-IR-22

Ref: HECO WP-150 "Source:"

Please provide for each available month of 2003 and 2004, complete copies of HECO's "Monthly Revenue by Summary Rates (Rev510)."

CA-IR-23

Ref: HECO-205, HECO-207, HECO-209, HECO-211 and HECO-213.

For **each** of the referenced Exhibits, please provide the following information:

- a. Provide the Exhibits in electronic Excel format, with all formulae intact and linked spreadsheets. An integrated set of spreadsheets is desired that will replicate all calculations performed.
- b. Include in your response to part (a) of this information request the updated calendar year 2004 data in each column in place of the April year-to-date information.
- c. Provide Weather Normalized Use/Average Customer and Billed Sales in each year 2000, 2001, 2002, 2003 and 2004.
- d. Provide degree day data and algorithms employed to determine the response to part (b) of this information request in each year 2000, 2001, 2002, 2003 and 2004.
- e. Please calculate and compare the proposed KWh usage per average customer in HECO-201 to the response in part (c)

of this information request and explain the known reasons for any significant variances between recent actual normalized usage per customer and the Company's proposed test year levels of same.

CA-IR-24

Ref: HECO T-2, Page 2, Line 22.

Please provide the following information regarding HECO's annual sales forecast and quarterly updates procedure:

- a. A complete copy of the most recent "annual sales forecast."
- b. A complete copy of the most recent "quarterly update."
- c. Does HECO intend to update its test year sales forecast?
- d. Please explain and provide all documentation associated with your response to part (c) of this information request.

Witness T-3 Mr. Young.

CA-IR-25

Ref: T-3 Revenue Calculations.

Mr. Young describes in testimony his methods and the data employed to develop test year revenue estimates. Please provide complete copies of all electronic spreadsheet files (excel format) associated with all work performed, leaving cell references, formulae and links to other files intact. An integrated set of spreadsheets is desired that will replicate all calculations performed by Mr. Young.

CA-IR-26

Ref: HECO 304 (8 pages) and HECO WP-304 (154 pages).

Please provide complete copies of all source data and spreadsheet files (excel format) underlying the determination of test year revenues and present rates and at proposed rates for each rate schedule, to the extent not contained in your response to the immediately preceding question. In addition please explain and provide documentation for each adjustment made to allocate sales among rate schedules and to adjust billing determinants from forecasted amounts.

CA-IR-27

Ref: HECO 303 and HECO WP-303.

Please provide complete copies of all source data and spreadsheet files (excel format) underlying the determination of test year Other Operating Revenues at present rates and at proposed rates for each line item, indicating the methods employed to determine billing determinants for each line item.

Witness T-6 Mr. A. Fujinaka

CA-IR-28

Ref: HECO 602 - Equivalent Availability.

Please provide detailed supporting calculations for the HECO data on the graph in all years, provide updated actual 2004 information and provide copies of the documentation supportive of the Industry data, including any updated Industry data now available for periods

subsequent to 2002. Provide all data in hard copy and electronic (excel) format.

CA-IR-29

Ref: HECO 602 – Equivalent Availability.

Please provide separate Equivalent Availability Factor calculations for each HECO-owned and IPP unit for each year shown and explain each of the known causes for significant fluctuations in such data for all years subsequent to 1999. Provide all data in hard copy and electronic (excel) format.

CA-IR-30

Ref: HECO 603 - Equivalent Forced Outage Rates.

Please provide detailed supporting calculations for the HECO data on the graph in all years, provide updated actual 2004 information and provide copies of the documentation supportive of the Industry data, including any updated Industry data now available for periods subsequent to 2002. Provide all data in hard copy and electronic (excel) format.

CA-IR-31

Ref: HECO 603 – Equivalent Forced Outage Rates.

Please provide separate Equivalent Forced Outage Rate calculations for each HECO-owned and IPP unit for each year shown and explain each of the known causes for significant

fluctuations in such data for all years subsequent to 1999. Provide all data in hard copy and electronic (excel) format.

CA-IR-32

Ref: HECO T-6, Page 5, Line 7.

Please identify and explain each instance in 2003 and 2004 when load was shed automatically or manually, indicating the known causes of each incident, as well as the role of interruptible tariff provisions, DSM and other tools available to HECO at such times to help maintain supply/demand balancing.

CA-IR-33

Ref: HECO 608 – Waiiau 9 & 10 Service Hours.

Please provide detailed supporting calculations for the unit hours data on the graph in all years, provide updated actual 2004 information and provide copies of the documentation and calculations supportive of all "Forecast" hours data. Provide all data in hard copy and electronic (excel) format. Provide all data in hard copy and electronic (excel) format.

CA-IR-34

Ref: HECO 609 – Cycling Unit Service Hours.

Please provide detailed supporting calculations for the unit hours data on the graph in all years, provide updated actual 2004 information and provide copies of the documentation and

calculations supportive of all "Extrapolated" hours data. Provide all data in hard copy and electronic (excel) format.

CA-IR-35

Ref: HECO T-6, Page 8, Line 22.

According to the testimony, "The rapidly growing demand will increase Other Production O&M expenses as units are run harder and require more maintenance to mitigate impacts on reliability and reserve margins decrease." Please provide the following information with respect to this statement:

- a. State whether or not actual recent "rapidly growing demand" has, in fact, increased actual Other Production O&M expenses and provide copies of all studies, reports, analyses, workpaper and other documents associated with your response.
- b. Regarding the prediction that "rapidly growing demand **will** increase Other Production O&M expenses," please state whether this prediction is based upon any studies, analyses, workpapers, projections or other empirical data.
- c. If your response to part (b) of this information request is affirmative, please provide complete copies of all studies, reports, analyses, workpaper and other documents associated with your response.

CA-IR-36

Ref: HECO T-6, Page 9, Line 12.

According to the testimony, "Other Production O&M Non-labor will significantly increase due to the need for outside services to supplement the workforce and provide specialized skills and services, i.e., generator, turbine and environmental consulting services." Please provide the following information with respect to this statement:

- a. A detailed schedule comparing actual annual "outside services" costs chargeable to Production O&M accounts in 2001, 2002, 2003, 2004 and the projected test period amount, by generating station, Account, RA, payee, type of service and amount.
- b. Explanations for significant (more than \$250,000 per year) fluctuations among years, as well as individually significant payments (more than \$100,000 to a vendor) in each year.
- c. Detailed explanations for each new or changed level of activity involving outside services in the test year, relative to historical activity and cost levels set forth in the response to part (a) of this information request.

CA-IR-37

Ref: HECO T-6, Page 9, Line 20.

According to the testimony, "...other major factors [that] impact Other Production O&M" include "Age of generating units and

associated infrastructure.” Please provide the following information with respect to this statement:

- a. State whether or not the “age of generating units” has, in fact, caused an increase in actual Other Production O&M expenses and provide the estimated magnitude of change occurring in each year since 1995.
- b. Provide copies of all studies, reports, analyses, workpaper and other documents associated with your response to part (a) of this information request.

CA-IR-38

Ref: HECO T-6, Page 10, Line 7 and HECO 610.

According to the testimony, “Significant capital, and O&M Labor and Non-Labor resources are required to maintain compliance with all regulations impacting the operation and maintenance of HECO’s generating units, the disposal of wastes generated from the process, and ensuring employee and public safety.” Please provide the following information with respect to this statement:

- a. Identify and quantify the “capital” resources that were invested in 2004 and that are projected to be invested in 2005 with respect to compliance with regulations and safety, indicating any projects/amounts directly attributable to changed regulations.

- b. Identify and quantify the "O&M Labor" resources that were expended by Account and RA in 2004 and that are projected to be expended in 2005 with respect to compliance with regulations and safety, indicating any projects/amounts directly attributable to changed regulations.
- c. Identify and quantify the "O&M Non-Labor" resources that were expended by Account and RA in 2004 and that are projected to be expended in 2005 with respect to compliance with regulations and safety, indicating any projects/amounts directly attributable to changed regulations.
- d. Are any of the regulations that are summarized on HECO 610 newly effective or significantly revised since January 1, 2002? If affirmative, please explain and provide specific reference to such regulation changes.
- e. Aside from the EPA 316(b) change referenced at line 21, are there any new or revised regulations for which HECO will be required to incur additional costs in the future?
- f. If your response to part (e) of this information request is affirmative, please explain and quantify all planned activities that will be necessary to address the new or revised regulations, the timelines for the completion of such planned activities and the anticipated new costs that will be incurred.

CA-IR-39

Ref: Environmental Protection Agency Regulation 316 (b) Intake Structure Regulation.

Please provide the following:

- a. A copy of the noted regulation;
- b. A copy of all plans and studies undertaken to-date to respond to enacted regulation;
- c. The construction investment budgeted by month, by NARUC account associated with compliance for each month of the 2005 test year;
- d. The actual construction investment by month, by NARUC account associated with compliance for each month available to-date since enactment;
- e. The actual operation and maintenance expense incurred by month, by NARUC account for each month available since enactment of the regulation; and
- f. The budgeted operation and maintenance expense by month, by NARUC account for each month of the 2005 test year.

CA-IR-40

Ref: HECO T-6, Page 11, Line 17.

According to the testimony, "The non-reheat and reheat steam units operating duties are more rigorous than in previous years to meet growing system demands. Non-reheat units used for daily cycling are subjected to additional wear and tear due to a significant

increase in daily on/off operation. Reheat units are now experiencing degradation due to daily on/off operation of critical auxiliaries while operating at their minimum loads." Please respond to the following:

- a. Provide comparable annual data indicating startups by unit and other operating statistics indicating changed and more rigorous cycling of units and auxiliaries in 2002, 2003, 2004 and anticipated in 2005.
- b. Explain and provide documentation of the asserted "additional wear and tear" thought to be caused by daily on/off operation.
- c. Provide comparative capital and expense (by Account/RA) amounts in each year 2000 through 2004 to the projections in the test year that are supportive of the apparent conclusion that cycling service has, in fact, increased production labor and non-labor costs incurred by HECO.

CA-IR-41

Ref: HECO 611 –2003 Production Maintenance Schedule – Planned vs. Actual.

- a. Please provide the 2003 Planned Outage Schedule Exhibit in color and with all related reports and documentation, including the budgeted capital and O&M costs for each outage within the plan.

- b. In addition, please provide the corresponding actual capital and O&M costs for each outage that actually occurred (bottom half of exhibit) and explain each significant variance (more than \$100,000) between planned/actual schedule and between planned/actual costs.

CA-IR-42

Ref: HECO 612 –2004 Production Maintenance Schedule – Planned vs. Actual.

- a. Please provide a color copy of the 2004 Planned Outage Schedule Exhibit, together with copies of all related reports and documentation, including the budgeted capital and O&M costs for each outage within the plan.
- b. In addition, please provide the corresponding actual capital and O&M costs for each outage that actually occurred (bottom half of exhibit) and explain each significant variance (in excess of \$100,000) between the planned versus actual schedule and the between planned versus actual costs.

CA-IR-43

Ref: HECO 627 Production Maintenance Schedule – Test Year.

- a. Please provide a a color copy of the current Planned 2005 Outage Schedule Exhibit together with copies of all related reports and documentation for the Test Year, including a detailed statement of the budgeted capital and O&M costs by Account and RA for each outage within the plan.

- b. If any revisions have been made to the Outage Schedule and related cost estimates since the preparation of the Company's rate filing, please identify and quantify each change and explain whether such revisions are properly recognized in the rate case Docket.

CA-IR-44

Ref: HECO T-6, Page 13, Line 13.

According to the testimony, "[t]he 2005 test year overhaul schedule shown at the bottom of HECO-627 represents a normal overhaul year, where generating units are selected based on the criteria mentioned above, and are planned and forecasted accordingly."

Please provide the following information:

- a. Explain how this outage schedule was determined to be "normal."
- b. Provide complete copies of all studies, reports, analyses, workpapers, projections, correspondence and other documentation associated with your response to part (a) of this information request.
- c. The Company's response to CA-IR-1, HECO T-6, Attachment 4, shows "Projects – Labor Hours and Direct Labor by RA" totaling 102,363 hours and \$3,619,048 for the projected test period. Please provide the comparable actual

labor hours and costs for such production O&M "Projects" by RA for each year from 2002 to 2004.

- d. The Company's response to CA-IR-1, HECO T-6, Attachment 4, shows "Projects – Direct Non-Labor by RA" totaling \$9,256,001 for the projected test period. Please provide the comparable actual labor cost incurred for such production O&M "Projects" by RA for each year from 2002 to 2004.

CA-IR-45

Ref: HECO T-6, Page 12, Lines 18 to 24.

According to the testimony, production department work and costs are managed in categories including outage-related work that is for "Planned Outages," "Maintenance Outages" or "Forced Outages," as well as other types of work considered "Operational" or "Preventive," "Predictive" and "Corrective" maintenance. These categories are explained in greater detail through page 17 of the testimony.

- a. Please provide a breakdown of the actual capital and O&M costs incurred for each work category in each year from 2002 through 2004, by Account and RA.
- b. Compare the historical costs provided in response to part (a) of this information request to the test year projected costs by

category, with an explanation of all variances greater than \$100,000 among years or between categories.

CA-IR-46

Ref: HECO T-6, Page 16, Line 16.

According to the testimony, "HECO has been able to manage the total Other Production O&M expense over the years despite the challenges and dynamic nature of maintaining aging plant and equipment." Examples are provided on page 17 of certain efforts to improve operational performance and cost effectiveness.

- a. Please identify and describe other known innovations and technology applications employed by the Power Supply department to improve efficiencies.
- b. Please provide copies of reports and other documentation illustrating the effectiveness of the five measures described on page 17, as well as the other measures identified in your response to part (a) of this information request.

CA-IR-47

Ref: HECO-629.

- a. Please provide a monthly breakdown, by payee, of actual expenses incurred in 2003 and 2004 for each line item for which there are itemized amounts shown for Power Production Operations outside services in the test year.

- b. Is HECO considering adjusting the forecasted costs in each instance where actual expenditures do not support the increases reflected in the test year forecast? Explain why or why not.
- c. If contractual commitments have been made for the increased expenses, please provide copies of agreements reflected the contractual commitment.

CA-IR-48

Ref: HECO T-6, Page 28, line 23 to Page 29, line 13, HECO-623 and HECO 625.

According to the testimony, “[t]he increase between 2003 Actual and test year 2005 is mainly attributed to existing vacancies from retirements at the end of 2003, and an increase in maintenance staffing.” Please provide the following information:

- a. State whether the Company conducted any studies of the optimal staffing plan for production maintenance personnel and, if affirmative, provide complete copies of all such studies.
- b. Provide all calculations, workpapers, analyses, projections and other documents supportive of the cost effectiveness of HECO’s decision to increased maintenance employee levels by 40 people (34 percent) relative to 2003 staff levels, with 20 added positions attributed to night maintenance.

- c. Explain and quantify the treatment of overtime hours and costs reflected in the test year, relative to historical overtime percentages per HECO-625.
- d. Explain and reconcile the increased staffing with the proposed versus historical levels of overtime for production department maintenance personnel, indicating the extent to which “avoided” overtime costs in the test year projections are available to “pay for” increased staffing levels in such projections.
- e. Explain and reconcile increased staffing with the proposed versus historical levels of outside services costs incurred by the power production department, indicating the extent to which “avoided” outside service costs in the test year projections are available to “pay for” increased staffing levels in such projections.
- f. Provide an update to HECO-623 indicating actual YE 2004 staffing levels and explain plans for and the status of any further hiring in 2005.
- g. According to HECO’s response to CA-IR-1, T-6, Page 3 of 3, “[b]acklog of work continues to increase as the units and associated infrastructure ages.” Please describe how HECO’s production department maintenance work requirements are tracked and provide documentation of all

measures of work "backlog" as of December 2002, 2003 and 2004 associated with this statement.

CA-IR-49

Ref: HECO-626 Outside Services – Production Maintenance.

- a. Please provide a detailed breakdown, comparable to HECO-629 that is associated with Production Operations Outside Services, indicating the projected test year outside services Production Maintenance expenses by category and payee.
- b. In addition, please provide a monthly breakdown, by payee, of the actual expenses incurred in 2003 and 2004 in the same categories.
- c. Is HECO considering adjusting the forecasted costs for the 2005 test year in each instance where the actual expenditures through December 2004 do not provide evidence of the anticipated increases reflected in the test year forecast? Explain why or why not.
- d. If contractual commitments have been made for the increased expenses, please provide copies of agreements reflecting the contractual commitment.

CA-IR-50

Ref: BRO Program.

Please provide complete copies of the:

- a. studies/reports addressing the need for, feasibility of, and success of such program; and
- b. studies, reports, documents, etc. from EPRI leading to the conclusion that the program "has elevated HECO's industry ranking to "world class" status.

CA-IR-51

Ref: State-of-the-art instrumentation and software to track and monitor the operating performance of HECO's steam generating units on a real time basis.

If different from the EMS system that is the subject of Docket No. 03-0360, and not already provided in that docket, please provide:

- a. A copy of the feasibility studies addressing the acquisition and implementation of each hardware application and each software program.
- b. The in-service date of each hardware application and each software program
- c. The capitalized costs by NARUC account for each hardware application and each software program

CA-IR-52

Ref: Boiler Control upgrade.

Please provide:

- a. A copy of the feasibility studies addressing the acquisition and implementation of each Boiler Control upgrade.
- b. The in-service date of each Boiler Control upgrade.
- c. The capitalized costs by NARUC account for each Boiler Control upgrade.

CA-IR-53

Ref: Non-destructive diagnostic instruments.

Please provide:

- a. A copy of the feasibility studies addressing the acquisition and implementation of each non-destructive diagnostic instrument.
- b. The in-service date of each non-destructive diagnostic instruments.
- c. The capitalized costs by NARUC account for each non-destructive diagnostic instrument.

CA-IR-54

Ref: Automatic paging and cell phone system.

If different from the EMS system that is the subject of Docket No. 03-0360, and not already provided in that docket, please provide:

- a. A copy of the feasibility studies addressing the acquisition and implementation of the automatic paging and cell phone system.
- b. The In-service date of each Capitalized costs by NARUC account of the automatic paging and cell phone system.
- c. The capitlized costs by NARUC account of the automatic paging and cell phone system.

CA-IR-55

Ref: Production Materials Inventory.

Please provide the following:

- a. Actual calculations deriving the 2005 test year average balance as discussed at pages 37 and 38; and
- b. Actual production materials inventory balance for each month beginning January 2003 to 2005 to-date.

Witness T-8 Mr. S. Yoshida.

CA-IR-56

Ref: EPRI-based T&D Maintenance Optimization Program.

Please provide the following regarding the noted program:

- a. Copies of all studies addressing the feasibility of the program and identify any and all expectations from the program.
- b. The costs incurred to-date by month, by NARUC account related to the program.
- c. The budgeted 2005 expenditures by month, by NARUC account related to the program.
- d. A listing of each change to the 2005 rate case budget that was reflected, as a result of implementation of the Program along the annual dollar impact of each change noted.

CA-IR-57

Ref: Direct burial Cable Replacement Projects and Programs.

Please provide copies of all feasibility studies addressing each project or program budgeted to occur in 2005.

CA-IR-58

Ref: T&D Inventory.

Please provide the following regarding T&D inventory:

- a. The actual calculations supporting the 2005 T&D materials inventory level as discussed at page 21.
- b. The actual T&D materials inventory balance for each month beginning January 2003 to 2005 to-date.

Ref. T-8, page 4, lines 16-17 (T&D Expense).

The referenced testimony attributes the decrease in T&D expense from 2000 to 2003 as being “primarily due to a reduction in spending and hiring constraints that occurred following the events of September 11, 2001.” Please provide the following:

- a. With regard to T&D O&M, when did the spending reduction and hiring constraints end? Please explain.
- b. Did the spending reduction and hiring constraints result in the deferral of needed T&D **operating** costs to future periods?
 1. If so, please identify any material operational needs that were deferred.
 2. Provide an estimate of the expenses associated with the deferral and indicate when HECO incurred, or plans to incur such costs.
- c. Did the spending reduction and hiring constraints result in the deferral of needed T&D **maintenance** costs to future periods?
 1. If so, please identify any material maintenance needs that were deferred.
 2. Provide an estimate of the expenses associated with such deferral and indicate when HECO incurred, or plans to incur such costs.

- d. Referring to the response to parts (b) and (c) above, does the 2005 test year forecast include any “catch up” costs resulting from the identified deferrals?
1. If so, please identify such projects.
 2. Quantify the related amounts included in the 2005 test year and provide all calculations supporting such quantification.

CA-IR-60

Ref: T-8, page 6, lines 20-22 (Transmission Oper Exp).

The referenced testimony indicates that a \$162,000 expense difference between 2003 and 2005 “primarily results from staff additions to provide required operational coverage and inspections of transmission facilities to maintain system reliability.” Please provide the following:

- a. Was HECO not required, or was it unnecessary for the Company to provide “operational coverage and inspections of transmission facilities to maintain system reliability” in 2003? Please explain.
- b. Referring to the response to part (a) above, please identify any new requirements imposed on HECO in 2004 or 2005 that did not exist in 2003, indicating the date of implementation and the source of each new requirement.

CA-IR-61

Ref: T-8, page 7, lines 23-25 (Transmission Maint Exp).

The referenced testimony indicates that a \$936,000 expense difference between 2003 and 2005 “primarily results from staff additions to provide required operational coverage and inspections, and increased security of transmission facilities to maintain system reliability.” Please provide the following:

- a. Was HECO not required, or was it unnecessary for the Company to provide comparable “operational coverage and inspections, and increased security . . . to maintain system reliability” in 2003? Please explain.
- b. Referring to the response to part (a) above, please identify any new requirements imposed on HECO in 2004 or 2005 that did not exist in 2003, indicating the date of implementation and the source of each new requirement.

CA-IR-62

Ref: T-8, pages 9-10 (Distribution O&M Exp).

The referenced testimony indicates that \$848,000 of distribution operations expense and \$2,065,000 of distribution maintenance expense of the difference between 2003 and 2005 is due to “staff additions” required to operate and/or maintain distribution facilities” and maintain or ensure system reliability. Please provide the following:

- a. Was HECO not required, or was it unnecessary for the Company to provide adequate staffing to inspect and maintain its distribution facilities and maintain system reliability in 2003? Please explain.
- b. Referring to response to part (a) above, please identify any new requirements imposed on HECO in 2004 or 2005 that did not exist in 2003, indicating the date of implementation and the source of each new requirement.

CA-IR-63

Ref: T-8, pages 10-11 (T&D O&M).

The referenced testimony indicates that the 2005 test year estimate of T&D O&M expenses are based on HECO's O&M Expense Budget for the year, with certain adjustments. Please provide HECO's T&D expense budget for calendar years 2003 and 2004, in a summary format comparable to HECO-809.

CA-IR-64

Ref: T-8, page 12, lines 12-17 (T&D O&M Increases).

The referenced testimony lists six items contributing to the expected increase in T&D O&M for the 2005 test year. Please provide an estimate of the increase in O&M expense associated with each item.

CA-IR-65

Ref: HECO-807, HECO-810 & HECO-812 (T&D Expense).

Please update these exhibits to include the actual amounts recorded in 2004.

CA-IR-66

Ref: HECO-WP-805 (T&D Expense).

Notes D, K and O refer to “misunderstandings” that led to actual expenses being charged to expense element 505, representing Outside Services – Construction, rather than element 501. Please provide the following:

- a. When and how did this “misunderstanding” first arise?
- b. Please explain how this “misunderstanding” impacted the actual T&D O&M expenses recorded during the period 2000-2004.
- c. Please explain when and how the actual charges were corrected.
- d. Please explain whether the charges to “Outside Service – Construction” were capitalized, as implied by the name, or expensed.
- e. Referring to the response to part (c) above, did the correcting journal entries in the identified periods included any amounts attributed to one or more prior years? Please explain.

CA-IR-67

Ref: HECO-WP-805 (Distribution Expense).

Notes L, M, N, P and Q refer to certain expense variances as being due to “preventive” or “corrective” distribution maintenance. Please provide the following:

- a. For each “Note,” please describe the specific “preventive” or “corrective” maintenance planned for 2005 that was not undertaken in 2003.
- b. Referring to response to part (a) above, please explain whether similar “preventive” or “corrective” maintenance was undertaken prior to 2003.
- c. Referring to response to part (a) above, please explain why similar “preventive” or “corrective” maintenance was not undertaken during 2003.
- d. Referring to response to part (a) above, does the “preventive” or “corrective” maintenance planned for 2005 include any “catch-up” maintenance amounts attributed to one or more prior years? Please explain.

CA-IR-68

Ref: HECO-WP-805 (Distribution Expense).

Notes F and H refer to an increase in staffing to “ensure adequate coverage of 24/7 shifts,” indicating that current staffing results in difficulties with staffing shifts and/or causes PTM’s to work extended shifts. Please provide the following:

- a. Please explain the "PTM" acronym.
- b. Prior to 2003, did HECO have adequate staffing to fully cover 24/7 shifts? Please explain.
- c. In the absence of adequate staffing, did the extended shifts result in HECO paying additional overtime or premium pay to employees? Please explain.
- d. In preparing the 2005 test year forecast, was T&D expense determined in such a manner that excluded any overtime or premium pay that would have been incurred absent the increase in staffing?
 1. If so, please explain how that was achieved.
 2. Provide documentation demonstrating said exclusion or a pinpoint reference to the T&D workpapers already provided that shows such exclusion.

CA-IR-69

Ref: T-8, pages 7 & 9 (T&D Tree Trimming).

Please provide the actual tree/brush trimming expense, by NARUC account, for calendar years 2000-2004 and the 2005 test year forecast. If the information is contained in the exhibits or workpapers previously provided by HECO, please provide a pinpoint reference to the responsive data.

Ref: T-8, pages 18-20 & HECO-825 (Staffing).

At page 19, the referenced testimony discusses the efforts undertaken to strategically manage the staffing reductions during 2000-2003, including: productivity improvements, reorganization, use of contract services, use of smaller construction crews, and use of new technologies. HECO-825 shows that the 2005 test year staffing levels will exceed even the 2000 level. Please provide the following:

- a. Does HECO's 2005 test year forecast anticipate continuing with these productivity and efficiency efforts? If not, please explain why those efforts should be terminated.
- b. During this period, did HECO incur incremental employee overtime costs or increased costs for contract services to fill the void created by reduced employee levels? Please explain and provide supporting quantification data.
- c. Referring to the response to parts (a) and (b) above, does the 2005 test year forecast recognize reduced overtime pay and lower contract work as a result of the higher staffing forecast?
 1. If not, explain why not.
 2. If yes, please explain how the reduction in costs was recognized in the forecast and provide a pinpoint reference to any workpapers showing this result.

CA-IR-71

Ref: T-8, HECO-825 & HECO-WP-811 (Staffing).

Please update HECO-825 and HECO-WP-811 to include actual 2004 employee data.

CA-IR-72

Ref: T-8, HECO-826 (Staffing).

Please provide retirement eligibility data comparable to HECO-826 for calendar years 2000 through 2003.

Witness T-9 Ms. Ejercito.

CA-IR-73

Ref: Customer Deposits.

Please provide the actual amounts of Customer Deposit balances by month for the period June 2004 to-date.

CA-IR-74

Ref: T-9, page 4 (Customer Accounts).

Has HECO prepared any studies or analyses to quantify the historical relationship between the number of customer accounts and expense levels to determine which cost elements are variable and the degree of variability? If so, please provide a copy of the most recent study in both hard copy and Excel spreadsheet format, with intact cell formulae.

CA-IR-75

Ref: T-9, pages 4-5 & 19-21 (Uncollectibles).

For the period January 2000 through December 2004, please provide the following information on a monthly basis:

- a. Gross amount of residential account write-offs, before recognizing any recoveries of amounts previously written off.
- b. Amount of any recoveries of residential accounts previously written off.
- c. Gross amount of commercial account write-offs, before recognizing any recoveries of amounts previously written off.
- d. Amount of any recoveries of commercial accounts previously written off.
- e. Please explain the typical time lag between customer billing and the write off of that billing as uncollectible.
- f. Please identify which residential and commercial revenue accounts are considered likely to incur uncollectible activity.

CA-IR-76

Ref: T-9, pages 6-8 (Customer Accounts-Staffing).

Please provide the following:

- a. Referring to page 7 of the referenced testimony, please provide the actual employee counts for 2004 (average & high).
- b. During 2003, did HECO incur employee overtime and increased contract services charges to provide reasonable

service to customers, maintain daily operations and undertake new or additional projects? Please explain.

- c. Referring to the response to part (b) above, does the 2005 test year forecast recognize reduced overtime pay and lower contract work as a result of the higher staffing forecast?
1. If not, explain why not.
 2. If yes, please explain how the reduction in costs was recognized in the forecast and provide a pinpoint reference to any workpapers showing this result.

CA-IR-77

Ref: T-9, page 18, lines 10-23 (Customer Records & Collection).

Please provide the following:

- a. Please identify the specific “initiatives, projects, additional work or other items” that HECO would have undertaken in 2003 with adequate staffing.
- b. Referring to the response to part (a) above, does the 2005 test year forecast include any initiatives or projects deferred from 2003? If so, please identify those projects and provide the amount(s) included in HECO’s 2005 test year forecast.

Witness T-10 Mr. Hee.

CA-IR-78

Ref: T-10, page 2 (Customer Service – 2004 Reorganization).

Please provide the following:

- a. Were any cost/benefit studies or analyses undertaken to estimate the relative benefits of the reorganization? If so, please provide a copy of such study, including any narrative discussion of assumptions or study development/ conclusions.
- b. At lines 17-22 of page 2 of the referenced testimony, Mr. Hee states that HECO plans to provide the test year estimate of the reorganization in rebuttal testimony. In order for the Consumer Advocate to have adequate time to review and analyze such information, please provide the required calculation results and underlying workpapers.

CA-IR-79

Ref: T-10, page 4 (Customer Service – Green Power Program).

Please provide the following:

- a. Identify and describe the specific Green Power initiatives that HECO plans to undertake.
- b. At lines 23-25 of page 4 of the referenced testimony, Mr. Hee indicates that “other utilities have found that customers are interested and willing to pay a premium rate for electricity generated from those [Green Power] sources.”

Does HECO plan on provisioning such Green Power energy as a regulated or unregulated service? Please explain.

- c. Referring to the response to part (b) above, is HECO considering, or does the Company currently plan to sell Green Power energy to customers above cost plus a reasonable return? Please explain.

Witness T-13 Mr. Ernest Shiraki

CA-IR-80

Ref: Normalization adjustment for periodic ELLIPSE upgrades.

Please provide the following:

- a. A detailed narrative description of ELLIPSE (or comparable previous software programs) that were purchased during the past ten years, stating also the implementation date(s) and attendant costs incurred by NARUC account.
- b. A copy of any updated Mincom retirement notices such as provided in exhibit HECO-1309.
- c. Referring to exhibit HECO-1309, please note which of the listed Mincom products HECO currently owns or leases for the Company's use.
- d. Any and all additional correspondence from Mincom regarding future upgrades, future retirements, cost estimates of forthcoming products, capabilities of upgrades, etc. in HECO's (or affiliate's) possession.

CA-IR-81

Ref: Application to the Internal Revenue Service.

Please provide the following:

- a. A copy of the Company's application to the Internal Revenue Service as discussed at page 37 of Mr. Shiraki's direct testimony.
- b. A copy of all studies/analyses undertaken in the decision to make an application to the IRS.
- c. The calculation of all changes that will be necessary to the Company's proposed test year cost of service if the Company's application is granted in total by the IRS.

CA-IR-82

Ref: Computer software development costs.

Please provide the following regarding computer software development costs included within the 2005 test year cost of service:

- a. For any computer software development costs that have previously been, or are projected to be, deferred prior to or during the 2005 test year, please provide:
 1. a description of the project;
 2. initial costs capitalized;
 3. cite authorizing regulatory order, if applicable;
 4. date(s) deferral was initially recorded;

5. date amortization began and date amortization is scheduled to cease;
 6. beginning and end of 2005 capitalized costs;
 7. annual amortization; and
 8. a copy of all feasibility studies addressing need/justification for project.
- b. For any computer software development costs that are budgeted to be expensed during the 2005 test year, please provide the following:
1. a description of the project;
 2. costs forecasted to be expensed by month by NARUC account; and
 3. all feasibility studies addressing need/justification for the project.

CA-IR-83

Ref: Computer software development costs.

Please provide the following for computer software development costs that were expensed (as opposed to deferred and amortized) during calendar years 2002 through 2004:

- a. Narrative description of each project;
- b. Amount expensed by year by NARUC account; and
- c. A copy of all feasibility studies addressing need/justification for each project.

CA-IR-84

Ref: Computer software development costs.

- a. Please describe and discuss the tax election made with regard to computer software development costs stating specifically when such costs are deducted/depreciated for purposes of calculating federal taxable income.
- b. To the extent the deduction/amortization is faster or slower than book expense/amortization, please note which accumulated deferred income tax account is employed and provide the beginning and end of 2005 test year balance for same.

Witness T-16 Ms. T. Sekimura.

CA-IR-85

Ref: HECO-1608, HECO-1609, HECO-WP-1610, HECO-WP-1611.

Please provide fully linked and calculating Depreciation Expense and Accumulated Depreciation Reserve exhibits, including supporting T-16 workpapers.

CA-IR-86

Ref: Revision discussed at page 22.

Please provide the revised/updated 2005 estimate for depreciation expense that reflects the new depreciation rates effective September 3, 2004 (that the Company intends to update during rebuttal).

CA-IR-87

Ref: Annual vehicle depreciation cleared.

Please provide:

- a. The 2005 budgeted vehicle depreciation as calculated in total, and as allocated/assigned/cleared to NARUC account. Provide all supporting calculations in hard copy and computable Excel spreadsheet format.
- b. The total 2003 and 2004 vehicle depreciation, as well as amounts cleared to NARUC account in each period.

Witness T-17 Mr. L. Okada.

CA-IR-88

Ref: HECO-1704 Development of State Capital Goods Excise Tax Credit

Please provide a schedule showing the following actual data for all vintages through 2003 and estimated for 2004 and 2005:

- a. Capital expenditures generating the state capital goods excise tax credit;
- b. State capital goods excise tax credits generated in each year; and
- c. Calculation or basis for amortization period chosen for each vintage.

CA-IR-89

Ref: HECO-1703 Development of Federal Investment Tax Credit amortization.

Please provide a table or schedule showing the following for each vintage of Federal Investment Tax Credits:

- a. Initial ITC generated;
- b. Amortization period (number of years); and
- c. Ending unamortized balance as of December 31, 2003.

CA-IR-90

Ref: HECO-WP-1705a and 1705b.

To the extent any have been prepared, please provide all budget variance reports for year-end 2004 accumulated deferred income reserve balances.

CA-IR-91

Ref: Prior Federal and state income tax returns.

Please provide a listing of all book/tax differences and related Schedule M amounts for stand alone HECO, HELCO and MECO and consolidated HEI for the tax years 2002 and 2003, as well as preliminarily calculated for calendar year 2004. Additionally, for each book/tax difference designate which differences are "temporary" differences and which differences are "permanent" differences.

Witness T-18 Ms. L. Nagata.

CA-IR-92

Ref: T-18, page 25, line 8.

Please explain all reasons why the Company's expenses are thought to be subject to inflation at the same rate as the Consumer Price Index ("CPI"), rather than some other measure of inflation and provide the following information:

- a. Identify and describe any indicators of inflation other than CPI that were considered for use by HECO in projecting expenses, explaining the reasons for rejection of each alternative to CPI that was considered.
- b. State whether HECO has any studies, reports, analysis, workpapers or other information supportive of the Company's apparent conclusion that the CPI measure of inflation is applicable to the specific basket of goods and services purchased by HECO.
- c. If the response to part (b) is affirmative, please provide complete copies of all documents associated with your response to part (b).
- d. State whether HECO believes that its management and employees are able to achieve any improvements in efficiency or productivity that serve to offset the impact of inflation upon the Company.

- e. Provide complete copies of all documents associated with your response to part (d).

CA-IR-93

Ref: HECO-1803 Projects Included in Plant Additions.

Please provide the following:

- a. For each 2004 estimated plant addition, please provide the actual in-service cost and in-service date.
- b. To the extent that a particular project was expected to be closed to plant in service during 2004, but for any reason was delayed, please provide a narrative description for the reason(s) for such delay and provide revised estimates of closing costs and closing dates.
- c. To the extent any 2005 estimated plant addition was accelerated and closed to plant in 2004, please list the project, provide the in-service date and cost, and provide a narrative description of events contributing to the earlier-than-originally-anticipated in-service date.
- d. Provide any updated version of HECO-1803 that may have been developed to show the revised in-service dates and costs, or project listed or projects that may have been added or deleted.

CA-IR-94

Ref: HECO-1801.

Please provide the actual 2004 plant addition amounts by categories of "Projects" and "Programs" as shown on HECO-1801.

Witness T-19 Ms. G. Ohashi.

CA-IR-95

Ref: HECO-1901.

Please provide the actual 12/31/2004 balances that are shown on an estimated basis for 12/31/2004 on HECO-1901, with the exception of "Working Cash at Present Rates."

CA-IR-96

Ref: HECO-1902.

For each "ESTIMATED CHANGE" in 2004 shown, please provide such change on an actual basis, including year-end 2004 balances by category shown.

CA-IR-97

Ref: HECO-WP-1903.

Please provide the actual 12/31/04 ending balance by categories shown on an estimated basis at 12/31/04 on page 2.

CA-IR-98

Ref: HECO-1904.

Please provide the actual 2004 accruals and payments that are comparable to those shown on an estimated basis for calendar year 2004.

CA-IR-99

Ref: HECO-1908.

Please provide the 2004 actual receipts, advances and amortization for all the CIAC transactions/balances shown on an estimated basis for 2004.

Witness T-22 Ms. E. Seese.

CA-IR-100

Ref: T-22, page 11, line 16.

According to the witness, "HECO prepares both methods in its cost-of-service study for this proceeding, using the recorded distribution plant data for 1985-2003." Please provide the following:

- a. Explain the specific assumptions employed for each method (minimum system / zero intercept).
- b. Provide complete copies of all data employed for each method.
- c. Explain how the results are interpreted, weighted together (between two methods) and inserted into the classification of each distribution plant account.

Witness T-21 Richard A. Von Gnechten.

CA-IR-101

Please provide a schedule showing the capital structure ratios (common equity, long-term debt, short-term debt, preferred stock and hybrid securities) for HECO and HEI for each year from 1999 to 2004.

CA-IR-102 Please provide copy of all reports by rating agencies that evaluate HECO and/or HEI for the period 1999 to the present.

CA-IR-103 Please provide copy of all reports by security analysts that evaluate HECO and/or HEI for the period 1999 to the present.

CA-IR-104 Please provide a schedule showing the credit ratings of HEI, HECO, HELCO and MECO by each of the major credit rating agencies (i.e., Fitch, Moody's, and Standard & Poor's) for each year from 1990 to the present.

CA-IR-105 Please provide copy of credit rating agencies' documents relied upon in making following statements:

- a. Imputed debt for PPAs , page 26, lines 17-23 of HECO T-21,
and
- b. Equity credit for hybrid securities, page 26, lines 24-25 and
page 27, lines 1-2 of HECO T-21.

CA-IR-106 **Ref: HECO T-21, page 28, lines 16-21.**

The witness in the above referenced testimony states that "since its last rate case in 1995, HECO's business risk has increased." Please provide copy of any rating agency reports relied upon in making this statement.

CA-IR-107

- a. Please indicate if HECO's calculation of capital structure ratios, as described on pages 30-40 of HECO-T-21, are determined in an identical fashion to that approved by the Commission in recent HECO, HELCO, and MECO rate decisions.
- b. If no, please indicate how HECO's proposals differ from recent Commission decisions and specify the impact of any proposed change.

CA-IR-108

- a. Please indicate if HECO's calculation of capital costs, as described on pages 40-44 of HECO T-21, are determined in an identical fashion to that approved by the Commission in recent HECO, HELCO, and MECO rate decisions.
- b. If no, please indicate how HECO's proposals differ from recent Commission decisions and specify the impact of any proposed change.

CA-IR-109

Ref: HECO T-21 discussion regarding the analysis of HEI impact.

Please provide a copy of all reports by security analysts and rating agencies over the period 1995 to the present that discuss the impact of HEI on HECO's risks and ratings.

Witness T-20 Roger A. Morin.

CA-IR-110 **Ref: use of 30-year Treasury bonds as risk-free rate in CAPM and risk premium methodologies.**

- a. Please indicate if Dr. Morin believes that the US Treasury still issues 30-year bonds.
- b. If no, please explain how Dr. Morin believes that 30-year US Treasury bonds have a measurable yield at the current time.
- c. Please provide a copy of any sources of 30-year Treasury bond yields that Dr. Morin is aware of.

CA-IR-111 Please provide a copy of Value Line Investment Analyzer, as cited on page 22, lines 16-18 of HECO T-20.

CA-IR-112 Please provide a copy of May 2004 edition of Consensus Economics Inc.'s "Consensus Forecast" as cited on page 22, lines 19-23 of HECO T-20.

CA-IR-113 **Ref: T-20, page 18, lines 22-25 and page 19, lines 1-4.**

In the above referenced testimony the witness states that "caution and judgment are required in interpreting the results of the DCF model." Please indicate what "caution and judgment" are required in interpreting the CAPM and risk premium models.

CA-IR-114 Please identify any regulatory commission(s) that Dr. Morin is aware of who has(ve) adopted his version of the empirical CAPM and provide citations to the specific Decision and Orders discussing the adoption of Dr. Morin's proposal.

CA-IR-115 **Ref: Page 25, lines 13-14.**

In the referenced testimony, Dr. Morin cites the "use of the entire study period in estimating the appropriate market risk premium." Please explain why Dr. Morin's risk premium estimates on pages 29-30 of his testimony reflect the use of risk premiums that end in 2001.

CA-IR-116 Please provide source document(s) of all "ROE allowed by regulatory commissions for electric utilities over the last decade" as cited on page 31 of Dr. Morin's direct testimony.

CA-IR-117 **Ref: Page 34, lines 8-16.**

The referenced testimony discusses the assumptions of DCF model. Please indicate Dr. Morin's assessment of the assumptions of the CAPM, empirical CAPM, and risk premium models.

CA-IR-118 **Ref: Page 38, lines 14-25.**

The referenced testimony discusses the “abundance of evidence attesting to the important of earnings in assessing investors’ expectations.” Please identify any evidence that Dr. Morin is aware of that implies investors rely exclusively on earnings forecasts in making investment decisions.

CA-IR-119 **Ref: Page 50, lines 1-13.**

Dr. Morin states that HECO is more risky than the average electric utility. Please indicate if Dr. Morin has considered the cost of debt of HECO and the “average electric utility” in reaching this conclusion.

CA-IR-120 Please provide a copy of the May 8, 2003 Standard & Poor’s Global Sector Review cited on page 60, lines 4-8 of Dr. Morin’s direct testimony.

CA-IR-121 Please provide a copy of the relevant pages of Moody’s Power Sourcebook, 2003 edition, as cited on page 62, lines 15-17 of Dr. Morin’s direct testimony.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

THIRD SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-113

HAWAIIAN ELECTRIC COMPANY, INC.

THIRD SUBMISSION OF INFORMATION REQUESTS

CA-IR-122

Ref: T-4, Page 3, Lines 3 - 8.

Please provide complete copies of all studies, reports, analyses, workpapers, projections and other documents associated with HECO's evaluation of optimal production operations staffing and explain each alternative that was considered, as well the specific information relied upon to formulate new "around-the-clock" staffing plans.

CA-IR-123

Ref: T-4, Page 7, Lines 11 – 13.

Please provide actual fuel prices for low sulfur fuel oil and diesel oil by month, since January 1, 2004.

CA-IR-124

Ref: T-4, Pages 11 – 12.

For the P-MONTH Production Simulation Model, please provide for the test year period, in electronic spreadsheet format and hard copy format the following:

- a. the energy and hourly load to be served by the HECO system;
- b. the energy and hourly load to be served by firm and non-firm purchased power producers;

- c. the load carrying capability for each HECO and firm power producer-generating unit, with an indication as to which units are on AGC;
- d. the minimum run time for each individual generating units used by HECO, including the Kalaeloa and AES units; and
- e. HECO's unit commitment as used in production simulation.

CA-IR-125

Ref: T-4, Page 12, Line 5.

Please provide a detailed statement and diagram describing the test year overhaul maintenance schedule for generating units (including Kalaeloa, AES-Hawaii and H-Power) used in production simulation in the test year. Include the duration, purpose and scope of each planned outage by unit.

CA-IR-126

Ref: T-4, Page 14, Line 13.

Please provide, by source, the annual non-firm power purchased for the year 2004, from each power producer.

CA-IR-127

Ref: T-4, Page 14, Line 18.

- a. Please explain what is meant by "normal top load rating" and the manner that the NTL was determined for each of HECO's units.

- b. Please provide the generating unit nameplate capacity rating for each of the units listed in HECO-WP-406, page 1.

CA-IR-128

Ref: T-4, Page 15, Line 8.

- a. Please provide all workpapers, analyses and source documents for the test data and the manufacturers' unit data for calculating the A, B, and C "heat rate constants."
- b. Please provide the completion date of test data.
- c. Please provide a comparison of the value for the A, B and C heat rate constants utilized in HECO's last rate case with those utilized for each unit by HECO in this rate case and an explanation of the differences.

CA-IR-129

Ref: T-4, Page 16, Line 11.

For each generating unit please provide the actual maintenance overhaul days for 2001, 2002, 2003, and 2004 and a description of the maintenance overhaul work done during each of those outages.

CA-IR-130

Ref: T-4, Page 16, Line 18 and HECO Workpaper 406, Page 303

- a. Please describe the method used to calculate the equivalent forced outage rates for each year, for each unit.

- b. Provide a description of the cause of the forced outage, and the remedial measures taken for each unit equivalent forced outage rate exceeding 5% in any year.

CA-IR-131

Ref: T-4, Page 17, Line 7.

Please provide a copy of the January 12, 2004 planned Maintenance Schedule.

CA-IR-132

Ref: T-4, Page 24, Line 19.

Please provide a detailed calculation and complete copies of all supporting documentation for the estimated \$783,000 for Kahe pipeline charges in the test year.

CA-IR-133

Ref: T-4, Page 24, Lines 19 – 22.

- a. Please provide the HECO Kahe pipeline Facility and throughput Charges for each of the years 2001, 2002, 2003 and 2004, incurred under the terms and conditions of the existing Facilities and Operations Contract with Chevron.
- b. Please provide a description and all workpapers showing the adjustment to 2005 dollars.

CA-IR-134

Ref: T-4, Page 25, Line 17.

Please provide a detailed explanation and complete copies of all supporting documentation for the assumption made that Kahe pipeline costs estimated at \$783,000 are reasonable to use as a “proxy” for the Chevron Waiiau pipeline charges in the test year.

CA-IR-135

Ref: T-4, Page 26, Lines 2 – 5.

- a. Please provide the HECO Kahe pipeline Maintenance Charge for each of the years 2001, 2002, 2003 and 2004, incurred under the terms and conditions of the existing Facilities and Operations Contract with Chevron.
- b. Please provide a description and all workpapers showing the adjustment to 2005 dollars.

CA-IR-136

Ref: T-4, Page 27, Lines 14 – 19.

- a. Please provide the HECO Kahe Pipeline Base Fee for each of the years 2001, 2002, 2003 and 2004, incurred under the terms and conditions of the existing Facilities and Operations Contract with Chevron.
- b. Please provide a description and all workpapers showing the adjustment to 2005 dollars.

CA-IR-137

Ref: T-4, Page 28, Lines 2 - 15.

- a. For the years 2001, 2002, 2003 and 2004, please provide the fuel trucking expense in dollars and in dollars per barrel, delivered from BPTF to HECO's Iwilei tank farm.
- b. Provide a comparison of the information provided in response to part a above with the 2005 test year trucking expense and an explanation of the differences.
- c. Please provide the name of the company that provided the trucking of the fuel oil for the years in part a above.

CA-IR-138

Ref: HECO 403, Page 1.

Please provide a copy of the Transmission Loss Study by H. Lee dated April 16, 2004 referenced in Footnote 2 and any other studies of transmission or distribution losses, prepared on or after that date.

CA-IR-139

Ref: HECO Exhibit 404, Page 2.

Please provide in electronic spreadsheet format and hard copy format the hourly output of P-MONTH Production Simulation Model for each HECO unit, including the Kalaeloa and AES units.

CA-IR-140

Ref: HECO-402 Petrospect Cost.

Please provide complete copies of all studies, analyses, workpapers, calculations and other information used to determined

the Petrospect cost/barrel amount set forth in HECO-402, including documentation for historical costs actually incurred and explanations of changes or trends in such historical costs.

CA-IR-141 **Ref: HECO WP – 403, Page 1.**

Please update this workpaper and provide comparable 2004 kWh for the Company's "no charge" and "energy sales" in megawatts.

CA-IR-142 **Ref: HECO WP – 408, Page 1.**

Please provide information for the 2004 calendar year for the calculation of the historical net heat rate as shown on WP-408.

CA-IR-143 **Ref: HECO WP – 409, Page 9, Fuel Oil Inventory Study, Appendix B, Page 62 & 63.**

HECO indicates that a 5-day period for fuel required for a continuous operation at each of the power plants. Please provide copies of all studies, reports, analyses, and workpapers that support the 5-day period.

CA-IR-144 **Ref: HECO WP – 409, Fuel Oil Inventory Study, Page 23.**

Please provide a copy of all studies, reports, analyses and workpapers that support a 14-day arrangement for an "unscheduled" tanker.

CA-IR-145

Ref: HECO WP - 410.

Please provide complete copies of all studies, analyses, workpapers, calculations and other information used to determine the amounts set forth in WP-410 for fuel related expenses, to the extent not included in your response to the immediately preceding two IRs.

CA-IR-146

Ref: HECO-410, HECO-411 and HECO 414 Fuel Inventory.

Please provide the monthly fuel inventory quantity and dollar balances by station and fuel type for each month of 2002, 2003 and 2004 to-date, in electronic spreadsheet form and in hard copy.

CA-IR-147

Ref: Exhibit 504, Page 1.

- a. The referenced exhibit shows that the amount of purchased energy from Chevron increased from 302,435 annual kWh to 2,105,228 kWh in 2003. Please explain the reasons for the increase in purchased energy.
- b. Please provide the actual amount of purchased energy from Chevron and Tesoro for 2004.

CA-IR-148

Ref: T-5, Page 4, Lines 1 – 3.

Please provide complete copies of the analysis and all workpapers related to the derivation of the second order equations for AES and Kalaeloa.

CA-IR-149

Ref: T-5, Page 4, Lines 11 – 14.

Please provide a copy of the power dispatch schedules for H-Power for the test year period as modeled in the P-Month Production Simulation Model.

CA-IR-150

Ref: T-5, Page 5, Lines 5 – 8.

Please provide the specific dates for the maintenance schedule for H-Power as modeled in the P-Month Production Simulation Model.

CA-IR-151

Ref: T-5, Page 7, Lines 15 – 17.

- a. Please provide the quarterly Schedule Q rates for 2005 test year.
- b. Please provide the calculation of the 2005 test year schedule Q quarterly rates.

CA-IR-152

Ref: T-5, Page 9, Lines 5 – 3.

For Kalaeloa, please provide a copy of Amendment No. 3 to the Purchase Power Agreement dated October 14, 1988.

CA-IR-153

Ref: HECO Exhibit 403, Page 1.

Please provide the actual system losses for the years 2000 through 2004 and provide explanations of changes expected in the test year to derive the forecasted 4.7% loss factor, or any trends in losses to support the reasonableness of the 4.7% factor proposed for the test year.

CA-IR-154

Ref: HECO WP – 404, Pages 6 – 8.

Please provide the actual heat content in Mbtu per barrel of low sulfur oil and diesel oil for the years 2000 through 2004 and provide explanations of any difference with heat content assumed in the test year.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FOURTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

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2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-113

HAWAIIAN ELECTRIC COMPANY, INC.

FOURTH SUBMISSION OF INFORMATION REQUESTS

The following information requests are directed to the witness sponsoring HECO T-2.

CA-IR-155

Ref: HECO T-2, Page 7.

Please identify, explain and quantify each of the “incremental changes to the February 2004 forecast” that was incorporated into the rate case test year sales forecast.

CA-IR-156

Ref: HECO T-2, Page 11, Line 11 and HECO-203.

According to the testimony, “[t]he estimate of total commercial sales was based on sector analysis.”

- a. Please provide a complete copy of this “sector analysis,” as well as all available updates to such “analysis” that have been prepared by, or for HECO.
- b. Please provide data files on diskette. Included in the data files, please include detailed historical data shown in Appendix O, page 27 to 28 and commercial allocation of sectors in Appendix J of February 2004 forecast voluminous document and any updates.
- c. For each of the large housing projects, please identify if the project is master metered.

- d. If available, provide the number of housing units for each of the large housing projects.

CA-IR-157

Ref: HECO T-2, Page 11, Line 11, HECO-203 and Test Year Sales Forecast Workpapers.

According to the testimony, “[t]he estimate of total commercial sales was based on sector analysis.” Please provide the following information:

- a. monthly actual sales volumes for each “sector” for the period January 2003 through December 2004;
- b. monthly weather-normalized sales volumes for each “sector” for the period January 2003 through December 2004;
- c. the most current available “Large Projects” update comparable to the information reflected on workpapers 34-35, which contain the “LARGE PROJECTS, May 2004 Sales Update;”
- d. explanations for any apparent trends or observable aberrations in the data provided in response to subparts (a),(b) and (c) of this information request, indicating how such data is thought to be supportive of HECO’s projected test year 2005 sales volumes to each “sector;” and

- e. identify and quantify each known change to the commercial forecasted sales for the test year, given your responses to subparts (a) through (d) above.

CA-IR-158

Ref: HECO T-2, Page 11, Line 14.

According to the testimony, “[t]he test year customer forecast for Schedule R was based on a market analysis of the housing real estate market.” Please provide the following:

- a. a complete copy of this “market analysis;”
- b. all available updates to such “market analysis” that have been prepared by, or for HECO; and
- c. an explanation as to how the Company derived the 2,700 and 3,000 customer count addition estimates for 2004 and 2005, respectively (excluding the Kukui Gardens conversions) from such data.

CA-IR-159

Ref: HECO T-2, Page 20 and HECO-WP-201, Page 34.

- a. Based on actual 2004 residential customers, kwh sales, and resultant average use, please explain the reasons for the deviations from HECO’s 2004 residential forecast.
- b. Please comment on the reasonableness of HECO’s test year average residential use based on the 2004 actual residential use.

CA-IR-160

Ref: HECO T-2, Page 20 and HECO-WP-201, Page 34, Kukui Gardens.

- a. Please provide copies of any updates to the Kukui Gardens customer transfers from Schedule P to Schedule R for 2004 and 2005.
- b. Please provide the assumptions, data, and calculations used to derive the Kukui Gardens energy sales for 2004 to 2006.
- c. The commitment of funds for the Kukui Gardens project was approved in Decision and Order No. 20406 filed in Docket No. 03-0107 on September 2, 2003.
 1. Please provide the current status of the company's efforts to complete this CIP project.
 2. Please provide details of any changes to the scope of the project that would change the electrical energy and demand effects of the project from the information provided with the application filed in Docket No. 03-0107.

CA-IR-161

Ref: HECO T-2, Page 2, Line 22.

The Consumer Advocate understands that HECO prepares quarterly sales forecast updates. Based on this understanding, please provide a copy of all quarterly

updated forecasts to the February 2004 forecast, together with the workpapers and meeting notes to support each update.

CA-IR-162

Ref: February 2004 voluminous workpapers.

- a. Please provide the electronic data files for Appendix O and P with all formulae and cell references intact.
- b. Please include any updates for the 2003 and 2004 calendar years.

CA-IR-163

Ref: HECO-WP-201, Page 15 and Appendix F of February 2004 voluminous workpapers.

- a. Please provide a copy of the assumptions and calculations used to determine the future DSM impacts by rate class for 2004 and 2005.
- b. If another witness is responsible for the response to this information request, identify the witness.
- c. Please provide a copy of the electronic files for the voluminous workpapers, with all formulae and cell references intact.

CA-IR-164

Ref: Appendix E, Page 41 of February 2004 voluminous workpapers.

- a. Please provide copies of the documents relied upon to determine the new construction estimates that Marketing Services used for the February 2004 forecast.
- b. Please provide copies of any updates to the new construction estimates reflected in the February 2004.

CA-IR-165

Ref: HECO T-2, Page 30, Lines 11 to 14.

Please provide copies of any documents received from the military to support the estimates and construction schedules for the military's projected loads in the 2005 test year.

The following information requests are directed to the witness sponsoring HECO T-3.

CA-IR-166

Ref: HECO T-3, Schedule J Demand Ratchet Change, HECO-WP-304, Page 50.

Please explain the procedures employed by HECO to quantify the revenue impact of the proposed change in the demand ratchet at present and proposed rate levels and provide the underlying billing data and calculations associated with HECO's quantification of same.

CA-IR-167

Ref: HECO-303, Other Revenues billing determinants.

Please provide (a) the historical transaction volumes associated with each element of other revenues; and (b) copies of all other analyses and information used to derive such revenues at present and proposed rate levels.

The following information requests are directed to the witness sponsoring HECO T-6.

CA-IR-168

Ref: HECO T-6, Page 4, Line 15.

According to the testimony, "HECO's EAF and EFOR are better than the national average because we are an isolated utility."

- a. Please identify and describe each of the existing business goals and objectives regarding targeted EAF/EFOR levels.
- b. Please identify all other Production Department business goals associated with safety, environmental compliance, percentage of preventive maintenance, overtime levels, O&M forecast achievement, etc.

CA-IR-169

Ref: HECO T-6, Page 5, Line 6.

According to the testimony, "...if demand is allowed to exceed supply, system frequency will begin to sag, and if it sags too low, customers will be shed from the system via

automatic and/or manual means in an attempt to reestablish the balance between supply and demand.” Please provide the following information:

- a. Confirm that such load “shedding” has not occurred since December of 2002.
- b. Describe all steps taken by HECO since that event, in response to problems identified by HECO within its letter from W. Bonnet filed on January 31, 2003 that discussed the findings from HECO’s initial investigation of the incident that led to load shedding on December 19, 2002.
- c. Provide copies of subsequent analyses and reports that were prepared in connection with the load shedding event in 2002 and problems identified in the Bonnet letter noted above.
- d. Explain any changed circumstances and procedural improvements that have been taken by HECO to mitigate the risks of future load shedding.

CA-IR-170

Ref: HECO T-6, Page 8, Line 22.

According to the testimony, “[t]he rapidly growing demand will increase Other Production O&M expenses as units are run harder and require more maintenance to mitigate

impacts on reliability and reserve margins decrease.”

Please provide the following information:

- a. State whether HECO has any studies or other empirical evidence to support the quoted statement.
- b. If yes, please provide complete copies of all such documents.
- c. If no, please explain how HECO made such determination.
- d. Explain and quantify the extent to which the increase in demand that occurred in, “... the late 80’s, and before 406 MW of additional capacity was added by the IPPs in the early 1990’s” also caused increased production O&M costs in that “late 80’s” time frame.

CA-IR-171

Ref: HECO Response to CA-IR-1, HECO T-6, Attachment 1, Production O&M labor cost projections.

Please provide the following information associated with the Labor Hours and Direct Labor by RA amounts reflected in the Company’s test year forecast:

- a. Provide additional information for nonproductive time loadings, clearings and any other overheads added to the amounts shown in Attachment 1, total direct labor of \$23,165,132, that is needed to reconcile to the labor amounts shown in HECO-615.

- b. Please provide a payroll distribution (dollars and percentages) for total production department direct labor, indicating test year projected amounts charged to capital additions, retirements, billed to others, deferred and charged to expense.
- c. Please provide comparable actual payroll distribution data (dollars and percentages) indicating the actual percentage of production departmental direct labor that was charged to capital additions, retirements, billed to others, deferred and charged to expense in each year 2002, 2003 and 2004.
- d. Explain known reasons for differences between the payroll distribution results for the test year (part b) and the actual results in historical periods (part c).

CA-IR-172

Ref: HECO Response to CA-IR-1, Production O&M labor cost projections.

For each RA containing production department employees that are paid for overtime, please provide the following information on a RA and total Company basis:

- a. The hours of test year projected overtime and the related percentage of straight time hours that such overtime represents.

- b. Comparable actual overtime hours and percentages for each of the last three calendar years (i.e., 2002, 2003 and 2004).
- c. Explanations of causes for observed differences or trends between projected test year overtime levels and the comparable historical levels.
- d. Describe if/why the proposed staffing increases in RAs IH, IL, IT, IX do not substantially reduce or eliminate the historical levels of overtime compensation in these RAs.

CA-IR-173

Ref: HECO Response to CA-IR-1, HECO T-6, Attachment 5, Production staffing projections.

For each new position that did not exist on December 31, 2004, please provide complete copies of all internal analyses, projections, workpapers, reports, correspondence and other documents prepared in connection with the solicitation of management approval for the new position and all management review of such staffing proposal(s).

CA-IR-174

Ref: HECO Response to CA-IR-1, HECO T-6, Attachments 3A through 3I and Attachments 4A through 4E, Labor Hours Projection.

Please confirm the following information regarding projected test year production labor hours and costs:

- a. HECO has assumed that each authorized position will be filled throughout the test year, and that no vacancies will exist during 2005.
- b. HECO has assumed that each new position has been filled as of January 1, 2005, even though many of such new positions have not yet been authorized by management or filled.
- c. HECO has historically experienced a certain level of ongoing vacancies within its authorized staffing levels, due to retirements and resignations that cannot be immediately re-staffed.
- d. Explain how the Company's treatment of vacancies is thought to produce a reasonable estimate of labor costs to be incurred in 2005, given your responses to subparts (a) through (c) of this information request.

CA-IR-175

Ref: HECO Response to CA-IR-1, HECO T-6, Part e.

According to the response, “[b]acklog of work continues to increase as the units and associated infrastructure ages.”

Please provide the following information:

- a. Identify and describe each measure of work volumes and work “backlog” that is tracked by management.

- b. Explain which production department work elements are discretionary or deferrable and identify which can be added to the “backlog of work” without negatively impacting service reliability or safety.
- c. Provide comparable statistical data indicating the relative amounts of “backlog work” that existed at December 2002, December 2003 and December 2004 in as much detail as available.
- d. Provide complete copies of all studies, reports, analyses and other information relied upon to support the conclusion that “[b]acklog of work continues to increase.”
- e. Provide complete copies of all studies, reports, analyses and other information relied upon to support the conclusion that “[b]acklog of work” is directly correlated to the age of generation assets.

CA-IR-176

Ref: HECO T-6, Page 23, line 11, HECO-619 and HECO-620.

According to the testimony, “[t]he increase between 2003 Actual and 2005 test year is mainly attributed to existing vacancies from retirements at the end of 2003, and an increase in operations staffing level to support

24x7 availability of Honolulu Units 8&9, and Waiau Units 3&4.” Please provide the following information:

- a. State whether the Company conducted any studies of the optimal staffing plan for production operations.
 1. If yes, provide complete copies of all such studies.
 2. If no, please explain how HECO determined the staffing requirements to support the statement cited above.
- b. Provide copies of all calculations, workpapers, analyses, projections and other documents supportive of the cost effectiveness of HECO's decision to support 24X7 operations of the H8, H9, W3 and W4 generating facilities in the proposed manner.
- c. Explain and quantify the treatment of overtime hours, percentages and costs in the test year for each production operations RA, relative to historical overtime percentages per HECO-620.
- d. Explain and reconcile the increased staffing with the proposed versus historical levels of overtime for the production department operations personnel, indicating the extent to which “avoided” overtime

costs in the test year projections are available to “pay for” increased staffing levels in such projections.

- e. Explain and reconcile increased staffing with the proposed versus historical levels of outside services costs incurred by the power production department, indicating the extent to which “avoided” outside services costs in the test year projections are available to help “pay for” increased staffing levels in such projections.
- f. Provide an update to HECO-619 indicating actual YE 2004 staffing levels and explain plans for, and the status of any further hiring in 2005
- g. According to HECO T-6, Page 3 of 3 and the response to CA-IR-1, “[b]acklog of work continues to increase as the units and associated infrastructure ages.”
 - 1. Please describe how HECO’s production department operations’ work requirements are tracked.
 - 2. Provide copies of documentation for all available measures of work “backlog” as of December 2002, 2003 and 2004 associated with this above statement.

Ref: HECO T-6, Page 28, Line 23, HECO-623 and HECO-625.

According to the testimony, “[t]he increase between the 2003 Actual and test year 2005 is mainly attributed to existing vacancies from retirements at the end of 2003, and an increase in maintenance staffing level to support night shift maintenance crews at Kahe and Waiiau Power Plants to perform off-peak maintenance, and higher volumes of work attributed to concurrent and back-to-back scheduled and unscheduled outages.” Please provide the following information:

- a. State whether the Company conducted any studies of the optimal staffing level for production maintenance operations.
 1. If affirmative, provide complete copies of all such studies.
 2. If no, please explain how HECO arrived at the conclusion made in the above statement, identifying all information relied upon.
- b. Provide copies of all calculations, workpapers, analyses, projections and other documents supportive of the cost effectiveness of HECO’s decision to support night shift maintenance crews in the proposed manner.

- c. Explain and quantify the treatment of overtime hours, percentages and costs in the test year for each production operations RA, relative to historical overtime percentages per HECO-625.
- d. Explain and reconcile increased staffing with the proposed versus historical levels of overtime for production department maintenance personnel, indicating the extent to which “avoided” overtime costs in the test year projections are available to “pay for” increased staffing levels in such projections.
- e. Explain and reconcile increased staffing with the proposed versus historical levels of outside services costs incurred by the power production maintenance RAs, indicating the extent to which “avoided” outside services costs in the test year projections are available to help “pay for” increased staffing levels in such projections.
- f. Provide an update to HECO-623 indicating actual YE 2004 staffing levels and explain plans for, and the status of any further hiring in 2005.
- g. According to HECOT-6, Page 3 of 3 and the response to CA-IR-1, “[b]acklog of work continues to increase as the units and associated infrastructure ages.”

1. Please describe how HECO's production department maintenance work requirements are tracked.
2. Provide copies of documentation for all available measures of work "backlog" as of December 2002, 2003 and 2004 to support the above referenced statement.

CA-IR-178

Ref: HECO-618 Other Production Operations Expense "Labor."

Please provide the following information for each of the years shown:

- a. Recorded actual direct labor hours charged to Other Production Operations expense accounts, by NARUC Account, for each year 2000, 2001, 2002, 2003 and 2004.
- b. Comparable projected 2005 Test Year direct labor hours charged to Other Production Operations expense accounts, by NARUC Account.
- c. An explanation of each known material change in operations or scope of work that is expected to contribute to the anticipated shifts in direct labor hours charged to operations expenses by Account.

CA-IR-179

**Ref: HECO-622 Other Production Maintenance Expense
“Labor.”**

Please provide the following information for each of the years shown:

- a. Recorded actual direct labor hours charged to Other Production Maintenance expense accounts, by NARUC Account, for each year 2000, 2001, 2002, 2003 and 2004.
- b. Comparable projected 2005 Test Year direct labor hours charged to Other Production Maintenance expense accounts, by NARUC Account.
- c. An explanation of each known material change in operations or scope of work that is expected to contribute to the anticipated shifts in direct labor hours charged to maintenance expenses by Account

CA-IR-180

Ref: HECO-WP-601, Pages 4 through 7, CA-IR-2, HECO T-6, Attachment 4B; Overhaul Projects.

Please provide the following historical and test year projected information in hard copy and magnetic media (Excel format) on a comparable basis among years:

- a. Actual overhaul project summaries for each of the past five calendar years from 2000 through 2004,

indicating the Project number and start/completion dates for each active overhaul project by unit/station.

- b. Provide total expensed costs (excluding capitalized costs) for each overhaul project listed in your response to subpart (a) of this information request, broken down into the Material, Outside Services and Labor cost types.
- c. Compare the total number of overhauls, overhaul project scope and overall expensed costs associated with projected test year overhauls to the incurred expense levels in prior years and explain if and why the test year activity is thought to be reasonable and reflective of normal ongoing expense levels based upon such comparisons.
- d. Provide the most current available five-year Overhaul budget, indicating the labor and non-labor budget for each overhaul expected to be conducted in each year.
- e. Compare the total number of overhauls, overhaul project scope and overall expensed costs associated with projected test year overhauls to the anticipated expense levels in future years, as set forth in your response to subpart (d) of this information request,

and explain if and why the test year activity level and associated costs are thought to be reasonable and reflective of normal ongoing expense levels based upon such comparisons.

CA-IR-181

Ref: HECO Response to CA-IR-1, HECO T-6, Attachment 6 2002-2004 Actual Generation Unit Conditions.

Please explain each of the "Generation Conditions Criteria" and what specific steps are being taken by HECO in response to the trends in such conditions through year-end 2004.

CA-IR-182

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3A Power Supply Non-Labor Expense Estimates.

Please explain the basis for each of the following estimated non-labor test year estimated production expense amounts and provide complete copies of all invoices, quantity times price calculations, workpapers and other supporting documentation for such amounts, as well as comparable actual incurred expenses for each of the past three years:

- a. RA=PIB Training Costs \$258,600
- b. RA=PIK City Water \$228,000
- c. RA=PIK Wastewater Chem \$ 81,600

d.	RA=PIK Demin/Evap. Chemicals	\$300,000
e.	RA=PIK Condenser Chemicals	\$238,800
f.	RA=PIK Boiler Water Treatment	\$ 25,200
g.	RA=PIL K1/6 Structural Painting	\$200,000
h.	RA=PIL Basin Struct Repairs	\$150,000
i.	RA=PIL Cathodic Protection	\$150,000
j.	RA=PIL BFP OH (1)	\$150,000
k.	RA=PIL Kahe Fuel Tank Deferred	\$210,000
l.	RA=PIN Cathodic Protection	\$150,000
m.	RA=PIN BFP OH	\$150,000
n.	RA=PIN H9 Blr Chem Clean	\$400,000
o.	RA=PIO Clean Island Council	\$139,000
p.	RA=PIO Honolulu Harbor Fees	\$145,600
q.	RA=PIW Wast Water Treat.	\$ 82,000
r.	RA=PIW Demin/Evap Chemicals	\$120,000
s.	RA=PIW Cond. Chemicals	\$ 79,800
t.	RA=PIX Asbestos abate/remov	\$100,000
u.	RA=PIX Paint Corrosion Control	\$400,000
v.	RA=PIX Travel Screen OH	\$150,000
w.	RA=PIX Sludge Bed Drying Cell	\$100,000

CA-IR-183

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3C, Page 8, Emission Fee Expense Estimates.

Please provide a copy of the most recent available emission fee report, calculations and paid invoice for HECO, as well as details regarding the history of HECO's fee payments and amounts waived for the past ten years, indicating how the 7/10 prorate was determined to support the Company's normalization adjustment.

CA-IR-184

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3D, Admin/Planning Non-Labor Expense Estimates.

Please explain the basis for each of the following non-labor test year expense estimates and provide complete copies of all invoices, quantity times price calculations, Hawaii PUC Decision & Order references and other supporting documentation for such amounts, as well as comparable actual incurred expenses for each of the past three years:

- | | | |
|----|-------------------------------------|-----------|
| a. | RA=PYA Kahe 7 Amortization | \$900,000 |
| b. | RA=PYA Waiiau Water Well Amort | \$302,244 |
| c. | RA=PYB Alternative Tolling Consult. | \$ 75,000 |
| d. | RA=PYB Competitive Bidding Legal | \$ 75,000 |

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3E, Electronic Shock Absorber R&D Expense Estimate.

Please provide the following information regarding the costs of this project, which is included in the test year forecasted expenses:

- a. Copies of all proposals, contracts, studies, workpapers, correspondence and other documentation supportive of this project.
- b. Monthly actual and projected expenditures incurred to-date and planned through project completion, by NARUC Account.
- c. Copies of all reports and recommendations from Phase I of the ESA effort.
- d. Explain HECO's long-term plans associated with ESA, including any potential investment or technology licensing arrangements the Company intends to explore to recover its investment in the technology.
- e. What cost sharing or co-funding arrangements with EPRI, EEI or other interested parties have been explored by HECO, if any?
- f. Please provide copies of all documents associated with your responses to subparts (d) and (e) of this information request.

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3L, Technology Entries Expense Estimate.

Please provide the following information regarding the Sun Power for Schools and Biomass projects included in the test year forecasted expenses:

- a. Copies of all proposals, contracts, studies, workpapers, correspondence and other documentation supportive of each of these projects.
- b. Monthly actual incurred to-date and projected expenditures through project completion, by NARUC Account, for each project.
- c. Explain and quantify how, for the Sun Power program, “[t]his estimate is offset by monies collected from our customers that are participating”, indicating where such cost “offset” amounts are included in the test year.
- d. Explain what is meant by “placeholder for the biomass initiative” and provide copies of all economic justification for the inclusion of these expenses in the test year at this time.

CA-IR-187

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3M, Ho'okina Award Program.

Please provide the following information regarding this program for which expenses are included in the test year forecasted expenses:

- a. Copies of all program guidelines, instructions and conditions.
- b. Monthly actual program expenditures by NARUC Account incurred in each of the past three calendar years.
- c. Explain how the "2003 Recycle," the "5/1/03 Adjustment" and the "2004-2005 Estimate" amounts were determined, with copies of all studies, analyses, workpapers and other documentation associated with the determination of such amounts.

CA-IR-188

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 4A, Kahe Pond Cleaning Expense Estimate.

Please provide the following information regarding this project included in the test year forecasted expenses:

- a. Explain why this project was originally planned for completion by December 2002 (See page 3 of 9), but has apparently been deferred for inclusion in the test year.

- b. Provide actual expenditures incurred to-date and planned through project completion, by NARUC Account, for this project.
- c. Provide the amount of historical pond cleaning expense at each HECO generating station for the past 10 years and explain why the costs of this particular Kahe project are thought to be representative of normal, ongoing cost levels in light of such history.

CA-IR-189

Ref: HECO Boiler Control System Projects (Docket Nos. 01-0072 and 01-0272).

In its Application dated August 8, 2001, HECO asserted that the Kahe Unit 5 Boiler Control System improvements would produce “[d]ecreased maintenance and operational costs” (page 4) and that the work was “similar to work proposed for the Kahe unit 6 Boiler Control System which was the subject of Docket No. 01-0072.

- a. Please identify each Boiler Control System project that has been undertaken at Kahe, Honolulu or Waiiau stations in 2000 through 2004, other than the projects which were the subject of Docket Nos. 01-0072, 010272, 02-00206 and 02-0207.

- b. Please explain and quantify how (and specifically where) the related expense savings associated with the upgrades to the boiler control systems identified in response to subpart a. of this information request were recognized in the rate case filing.

The following information requests are directed to the witness sponsoring HECO T-17.

CA-IR-190

Ref: HECO-1705 Summary of Deferred Income Tax Liability Balances for Rate Base Purposes.

Please provide the following regarding all temporary differences forecasted for the 2005 test year:

- a. a listing of all temporary differences, as well as the Schedule M amounts for the 2005 forecast; and
- b. a listing of all temporary differences, as well as the actual Schedule M amounts for 2004 (the 2004 actuals have not been finalized when HECO responds to this information request, provide the estimated amounts and the actual amounts when available).

CA-IR-191

Ref: HECO-WP-1701, page 3.

Please provide the following:

- a. A copy of the actual Form 941 for 2003 reflecting the actual "Gross Pay" and "FICA" taxes for each quarter

of 2003 shown on HECO-WP-1701, well as all a copy of the actual Form 941 filed for 2004.

- b. A copy of the 2005 employees budgeted by month that would be comparable to the projected year end amount of 1,491.
- c. The actual number of employees for the first pay date in 2005 (i.e., as of January 12, 2005).

CA-IR-192

Ref: HECO-WP-1702.

Please provide the support for each number reflected therein, including without limitation:

- a. the interest expense on Long Term Debt'
- b. the interest Expense on Short Term Debt;
- c. the interest Expense on Hybrid Securities;
- d. the average Short-Term Debt in the amount of \$39,929,000; and
- e. the ratio of Debt to Total.

CA-IR-193

Ref: HECO-1706 "Excess" Deferred Income Tax Balances.

Please provide a schedule of the amortization of excess deferred taxes that are turning around pursuant to the "average rate assumption" method for 2003 actual, 2004 actual, and forecasted for 2005 and 2006.

CA-IR-194

Ref: HECO-1706 "Excess" Deferred Income Tax Balances.

Please provide a schedule of the amortization of excess deferred taxes that are related to basis differences capitalized for 2003 actual, 2004 actual and forecasted for 2005 and 2006.

CA-IR-195

Ref: HECO-1706 "Deficit" Deferred Income Tax Balances.

Please provide the calculations supporting the original "deficit" accumulated deferred income tax expense balance and the method of determining the appropriate amortization period for each such "deficit" balance.

The following information requests are directed to the witness sponsoring HECO T-18.

CA-IR-196

Ref: HECO-1803 Budgeted 2004/2005 Plant additions -- CIP Application filed in Docket No. 02-0207 pertaining to the Kahe Boiler Control System upgrade.

Within HECO's application in Docket No. 02-0207, HECO stated in relevant part "[d]eferred maintenance and operational costs, increased reliability and flexibility, higher availability of major equipment through on-line monitoring capability and reduced shutdowns for corrective maintenance as a result of the self-correcting/diagnostic

capability of the modernized boiler control system are expected.” (Page 4 of HECO’s application). Please state specifically, to the extent possible, how anticipated decreases in maintenance and operational costs were considered within the 2005 production operations and maintenance budget and how much the 2005 production operations and maintenance budget was reduced as a result of such anticipated savings.

CA-IR-197

Ref: HECO-1803 Budgeted 2004/2005 Plant additions -- CIP Application filed in Docket No. 04-0109 pertaining to the Waiou 9 Exhaust Duct Replacement project.

At page 5 of its CIP application HECO discusses the impracticality of continued weld repairs of the exhaust duct system. Please state specifically, to the extent possible, how anticipated decreases in weld repair costs were considered within the 2005 production operations and maintenance budget and how much the 2005 production operations and maintenance budget was reduced as a result of such anticipated savings.

Ref: HECO-1803 Budgeted 2004/2005 Plant additions – CIP Application filed in Docket No. 00-0040 Ward pertaining to the Avenue Air Conditioning Improvement project.

Please provide the following, all of which are in regard to HECO's CIP Application filed in Docket No. 00-0040:

- a. Please provide the actual in-service cost and in-service date of Phase I of this project.
- b. Please provide the actual energy cost savings in the first year following completion of Phase I. Include copies of all workpapers reflecting the computations made to derive the energy cost savings, the assumptions made for the calculation and any other documentation relied upon to determine the energy cost savings.
- c. Please provide the actual maintenance savings in the first year following completion of Phase I. Include copies of all workpapers reflecting the computations made to derive the maintenance savings, the assumptions made for the calculation and any other documentation relied upon to determine the maintenance savings.
- d. Please provide actual repair savings in the first year following completion of Phase I. Include copies of all workpapers reflecting the computations made to

derive the repair savings, the assumptions made for the calculation and any other documentation relied upon to determine the repair savings.

- e. Please provide the in-service date as estimated for the 2005 forecast.
- f. Please provide monthly energy cost savings forecasted in the 2005 operating expense budget for those months in 2005 following completion of Phase II. Include copies of all workpapers reflecting the computations made to derive the energy cost savings, the assumptions made for the calculation and any other documentation relied upon to determine the energy cost savings.
- g. Please provide monthly maintenance savings forecasted in the 2005 operating and maintenance budget for the months following completion of Phase II. Include copies of all workpapers reflecting the computations made to derive the maintenance savings, the assumptions made for the calculation and any other documentation relied upon to determine the maintenance savings.
- h. Please provide monthly repair savings forecasted in the 2005 operating expense budget for those months

following completion of Phase I. Include copies of all workpapers reflecting the computations made to derive the repair savings, the assumptions made for the calculation and any other documentation relied upon to determine the repair savings.

CA-IR-199

Ref: HECO-1803 Budgeted 2004/2005 Plant additions -- CIP Application filed in Docket No. 01-0228 pertaining to the Waikiki Rehabilitation Program Project 1.

Within HECO's CIP Application filed in Docket No. 01-0228 HECO describes its capital project proposal to aggressively and comprehensively rehabilitate the underground electric distribution system in the Waikiki area to reduce cable failures. Please provide the following regarding actual/potential cable failures:

- a. Actual cable failures in the affected area for the 24 months preceding the project completion, or if not yet completed, latest 24 months available.
- b. Actual cost of repairing cable failures in the affected area for the 24 months preceding the project completion, or if not yet completed, actual costs of repairs for the latest 24 months available.

- c. Reductions in cable repairs forecasted in the 2005 budget attributable to completion of the rehabilitation project.

CA-IR-200

Ref: Capital Budgeting.

Please provide a copy of the listing of capital projects, including estimated expenditures by period, prepared in the spring of 2004 for all process areas that compiled such a list.

CA-IR-201

Ref: Capital Budgeting.

Please provide a copy of the Final Project List of capital projects, including estimated expenditures by period, ultimately approved by the Officers for 2004.

CA-IR-202

Ref: Capital Budgeting.

- a. Please provide the budgeted and actual program expenditures for each month of 2003 and 2004.
- b. Please provide a copy of the budgeted program expenditures for each month of 2005.

CA-IR-203

Ref: Capital Budgeting.

Please provide a copy of the capital budget variance reports prepared for March 2004, June 2004, October 2004 and December 2004.

CA-IR-204

Ref: HECO-1803.

Please provide the following information regarding the capital improvement project that was the subject of Docket No. 03-0124.

- a. Discuss and describe the impact, if any, of the new phone system upon services being received by HECO from Verizon, and the cost of services received from Verizon that may have changed as a result of installing the new phone system.
- b. Discuss and quantify the impact, if any, of the new phone system upon the 2004 and 2005 operating budgets.

CA-IR-205

Ref: AFUDC Accounting.

Please provide the following regarding the Company's AFUDC accounting:

- a. Provide the AFUDC rate utilized in each month of 2004.

- b. Provide the actual development of the AFUDC rate employed for each month of 2004.
- c. Provide the forecasted AFUDC rate forecasted for each month of 2005
- d. Provide the underlying development of the AFUDC rate employed for each month of the 2005 forecast.

CA-IR-206

Ref: Kalaeloa-Barbers Point Harbor pipeline discussed at page 10.

- a. Please provide the original, as well as all subsequent feasibility studies addressing the need for this investment.
- b. Provide any and all updated studies addressing the probable dates and uses for the pipeline.

CA-IR-207

Ref: Waianae Substation Property.

Please provide the following regarding the Waianae Substation Property proposed to be include in rate base:

- a. Copies of the original and all subsequent feasibility studies addressing its acquisition and subsequent retention.
- b. Copies of the "latest area review" noted at the top of page 11.

Ref: Underground cost sharing projects discussed beginning at page 7.

Please provide the following regarding the cost of any underground projects installed during the period 2000 to date, or forecasted to close to plant in service during 2005, for which the Company agreed to invest more in plant/construction expenditures than that required pursuant to Rules 13 and 14:

- a. the project number and description;
- b. the total cost of project;
- c. HECO's investment in the project;
- d. the other parties' contributions to the project;
- e. the amount of HECO's investment in the project above that required by Rule 13 or 14;
- f. a description of the primary reason, or reasons for which HECO agreed to invest more in the project than is required by the Company's Rule 13 or 14;
- g. a description of neighborhood, community or other organization promoting the underground versus overhead installation; and
- h. the areas, neighborhoods, municipalities, communities, etc primarily benefiting from the aesthetics of installing the facility underground.

CA-IR-209

Ref: Underground cost sharing projects discussed beginning at page 7.

Please provide copies of any studies addressing the expected incremental costs (i.e., locating and repairing lines, etc.) and/or expected savings (i.e., avoided wind damage, avoided termite repairs, etc.) resulting from the underground versus overhead installation of lines.

The following information requests are directed to the witness sponsoring HECO T-19.

CA-IR-210

Ref: HECO-WP-1907 (Lead lag study support).

Please provide copies of the purchased power contract excerpts, revenue tax statutes, withholding tax statutes, and 401K contribution schedules that support the various expense payment lags that were *not* developed vis-à-vis sampling of transactions. (Received following interview with Gayle Ohashi)

CA-IR-211

Ref: HECO-WP-1907 (Lead lag study support).

- a. Are the Public Service Company (pursuant to Chapter 239) taxes paid each month assessed upon the immediately-preceding month's gross utility revenues received *or* simply one-twelfth of the annual

assessment that was based upon the prior year's annual gross utility revenues received?

- b. If the conclusion is that the PSC taxes paid each month are based upon the immediately preceding month's gross utility revenues received, please specifically note the statutory language relied upon.
- c. If the conclusion is that the PSC taxes paid each month are based on one-twelfth of the annual assessment that was based upon the prior year's annual gross utility revenues received, please explain why the lead-lag study assumes an average payment lag from the end of the service period of approximately ten days.

CA-IR-212

Ref: HECO-WP-1907 (Lead lag study support).

Please provide the following regarding the Public Service Company (PSC) taxes for the period January 2003 to date: the PSC taxes charged to NARUC expense account 408:

- a. the gross revenues upon which PSC taxes charged to expense (being requested in subpart (a) of this information request) were assessed;
- b. the month that the revenues upon which the PSC taxes charged to NARUC expense account no. 408

- (being requested in response to subpart (a) of this information request) were billed to customers; and
- c. the PSC taxes accounts payable balance for each month.

CA-IR-213

Ref: HECO-WP-1907 (Lead lag study support – Non labor O&M expense payment lag).

Certain transactions in the non-labor O&M expense lag sample were paid vis-à-vis an employee “purchasing card” (e.g., transaction No. 19). Please provide the following regarding such “purchasing card” arrangements:

- a. describe which employees are issued such cards;
- b. describe the events, arrangements or conditions that establish the criteria for use and issuance of such cards; and
- c. provide copies of any authoritative document or controlling contract that describes the payment patterns for use of such cards.

CA-IR-214

Ref: HECO-WP-1907 (Lead lag study support – Income Tax Payment Lag).

Mr. Lon Okada explained that the federal/state income tax payment lag is driven by the Company’s ability to deduct the PSC tax for a given tax year in the first quarter of the “tax”

year. For any given income tax year, please provide the following regarding the PSC tax deduction:

- a. the period during which the PSC tax is accrued;
- b. the period/method of accruing the PSC tax on the Company's financial statement books for which the tax deduction is being taken; and
- c. the date(s) the PSC tax is actually paid.

CA-IR-215

Ref: HECO-WP-1907 (Lead lag study support – Non labor O&M expense payment lag).

Please provide the following regarding any “reserves” or “provisions” for self-insurance:

- a. a descriptive itemization for each self-insurance reserve;
- b. the monthly reserve balance for the period January 2002 to-date; and
- c. the forecasted 2005 reserve balance by month.

CA-IR-216

Ref: HECO-WP-1907 (Lead lag study support – Non labor O&M expense payment lag).

Please provide the following regarding any “prepayment” account:

- a. a descriptive itemization for each prepayment subaccount;

- b. the monthly prepayment balance for the period January 2002 to 2005 to-date; and
- c. the forecasted 2005 prepayment balances by month.

The following information requests are directed to the witness sponsoring HECO T-22.

CA-IR-217

Ref: T-22, Page 6, Lines 14 – 25.

Please state whether the Company's embedded cost of service methodology and procedures are the same as were employed by HECO in its most recent general rate case proceeding and describe any changes in methodology or procedures that have been employed, together with an explanation for the changes that were made.

CA-IR-218

Ref: T-22, Page 11, Line 16.

According to the witness, "HECO prepares both methods in its cost-of-service study for this proceeding, using the recorded distribution plant data for 1985-2003."

- a. Please provide complete copies of all electronic spreadsheet files associated with, and supportive of, the minimum size system and the minimum intercept approaches.
- b. In addition, please indicate which specific values were adopted from each study to apply to individual

Distribution Plant accounts and explain the basis for acceptance/rejection of each calculated study result under the two methods.

CA-IR-219

Ref: T-22, Page 10, Line 15.

According to the witness, “[t]he distribution lines and transformers are assigned to demand and customer components, since the size and costs of these facilities are dependent not only on the customers’ load, but also on the type and location of the customers.” Please respond to the following:

- a. State whether HECO has performed or acquired any study of distribution poles, lines and transformers that evaluates whether such facilities and related costs are caused by or vary directly in correlation with the number of customers being served.
- b. If your response to subpart (a) of this information request is affirmative, please provide complete copies of all documentation associated with your response.
- c. Please explain if/how the economics of HECO’s Rule 13 line extension policy have been considered in attributing some portion of distribution poles, lines and transformers to a customer classification.

- d. Describe how distribution poles, lines and transformers can be treated as positively correlated to and properly allocated based upon the number of customers served, given HECO service to specific individual customers that may be:
1. Rate Schedule R service to single-family homes in newly constructed subdivisions;
 2. Rate Schedule R service to single-family homes built upon existing lots where no new distribution pole line construction is required;
 3. Rate Schedule R service to multi-family condominium projects with much higher densities than items 1 and 2;
 4. Rate Schedule J service to master metered condominium projects containing the same number of units and requiring the same pole line extension as item 3; and
 5. Rate Schedule PP service to a large commercial customer located in a location remote from existing distribution facilities.
- e. Explain each reason why the Company's Marginal Cost Study, at HECO-WP-2217, page 85, includes only meters and services (and related O&M) as

customer-related costs, while the Company's embedded study expands the facilities and costs presumed to be customer-related to also include a portion of the cost for distribution poles, lines and transformers.

CA-IR-220

Ref: T-22, Page 10, Line 2.

Please confirm and respond to the following information regarding HECO's embedded cost of service allocation study

- a. All non-fuel production O&M expenses are classified as demand-related.
- b. No study has been performed by, or for HECO to determine whether some portion of non-fuel production O&M expenses are, instead, costs that tend to vary with the amount of energy that is produced.
- c. In its Marginal Cost study, certain production O&M expenses are treated as "variable" O&M, as stated at page 99 of HECO-WP-2217.
- d. In its production simulation modeling, certain non-fuel production O&M expenses are treated as variable, rather than fixed costs.

- e. Please explain and reconcile the apparent differences in classification of production O&M expenses for the purposes stated in your responses to subparts (a) through (d) of this information request.
- f. What percentage of expenses recorded in each NARUC Production O&M expense account other than fuel does the Company believe is variable in relation to KWH generation, as opposed to being a fixed cost associated with the continued availability of the capacity?
- g. Provide a copy of all studies and other documents associated with your responses to subparts a through d and f of this information request.

CA-IR-221

Ref: T-22, Page 15, Lines 12 – 21.

Please state whether the Company's marginal cost of service methodology and procedures are the same as were employed by HECO in its most recent general rate case proceeding and describe any changes in methodology or procedures that have been employed, with an explanation for the changes that were made.

CA-IR-222

Ref: T-22, Page 14, Line 21 and HECO-WP-2202, Page 82.

Please provide a complete copy of the Company's "Class Load Study" results and report, indicating how specific amounts from the study were incorporated into the determination of allocation factors used in the Company's embedded cost of service study (HECO-WP-2202, page 82). If any of the Demand Allocation Factor input values or load factors were based upon adjustments to the Class Load Study or other input data or calculations, please fully explain and provide such additional information.

CA-IR-223

Ref: T-22, Page 15, Line 12.

Please provide a copy of the documentation relied upon by HECO to understand and apply the "National Economic Research Associations (NERA) method" in the design and conduct of its Marginal Cost of Service Study.

CA-IR-224

Ref: T-22, Page 16, Line 3 and HECO-WP-2217, Page 99.

Please explain and provide supporting calculations and documentation for the production O&M expenses that are treated as "variable" O&M in the Company's Marginal Cost of Service Study.

CA-IR-225

Ref: T-22, Page 23, Lines 5-12 and HECO-106, Page 8.

Please explain how the assumed “730 hours per month” that is reasonably applied to Traffic Signal Lights that are on 24 hours daily, times 365 days, divided by 12 months (equals 730 hours) will produce a reasonable estimate of monthly energy consumption for civil defense sirens that are presumably not subject to constant operation.

CA-IR-226

Ref: T-22, Page 27, Schedule J Demand Ratchet Change.

Please explain the basis for the proposed change in the billing demand ratchet and provide complete copies of all studies performed by the Company to evaluate the impacts of this proposed change upon individual customers and upon overall annual HECO revenue levels.

CA-IR-227

Ref: T-22, Page 27, Network Adjustment.

Please explain each difference in cost, or quality of service associated with the Iwilei Network and provide copies of supporting studies and documentation associated with the amount of additional charges to PS and Schedule J (proposed) customers resulting from such cost and service quality differences.

Ref: T-22, Page 28, Schedule H Cooking and Water Heating Service.

Please explain the background and origin of this “end-use rate” and provide the following information:

- a. Describe why the billing kw load under Schedule H should continue to be discounted from actual demands for cooking and water heating at a time when HECO is attempting to control demand growth and expand DSM.
- b. Provide an estimate of the average annual savings (dollars and percentage) being experienced by Schedule H customers at present rate levels, relative to the effective delivered price they would pay under the otherwise applicable rate schedule, if Schedule H were not available.
- c. Explain the rate administration policies and procedures required to ensure that only eligible loads are being served under Schedule H and describe HECO's recent experience in applying such policies and procedures that have produced declining customer counts and sales (see HECO-211).

Ref: T-22, Page 30, Line 22; DSM Cost Allocations.

According to the testimony, “[t]he test-year DSM costs estimates included in the customer service expense were allocated to the different rate classes based on the recorded DSM program costs incurred for each rate class from 1996 to 2003.” Please provide the following information:

- a. Explain and reconcile the “Total Cust Serv. Exp (C8 FCT, %) values in HECO-WP-2202 at page 144 into the C8 Customer Service factor percentages shown at HECO-2214.
- b. Provide the analysis of DSM program costs incurred from 1996 to 2003 that was conducted, with reference to how such amounts were used in derivation of the percentages used in subpart (a) of this information request.
- c. Provide an analysis of proposed test year DSM costs by program, with all available estimates of participation in such programs among rate schedules, as available.

CA-IR-230

Ref: T-22, page 43, Lines 3-9.

Please provide a summary by customer of the following Rider I information for each customer and in total for the past three years:

- a. Total contract demand in KW;
- b. Interruptible portions of subpart (a) of this information request demand;
- c. Billing KW discount percentage in relation to subpart (b) of this information request;
- d. Frequency and duration of interruptions during the last 36 months (2002, 2003 and 2004);
- e. Explain changes or trends in information responsive to subparts (a), (b), (c) and (d) of this information request; and
- f. Identify and, to the extent possible, quantify the additional Rider I customer participation that is expected as a result of reducing minimum KW participation from 500 KW to 100 KW.

CA-IR-231

Ref: T-22, Page 50, Line 14 to Page 51, Line 14; Field Collection and Service Establishment Charges.

Please explain the Company's policies and procedures with respect to customer notifications, dispatching of field collection personnel, termination of service, restoration of

service and imposition of each applicable charge under various normally encountered scenarios of customer interaction with the Company (for example, customer no answer, answer without payment, answer with payment, installment payment agreement, third party payment, etc.)

CA-IR-232

Ref: T-22, Page 53 and Pages 57 to 60; Residential Time-of-Use Service Pilot.

- a. Please provide copies of all available studies, reports, analyses and other documents prepared by, or for HECO to evaluate the TOU Pilot Program and customer participation, customer acceptance and comments, as well as the load management performance achieved under the Program to date.
- b. What, if any, changes to the program are thought to be necessary as a result of the Pilot program and HECO's assessment of results to-date?
- c. Provide copies of all analysis and/or documentation relied upon to determine the reasonableness of the changes identified in response to subpart (b) of this information request.

CA-IR-233

Ref: T-22, pages 54-56; Residential Time-of-Use Proposed Rates.

Please explain and provide the supporting calculations associated with HECO's derivation of the following proposed rate elements:

- a. The "difference in the installed costs between the regular and time-of-use meters;
- b. How existing differentials between energy rates were preserved; and
- c. How the limit to 1,000 customers was determined.

CA-IR-234

Ref: T-22, pages 60-64; Residential Time-of-Use Proposed Rates.

Please explain and provide supporting calculations associated with HECO's derivation of the following proposed TOU-C rate elements:

- a. Customer charges no higher than for Schedules G and J, even though additional costs for TOU metering and billing would be involved;
- b. TOU-C energy rate differentials by period;
- c. Demand Service TOU-C rate differentials by period; and

- d. Minimum charges no higher than for Schedule G, even though additional costs for TOU metering and billing would be involved.

CA-IR-235

Ref: T-22, Pages 64 - 66; Rate Schedules CHP and EDR.

Please explain whether the Company's inclusion of test period revenues, expenses and investment balances for utility-owned CHP and for the pending Rider EDR should be modified, given the anticipated schedule for these separately docketed matters and provide supporting calculations for each adjustment properly made to the Company's filing, as applicable.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FIFTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FIFTH SUBMISSION OF INFORMATION REQUESTS

General Questions

CA-IR-236 **Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3C, Page 13.**

Please explain why a budget "Recycle" was performed for the projected 2005 test year budgeted amounts and provide complete documentation, including correspondence, instructions, spreadsheets, analyses, reports and other information, for all changes made as part of this and every other such "Recycle" that was conducted.

CA-IR-237 **Ref: HECO-WP-101(N) Pages 1432 and 1433.**

Please provide an electronic (excel format) and hard copy report of the actual 2002, actual 2003, actual 2004 and budgeted test year 2005 projected costs by Expense Element, with a secondary sort by NARUC Account.

Information Technology Questions

CA-IR-238 **Ref: HECO Response to CA-IR-2, Various Witnesses, IT Non-labor Expenses.**

For the Information Technology and Service Department, please provide a list of the total actual incurred costs in the

following breakdown for each historical year 2002, 2003 and 2004 and comparable test year 2005 projected test year costs, with an explanation for major changes or trends (exceeding \$100,000) in each category of costs among the years:

- a. Labor Non-project;
- b. Materials Non-project;
- c. On-Costs;
- d. Other;
- e. Outside Services;
- f. Transportation;
- g. NC charges for EFMS Project;
- h. NC charges for EBUS Project; and
- i. NC charges for other Projects (itemized).

CA-IR-239

Ref: HECO Response to CA-IR-2, Various Witnesses, IT Non-labor Expenses.

For the Information Technology and Service Department, please provide a list that shows the distribution of total accumulated ITS costs in the following breakdown for each historical year 2002, 2003 and 2004 and comparable test year 2005 projected test year costs, with an explanation for major (exceeding \$100,000) shifts in the distribution of ITS costs among the years:

- a. HELCO Direct Charges;
- b. MECO Direct Charges;
- c. Expense Element 451 Charges by non-ITS PMs;
- d. Intercompany charges based on Purchase Orders;
- e. EFMS Project Charges;
- f. EBusiness Project Charges;
- g. Allocated Charges Among HECO individual RA;
- h. Non-project capitalized charges (Indicator NI, NR);
- i. Other (explained).

Witness T-6 Mr. A. Fujinaka

- CA-IR-240
- a. Please confirm that one performance measure tracked by HECO Production Department management personnel is the percentage of planned preventive power plant maintenance that is actually completed in each budget period.
 - b. Provide copies of the tracking information which indicates the actual performance in 2002, 2003 and 2004 relative to the performance measure identified in subpart (a) of this information request.
 - c. Provide copies of the actual reports produced in the normal course of business to track and explain performance relative to this measure.

CA-IR-241

- a. Please confirm that one performance measure that is tracked by HECO Production Department management personnel is the level of overtime that is incurred and provide tracking information indicating actual performance in 2002, 2003 and 2004 relative to this performance measure.
- b. Provide copies of the actual reports produced in the normal course of business to track and explain performance relative to this measure.

CA-IR-242

- a. Please confirm that one performance measure that is tracked by HECO Production Department management personnel is the level of total non-fuel O&M expense that is incurred relative to budgeted levels and provide tracking information indicating actual performance in 2002, 2003 and 2004 relative to this performance measure.
- b. Provide copies of the actual reports produced in the normal course of business to track and explain performance relative to this measure.

CA-IR-243

Please provide complete copies of Production Department budget variance reports that were prepared for reporting

periods within the years 2003 and 2004, including full details regarding non-fuel O&M expenses, as well as all narrative reports explaining variances from budget levels.

CA-IR-244

- a. Does the Production Department maintain a listing(s) of discretionary projects that can be performed when resources are available?
- b. If affirmative, please provide copies of these listings in the form they are maintained for all available periods of 2003 and 2004 and explain the relative progress made by HECO in performing work contained on such listing(s).

Witness T-8 Mr. S. Yoshida

CA-IR-245

Ref. HECO response to CA-IR-1 (T&D O&M).

- a. Please provide a copy of the “resource leveling reports” by labor class for the 2005 test year forecast, indicating the overtime hours and resulting OT percentage.
- b. In addition, please provide comparable level of actual overtime hours and percentages for calendar years 2000 through 2004.

CA-IR-246

Ref: HECO-818 through HECO-821 & HECO 823 (T&D Reliability).

Please update these charts with actual interruption/ reliability statistics and O&M data for calendar year 2004.

CA-IR-247

Ref: HECO T-8, Page 11 (T&D Planning).

Please provide documentation of the inspection cycles, work plans and system requirements for the 2005 forecast test year.

CA-IR-248

Ref: HECO-807 (T&D O&M).

Please provide the actual amount of contract labor for calendar years 2000-2004 and the 2005 test year forecast. If the information is contained in the exhibits or workpapers previously provided by HECO, please provide a pinpoint reference to the responsive data.

Witness T-14 Mr. Ernest Shiraki

CA-IR-249

Ref: HECO T-13, Pages 13-15 (Standard Labor Rates).

The referenced testimony generally describes the Standard Labor Rates used by HECO. Please provide the following:

- a. Please provide a copy of the documentation (hours and dollars), in both hard copy and spreadsheet file format (with all formula, cell references and file links

intact), supporting the development of the Standard Labor Rates used in the 2005 test year forecast.

- b. If not contained in the response to subpart (a) above, please provide a breakdown of the labor dollars (2003 base year) between regular pay and overtime/premium pay by labor group.
- c. Referring to the information provided in response to subpart (b) above, please explain the treatment of nonproductive pay (e.g., vacation, holiday, sick leave, etc.) in quantifying the standard labor rates.
- d. If not contained in the response to subpart (a) above, please provide a breakdown of the labor hours (2003 base year) between regular and overtime/premium hours by labor group.
- e. Referring to the information provided in response to subpart (d) above, please explain the treatment of nonproductive hours (e.g., vacation, holiday sick leave, etc.) in quantifying the standard labor rates.
- f. If the responses to subparts (c) and (e) above indicate that the standard labor rates were based on productive hours and dollars, please provide the unproductive hours and dollars in 2003 (base year) and 2005 test year forecast by labor group.

CA-IR-250

Ref: HECO T-13, Pages 13-15 (Standard Labor Rates).

Please provide the spreadsheets and other supporting documents used in developing the standard labor rates (hours and dollars) actually applied by HECO in calendar years 2002 and 2003.

CA-IR-251

Ref: HECO-1310 (HEI Billings).

The referenced workpaper support was provided in a "Word" document file. Please provide the following:

- a. Please provide HECO-1310 in an Excel spreadsheet file format with intact formulae, cell references and file links.
- b. Please provide actual 2004 HEI charges to HECO, showing direct and allocated charges in a format comparable to the 2003 data set forth on HECO-1310.
- c. Referring to item (a) above, please provide additional HEI workpapers supporting the conversion of 2003 direct labor hours and shared labor hours into their respective labor dollars.
- d. Referring to items (a) and (c) above, please provide a copy of the underlying workpapers and calculations

supporting the derivation of any standard hourly labor rates used therein.

CA-IR-252

Ref: HECO-1310 (HEI Billings).

Please provide the following with regard to the HEI allocation applied to shared costs:

- a. Please provide a copy of all workpapers, in hard copy and spreadsheet file format (with intact formulae and cell references), supporting the development of the HEI allocation factors set forth on HECO-1310.
- b. If not supplied in response to subpart (a) above, please provide the source documents supporting the inputs used in the development of each allocation factor.
- c. Have the allocation factors referenced in response to subpart (a) above, been revised or updated?
- d. If so, please provide the information requested in subparts (a) and (b) above for the updated factors.

CA-IR-253

Ref: HECO-1310 (HEI Billings).

Please provide a copy of all workpapers supporting each of the adjustments described in the footnotes to HECO-1310.

CA-IR-254

Ref: HECO-1310 (HEI Billings).

- a. Does HEI retain any costs that are not subject to direct assignment to, or otherwise allocated to HECO, HELCO and/or MECO?
- b. If so, please provide the following:
 1. Please identify the nature and type of costs typically retained by HEI.
 2. Please provide the actual percentage of costs retained by HEI in calendar years 2001, 2002, 2003 and 2004, showing all calculations and supporting documents.
 3. Please provide the percentage of costs retained by HEI implicit in the 2005 test year forecast, showing all calculations.

CA-IR-255

Ref: HECO-1312 (HECO Billings to HEI).

The referenced workpaper support was provided in a "Word" document file. Please provide the following:

- a. Please provide HECO-1312 in an Excel spreadsheet file format with intact formulae, cell references and file links.
- b. Please provide the actual 2004 HECO billings to HEI.

- c. Referring to subpart (a) above, please provide additional HECO workpapers supporting the development and quantification of the 2005 test year charges to HEI.
- d. Referring to subparts (a) and (c) above, please provide a copy of the underlying workpapers and calculations supporting the derivation of any standard hourly labor rates or allocation factors used therein.

CA-IR-256

Ref: HECO-1312 (HECO Billings to HEI).

- a. Does HECO fully load its billings to HEI with rents, benefits and other overhead costs similar to the charges HECO receives from HEI?
- b. If not, please explain why such loadings are not included in the billings to HEI and explain whether benefits follow labor costs.

CA-IR-257

Ref: HECO-1314 (A&G Expense Transferred).

Please provide a copy of the original and updated KPMG studies.

Witness T-16 Ms. T. Sekimura

CA-IR-258

Ref: HECO-1603 (Rate Case Expense).

Please update the Company's test year forecast of rate case expense, including any additional consulting fees or other costs currently anticipated by HECO.

CA-IR-259

Ref: HECO-1603 (Rate Case Expense).

The referenced exhibit amortizes rate case expense over a three-year period. Please identify and describe any Company plans for a "next" rate case beyond the current docket. If none, please so state.

CA-IR-260

Ref: HECO-1605 (Rent Expense).

Please provide the following information regarding 2005 forecast of rent case expense:

- a. Please update the Company's test year forecast of rent expense, including any additional leased space or revised rental rates.
- b. For each listed area, building or suite referenced in the revised HECO-1605, please identify the occupants of the leased square footage by HECO RA (or department).

- c. For each listed area, building or suite referenced in the revised HECO-1605, please identify the occupants of the leased square footage by HEI RA (or department).
- d. Referring to items (a) and (b) above, please identify the square footage and lease rent attributed to DSM and how such amount is, or will be, reflected in the 2005 test year forecast.

CA-IR-261

Ref: HECO-1604, Page 16 (Ellipse Fees).

With regard to the recurring maintenance and BSI fees, Please provide the following:

- a. Please provide the current or expected term of the contract, including future plans to continue using Ellipse.
- b. Please provide support for the 4.166% maintenance fee increase effective June 2004.
- c. Please provide a copy of the workpapers and underlying documentation supporting the assumed 2.23% fee increase in 2005.
- d. Please explain the timing of the 2005 fee increase for maintenance (June 2005) and BSI (January 2005).

- e. Please explain the reference in footnote (c) to the six-year average CPI-urban inflation rate for the period 1997-2002.
- f. Please provide a copy of the provisions of the software agreement that address fee escalation.
- g. Please provide a copy of a recent 2005 billing, showing current rates and charges.

CA-IR-262

Ref: HECO T-16, Pages 14-15 (Ellipse Fees).

Please provide a copy of Amendment 17 to the Software License Agreement No. NA099601, concerning the \$1.1 million fee.

CA-IR-263

Ref: HECO-1604, Page 16 (Ellipse Fees).

The monthly amortization was determined by dividing the \$1.1 million fee by 24 months and multiplying by 1.04166. Please provide the following information:

- a. Why is the fee increased by 4.166%?
- b. Please provide a copy of any payback or cost/benefit studies prepared by, or for, the Company in deciding to pay the \$1.1 million fee.

- c. Please provide the recurring monthly fees prior to the software maintenance fee reduction, effective June 2004.

Witness T-2 Ms. C. Hazama

CA-IR-264

Ref: HECO T-2, Page 20 and 21 and Appendix H, Pages 15 to 17 of the February 2004 voluminous workpapers.

In prior rate cases, the Consumer Advocate was able to replicate the econometric equation used by HECO to determine the test year forecast. For the instant proceeding, however, the Consumer Advocate was not able to replicate the econometric equation using EVIEWS4. Please provide the following information.

- a. Please provide the data file used to determine HECO's model.
- b. Please provide information from the software package (MetrixND) which describes the method used to calculate the AR Models.
- c. Please provide the results of the residential use model without the AR(1) specification.

CA-IR-265

Ref: HECO WP-201, page 39 and February 2004 voluminous forecast, Appendix G.

Please identify the specific 3rd Party CHP installations expected in 2004 and 2005 and the kw and kwh impacts for each project.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SIXTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SIXTH SUBMISSION OF INFORMATION REQUESTS

General Questions

CA-IR-266

Ref: HECO Response to CA-IR-18.

Please explain the rationale for continuation of the Rule No. 4 Service Contracts provision for use of a "FORM CONTRACT FOR CUSTOMER RETENTION" and related "STANDARD FORM CONTRACT FOR CUSTOMER RETENTION," given the Company's interests in expanded DSM to constrain load growth and reduce the need for future capacity additions. Please provide reference to any HECO testimony associated with retaining customer retention contracting provisions and provide copies of any studies and other available information associated with your response.

CA-IR-267

Ref: HECO Response to CA-IR-18.

- a. Please explain whether the Company is proposing any changes to the Rule No. 4 Service Contracts "ATTACHMENT 4 ENERGY AUDIT SPECIFICATIONS" details.
- b. If yes, please provide reference to any HECO testimony associated with any proposed changes

and/or provide copies of any studies and other available information associated with your response.

Witness T-1 Mr. Alm.

CA-IR-268

Ref: HECO T-1, page 19, line 23.

According to Mr. Alm, "Even if the Company has not incurred expenses at the same levels in prior years, if the expenses are reasonable they should be included for ratemaking purposes during the period when the rates are in effect."

Please respond to the following:

- a. State with specificity each of the objective criteria or tests that were applied by HECO to determine if the expenses that have been included in the 2005 test year projections are "reasonable."
- b. Explain whether judgment is required by employees preparing the test year expense projections, to determine if expense levels being proposed are "reasonable."
- c. Describe what specific guidelines, constraints and other measures of "reasonableness" were imposed by management in reviewing and approving the O&M budgets from each department, so as to ensure

reasonableness in the overall projections to be submitted in support of the rate filing.

CA-IR-269

Ref: HECO T-1, page 19, line 10.

Mr. Alm explains the actions taken by HECO since September 11, 2001 and states “HECO deliberately reduced spending, while not compromising reliability, during that period. However, such reduction in the level of spending and unfilled positions can not continue for an indefinite period of time. After a while, the vacancies need to be filled or certain work will not get done.” Please provide the following information:

- a. Identify and describe the specific elements of HECO's reduced spending policies, including details regarding any hiring suspensions, budget reductions, deferred programs or projects, capital investment deferrals, etc.
- b. Provide copies of memoranda, budget guidelines, intercompany correspondence and other documents that were distributed by management to explain the measures identified in your response to subpart (a) of this information request.

- c. List and, to the extent possible, quantify the amounts of any work that did not get done during the past few years as a result of the actions taken.
- d. Explain whether HECO believes that the Commission should expect the Company to maintain any continuing budget austerity plans, ongoing hiring constraints or any other spending limitations in an effort to promote operational efficiency and minimize the burden of rate increases upon customers.

CA-IR-270

Ref: HECO T-1, page 8.

The Question at line 12 addresses the principle factors affecting the need for HECO to increase its rates. The response focuses on several resource procurement issues.

- a. Is minimizing rate impacts one of the criteria used by HECO for resource selection?
 - 1. If so, please specify all of the other criterion considered, and explain how each criterion is applied in determining which resources to procure.
 - 2. If not, please explain why not.
- b. Please identify the actual system average rate charged to customers and the average rate for each

customer class (i.e., residential, commercial, industrial) for each year beginning from the year 2000 through 2004.

- c. Please provide the projected system average and class rates during the period 2005 through 2010 assuming HECO's proposed resource acquisitions are approved.
- d. Please identify each resource procurement alternative considered by HECO in lieu of the proposed new and expanded DSM programs.
- e. Please provide the projected system average and class rates during the period 2005 through 2010 under each of the resource procurement alternatives identified in response to subpart (d) above.

CA-IR-271

Ref: HECO T-1, at 10.

Regarding HECO's "4.5 years per day reliability guideline used for capacity planning." Please provide the following information.

- a. Identify the actual LOLP for each year beginning from the year 2000 through 2004.

- b. Provide the projected LOLPs for each year during the period 2005 through 2010 absent further resource additions.
- c. Identify an upper bound on the LOLP that the Company would view as reasonable in 2004 and beyond.

CA-IR-272

Ref: HECO T-1, at 10-11.

Please provide the Company's current estimate of when generating system reliability will fall below the 4.5 years per day reliability guideline threshold (a) absent further resource additions, and (b) assuming the proposed demand and supply side resources are approved and deliver the expected capacity benefits.

CA-IR-273

Ref: HECO T-1, at 11.

What is the Company's current expectation regarding whether and when the "40 MW or more of additional firm capacity ... can be implemented."

- a. Please describe the likelihood and expected in-service dates of additional capacity from the "two amendments to HECO's power purchase agreement with Kalaeloa Partners, L.P."

- b. Please provide a schedule that shows the expected in-service dates and quantities for the “additional firm capacity” (as that term is used in line 9) derived from “load reduction measures.”

CA-IR-274

Ref: HECO T-1, at 11.

HECO states that its ability to defer construction of a new generation resource will depend on whether other new demand and supply side projects are approved and completed.

- a. Please state whether the deferral of the new generation unit also depends on the continued operation of all existing generating units at their existing capacities through the end of the decade.
- b. Please indicate whether the Company is aware of any specific plans or proposals from within the Company, or from government leaders, to retire certain generating units prior to 2009.
- c. Please indicate whether the Company is aware of any specific plans or proposals from within the Company, or government leaders, to de-rate certain generating units (e.g., to improve environmental conditions) prior to 2009.

- d. Please provide copies of all documents that describe the retirement or de-rating proposals.

CA-IR-275

Ref: HECO T-1, at 11.

Regarding the list of factors that might affect the need for the next central station generating unit, please provide a projection, for each year through 2009, of:

- a. the expected load reduction benefits (MWs) from “already-installed” load management and energy efficiency DSM programs;
- b. the expected load reduction benefits (MWs) from “yet-to-be-installed” load management and energy efficiency DSM programs;
- c. the expected capacity benefits (MWs) from distributed generation;
- d. the expected capacity benefits (MWs) from renewable generation installed pursuant to Act 95 (or otherwise, see HECO T-1, at 14, lines 20-21);
- e. the capacity additions (MWs) that are expected to result from generating unit additions;
- f. the capacity additions (MWs) that are expected to result from generating unit upgrades;

- g. the "40 MW or more of additional firm capacity" that is expected to be provided through load reduction measures;
- h. the expected level of capacity reductions (MWs) attributable to generating unit retirements;
- i. the expected level of the capacity reductions (MWs) attributable to generating unit de-ratings; and
- j. the effects on need (i.e., in MWs) as may result from lower or higher availability rates for existing generating units (see HECO T-1, at 13, lines 7-9).

CA-IR-276

Ref: HECO T-1, at 11.

Regarding the discussion of CHP installations:

- a. Is increasing the quantity of CHP on HECO's system one of the Company's resource procurement goals?
- b. If so, please specify the goal in terms of the amount of CHP that HECO wants to have installed on its system.
- c. Please identify the actual CHP on HECO's system (MW and MWH) for each year beginning from the year 2000 through 2004.

- d. What is the expected increase in CHP levels (MW and MWH) in each year during the period from 2005 through 2010?

CA-IR-277

Ref: HECO T-1, at 10-11.

Regarding the discussion of the Company's need for capacity, please:

- a. Please provide basic information regarding the annual capacity and energy requirements of HECO's system (i.e., before the resource additions proposed in the instant rate case). Please provide data and charts (in MWs and MWhs) that depict the following:
1. The current and projected peak load and energy requirements of the system.
 2. The current and projected contributions from existing supply-side resources.
 3. The current and projected contributions from existing demand-side resources.
 4. The projected contributions from proposed new or uprated supply-side resources.
 5. The projected contributions from proposed new and expanded demand-side resources.

6. The projected resource (capacity and energy) needs.
 - b. Please provide a reasonable “high” need scenario, based on consideration of the factors outlined in the response to subpart (a) above.
 - c. Please provide a reasonable “low” need scenario, based on consideration of the factors outlined in the response to subpart (a), above.

CA-IR-278

Ref: HECO T-1, at 10-11.

Regarding the discussion of the Company’s need for capacity, please:

- a. provide a current projection, for each year through 2009, of the need for additional capacity resources (in MWs);
- b. identify the date on which that projection was developed; and
- c. provide a copy of all workpapers, reports and other materials used to develop that projection.

CA-IR-279

Ref: HECO T-1, at 12.

Regarding the Question (line 24) discussing the Company’s resource needs if load grows faster than forecast, please:

- a. State whether the Company has performed any analyses of the contingencies (including higher or lower rates of load growth, etc.) that might affect its need for capacity resources.
- b. If yes:
 - 1. please provide copies of any such contingency analyses (i.e., that are not out-of-date, or otherwise in need of updating); and
 - 2. provide a copy of all workpapers, reports and other materials used to develop the contingency analyses provided in response to subpart (b) above.

CA-IR-280

Ref: HECO T-1, at 12.

Regarding the response to the question “What will be needed if load grows faster than forecast?” and other potential contingency scenarios:

- a. Is increasing resilience under sensitivity analysis one of the criteria used by the Company for resource procurement purposes?
- b. If so, please describe the criterion and explain how it is applied.

- c. Please identify the factors that might affect the cost of HECO's resource portfolio.
- d. Please describe the degree to which HECO's portfolio is currently hedged against adverse movement by the various factors described in the response to subpart (c) above.
- e. Does the Company have a risk mitigation strategy?
- f. If so, please describe it. For example, please identify any upper and lower bounds on hedging various risk factors that the Company would view as reasonable in 2005 and beyond.

CA-IR-281

- a. Is maintaining an appropriate mix of baseload, cycling and peaking generating capacity a goal of the Company's resource procurement process?
- b. Please identify the actual generation mix for each year beginning with the year 2000 through 2004.
- c. What is the projected generation mix in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- d. Please identify the target generation mix.

CA-IR-282

- a. Is fuel diversity one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.
- c. Please rate the diversity of the existing fuel supply mix.
- d. Please identify the trend. That is, to what degree is fuel flexibility becoming an increasing problem? By what measure?
- e. Please identify a fuel diversity target.

CA-IR-283

- a. Is improving system power quality one of the criteria used by HECO for resource procurement?
- b. Please describe the current state of the Company's system from the standpoint of power quality.
- c. Where are power quality problems likely to develop over the period from 2005 through 2010?
- d. What is HECO's target for system power quality over the period 2005 through 2010?

CA-IR-284

- a. Are there specific locations on the Company's system where service is, or is likely to become, sub-par in terms of power quality?

- b. If so, where are those locations and what is the nature of the problem?
- c. Please identify the measures by which the Company assesses local power quality.
- d. Please identify the actual performance levels for each year beginning the year 2000 through 2004.
- e. What is the projected change in power quality over the period 2005 through 2010?
- f. Please identify the target level of power quality.

CA-IR-285

Ref: HECO T-1, at 15.

Regarding the statement that the Company “works with customers and with leaders in federal, state, and county governments ... to plan and develop projects ... in a way that recognizes strong environmental ... values,” please specify the Company’s environmental goals and targets and compare the targets with federal and state standards.

CA-IR-286

- a. Is limiting the use of potable water a goal of the Company resource procurement process? Explain why or why not.

- b. Please identify the actual potable water consumption for the HECO system for each year beginning from the year 2000 through 2004.
- c. What are the projected potable water consumption levels in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- d. Please identify the target for potable water consumption.

CA-IR-287

- a. Is limiting impacts on the marine environment one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.

CA-IR-288

- a. Is limiting impacts on the terrestrial environment one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.
- c. Please provide any data or other measures that would provide a context within which to assess this criterion.

d. Please indicate how new transmission construction is assessed relative to this criterion. How are the terrestrial impacts of a transmission line evaluated relative to those of a generating facility?

CA-IR-289

- a. Is limiting CO₂ emissions to the atmosphere one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.
- c. Please identify the actual CO₂ emissions for the HECO system for each year 2000 through 2004.
- d. What are the projected CO₂ emissions levels in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- e. Please identify the CO₂ emissions target.

CA-IR-290

- a. Is limiting VOC emissions to the atmosphere one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.
- c. Please identify the actual VOC emissions for the HECO system for each year 2000 through 2004.

- d. What are the projected VOC emissions levels in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- e. Please identify the target for VOC emissions.

CA-IR-291

- a. Is limiting CO emissions to the atmosphere one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.
- c. Please identify the actual CO emissions for the HECO system for each year 2000 through 2004.
- d. What are the projected CO emissions levels in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- e. Please identify the target for CO emissions.

CA-IR-292

- a. Is limiting PM10 emissions to the atmosphere one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.

- c. Please identify the actual PM10 emissions for the HECO system for each year 2000 through 2005.
- d. What are the projected PM10 emissions levels in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- e. Please identify the target for PM10 emissions.

CA-IR-293

- a. Is limiting NOx emissions to the atmosphere one of the criteria used by HECO for resource procurement?
- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.
- c. Please identify the actual NOx emissions for the HECO system for each year 2000 through 2005.
- d. What are the projected NOx emissions levels in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- e. Please identify the target for NOx emissions.

CA-IR-294

- a. Is limiting SO2 emissions to the atmosphere one of the criteria used by HECO for resource procurement?

- b. If so, please specify the criterion and explain how it is applied in determining which resources to procure.
- c. Please identify the actual SO2 emissions for the HECO system for each year 2000 through 2005.
- d. What are the projected SO2 emissions levels in each year during the period 2005 through 2010 with and without the resource additions proposed in the instant rate case?
- e. Please identify the target for SO2 emissions.

CA-IR-295

- a. Please describe HECO's plans relative to the recent legislation addressing a renewables portfolio standard for Hawaii.
- b. Please indicate whether and how these plans affected decisions regarding the resources to be included for cost recovery in the instant rate case.

Witness T-6 Mr. A. Fujinaka.

CA-IR-296

Ref: HECO Response to CA-IR-16; Production Department Outside Services-General, EE=501 Projected Test Year Expenses.

For each of the following Honolulu Power Plant Maintenance RA=PIN Activities, test year projected Outside Services costs appear to be excessive relative to historical actual

expenditure levels in the years 1999 through 2004. Please explain why the Company's projections should be viewed as reasonable under these circumstances and state specifically how rate case inclusion of a lower (than HECO's proposed) "normalized" or average historical level of expenditures would adversely impact generation availability, efficiency or safety if test period proposed expenditures were adjusted:

- a) 265 Structures Corrective \$226,800
- b) 270 FO Plant Sys-Pred \$285,000
- c) 260 Electric Eq-Prev \$ 80,000
- d) 262 Electric Eq-Corr \$256,000

CA-IR-297

Ref: HECO Response to CA-IR-2, HECO T-6, Pages 17-21, Production Department Outside Services.

For the Honolulu Power Plant, please provide a history of the Company's performance of the following activities (that are included in the test year expense forecast) for each year from 1999 through 2004, explaining why the projected activities and costs are reasonable in light of historical work requirements and the expected frequency of future performance of such work after 2005:

- a. Iwilei HPP FO Pipeline Pigging \$160,000;
- b. Budget Recycle \$ 80,000;
- c. Can't Locate Support \$ 45,000;

- d. Building Repairs \$ 60,000;
- e. Deck Plating Repairs \$ 50,000;
- f. Circ Water Pump Rpr \$ 80,000;
- g. Burner Tip Replacement \$150,000;
- h. H09 Boiler Chem Cln add \$400,000; and
- i. Asbestos Removal \$ 50,000.

CA-IR-298

Ref: HECO Response to CA-IR-16, Production Department Projected Labor Hours.

Each of the Production Department RA's spreadsheet file "Copy of Hours Extract.xls" when sorted and sub-totaled by RA, indicates that the projected Test Year 2005 labor hours significantly exceed historical actual labor hours incurred in the years 1999 through 2004. Please state with specificity what essential tasks associated with production operations or maintenance has not been done in the past, but will be commenced in 2005 within each RA to require the projected increase in total labor hours:

- a. PIB Test Year proposed labor hours = 12,944 versus historical range from 2,720 to 8,200;
- b. PIH Test Year proposed labor hours = 45,649 versus historical range from 32,194 to 40,105;
- c. PIL Test Year proposed labor hours = 67,618 versus historical range from 46,493 to 50,397;

- d. PIN Test Year proposed labor hours = 15,801 versus historical range from 10,834 to 14,192;
- e. PIP Test Year proposed labor hours = 35,794 versus historical range from 5,932 to 25,306;
- f. PIT Test Year proposed labor hours = 120,284 versus historical range from 100,237 to 111,637;
- g. PIW Test Year proposed labor hours = 123,649 versus historical range from 96,054 to 105,999;
- h. PIX Test Year proposed labor hours = 64,666 versus historical range from 31,407 to 38,564.

Witness T-22 Ms. Seese.

CA-IR-299

Ref: HECO Response to CA-IR-100.

With regard to the 48% customer classification of distribution poles in the cost of service study, please respond to the following:

- a. Confirm that HECO's minimum installed size pole is 30 feet.
- b. Explain how the zero intercept study results on page 2 of the response to CA-IR-100 (negative \$318) were interpreted for use in the cost of service study.

- c. Describe how many customers per pole, or poles per customer, are required to establish service, relative to expanding the system to serve residential customers.
- d. Explain how residential customer density affects the number of poles required to provide service, with reference to multi-family high rise buildings versus single family homes.

CA-IR-300

Ref: HECO Response to CA-IR-100.

With regard to the 60% customer classification of distribution transformers in the cost of service study, please respond to the following:

- a. Confirm that HECO's minimum installed distribution transformer is 25 kVa.
- b. Explain how the zero intercept study results on pages 14, 22 and 38 of the response to CA-IR-100 were interpreted for use in the cost of service study.
- c. Describe how many customers are typically served per transformer, relative to the expansion of the distribution system to serve residential customers.
- d. Explain how residential customer density affects the number and types of transformers required to provide

service, with reference to multi-family high rise buildings versus single family homes.

- e. What is the demand serving capacity of a single 25 kVa transformer and how has any demand serving “credit” been provided to the residential class (in the demand allocation factor determination) after having customers pay for such transformers on a “customer” basis of allocation?

CA-IR-301

Ref: HECO Response to CA-IR-100.

With regard to the 42% customer classification of distribution conductors in its cost of service study, please respond to the following:

- a. Confirm that HECO’s minimum installed conductor is sized to serve 106 amps.
- b. Explain how the zero intercept study results on pages 3 and 4 of the response to CA-IR-100 were interpreted for use in the cost of service study.
- c. Describe how the minimum system conductor study results are translated into the values set forth in WP-2202 at page 147.
- d. Explain how residential customer density affects the amount of conductor required to provide service to

each customer, with reference to multi-family high rise buildings versus single family homes.

Witness T-2 Ms. C. Hazama.

CA-IR-302

Ref: Residential Use Model, Appendix H, Page 17 of the February 2004 voluminous workpapers.

The Consumer Advocate notes that the regression statistics indicate only two iterations to derive the regression results.

- a. Please provide the estimation options used by the software package (MetrixND) to determine HECO AR residential model such as the maximum number of iterations and the convergence criterion.
- b. Please provide a copy of the results of the residential use model with greater precision (i.e., that may produce more iterations to derive the regression equation).

CA-IR-303

Ref: Weather normalization, February 2004 voluminous forecast, Appendix P, page 41 to 47.

- a. In Appendix P, page 43, the cooling degree day (CDD) impact factor appears to be steadily increasing until 1998 after which the factor appears to level off or stabilize.

1. Please discuss the possible reasons for the slowdown in growth of the CDD impact factors in recent years.
 2. Please provide the data used for the weather normalization calculations on diskette.
- b. In determining its weather normalization methodology, did HECO rely on methods used by other studies? If so, please provide copies of the studies.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SEVENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SEVENTH SUBMISSION OF INFORMATION REQUESTS

The following information requests are directed to Alan Hee, HECO T-10.

- CA-IR-304
- a. Please provide specific reference to all testimony and briefs relating to the issues of lost revenues and utility incentives prepared by or for HECO within the last five years.
 - b. Please provide copies of any public statements relating to the issues of lost revenues and utility incentives prepared by or for HECO within the last five years.

CA-IR-305

Ref: HECO T-10, page 49.

HECO states that the Company would not require regulatory approval to increase the DSM budget if DSM program costs were rolled into base rates.

- a. Please confirm that the statement is based on the premise that inclusion of the DSM costs in base rates would put DSM expenditures on a par with, for example, distribution expenditures, which can be increased or decreased without Commission approval in response to changing system conditions.

- b. If the premise described in subpart (a) of this information request is not correct, please explain the basis for the statement made in the referenced testimony.

CA-IR-306

Ref: HECO T-10, page 54.

Mr. Hee claims that the shortfall of \$6,129,600 included in base rates is equal to the “annualized amount of fixed cost contribution to revenue loss from the implementation of DSM programs over a period of three program years.” HECO 1023, however, shows that the quantity \$6,129,600 is actually twice the annualized shortfall. If the Company is proposing to recover through base rates twice the annualized shortfall, please explain how this is approach consistent with the standard rate case practice given that this level of lost revenues will not be reached until 2007.

CA-IR-307

Ref: HECO T-10, page 56, lines 12-14.

- a. Did Mr. Hee intend to say that the annualized three-year shortfall is \$3,064,823?
- b. If not, please explain.

CA-IR-308

Ref. HECO T-10, page 57-58.

- a. Regarding the proposed reconciliation clause, please clarify whether base rates will be adjusted to reflect the actual cost

of DSM-related outside services that are incurred in 2005, if such cost is either less or greater than the estimated DSM-related costs included in the instant revenue requirement.

- b. If no, please explain why not?
- c. If yes, please explain the mechanism that will be used to adjust the base rates to “true up” the estimated DSM-related costs to actual.

CA-IR-309

Ref: HECO T-10, page 58.

Mr. Hee states that the reconciliation clause will have two components. Please explain how these two components will recover the costs of approved DSM programs not included in base rates. If possible, provide a numerical example.

CA-IR-310

Ref: HECO T-10, page 62.

- a. Will the proposed continuation of the Residential and C&I DSM adjustment components of the IRP Clause result in the double counting of some program costs and a higher effective return on program expenditures?
- b. If so, please provide an estimate of the increased cost to customers due to these effects. If not, please explain why not.

- c. If no, please explain why not and also include a discussion as to how the Commission and Consumer Advocate will be able to ascertain that HECO is not allowed to recover some program costs twice. In the explanation, cite specific criteria and/or mechanisms, etc. will be applied to ensure that double recovery does not inadvertently occur.

CA-IR-311

Ref: HECO 1021.

Please provide the rationale for assuming that the Energy Solutions for the Home Program will produce the same lost revenue per MWh saved as the Residential Efficient Water Heating Program.

The following information requests are directed to Gregory Wikler, HECO T-11.

CA-IR-312

Ref: HECO T-11, page 3, lines 3-4.

- a. Does provision 4) allow the Company to implement, without Commission approval, new measures not covered by the proposed new DSM programs described in Mr. Wikler's testimony?
- b. If so, please cite the authoritative source which allows the Company to implement new DSM programs that have not been approved by the Hawaii Public Utilities Commission.
- c. If not, please explain how HECO's proposed customer incentive budget flexibility provisions would allow the

Company to add new measures and establish corresponding incentive levels to address market opportunities.

CA-IR-313

Ref: HECO T-11, page 4.

What is the basis of the Company's free rider estimates in its estimates of demand and energy reductions? Provide the assumptions, calculations, and results for each DSM program that resulted in the estimate of free riders.

CA-IR-314

Ref: HECO 1102, Appendix E.

Please provide electronic spreadsheets, with all formula and cell references intact, for the benefit / cost calculations provided in this exhibit for each individual program included in the Company's DSM portfolio. Please provide copies of all workpapers containing the computations that support the numbers presented in this document, and specify all assumptions made in performing such calculations, including the fuel and capital cost projections used in each assessment and the dates such projections were prepared.

CA-IR-315

- a. For each of the cost-benefit tests referenced in the above information request pertaining to HECO 1102, Appendix E, state whether the following costs are included or excluded:
 - (i) utility incentives excluding lost revenues;
 - (ii) lost

revenues; (iii) customer service costs excluding customer incentives; (iv) customer incentives; and (v) utility administrative and overhead costs including M&E costs.

- b. If not provided in the electronic spreadsheets, please provide an estimate of each of these costs for each program analyzed.
- c. Please also state whether the level of customer incentives used in each test is reflective of current or future incentive levels.

CA-IR-316

Ref: HECO T-11, page 12, lines 5-14.

Is the Company's proposal to recover through base rates evaluation costs incurred outside of the test year consistent with Commission base rate case practice? Please discuss.

CA-IR-317

Ref: HECO T-11, page 33.

Regarding the statement that HECO will pay the demand incentive for any customer demand reduction, please describe how such demand incentive payments are to be calculated, and how HECO will ensure that such incentive will be cost effective.

CA-IR-318

Ref: HECO T-11, page 81.

At line 20, Mr. Wikler states the 2005 estimate for the cost of the residential direct load control program is \$2,880,959. HECO 1004, however, shows a cost of \$2,042,000 for residential direct load control. Please explain this discrepancy.

The following information requests are directed to Daniel Violette, HECO T-12.

CA-IR-319

Ref: HECO T-12, page 3.

Mr. Violette says that his testimony addresses the economic rationale underlying appropriate financial treatment of investments in DSM programs. If the term “investments in DSM programs” includes DSM expenditures that currently are booked to expense accounts, please explain why such expenses deserve a different ratemaking treatment than other HECO expenses (e.g., purchased energy).

CA-IR-320

Ref: HECO T-12, page 7, lines 10-11.

- a. Given HECO’s need to add new resources to meet strong load growth, why does Mr. Violette believe the Company must receive positive incentives beyond direct cost recovery of the Commission approved DSM programs to encourage implementation of cost-effective DSM programs?

- b. In other words, why would the opportunity to implement cost-effective DSM programs to fulfill basic service obligations not be sufficient encouragement?
- c. Is Mr. Violette saying that, absent DSM incentives, HECO likely will choose to make more costly and perhaps riskier supply-side investments?

CA-IR-321

Ref: HECO T-12 pages 13–15.

Please provide copies of each decision or resolution referenced on pages 13-15.

CA-IR-322

Ref: HECO T-12, page 20.

Please provide copies of the recent state commission decisions referenced at lines 12-13.

CA-IR-323

Ref: HECO T-12, page 28.

- a. Is Mr. Violette aware of any US gas or electric utilities that have received regulatory approval for the two-part incentive mechanism that he recommends in this proceeding?
- b. If so, please provide the names of the utilities and cite the related commission orders approving such mechanisms.

- c. Is Mr. Violette aware of any US gas or electric utilities that have been authorized to earn a return on DSM expenditures that are booked to expense accounts?
- d. If so, please provide the names of the utilities and cite the related commission orders approving such treatments.

CA-IR-324

Ref: HECO T-12, page 31, footnote 24.

Please provide a copy of the data obtained from the S&P Compustat data service, along with all workpapers used to develop the rate-of-return estimates shown in the table at page 32.

CA-IR-325

Ref: HECO T-12, page 32, line 13.

- a. In using the term “agreed-upon level of kWh savings,” did Mr. Violette envision some future discussion among interested parties where agreement would be reached on a target level of savings going forward? Explain.
- b. Does the term mean that the target has already been established?
- c. If the response to subpart (b) of this information request is yes, in what forum was the target established and who were the participants?
- d. If not, please explain.

CA-IR-326

Ref: HECO T-12, pages 34-35.

Please provide support for the statement that the financial community is opposed to, or unsupportive of the capitalization of DSM expenditures. Specifically, provide copies of all reports or studies that demonstrate that the financial community reacts unfavorably to this approach.

CA-IR-327

- a. Is Mr. Violette aware of any US gas or electric utility that capitalizes DSM expenditures and recovers both the amortization and return on investment through rates?
- b. If so, please provide the names of such utility and provide details regarding the program cost accounting.

CA-IR-328

- a. For each existing and proposed DSM program, please state whether the services are delivered by personnel employed directly by HECO or by third-party service companies working under contract to HECO.
- b. What portion of the test year program costs associated with each program relate to costs billed by third-party service providers?
- c. For programs delivered by third-party providers, please discuss in qualitative and quantitative terms the added value provided by HECO personnel.

CA-IR-329

Please explain how HECO balances the interests of participants and non-participants when deciding to increase the size of its DSM budgets. Regarding the decision to more than double the energy savings in 2005 compared to 2003, provide all analyses performed by or for HECO that demonstrate that the increase in rates charged to non-participants in 2005 and after as a result of the proposed expansion of the DSM programs will be reasonable.

CA-IR-330

Ref: HECO T-12, page 48, line 8.

Please identify and discuss the risks that utilities face when they implement DSM programs.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

EIGHTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

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2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

EIGHTH SUBMISSION OF INFORMATION REQUESTS

General Questions

- CA-IR-331 Please provide the following statistical data for each available month of 2005:
- a. Actual KWH sales by rate code.
 - b. Actual employee levels by RA.
 - c. Actual direct labor hours worked by RA.
 - d. Actual non-labor expenses by RA.

Witness T-3, Peter C. Young

CA-IR-332 **Ref: HECO WP-303, page 2.**

For each line item of Miscellaneous Revenues on page 2 of this workpaper, please provide the following information:

- a. Please identify the HPUC Decision, if any, that is associated with the underlying transactions (for example, the gain amortization amounts and rentals) as applicable and state the original amount, amortization period and beginning/termination date for such amortization.
- b. Provide a monthly breakdown of actual recorded miscellaneous revenues in each month of 2004, by sub-account and category/type of miscellaneous revenue,

- indicating how such recorded amounts compare with the amounts set forth in this Workpaper.
- c. State whether any recorded miscellaneous revenues on HECO's books in 2004 (see part b, above) were excluded in preparing the Company's test year projections and explain the basis for such exclusion.
 - d. State whether HECO has experienced any gains or losses from the disposition of property since the last general rate case and provide a description of the property transaction, as well as detailed calculations associated with the gain/loss that was realized.
 - e. If your response to part d is affirmative, please reference all HPUC applications and actions associated with the described transaction(s).

CA-IR-333

Ref: HECO-304 Residential Revenue at Proposed Rates.

HECO-304 at page 1 reflects negative \$116,500 revenue at proposed rates captioned as "Miscellaneous" that is attributed to Schedule E, Minimum Bill Adjustments, Apartment House Discount and Residential TOU (per footnote).

- a. Please provide a detailed breakdown of this amount by element, indicating which pages of HECO-WP-304 provide supporting calculations for each element.

- b. Explain why proposed rate changes have the effect of significantly reducing the negative value of these tariff elements.

Witness T-13 Mr. Ernest Shiraki

CA-IR-334 **Ref: HECO-1314 (Administrative Expenses Transferred).**

Please provide supporting documentation for the following items appearing on HECO-1314:

- a. Cost Pool-Labor of \$1,453,000.
- b. Cost Pool-Nonlabor of \$11,083,000.
- c. Cost Base-Capital Labor Hours of 452,000.
- d. Cost Base-Clearings to Capital of 210,000 hours.

CA-IR-335 **Ref: T-15, pages 43-44 & HECO-1315 (Employee Benefits Transferred).**

HECO-1315 provides the calculation of the 2005 test year forecast for employee benefits transferred (Account 926020), based on an employee benefit rate per hour. [Note: If the information requested below has been previously provided in response to CA-IR-2 or another interrogatory, please provide a pinpoint reference to the responsive data.] Please provide the following:

- a. Please provide the summary report supporting the total Company productive hours of 3,022,000 set forth on HECO-1315.

- b. Referring to item (a) above, please provide a breakdown of the productive hours between the following general categories: O&M expense accounts, capital accounts, affiliate billings, other non-expense accounts.
- c. In general terms, does the distribution of employee benefit costs follow the distribution of labor costs? Please explain and provide a copy of any supporting documentation.

Witness T-15 Ms. J. Price

CA-IR-336

Ref: T-15, page 4 & HECO-1502 (Pension Costs).

HECO-1502 provides a multi-year comparison of Administrative and General Expenses charged to Account 926. Please provide the following with regard to the qualified pension plan:

- a. Please identify and describe the impact of revisions to key assumptions, actual returns, plan amendments or other key factors causing the dramatic change in NPPC from a negative \$20.5 million in 2001 to positive levels in 2003 actual and 2005 forecast.
- b. Please explain and reconcile why the 2004 forecast is a negative NPPC amount in relation to positive amounts for the 2003 actual and 2005 forecast.

CA-IR-337

Ref: T-15, page 9 & HECO-1504 (Pension Costs).

HECO-1504 provides NPPC amounts by year since 1995. Please provide the following:

- a. Please update this schedule to reflect annual NPPC amounts for each year starting with the adoption of FAS87, including 2004 actual and any revised estimates for the 2005 test year forecast.
- b. For each year (e.g., 1987-2005) referenced in item (a) above, please provide the following information since adoption of FAS87:
 1. Discount rate.
 2. Expected return on plan assets.
 3. Actual return on plan assets.
 4. Actual pension fund contribution.
- c. Please explain and reconcile any variances between the cumulative NPPC provided in response to item (a) above and the prepaid pension asset balances set forth on HECO-1904.

CA-IR-338

Ref: T-15, pages 4-5 & HECO-1503 (Pension Costs).

Please provide the following information:

- a. Please provide a complete copy of the Watson Wyatt FAS87 actuarial study supporting the 2004 actual NPPC recorded

by HECO and the 2005 test year NPPC projection set forth on HECO-1503. [Note: HECO-WP-1550 appears to be a pension "contribution" study.]

- b. Referring to item (a) above, please confirm that the studies were based on January 1, 2003 employee demographics and assumptions. If this cannot be confirmed, please explain.
- c. Please provide complete copy of the 2004 Watson Wyatt FAS87 actuarial study (valuation as of January 1, 2004), including any reforecast of the 2005 projection. If the study is not yet available, please indicate when the study is expected to be completed and provide the requested information immediately upon receipt.

CA-IR-339

Ref: T-15, page 6 (Pension Contribution).

At lines 18-25, the referenced testimony generally describes the Company's pension funding practice, but observes that the actual contribution may differ from the \$4,349,000 forecast, referring to HECO's comprehensive income situation discussed by Mr. Von Gnechten in HECO T-21. Please provide the following:

- a. Please provide a pinpoint citation to the portion of HECO T-21 referenced by this passage.

- b. At what point in time would HECO determine whether to fund the \$4,349,000 forecast? Please explain.
- c. Referring to HECO-1503, the contribution range is \$0 to about \$46.8 million. If HECO were to conclude that the contribution amount should be less than the pension cost included in the 2005 test year forecast, please explain how HECO would propose that the unfunded pension cost be recognized in quantifying overall revenue requirement (i.e., operating expense and rate base).

CA-IR-340

Ref: T-15, page 12 & HECO-1506 (FAS106 OPEB Costs).

Please provide the following information:

- a. Please provide a complete copy of the Watson Wyatt actuarial study supporting the 2004 actual FAS106 costs recorded by HECO and the 2005 test year projection set forth on HECO-1506.
- b. Referring to item (a) above, please confirm that the studies were based on January 1, 2003 employee demographics and assumptions. If this cannot be confirmed, please explain.
- c. Please provide complete copy of the 2004 Watson Wyatt actuarial study, including any reforecast of the 2005

projection. If the study is not yet available, please provide the requested information immediately upon receipt.

CA-IR-341

Ref: T-15, pages 11-12 & HECO-1506 (FAS106 OPEB Costs).

The referenced testimony indicates, in part, that the HPUC allowed HECO to adopt FAS106 effective January 1, 1995 and that HECO funds the entire postretirement cost to tax advantaged funding vehicles, to the maximum extent possible. Please provide the following information

- a. Referring to HECO-1506, please provide a schedule showing comparable FAS106 cost data for each year since adoption in 1995.
- b. To the extent that the amount of annual FAS106 cost exceeds the amount contributed to tax advantaged funding vehicles, please explain how HECO has accounted for any difference (e.g., internal funding commingled with other corporate assets, external non-deductible fund, etc.) and provide a breakdown of the cumulative balance by year since adoption of FAS106.
- c. For each year (e.g., 1995-2005) referenced in item (a) above, please provide the following information since adoption of FAS106:
 1. Discount rate.

2. Expected return on plan assets.
3. Actual return on plan assets.
4. Actual contributions to tax advantaged funding vehicles.

CA-IR-342

Ref: T-15, pages 11-12 & HECO-1506 (FAS106 OPEB Costs).

Please confirm that HECO has not transferred any "excess" pension funds for purposes of paying retiree OPEB benefits via transfer provisions under IRC Section 401(h). If such transfers have occurred, please provide the amount thereof by calendar year since adoption of FAS106.

CA-IR-343

Ref: T-15, page 15 (FAS106 OPEB Costs).

At lines 11-20, the referenced testimony discusses reductions in postretirement benefit costs as a result of the 1998 and 2003 union negotiations, changes in plan provisions and changes in drug plan provisions. Please provide the following:

- a. Please provide an estimate of the impact of the identified changes.
- b. Does the FAS106 actuarial study consider the estimated impact of the new Medicare Reform Act (MRA) on retiree prescription drug costs?

1. If so, please provide an estimate of the impact on the 2005 test year forecast.
2. If not, please explain why the actuarial study does not consider the MRA and provide any estimates of the savings of such program provided to HECO.

CA-IR-344

Ref: T-15, page 16 (Long-Term Disability).

Please provide the following:

- a. Please explain why HECO changed from a partially self-insured basis for long-term disability to a fully insured basis.
- b. Referring to the decision referenced in item (a) above, did the Company prepare any cost/benefit studies in assessing the economics of the change?
 1. If so, please provide a copy of any such studies.
 2. If not, please explain why such studies were not undertaken.

CA-IR-345

Ref: T-15, page 17 & HECO-1507 (Long-Term Disability).

HECO-1507 provides the calculation of long-term disability for the forecast test year. [Note: If the information requested below has been previously provided in response to CA-IR-2 or another

interrogatory, please provide a pinpoint reference to the responsive data.] Please provide the following:

- a. Please explain and provide a copy of any documentation supporting the development of the bargaining unit and merit premium rates of \$0.42 and \$0.59, respectively.
- b. Referring to item (a) above, please provide the actual 2005 premium rates along with a copy of supporting documentation.
- c. Referring to Note 2 on HECO-1507, please provide documentation supporting the percentage allocation of bargaining unit and merit employees.
- d. Please provide a copy of the workpapers supporting \$161,418 of "claims" and explain how this amount was determined.

CA-IR-346

Ref: T-15, page 23 (Administration Costs).

The referenced testimony indicates that the \$400,700 estimate included in the test year was based on prior year costs. Please provide the historical data on which this estimate was based and provide a detailed breakdown of the various components or expense elements comprising this amount. [Note: If this information has previously been supplied in response to CA-IR-1 or CA-IR-2, please provide a pinpoint reference thereto.]

CA-IR-347

Ref: T-15, page 28 & HECO-1509 (Group Medical).

At line 18, the referenced testimony indicates that actual group medical rates for 2005 were established in October 2004. Please update HECO-1509 to reflect the actual 2005 rates.

CA-IR-348

Ref: T-15, page 27 & HECO-1510 (Medical Expense).

Please update HECO-1510 to reflect the following:

- a. Actual January 2005 employee participation by available plan.
- b. Actual 2005 premium rates.

CA-IR-349

Ref: T-15, page 29 & HECO-1511 (Group Dental).

At lines 14-17, the referenced testimony describes how the premium rates were determined for the 2005 test year. If the 2005 actual premium rates are available, please update HECO-1511 to reflect the actual 2005 rates.

CA-IR-350

Ref: T-15, page 30 & HECO-1512 (Group Vision).

At lines 4-13, the referenced testimony describes how the premium rates were determined for the 2005 test year. If the 2005 actual premium rates are available, please update HECO-1512 to reflect the actual 2005 rates.

CA-IR-351

Ref: T-15, pages 34-35 (Labor Market).

The referenced testimony describes the merit increases included in the 2005 test year forecast and generally discusses the labor markets in which HECO competes for employees. Please provide a copy of any studies, analyses or other documentation prepared by, or for, HECO that addresses the competitive labor market and how the Company's pay rates compare to comparable positions of those competitors.

CA-IR-352

Ref: T-15, page 36 (Human Resources Suite).

Please discuss the current status of HECO's plans to file an application for approval of this software project with the HPUC, including the anticipated filing date, if known.

Witness T-19 Ms. G. Ohashi

CA-IR-353

Ref: T-19, page 11 (Pension Asset).

At line 12, Ms. Ohashi states: "In theory, ratepayers provide the funds based on the NPPC and investors provide the funds contributed to the pension fund." Please provide the following:

- a. Please provide a copy of all documentation relied upon that supports this regulatory "theory," including any pinpoint citations to HPUC rules, Hawaii statutes, regulatory

decisions (other than the referenced HELCO and MECO decisions) or other authoritative literature.

- b. Please explain how ratepayers provide pension costs based on the NPPC, identifying and describing any cost recovery mechanisms or assumptions associated with this treatment.
- c. Please explain how investors provide the funds contributed to the pension fund, indicating how such amounts are collected from investors.

CA-IR-354

Ref: T-19, page 11 (Pension Asset).

At line 12, Ms. Ohashi states: "In theory, ratepayers provide the funds based on the NPPC and investors provide the funds contributed to the pension fund." Please provide the following:

- a. Does the Company believe that expenses that increase between rate proceedings (e.g., positive NPPC, storm damage costs, abandoned projects, outside services, etc.) are automatically recovered from ratepayers as recorded by HECO? If so, please explain.
- b. Does the Company believe that act of recording negative NPPC results in those credits automatically being flowed through to the benefit of customers? If so, please explain.

CA-IR-355

Ref: T-19, page 11 (Pension Asset).

At line 15, Ms. Ohashi states: "Since the test year estimates forecast that the NPPC and fund contributions will result in a net asset, investors are providing the net amount." Please provide the following:

- a. Please provide the test year forecast estimates of NPPC and fund contributions on which this statement is based.
- b. Please provide the amount of NPPC included in the test year forecast in HECO's last rate proceeding.
- c. Please provide the amount of pension fund contributions forecast for the test year in HECO's last rate proceeding.

CA-IR-356

Ref: HECO-1904 (Pension Asset).

In a format comparable to HECO-1904, please provide the accumulated deferred income tax reserve balance HECO has included in rate base associated with the prepaid pension asset.

Witness T-22, Ms. Estrella Seese

CA-IR-357

Ref: Minimum Charge Tariff Provisions.

Please provide the following information regarding HECO tariff provisions within Schedules R and G that provide for minimum charges:

- a. Explain the origin of this tariff element, if known, and the purpose it is believed to serve today that is not served by the Customer Charge within the tariff.
- b. What specific pricing or efficiency goals are believed to be achieved by maintaining a Minimum Charge provision that charges customers for certain amounts of energy, whether such energy is used or not?
- c. To what extent are the Company's demand side management goals in conflict with tariff provisions that tend to encourage customers to use energy because of Minimum Charge tariff provisions that work like take or pay pricing?
- d. Provide the amount of kwh and revenues (present and proposed rates) that are billed under the Minimum Charge provisions of each rate having such provisions.
- e. State each reason why HECO or Ms. Seese believes the Minimum Charge tariff elements should not be eliminated from each of the Company's tariffs.

CA-IR-358

Ref: T-22, Page 19 Base Fuel Charge.

Please provide detailed calculations and references into supporting documentation associated with the Company's proposed 6.052 cents/KWH Base Fuel Charge.

CA-IR-359

Ref: T-22, Page 26 Schedule J Proposed Maximum Load.

Please provide the following information regarding the Company's proposal to define a maximum qualifying load for Schedule J:

- a. For the 208 customers that "will be grandfathered," describe whether they would generally pay higher or lower prices for service if they migrated to large power rates PS, PP or PT.
- b. State whether any migration has been modeled or assumed in pricing out revenues at present and/or proposed rates in the Company's filing.
- c. Provide calculations and references into (or copies of) supporting documentation associated with your response to part (b).
- d. Explain HECO's procedures for working with customers to optimize their tariff selection, including descriptions of the frequency of customer contacts that are made, information that is provided to customers and policies that are followed with respect to customer migrations among rates.

CA-IR-360

Ref: T-22, Page 20 Schedule E Employee Service.

Please provide the following information regarding the Company's employee discount for electric service:

- a. Explain the origin of this tariff, if known, and the purpose it is believed to serve today that is not served by other offered employee benefit programs.
- b. To what extent are the Company's demand side management goals in conflict with tariff provisions that tend to distort the pricing cues associated with energy usage?
- c. Why is it thought reasonable to increase the value of this employee benefit by over nine percent (the approximate proposed residential rate increase), rather than limiting the benefit to a fixed monthly credit amount on employee bills?
- d. Please explain why the Company has included \$57,100 of employee discount negative revenue for rate Schedule G (embedded in HECO 304, page 2, proposed rates "Miscellaneous", according to the "assumptions" tab of file "HECO_RateG_Draft_proposed_final_110704efile.xls").
- e. Provide the number of employee "commercial" customers being served under General Service Schedule G and explain the circumstances of all such service.
- f. Is the Company aware of any other electric utility that provides discounted electric service as an employee benefit?
- g. If your response to part f is affirmative, please identify each other utility's employee discount program and provide available detailed information regarding same.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

NINTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

NINTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-361

Ref: HECO Rule No. 16, Interruption of Service.

According to the Rule, the Company is to provide semiannual notification of the customers' right to file compensation claims associated with any interruption of service and any such customer claims must be filed within 30 days of the interruption to be valid. Please provide a statement of all submitted customer claims pursuant to this Rule since January 1, 2000 and explain the resolution of each such claim, indicating any charges by NARUC account that were incurred by the Company.

Witness T-3, Peter C. Young

CA-IR-362

Ref: HECO-305, AES Capacity Rate Adjustment.

Please explain and reconcile why the calculated rate adjustment on this Schedule is -0.401%, when the actual tariff provision at HECO-105, page 5, actually specifies a "Rate Adjustment of 0.406%."

CA-IR-363

Ref: HECO-WP-304, page 8 and page 15 Time of Use Revenue.

Regarding the accounting in Company workpapers for time of TOU-R and TOU-C revenue impacts, please provide the following information:

- a. Please explain the assumptions and analyses employed to estimate the number of customers that could benefit from TOU rates and the revenue effect of such participation.
- b. Provide a monthly breakdown for all available months of 2003 and 2004 of the actual number of TOU-R and TOU-C participants and the experienced actual revenue impacts of such participation.
- c. Provide complete copies of all studies performed (or references if filed with the PUC) to evaluate the performance of HECO's TOU pilot programs.
- d. State whether HECO has assumed that all customers who might benefit from TOU rates will, in fact, participate in the formulation of the adjustments shown at pages 8 and 15 of HECO-WP-304, and explain the basis for such assumption.

CA-IR-364

Ref: HECO-WP-304.

Please confirm that 2003 billing information was extracted from automated systems for purposes of preparing this workpaper and provide copies of the "recorded" supporting billing unit data

documentation (MWH, KW demand, Bills, etc.) for each rate schedule that was used to distribute projected MWH sales volumes among rate blocks throughout the referenced workpaper.

Witness T-22, Ms. Estrella Seese

CA-IR-365

Ref: T-22, page 23, Unmetered Schedule G Service.

Please provide the following information regarding HECO's proposal to offer unmetered Schedule G Service:

- a. Summarize the number of accounts/meters that are expected to be eligible for and to actually take unmetered service.
- b. Explain HECO's plan to notify customers of this service offering, negotiate unmetered service agreements, remove meters and the timeline for transition to such service.
- c. What, if any, customer bill impacts are expected to result from transitioning to unmetered service (please respond for representative types of anticipated loads)?
- d. Provide the incremental amount of bills, kwh and revenues (present and proposed rates) that are expected to result from the proposed implementation of unmetered service.
- e. Provide references to, or copies of, all analyses associated with your responses to parts (a) through (d), above.

CA-IR-366

Ref: HECO-2220, Schedule E Adjustments.

Please explain the basis for, and provide calculations supportive of, the employee discount adjustment taken to each of the following rates:

- a. Schedule J proposed revenues of \$184,900,
- b. Schedule H proposed revenues of \$5,500,
- c. Schedule PS proposed revenues of \$68,000,
- d. Schedule PP proposed revenues of \$150,000,
- e. Schedule PT proposed revenues of \$9,000, and
- f. Schedule F proposed revenues of \$5,400.

CA-IR-367

Ref: HECO-2218, Schedule R Apartment House Discount.

Please provide the following information regarding the Company's tariff provision for a 10 percent bill credit (up to \$5.00 per month per apartment) for apartment owners willing to accept the three listed terms and conditions:

- a. Explain when this tariff provision was initiated and provide copies of, or reference to associated testimony and exhibits.
- b. State whether the discount terms are thought to be cost-based or economically justified.
- c. Provide complete copies of all studies and other documentation associated with your response to part (b) of this information request.

CA-IR-368

Ref: HECO-2220, HECO-2222, HECO-2223 and HECO-2224, Power Factor Adjustment

Please provide the following information regarding the Company's tariff provision for a 0.1 percent demand and energy charge adjustment for each full one percentage departure from an 85 percent power factor:

- a. Explain when this tariff provision was initiated and provide copies of, or reference to associated testimony and exhibits.
- b. State whether the discount terms are thought to be cost-based or economically justified.
- c. Provide complete copies of all studies and other documentation associated with your response to part (b) of this information request.

CA-IR-369

Ref: T-22, page 27, HECO-2220 and HECO-2222, Network Adjustment.

Please provide the following information regarding the Company's new tariff provision adding a 0.9 percent demand and energy charge increase for customers served on the downtown underground network:

- a. Explain why this tariff provision is needed now and describe any changes in operations or facilities associated with the change.

- b. State whether the proposed pricing differential is thought to be cost-based or economically justified.
- c. Provide complete copies of all studies and other documentation associated with your response to part (b) of this information request.
- d. Define what is meant by “the inherent operating conditions in the downtown area supplied by the Company’s underground network system,” as referenced in HECO-106, page 12 (proposed tariff sheet 54B).
- e. Explain and quantify how customers are thought to benefit from the “multiple redundancy of the circuits” on the Iwilei Network, as noted in the testimony.

CA-IR-370

Ref: T-22, pages 25, 31, 33 and 36, Proposed Demand Charge Levels.

Please explain why the existing and proposed demand charges for Schedule J are so much lower than corresponding demand charge levels (existing and proposed) for Schedules PS, PP and PT. Provide copies of all studies and other documentation associated with your response.

Ref: T-22, pages 25, 31, 33 and 36, and HECO-2211; Proposed Demand Charge Levels

Please provide the following information regarding existing and proposed demand charge levels for Rate Schedules J, PS, PP and PT:

- a. Confirm and explain why none of the existing or proposed demand charge levels meet or exceed HECO's calculated Unit Marginal Cost values for "Demand Costs."
- b. Explain why the Schedule J existing and proposed demand charge levels fail to meet either the Unit Embedded Demand Costs or Unit Marginal Demand Costs.
- c. Explain the basis for maintaining declining block demand charge rates for Schedule PS, PP and PT customers.
- d. Provide complete copies of any studies or other documentation associated with your responses to parts (a) through (c) of this information request.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TENTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-372

Ref: Iolani Court Plaza.

By letter dated February 24, 2005, Mr. William Bonnet advised the Commission of certain transactions regarding the sale of leased fee interest in residential units. Please provide a summary of the overall status of Iolani Court Plaza transactions, reconciling the Total Net Gain on Sale realized by HECO overall to date into the amounts shown in HECO-1320 and HECO-WP-303 page 2 for the test period.

Witness T-3, Peter C. Young

CA-IR-373

Ref: HECO Responses to CA-IR-222 and CA-IR-230, page 3; HECO-WP-304, pages 69 and 135-138 Rider I billing determinants.

Please provide the following information for each Rider I customer:

- a. Actual 2003 billing determinants.
- b. Any adjustments to the part a actual information in deriving the "Billing Units" used in HECO-WP-304 calculations.
- c. Explanations and copies of documentation for each adjustment provided in your response to part b.

- d. State the contract period, any assumptions and provide calculations used to determine the billing kw in HECO-WP-304.
- e. Explain whether any adjustments were made in the CA-IR-222 Class Load Study to account for interruptible demands measured during 2003.

CA-IR-374

Ref: HECO WP-304, pages 126 through 143.

Regarding each of the following Schedule PP Rider customers, please provide a copy of the customer's service contract and the actual 2003 monthly detailed billing determinants, as well as explanations and calculations supporting the specific amounts used for test year billing determinants (if different from the 2003 actual values):

- a. Rider Mb PP4 (page 130).
- b. RiderMult PP2 (page 140).
- c. Rider CHP PP1 (page 141).
- d. Rider CHP PP2 (page 142).
- e. Rider CHP PP3 (page 143).

CA-IR-375

Ref: HECO-WP-304, pages 55 through 100.

For each of the following Schedule J Rider customers, please provide a copy of the customer's service contract and the actual

2003 monthly detailed billing determinants, as well as explanations and calculations supporting the specific amounts used for the test year billing determinants (if different from 2003 actual values):

- a. Rider Mb J1 (page 56).
- b. Rider Mb J2 (page 57).
- c. Rider Mb J8 (page 63).
- d. Rider Mb J11 (page 66).
- e. Rider Mb J12 (page 67).
- f. Rider Mb J13 (page 68).
- g. Rider T J7 (page 76).
- h. Rider T J8 (page 77).
- i. Rider T J16 (page 85.)
- j. Rider T J17 (page 86).
- k. Rider Mbl J1 (page 94.)
- l. Rider U J4 (page 98).
- m. Rider EDR J1 (page 99).
- n. Rider CHP J1 (page 100).

Witness T-22, Ms. Estrella Seese

CA-IR-376

Ref: HECO Response to CA-IR-228, Schedule H Service.

Please provide the following information regarding HECO's
Schedule H Service:

- a. Regarding the “very small size and continued decline in the number of Schedule H customers” (response part a(1)), please explain any problems that would be caused by grandfathering existing customers’ participation in the rate, but closing the rate to any new customers prospectively.
- b. Regarding the site inspections on the customers’ premises explained in response to part c, please provide an estimate of the annual Field Service Division labor hours expended to administer this end-use rate.
- c. Provide references to, or copies of, all analyses associated with your responses to parts a through d, above.

CA-IR-377

Ref: HECO’s Response to CA-IR-229 DSM Allocations and C-8 Allocation Factor.

Please provide the following information:

- a. The actual class allocation of test year DSM costs, if different from the percentage values set forth at the bottom of page 3 of the response.
- b. Copies of supporting documentation and calculations supportive of the response to part a, above, if different from page 3 of the response.
- c. A revised page 144 for HECO-WP-2202, supportive of the actual C8 allocation factors employed in the Company’s

embedded cost of service study (for example, 53.56% to R on the "HAFDATA" tab, cell C14 of the Excel model).

- d. Complete calculations and underlying data if any revisions to the customer service allocation factor C8 percentage values, have been identified as needed by the Company.

CA-IR-378

Ref: HECO Response to CA-IR-225 civil defense siren billing kWh.

Please provide a complete statement and copies of supporting documentation for any changes HECO intends to make to its proposed 730 hours per month billing kWh level, so as to allow the Consumer Advocate an opportunity to evaluate such revisions (if any).

CA-IR-379

Ref: HECO response to CA-IR-224, page 2.

Please explain the methodology employed and calculations used to determine the values in the "Variable O&M \$/MWH" column. Provide copies of all studies and other documentation associated with your response.

CA-IR-380

Ref: HECO response to CA-IR-220.

Please provide the following information regarding the classification of non-fuel production O&M costs:

- a. Explain the basis for HECO's "demand-related" classification of all such costs (part a), given the admission in part f that, "the Company has not made a determination of the percentage of recorded expenses in each NARUC Production O&M expense account other than fuel that is variable in relation to kWh generation, as opposed to being fixed cost...."
- b. Explain whether the Company views such a "determination" to be reasonable, in order to facilitate a more accurate classification of non-fuel production O&M expenses.
- c. Identify and provide copies of any authority relied upon by HECO for its "demand-related" classification of these costs in the absence of any study or other "determination" of cost causation.

Witness T-17, Lon Okada

CA-IR-381

Ref: HECO-2103 and HECO-WP-1702 regarding the Interest Deduction for Income Tax Calculation.

- a. Please confirm, or explain and quantify to the contrary if applicable, that there are no planned long-term debt issuances projected for calendar year 2005.
- b. Please confirm, or explain and quantify to the contrary, if applicable, that there were no additional long-term debt issuances during calendar year 2004 that were not

forecasted or predicted when developing the "Net Proceeds" amount shown on HECO-2103.

- c. Please confirm, or explain and illustrate to the contrary as applicable, that the "Annual Amortization" amount (consisting of Issuance and Redemption Costs, Investment Income Differential and Discount) shown in Column (D) on HECO-2103, are not reflected or considered in any amount or to any degree within the simplified top down federal and state cost of service income tax calculation developed on HECO-1702.
- d. If not confirmed, please state and show specifically where such amortization amount has been considered in the development of federal/state cost-of-service taxable income.
- e. With regard to each subcomponent of the "Annual Amortization" amount shown within Column (D) of HECO-2103 (i.e., Issuance and Redemption Costs, Investment Income Differential and Discount), please state when such amount is deductible for purposes of developing federal and state taxable income. To the extent any component is *never* deductible, please specifically and identify each appropriate amortization component as a *permanent* book/tax difference.

- f. Assuming 1) that it is confirmed in part (c) to this request that the Annual Amortization shown within Column (D) of HECO-2103 is not considered in the development of cost-of-service federal/state taxable income, and 2) that is confirmed in part (e) to this request that the Annual Amortization shown within Column (D) of HECO-2103 does not represent a *permanent* book/tax difference, please provide all reasons or rationale for the exclusion of such Annual Amortization amount from cost-of-service federal/state taxable income.

CA-IR-382

Ref: Response to CA-IR-91 providing *permanent* book/tax differences for calendar year 2004.

Please provide the following regarding the permanent book/tax difference entitled "Keyman Insurance:"

- a. A complete descriptive explanation of this insurance, including purpose, insurable interest (if applicable), beneficiaries, and initial date of purchase.
- b. A complete description of the income statement and balance sheet impact of such transaction (i.e., NARUC income statement accounts charged/credited and any balance sheet accounting related to this program).

- c. A description of the cost incurrence by, or assignment/allocation of costs between, parent/subsidiaries/affiliates.
- d. Comparable 2005 estimate of such permanent difference by parent and subsidiaries. If no difference is forecasted for 2005, please explain why not.
- e. Total HECO above-the-line cost of service impact of this transaction in the 2005 test year, if applicable. If there is no impact please explain how this can occur.

CA-IR-383

Ref: Response to CA-IR-91 providing permanent book/tax differences for calendar year 2004.

Please provide the following regarding the permanent book/tax difference entitled "Flex Dividend Deduction:"

- a. A complete descriptive explanation of this permanent difference.
- b. A complete description of the income statement and balance sheet impact of such transaction (i.e., NARUC income statement accounts charged/credited and any balance sheet accounting related to this program).
- c. Describe why this is considered an "HEI" or "non-utility" transaction.
- d. Comparable 2005 estimate of such permanent difference. If no difference is forecasted for 2005, please explain why not.

- e. Total HECO above-the-line cost of service impact of this transaction in the 2005 test year, if applicable, or alternatively, confirmation that there is no above-the-line cost of service impact from this transaction included within the 2005 test year.

CA-IR-384

Ref: Response to CA-IR-91 providing permanent book/tax differences for calendar year 2004.

Please provide the following regarding the permanent book/tax difference entitled "Nonqualified Stock Option Exercise:"

- a. A complete descriptive explanation of this permanent difference.
- b. A complete description of the income statement and balance sheet impact of such transaction (i.e., NARUC income statement accounts charged/credited and any balance sheet accounting related to this program).
- c. Describe why this is considered an "HEI" or "non-utility" transaction.
- d. Comparable 2005 estimate of such permanent difference. If no difference is forecasted for 2005, please explain why not.
- e. Total HECO above-the-line cost of service impact of this transaction in the 2005 test year, if applicable, or alternatively, confirmation that there is no above-the-line cost

of service impact from this transaction included within the 2005 test year.

CA-IR-385

Ref: Response to CA-IR-91 providing permanent book/tax differences for calendar year 2004.

Please provide the following regarding the permanent book/tax difference entitled "Preferred Dividends:"

- a. A complete descriptive explanation of this permanent difference.
- b. A complete description of the income statement and balance sheet impact of such transaction (i.e., NARUC income statement accounts charged/credited and any balance sheet accounting related to this program).
- c. Describe why this is considered an "HEI" or "non-utility" transaction. If this difference is related to a preferred stock financing, please state the terms of the security issued (i.e., maturity, call options, coupon rate, discount/premium, etc.), and also please state what asset(s) such issuance is assumed to finance and why.
- d. Comparable 2005 estimate of such permanent difference. If no difference is forecasted for 2005, please explain why not.
- e. Total HECO above-the-line cost of service impact of this transaction in the 2005 test year, if applicable, or alternatively, confirmation that there is no above-the-line cost

of service impact from this transaction included within the 2005 test year.

CA-IR-386

Ref: Response to CA-IR-91 providing permanent book/tax differences for calendar year 2004.

Please provide the following regarding the permanent book/tax difference entitled "Real Estate Partnership Leveraged Lease Book NI:"

- a. A complete descriptive explanation of this permanent difference.
- b. A complete description of the income statement and balance sheet impact of such transaction (i.e., NARUC income statement accounts charged/credited and any balance sheet accounting related to this program).
- c. Describe why this is an "HEI" or "non-utility" transaction.
- d. Comparable 2005 estimate of such permanent difference. If no difference is forecasted for 2005, please explain why not.
- e. Total HECO above-the-line cost of service impact of this transaction in the 2005 test year, if applicable, or alternatively, confirmation that there is no above-the-line cost of service impact from this transaction included within the 2005 test year.

CA-IR-387

Ref: Response to CA-IR-91 providing permanent book/tax differences for calendar year 2004.

Please provide the following regarding the permanent book/tax difference entitled "Franchise Tax Payment:"

- a. A complete descriptive explanation of this permanent difference.
- b. A complete description of the income statement and balance sheet impact of such transaction (i.e., NARUC income statement accounts charged/credited and any balance sheet accounting related to this program).
- c. Describe why this is an "HEI" or "non-utility" transaction.
- d. Comparable 2005 estimate of such permanent difference. If no difference is forecasted for 2005, please explain why not.
- e. Total HECO above-the-line cost of service impact of this transaction in the 2005 test year, if applicable, or alternatively, confirmation that there is no above-the-line cost of service impact from this transaction included within the 2005 test year.

CA-IR-388

Ref: Response to CA-IR-91 providing permanent book/tax differences for calendar year 2004.

Please provide the following regarding the *federal* permanent book/tax difference entitled "Research Tax Credit - 2003:"

- a. A complete descriptive explanation of this permanent difference.
- b. A complete description of the income statement and balance sheet impact of such transaction (i.e., NARUC income statement accounts charged/credited and any balance sheet accounting related to this program).
- c. Comparable 2005 estimate of such permanent difference. If no difference is forecasted for 2005, please explain why not.
- d. Total HECO above-the-line cost of service impact of this transaction in the 2005 test year, if applicable, or alternatively, confirmation that there is no above-the-line cost of service impact from this transaction included within the 2005 test year.

CA-IR-389

Ref: HECO-WP-1705 (Federal and State Accumulated Deferred Income Tax Schedule).

Please update HECO-WP-1705a and HECO-WP-1705b for *actual* 2004-ending federal and state accumulated deferred income tax balances and most-recently-revised end-of-2005 estimated federal and state accumulated deferred income tax balances.

Witness T-18, Lorie Nagata.

CA-IR-390

Ref: CIP Docket No. 04-0278 Ford Island Substation.

Please provide the following regarding the Ford Island Substation Project:

- a. Were the long-lead-time materials noted at page 15 of the application ordered in January 2005? If no, when were they/will they be ordered and how has this impacted the expected timing for completion of the project?
- b. Are there any penalty provisions in any contracts with the Navy/federal government for not completing the substation by December 2005 as now anticipated? If yes, please note and describe such penalty provisions.
- c. Describe, discuss and quantify the first loads anticipated to be served immediately following the completion of the Ford Island substation.
- d. Describe, discuss and quantify the expected/anticipated annual increases in load anticipated to be served in the subsequent annual periods following the completion of the Ford Island substation.

Ref: HECO-WP-1801 2004 Plant Additions.

The following Project Nos. show significant construction expenditures beyond 2004 even though the Company projected to have plant closings for these noted projects by the end of 2004.

- P0000562 Mokuone 46-12KV Line Ext
- P000143 Salt Lake Blvd Widening Ph2
- P0000423 Kailua Rd UG Conversion
- P0000530 Ka Iwi 12kV UG, Ph 1 Inc 2
- P0000575 Nimitz Hwy Rehab-UA # 1691
- P0000597 Diamond Head Rd OH/UG Imp

Please provide the following regarding the above-noted Project Nos.:

- a. Confirm, or explain and quantify to the contrary if applicable, that all amounts included in the column entitled "Project to Date Recorded 12/31/03" were recorded as Construction Work in Progress as of 12/31/03 and were **not** included in Plant in Service as of that date.
- b. The actual construction costs closed to plant in service at December 2004.
- c. For each project, narratively describe how elements of the projects -- though not the totality of the projects -- are deemed to be in service, and the criteria for determining in service status for individual components/phases.

Ref: HECO-WP-1801 2005 Plant Additions.

The following Project Nos. show significant construction expenditures beyond 2005 even though the Company projected to have plant closings for these noted projects by the end of 2005.

- P0000834 46 kV Fdrs to Mamala Sub
- P0000836 Ford Island Substation
- P0000838 46 kV Fdrs to FI Sub
- P0000951 Ocean Pointe 46 kV Lines
- P0000829 W4 Main Xfmr Replacement

Please provide the following regarding the above-noted Project Nos.:

- a. Confirm, or explain and quantify to the contrary if applicable, that all amounts included in the column entitled "Project to Date Recorded 12/31/03" were recorded as Construction Work in Progress as of 12/31/03 and were **not** included in Plant in Service.
- b. Actual construction costs closed to plant in service at December 2004, if applicable.
- c. For each project, narratively describe how elements of the projects – though not the totality of the projects – are deemed to be in service, and the criteria for determining in service status for individual components/phases.

CA-IR-393

Ref: HECO-1800 and HECO-WP-1801 Quantification of Projected Plant Additions.

In an interview held with Lorie Nagata and other HECO representatives on February 8, 2005, the various representatives discussed how the Company undertook a "construction expenditures update" approximately on a quarterly basis with the next "update" anticipated to begin around April 1. Please provide the results of the update and the expected impact by program and project costs as now summarized on HECO-1800 and HECO WP-1801, as soon as such exercise has been completed.

Witness T-21, R.A.Von Ghnechten.

CA-IR-394

Ref: HECO-WP-2103, page 2, regarding Series 2002A Special Purpose Revenue Bonds.

Please provide a complete description of the intended uses/purpose of such bonds and complete description of the accounting for such transactions, including without limitation the following:

- a. Specific delineation of purposes for which such bond proceeds may be used and/or a delineation of purposes for which the bond proceeds cannot be used.
- b. Investments made by trust with undrawn construction funds.

- c. Actual amounts of undrawn construction funds invested, as well as actual earnings on such undrawn construction funds, in each month since issuance of the bonds.
- d. Accounting for the Investment Income Differential on the undrawn balance of bond proceeds invested in temporary investments. Specifically state/describe/quantify to which accounts such Differential is initially charged and what event occurs or what time intervals pass before amortization of specific amounts begin.
- e. To the extent not explained in response to previous subparts of this request, state how and to what extent the drawn and undrawn balances of the bond proceeds were considered in the development of the AFUDC rate applied to construction projects in each year since issuance of the bonds.
- f. State, quantify and describe the extent to which AFUDC accounting may differ for construction projects ultimately deemed to be financed by the Special Purpose Revenue bond proceeds versus all other projects not eligible for Special Purpose Revenue Bond financing.
- g. Describe and explain, if applicable, how the accounting for the Series 2002A Special Purpose Revenue Bonds may have differed from policies and procedures employed for other series of Special Purpose Revenue Bonds.

The following Information Requests are directed to HECO's Accomplishments and Surcharge Report, April 30, 2004:

CA-IR-395

Ref: Page 3.

Describe how KW impacts are adjusted for their coincidence with HECO's peak. Provide all assumptions and calculations.

CA-IR-396

Ref: Page 3.

Describe how kwh impacts are adjusted for system losses. Provide all assumptions and calculations, and explain in detail how losses are measured.

CA-IR-397

Ref: Page 4.

Why do net-to-gross ratios, which used to adjust for system losses, range from 60% to 89%, while HECO's 2003 FERC Form 1 (page 401a) shows a system-wide net-to-gross ratio of 95%?

CA-IR-398

Ref: Page 7.

- a. Why are evaluation costs subtracted from the UC test when calculating shareholder incentives?
- b. Were evaluation costs included in the original benefit / cost analyses that determined that the programs were economic?
Explain why or why not.

CA-IR-399

Ref: Page 7.

Please explain why the TRC test can be problematic when testing an on-going program.

CA-IR-400

Ref: Page 8.

Does HECO have a position on whether or not DSM programs should also pass the RIM test? Please explain.

CA-IR-401

Ref: Page 12.

Please provide the electronic files supporting the results of the 2001 M&E Report referenced, with all formula and cell references intact. Also provide the electronic files for the 2002 M&E Report results. If HECO has this report itself in electronic media, please provide a copy of that file.

CA-IR-402

Ref: Page 12.

Please provide the electronic files supporting the results of the Impact Evaluation Reports referenced with all formula and cell references intact. If HECO has this report itself in electronic media, please provide a copy of that file.

CA-IR-403

Ref: page 13.

Please provide a copy of the updated avoided costs. Also provide all assumptions, workpapers, calculations, spreadsheets, and computer model output uses in developing these costs.

CA-IR-404

Ref: page 21.

- a. Please provide details on each of the options listed in the last paragraph, including HECO efforts to identify additional CHP sites and increasing the output of HECO's existing units.
- b. Other than amendments 5 and 6 for the Kalaeloa PPA, are there any other options to increase output from IPPs?
- c. If so, please describe in detail each option and provide the amount of energy/capacity to be received from each option in terms of MW, the cost of each option, the timing of the option, etc.

CA-IR-405

Ref: Attachment A.

- a. How does HECO track the monthly quantity of individual measures installed (i.e., light fixtures, motors, etc.)?
- b. Are these quantities entered into DSMIS as installations are actually made? Explain why or why not.

- c. How frequently does HECO conduct field visits to verify that the measures installed in prior years are still in-service?

CA-IR-406

- a. How does HECO determine the kw savings from each measure?
- b. Are these calculated or metered?
- c. How frequently does HECO conduct field measurements of savings?

CA-IR-407

Ref: Attachment C.

Please explain the Arch Wireless invoices for the RNC program.

CA-IR-408

Ref: Attachment D, page 1.

- a. Please explain the tax benefit item, and provide any calculations.
- b. Who receives this tax benefit?

CA-IR-409

Ref: Attachment D, page 3.

Why are lost revenues valued in \$/kw, instead of \$/kwh?

CA-IR-410

Ref: Attachment D, pages 5 – 7.

- a. What are the bases for the decay rates for energy and capacity?

- b. Do these ever get adjusted for actual field verifications?
Explain why or why not.

CA-IR-411

Ref: Attachment D, page 4.

Explain the difference between the 2003 Resource cost for the CICR program of \$4,662,832 versus the \$7,233,132 figure shown on page 1.

CA-IR-412

Ref: Attachment D, pages 8 and 9.

- a. Please provide copies of the workpapers and electronic files containing the spreadsheets that perform the calculations for the entries, including NPV estimates. Leave all formula and cell references intact.
- b. Also explain how the program costs listed on page 1 translate or comport with the costs listed on page 8.

Witness T-2 Ms. C. Hazama

CA-IR-413

Ref: Response to CA-IR-264.

In order to clarify technical issues regarding the referenced response, the Consumer Advocate contacted Ms. Hazama. By email sent on March 10, 2005, Ms. Hazama provided the following clarification:

In response to your telephone request, the following is to clarify the response to CA-IR-264:

Question:

On pages 8 and 9 of CA-IR-264, the number of observations are both 26, even if page 9 includes the AR. Shouldn't the observations for page 9 be only 25?

Answer:

The MetrixND output is a little subtle about how this is reported. Both of the models use 1977 - 2002 data or 26 observations. The difference in the two models is seen in the degrees of freedom for error.

- On page 8, the DF are 23 (26 - constant - A/C - lagprice)
- On page 9, the DF are 22 (26 - constant - A/C - lagprice - AR)

Basically, the 1976 observation is dropped from the series because of the lag price, resulting in 26 observations for data.

- In the model on page 8, the model is fitted using the 1977-2002 dependent variables
- In the model on page 9, the model is fitted using the 1978 - 2002 dependent variables and 1977-2001 errors for the AR term.

The response provided by Ms. Hazama explains some of the subtleties of MetrixND. The Consumer Advocate notes that the regression results on pages 8 and 10 are identical. The only difference is on page 8, which indicates the Estimation Begin Date of 1976. HECO's clarification explains that the observation for 1976 is dropped so the both regressions start with 1977 data. Although the regression models on pages 8 and 10 appear identical, the addition of the AR(1) term to both models produces

entirely different results on pages 4 and 9. Based on the above, please respond to the following.

- a. Please explain the reasons for the differences between the regression results on pages 4 and 9 with only the addition of the AR factor for both.
- b. Please explain why the model on page 9 stops after only 2 iterations while the regression model on page 4 goes through 10 iterations.
- c. If the model on page 9 is fitted using the 1978 to 2002 data as noted above, with the 25 observations, shouldn't the degrees of freedom be equal to:
$$25 - \text{constant} - A/C - \text{lagprice} - AR$$

or $25 - 4$ which is equals 21?
- d. If not, please explain.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

ELEVENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

ELEVENTH SUBMISSION OF INFORMATION REQUESTS

Witness T-17, Lon Okada.

CA-IR-414

Ref: HECO-WP-1705a and 1705b.

Please provide the following for each "Rate Case Adjustment" except for "Account 28310 State ITC:"

- a. Provide a brief explanation as to the reason for excluding the ADIT balance from rate base determination.
- b. State whether there is a balance sheet account related to the accumulated deferred income tax balance being excluded from rate base determination. If a related balance sheet account exists, provide the account number, account description and projected beginning and end of 2005 balances, and state whether such related balance sheet amount has been included within the Company's proposed rate base determination.
- c. Identify, as applicable and appropriate, whether the timing difference is related to an above-the-line *or* below-the-line expense item. If related to an above-the-line expense item, provide the 2005 projected cost-of-service expense amount and the related 2005 projected tax deduction.

Witness T-18, Lorie Nagata.

CA-IR-415

Capital versus Expense Accounting for Production Facility Repairs.

Since HECO's last rate case (Docket No. 7766) please provide the following regarding every instance wherein the Company elected to capitalize the replacement of a minor item of property (i.e., less than a property unit) that would have been expensed pursuant to Utility Plant Instructions contained in the NARUC Uniform System of Accounts, but for the fact that the replacement purportedly resulted in a substantial betterment:

- a. Project number, project title and brief description of the repair and replacement.
- b. Date replacement was capitalized.
- c. Total cost capitalized.
- d. A detailed description of the "substantial betterment" achieved as a result of the replacement.
- e. CIP docket number in which addressed, if applicable.

CA-IR-416

Capital versus Expense Accounting for Production Facility Repairs.

Please provide the following regarding every instance wherein the Company has forecasted within the 2005 test year to capitalize the replacement of a minor item of property (i.e., less than a property unit) that would be expensed pursuant to Utility Plant Instructions

contained in the NARUC Uniform System of Accounts, but for the fact that the replacement purportedly will result in a substantial betterment:

- a. Project number, project title and brief description of the projected repair and replacement.
- b. Date of expected replacement.
- c. Total forecasted cost capitalized.
- d. A detailed description of the “substantial betterment” expected as a result of the replacement.
- e. CIP docket number in which addressed, if applicable.

Witness T-13, Mr. Ernest Shiraki.

CA-IR-417

Ref: HECO response to CA-IR-251 & HECO-1310 (HEI Billings).

HECO provided a copy of the Excel spreadsheet file supporting HECO-1310 in response to CA-IR-251(a). The spreadsheet file contains hard inputs for direct/ indirect labor hours and labor dollars. Further, the spreadsheet file does not contain any algorithms that apply the various allocation factors to total labor/ nonlabor dollars to derive HECO’s allocated share. Please provide the following:

- a. Does a version of the spreadsheet file exist that contains cell formulae showing the application of standard labor rates to labor hours in quantifying labor dollars? Please explain.

- b. Does a version of the spreadsheet file exist that applies the allocation factors to total indirect labor and non-labor costs to derive HECO's allocated share? Please explain.
- c. Referring to items (a) and (b) above, please provide additional linked spreadsheet files or a revised spreadsheet that shows all underlying calculations and algorithms.

CA-IR-418

Ref: HECO response to CA-IR-252 & HECO-1310 (HEI Billings).

- a. Does HECO plan on updating the HEI billings to HECO included in the 2005 test year forecast to reflect more current allocation factors?
- b. If not, why not?
- c. If so, please provide the revised amounts proposed for inclusion in the 2005 test year forecast, showing all calculations and workpapers.

CA-IR-419

Ref: HECO-1310 (HEI Billings).

- a. Does HECO plan on updating the HEI billings to HECO included more current estimates of HEI's 2005 test year forecast?
- b. If not, why not?

- c. If so, please provide the revised amounts proposed for inclusion in the 2005 test year forecast, showing all calculations and workpapers.

CA-IR-420

Ref: HECO response to CA-IR-252 & HECO-1310 (HEI Billings).

In response to CA-IR-252, the Company provided documentation supporting the development of the numerous allocation factors used to quantify the amount of HEI billings to HECO included in the 2005 test year forecast. The following questions point to specific pages of the response to CA-IR-252 and request additional information and/ or explanation:

- a. Pages 11, 16, 45 and 49. Please provide additional documentation showing the split of "HEI Diversified, Inc. and subsidiary" amounts between ASB and HEIDI, by income statement and balance sheet line item.
- b. Pages 12 and 46. As of year-end 2003 and 2004, the "Hycap Management, Inc." common equity balance declined from \$18.7 million to \$234,000. Please describe the business purpose of this entity and the apparent write-off of its equity investments in subsidiaries during 2004.
- c. Pages 16-20 and 49-51. For each entity, please provide a more detailed breakdown of the reported expenses for 2003 and 2004. If a more detailed income statement for each

entity is not readily available, please segregate the reported expenses between the following broad expense categories: fuel & purchased power; depreciation & amortization; labor; benefits; and other.

- d. Pages 27 and 57. It is unclear how Bishop Insurance of Hawaii is considered in the development of the HEI allocation factors. Please explain in general how Bishop Insurance was considered, specifically referring to the gross payroll data.
- e. Pages 16-20, 30, 49-51, and 60.
 - 1. Please explain why pages 30 and 60 only show month-end employees for HECO, HELCO, MECO, ASP, PECS and HEI Corporate when pages 16-20 and 49-51 present operating results for additional subsidiaries.
 - 2. If each of the subsidiaries reporting operating results in 2003 and/ or 2004 do not have employees, please explain how each entity's day-to-day work requirements are met (e.g., work performed by parent or affiliate employees whose labor/ benefit costs are allocated to subsidiary, work performed by outside contractor, etc.).

- f. Pages 7 and 44.
 - 1. Please explain the disproportionate attribution of “executives” to HECO in relation to HELCO, MECO and HEI.
 - 2. Does HECO directly assign or allocate a portion of its executive time to HELCO, MECO and/ or HEI? Please explain.
- g. Page 14. The notations showing the calculation of short term borrowings attribute negative short term debt (\$4.8 million) to HECO in 2003 that was then assigned to HELCO.
 - 1. Please explain how HECO can have negative short term debt.
 - 2. Please explain why HECO was assigned zero short term debt with the negative \$4.8 million assigned to HELCO.
- h. Pages 15, 19-20, 47 and 51. In 2003, the common equity and pre-tax income attributed to HECO included HECO Capital Trusts I and II. In 2004, these trusts do not appear, at least separately, in the summary financial statements.
 - 1. Please describe the business purpose of each of these trusts.

2. Why were these Trusts included in the HECO numbers for purposes of developing the 2003 allocation factors? Please explain.
 3. Were these Trusts included in HECO's financial reports for 2004, such that it was unnecessary to separately add them in? Please explain.
- i. Pages 13 and 18. In 2003, separate financial data is presented for Hawaiian Electric Industries Capital Trust I and subsidiary. Similar financial data is not show in 2004.
1. Please describe the business purpose of the Hawaiian Electric Industries Capital Trust I and subsidiary.
 2. Please explain why the Hawaiian Electric Industries Capital Trust I and subsidiary financial results were not considered in developing the 2003 allocation factors. If they where, please provide a pinpoint reference to such consideration.
 3. Why was financial data for Hawaiian Electric Industries Capital Trust I and subsidiary not provided for 2004? Please explain.
- j. Pages 3 and 4. The estimated common equity results for December 31, 2004 used by the Company in HECO-1310 are not supported by the workpapers provided in response to

CA-IR-252 (pages 3-7). In addition, these common equity amounts were hard inputs in Excel spreadsheet file provided by HECO ("CA-IR-2a TY allocation factors.xls").

1. Please explain how the 12/31/04 estimates were determined.
2. Please provide a copy of any supporting workpapers, as requested by CA-IR-252(a).

CA-IR-421

Ref: HECO responses to CA-IR-252, CA-IR-253 & HECO-1310 (HEI Billings).

In response to CA-IR-252, the Company provided documentation supporting the development of the numerous allocation factors used to quantify the amount of HEI billings to HECO included in the 2005 test year forecast. Item 7 of the response to CA-IR-253 described the Company's elimination of incentive compensation costs from the HEI charges to simplify issues in the rate case. The following questions point to specific pages of the response to CA-IR-252 and request additional information and/ or explanation:

- a. Pages 5, 21-29, 42, and 55-59. The development of the Gross Payroll allocation factor appears to include bonuses and incentive pay. Please explain why such pay was not excluded from the calculation of the Gross Payroll factors used for rate case purposes.

- b. Referring to item (a) above, please provide revised Gross Payroll allocation factors exclusive of bonus and incentive compensation.

CA-IR-422

Ref: HECO responses to CA-IR-6 & CA-IR-252 (HEI Billings).

Page 4 of the response to CA-IR-6 represents a corporate organizational chart for Hawaiian Electric Industries, Inc. Please identify each of the subsidiary operations listed below that have been excluded from the development of the allocation factors used to apportion shared HEI costs, as presented in the response to CA-IR-252, and provide a detailed explanation of the rationale for each property excluded therefrom:

- a. HEI Properties, Inc.
- b. HYCAP Management, Inc.
- c. HEI Diversified, Inc.
 - 1. American Savings Bank, FSB.
 - 2. Adcommunications, Inc.
 - 3. American Savings Investment Services Corp.
 - 4. Bishop Insurance Agency.
 - 5. ASB Realty Corporation.
- d. Hawaiian Electric Company, Inc.
 - 1. Hawaii Electric Light, Inc.
 - 2. Maui Electric Company, Ltd.

3. HECO Capital Trust III.
4. Renewable Hawaii, Inc.
- e. The Old Oahu Tug Service, Inc.
- f. HEI Power Corp.
 1. HEI Investments, Inc.
 2. HEI Power Corp. International.
 - (a) HIEPC China.
 - (b) United Power Pacific Co., Ltd.
- g. Pacific Energy Conservations Services, Inc.
- h. HEI Capital Trust II, III.

CA-IR-423

Ref: HECO response to CA-IR-252 & HECO-1310 (HEI Billings).

In response to CA-IR-252(c), the Company indicated that common equity based allocation factors are used to allocate approximately 80% of the total HEI shared charges. Please provide a detailed explanation of the rationale for using common stock and cumulative equity earnings (i.e., common equity) as the basis for apportioning shared cost responsibility between the regulated and non-regulated entities included in the HEI portfolio.

CA-IR-424

Ref: HECO T-13, page 38, response to CA-IR-253 and HECO-1310 (HEI Billings).

In response to CA-IR-253, Item 9 refers to Footnote 12 of HECO-1310 and describes certain HEI adjustments to 2004 for

inclusion in the 2005 test year forecast related to Sarbanes-Oxley ("SOX"). The adjustments are primarily associated with an additional 1,304 labor hours related to SOX that were converted into labor dollars and partially allocated to HECO. Additional external auditor charges were also allocated to HECO. Please provide the following:

- a. During or subsequent to 2003, did HEI hire additional full time or part-time employees to whom the 1,304 hours are attributable?
 1. If so, please identify those new employment positions, annual pay rates and dates of hire.
 2. If not, please explain whether the additional labor hours relate to pre-existing HEI employees.
- b. Referring to page 9 of the response to CA-IR-253, please provide additional support showing the development of the December 31, 2003 labor rates included in column (b), showing all labor loading calculations.
- c. Are the \$48,954 in additional "external auditor attestation fees" for SOX compliance an annually recurring cost? Please explain.
- d. At page 38 of HECO T-13, the \$128,000 increase in KPMG audit fees between 2003 and 2005 is generally attributed to additional work to comply with SOX, including internal

controls. The response to CA-IR-2, Attachment 6 (pages 4-5), provides additional support for the HECO SOX audit fees. Are the HEI SOX audit fees (\$48,954) duplicative of the increased audit fees directly incurred by HECO (\$128,000)? Please explain.

- e. Referring to page 38 of HECO T-13 and CA-IR-2, Attachment 6 (pages 4-5), is the increase in SOX audit fees incurred by HECO partially allocable to HELCO and MECO?
 - 1. If so, has that allocation been considered in quantifying HECO's 2005 forecast test year estimate? Please explain and provide all supporting calculations (or a pinpoint reference to any responsive information previously provided).
 - 2. If not, why not? Please explain.
- f. Please provide additional support for the actual increase in SOX audit fees incurred by HEI and by HECO in 2004 and 2005, if known.

CA-IR-425

Ref: HECO response to CA-IR-254 & HECO-1310 (HEI Billings).

In response to CA-IR-254, the Company provided total HEI expenses (excluding intercompany billings) for 2001-2004 and the 2005 Forecast. Please provide the following:

- a. Do the amounts for 2004 represent actual or budgeted expenses? Please explain.
- b. Do the amounts for the 2005 Forecast represent the results of HEI's normal budget/ forecast process as opposed to the test year forecast process? Please explain.
- c. For calendar years 2003, 2004 and 2005 Forecast, please provide a detailed breakdown of the HEI expenses by Activity Code, regardless whether the costs are retained or billed by HEI.
- d. Referring to item (c) above and the response to CA-IR-254(b), please identify each activity code that is retained (i.e., not billed) by HEI.

CA-IR-426

Ref: HECO response to CA-IR-254 & HECO-1310 (HEI Billings).

In response to CA-IR-254(b)(3), the Company indicated that of the estimated 21.9% of costs billed by HEI to its subsidiaries, HECO's 2005 test year amount of \$1.7 million (HECO-1310) represents approximately 39% of the estimated costs billed. Using 2003 actual data from HECO-1310 and CA-IR-254, HEI billed approximately 24.8% of \$22.17 million of which \$1.67 million or 30.4% (i.e., $\$1.67 \text{ million} \div (\$22.17 \times 24.8\%) = 30.4\%$) was billed to HECO. Please provide the following:

- a. Referring to page 4 of the response to CA-IR-254, the total HEI expenses (excluding interco billings) decreased from 2003 (\$22.17 million) to the 2005 Forecast (\$20.12 million). Please explain and reconcile the decline in total HEI costs with the increase in HEI costs charged to HECO, as supported by HECO-1310.
- b. Please explain and reconcile the increase in HECO's share of HEI's billed cost from 30.4% in 2003 to approximately 39% in the 2005 test year estimate.

CA-IR-427

Ref: HECO response to CA-IR-249 (Standard Labor Rates).

Attachment A to a letter (dated January 11, 2005) from William Bonnet to Cheryl Kikuta provided, in part, the "standard labor rates used to derive the 2005 test year labor expenses." The referenced interrogatory sought additional documentation supporting the development of the Standard Labor Rates used in the 2005 test year forecast. A comparison of the labor rates set forth in these documents indicates that the rates set forth on Attachment A are about 2.8% to 5.9% higher than the CA-IR-249 rates. Please provide the following:

- a. Please explain (e.g., payroll tax loadings) and reconcile these rate differences.

- b. Please provide a revised Excel spreadsheet (see the response to CA-IR-249), showing the development of the Attachment A labor rates.
- c. Referring to items (a) and (b) above, please provide documentation supporting the quantification of any reconciling adjustments, calculations or revisions.

CA-IR-428

Ref: HECO response to CA-IR-249 (Standard Labor Rates).

The referenced response did not provide the requested straight time or overtime data (hours or dollars), because such information is not available on a distributed basis. Please provide the following:

- a. According to page 5 of the response to CA-IR-249, the "Grand Total" labor dollars for 2003 was \$81,983,904. Please provide a breakdown of this amount between merit and bargaining employee groups, separately showing regular pay and overtime/ premium pay for each group.
- b. According to page 5 of the response to CA-IR-249, the "Grand Total" labor hours for 2003 was 2,582,536. Please provide a breakdown of these hours between merit and bargaining employee groups, separately showing regular hours and overtime/ premium hours for each group.

CA-IR-429

Ref: HECO response to CA-IR-249 (Standard Labor Rates).

In calculating the 2003 standard labor rates, the referenced response generally discusses certain adjustments to merit unpaid overtime hours, because merit overtime is not compensated.

Please provide the following:

- a. Referring to Column C of response pages 4-5, please provide additional data showing the detailed data used in calculating the 2003 recorded merit OT factors (e.g., 1.07, 1.08, & 1.16).
- b. Referring to Column D of response pages 4-5, please provide additional data showing the detailed data used in calculating the 2005 budget merit OT factors (e.g., 1.10, 1.09, & 1.13).

CA-IR-430

Ref: HECO response to CA-IR-249 (Standard Labor Rates).

According to "Note 1", the 2003 recorded merit OT factors are based on the sum of productive and nonproductive hours, which total 2,088 annual base hours. The 2005 budget merit OT factors are based on 2,080 annual base hours. Please provide the following:

- a. Since calendar year 2003 was not a "leap year," please explain why the 2003 recorded average merit unpaid OT

factor (Column C) was based on 2,088 annual base hours, while 2005 has 2,080 base hours.

- b. According to the responses to CA-IR-249 (c) and (e), neither nonproductive pay nor nonproductive hours were considered in the development of the standard labor rates. Please explain HECO's accounting for nonproductive pay, identifying accounts charged/ credited and any related clearings or distributions to ultimate accounts.

CA-IR-431

Ref: HECO response to CA-IR-250 (Standard Labor Rates).

The referenced response did not provide the requested straight time or overtime data (hours or dollars) embedded in the development of the standard labor rates for calendar years 2002 and 2003. For each year, please provide the following:

- a. Please provide a breakdown of the recorded labor pay between merit and bargaining employee groups, separately showing regular pay and overtime/ premium pay for each group.
- b. Please provide a breakdown of the labor hours between merit and bargaining employee groups, separately showing regular hours and overtime/ premium hours for each group.

The following information Refquests pertain to HECO's Adequacy of Supply Report, March 10, 2005 ("AOS 2005").

CA-IR-432 **Ref: AOS 2005 Appendix 1, at 2.**

- a. What is the capacity (MW) rating of each of the cogen units at Tesoro, Chevron, and Pearl Harbor?
- b. What is the maximum amount of MWs that each unit can deliver to HECO?

CA-IR-433 **Ref: AOS 2005, at 2.**

Please provide a table that lists all individual generating units that comprise the 1615 MW identified at the top of the page as "HECO's 2004 total generating capability." Include for each (a) unit name, (b) year entered into commercial service, (c) type, (d) primary fuel, (e) capability (MWs), (f) ownership, (g) whether dispatchable, (h) whether capable of load following and/or providing spinning Reserve, (i) equivalent forced outage rate assumed for Reliability purposes, and (j) annual maintenance "down time" Requirements.

CA-IR-434 **Ref: AOS 2005, at 10, Table 1.**

Please provide key data, assumptions and all supporting documentation for the June 2004 forecast of peak loads.

CA-IR-435

Ref: AOS 2005, at 8, n.5.

Please provide a ten-year forecast of the amount of interruptible load on the HECO system.

CA-IR-436

Ref: AOS 2005, at 5.

What is the likely maximum generating station capacity (MW) that the Campbell Industrial Park site can sustain (i.e., assuming no change in output of the existing generation in the aRefa and no transmission constraints)?

CA-IR-437

Ref: AOS 2005, at 2.

Please provide the following information on the “two as-available energy producers” on the HECO system:

- a. unit name;
- b. in-service date;
- c. type of unit;
- d. primary fuel;
- e. capability (MW);
- f. ownership;
- g. equivalent forced outage rate assumed for reliability purposes; and
- h. annual maintenance (downtime) requirements.

CA-IR-438

Ref: AOS 2005, at 3-4.

- a. Has HECO taken any steps to encourage the installation of CHP units by non-utility vendors at customer sites?
- b. If so, please describe.
- c. If no, please explain why not.

CA-IR-439

Ref: AOS 2005, at 4-5, 24-25.

- a. Has HECO conducted in the last three years any studies of opportunities to improve the availability levels of its owned generating facilities.
- b. If so, please provide a copy of the results of those studies.
- c. If no, please explain why not.

CA-IR-440

Ref: AOS 2005, at 7.

What is the date on which HECO expects to file its "preferred plan for IRP-3"?

CA-IR-441

Ref: AOS 2005, at 6.

- a. Please provide a copy of all documents (memoranda, correspondence, reports, etc.) that pertain to HECO's consideration of "portable, leased DG units at HECO-controlled substation sites and other sites." Include

documents that identify or discuss related potential savings in transmission and distribution investments.

- b. Please identify the sites for which such DG units have been considered, and identify the anticipated maximum output (MWs) of generation facilities located on those sites.

CA-IR-442

Ref: AOS 2005, at 6.

Please provide copies of all documents (memoranda, correspondence, reports, etc.) that pertain to HECO's consideration of permanent DG units at HECO-controlled substation sites and other sites.

CA-IR-443

Ref: AOS 2005, at 22.

- a. Please identify the load forecast that was operable (i.e., provide both the date that the forecast was produced and peak load projections for each year through 2009) in July 2003 when HECO started its IRP-3 planning process.
- b. Please state whether the HECO IRP-3 process started in July 2003 at any time considered a scenario in which projected loads might reach levels consistent with those of the June 2004 forecast.
- c. If Part (b) above is answered in the affirmative, please provide a copy of the relevant scenario analysis (i.e., provide

both the date that the forecast was produced and peak load projections for each year through 2009).

- d. Please state whether HECO at any time prior to 2004 considered a scenario in which projected loads might reach levels consistent with those of the June 2004 forecast.
- e. If Part (d) is answered in the affirmative, please provide a copy of the relevant scenario analysis (i.e., provide both the date that the forecast was produced and peak load projections for each year through 2009).

CA-IR-444

Ref: AOS 2005, at 6.

- a. Please identify the date on which HECO first communicated to the Commission that it expected a capacity shortfall during 2005 (i.e., that it would need additional resources during 2005 “to maintain generation system reliability at or above HECO’s reliability guideline”).
- b. Please provide a copy of the document in which this information was communicated to the Commission.
- c. Please identify the date on which it became apparent to HECO’s senior management that the company would required additional resources during 2005 “to maintain generation system reliability at or above HECO’s reliability guideline.”

CA-IR-445

Ref: AOS 2005, at 6.

Please provide a copy of all documents (including, but not limited to scenario analyses) that address the risk (or eventuality) that HECO might experience a capacity shortfall during 2005 (i.e., that it would need additional resources during 2005 "to maintain generation system reliability at or above HECO's reliability guideline").

CA-IR-446

Ref: AOS 2005, at 7, 24.

- a. Please provide a copy of all documents that address the mitigation of the risk (or eventuality) that HECO might experience a capacity shortfall during 2005.
- b. Has HECO considered issuing an RFP to secure needed capacity from competitive markets?
- c. If the response to Part (b) is in the affirmative, please provide a copy of all documents that address a potential RFP?
- d. Please state whether HECO believes that a competitive solicitation for needed power supplies would not resolve its capacity deficiency (i.e., its reserve capacity shortfall as shown in Table 4) at reasonable cost.

CA-IR-447

Ref: AOS 2005, at 5.

- a. How will the Hawaii Renewable Portfolio Standard (RPS) Requirements be met on Oahu “if . . . renewable energy program imports are not fully realized”?
- b. Has HECO considered renewable capacity that can help meet the capacity shortfall in the interim?

CA-IR-448

Ref: AOS 2005, at 5-6.

- a. How did HECO determine that the identified simple-cycle combustion turbine is the best option to pursue in 2009 (i.e., “the earliest that HECO expects to be able to permit, acquire, install and place into commercial operation” such facility)?
- b. What other options has HECO explored?
- c. Please provide copies of all documents that address the other options that have been explored.

CA-IR-449

Ref: AOS 2005, at 13, Section 3.5.

- a. Please explain why the system average generating unit EFORs will not continue to be higher than the identified “forward looking system average EFOR for the 2005-2009 period,” given that load is expected to grow and capacity is expected to be short in coming years?

- b. Why would growing loads and short capacity not be expected to result in more planned outages for the coming years or more derates?
- c. What maintenance plans are in place to address issues associated with wear and tear of the units?

CA-IR-450

Ref: Response to CA-IR-274.

The response to Part (b) of CA-IR-274 discusses the possible retirement of the Honolulu Power plant and “Replacement of the Honolulu Power Plant capacity with capacity from a power plant at an alternative site.”

- a. Please provide copies of all resource planning documents that address this retirement, as either a “plan” or a “contingency” scenario.
- b. Has the possible retirement of the Honolulu Power Plant been incorporated into the planning (to-date) for HECO’s IRP-3?
- c. If the response to Part (b) is in the affirmative, please explain how and provide supporting documentation.

CA-IR-451

Ref: Response to CA-IR-274.

The response to Part (b) of CA-IR-274 discusses the possible retirement of the Honolulu Power Plant. The November 14, 2004

article provided states that “operating generators would be taken down in 2008.”

- a. Please provide a copy of all company documents that discuss a possible date for the retirement of the Honolulu Power Plant.
- b. If no such documents exist beyond those already provided, please state HECO’s knowledge regarding the source of this date.
- c. Please state what HECO has indicated about possible retirement dates to the parties with which it has been discussing the possible retirement of the Honolulu Power Plant.

CA-IR-452

Ref: Response to CA-IR-278.

The response to Part (c) of CA-IR-278 appears non-responsive.

- a. Please verify that there are no “workpapers, reports and other materials” used to develop the need projection contained in HECO’s March 10, 2005 Adequacy of Supply Report.
- b. Otherwise, please provide the most recent simulation of HECO’s program used to calculate its capacity (MW) need during each year through 2009. Include all input assumptions and any work papers and calculations? Where

supporting electronic spreadsheet are available, please provide copies of those spreadsheets with all formulas and cell references intact.

CA-IR-453

Ref: Response to CA-IR-279(b).

Please provide copies of all contingency analyses performed by the company that are not out-of-date, or otherwise in need of updating (or already provided through the response to CA-IR-279).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWELFTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWELFTH SUBMISSION OF INFORMATION REQUESTS

- CA-IR-454
- a. Has HECO prepared any forecasts, budgets or projections of its anticipated sales or revenues, operating expenses, capital investment or other financial performance parameters for calendar year 2006?
 - b. If affirmative, please provide complete copies of the most detailed available documentation associated with all such forecasts, budgets or projections.
- CA-IR-455
- a. Has HECO prepared any budget variance reports or other accounting reports that compare actual revenues, operating expenses and plant investment expenditures to forecasted amounts for year to date 2005?
 - b. If affirmative, please provide complete copies of the most detailed available documentation associated with all such reports, including all narrative discussions of the reasons for experienced variances.

Witness T-2, Ms. Hazama

CA-IR-456

Ref: HECO Response to CA-IR-156 and CA-IR-157, parts (d) and (e) Commercial Sales Sector Analysis.

Please provide detailed calculations supporting each revision to test period commercial sales by rate schedule (billing determinants and revenue \$) that HECO believes to be appropriate as a result of its re-evaluation of commercial sales level estimates (if any).

CA-IR-457

Ref: HECO Response to CA-IR-158 Residential Sales Market Analysis.

Please provide the following information in consideration of updated permit data and residential customer count information:

- a. Actual monthly 2004 and to-date 2005 residential customer count information.
- b. Actual monthly 2005 private building permit data, as available.
- c. Explain the revisions to HECO's assumed residential customer additions of 2,700 that should be made to fully account for actual customer level information through December 2004.
- d. Given the strong positive correlation between permits and customers added, as shown on the graph at page 3 of the response, please explain why/if the 3,811 permits granted in

2004 should not produce an upward revision in the assumed 3,000 customer added during 2005.

- e. Provide detailed calculations supporting any revision to its filing that HECO views as appropriate to consider updated residential customer count and permit information.

CA-IR-458

Ref: Response to CA-IR-222 (2003 Class Load Study, pages 14 to 16), HECO T-2 (pages 20 to 22), and Adequacy of Supply report filed March 10, 2005, page 3.

According to the Class Load Study, to support long-range forecasting and renewable portfolio standards, the residential sample was stratified by the fuel used for water heating. HECO T-2 and the Adequacy of Supply report, however, note that air-conditioning is a major factor influencing residential sales and the impact on the peak.

- a. Did HECO determine the number of residential customers in the samples with air-conditioning?
- b. If yes,
 - 1. Please provide the data.
 - 2. Please explain if the proportion of air-conditioned homes in the 2003 study is comparable to the saturation rate (0.5115) used to forecast residential energy sales in HECO T-2.

- c. If not, why was air-conditioning was not considered since HECO has determined that air-conditioning is a major factor in residential energy sales and demand?

Witness T-6, Mr. Fujinaka

CA-IR-459

Ref: HECO Response to CA-IR-38, page 7.

O&M non-labor costs for Actual 2004 and Test Year 2005 that are associated with, "Compliance with Regulations and Safety" are identified on page 7 by RA#. Non-labor O&M within RA PJB "Air Quality and Noise" is projected to increase from \$336,389 in 2004 to \$1,140,454 in 2005 with no explanation of any changed regulations affecting such activities. Please explain and justify this increase, describing all individual projects and payees that were active in 2004 and that are planned in 2005.

CA-IR-460

Ref: HECO Response to CA-IR-38, parts (e) and (f), Environmental Site Assessments.

Regarding the newly proposed All Appropriate Inquiries regulation that, "if adopted, as proposed is expected to raise consulting costs for conducting these property assessments by roughly 20%," please respond to the following:

- a. Please describe typical situations when HECO would normally be involved in a process of "conducting environmental site assessments ("ESA") for property

transactions and for defining environmental professionals who are qualified to conduct such assessments.”

- b. State whether the proposed AAI regulations would increase the frequency of required ESAs, or instead would increase the cost (but not the frequency) of such assessments.
- c. Describe whether transaction-related costs such as consulting fees for ESAs are typically capitalized by HECO as an adjustment to plant in service or as a reduction of the otherwise realized gain on sale of land, as opposed to current period expensing of such costs.

CA-IR-461

Ref: HECO March 10, 2005 Adequacy of Supply Report to the Hawaii Public Utilities Commission, page 13: 3.5 HECO Generating Unit Availabilities.

According to the report, “For this AOS, forward looking EFORs for each HECO generating unit were developed by reviewing historical EFORs and when applicable, adjusting these EFORs to account for the expected condition of major generating unit components as a result of recently completed or soon-to-be completed overhaul and refurbishment work.” Please respond to the following:

- a. Please provide complete copies of all studies, analyses, reports, projections, workpapers and other documents associated with the development of the referenced “...forward looking EFORs for each HECO generating unit.”

- b. Please provide a detailed breakdown of the “forward looking system average EFOR for the 2005-2009 period” of 2.89% by year and unit (owned and IPP).
- c. Identify each instance where it was necessary for HECO to “...adjust[ing] these EFORs to account for the expected condition of major generating unit components.”
- d. Explain the basis for each adjustment referenced in part (c) and describe the overhaul work that was completed that contributed to such adjustment.
- e. Identify and describe each program or process initiated by HECO to improve upon the EFOR and availability (EAF) values experienced in 2004.

Ref: HECO Response to CA-IR-47, Transmittal 1, Production Operations Outside Services Listing.

For each of the following work orders associated with production operations, please describe the work order and provide a monthly breakdown of charges by RA, NARUC Account, Expense Element and Payee for the periods January 2003 through February 2005, with an explanation of any unusual or non-recurring transactions included within the data provided:

a	AD000903	Knapp v. AES/HECO/HEI
b	FA000343	Waiau Power Plant Security - GUARDSMARK KAHE POWER PLANT SECURITY -
c	FA000344	GUARDSMARK HONOLULU POWER PLANT SEC --
d	FA000347	GUARDSMARK
e	HP000020	IC-AES-HI PPA
f	HP000023	IC-KPLP PPA
g	HP000025	IC-NUG Guidelines Development
h	HP000032	Honolulu PP - Clean Island Council fee
i	HP000033	Waiau PP Clean Island Council Annual fee
j	HP000034	Kahe PP-Clean Island Council Annual fee
k	HP000734	City Water \$\$ for Honolulu Station
l	HP000735	City Water \$\$ for Waiau Station
m	HP000736	City Water \$\$ for Kahe Station
n	HP001357	HNEI Fuel Cell Test Center-Public Commun
o	HP001360	Fuel Cell Test Center-Facilities R&D Exp
p	HP001501	YP-GH-Rental Value of Cooke St. Warehous
q	HP001686	IC KPLP Capacity Addition Options
r	HP001789	Comp Bid Work - Generation Planning Div.
s	LA000198	Energy Corridor Lease Rent SWO-HAZARD WSTE DISPOSAL (HONOLULU
t	PR000244	STA)
u	PR000245	SWO-ASBESTOS REMOVAL (HONOLULU STA)
v	PR000249	SWO-HAZARDOUS WSTE DISPOSAL (KAHE)
w	PR000251	SWO-MERCURY DISPOSAL (KAHE)
x	PR000253	SWO-HAZARD WASTE DISPOSAL (WAI AU)
y	PR000256	SWO-ASBESTOS REMOVAL (WAI AU)
z	PR002264	SWO-ASBESTOS REMOVAL/DISPOSAL (KAHE)
aa	PR019330	PMO Development Activities Work order
ab	PR026259	PSRO Reliability Team Development

CA-IR-463

Ref: HECO Response to CA-IR-49, Transmittal 2, Production Maintenance Outside Services Project Listing.

Please provide a comparison of actual total labor and non-labor charges for each overhaul and major inspection project (inclusive of the outside services amounts shown on this attachment) for each year 2000 through 2004 and with another column for comparison to the test period (by projected overhaul with 2005 projected expenses). Explain the known reasons for major fluctuations in overall levels of overhaul/inspection activity among the years.

Witness T-22, Ms. Estrella Seese

CA-IR-464

Ref: WP-2220, Page 4 of 21 Energy Losses.

Estimated 2003 energy losses are set forth by step, indicating sales as a percentage of system input at 91.7 percent. In contrast, worksheet HLADATA of the Company's embedded cost of service spreadsheet file at rows 5 through 12 appears to employ different loss percentage data. Please explain and reconcile differences in loss information used for the test period and quantify any further adjustments required to the Company's study.

CA-IR-465

Ref: HECO Response to CA-IR-226 Schedule J Ratchet.

What is the approximate annual revenue impact of the proposed change in the demand ratchet at present rate levels and at proposed rate levels?

CA-IR-466

Ref: HECO responses to CA-IR-233 and CA-IR-234; T-22, pages 55 and 62, Time of Use off-peak energy proposed pricing.

With regard to proposed TOU-R and TOU-C energy rates, it appears that HECO is proposing Priority Peak Period energy prices reflective of a 5.0 cents/kwh increase over corresponding proposed Schedule R and Schedule G energy prices and with a 2.0 cents/kwh increase over Schedule R/G rates for the Mid-Peak Period. However, different discounts of 5.0 cents/kwh for TOU-C (Option 1) but only 3.5 cents/kwh for TOU-R are proposed for the Off-Peak Period. Please explain this disparity and provide complete copies of all analyses, workpapers and other information supportive of the proposed Off-peak rates.

CA-IR-467

Ref: HECO-2216 and HECO-2217.

Please explain how HECO interpreted and applied the estimated marginal energy costs by time-of-use rating period and time-differentiated marginal demand-related costs in designing the TOU-R energy rates and TOU-R rating periods described at T-22, pages 54-55. Include any calculations and supporting documentation that is associated with your response.

CA-IR-468

Ref: HECO-2216 and HECO-2217.

Please explain how HECO interpreted and applied the estimated marginal energy costs by time-of-use rating period and time-differentiated marginal demand-related costs in designing the newly proposed TOU-C energy rates, TOU-C demand charges and TOU-C rating periods described at T-22, pages 61-64. Include any calculations and supporting documentation that is associated with your response.

CA-IR-469

Ref: HECO-2217 and WP-2217, Pages 1 and 2 of 153 Marginal Cost Annual Combustion Turbine Cost.

Please provide the following information regarding the Company's asserted marginal cost of generation:

- a. A more legible copy of WP-2217, page 2, indicating the source of the data and explaining which values were used to develop the \$816/KW value on page 1.
- b. Reference to or calculations of the regression or other algorithms used to develop the 10.37 percent "General Plant Loading" on line 2 of WP-2217, page 1 of 153 (this is not apparent from the CA's review of electronic file: HECO_TY_2005_MARGINAL_COST_STUDY_V3.xls at worksheet A&G&GENP).
- c. Reference to or calculations of the regression or other algorithms used to develop the 0.43 percent "A&G Loading"

on line 4 of WP-2217, page 1 of 153 (this is not apparent from the CA's review of electronic file: HECO_TY_2005_MARGINAL_COST_STUDY_V3.xls at worksheet A&G&GENP).

- d. Reference to supporting documentation and/or calculations used to develop the \$14.63 "Fixed O&M Expenses" on line 7 of WP-2217, page 1 of 153 (this is not apparent from the file: HECO_TY_2005_MARGINAL_COST_STUDY_V3.xls at worksheet GENCOST).
- e. Reference to or calculations of the regression or other algorithms used to develop the 61.73 percent "A&G Loading" on line 8 of WP-2217, page 1 of 153 (this is not apparent from the CA's review of electronic file: HECO_TY_2005_MARGINAL_COST_STUDY_V3.xls at worksheet A&G&GENP).
- f. Explain the basis of and provide calculations for the "Adjusted for Availability Factor" at 95 percent on line 15 of WP-2217, page 1 of 153.

CA-IR-470

Ref: HECO-WP-2217, Pages 1 and 3 of 153 Marginal Cost of Service "Annual Economic Charge Related to Capital Investment."

The levelized annual carrying charge rates for production, transmission and distribution substation investment of 11.22%,

9.33% and 9.91% respectively, appear to recognize an after tax cost of capital of 8.15 percent reduced by an inflation value of 2.0 percent for "Inflation net of Technical Progress" (see HECO_TY_2005_MARGINAL_COST_STUDY_V3.xls at worksheet TR-ECC at cell H21 and the referenced sheet ECCTRANS at row 21). Please provide the following information:

- a. Explain the basis for this proposed derivation of a carrying charge rate.
- b. Describe what is meant by "technical progress" in relation to inflation.
- c. Explain why a measure of inflation is removed from the after tax cost of capital.
- d. Provide complete copies of authoritative support for your responses to parts (a) through (c).

CA-IR-471

Ref: HECO-2217 "Period Assignment Factor" and T-22, page 55.

The Company appears to apply period weighting factors to its calculated marginal annual demand-related costs on HECO-2217 based upon the relative probability of peak conditions occurring within particular time of use periods. Please provide the following information:

- a. Explain the logic behind the Company's weighting factors approach, using currently effective time of use periods,

- b. Explain why the shifting of holidays into the off-peak and mid-peak periods tends to increase the probability of a peak during the priority period from approximately 58.8 percent to about 75 percent (see Copy of Relative prob peak-04_TY2005-REV-CM.xls at Summary prob peak 2005).

CA-IR-472

Ref: HECO-2234 System Peak Generation.

The peak demand data displayed on pages 2 and 3 indicate that monthly peak demands during the summer months tend to occur during the early afternoon hours during weekdays, while peaks occur in the early evening in all non-summer months. Please respond to the following:

- a. Please confirm this understanding and explain why this pattern is thought to exist.
- b. Describe how this pattern of peak demand was considered and influenced the Company's selection of the Average and Excess method of allocation of production and transmission demand-related costs (see T-22, at pages 12-14).
- c. Why does the "Mid-Peak Period" for TOU-R and TOU-C proposed pricing include 7:00 a.m. to 5:00 p.m. period Monday through Friday during the summer months, when the timing of summer month peaks before 5:00 p.m.

suggests that "Priority Peak Period" pricing would be more applicable?

CA-IR-473 **Ref: Response to CA-IR-222 (2003 Class Load Study).**

It appears that the pie charts on Exhibits 4.1 and 4.2 are based on the data from Table 4.1 that should be interchanged. Please confirm or clarify.

CA-IR-474 **Ref: Response to CA-IR-222 (2003 Class Load Study), page 16.**

Please explain why the sample for class E, Electric Service for Employees, is so much larger, proportionally, than the other residential categories.

Witness T-8 Mr. S. Yoshida

CA-IR-475 **Ref: HECO T-8, pages 11 & 18-20 (T&D – Work Requirements).**

At page 11, the description of the direct labor budget process indicates that the "standard unit of measurement in T&D ... is a man-hour" and that "labor requirements are estimated in man-hours." At page 19, the discussion of the proposed T&D staffing increase refers to "increased system requirements" as a result of the continuing growth and age of the utility plant, employee retirements and new projects. Please provide the following:

- a. How were “system requirements” measured and quantified for purposes of preparing the test year forecast and determining increased staffing levels? Please explain and provide copies of any supporting documentation.
- b. Referring to item (a) above, were “system requirements” determined first, then matched with the number of man-hours required to do the work, and finally translated into employee counts? Please explain and provide copies of any supporting documentation.
- c. How was the number of increased employees (i.e., 16 - Construction & Maintenance; 14 – System Operation) determined? Please explain and provide copies of any supporting documentation.

CA-IR-476

Ref: HECO T-8, pages 11 & 18-20 (T&D – Work Requirements).

At page 11, the description of the direct labor budget process indicates that the “standard unit of measurement in T&D ... is a man-hour” and that “labor requirements are estimated in man-hours.” At page 19, the discussion of the proposed T&D staffing increase refers to “increased system requirements” as a result of the continuing growth and age of the utility plant, employee retirements and new projects. Please provide the following:

- a. How has the overall level of “system requirements” for the 2005 test year forecast changed in relation to recent actual experience? Please explain.
- b. Please provide comparable “system requirements” for calendar years 2003, 2004 and 2005 – noting whether the data represents actual or forecast levels.

CA-IR-477

Ref: HECO T-8, pages 11 & 18-20 (T&D – Work Requirements).

At page 11, the description of the direct labor budget process indicates that the “standard unit of measurement in T&D ... is a man-hour” and that “labor requirements are estimated in man-hours.” At page 19, the discussion of the proposed T&D staffing increase refers to “increased system requirements” as a result of the continuing growth and age of the utility plant, employee retirements and new projects. Please provide the following:

- a. Does the increase in employees (i.e., 16 – Construction and Maintenance; 14 – System Operation) reduce the need for overtime during the 2005 forecast test year? Please explain and provide a copy of any supporting documentation.
- b. Please provide a comparison of the T&D straight time and overtime hours included in the 2005 test year forecast with historical levels in calendar years 2001 through 2004.

- c. If the responses to items (a) and (b) above indicate that the addition of employees in the test year forecast has not reduced overtime requirements, please provide a detailed explanation (and copies of any supporting documentation) addressing why overtime levels are not expected to decline as a result of adding 30 T&D employees.

CA-IR-478

Ref: HECO T-8, pages 11 & 18-20 (T&D – Work Requirements).

At page 11, the description of the direct labor budget process indicates that the “standard unit of measurement in T&D ... is a man-hour” and that “labor requirements are estimated in man-hours.” At page 19, the discussion of the proposed T&D staffing increase refers to “increased system requirements” as a result of the continuing growth and age of the utility plant, employee retirements and new projects. Please provide the following:

- a. Does the increase in employees (i.e., 16 – Construction and Maintenance; 14 – System Operation) reduce the need for reliance on contract labor during the 2005 forecast test year? Please explain and provide a copy of any supporting documentation.

- b. Please provide a comparison of the T&D contract labor costs included in the 2005 nonlabor test year forecast with historical levels in calendar years 2001 through 2004.

CA-IR-479

Ref: HECO T-8, pages 18-20 & HECO-826 (T&D Retirements).

At page 19, the discussion of the proposed T&D staffing increase refers to "increased system requirements" as a result of the continuing growth and age of the utility plant, employee retirements and new projects. HECO-826 provides information regarding T&D employee retirement eligibility. Please provide the following:

- a. For Construction & Maintenance, please provide the following:
 - 1. The number of employees eligible to retire in 2003 that actually retired in 2003.
 - 2. The number of employees eligible to retire in 2004 that actually retired in 2004.
 - 3. The number of employees eligible to retire in 2005 that the Company expects will retire in 2005, indicating whether such expected retirements were reflected in the 2005 test year forecast.
 - 4. The number of employees eligible to retire in 2006 that the Company expects will retire in 2006.

- b. For System Operations, please provide the following:
1. The number of employees eligible to retire in 2003 that actually retired in 2003.
 2. The number of employees eligible to retire in 2004 that actually retired in 2004.
 3. The number of employees eligible to retire in 2005 that the Company expects will retire in 2005, indicating whether such expected retirements were reflected in the 2005 test year forecast.
 4. The number of employees eligible to retire in 2006 that the Company expects will retire in 2006

CA-IR-480

Ref: HECO T-8, pages 12-14 (T&D O&M Increases).

The referenced pages discuss aging T&D plant as contributing to the increase in T&D O&M expenses. Please provide the following:

- a. State whether or not aging T&D plant has directly caused or materially contributed to actual increases in T&D O&M expenses, providing estimates of the magnitude of change occurring in each year since 1995.
- b. Please provide a copy of all studies, analyses, reports or other documents supporting the response to item (a) above.

CA-IR-481

Ref: HECO T-8, pages 12 & 14-15 (T&D O&M Increases).

The referenced pages discuss growth in T&D plant as contributing to the increase in T&D O&M expenses. Please provide the following:

- a. State whether or not growth in T&D plant has directly caused or materially contributed to actual increases in T&D O&M expenses, providing estimates of the magnitude of change occurring in each year since 1995.
- b. Please provide a copy of all studies, analyses, reports or other documents supporting the response to item (a) above.

Witness T-9 Mr. Yamamoto

CA-IR-482

Ref: HECO T-9, pages 3 & 6-8 (Customer Accounts – Work Requirements).

At page 3, the first step in preparing HECO's O&M expense budget for Customer Accounts based staffing requirements on "forecasted operational and workload requirements." At page 8, the discussion of increased staffing included in the 2005 test year forecast indicates that 2003 level is not an accurate basis for comparison, instead citing to 2000-2001 and 2004. Please provide the following:

- a. How were "workload requirements" measured and quantified for purposes of preparing the test year forecast and

determining increased staffing levels? Please explain and provide copies of any supporting documentation.

- b. Referring to item (a) above, were “workload requirements” determined first, then matched with the number of man-hours required to do the work, and finally translated into employee counts? Please explain and provide copies of any supporting documentation.
- c. How was the number of increased employees (i.e., 3 - bargaining unit; 16 – clerical, administrative support & supervisory staff) determined? Please explain and provide copies of any supporting documentation.

CA-IR-483

Ref: HECO T-9, pages 3 & 6-8 (Customer Accounts – Work Requirements).

At page 3, the first step in preparing HECO’s O&M expense budget for Customer Accounts based staffing requirements on “forecasted operational and workload requirements.” At page 8, the discussion of increased staffing included in the 2005 test year forecast indicates that 2003 level is not an accurate basis for comparison, instead citing to 2000-2001 and 2004. Please provide the following:

- a. How has the overall level of “workload requirements” for the 2005 test year forecast increased in relation to recent actual experience? Please explain.

- b. Please provide comparable “workload requirements” for calendar years 2003, 2004 and 2005 – noting whether the data represents actual or forecast levels.

CA-IR-484

Ref: HECO T-9, pages 3 & 6-8 (Customer Accounts – Work Requirements).

At page 3, the first step in preparing HECO’s O&M expense budget for Customer Accounts based staffing requirements on “forecasted operational and workload requirements.” At page 8, the discussion of increased staffing included in the 2005 test year forecast indicates that 2003 level is not an accurate basis for comparison, instead citing to 2000-2001 and 2004. Please provide the following:

- a. Does the increase in employees (i.e., 3 – bargaining unit; 16 – clerical, administrative support & supervisory staff) reduce the need for overtime during the 2005 forecast test year? Please explain and provide a copy of any supporting documentation.
- b. Please provide a comparison of the Customer Accounts straight time and overtime hours included in the 2005 test year forecast with historical levels in calendar years 2001 through 2004.
- c. If the responses to items (a) and (b) above indicate that the addition of employees in the test year forecast has not

reduced overtime requirements, please provide a detailed explanation (and copies of any supporting documentation) addressing why overtime levels are not expected to decline as a result of adding 19 Customer Accounts employees.

CA-IR-485

Ref: HECO T-9, pages 6-8 & 10 (Customer Accounts – Work Requirements).

At page 3, the first step in preparing HECO's O&M expense budget for Customer Accounts based staffing requirements on "forecasted operational and workload requirements." At page 8, the discussion of increased staffing included in the 2005 test year forecast indicates that 2003 level is not an accurate basis for comparison, instead citing to 2000-2001 and 2004. At page 10, the continued utilization of outside consulting services is discussed. Please provide the following:

- a. Does the increase in employees (i.e., 3 – bargaining unit; 16 – clerical, administrative support & supervisory staff) reduce the need for reliance on contract labor during the 2005 forecast test year? Please explain and provide a copy of any supporting documentation.
- b. Please provide a comparison of the Customer Accounts contract labor costs included in the 2005 nonlabor test year forecast with historical levels in calendar years 2001 through 2004.

- c. Are the 19 additional Customer Service employees expected to participate in or materially displace historical reliance on outside consulting services to support technology and IT system initiatives, initiative evaluation, maintain operations or address new issues and work expected to arise? Please explain.

Witness T-10 Mr. Hee

CA-IR-486

Ref: HECO T-10, pages 4 & 11-12 (Customer Service – Work Requirements).

At page 4, the preparation of HECO's 2005 Customer Service O&M expense budget is described as "first determining workload requirements for various customer service activities in 2005 and assigning employees to specific labor classes." At pages 11-12, the increased staffing included in the 2005 test year forecast (i.e., 17 more employees than in 2003) is briefly discussed. Please provide the following:

- a. How were "workload requirements" measured and quantified for purposes of preparing the test year forecast? Please explain and provide copies of any supporting documentation.
- b. Referring to item (a) above, how were the test year "workload requirements" translated into required employee counts? Please explain and provide copies of any supporting documentation.

- c. How was the number of increased employees determined?
Please explain and provide copies of any supporting documentation.

CA-IR-487

Ref: HECO T-10, pages 4 & 11-12 (Customer Service Work Requirements).

At page 4, the preparation of HECO's 2005 Customer Service O&M expense budget is described as "first determining workload requirements for various customer service activities in 2005 and assigning employees to specific labor classes." At pages 11-12, the increased staffing included in the 2005 test year forecast (i.e., 17 more employees than in 2003) is briefly discussed. Please provide the following:

- a. How has the overall level of "workload requirements" for the 2005 test year forecast increased in relation to recent actual experience? Please explain.
- b. Please provide comparable "workload requirements" for calendar years 2003, 2004 and 2005 – noting whether the data is based on actual or forecast levels.

CA-IR-488

Ref: HECO T-10, pages 4 & 11-12 (Customer Service – Work Requirements).

At page 4, the preparation of HECO's 2005 Customer Service O&M expense budget is described as "first determining workload

requirements for various customer service activities in 2005 and assigning employees to specific labor classes.” At pages 11-12, the increased staffing included in the 2005 test year forecast (i.e., 17 more employees than in 2003) is briefly discussed. Please provide the following:

- a. Does the increase in employees reduce the need for overtime during the 2005 forecast test year? Please explain and provide a copy of any supporting documentation.
- b. Please provide a comparison of the Customer Service straight time and overtime hours included in the 2005 test year forecast with historical levels in calendar years 2001 through 2004.
- c. If the responses to items (a) and (b) above indicate that the addition of employees in the test year forecast has not reduced overtime requirements, please provide a detailed explanation (and copies of any supporting documentation) addressing why overtime levels are not expected to decline as a result of adding 17 Customer Service employees.

CA-IR-489

Ref: HECO T-10, pages 4 & 11-12 (Customer Service – Work Requirements).

At page 4, the preparation of HECO’s 2005 Customer Service O&M expense budget is described as “first determining workload requirements for various customer service activities in 2005 and

assigning employees to specific labor classes.” At pages 11-12, the increased staffing included in the 2005 test year forecast (i.e., 17 more employees than in 2003) is briefly discussed. Please provide the following:

- a. Does the increase in Customer Service employees reduce the need for reliance on contract labor during the 2005 forecast test year? Please explain and provide a copy of any supporting documentation.
- b. Please provide a comparison of the Customer Service contract labor costs included in the 2005 nonlabor test year forecast with historical levels in calendar years 2001 through 2004.

Witness T-13 Mr. Ernest Shiraki

CA-IR-490

Ref: HECO T-13, pages 27-28, response to CA-IR-256 and HECO-1312 (HECO Billings to HEI).

The referenced response indicates that HECO fully loads its billings to HEI for rent, benefits, and other overhead costs similar to the charges HECO receives from HEI. Please provide the following:

- a. For a recent actual HECO billing to HEI, please provide the billed amount along with a copy of all supporting documentation – including the calculation of loadings for rent, benefits and other overhead costs.

- b. With regard to the 2005 test year forecast, the Company's supporting workpaper spreadsheet files did not include HECO-1312. Please provide HECO-1312 in an Excel spreadsheet file format, if available.
- c. Referring to HECO-1312 and item (b) above, please provide the algorithms, cell formulae and allocations underlying the calculation of each individual amount of HECO billings to HEI. [If the requested information has already been provided, please provide a pinpoint reference to said support for each amount appearing on HECO-1312.]
- d. Please explain how and whether the labor and nonlabor costs set forth on HECO-1312 are linked to HECO's 2005 test year forecast of labor and nonlabor expenses.

CA-IR-491

Ref: HECO T-13, pages 27-28, & HECO-1312 (HECO Billings to HEI).

Please explain HECO's accounting for the labor and nonlabor costs billed to HEI and provide a copy of any accounting policies or procedures that discuss such accounting.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

THIRTEENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

THIRTEENTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-492 **Ref: Response to CA-IR-101.**

Please provide the underlying data (i.e., dollar amounts for each capital structure item) for the capital structure ratios contained in this response.

CA-IR-493 Please provide a schedule showing the capital structure ratios (amounts of capital and percentages) for HECO on a consolidated (i.e., not just Oahu only) basis for the period 1999-2004.

CA-IR-494 Please provide two schedules showing the capital structure ratios (amounts of capital and percentages) for Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO) for the period 1999-2004.

CA-IR-495 **Ref: HECO Response to CA-IR-36, Attachment 3.**

According to the Attachment at note 1, "Cost to supplement the workforce increased by \$1,209,171 in 2004 compared to 2003."

Please provide the following information:

- a. What are the comparable amounts for the proposed 2005 test year for each row of Attachment 3?

- b. For what reasons should the Company's projected "cost to supplement the workforce" not decline in direct proportion to the increased workforce staffing levels being added by HECO for production operations and production maintenance?
- c. Please provide complete copies of all studies, workpapers, analyses, projections, correspondence and other documents associated with your response to part b.

CA-IR-496

Ref: HECO Response to CA-IR-37, Attachment 1.

According to the "Operation" expense row, HECO has been able to effectively operate its fleet of generating units at a relatively constant annual expense level of \$19.4 to \$20.2 million in each of the past four years. Given no change in the units within the Company's owned generating unit fleet, please explain each known reason why, in the 2005 test year, it is predicted that such expenses will need to increase by more than 20 percent over this historically stable expense level. Provide complete copies of (or references to) all documents associated with your response.

CA-IR-497

Ref: HECO Response to CA-IR-41, Attachment 3.

This response indicates that actual versus budgeted 2003 overhaul costs, while differing considerably among units/projects, were

relatively close to budget overall, with a variance of only \$132,861. However, "All other costs" experienced a favorable variance of more than \$5.9 million. Please provide a detailed analysis of this favorable variance by RA and Cost Element, with explanations of all work that was deferred or avoided.

CA-IR-498

Ref: HECO Response to CA-IR-40, pages 6, 7 and 8.

The spreadsheet attached to the response summarizes boiler feed pump costs for reheat generating units and boiler casing, refractory repairs and duct repairs on the cycling units. Please respond to the following:

- a. Confirm that the amounts shown are non-labor charges or provide a breakdown of any labor amounts included in such costs.
- b. Describe the specific work typically required to be done in each activity; boiler feed pump, casing, refractory and duct repairs.
- c. Explain how increased cycling and startup frequencies impact the quantity and severity of such repairs.
- d. Explain whether boiler casing and refractory repairs of the magnitude expended on Waiau 3, Honolulu 8 and Honolulu 9 in recent years are reasonably anticipated for each of the Company's other cycling units.

- e. Provide the planned schedule of boiler casing and refractory repairs by unit for each year 2005 through 2008.

CA-IR-499

Ref: HECO Response to CA-IR-43, pages 1 and 2.

According to the response to part b, "Therefore, another revision to the 2005 Planned Maintenance Schedule with Capital and O&M project updates will be forthcoming, and will be provided (with a comparison of the schedule and cost impacts) after it is finalized and approved." Please respond to the following:

- a. Confirm that HECO's proposed test year level of production maintenance expense in its filing is based upon the 1/12/04 Planned Maintenance Schedule (HECO-627) and actual projected overhaul project costs, as summarized on page 6 of the response, with no normalization adjustments made for ratemaking purposes.
- b. Explain whether the Company intends to revise its prefiled revenue requirement evidence for the referenced "project updates" referenced on page 2 of the response.
- c. Please explain whether the January 12, 2004 Planned Maintenance Schedule, the February 3, 2005 revision to the Planned Maintenance Schedule, or the "further revisions" to be made (as referenced at the bottom of page 2, are most indicative of normal, ongoing production maintenance

expenses that should be recognized for ratemaking purposes.

- d. Provide complete copies of all studies, reports, analyses, workpapers, projections, correspondence and other documents associated with your response to part c.

CA-IR-500

Ref: HECO Response to CA-IR-43, page 11.

Please provide the following more detailed information regarding the cost table by Project number set forth on page 11:

- a. Labor and non-labor costs by RA for each project listed in the 1/12/04 and in the 2/3/05 maintenance schedules.
- b. When the "further revisions" referenced at page 2 are finalized and approved, append another column to the response to part a incorporating the same cost breakdown by RA details.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FOURTEENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FOURTEENTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-501

Ref: CA-IR-124.

Please provide all input data files for the P-MONTH Production Simulation Model, for the test year period, in electronic format and hard copy.

CA-IR-502

Ref: CA-IR-124.

Please explain how you are modeling load in the P-MONTH Simulation Model for the test year. Are you modeling every hour of the year or are you modeling typical load for a weekday and weekend?

CA-IR-503

Ref: T-4, Page 10, Lines 8 – 15.

The software to run the P-MONTH Production Simulation Model has been updated by an outside vendor since HECO's last rate case. Please provide a list of the software updates, their purpose and how each update changed the model.

- a. "As a result, the program algorithms used in this model are consistent current industry standards". Please provide the program algorithms referenced and/or program manuals.

CA-IR-504

Ref: CA-IR-124, part c.

Generating unit capability information was provided in the response to CA-IR-124, part c. Please indicate which generating units are modeled with AGC in the P-MONTH Production Simulation Model.

CA-IR-505

Ref: CA-IR-143.

HECO Workpaper 409, Page 62, indicates a 5-day requirement on the receiving and testing of fuel oil at Kahe Power Plant. Please provide copies of all supporting documents for this 5-day requirement.

CA-IR-506

Ref: CA-IR-124, part e.

- a. Please provide copies of all studies, reports, analyses, and work papers for the Penalty Factors, for all generating units provided in the above referenced response.
- b. Please explain why the penalty factor of 1.006 for Waiau 3 and Waiau 4 is different than the penalty factor of 1.012 for Waiau 5 through Waiau 10?

CA-IR-507

Ref: Response to CA-IR-361 (Interruption of Service).

The referenced response referred to HECO-1401, page 3, and HECO-1404, page 1, for the service interruption liability claim costs. A review of these referenced documents do not produce any

historical information that ties to the annual amounts set forth in the table appearing on the first page of the response to CA-IR-361.

Please provide the following:

- a. Please provide a pinpoint reference to the specific information set forth on HECO-1401 and HECO-1404 that provides the liability claim information, reconciling and explaining any differences.
- b. If not clear from the response to item (a) above, please provide the service interruption liability claim costs included in the 2005 test year forecast, along with any supporting documentation.

Witness T-16 Ms. T. Sekimura

CA-IR-508

Ref: Response to CA-IR-331 & HECO-1612 (Employee Counts).

HECO-1612 compares average employees during the 2005 forecast test year with prior year levels. Please provide the following:

- a. Please provide the monthly employee counts supporting the 2005 test year average.
- b. If the information is readily available, please provide the monthly employee counts supporting the 2000-2003 recorded and 2004 budgeted averages.

Ref: Response to CA-IR-331 & HECO-1612 (Employee Counts).

The response to CA-IR-331 included actual employee counts as of February 2005. For each of the following employee count variances, please describe the Company's plans to add, transfer or decrease employees in the remainder of 2005:

- a. As of February 2005, the actual number of "Safety, Security & Facilities" employees under the VP-Corporate Excellence is 52 vs. the 2005 test year average of 43.
 1. What are HECO's plans to reduce employees in this area to achieve the average employee counts forecast for 2005?
 2. Has the Company revised its organizational structure or its plans in this area?
 3. Please explain and provide a copy of any supporting documents or analyses.

- b. As of February 2005, the actual number of "Project Management" employees under the VP-Energy Delivery is 0 vs. the 2005 test year average of 8.
 1. What are HECO's plans to increase employees in this area to achieve the average employee counts forecast for 2005?
 2. Has the Company revised its organizational structure or its plans in this area?

3. Please explain and provide a copy of any supporting documents or analyses.
- c. As of February 2005, the actual number of "System Operation" employees under the VP-Energy Delivery is 99 vs. the 2005 test year average of 109.
1. What are HECO's plans to increase employees in this area to achieve the average employee counts forecast for 2005?
 2. Has the Company revised its organizational structure or its plans in this area?
 3. Please explain and provide a copy of any supporting documents or analyses.
- d. As of February 2005, the actual number of "Customer Service" employees under the Sr. VP-Operations is 124 vs. the 2005 test year average of 134.
1. What are HECO's plans to increase employees in this area to achieve the average employee counts forecast for 2005?
 2. Has the Company revised its organizational structure or its plans in this area?
 3. Please explain and provide a copy of any supporting documents or analyses.

Ref: Response to CA-IR-331 & HECO-1612 (Employee Counts).

The response to CA-IR-331 included actual employee counts as of February 2005. Please provide the following:

- a. Did the Company transfer employees from “Energy Solutions” and “Integrated Resources Planning” under the Sr. VP-Energy Solutions to create a new “Customer Solutions” organization? Please explain.
- b. As of February 2005, the actual number of “Customer Solutions” employees is 50 vs. the 2005 test year average of 63 for “Energy Solutions” and “Integrated Resources Planning.”
 1. What are HECO’s plans to increase employees in this area to achieve the average employee counts forecast for 2005?
 2. Has the Company revised its organizational structure or its plans in this area?
 3. Please explain and provide a copy of any supporting documents or analyses.

CA-IR-511

Ref: Response to CA-IR-331 & HECO-1612 (Government & Community Affairs).

As of February 2005, the referenced response identifies seven Government & Community Affairs employees, as compared to five included in the test year forecast. Please provide the following:

- a. Please list the Government & Community Affairs positions included in the 2005 test year forecast.
- b. Please list the actual Government & Community Affairs positions as of February 2005.
- c. Referring to the lists provided in response to items (a) and (b) above, please identify and describe any revisions to HECO's staffing plans and objectives for this department in 2005.
- d. For each position identified in response to items (a) and (b) above, please provide a copy of the written job description. If no formal job descriptions exist, please explain the absence of such documentation and provide a detailed discussion of the duties and responsibilities of each position.

CA-IR-512

Ref: Response to CA-IR-331 & HECO-1612 (Special Projects).

As of February 2005, the referenced response identifies 4 Special Projects employees, as compared to "0" included in the test year forecast. Please provide the following:

- a. Please list any Special Projects positions included in the 2005 test year forecast.
- b. Please list the actual Special Projects positions as of February 2005.
- c. Referring to the lists provided in response to items (a) and (b) above, please identify and describe any revisions to HECO's staffing plans and objectives for this department in 2005.
- d. For each position identified in response to items (a) and (b) above, please provide a copy of the written job description. If no formal job descriptions exist, please explain the absence of such documentation and provide a detailed discussion of the duties and responsibilities of each position.

CA-IR-513

Ref: Response to CA-IR-331 & HECO-1612 (Governmental Relations & Public Affairs).

As of February 2005, the referenced response identifies three Governmental Relations and two Public Affairs employees, which represent the same employee counts included in the test year forecast. Please provide the following:

- a. Please list the Governmental Relations and Public Affairs positions included in the 2005 test year forecast.
- b. Please list the actual Governmental Relations and Public Affairs positions as of February 2005.

- c. For each position identified in response to items (a) and (b) above, please provide a copy of the written job description. If no formal job descriptions exist, please explain the absence of such documentation and provide a detailed discussion of the duties and responsibilities of each position.

CA-IR-514

Ref: CA-IR-86.

- a. Is the noted \$80,132,009 of updated total utility book depreciation and amortization expense supposed to be \$80,079,731?
- b. If no, please provide a listing of FERC plant subaccounts depreciation accruals that should be summed to arrive at the noted \$80,132,009.

CA-IR-515

Ref: HECO-WP-1602.

Please provide an update of 2005 estimated Amortization of CIAC based upon 2004 actual receipts, transfers, etc.

CA-IR-516

Ref: HECO-1608.

Please provide an update of 2005 estimated Amortization of SFAS 109 regulatory assets, including underlying workpapers, based upon 2004 actual plant addition activities.

Witness T-17, Mr. Lon. Okada

CA-IR-517

Ref: Response to CA-IR-193 addressing "Excess" Deferred Income Tax Balances.

- a. Please provide the development of the net excess deferred tax balance as determined in 1998, tying "per book" net plant amounts in total used in such calculation to Form 1 reported amounts.
- b. Provide the basis for determining the "average remaining life" used to amortize the excess deferred tax balance.
- c. If such schedule has been prepared, provide the total electric turnaround of excess deferred tax amount by year as calculated adhering strictly to the average rate assumption method.
- d. Are the "deficit" deferred income tax balances being amortized over the same period as the "excess" deferred income tax balances? If no:
 1. Over what period are the "deficit" deferred income taxes being amortized
 2. Explain the basis or reason for amortize "deficit" deferred income taxes over a different period than the "excess" deferred income taxes.

Witness T-19, Ms. Gayle Ohashi

CA-IR-518

Ref: HECO-WP-1907, page 28, addressing pension expense payment lag:

- a. Please provide the actual pension contribution payment(s) made by date(s) related to 2003 and 2004 pension costs. In other words, provide actual pension contributions (dates and amounts) attributable to calendar years 2003 and 2004 pension funding requirements/limitations as determined by minimum required (ERISA) and maximum tax deductible (IRC) contributions (or any amount in between) for each noted period.
- b. Please provide the mandatory pension contribution dates for any given calendar year as may be dictated/guided by the Internal Revenue Code, pension plan documents, or other authoritative sources.
- c. Please provide the forecasted pension contributions (dates and amounts) related to calendar year 2005 as determined by minimum required (ERISA) or maximum tax deductible (IRC) contributions (or any amount in between) for each noted period.

CA-IR-519

Ref: HECO-WP-1907, page 28, addressing OPEB expense payment lag:

- a. Please provide the actual OPEB contribution payment(s) made by date(s) related to 2003 and 2004 OPEB costs. In other words, provide actual OPEB contributions (dates and amounts) attributable to calendar years 2003 and 2004 OPEB funding requirements/limitations/targets.
- b. Please provide the mandatory OPEB contribution dates for any given calendar year as may be dictated/guided by the Internal Revenue Code, OPEB plan documents, or other authoritative sources.
- c. Please provide the forecasted OPEB contributions (dates and amounts) related to calendar year 2005.

Witness T-9, Mr. Darren Yamamoto

CA-IR-520

Ref: Revenue Lag Days Calculation.

Please provide the following all relating to the interaction of the revenue lag day calculation utilized in the lead lag study and the assessment of Late Payment Charges Revenues:

- a. Please confirm our understanding received during our interview held on February 7, 2005 with Darren Yamamoto and his staff that Late Payment Charges of 1.0% of a customer's outstanding bill is assessed whenever a customer's payment is not received within 19 days of bills

being mailed. If any element of this understanding is incorrect, please correct, expand or clarify as deemed necessary or appropriate.

- b. Notwithstanding Commission approved Rules that allow assessment of a one percent (1.0%) Late Payment Charge when customer revenues are not received within 19 days following the mailing date of the utility bill, does the Company occasionally, regularly or routinely waive such Late Payment Charges? Please explain any answer given and specifically delineate the criteria or conditions for waiving the Commission authorized assessment of Late Payment Charges as applicable.
- c. Please provide accounts receivable aging reports as well as any other reports routinely generated for 2003, 2004 and 2005 to date that quantify and/or stratify the number of days and related amounts of customers' accounts receivable balances outstanding by time frames (i.e., 0 – 30 days outstanding, 31 – 60 days outstanding, 61 – 90 days outstanding, over 90 days, or other stratifications as may be routinely reported and analyzed.)
- d. In response to CA-IR-167 the Company provides historic Late Payment Charges billed in relationship to total historic revenues billed, leading to a conclusion that historically

about 0.1% of total revenues are ever subjected to the 1.0% Late Payment Charge. Utilizing an accounts receivable turnover calculation, HECO calculates the *average* number of days between issuance of bill (when transaction hits the accounts receivable balance) and receipt of related revenues to be 22.5 days. Thus, the collection lag calculated utilizing the accounts receivable turnover methodology suggests that, *on average*, HECO customers pay their utility bills three and one-half days beyond the due date that triggers assessment of the one percent (1.0%) Late Payment Charge. Please provide any and all quantitative analyses or qualitative explanation that reconciles how or why so little Late Payment Charges are being assessed/collected in light of the calculated average collection lag that significantly exceeds the Late Payment Charge trigger date.

Witness T-18, Ms. L. Nagata

CA-IR-521

Ref: Response to CA-IR-93 regarding 2004 Actual Plant Additions.

The noted response indicates that Item No. P0000886 (Wal-Mart Sam's Keeaumoku) came on line considerably under the original 2004 budget amount. Please provide the following regarding Item No. P0000886:

- a. State whether the entire project has been completed.
- b. If the entire project has *not* been completed, please describe the remaining phases, state the estimated cost for each remaining phase, and state the currently estimated in-service date for each remaining phase.
- c. As applicable, state the criteria for determining when each phase is considered in-service.
- d. If the entire project has been completed, please briefly explain why the project came in significantly under budget.

CA-IR-522

Ref: Response to CA-IR-93 regarding 2004 Actual Plant Additions.

The noted response indicates that Item No. Y00027 (Mokuone Substation) came on line considerably under the original 2004 budget amount. Please provide the following regarding Item No. Y00027:

- a. State whether the entire project has been completed.
- b. If the entire project has *not* been completed, please describe the remaining phases, state the estimated cost for each remaining phase, and state the currently-estimated in-service date for each remaining phase.
- c. As applicable, state the criteria for determining when each phase is considered in-service.

- d. If the entire project has been completed, please briefly explain why the project came in significantly under budget.

CA-IR-523

Ref: HECO-1902 and the Company's response to CA-IR-96 addressing changes in plant/ depreciation reserve balances.

It is the CA's understanding that depreciation expense accrued in any given year is based upon beginning-of-calendar-year gross plant in service balances multiplied times authorized depreciation rates. Please confirm such assumption, and if correct, explain why the "actual" depreciation expense accrual for 2004 turned out to be slightly different than the 2004 estimate as provided in response to CA-IR-96.

CA-IR-524

Ref: HECO-WP-1907 (Fuel payment lag development).

Please provide any updated fuel payment lags that have resulted from new/amended Chevron or Tesoro contracts recently entered into that became/will become effective in 2005.

CA-IR-525

Ref: Company's response to CA-IR-216.

- a. Is each "Prepayment" account shown therein related exclusively to HECO's provision of electric service?
- b. If no, please provide the following:

1. State each entity/business unit (i.e., parent, subsidiary, unregulated business venture, etc.) to which the prepayment also relates.
2. State the basis for allocating/assigning the expense distribution of the prepayment balance between HECO electric service and other benefiting entities/business units.
3. Provide the actual expense distribution from the prepayment account between entities/business units for calendar year 2004.

CA-IR-526

Ref: Company's response to CA-IR-215.

- a. Is each "Reserve" account shown therein related exclusively to HECO's provision of electric service?
- b. If no, please provide the following:
 1. State each entity/business unit (i.e., parent, subsidiary, unregulated business venture, etc.) for which the reserve account also applies.
 2. State the basis for accruing the expense provision of the reserve balance between HECO electric service and other entities/business units for which the expense is being accrued.

3. Provide the actual expense accrual for each reserve account by entity/business unit for calendar year 2004.

HECO Witness T-6, Mr. Fujinaka.

CA-IR-527

Ref: HECO Response to CA-IR-34, Attachment 1, Cycling Unit Service Hours.

According to the Attachment, cycling service hours were much higher in the late 1980's and other years prior to 1992, when the IPP capacity purchases were added to system resources, and have recently grown with demand to comparable levels in 2004. Please provide the following information:

- a. Please append to the Attachment 1 table and graphs cycling unit service hours associated with each of the Company's units based upon the HECO generation dispatch simulation for the test period, as well as the combined "total" hours, if available.
- b. Explain whether the cycling units were staffed for 16 hours per day, 5 days per week or for 24X7 operations in the late 1980's and in 1990-1992, so as to accommodate the service hour demands at that time.
- c. If 24X7 staffing was not needed in the late 1980's and in 1990-1992, please explain why such staffing is now thought to be needed due to higher demand levels.

- d. Please describe the generating unit operations staffing complement, in terms of number of approximate numbers of personnel, for each generating station throughout each year of the time frame of this table and graph.
- e. Please provide the approximate level of overtime hours incurred for production operations for each generating station throughout as many prior years of the time frame of this table and graph as are available.

CA-IR-528

Ref: HECO Responses to CA-IR-28, Attachment 2, page 21; to CA-IR-30, Attachment 1; and HECO's Adequacy of Supply Report to the Commission dated March 10, 2005 at page 13.

According to the "HECO" column in CA-IR-30 and in CA-IR-28, Attachment 2, page 21, the Company's EFOR declined to 6.18 percent during 2004. However, the March 10 AOS Report to the Commission, in contrast, stated, "The 2004 system average EFOR was 4.98%..." Please provide the following information:

- a. Explain why the EFOR for 2004 was stated at 4.98 percent in the letter to the Commission, which does not match the referenced IR responses.
- b. Provide reconciling calculations for the 4.98% versus 6.18% system EFOR rate.

- c. Explain the primary outage and maintenance conditions experienced at each generating unit that contributed to the deterioration in system EFOR in 2004.
- d. Were any extraordinary maintenance outage conditions experienced during 2004 that contributed to EFOR deterioration and that required unusual repair efforts or expansion of outage scope or duration at particular generating units?
- e. If your response to part d is affirmative, please identify and describe the expanded work scope that was required at each unit and explain how such work has impacted future outage schedule and work scoping plans.
- f. Describe the specific steps that have been taken by HECO to remedy each condition referenced in your response to part c.

CA-IR-529

Ref: HECO Response to CA-IR-28, Attachment 2.

This response indicates that for each HECO generating unit, "Available Hours" have exceeded 8,000 hours in either 2003 or 2004, approaching total "Period Hours" of 8,760. However, at page 24 of his testimony, T-6 explains the proposal to add operations staffing by stating, "The additional operators will help to reduce the overtime to more manageable and healthy levels as well

as increase the respective unit availabilities from 16x5 to 24x7.”

Please provide the following information:

- a. Explain why generating units are being reported as available on a nearly 24x7 basis in the past two years, if additional staffing is only now being added to achieve such around the clock availability.
- b. State with specificity how nearly full time availability has been achieved historically, when increased staffing for 24X7 operation is required to achieve such availability.
- c. Provide straight time, overtime and other labor statistics associated with your response to part b.

HECO Witness T-22, Ms. Estrella Seese

CA-IR-530

Ref: HECO Embedded Cost of Service Model, sheet HLADATA.

According to footnote 2, “LF for Schedules R, G, H, and F are based on HECO 2003 Class Load Study. Schedules J, PS, PP, and PT are based on Rpt 212 rate runs.” Please describe the basis and time period(s) used to prepare the Rpt 212 rate runs and provide copies of the summary pages for same, indicating the input load factor values used by HECO.

CA-IR-531

Ref: HECO-2210 and HECO-WP-2202, Page 10, Customer Costs.

According to footnote 1 on HECO-2210, calculated unit customer costs used in designing the company's proposed rates "Includes the proposed DSM program costs included in Account No. 910 – Customer Service Expense." Please respond to the following:

- a. Please explain the basis for inclusion of allocated DSM costs within the "Customer" function, as opposed to recognizing such costs as "demand" related.
- b. Provide copies of or citation to any regulatory decisions or other authority relied upon in connection with your functionalization of DSM costs.
- c. Please quantify the effects of excluding DSM costs from the overall revenue requirement and the Company's calculated unit cost of service set forth on HECO-2210.

CA-IR-532

Ref: HECO Response to CA-IR- 368; Power Factor Adjustment.

The response states at part b, "The power factor adjustment is economically justified as it provides incentives to customers to install capacitors and reduce the kvar that they require from the system, thereby reducing the utility system costs." Please respond to the following:

- a. State whether or not HECO has any calculations, studies, workpaper or other information that compares the amount of

“incentives to customers” to the related achieved “reduction in utility system costs,” so as to determine if the level of existing power factor credits to customers are, in fact, “economically justified.”

- b. If your response to part a is affirmative, please identify and provide complete copies of each document supportive of power factor credit economics.
- c. Please provide the dollar amount of total power factor billing determinants and billed revenue charges/credits by rate schedule, for each historical year 2002, 2003 and 2004.
- d. Please compare and reconcile the year 2003 actual power factor billings to all customers in each rate schedule, into the corresponding amounts set forth in test year revenue calculations at present rates and at proposed rates sponsored by witness T-3 (for example, HECO_RatePP_Draft_proposed_110704_final_efile.wks, sheet “PowerFactor” indicates \$2.5 million and \$3.6 million of total Rate PP credits at present and proposed rate levels, respectively).

Witness T-10 Mr. Hee.

CA-IR-533

Ref: HECO T-10, page 35, & HECO-WP-2303 (DSM Costs).

On March 16, 2005, the Commission issued Order No. 21698, which separated HECO's DSM and load management requests from the rate case and opened Docket No. 05-0069 to consider those issues. Please provide the following:

- a. Does the Company concur that the 2005 test year forecast should be adjusted to remove these costs from overall revenue requirement? If not, please explain.
- b. Please provide a quantification of the adjustments required to remove DSM and load management costs, revenues and/or investments from HECO's 2005 test year forecast.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FIFTEENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

FIFTEENTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-534

Ref: Response to CA-IR-278, Part c.

The information provided is not responsive. For example, please provide copies of all workpapers, analysis, reports, etc. that were prepared and used to develop the information contained in the AOS 2005.

CA-IR-535

With respect to pages 24 to 27 of the Company's March 10, 2005 Adequacy of Supply report to the Commission:

- a. Please identify (i.e., separately) the megawatt contribution from each of the "mitigation measures" identified, in each year 2005 through 2009.
- b. Please reconcile the resource plan that the company will pursue in the form of "mitigation measures" to the "six proposed resource plans" that the Company discusses at the bottom of page 22. That is, please explain whether HECO plans to pursue the mitigation measures and (i) all of the six resource plans, (ii) one of the proposed resource plans, (iii) some combination of mitigation measures and resource plan measures, or (iv) has some other resource plan in mind.

- c. To the extent not addressed in the response to part (b) above, please identify the complete package of resources that HECO plans to acquire during the next five years to respond to the identified capacity shortage.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SIXTEENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SIXTEENTH SUBMISSION OF INFORMATION REQUESTS

CA-IR-536

Ref: HEI Form 10-K dated 3/11/2005, page 45.

According to the Report, "HECO and its subsidiaries expensed approximately \$3.3 million, \$3.1 million and \$2.8 million in 2004, 2003 and 2002, respectively, for research and development. Contributions to the Electric Power Research Institute accounted for more than half of the expenses. There were also expenses in the areas of energy conservation, new technologies, environmental and emissions controls, and expenses for studies relative to technologies that are applicable or may be applicable in the future to HECO, its subsidiaries and their customers." Please provide the following information:

- a. A detailed breakdown of R&D expenditures by NARUC Account and by project/payee in each year 2002 through 2004 and in the projected test year.
- b. Explain the variations between test year proposed R&D and historical expenditure levels set forth in the response to part (a).

CA-IR-537

Ref: HEI Form 10-K dated 3/11/2005, page 34.

According to the Report, "On October 13, 2004, HECO issued a public request that its customers voluntarily conserve energy as two units were out for scheduled maintenance and two units were unexpectedly unavailable." Please respond to the following regarding this statement:

- a. Provide a copy of the script and other documentation associated with the "public request" that was made.
- b. Describe the outage conditions that were being experienced at the time and HECO's response to such conditions.
- c. Provide copies of the unit outage reports associated with the two units on scheduled maintenance and the two units that were "unexpectedly unavailable."
- d. Provide a summary of the incurred costs by NARUC Account and by month associated with each of the referenced outages.

CA-IR-538

Ref: HEI website News Release dated February 7, 2005 regarding fourth quarter earnings.

According to this document, "The primary reason for the decline in fourth quarter net income was \$10.4 million higher maintenance expenses quarter-over-quarter (\$6.3 million, net of taxes) due to the larger scope and timing of overhauls, repairs and maintenance,

including an unscheduled major overhaul of an Oahu generating unit.” Please provide the following information:

- a. Identify and describe the “unscheduled major overhaul of an Oahu generating unit” that is referenced in the statement.
- b. Provide a complete copy of the unit outage report associated with the referenced outage.
- c. Provide a summary of the incurred costs by NARUC Account and by month associated with the outage.

CA-IR-539

- a. Does HECO (or HEI on behalf of HECO) prepare any multi-year long term financial forecasts in the normal course of business?
- b. If affirmative, please provide the following information:
 1. A complete copy of the most recently prepared HECO five-year operations forecast (or equivalent).
 2. A detailed statement of the assumptions employed in the development of documents produced in response to part (1) and the 5-year capital budget that was filed with the Commission on December 30, 2004.
 3. The most detailed available breakdown of electric operating expenses by account block, cost element, department, RA, etc., for each forecasted year.

Ref: HEI Form 10-K dated 3/11/2005, page 18 (Contingencies).

According to the 2004 10-K, "Certain factors that may affect future results and financial condition—Other regulatory and permitting contingencies" include "HECO's East Oahu Transmission Project; the lawsuit against The AES Corporation, HECO and HEI; and the Honolulu Harbor environmental investigation." Please provide the following for each of the identified matters:

- a. Does the 2005 test year forecast include any expense accruals or charges related to these "factors"? If so, please provide all such amounts by NARUC account.
- b. Referring to item (a) above, please provide a detailed explanation as to why the identified amounts should be included in the 2005 test year forecast and considered in quantifying overall revenue requirement.
- c. Please provide the amount of any expense accruals or charges recorded in HECO's actual results of operations (by NARUC account) in calendar years 2004 and 2005 related to these "factors."
- d. Does the Company reasonably anticipate that any costs incurred as a result of these actions will be fully covered by existing insurance policies? Please explain and quantify the amount of any expected out of pocket costs.

Ref: HEI Form 10-K dated 3/11/2005, page 18 (Contingencies).

According to the 2004 10-K, "on July 22, 2004, a contractor (hired by HECO for a utility line extension project to support the expansion of the City and County of Honolulu's wastewater treatment plant) accidentally drilled into a force main sewer line owned by the City and County. The City and County made a formal demand that HECO provide full compensation for damages to the force main sewer line. Management believes HECO has defenses against any assertions that it has liability for the incident as well as insurance coverage (over a deductible amount). Accordingly, HECO responded to the demand asserting its defenses against liability. HECO has increased its general liability reserves to provide for clean-up costs in the event it is found to have responsibility for such costs." Please provide the following:

- a. Does the 2005 test year forecast include any expense accruals or charges related to this incident? If so, please provide all such amounts by NARUC account.
- b. Referring to item (a) above, please provide a detailed explanation why the identified amounts should be included in the 2005 test year forecast and considered in quantifying overall revenue requirement.
- c. Please provide the amount of any expense accruals or charges recorded in HECO's actual results of operations (by

NARUC account) in calendar years 2004 and 2005 related to this incident.

- d. Does the Company reasonably anticipate that any costs incurred as a result of this incident will be fully covered by existing insurance policies? Please explain and quantify the amount of any expected out of pocket costs.

CA-IR-542

Ref: HEI Form 10-K dated 3/11/2005, page 34 (Affiliates).

According to the 2004 10-K, "all transfers of \$300,000 or more of real property between a public utility and affiliated interests require the prior approval of the PUC and proof that the transfer is in the best interest of the public utility and its customers. If the PUC, in its discretion, determines that an affiliated contract is unreasonable or otherwise contrary to the public interest, the utility must either revise the contract or risk disallowance of the payments for ratemaking purposes." Please provide the following:

- a. Since HECO's last rate case, has HECO transferred \$300,000 or more of real property to an affiliate? If yes, please describe each such transaction.
- b. Referring to item (a) above, please identify and describe the Company's efforts to seek the required regulatory approval(s).

CA-IR-543

Ref: HEI Form 10-K dated 3/11/2005, page 34 (Affiliates).

According to the 2004 10-K, "in ratemaking proceedings, a utility must also prove the reasonableness of payments made to affiliated interests under any affiliated contract of \$300,000 or more by clear and convincing evidence." Please provide the following:

- a. Please identify each affiliate to whom HECO actually paid more than \$300,000 under an affiliate contract during the 2004 historical year.
- b. Please identify each affiliate to whom HECO expects to pay more than \$300,000 under an affiliate contract during the 2005 test year forecast.
- c. Referring to items (a) and (b) above, please provide a pinpoint reference to the pages of testimony or related exhibits through which HECO seeks to establish the required reasonableness of the identified payments.

HECO Witness T-6: Mr. Fujinaka

CA-IR-544

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 4A, Pages 8 and 9.

These documents are captioned "VIEW: 5-Yr Proj Cost" and "VIEW: 5-Yr Proj Labor Hour" and appear to be an excerpt of certain RA cost and labor hour projections by project for five future years. Please provide the following information:

- a. Confirm that HECO maintains five-year projections of its “project” expenditures for the production department or explain what alternative information is maintained that sets forth long term estimates of project hours and costs.
- b. Provide the most current available detailed copy of five year projected expensed labor hours per project; sorted by project, RA, Activity, Location, and Indicator for each of the future years that have been forecasted by HECO.
- c. Provide the most current available detailed copy of five year projected capitalized labor hours per project; sorted by project, RA, Activity, Location, and Indicator for each of the future years that have been forecasted by HECO.
- d. Provide the most current available detailed copy of five year projected labor expenses per project; sorted by project, RA, Activity, Location, and Indicator for each of the future years that have been forecasted by HECO.
- e. Provide the most current available detailed copy of five year projected capitalized labor costs per project; sorted by project, RA, Activity, Location, and Indicator for each of the future years that have been forecasted by HECO.
- f. Provide the most current available detailed copy of five year projected expensed non-labor costs per project; sorted by

project, RA, Activity, Location, and Indicator for each of the future years that have been forecasted by HECO.

- g. Provide the most current available detailed copy of five year projected capitalized non-labor costs per project; sorted by project, RA, Activity, Location, and Indicator for each of the future years that have been forecasted by HECO.
- h. Provide a summary of the total labor and non-labor expenses for 2005 indicated from your response to parts (b) through (g) and reconcile such summary to the proposed test year expenses contained in the Company's rate filing.

CA-IR-545

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 4A, Pages 4 through 6.

This document is captioned, "PROJECT IDENTIFICATION FORM – INITIALIZE PROJECT" (PIF form) and appears to summarize project cost forecasts, strategic plan linkage, corporate goals and project purposes into a standardized document used to control project expenditures. Please provide the following information:

- a. Confirm and explain the purpose for this form.
- b. Provide complete copies of these forms for each of the unit overhaul projects (see Attachment 4B, page 1) for which the Company is seeking rate case inclusion of expenses.
- c. If the overhaul schedule and test year projected O&M expenses are to be revised by HECO, relative to its

initial filing, please also provide the information associated with part (b) for the revised overhaul projects.

- d. Provide complete copies of the PIF forms associated with any other projects for which the Company is seeking rate case inclusion of expenses in excess of \$500,000 (if any).
- e. Regarding the "Strategic Plan Linkage:" field on the PIF form, please provide a complete copy of the Company's most recently prepared "Strategic Plan."

Witness T-17, Mr. Lon. Okada

CA-IR-546

Ref: Responses to CA-IR-211 and CA-IR-212 regarding PSC Taxes.

Please provide the following:

- a. Confirm, or explain to the contrary as applicable, that PSC taxes assessed and paid in any given calendar year are assessed upon the *prior year's* actual billed plus unbilled revenues.
- b. Clarify whether the "Taxable Base" revenues shown in Column A of the response to CA-IR-212 relate to the year/month shown or actually to the comparable months in the *prior year*.
- c. Clarify whether the "Current Year PSC Tax Expense" shown in Column B relate to the year/month shown or actually to the comparable months in the *prior year*.

- d. Provide the workpapers supporting the Public Service Company Taxes "At Present Rates" as shown on HECO-1701 (i.e., \$58,660).
- e. Provide the actual amount of 2005 PSC taxes that have been/will be assessed based upon actual 2004 revenues. Provide underlying calculations/workpapers tying/reconciling revenue base used in such assessment to revenues reported for financial statement purposes.
- f. Please provide the amount of PSC taxes included in the 2005 board-of-director approved budget, including underlying calculations/workpaper support, tying/reconciling the taxable base revenues into 2004 actual/estimated revenues.
- g. How are PSC taxes assessed allocated across, or spread to, each month of a given calendar year (i.e., one-twelfth of the annual assessment, based upon consumption in each month of the prior year, other).

CA-IR-547

Please provide an update of all correspondence to/from HECO or its outside counsel/consultants and the Internal Revenue Service regarding HECO's application to the IRS as discussed at page 37 of Mr. Shiraki's direct testimony.

CA-IR-548 Please provide an update of any research/studies undertaken by HECO or its outside counsel/consultants regarding other companies ability – or lack thereof – to avail themselves of the change in tax elections as discussed at page 37 of Mr. Shiraki’s direct testimony.

CA-IR-549 Please provide copies of workpapers, or cite previously provided workpapers, supporting the derivation of Public Utility Fees “At Present Rates” as reflected on HECO-1701.

CA-IR-550 Please provide copies of workpapers, or cite previously provided workpapers, supporting the derivation of Franchise Royalty Taxes “At Present Rates” as reflected on HECO-1701.

Witness T-13 Mr. Ernest Shiraki.

CA-IR-551 **Ref: HECO revised response to CA-IR-251 & HECO-1310 (HEI Billings).**

Footnotes 12 and 15 of HECO-1310 provide additional “normal” annual costs attributable to Sarbanes-Oxley (Sections 404 and 302) compliance. Footnote 12 also indicates that “since 2004 will be the first year of implementation of Sarbanes-Oxley Section 404, the Company anticipates that the actual costs will far exceed the 2004 estimates shown.” Please provide the following:

- a. Referring to HECO-1310, please confirm that the "normal" costs included in the 2004 estimate, which were then escalated for inclusion in the 2005 test year forecast, total \$97,546. If this cannot be confirmed, please separately list and total the amounts included in the 2004 estimate and the 2005 test year forecast.
- b. Referring to the revised response to CA-IR-251, the 2004 actual HEI billings to HECO appear to include \$69,440 related to Sarbanes-Oxley (ADM 112, RPT 098 & TAX 019). Does this represent the total of the actual 2004 Sarbanes-Oxley charges billed by HEI? If not, please provide a detailed listing, description and quantification of the actual Sarbanes-Oxley charges included in the actual 2004 HEI billings to HECO.
- c. Regarding the response to item (b) above, does the Company believe that the actual 2004 costs "far exceed" the anticipated level of "normal" Sarbanes-Oxley costs? Please explain.
- d. Referring to item (c) above, please reconcile the actual 2004 Sarbanes-Oxley compliance costs with the "normal" amounts included in the 2005 test year forecast.

CA-IR-552

Ref: HECO revised response to CA-IR-251 & HECO-1310 (HEI Billings).

Please explain and reconcile the following variances between the amounts included in the 2005 test year forecast and the 2004 actual charges to HECO from HEI:

- a. INV 006 (Group analyst meetings): \$150,510 actual 2004 vs. \$127,251 test year forecast.
- b. INV 008 (Investor base/ stockholder monitoring): \$15,851 actual 2004 vs. \$29,745 test year forecast.
- c. INV 009 (Investor Relations Planning): \$2,221 actual 2004 vs. \$43,595 test year forecast.
- d. INV 13 (Other investor relations activities): \$34,225 actual 2004 vs. \$20,746 test year forecast.

CA-IR-553

Ref: HECO-1310 (HEI Billings).

Please provide the following information regarding the identified charges included in the 2005 test year forecast:

- a. CON 002 (Meetings) and CON 004 (Other): \$43,051 of test year general consulting charges directly assigned to HECO. Please identify and describe the specific consulting services typically incurred by HEI and assigned to HECO for inclusion in the test year forecast.
- b. TAX 003 (Tax and financial planning): \$22,263 is included in the test year forecast. Please describe the type and nature

of tax/ financial planning services, identifying any portion associated with personal advice to executives and senior management personnel.

Witness T-8 Mr. S. Yoshida

CA-IR-554 **Ref: HECO T-8, p. 18 & HECO T-13, p. 47. (OMS).**

The Outage Management System is described as a major reliability initiative HECO plans to implement in 2006. Please provide the following:

- a. Are any costs associated with OMS included in the 2005 test year forecast of rate base or expense?
- b. Referring to item (a) above, please provide the respective amounts included in revenue requirement, along with a pinpoint reference to the forecast workpapers or other documentation supporting the quantification of such amounts.

Witness T-9, Mr. Darren Yamamoto.

CA-IR-555 **Ref: HECO T-9, p. 5-6 & 15, & HECO T-13, p. 47. (CIS).**

HECO's plans to replace the current Customer Information System are generally discussed, with reference to Docket No. 04-0268. Please provide the following:

- a. Are any costs associated with CIS included in the 2005 test year forecast of rate base or expense?

- b. Referring to item (a) above, please provide the respective amounts included in revenue requirement, along with a pinpoint reference to the forecast workpapers or other documentation supporting the quantification of such amounts.

Witness T-15 Ms. J. Price.

CA-IR-556 **Ref: T-15, page 17, response to CA-IR-345 & HECO-1507 (Long-Term Disability).**

With regard to the update to HECO-1507 produced in response to CA-IR-345, please provide the following:

- a. Referring to page 8 of the response to CA-IR-345, please provide support for calculation of the average merit salary (\$73,284) and BU wage (\$57,595) as of January 1, 2005.
- b. Referring to item (a) above, how do these average compensation levels compare to the compensation levels effectively included in HECO's 2005 test year forecast? Please explain and reconcile any material differences.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SEVENTEENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

SEVENTEENTH SUBMISSION OF INFORMATION REQUESTS

- CA-IR-557
- a. Please identify by name and title the person within HECO's organization who has lead responsibility for monitoring generating system reliability (i.e., performance relative to the "4.5 years per day" standard).
 - b. Please provide copies of all memoranda, reports, or correspondence issued between January 1, 2002 and the March 31, 2005, (i) to, or (ii) by the person identified in response to part (a), above, addressing the topics of actual, historic, or projected generating system reliability.
- CA-IR-558
- a. Please verify that HECO's March 31, 2004 Adequacy of Supply report ("AOS 2004") to the Commission identified a need for 40 MWs to maintain generating system reliability above the 4.5 years per day guideline to 2007 (see page 6).
 - b. Please verify that, as of March 31, 2004, HECO was exploring several options to address this need for additional capacity resources including:
 - i. more aggressive energy and load management DSM programs;

- ii. identification and implementation of CHP projects in addition to those included in HECO's proposed CHP program;
 - iii. increased output from HECO's existing units;
 - iv. increased output from existing Independent Power Producers; and
 - v. the installation of DG (see AOS 2004 at 9).
- c. For each mitigation measure described in part (b) above (and other mitigation measures not listed), please describe the steps that HECO accomplished during the months between publication of AOS 2004 and AOS 2005.
- d. For each mitigation measure discussed in part (c), above, please describe the incremental MW contributions that HECO has been able to secure for each year 2005 through 2009, based on the efforts described.
- e. Please provide the "action plan," i.e., the document or documents that governed HECO's actions as it pursued the incremental MW contributions described in part (d), above.
- CA-IR-559 a. Please provide a copy of each contingency analysis performed relative to the "base case scenario" represented in AOS 2004.

- b. Please provide a copy of the contingency plan for addressing contingencies identified in the response to part (a), above.

CA-IR-560

- a. Can Table 3 of AOS 2005 be interpreted to mean that, in 2006, Oahu should expect one outage per year because HECO's generation system cannot meet customer demands? Please explain.
- b. Can Table 3 of AOS 2005 be interpreted to mean that, in 2005, Oahu should expect about one outage per year because HECO's generation system cannot meet customer demands? Please explain.
- c. If the answer to part (a) or part (b), above is in the affirmative, please reconcile the response to the paragraph on page 25 of AOS 2005, which begins "HECO has sufficient firm generating capacity on its system to meet the forecasted load."

CA-IR-561

Attachment 2 to Appendix 3 to HECO's March 10, 2005 Adequacy of Supply report ("AOS 2005") to the Commission suggests that the Company's "4.5 years per day" standard has been the Company's planning standard since 1968 (see Page 3 of 3). Please verify that this is the case.

- CA-IR-562
- a. Has HECO made commitments to any government leaders or agencies to preserve system reliability at or above the 4.5 years per day standard?
 - b. If the response to part (a) is in the affirmative, please identify:
 - i. each such government leader (by office) or agency to which such commitment was made; and
 - ii. provide the earliest known date on which each such commitment was made.
 - c. Please provide copies of documents that support the response to part (b), above.

- CA-IR-563
- a. Given that the AOS 2005 base scenario includes assumed resources as described at 16-17, including an additional 29 MWs from Kalaeloa, please explain how the resource deficiency grew from 40 MWs in AOS 2004 to 60 MWs in AOS 2005.
 - b. Please provide a table that reconciles the shortage identified in AOS 2004 to the shortage identified in AOS 2005. For example, for the year 2005, please identify the assumed:
 - i. peak forecast values (MWs) and the change in peak forecast values from AOS 2004 to AOS 2005;

- ii. load management DSM values (MWs) and the change in MW contributions under AOS 2004 and AOS 2005;
- iii. energy efficiency DSM values (MWs) and the change in MW contribution under AOS 2004 and AOS 2005, etc.

CA-IR-564

Attachment 2 to Appendix 3 to HECO's AOS 2005 states that "We planned (in 1972) to increase the level of reliability to between 7.0 and 10.0, ... as our company financing and earnings will permit us to do so" (see Page 3 of 3).

- a. Please verify that the "7.0" and "10.0" refer to "7.0 years per day" and "10.0 years per day" planning standards, respectively.
- b. Please state (i) whether and (ii) when this alternate planning standard was adopted.
- c. If the 7.0 to 10.0 years per day planning standard was adopted, please explain statements in the AOS 2005 that identify 4.5 years per day as the planning standard.
- d. If the 7.0 to 10.0 years per day planning standard was not adopted, please explain why not.

CA-IR-565

- a. Has HECO made commitments to any government leaders or agencies to preserve system reliability at or above the 7.0 years per day standard?
- b. If the response to part (a) is in the affirmative, please identify:
 - i. each such government leader (by office) or agency to which such commitment was made; and
 - ii. provide the earliest known date on which each such commitment was made.
- c. Please provide copies of documents that support the response to part (b), above.

CA-IR-566

The AOS 2005, at 3, states that “delays have resulted in reduced estimates of annual load management program impacts....”

- a. Could HECO have taken steps to accelerate the marketing and installation of the Residential Direct Load Control, and Commercial and Industrial Load Control Programs? Please explain.
- b. Please explain why HECO did or did not take steps to accelerate the marketing and installation of these “Load Management DSM Programs” (i.e., prior to March 10, 2005).

- c. Please provide all documents that address HECO decisions regarding the timing of marketing and installing these "Load Management DSM Programs."

CA-IR-567

The AOS 2005, at 3, states that "it is assumed that the benefits from these eight programs will begin in July 2005, but this date is predicated on the assumed bifurcation of the DSM programs from the HECO rate case such that they can be reviewed and approved by the PUC on an accelerated schedule...."

- a. Please explain why HECO did or did not take steps to accelerate the implementation of these DSM programs (i.e., prior to March 10, 2005).
- b. Please provide copies of all documents that address HECO decisions regarding the timing of the implementation of these DSM programs.

CA-IR-568

The AOS 2005, at 4, states that "a revised forecast for CHP was developed that estimates CHP impacts, ... based on the assumption that HECO will be allowed to begin installing CHP systems in 2006."

- a. Could HECO have taken steps to accelerate the installation of CHP systems? Please explain.

- b. Please provide all documents that address HECO decisions regarding the timing of installing CHP systems.

CA-IR-569

- a. Please state what HECO will do to ensure that system reliability returns to the 4.5 years per day standard in the event that there are further delays in proceedings before the Commission addressing DSM and CHP programs.
- b. Please provide a copy of any “contingency” or “action” plan that documents HECO’s planned actions under the contingency described in part (a), above.

CA-IR-570

Please provide a copy of the (a) capital improvements and (b) maintenance budgets for each HECO generating facility for the years 1999 through 2004.

CA-IR-571

- a. Please provide copies of all HECO documents dated between January 1998 and the present that address the lead times for permitting new generating facilities.
- b. Please provide copies of all HECO documents dated between January 1998 and the present that address HECO decisions to initiate the permitting of its next major generating facility (e.g., the “Next Generating Unit Addition” discussed in the AOS 2005, at 5.

CA-IR-572

- a. Please provide copies of all HECO documents dated between January 1998 and the present that address the lead times for engineering new generating facilities.
- b. Please provide copies of all HECO documents dated between January 1998 and the present that address HECO decisions to initiate the engineering of its next major generating facility (e.g., the "Next Generating Unit Addition" discussed in the AOS 2005, at 5.

CA-IR-573

The AOS 2005 states at 5-6 that HECO anticipates reserve capacity shortfalls in 2005 and projects these shortfalls to continue at least until 2009.

- a. Please identify the earliest date by which HECO is projecting that it will re-attain the "4.5 years per day" reliability standard.
- b. Please identify the earliest date by which HECO is projecting that it will re-attain a "7.0 years per day" reliability standard.
- c. How much incremental generating capacity (i.e., relative to existing generating capacity and existing resource commitments) would be required to re-attain the "7.0 years per day" standard in the year identified in the response to part (b), above.

CA-IR-574

Regarding the AOS 2005 and the "Action Plan and Mitigation Measures" identified at 24:

- a. Please provide a status report on each mitigation measure.
- b. Please identify the incremental capacity contributions that HECO projects from each mitigation measure for each year 2005 through 2009.

Witness T-3 Mr. Young

CA-IR-575

Ref: Schedule PP – Large Power Primary HECO-WP-304, page 124.

For each month in 2004, please provide in electronic format, for each customer in the Large Power Primary Voltage Service, in rate class Schedule PP, the following:

- a. KWh;
- b. KVARh;
- c. kW;
- d. Power Factor (%), please indicate whether this amount is actual or an estimate;
- e. Demand Charges (\$);
- f. Energy Charges (\$);
- g. Power Factor Adjustment Rate (%); and
- h. Power Factor Adjustment (\$).

CA-IR-576

Ref: Schedule PP – Large Power Primary HECO-WP-304, page 124.

For each HECO generating unit please provide the following:

- a. Rated Capacity.
- b. Rated power factor (%) (at rated capacity in 1).
- c. Exciter rating (kW).
- d. Original cost and accumulated depreciation costs for FERC Account numbers 314 and 344 for each HECO generating unit. Breakout the cost of the generator, steam turbine (if applicable) and exciter.
- e. Please provide the range of the rated power factor, from leading to lagging.
- f. Please provide the range of the rated VAR capability, from leading to lagging.
- g. What is the minimum generation (kW)?

CA-IR-577

Ref: Schedule PP – Large Power Primary HECO-WP-304, page 124.

Please provide the original cost and accumulated depreciation costs for all generator step-up transformers.

CA-IR-578

Ref: Schedule PP – Large Power Primary HECO-WP-304, page 124.

Please provide the original cost and accumulated depreciation cost for all capacitors on the HECO system (HECO owned).

CA-IR-579

Ref: Schedule PP – Large Power Primary HECO-WP-304, page 124.

- a. Please provide the actual system VAR flow at the time of the annual peak load in 2003 and 2004.
- b. Please provide the annual peak demands in 2003 and 2004 (including date and time of peak).

CA-IR-580

Ref: Schedule PP – Large Power Primary HECO-WP-304, page 124.

- a. Please provide the actual MW and MVAR output of all HECO generating units at the time of the annual peak load for 2003 and 2004.
- b. Please provide an hourly actual MW and MVAR output of all HECO generating units for a recent 24-hour period.

HECO Witness T-1: Mr. Alm

CA-IR-581

Ref: T-1, page 28, Revenue Increase Allocation.

According to testimony at line 8, "Based on the \$98,614,000 or 9.9% increase, the rate increase to the residential customer would be approximately 15%, based on HECO's criteria that the allocation to the rate schedule should be plus or minus 25% of the system increase, and the class rate of return should be between plus or minus 50% of the system rate of return." Please respond to the following regarding these statements:

- a. Provide illustrative calculations to show the application of “HECO’s criteria” to the \$98.6 million level of “system increase,” as described in this statement, indicating how the “approximately 15%” was determined, as well as the percentage increases that would be attributed to other rate schedules.
- b. Provide alternative illustrative calculations to show the application of “HECO’s criteria” to a hypothetical assumed \$50.0 million level of base rate “system increase.”
- c. State with specificity HECO’s proposed class distribution of its overall rate increase, after reflecting all known changes to its filing including the removal of DSM cost recovery pursuant to Commission Order.
- d. Explain how HECO’s proposed recovery of DSM costs will be distributed among customer classes and whether such distribution of DSM costs should be considered in determining overall customer impacts associated with rate increase allocations in the rate case.
- e. Explain what consideration HECO believes should be given the “relatively high electric bills for residential customers due to the current fuel prices,” as referenced in testimony, in determining overall customer impacts associated with rate increase allocations in the rate case.

- f. Provide citation into any Commission orders or other authority relied upon or responsive to HECO's criteria" for rate increase allocations across customer classes relative to indicated cost of service.

CA-IR-582

Ref: HECO web at http://www.heco.com/CDA/JVN/JVN_Shell/.

According to the Company's internet postings, the following positions were open as of April 7, 2005: Control Technician, Director of Internal Audit, Financial Systems Analyst, Industrial (Power Plant) Journey Electrician, Insulator, Machinist, Operations & Maintenance Engineer, Pipefitter/Boiler Mechanic, Planning Engineer, Power Plant Mechanical Engineer, Sr. Resource Planning Analyst, Structural Engineer, Transmission & Distribution Standards Engineer, Welder.

- a. Please state whether each such position was included within test year expenses.
- b. If yes, was the position filled throughout the year 2005.
- c. Provide the approximate test year wage and benefits expense by NARUC account attributable to each such budgeted position.

HECO Witness T-3: Mr. Young

CA-IR-583 **Ref: HECO-WP-303 and CA-IR-167, page 4, Field Collection Visits.**

The workpaper indicates estimated field collection visits under proposed rates of 16,608. However, CA-IR-167 appears to support a "Total Attempts" volume that is somewhat higher in each of the years 2002 and 2003. Please explain this difference and provide support for the 16,608 value that was used, or admit that some other stated volume is more appropriate.

CA-IR-584 **Ref: Response to CA-IR-374 and CA-IR-375; "Potential" rider customers.**

Several of the referenced Rider customers are indicated to be "potential" customers anticipated to be added in 2005 for which the Company does not presently have contracts for rider service discounts. Other CHP and EDR customers are similarly "potential" discount recipients and expected to be removed from the Company's filing. Please provide the following information:

- a. Identify each rider discount customer within each rate schedule in HECO-WP-2223 where the Company cannot presently document the existence of a Rider service arrangement.

- b. Explain whether or not the calculated revenue discount for each customer identified in response to part (a) is, or is not, properly removed from the test year revenue calculations.
- c. For each test year Rider customer identified in response to part (a) that HECO proposes to not eliminate from the revenue discount calculations in HECO-WP-2223, please provide an explanation of all reasons why a full year of discounted service remains a reasonable assumption for the customer.
- d. Provide complete copies of all documents associated with your response to part (c).

CA-IR-585

Ref: Response to CA-IR-332, HECO-WP-303 and HECO-1320, Six Properties Gain on Sale.

In Decision and Order 16935 in Docket No. 98-0314, the Commission approved the sale of several properties, four of which are reflected within test year amortization revenues. Please provide the following information regarding these properties:

- a. Current status of efforts to sell the "old" Waianae Substation Site and all known sale price, gain on sale and amortization amounts associated with any such sale.
- b. Current status of efforts to sell the Kahaluu Transmission Corridor and all known sale price, gain on sale and amortization amounts associated with any such sale.

HECO Witness T-6: Mr. Fujinaka

CA-IR-586

Ref: HECO-619 AND HECO-623, Production Staffing Changes.

According to the referenced Exhibits, HECO intends to add 62 employee positions, relative to actual staffing levels at year-end 2003. Please respond to the following regarding these positions:

- a. State whether HECO human resources personnel maintain standardized position description (or comparable) forms in the normal course of business.
- b. If standardized forms are maintained, please provide a complete copy of such forms for each of the following positions where staffing is to be increased:
 1. Operators.
 2. Maintenance Supervisor.
 3. Day Crew.
 4. Night Maintenance Supervisor.
 5. Night Crew.
 6. Crew.
- c. If standardized position description forms are not maintained in the normal course of business by HECO, provide the most detailed existing description of the skills, responsibilities, qualifications, and other qualitative measures of work associated with each position listed in part (b).

HECO Witness T-22: Ms. Seese

CA-IR-587

Ref: HECO's responses to CA-IR-360 and CA-IR-340; Employee Service Discounts.

According to part (c) of this response, "...the employee discount is a contractual obligation between HECO and its bargaining unit employees." The Agreement with Local 1260 at page 38 states, "The employee's electric light and power discount will be equal to one third of the employee's monthly KWH usage up to a cap of 275 KWH." Please respond to the following:

- a. Please explain whether billings to employees reflect removal of the first 275 KWH from billed KWH, or whether some other billing algorithm is actually employed.
- b. Please state whether any of the customer charge is actually discounted for employees.
- c. Please explain whether retirees are provided with the employee discount and provide documentation for any obligation to offer such a benefit to retirees.
- d. Provide a breakdown of test year numbers of employees, retirees and any other persons who are included in the employee discount calculations at HECO-WP-304, page 5.
- e. Provide information needed to reconcile the employee and retiree numbers in your response to part d into the projected test year 1,493 employees contained within HECO-1612.

- f. Explain whether expenses associated with the Electric Discount Trust at page 8 of the response to CA-IR-340 have been included in test year expenses and provide the amount of such expenses, if included.
- g. Explain how the \$297,000 “which represents the electric discount for retirees” that is referenced at page 11 of Ms. Price’s testimony was determined. Provide copies of all analysis and workpapers supporting the determination of this amount, with all formula and cell references intact, if available in electronic format.
- h. Provide any further adjustment calculations, if necessary, to reconcile the costs associated with extending employee and retiree electric service discounts to employee levels and expense levels actually included in the test year.

CA-IR-588

Ref: HECO’s responses to CA-IR-219; page 3.

According to part (e) of this response, “The referenced workpaper, HECO-WP-2217, page 85 provides the estimates of the marginal meter cost and marginal service drop cost to connect a customer to the system. In addition to these costs, the marginal cost of connecting a customer to the system includes the marginal distribution facilities cost provided in HECO-WP-2217, page 60.” Please respond to the following:

- a. Confirm that the "Determination of Customer-Related Unit Costs" at page 85 of the marginal cost study WP-2217 recognizes only meter and services related costs (investment, O&M, working capital) to be classified as "customer" costs.
- b. Confirm that the "distribution facilities costs" at the referenced page 60 of HECO-WP-2217 are, in fact, treated as "Demand" costs, rather than customer costs, within HECO-2217 and in HECO-2211.
- c. Provide a calculation of the marginal "Demand Costs: Distribution" of \$4.23/month on HECO-2211 with references into corresponding HECO-2217 and HECO-WP-2217 where such amounts are developed.
- d. Confirm that the HECO-2211 marginal "Customer Costs:" that are shown for each rate schedule are simply one twelfth of the Total Marginal Costs shown at HECO-WP-2217, page 85, inclusive of only costs related to meters and services.
- e. If anything but an unqualified confirmation is provided in response to parts a, b, and d, please explain your response and provide supporting documentation and detailed calculations indicating how and where the distribution facilities costs on HECO-WP-2217, page 60 are treated as

“the marginal cost of connecting a customer” rather than as a demand-related costs within the Company’s marginal cost of service study.

Witness T-15 Ms. J. Price.

CA-IR-589

Ref: HECO T-15, pages 11-12, response to CA-IR-340 and HECO-1504 (FAS106 OPEB Costs).

The cited testimony refers to HPUC Decision No. 13659 in support of the FAS106 regulatory asset deferral and 18-year amortization beginning January 1, 1995. The historical comparison of benefit costs presented on HECO-1504 includes an OPEB-Regulatory Asset Amortization of \$1,301,839. According to pages 2 and 7 of the response to CA-IR-340, the OPEB-FAS 106 budget amounts for 2004 and 2005 set forth on HECO-1504 include \$2,400,379 for the amortization of the transition obligation (i.e., TBO Amortization). Please provide the following:

- a. Ordering paragraph 2 of Decision No. 13659 adopted a 20 year TBO amortization period. Is HECO amortizing the TBO over a 20-year period? Please explain the basis for any amortization period less than 20 years.
- b. Please provide the amount of the original Transition Benefit Obligation being amortized and the term (i.e., 20 years) of the amortization period, indicating the effective date the amortization commenced.

- c. Please provide a detailed breakdown of the components of the regulatory asset (by year of deferral) which forms the basis for the \$1,301,839 OPEB-Regulatory Asset Amortization.

CA-IR-590

Ref: HECO response to CA-IR-341 (FAS106 OPEB Costs).

The referenced response provides a comparison of FAS106 cost data by year since adoption in 1995. Please explain why the TBO Amortization has not remained constant, particularly referring to the BU VEBA, NBU VEBA, and the 401(h) Account.

CA-IR-591

Ref: HECO response to CA-IR-340 & HECO-1504 (FAS106 OPEB Costs).

The response to CA-IR-340(c) indicates that the reforecast of the 2005 FAS106 projection, based on employee demographics and assumptions as of January 1, 2005, will be completed by June 2005 and provided to the parties as soon as it is available. Even though the study is not yet complete, certain data should be currently available. Please provide the following:

- a. Referring to pages 7-11 of the response to CA-IR-340, please provide the actual value of plan assets, by trust, as of 12/31/2004.

- b. Please provide the distribution of the 12/31/2004 plan asset balances, supplied in response to part (a) above, between HECO, HELCO, MECO and HEI.
- c. Referring to pages 8-11 of the response to CA-IR-340, the estimated gain/(loss) on plan assets for 2004 was \$0. Please provide the actual gain/(loss) on plan assets, by trust, for 2004.

CA-IR-592

Ref: HECO T-15, page 11 & response to CA-IR-340 (FAS106 OPEB Costs).

The cited testimony indicates that the 2005 OPEB costs were reduced by \$297,000, representing the electric discount (ED) for retirees, in order to avoid duplication with the lower test year revenues resulting from these discounts. Please provide the following:

- a. Please provide a copy of the supporting documentation and calculations associated with the derivation of the \$297,000 cited at HECO T-15, page 11.
- b. Page 7 of the response to CA-IR-340 identifies an expense distribution of the electric discount in the amount of \$295,549. How does this amount related to the \$297,000? Please explain.
- c. At page 7 of CA-IR-340, the \$128.1 million beginning APBO includes \$7.1 million related to the electric discount. The

interest cost of \$7.8 million includes about \$436,000 of ED related interest cost associated with the \$7.1 million ED APBO, reduced by ½ of the expense distribution. Please confirm that test year OPEB costs include this ED interest component. If this cannot be confirmed, please explain.

- d. Referring to part (c) above, please explain why test year OPEB costs should include this ED interest component, since test year revenues have already been reduced for the full electric discounts provided to employees and retirees.

CA-IR-593

Ref: HECO-1504 & response to CA-IR-340 (FAS106 OPEB Costs).

HECO-1504 identifies an \$886,000 adjustment reducing test year OPEB costs for executive life insurance so as to limit issues.

Please provide the following:

- a. Please provide a copy of the supporting documentation and calculations associated with the derivation of the \$886,000.
- b. Page 7 of the response to CA-IR-340 identifies an expense distribution of executive life insurance in the amount of \$407,929. How does this amount related to the \$886,000 cited at HECO-1504? Please explain.
- c. At page 7 of CA-IR-340, the \$128.1 million beginning APBO includes \$7.3 million related to executive life. The interest cost of \$7.8 million includes about \$443,000 of executive life

related interest cost based on the \$7.3 million APBO, reduced by ½ of the expense distribution. Was the interest cost associated with executive life included or excluded from test year OPEB costs? Please explain.

CA-IR-594

Ref: HECO response to CA-IR-340 (FAS106 OPEB Costs).

Pages 2 and 7 of the referenced response recaps the input data and OPEB cost components supporting the 2004 and 2005 budget amounts set forth on HECO-1504. The four pages immediately following these two “recap” pages provide additional detail regarding the plan assets in each of the four identified trusts. However, the sum of the individual trust asset balances do not appear to tie to the recap asset balances of \$111,806,169 (2004) and \$115,459,602 (2005). Please explain and reconcile these amounts into the supporting asset trust detail.

CA-IR-595

Ref: HECO response to CA-IR-343 (FAS106 OPEB Costs).

Please provide a copy of all correspondence and other documentation between HECO/HEI and the Company’s actuary (Watson Wyatt) concerning the Medicare Reform Act (MRA) and any related estimates of the impact of MRA on FAS106 costs.

Ref: HECO response to CA-IR-341 (FAS106 OPEB Costs).

The response to CA-IR-341(c) states: "The asset method for the funding valuation has been changed effective January 1, 2004. Consequently, the value shown on the updated HECO-1504 for column q (2003) in the row labeled 'Actual Returns for Valuation' was changed from 22.13% to 2.29%." [Note: Although CA-IR-341 refers to information supplied in response to CA-IR-337, the response to CA-IR-337 has not been filed and is still outstanding as of 4/8/05.] Please provide the following:

- a. Please provide a detailed explanation of the change in "the asset method for funding valuation" that was implemented 1/1/04.
- b. Referring to part (a) above, please explain how the referenced "change" impacts the quantification of the actual return on assets.
- c. Please provide a side by side comparison of the change in "the asset method for funding valuation" and show the impact on achieved returns.
- d. In general terms, would this change in "the asset method for funding valuation" have the impact of reducing achieved returns in all years prior to 2003? Please explain.

Witness T-19, Ms. G. Ohashi

CA-IR-597

Ref: HECO T-19, page 12 (FAS106 OPEB Costs).

In explaining why the unamortized OPEB regulatory asset should be included in rate base, the referenced testimony states at line 20: "The unamortized OPEB regulatory assets represents costs associated with services provided in 1993 and 1994, net of amounts that ratepayers have paid." Do the amounts recorded as regulatory assets in 1993 or 1994 represent accrued costs or actual out-of-pocket cash payments? Please explain.

CA-IR-598

Ref: HECO T-19, pages 13 & 35 (FAS106 OPEB Costs & FAS87 Pension Costs).

In explaining who provides the OPEB liability, the referenced testimony at page 35 states: "Ratepayers provide the funds to support the OPEB NPBC and investors provide the funds contributed to the OPEB trusts. The OPEB liability is the net of the offset to the OPEB regulatory asset plus the NPBC and less the funds contributed to the trusts." Please provide the following with regard to HECO's pension accounting:

- a. Does HECO record a pension liability in its books and records?
- b. If no, please explain why it is appropriate to record an OPEB liability but not a pension liability.

- c. If the response to part (a) is affirmative, please provide the monthly balance of such liability account in 2004 and 2005 to date and provide the amounts used to reduce rate base in the 2005 test year forecast. If none, please explain.

Witness T-18, Ms. Nagata

CA-IR-599

Ref: HECO Response to CA-IR-92; General Inflation Factor.

- a. Does HECO possess any information supportive of the premise that its non-labor expenses that were not projected based upon "specific prices, inflation rates, or cost indices" do, in fact, tend to increase in direct correlation with CPI?
- b. If affirmative, please provide complete copies of all such information.

Witness T-8 Mr. S. Yoshida

CA-IR-600

Ref: HECO response to CA-IR-331 & HECO website at http://www.heco.com/CDA/JVN/JVN_Shell/ (T&D Employees).

According to the Company's internet postings, the positions open as of April 7, 2005, were primarily in Power Supply. Comparing the actual employee counts as of February 2005 (see CA-IR-331, pages 12-20) with the Company's 2005 test year forecast (HECO-1612), the Energy Delivery department was still down 8 "Project Management" and 10 "System Operation" employees. Please provide the following:

- a. "Project Management" positions:
 - 1. Since February 2005, please state whether each "Project Management" position open as of February 28, 2005, has since been filled.
 - 2. For those "Project Management" positions still open, please describe HECO's current plans and expected hire dates to fill those positions.
 - 3. Please indicate whether the 2005 test year forecast was prepared in a manner that treated those open "Project Management" positions as if filled throughout 2005 and provide the approximate test year wage and benefits expense by NARUC account attributable to each such budgeted but unfilled position.

- b. "System Operation" positions:
 - 1. Since February 2005, please state whether each "System Operation" position open as of February 28, 2005, has since been filled.
 - 2. For those "System Operation" positions still open, please describe HECO's current plans and expected hire dates to fill those positions.
 - 3. Please indicate whether the 2005 test year forecast was prepared in a manner that treated those open "System Operation" positions as if filled throughout

2005 and provide the approximate test year wage and benefits expense by NARUC account attributable to each such budgeted but unfilled position.

Witness T-10, Mr. Alan Hee

CA-IR-601

Ref: HECO response to CA-IR-331 & HECO website at <http://www.heco.com/CDA/JVN/JVN Shell/> (Energy Solutions Employees).

According to the Company's internet postings, the positions open as of April 7, 2005, were primarily in Power Supply. Comparing the actual employee counts as of February 2005 (see CA-IR-331, pages 12-20) with the Company's 2005 test year forecast (HECO-1612), the Energy Solutions department was still down 59 "Energy Services" and 4 "Integrated Resource Planning" employees. Please provide the following:

- a. "Energy Services" positions:
 1. Since February 2005, please state whether each "Energy Services" position open as of February 28, 2005, has since been filled.
 2. For those "Energy Services" positions still open, please describe HECO's current plans and expected hire dates to fill those positions.
 3. Please indicate whether the 2005 test year forecast was prepared in a manner that treated those open

“Energy Services” positions as if filled throughout 2005 and provide the approximate test year wage and benefits expense by NARUC account attributable to each such budgeted but unfilled position.

b. “Integrated Resource Planning” positions:

1. Since February 2005, please state whether each “Integrated Resource Planning” position open as of February 28, 2005, has since been filled.
2. For those “Integrated Resource Planning” positions still open, please describe HECO’s current plans and expected hire dates to fill those positions.
3. Please indicate whether the 2005 test year forecast was prepared in a manner that treated those open “Integrated Resource Planning” positions as if filled throughout 2005 and provide the approximate test year wage and benefits expense by NARUC account attributable to each such budgeted but unfilled position.

CA-IR-602

Ref: HECO response to CA-IR-331 & HECO website at http://www.heco.com/CDA/JVN/JVN_Shell/ (Customer Service Employees).

According to the Company’s internet postings, the positions open as of April 7, 2005, were primarily in Power Supply. Comparing the

actual employee counts as of February 2005 (see CA-IR-331, pages 12-20) with the Company's 2005 test year forecast (HECO-1612), the Customer Service department was still down 10 "Customer Service" employees. Please provide the following:

- a. Since February 2005, please state whether each "Customer Service" position open as of February 28, 2005, has since been filled.
- b. For those "Customer Service" positions still open, please describe HECO's current plans and expected hire dates to fill those positions.
- c. Please indicate whether the 2005 test year forecast was prepared in a manner that treated those open "Customer Service" positions as if filled throughout 2005 and provide the approximate test year wage and benefits expense by NARUC account attributable to each such budgeted but unfilled position.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

EIGHTEENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

EIGHTEENTH SUBMISSION OF INFORMATION REQUESTS

General Questions

CA-IR-603 Ref: HECO responses to CA-IR-1 and CA-IR-2 (Labor & Nonlabor Expense Forecasts).

The referenced interrogatories sought detailed support underlying HECO's 2005 test year forecast. Item (b) of both interrogatories sought "copies of all calculations, spreadsheet files, 'pencil' workpapers, surveys and other analyses performed by each of the employees identified in response to part (a), documenting all work done to determine required staffing levels and overtime hours by Department, RA, Activity and NARUC Account." In response, HECO provided a significant volume of hard copy documentation. However, the information provided directly to Utilitech did not contain any "spreadsheet files." Please provide the spreadsheet files, as originally requested, in an Excel format with all cell references and formulae intact.

CA-IR-604 Ref: HECO responses to CA-IR-1 and CA-IR-249 (Labor Hour Forecasts & Standard Labor Rates).

In response to the referenced requests, HECO separately provided hard copies of documentation showing employee work hours

(CA-IR-1) and the standard labor rates used by HECO to translate those work hours into labor costs. Please provide the following:

- a. For each HECO witness, please provide a recap of the work hours contained on the various "labor input sheets" that are used by Pillar in compiling the 2005 test year labor forecast. Such information should be provided in an Excel spreadsheet file format organized by labor class, such that the hours for each employee can be tied into the response to CA-IR-1.
- b. Using the 2005 standard labor rates provided in the response to CA-IR-249 and the employee hours provided in response to item (a) above, please provide a "proof" of the labor costs included in the 2005 test year forecast in an Excel spreadsheet file format.
- c. If the responses to items (a) and (b) above indicate that the requested information is either not available or cannot be provided in an Excel spreadsheet file format because HECO chose to prepare its 2005 forecast using software that is either not compatible with or is unable to download detailed forecast data into an Excel spreadsheet file, please provide a detailed explanation indicating how HECO considers its labor cost forecast (i.e., based on employee forecasts, which

are then translated into labor hours and labor expense) to be auditable and verifiable.

- d. If the responses to items (a) and (b) above do not contain the requested data in an Excel spreadsheet file format, please provide a detailed explanation as to how HECO would recommend that the Consumer Advocate quantify any ratemaking adjustments to the Company's forecasted increase in employee levels.
- e. If the responses to items (a) and (b) above do not contain the requested data in an Excel spreadsheet file format, please provide a detailed explanation as to how HECO would recommend that the Consumer Advocate quantify any ratemaking adjustments to the Company's forecasted labor hours.
- f. If the responses to items (a) and (b) above do not contain the requested data in an Excel spreadsheet file format, please provide a detailed explanation as to how HECO would recommend that the Consumer Advocate quantify any ratemaking adjustments resulting from revisions to the Company's forecasted standard labor rates.

Witness T-23 Mr. W. Bonnet

CA-IR-605

Ref: HECO-2301 (Overall Revenue Requirement).

The spreadsheet files supporting HECO T-23 that have been previously provided to Utilitech do not include HECO-2301 or the referenced "Pbase.xls" or "Pdsmrev.xls" spreadsheet files. Please provide the following:

- a. Please provide a copy of the referenced Excel spreadsheet files, with cell formulae, algorithms and links to other spreadsheet files intact and not converted to values.
- b. If not contained in the spreadsheet files produced in response to item (a) above, please provide the algorithms used by HECO to translate the operating income and rate base, under current rates, and the proposed weighted cost of capital (i.e., 9.11%) into the amounts set forth in the "Additional Amount" column (pro forma revenue increase and related effects on other operating income and rate base elements) of HECO-2301 and HECO-2302.

Witness T-8 Mr. S. Yoshida

CA-IR-606

Ref: HECO T-8 and responses to CA-IR-2 & CA-IR-13 (T&D Outside Services).

CA-IR-2 sought detailed budget information for non-labor items exceeding \$50,000. None of the attachments to CA-IR-2 appear to

contain any documentation supporting the development of the following forecast amounts.

A/C	RA	Act.	EE	2005 \$	
571	PDV	355	501	\$500,004	Vegetation Mgmt
593	PDP	471	501	400,000	Wooden Distr. Poles
593	PDV	494	501	1,360,004	Vegetation Mgmt.

Please provide the following:

- a. For each of these items, please explain and provide a copy of all related workpapers and analyses showing how the forecast amounts were determined.
- b. Vegetation Management.
 1. Referring to the non-labor spreadsheet supplied in response to CA-IR-13, the amounts forecasted for vegetation management (\$500,004 and \$1,360,004) appear to significantly exceed the average expenditures during 2000-2004.
 - (a) Does the following table accurately compare historical levels of expenditures for outside vegetation management services with the test year forecast?
 - (b) If not, please explain and provide any necessary corrections, including reliance on internal employees in lieu of external resources.

Year	A/C 571 RA PDV Act. 355 EE 501	A/C 593 RA PDV Act. 494 EE 501
2000 Actual	\$525,504	\$1,339,735
2001 Actual	2,282	480
2002 Actual	4,723	-7,227
2003 Actual	354	3,816
2004 Actual	184,260	1,470,359
2005 FCST	500,004	1,360,004

2. Referring to the table in item (b)(1) above, please discuss and describe the discretionary nature of HECO's tree trimming efforts and requirements.
 3. In quantifying the 2005 test year forecast, please explain and describe any efforts or methods employed by HECO to normalize the cost of retaining outside contractors for vegetation management. If none, please so state and explain the absence of any normalization treatment in the context of historical levels of expense.
 4. If the identified outside service amounts are included in the quantification of overall revenue requirement, what assurances can HECO provide that comparable amounts will be regularly incurred on a recurring basis in future years?
- c. Wood Poles.
1. Referring to the non-labor spreadsheet provided in response to CA-IR-13, the amount forecast for

wooden distribution poles (\$400,000) appears to significantly exceed the average expenditures during 2000-2004.

- (a) Does the following table accurately compare historical levels of expenditures for wooden pole outside services with the test year forecast?
- (b) If not, please explain and provide any necessary corrections, including reliance on internal employees in lieu of external resources

Year	A/C 593 Act. 471
2000 Actual	0
2001 Actual	0
2002 Actual	0
2003 Actual	486
2004 Actual	260,946
2005 FCST	400,000

- 2. Referring to the table in item (c)(1) above, please discuss and describe the discretionary nature of HECO's wood pole maintenance efforts and requirements.
- 3. In quantifying the 2005 test year forecast, please explain and describe any efforts or methods employed by HECO to normalize the cost of outside contractors for maintaining and treating wood poles. If none, please so state and explain the absence of

any normalization treatment in the context of historical levels of expense.

4. If the identified outside service amount is included in the quantification of overall revenue requirement, what assurances can HECO provide that comparable amounts will be regularly incurred on a recurring basis in future years?

Witness T-9 Mr. D. Yamamoto

CA-IR-607

Ref: HECO T-9 and responses to CA-IR-2 & CA-IR-13 (Customer Accounts – Outside Services).

CA-IR-2 sought detailed budget information for non-labor items exceeding \$50,000. None of the attachments to CA-IR-2 appear to contain any documentation supporting the development of the following forecast amounts.

A/C	RA	Act.	EE	2005 \$	
901	PCA	720	501	\$100,000	Improve Bus. Process
903	PCA	600	501	485,035	Cust. Inquiries
903	PCA	614	501	100,000	Proc. Verify Mail Bills

Please provide the following:

- a. For each of these items, please explain and provide a copy of all related workpapers and analyses showing how the forecast amounts were determined.
- b. Referring to the non-labor spreadsheet supplied in response to CA-IR-13, the amounts forecast for each of these items

appear to significantly exceed the average actual expenditures during 2000-2004.

1. Does the following table accurately compare historical levels of expenditures for these items with the test year forecast?
2. If not, please explain and provide any necessary corrections, including reliance on internal employees in lieu of external resources.

Year	A/C 901 RA PCA Act. 720 EE 501	A/C 903 RA PCA Act. 600 EE 501	A/C 903 RA PCA Act. 614 EE 501
2000 Actual	\$3,155	\$7,918	\$17,026
2001 Actual	616	90,706	24,258
2002 Actual	247	335,717	4,521
2003 Actual	0	252,462	26
2004 Actual	13,620	-116,231	177,342
2005 FCST	100,000	485,035	100,000

- c. Referring to the table in item (b) above, please discuss and describe the discretionary nature of HECO's reliance on outside contractors in these customer service areas.
- d. In quantifying the 2005 test year forecast, please explain and describe any efforts or methods employed by HECO to normalize the cost of outside contractors for customer accounting purposes. If none, please so state and explain the absence of any normalization treatment in the context of historical levels of expense.

- e. If the identified outside service amounts are included in the quantification of overall revenue requirement, what assurances can HECO provide that comparable amounts will be regularly incurred on a recurring basis in future years?

Witness T-10, Mr. Alan Hee

CA-IR-608

Ref: HECO T-10 and responses to CA-IR-2 & CA-IR-13 (Customer Service – Outside Services).

CA-IR-2 sought detailed budget information for non-labor items exceeding \$50,000. None of the attachments to CA-IR-2 appear to contain any documentation supporting the development of the following forecast amounts.

A/C	RA	Act.	EE	2005 \$	
910	PNR	750	501	\$250,000	Maint. Cust. Relations
910	PSA	105	501	100,000	Dev. Marketing Prog.

Please provide the following:

- a. For each of these items, please explain and provide a copy of all related workpapers and analyses showing how the forecast amounts were determined.
- b. Referring to the non-labor spreadsheet supplied in response to CA-IR-13, the amounts forecast for each of these items appear to significantly exceed the average actual expenditures during 2000-2004.

1. Does the following table accurately compare historical levels of expenditures for these items with the test year forecast?
2. If not, please explain and provide any necessary corrections, including reliance on internal employees in lieu of external resources.

Year	A/C 910 RA PNR Act. 750 EE 501	A/C 910 RA PSA Act. 102 EE 501
2000 Actual	\$0	\$-5000
2001 Actual	0	56,388
2002 Actual	0	27
2003 Actual	0	189
2004 Actual	0	12
2005 FCST	250,000	100,000

- c. Referring to the table in item (b) above, please discuss and describe the discretionary nature of HECO's reliance on outside contractors in these areas.
- d. Referring to HECO T-10, p. 4-5, is the \$250,000 set forth in item (b) above the same amount removed by the Company as it duplicated the \$100,000? Please explain.
- e. Referring to HECO T-10, p. 5, has HECO yet determined the details of the Green Power Program? Please explain.

Witness T-13, Mr. E. Shiraki

CA-IR-609

Ref: HECO T-13 and responses to CA-IR-2 & CA-IR-13 (A&G Expense – Outside Services).

CA-IR-2 sought detailed budget information for non-labor items exceeding \$50,000. None of the attachments to CA-IR-2 appear to contain any documentation supporting the quantification of the following forecast amounts.

<u>A/C</u>	<u>RA</u>	<u>Act.</u>	<u>EE</u>	<u>2005 \$</u>	
921	P3V	753	501	\$120,000	Maint. relat. w/commun.
921	P9S	730	501	480,000	Dev. & Adm. Bus. Plan
921	P9V	700	501	606,400	Research New Technol.

Please provide the following:

- a. For each of these items, please explain and provide a copy of all related workpapers and analyses showing how the forecast amounts were determined.
- b. Referring to the non-labor spreadsheet supplied in response to CA-IR-13, the amounts forecast for each of these items appear to significantly exceed the average actual expenditures during 2000-2004.
 1. Does the following table accurately compare historical levels of expenditures for these items with the test year forecast?
 2. If not, please explain and provide any necessary corrections, including reliance on internal employees in lieu of external resources.

Year	A/C 921 RA P3V Act. 753 EE 501	A/C 921 RA P9S Act. 730 EE 501	A/C 921 RA P9V Act. 700 EE 501
2000 Actual	\$47	\$0	\$0
2001 Actual	32,746	0	680
2002 Actual	77,245	44,113	1,000
2003 Actual	43,015	16,631	1,539
2004 Actual	87,200	164,916	246,433
2005 FCST	120,000	480,000	606,400

- c. Referring to the table in item (b) above, please discuss and describe the discretionary nature of HECO's reliance on outside contractors in these areas.
- d. In quantifying the 2005 test year forecast, please explain and describe any efforts or methods employed by HECO to normalize the cost of outside contractors in these areas. If none, please so state and explain the absence of any normalization treatment in the context of historical levels of expense.
- e. Referring to the \$120,000 item (maintain relations with the community), CA-IR-2, Attachment 26 (pages 2-10) discusses government relations, community affairs, regulatory affairs, etc. At page 3, there is reference to alignment of charitable giving and increasing the Community Service fund by \$20,000 to "enhance goodwill and maintain active relations." Please provide the following:
1. According to the referenced materials, the \$20,000 was added to a base forecast amount of \$100,000.

Please provide a detailed breakdown of the \$100,000 between major elements such as utility project coordination, charitable contributions, etc.

2. Please explain how the \$100,000 was determined to be appropriate amount, before adding the \$20,000.
- f. Referring to the \$480,000 item (research new technology), CA-IR-2, Attachment 21 (page 5) discusses two elements (\$180,000 and \$300,000) associated with a new State law regarding renewable energy and separate initiatives on data collection or new technology demonstrations.
1. When did the new State law become effective?
 2. It is unclear how the Company determined the amounts for the outside consulting services included in the 2005 forecast. Please provide copies of additional supporting documentation.
 3. Please identify each specific research effort or activity HECO has commenced or plans to undertake with these funds.
 4. Please describe HECO's commitment to dedicate comparable resources to similar activities on a regularly recurring basis in future years.
- g. Referring to the \$606,400 item (develop and administer business plans), CA-IR-2 (Attachment 1, p. 9) refers to

Attachment 23 for support. Attachment 23 discusses three imperatives: outside services to substitute for large internal staff (e.g., Communications-Pacific and Alani Apio), specific services which may not be needed on an ongoing basis, but critical for specific projects, and a community process in the context of high school film programs and infomercial/advertorials. Please provide the following:

1. Please describe the specific work undertaken by or expected to be assigned to Communications-Pacific and Alani Apio, providing the amounts associated with each.
2. Please provide specific planning details regarding the nature of the specific work to be undertaken that is described as “an additional amount for specific services” for which examples were given on Attachment 23, page 2.
3. Please elaborate on the “community process,” specifically discussing the ratepayer benefits of assisting high school film programs, target message paths, and emergency grants to high school programs (Searider Productions).
4. Please provide a detailed explanation of the projects undertaken by Searider Productions and what

facilitated HECO's decision to provide the emergency grant.

Witness T-16 Ms. T. Sekimura

CA-IR-610

Ref: HECO T-16 and responses to CA-IR-2 & CA-IR-13 (Miscellaneous General Expense – Outside Services).

CA-IR-2 sought detailed budget information for non-labor items exceeding \$50,000. Referring to a \$616,500 technology item (Account 9302, RA PNR, Act. 730, EE 501), CA-IR-2 (Attachment 1, p. 2) refers to Attachment 9 for support. Attachment 9 discusses three renewable energy R&D, Development and Demonstration areas: local EPRI matching funds, recurring renewable seed money, and a wind initiative. Please provide the following:

- a. Please compare and contrast the nature of the work included within the \$616,500 technology items included in Account 9302 with the \$480,000 included in Account 921 by HECO T-13 for similar endeavors.
- b. Referring to item (a) above, please identify any duplications in HECO's 2005 test year forecast. If none, please provide a detailed explanation demonstrating how the referenced budget items are not duplicative.

- c. With regard to the local EPRI matching funds of \$249,000, please provide comparable actual matching amounts in calendar years 2000-2004.

Witness T-6, Mr. Fujinaka

CA-IR-611

Ref: HECO Response to CA-IR-449 EFOR Rates.

According to the response, "...a substantial amount of boiler, turbine, generator and other work was done to Honolulu Unit 8 to restore its condition." Please respond to the following regarding this statement:

- a. Explain the degree of deterioration in the condition of each major system within Honolulu Unit 8 and how long HECO had been aware of such deterioration.
- b. Describe what incremental work, above and beyond recent typical unit overhaul scoping, was required to restore the condition of the Unit.
- c. Provide HECO's best estimate of the incremental capital and expensed costs incurred in connection with the incremental work described in your response to part b.
- d. Which of the incremental work elements identified and quantified in your responses to parts b and c, respectively, will not be recurring in future overhauls of the unit?
- e. What has been the historical overhaul interval/schedule for the Unit?

- f. What will be the ongoing future overhaul interval/schedule for the Unit?

CA-IR-612

Ref: HECO Response to CA-IR-449 EFOR Rates.

According to the response, "Another example is Waiau Unit 9. It has a five-year (2000-2004) average EFOR of 26.2%. The unit suffered a major force outage in October 2004 due to considerable blade damage in the compressor. (See HECO's response to CA-IR-129). A substantial amount of work is being done on the unit to restore its condition." Please respond to the following regarding this statement:

- a. Explain the degree of deterioration in the condition of each major system within Waiau Unit 9 and how long HECO had been aware of such deterioration.
- b. Describe what incremental work, above and beyond recent typical unit overhaul scoping, was required to restore the condition of the Unit.
- c. Provide HECO's best estimate of the incremental capital and expensed costs incurred in connection with the incremental work described in your response to part b.
- d. Which of the incremental work elements identified and quantified in your responses to parts b and c, respectively, will not be recurring in future overhauls of the unit?

- e. What has been the historical overhaul interval/schedule for the Unit?
- f. What will be the ongoing future overhaul interval/schedule for the Unit?

CA-IR-613

Ref: HECO Response to CA-IR-449 EFOR Rates.

According to the response, "Waiau Unit 10 has a five-year EFOR of 14.5%, but that unit is scheduled for a lengthy planned outage in 2005 to restore its condition." Please respond to the following regarding this statement:

- a. Explain the degree of deterioration in the condition of each major system within Waiau Unit 10 and how long HECO had been aware of such deterioration.
- b. Describe what incremental work, above and beyond recent typical unit overhaul scoping, is required during the 2005 outage to restore the condition of the Unit.
- c. Provide HECO's best estimate of the incremental capital and expensed costs to be incurred in connection with the incremental work described in your response to part b.
- d. Which of the incremental work elements identified and quantified in your responses to parts b and c, respectively, will not be recurring in future overhauls of the unit beyond 2005?

- e. What has been the historical overhaul interval/schedule for the Unit?
- f. What will be the ongoing future overhaul interval/schedule for the Unit?

CA-IR-614

Ref: HECO Response to CA-IR-451 Honolulu Power Plant Retirement.

Please provide a complete copy of the "Study completed by Sargent & Lundy" that has "shown that Honolulu Units 8 and 9 can operate reliably and cost-effectively until at least 2024."

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

NINETEENTH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

NINETEENTH SUBMISSION OF INFORMATION REQUESTS

Witness T-16 Ms. T. Sekimura

CA-IR-615 Ref: HECO response to CA-IR-260 & HECO-1605 (Rent Expense).

In response to CA-IR-260, the Company updated HECO-1605 to reflect revised lease rates, including the proposed capital lease treatment of the renegotiated King Street lease. Please provide the following:

- a. In response to CA-IR-260(a), HECO summarizes its proposed ratemaking treatment of the King Street lease, as follows: \$521,315 in amortization expense; \$9.948 million in rate base; \$10.115 million lease obligation; and a \$301,365 HEI rent credit (see revised HECO-1605). Please compare the revenue requirement effect of the proposed capital lease treatment to an operating lease treatment, showing all calculations.
- b. Referring to item (a) above, does HECO plan on including the long-term lease obligation in the capital structure or using it as a rate base reduction to offset the lease asset? Please explain, indicating the cost rate to be applied to any lease obligation included in the capital structure.

- c. In renegotiating the King Street lease, were any economic or financial studies/analyses conducted by or for HECO/HEI for purposes of analyzing the relative costs and benefits of the renegotiated lease terms?
1. If so, please provide a copy of each study, showing all calculations.
 2. If not, please explain the basis for not undertaking such analyses.
- d. Please identify and describe the key changes in the provisions of the renegotiated King Street lease from the immediately preceding agreement.

CA-IR-616

Ref: HECO response to CA-IR-260 & HECO-1605 (Rent Expense).

In response to CA-IR-260, the Company updated HECO-1605 to reflect revised lease rates, including the proposed capital lease treatment of the renegotiated King Street lease. On April 6, 2005, the Company filed a Petition with the HPUC (Docket No. 05-0084) seeking a declaratory order approving HECO's renegotiated "capital lease agreement" with the Trustees of the Estate of Bernice Pauahi Bishop. Attachment B of the referenced Petition represents the Company's detailed analysis of the applicability of capital lease Criteria d of FAS13. Please provide the following:

- a. Please provide a copy of the "2005 Braig appraisal" referenced as the data source for the land and building estimates on Petition Attachment B, including all supporting documents such as comparable property sales or other analyses.
- b. Petition Attachment B indicates that HECO's estimated incremental borrowing rate is 5.63%, citing to a 20-year uninsured taxable bond quote provided by Goldman Sachs. Page 4 of the Company's response to CA-IR-260 uses a monthly discount rate of 0.4824% (i.e., annual rate of 5.789%). Please explain and reconcile the difference between these discount rates.
- c. Page 4 of the response to CA-IR-260 calculates HECO's proposed monthly amortization by dividing the estimated FMV of the leased property of \$10.209 million (see HECO Petition, Attachment B) by 235 months. Since the renegotiated lease is for a 20-year term, please explain why HECO used a 235-month appropriate amortization period, rather than 240 months.

Ref: HECO response to CA-IR-260 & HECO-1605 (Rent Expense).

Please provide the following:

- a. Original HECO-1605 took into account the rent that had been waived for January and February for CPP Suites 700, 1520 and 1530. Revised HECO-1605 (CA-IR-260) does not recognize this waiver. Please explain and reconcile this change in position.
- b. Revised HECO-1605 (CA-IR-260) reflects updated monthly rental rates and monthly CAM rates for the CPP suites. Please provide a copy of the negotiated lease amendments supporting these rates.
- c. Referring to item (b) above, please provide a copy of any related correspondence or other documentation regarding the determination of fair market value rental rates used for the CPP suites.
- d. Please confirm that the Annual Property Tax Credit arises from the fact that the property owner is able to avoid property taxes on spaced used by the utility. If this cannot be confirmed, please explain.
- e. Referring to revised HECO-1605 (CA-IR-260), please explain and provide support for the property tax credit amounts reflected in column (f).

- f. Footnote 1 on the original and revised HECO-1605 indicates that the monthly CAM rate is for common area maintenance. The CAM rate in column (d) declined from \$0.992 (original) to \$0.975 (revised) per square foot per month. Please identify and describe the specific recurring and nonrecurring maintenance covered by this rate.
- g. Column (g) of both the original and revised HECO-1605 is identified as "Op Exp Recon." Please provide the following:
1. Please describe the purpose of this apparent reconciliation of operating expense.
 2. Please explain how the amounts in column (g) were determined.
 3. Discuss the process associated with any delays in the apparent expense true-up mechanism.
 4. Explain the relationship of the expense reconciliation amounts in column (g) with the CAM rate set forth in column (d).

CA-IR-618

Ref: HECO response to CA-IR-260 & HECO-1605 (Rent Expense).

Revised HECO-1605 (CA-IR-260) contains a new line for Pauahi Tower with annual rent in the amount of \$453,000 – occupied by Information Technology & Services. Please provide the following:

- a. The referenced rent amount represents an input into revised HECO-1605. Please provide a copy of any lease agreements that document the terms and conditions of the rental, including square footage occupied, term, rental rates and CAM factors.
- b. Please provide the following information regarding the newly leased space in Pauahi Tower, occupied by Information Technology & Services:
 1. How many employees occupy this space?
 2. Where were these employees located prior to the move to Pauahi Tower?
 3. Regarding the space previously occupied by these employees, which department(s) now occupy the former office location?
 4. Please describe and explain the basis of the decision to obtain additional space for Information Technology and Services.

Witness T-8 Mr. S. Yoshida

CA-IR-619

Ref: HECO response to CA-IR-248 (T&D O&M).

The referenced response provides historical levels (2000-2004 and 2005 test year forecast) of transmission and distribution contract labor by expense element (EE). Please provide the following:

- a. For both Transmission and Distribution, please explain the shift in emphasis between EE 505 to EE 501 beginning in 2004, describing any special projects or new initiatives.
- b. EE 505 is described as including charges from outside contractors for the construction of facilities, such as breaking and repairing concrete sidewalks to expose buried cables and digging of pole holes.
 1. Is this “construction” work typically capitalized to plant in service by HECO?
 2. If not, why not? Please explain.

CA-IR-620

Ref: HECO response to CA-IR-57 (T&D Cable Projects and Programs).

The referenced response describes two projects (P0000917, Village Park & P0001016, Lurline Mariposa) and two programs (P1810000, Preventive Cable Replacement & P0000122, Corrective Cable Replacement) regarding buried cable. Please provide the following:

- a. Referring to CA-IR-57, Attachment A, please explain when HECO initiated and the expected term of each identified project/ program.
- b. With regard to the “feasibility” studies referenced in CA-IR-57, were any cost/ benefit studies or other economic/ financial analyses prepared that included

estimates of the cost and expected benefits of these projects/ programs?

1. If so, please provide a copy of each such study/ analysis.
 2. If not, please explain why such analyses were either not undertaken or otherwise were considered unnecessary.
- c. Please describe the presentation and approval process followed for each of these projects/ programs.
- d. Please provide the approved expenditure forecast by year for each identified project/ program (specifically identifying amounts included in the 2005 test year forecast), also showing the annual distribution between expense and capital accounts.
- e. Does HECO anticipate that the identified projects/programs will result in reduced maintenance costs, as compared to costs previously incurred for corrective and maintenance efforts associated with cable failures and faults? Please explain.
- f. Referring to the responses to items (d) and (e) above, does the 2005 test year forecast recognize any reduction in maintenance costs, as compared to 2003 levels, expected to result from these projects/ programs?

1. If so, please quantify that reduction.
2. If not, please explain why such reductions have not been reflected in the 2005 test year forecast.

CA-IR-621

Ref: HECO response to CA-IR-69 (T&D Tree Trimming).

Please provide a breakdown of the annual amounts between outside contractors, HECO labor costs and HECO nonlabor costs.

CA-IR-622

Ref: HECO response to CA-IR-199 (Waikiki Rehabilitation Program).

The referenced response indicates that the 2005 budget does not reflect any reduced cable failures related to this project, as the HPUC has not yet issued a D&O approving the project, even though the project is assumed to be completed in June 2005. If the Waikiki Rehabilitation project is forecasted for completion in the 2005 test year and included in rate base, please explain why it would be inappropriate to similarly recognize the benefits (i.e., reduced maintenance costs) expected to result from that same project in the 2005 test year forecast.

Witness T-9 Mr. D. Yamamoto

CA-IR-623

Ref: HECO response to CA-IR-77 (Customer Records & Collections).

CA-IR-77 sought the identification of the specific "initiatives, projects, additional work or other items" not undertaken in 2003 because of inadequate staffing. The response to CA-IR-77(a) provides a general discussion of areas that would have been addressed with additional staffing. CA-IR-77(b) sought the identification of any initiative or projects deferred from 2003 to 2005, along with the related amounts included in the 2005 test year. No quantifications were provided. Please provide the following:

- a. Is the 2005 test year forecast higher as a result of work not having been done in 2003 that was instead deferred to 2005?
 1. If so, please so state.
 2. If not, please explain the basis for the response.
- b. Referring to item (a) above, please identify the specific work or undertakings deferred from 2003 to 2005.
- c. Referring to items (a) and (b) above, please provide a quantification of the added costs included in the 2005 test that would have been avoided, if the work could have been done in 2003.

Witness T-18, Lorie Nagata

CA-IR-624

Ref: Response to CA-IR-390 regarding the Ford Island Substation.

Please provide the following in this regard:

- a. Any correspondence with the military/federal government discussing the construction delays, revised construction schedules, expected load additions and/or revisions to expected load additions – including the revised timing associated with each load expected.
- b. Discuss specifically what actions and activities have been, are being, or will be occurring in order to meet the compressed construction schedule to maintain a December 2005 in-service date.
- c. State the expected/known Contribution in Aid of Construction receipt date(s) and amount(s) associated with this project. Differentiate by phase/subcomponent as applicable.

CA-IR-625

Ref: Response to CA-IR-204 regarding the acquisition of the new phone system.

Please provide the following in this regard:

- a. A detailed listing, as well as associated annual costs of phone system trunks, maintenance and data circuits *prior* to the acquisition and implementation of the new phone system *and* a detailed listing as well as associated annual costs of

phone system trunks, maintenance and data circuits expected *after* the new phone system is fully installed.

- b. Underlying support for the expected net increase of \$403,000 in the 2005 operating budget for the new phone system trunks, maintenance and data circuits.

CA-IR-626

Ref: HECO response to CA-IR-199 & HECO-1803 (Waikiki Rehabilitation Program).

The referenced response indicates that the 2005 budget does not reflect any reduction in cable failures expected to result from this project, as the HPUC has not yet issued a D&O approving the project, even though the project is assumed to be completed in June 2005 and included in rate base. Please provide the following:

- a. What is the expect term for this construction project?
- b. Does HECO still anticipate receiving HPUC approval in Docket No. 01-0228 in the near future, such that the project can still be completed in 2005? Please explain.
- c. To the extent that the timing of HPUC approval in Docket No. 01-0228 and completion of the project in 2005 are uncertain, does the Company believe that the investment in the Waikiki Rehabilitation capital project should be removed from rate base, particularly since any related benefits (i.e., reduced maintenance costs) have not been recognized in the 2005 test year forecast? Please explain.

- d. If the cost of the Waikiki Rehabilitation capital project remains in rate base, would it be appropriate and consistent to recognize any related benefits (i.e., reduced maintenance costs) in the 2005 test year forecast? Please explain

Information Technology Questions

CA-IR-627

Ref: HECO responses to CA-IR-2 & CA-IR-239 (Non-ITS PMs).

CA-IR-239(c) discusses "Expense Element 451 Charges by non-ITS PMs," refers to HECO T-13, CA-IR-2, Attachment 10, Page 26, and provides a multi-year comparison of charges to this expense element on page 3 of the response to CA-IR-239. Please provide the following:

- a. Please explain and describe the reference to "non-ITS PMs."
- b. For calendar years 2002 through 2004, please provide a breakdown for the "non-ITS PMs" similar to HECO T-13, CA-IR-2, Attachment 10, Page 26.
- c. Referring to HECO T-13, CA-IR-2, Attachment 10, Page 26, please describe the project (i.e., purpose, current status, start date, completion date, replacement for other projects/ efforts, etc.) identified as "PLC Market Trial."
- d. Referring to HECO T-13, CA-IR-2, Attachment 10, Page 26, please describe the project (i.e., purpose, current status,

start date, completion date, replacement for other projects/ efforts, etc.) identified as "CIS Replacement."

CA-IR-628

Ref: HECO response to CA-IR-238 (Other ITS Costs).

CA-IR-238(d) discusses variances in "Other" ITS costs between 2003, 2004 and 2005 forecast. Please provide the following:

- a. Please provide a detailed breakdown of the annual "Other" amounts set forth on page 3 of CA-IR-238, specifically listing the following categories: phone system maintenance, network circuits lease, software (McAfee and Change Management) and consulting charges.
- b. Referring to item (a) above, please describe each major component, indicating whether the amounts forecast for 2005 are expected to be one-time or annually recurring costs.

Witness T-17, Lon Okada

CA-IR-629

Ref: Response to CA-IR-383 regarding the permanent book/tax difference entitled "Flex Dividend Deduction:"

Please provide the following in this regard:

- a. Please confirm, or explain to the contrary as applicable, that the 401k plan referenced within the noted response refers to 401k plans for HEI-direct employees *as well as* all the various HEI subsidiaries including HECO.

- b. State the number of years the noted 401k plan has been in effect, as well as the number of years the Flex Dividend Deduction has been available to HEI (to the extent it may be different than the number of years that the 401k plan has been in effect).
- c. Please specifically state whether the referenced 401k plan(s) include any 401k plans applicable to HECO employees, and further, whether and to what extent such HECO 401k plan provides for Company matching provisions related to the employee's contribution that are included as a cost of service expense component in the instant application.
- d. Provide 2003 and 2004 deductible HEI dividends paid to the 401k plans held/owned by employees of each individual HEI subsidiary. In other words, please provide the deductible dividends paid to the 401 k participants of HECO, MECO, HELCO, etc.

Witness T-1, Mr. Alm

CA-IR-630

Ref: HECO T-1, page 19.

According to Mr. Alm's testimony, "HECO deliberately reduced spending, while not compromising reliability, during that period."

Please respond to the following:

- a. Describe the process through which HECO evaluated expenditure levels to identify places where spending could be “deliberately reduced”, as discussed by Mr. Alm.
- b. Provide complete copies of all budgeting guidelines, internal correspondence, memoranda, budget adjustment proposals, budget recycles, and other documents used to plan for and effect the “deliberately reduced spending” in each year.
- c. Provide all available information reflective of the spending reductions that were actually implemented in each department as part of the “deliberately reduced spending” that occurred in each year.
- d. What approximate total amount of avoided expense is thought to have been accomplished in each year as a result of the described expenditure reduction efforts?
- e. To the extent possible, provide a breakdown of the response to part (d) by NARUC block of accounts (production, transmission, distribution, customer accounting, customer services, A&G) for each applicable year.
- f. What approximate total amount of avoided capital expenditures is thought to have been accomplished in each year as a result of the described expenditure reduction efforts?

- g. To the extent possible, provide a breakdown of the response to part (f) by NARUC block of accounts (production, transmission, distribution, general plant) for each applicable year.
- h. Were any reports prepared for senior management or the Board of Directors to explain and quantify the cost reduction programs that were planned and implemented?
- i. Provide complete copies of all available documents associated with your responses to parts (c) through (h) of this information request.

Witness T-6, Mr. Fujinaka

CA-IR-631

Ref: HECO-608, HECO-609 and HECO Responses to CA-IR-173 and CA-IR-178 Production Staffing.

According to the response, there is a "...higher volume of maintenance required as a result of operating the units longer and harder." Please provide the following information:

- a. Explain why the increased cycling unit service hours, as shown on HECO-609 for the years 2000 through 2004, have not produced any corresponding increase in production O&M labor hours for either Steam Operation or for Steam Maintenance expense accounts in those same years (see CA-IR-178 at page 2).

- b. Explain why the increased peaking unit service hours, as shown on HECO-608 for the years 2000 through 2004, have not produced any corresponding increase in O&M labor hours for either Other Operation or for Other Maintenance expense accounts in those same years (see CA-IR-178 at page 2).
- c. Provide all studies, reports, analyses, workpapers and other information relied upon in concluding that a higher volume of maintenance is required as a result of operating the units longer and harder.

CA-IR-632

Ref: HECO Responses to CA-IR-170, page 4, Production O&M trends.

The largest year-over-year changes in actual historical production O&M expense levels do not seem to be correlated to the periods of “rapidly growing demand,” but instead to other periods and events. Please provide the following information:

- a. Please explain all known causes for the \$4.5 million increase in “Operation” expenses in the year 2000, relative to 1999.
- b. Please explain specific outage circumstances and costs and all other known causes for the \$3.7 million decrease in “Maintenance” expenses in the year 1998, relative to 1997.

- c. Please explain specific outage events and costs and all other known causes for the \$6.6 million increase in "Maintenance" expenses in the year 2000, relative to 1999.
- d. Please explain specific outage events and costs and all other known causes for the \$5.3 million increase in "Maintenance" expenses in the year 2004, relative to 2003.
- e. Provide copies of any available budget variance reports or other contemporaneous documentation prepared in connection with or to explain the matters described in your responses to parts (a) through (d), above.

CA-IR-633

Ref: HECO Responses to CA-IR-172 and CA-IR-178 Production Operations Labor Hours.

According to the response to CA-IR-178, at page 3 in footnote A, "This is a change from the past staffing of 16x5 operation to operate 24x7, not from a specific change in operation or scope of work." Please respond to the following regarding this statement:

- a. Explain why a "change from the past staffing" of 16x5 operations is required if there has been no specific "change in operation or scope of work" needing to be performed.
- b. Explain whether or not, for dispatch purposes, the H8, H9, W3 and W4 units were considered unavailable to serve load except during the 16x5 hours under the previous staffing plan.

- c. If the four generating units referenced in part (b) were considered available for dispatch during night and weekend hours outside of the 16x5 period, please explain specifically how such operation was conducted without the additional operator staffing that is now proposed.
- d. Provide statistical data indicative of the approximate actual operating hours during 2002, 2003 and 2004 for each of the four generating units referenced in part (b) that fell outside of the 16x5 staffing period for operators under HECO's staffing plan prior to the test year.
- e. Provide a summary of operator overtime hours incurred in each year 2002, 2003 and 2004 for each of the four generating units referenced in part (a) solely as due to the need to operate the unit outside of the current 16x5 staffing period for operators under HECO's staffing plan prior to the test year. Your response should be reconcilable into the "Overtime Hours" shown in response to CA-IR-172.
- f. Please explain why Honolulu station operators (RA=PIH) are still projected to incur overtime of 9% (4,762 OT hours) after increasing available test year straight time hours by approximately 20,000 hours over prior years as a result of staffing changes (see CA-IR-172, pages 4 and 5).

- g. Please explain why Waiiau station operators (RA=PIW) are budgeted to incur a record overtime level of 25,446 hours in the test year, in spite of increasing available test year straight time hours by approximately 37,000 hours over prior years as a result of proposed staffing changes (see CA-IR-172, pages 4 and 5).

CA-IR-634

Ref: HECO Responses to CA-IR-172 and CA-IR-178 Production Maintenance Labor Hours.

According to the response to CA-IR-178, at page 3 in footnote B, "This is a change in available maintenance manhours to support a greater workload and is not from a specific change in type of maintenance activity or scope of work." Please respond to the following regarding this statement:

- a. Explain why a "change in available manhours" is known to be needed if there has been no specific "change in type of maintenance activity or scope of work" required to be performed.
- b. If the Company has actually experienced changes in the "type of maintenance activity or scope of work" required to be performed, provide specific quantitative data and supporting documentation for the increased types and scope of work.

- c. Total actual production maintenance labor hours incurred in each year 2000 through 2004 (page 2 of CA-IR-178) range from a low of 227,183 in 2000 to a high of 245,786 in 2003. Please state with specificity the incremental types and scope of maintenance work that will be performed using the more than 30 percent increase in maintenance expense labor hours (318,763 hours) in the test period, relative to these historical periods.
- d. For each specific incremental work element identified in your response to part (c), please explain why such work was apparently not required in any of the years 2000 through 2004, but will be required starting in 2005.
- e. Please explain why Honolulu station operators (RA=PIH) are still projected to incur overtime of 9% (4,762 OT hours) after increasing available test year straight time hours by approximately 20,000 hours over prior years as a result of staffing changes (see CA-IR-172, pages 4 and 5).
- f. Please explain why Traveling Maintenance (RA=PIT) personnel are budgeted to incur a record overtime level of 34,556 hours in the test year, in spite of increasing available test year straight time hours by approximately 56,000 hours over prior years as a result of proposed staffing changes (see CA-IR-172, pages 4 and 5).

Ref: HECO Response to CA-IR-172 Production Labor Hours.

According to the response, test year total projected labor hours (including straight time and overtime) are projected to increase dramatically over prior year levels in every Production Department RA, in spite of the fact that HECO is not adding any Company-owned production capacity to its existing fleet of generation. Without repeating the generalizations stated throughout T-6 testimony about increasing demand levels, increased staffing plans, aging generating units, environmental regulations, etc. please provide specific quantitative data and supporting documentation indicating the Company's need for the added labor hours in each of the following RA's, relative to actual 2004 incurred labor hours:

- a. PIB Administration 20,530 test year hours (1,177 OT plus 19,353 Straight time), 60% above actual comparable 2004 levels.
- b. PIH Honolulu Operations 55,355 total hours, 40% above actual comparable 2004 levels.
- c. PIK Kahe Operations 135,813 total hours, 15% above actual 2004 levels.
- d. PIL Kahe Maintenance 81,045 total hours, 47% above actual 2004 levels.

- e. PIM Maintenance Administration 4,962 total hours, 34% above actual 2004 levels.
- f. PIN Honolulu Maintenance 18,857 total hours, 20% above actual 2004 levels.
- g. PIP Planning 50,134 total hours, 104% above actual 2004 levels.
- h. PIT Traveling Maintenance 198,746 total hours, 39% above actual 2004 levels.
- i. PIW Waiiau Operations 159,438 total hours, 34% above actual 2004 levels.
- j. PIX Waiiau Maintenance 79,164 total hours, 51% above actual 2004 levels.

CA-IR-636

Ref: HECO Responses to CA-IR-48(g) and CA-IR-175 Production Work Backlog.

According to part (c) of the IR-175 response, statistical data indicating the relative amounts of "backlog work" that existed at December 2002, versus December 2003, versus December 2004 that would be useful to evaluate the adequacy of historical staffing and expenditure levels relative to work requirements is "not applicable." The response to CA-IR-48, part (g) states, "Backlog statistics are not tracked and/or available in a useable format for analysis purposes." Please explain how management evaluates work requirements and determines staffing levels and contractor

requirements if it is not aware of whether or not the amount of backlog work is growing or declining. If any additional information is available to supplement your responses, please provide metrics associated with changes in the backlog of work requirements for these periods.

CA-IR-637

Ref: HECO Responses to CA-IR-188 and CA-IR-244 Structures Maintenance and Discretionary Projects.

According to the response to IR-244, part (b), "There is no report or special listing that's maintained other than the current list of items as shown in a, above." Please provide the following information:

- a. Confirm that no previously prepared iterations of this prioritized current listing of structural and facility maintenance items is available.
- b. If anything other than an unqualified confirmation is provided in response to part (a), please provide available copies of the listings associated with work status in 2003 and 2004, as initially requested.
- c. Explain how the Account 511 expenditure levels at page 4 of the response to CA-IR-188 tell us anything about "The progress made in past years..." relative to the prioritized listing of structural and facility maintenance items that need to be done – how can we tell if historical expenditures are creating a longer or a shorter list of prioritized "needs?"

- d. Provide all available reports, analyses, studies, projections and other documents indicating why the "Budget 2005" level of structural maintenance is reasonable and necessary, in spite of the fact that it is significantly higher than five of the six previous years' expenses that are shown.
- e. Explain why the Kahe Pond Cleaning project captioned "Construct Projects" under PIP planning is charged to expense rather than capital accounts in the test year forecasts and provide copies of documentation supportive of such classification.

CA-IR-638

Ref: HECO Response to CA-IR-240 Production Maintenance Mix.

According to the response, improving trends appear to be evidenced by the declining share of "corrective" work in combination with an increasing share of "predictive" work since 1999. Please provide the following information:

- a. Confirm this interpretation of the data or explain how management interprets the reported data.
- b. Provide complete copies of the actual reports "provided to management" regarding production department activities and performance trends, including but not limited to the "Maintenance Mix" graph and all associated narrative discussions of such information.

- c. Provide complete copies of all of the underlying detailed data used to determine the percentages shown for the graph in part b, broken down between project and non-project costs by activity for each year prior to 2005.

CA-IR-639

Ref: HECO T-6 Responses to CA-IR-2, Attachment 5, page 5, and CA-IR-186; Research New Technology projects.

Please provide the following additional information:

- a. A comparable breakdown of actual incurred and budgeted technology project expenses for each year 2000 through 2004 and each available projected year subsequent to 2004, explaining whether test year projected expenses are believed to be representative of normal, ongoing activity levels for such technology projects.
- b. A copy of the pending contract with Southwest Research Institute.
- c. A breakdown of EPRI and HECO actual and expected contributions by month in 2005 and 2006 for each known biomass/biofuels project.
- d. A breakdown of EPRI, HECO and any third party actual and expected contributions by month in 2005 and 2006 for each element of the Electronic Shock Absorber project.

Ref: HECO Response to CA-IR-182, page 3.

The responses provided for each of the following listed items did not appear to be supportive of test period proposed expense levels, either because of the lack of any historical comparable expenditures and/or because of the lack of any requested documentation as stated in the question posed as CA-IR-182. Please provide detailed documentation for the proposed test period amount for these items and provide actual expenditures to-date in 2005 (or explain why such costs should not be disallowed for lack of such support):

- a. PIL Kahe Fuel Tank "Non-recurring."
- b. PIL Cathodic Protection "Technical Assessment" based upon "staff experience."
- c. PIN Cathodic Protection "Technical Assessment" based upon "staff experience."
- d. PIO Honolulu Harbor Fees "reflects other Honolulu Harbor cost that would not be covered by the amount that was accrued back in 2001."
- e. PIX Travel Screen OH "prior to 2003, scope of work had changed such that replacement of the travel screen became capital work."

CA-IR-641

Ref: HECO T-6 Responses to CA-IR-1 and CA-IR-2.

To the extent HECO proposes any modifications or updates to its prefiled position regarding Production O&M expenses, please provide updated detailed documentation to replace each affected page of your response to these two information requests (including all revised labor hour and non-labor cost summaries, resource leveling sheets, forecast worksheets, project detail estimates, proposal documentation, etc.)

CA-IR-642

Ref: HECO T-6 Responses to CA-IR-2, HECO T-6, Attachment 4B.

For each production overhaul with expenses included in the Company's revised/updated filing (if not revised, respond for projects P844, P845, P846 and P847), please provide the following information:

- a. A copy of the outage work plan, including a detailed statement of the scope of work planned, including reference to each known major work element as well as each contingent budgeted work element that is subject to condition assessments to be made during the overhaul.
- b. A detailed statement of the budgeted labor hours by RA and by activity in each month for each outage in part (a).

- c. A detailed itemization of each significant budgeted non-labor charge by RA, activity and cost element for in each month for each outage in part (a).
- d. A complete copy of the outage report associated with the most recently completed previous unit outage corresponding with each test year planned overhaul project (K1, K4, K6, W4 if not updated).
- e. A detailed itemization of the actual labor hours and non-labor charges by RA, activity and cost element (comparable to the response to parts (b) and (c), above) in each month for the most recently completed previous overhaul identified in response to part (d).
- f. Explain each significant difference in the previous overhaul scope of work versus the test year planned overhaul scope of work, so as to fully explain the cost differences between parts (b)/(c) and part (e), above.
- g. Provide a complete electronic copy of the file "2005 NonLabor OH Budget.xls" corresponding to the Company's updated filing (or original filing if no changes are proposed) as well as any linked or supporting spreadsheet calculations and workpaper files.

CA-IR-643

Ref: HECO Response to CA-IR-183.

Please provide the following information regarding HECO's submission to the Department of Health CAB regarding 2004 Emission Fees payable in 2005:

- a. The actual amount of calculated fees by generating station.
- b. The CPI adjustment factor used to determine the amounts in part a, as required by HAR 11-60.1-114(j).

CA-IR-644

Ref: HECO Response to CA-IR-48.

Reference is made in part (a) indicating that the added night shift maintenance crew is needed to "accomplish maintenance on operating and available units" and that key resources must be increased to "handle the higher levels of work." However, in response to part (d) HECO states, "It is not possible to reconcile the increased maintenance staffing forecasted in 2005 because the maintenance staffing levels forecasted were based on the numbers of specific trades and craft personnel required to keep up with anticipated increased workload requirements." The Company repeatedly refers to increased volumes of work, yet appears to have no statistical measures of work requirements or backlog of work requirements. Please respond to the following:

- a. Given the absence of any studies of optimal staffing plans (part (a) response), was the judgment of management the sole determinant of numbers of personnel to be added?
- b. If the response to part (a) is not an unqualified "yes", provide complete copies of all studies, reports, projections and other information relied upon in determining staffing levels.
- c. State with specificity how the "anticipated increased workload requirements" referenced in your response to part (d) were measured and quantified.
- d. Provide copies of all measurements of workload requirements.
- e. Explain whether in test year production maintenance expense forecasting, the staffing levels were established first, and then the resulting available hours were "spread" over expected work activities – or alternatively -- whether the work requirements by activity were first quantified, and then summed up to determine the amount of straight time and overtime hours that were required.
- f. Provide copies of, or reference into, the workpapers indicating the process described in part (e) of your response.

Ref: HECO Revised 4-21-2005 Response to CA-IR-43, page 6, Revised Overhaul O&M estimates.

Please provide the following information regarding the three iterations of overhaul schedule related O&M estimates for the test year dated 1/12/2004, 2/3/2005 and "Revised 4/05 Schedule" on the page 6 spreadsheet:

- a. Identify which of the three alternative test year production maintenance expense amounts (\$14.5 million, \$17.1 million, or \$18.2 million) for overhauls is the most indicative of normal, ongoing conditions.
- b. Provide complete copies of all studies, reports, analyses, workpapers and other information relied upon in determining your response to part (a).
- c. State which of the three amounts in part (a), or which other amount not stated therein, should be included within HECO's revenue requirement so as to base the revenue requirement upon the most representative estimated amount of ongoing, normalized production maintenance expenses.
- d. Provide a complete explanation and copies of any information relied upon your response to part (c), to the extent not already provided by HECO.

Witness T-22, Ms. Seese

CA-IR-646

Ref: HECO Cost of Service Study Excel Model, Sheet "Page 3", development of Composite NCD D3 factor.

- a. Please explain the basis for this "composite" factor that appears to be derived as a simple average of the sum of diversified class demands (NCCP) and the class peak demands based upon load factors.
- b. Why is this averaging thought to be appropriate, in place of direct use of either the NCCP or class peak values?

CA-IR-647

Ref: Response to CA-IR-24(c).

HECO indicated that it was preparing its annual sales and peak forecast for 2005 to 2010 and expected the forecast to be issued in May 2005.

- a. Please provide the updated economic forecasts for Oahu provided by UHERO used as a basis for HECO's sales forecasts.
- b. Please provide the forecast revisions or alternative models updating HECO's June 2004 sales and peak forecast.

CA-IR-648

Ref: Response to CA-IR-157(d.1.).

- a. Please provide the estimated kwh impact caused by the flood damage to UH Manoa facilities for November and December 2004.

- b. Please provide monthly kwh use for UH Manoa facilities for 2004 and the available months for 2005.

CA-IR-649

Ref: Response to CA-IR-157(a).

Please provide the January to March 2005 monthly billed kwh sales by commercial sectors.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWENTIETH SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

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2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWENTIETH SUBMISSION OF INFORMATION REQUESTS

General Questions

CA-IR-650 **Ref: HECO response to CA-IR-187 (Ho'okina Award Program).**

The referenced response provided program guidelines and other information regarding the Ho'okina Award Program. Please provide the following:

- a. The response to CA-IR-187(b) indicated that actual monthly program expenditures by NARAUC account are not available, as the expense is incurred when awards are distributed in the March timeframe. Please provide actual number of award recipients and expenditures under the program, by NARUC account, for plan years 2002, 2003 and 2004, which would have been expensed in March 2003, 2004 and 2005.
- b. Please identify and describe the key factors contributing to the introduction of this program in 2002, including a detailed description and quantification of any related benefits that would not have occurred in the absence of the program.
- c. Prior to 2002, did HECO/HEI have an award program similar to Ho'okina that is no longer offered? Please explain.

- d. Please identify, describe and quantify all ratepayer benefits arising from this program that have been reflected in the 2005 test year forecast.

CA-IR-651

Ref: HECO response to CA-IR-187 & CA-IR-2, HECO T-6, Attachment 3M (Ho'okina Award Program).

The response to CA-IR-187(c) indicates that the 2004-2005 Ho'okina estimate was based on a \$200 per employee award, resulting in a revised budget amount of \$288,000, allocated as set forth on CA-IR-2, HECO T-6, Attachment 3M, page 3. Please provide the following:

- a. Please confirm that the \$288,000 amount was based on \$200 for 1,440 employees. If this cannot be confirmed, please explain.
- b. Does HECO expect 1,440 employees, or about 76% of the 1,493 included in the 2005 test year forecast (see HECO-1612), to qualify for payments in 2005 or 2006? Please explain and provide any support for this assumption.

CA-IR-652

Ref: HECO response to CA-IR-187 (Ho'omaika'i Award Program).

The referenced response, which provided program guidelines and other information regarding the Ho'okina Award Program, also

identifies “Ho’omaika’i” – an employee recognition program. Please provide the following:

- a. Are Ho’omaika’i awards also distributed in the March timeframe for the prior plan year? If so, please provide actual number of award recipients and expenditures under the program, by NARUC account, for plan years 2002, 2003 and 2004, which would have been expensed in March 2003, 2004 and 2005.
- b. Please provide the Ho’omaika’i program expenditures included in the 2005 test year forecast, by NARUC account.
- c. Please identify and describe the key factors contributing to the introduction of this program in 2002, including a detailed description and quantification of any related benefits that would not have occurred in the absence of the program.
- d. Prior to 2002, did HECO/HEI have an award program similar to Ho’omaika’i that is no longer offered? Please explain.
- e. Please identify, describe and quantify all ratepayer benefits arising from this program that have been reflected in the 2005 test year forecast.

Witness T-13, Mr. Ernest Shiraki.

CA-IR-653

Ref: HECO-1310, page 4 (HEI Incentive Compensation).

Footnote (9) of HECO-1310 indicates that the 2003 base for the 2005 test year HEI forecast "...was adjusted to exclude costs related to incentive compensation. This adjustment was made to simplify the issues related to this rate case only." HECO-1310 reduced the Company's 2003 expense by about \$41,064 for incentive compensation. Please provide the following:

- a. Please identify and describe the various incentive programs offered by HEI and provide actual expenses associated with these programs in both 2003 and 2004.
- b. Referring to item (a) above, please reconcile the 2003 actual HEI incentive compensation costs with the \$41,064 HEI set forth on HECO-1310, explaining any material differences.

CA-IR-654

Ref: HECO-1304 & HECO-1310 (Incentive Compensation).

Both referenced exhibits exclude incentive compensation costs from the 2005 test year forecast. HECO T-13 (page 9) and HECO T-1 (page 26) indicate that incentive compensation costs have been eliminated from the test year in order to simplify and the limit issues. Please provide the following:

- a. Does HECO consider the Ho'okina or Ho'omaika'i awards to represent a form of incentive compensation? If not, please

explain the distinction between these award programs and those identified on HECO-1304.

- b. Does HECO/HEI offer other employee award programs, similar to the Ho'okina or Ho'omaika'i programs, but not explicitly considered to a form of incentive compensation? If so, please provide the following for each such program:
 - 1. Identify and describe the program.
 - 2. Provide a copy of any program guidelines, instructions, qualifications and conditions.
 - 3. Provide actual program expenditures by NARUC account for the past three years.
 - 4. Provide the amount of the program expenditures included in the 2005 test year forecast.
- c. Referring to items (a) and (b) above, do the incentive compensation adjustments on HECO-1304 or HECO-1310 have the effect of excluding any portion of the identified awards from the 2005 test year forecast? If so, please provide the amount thereof and a pinpoint reference to any documentation supporting said exclusion. If not, why not?
- d. Please identify, describe and quantify all ratepayer benefits arising from each identified program that has been reflected in the 2005 test year forecast.

Ref: HECO response to CA-IR-82 (Software Development Costs).

The referenced interrogatory specifically referred to computer software development costs included within the 2005 test year, as opposed to recurring maintenance or right-to-use fees. Please provide the following:

- a. Please confirm that the major software costs provided in response to CA-IR-82(b) are development costs.
- b. Define “development” as used in this context.
- c. Regarding the Electric Facilities Management Systems (EFMS) Program costs, please provide the following:
 1. Please provide the dates on which the project was started and completed.
 2. Please provide the total actual cost of this program, showing expenditures by month.
 3. What is the expected life cycle of the EFMS program and subprojects?
 4. Did HECO capitalize any of the cost of the EFMS project? If so, please provide the total amount, showing the calculation of the net amount included in rate base and any amortization included in operating expense during the 2005 test year. If not, why not?

5. Does HECO expect to incur \$610,000 of EFMS program development costs on an annually recurring basis? Please explain.
- d. Regarding the E-Business (EBus) Program costs, please provide the following:
1. Please provide the dates on which the project was started and completed.
 2. Please provide the total actual cost of this program, showing expenditures by month.
 3. What is the expected life cycle of the EBus program and subprojects?
 4. Referring to HECO T-13, p. 49, did HECO capitalize any of the cost of the EBus project other than the \$670,000 deferred in November 2000? If so, please provide the total amount, showing the calculation of the net amount included in rate base and any related amortization included in the 2005 test year. If not, why not?
 5. Does HECO expect to incur \$510,000 of EBus program development costs on an annually recurring basis? Please explain.

Witness T-10, Mr. Hee.

CA-IR-656

Ref: HECO response to CA-IR-78 (Customer Service – 2004 Reorganization).

The referenced response indicates that the O&M impact of the reorganization is \$307,313 (excluding on-costs). The reorganization also results in the following changes: (a) “the Vice President, Customer Solutions [a new position] has the resources to actively pursue the Company strategy of presenting the customer with more choices related to energy options and optimum energy usage;” (b) “the Manager, Energy Services, is now concentrating his efforts on new DSM programs proposed in this rate case...”; and (c) an additional DSM Engineer position that was filled December 2004, which was transferred from the Customer Installation Department due to the increased emphasis on DSM measures. Please provide the following:

- a. Does the above summary reasonably describe the reorganization? If not, please explain.
- b. Based on the response to item (a) above, would it be accurate to describe the need for the reorganization and the incurrence of the added O&M costs on the increased focus on DSM? If not, please explain.
- c. Commission issued Order No. 21698 on March 16, 2005, which separated HECO’s DSM and load management requests from the rate case and opened Docket No. 05-0069

to consider those issues. CA-IR-533 (currently outstanding) requested a quantification of the adjustments required to remove DSM and load management costs, revenues and/or investments from HECO's 2005 test year forecast. Should the \$307,313 (excluding on-costs) be included in costs removed from the test year? If not, why not?

Witness T-16 Ms. T. Sekimura

CA-IR-657

Ref: HECO responses to CA-IR-71 & CA-IR-508 (Staffing).

Please provide the monthly employee counts supporting the actual 2004 average of 1,334.

CA-IR-658

Ref: HECO responses to CA-IR-261, CA-IR-263 & HECO-1604 (Ellipse Fees).

Please provide the following:

- a. The invoices attached to CA-IR-261 appear to only support two of the three Ellipse cost elements (buy-down fee & BSI tax) set forth on HECO-1604, p. 16. Please provide a copy of the January 2005 invoice for the recurring maintenance fee.
- b. CA-IR-263(c) indicates that the software maintenance fee reduction was effective June 2004. Beginning in June 2004, did HECO actually record the lower maintenance fee in operating expense or did the Company defer that expense

reduction as an offset to the \$1.1 million fee recorded as a prepaid expense (HECO T-16, p. 15)? Please explain.

- c. Did HECO record the entire \$1.1 million as a prepaid expense in June 2004 or only the \$550,000 installment paid in June 2004? If \$1.1 million, please explain why the full amount was recorded as a prepaid expense.
- d. Referring to HECO T-16, p. 15, did HECO actually commence the amortization of the \$1.1 million fee, over 24 months, beginning June 2004? If not, please explain.
- e. Referring to item (b) above, please provide the actual monthly balance for the prepaid expense account beginning in June 2004 through the most current month available.

Witness T-8 Mr. S. Yoshida

CA-IR-659

Ref: HECO responses to CA-IR-62 & CA-IR-69248 (Vegetation Management).

In discussing the increase in distribution O&M between 2003 and 2005, the response to CA-IR-62(a) referred to the Company's need to address increased vegetation growth around HECO's facilities in 2004 due to excessive rainfall. In response to CA-IR-69, HECO provided a comparison of actual tree/brush trimming expense for 2000-2004 actual and 2005 test year forecast. Please provide the following:

- a. Does the response to CA-IR-69 include the cost of internal Company resources as well as outside services used for tree/brush trimming? Please explain and provide any revisions or corrections.
- b. The distribution tree/brush trimming expense provided in response to CA-IR-69 is less than 2003, but higher than all other years. Was there also excessive rainfall in 2003? Please explain.
- c. According to the response to CA-IR-69, the T&D 2005 tree/brush trimming forecast is about \$175,000 less than 2003 and \$75,000 less than 2004 while significantly higher than 2001 (\$187,000) and 2002 (\$378,000). Is HECO also anticipating excessive rainfall for 2005? Please explain and discuss the relative relationship between rainfall and tree/brush trimming expense.

Witness T-9, Mr. D. Yamamoto

CA-IR-660

Ref: HECO response to CA-IR-555 (CIS).

The referenced response indicates that the 2005 test year rate base forecast does not include any capital or deferred costs for the CIS replacement project (P0000571), because it is forecasted to be completed after the test year. However, \$251,000 of CIS O&M costs (\$240,000 direct labor/non-labor plus \$11,000 of on-costs)

have been included in revenue requirement. Please provide the following:

- a. Please provide the current planned operational date for the new CIS system.
- b. Please confirm that the \$251,000 of CIS O&M expense is associated with the new CIS system. If this cannot be confirmed, please explain.
- c. Referring to items (a) and (b) above, please explain why HECO believes it is appropriate to include any operating expense associated with the CIS project in the test year forecast, when the project is not expected to be completed until after the test year.
- d. HECO T-9, page 5, refers to “an increasing number of customer billing and information functions that have to be handled manually, until a new customer information system can be implemented.” Please identify the labor and non-labor costs that will be avoidable, once the new CIS system is implemented and operational.
- e. Referring to item (d) above, has HECO removed any of the avoidable labor and non-labor costs from the 2005 test year forecast? If so, please quantify and provide a copy of or pinpoint reference to the relevant documentation showing that removal.

Witness T-15, Julie Price

CA-IR-661 **Ref: response to CA-IR-352 (Human Resources Suite).**

Please provide the following:

- a. What is the currently estimated start date for Phase 1 of the HRS project?
- b. What is the currently estimate completion date for Phase 1 of the HRS project?

Witness T-6, Mr. Fujinaka

CA-IR-662 **Ref: HECO Response to CA-IR-2, Attachment 3H, RA=PHS Security Services.**

According to the Attachment 3H at page 6, contract security services are set forth at six locations (Command Center, Kahe, Waiiau, Honolulu, King and Ward) on a weekly and monthly estimated basis. However, these amounts do not appear to tie into HECO-WP-101(G) at pages 877-882 for EE 501 expenses. Please provide the following information:

- a. Detailed calculations for security service charges relating the amount shown in Attachment 3H at page 6 to the specific amounts included in the test period.
- b. To the extent not provided in your response to part (a), a detailed calculation and copies of supporting documentation for the Honolulu PHS charges of \$86,000.

- c. To the extent not provided in your response to part (a), a detailed calculation and copies of supporting documentation for the Waiau PHS charges of \$294,608.
- d. To the extent not provided in your response to part (a), a detailed calculation and copies of supporting documentation for the Kahe PHS charges of \$267,808.

CA-IR-663

Ref: HECO Responses to CA-IR-2, Attachment 3A at page 3, RA=PIB Outside Services.

According to the workpaper, \$60,000 has been included for "Outside Services-General (3 stations)" with an Indicator of "NC." However, the costs appear to be included in non-labor direct expenses. Please provide the following information:

- a. Explain why these non-billable clearing amounts are treated as direct non-labor costs.
- b. Provide a detailed calculation, workpapers and supporting documentation for these specific outside services charges.
- c. Provide comparable actual charges by vendor for each of the years 2002, 2003 and 2004.

CA-IR-664

Ref: HECO Responses to CA-IR-2, Attachment 3A at page 7, RA=PIK, City Water Charges \$285,732.

According to the supporting workpaper, "revised budget amount not reflected on this sheet. Can't locate supporting doc to show change." Please provide the following information:

- a. Actual monthly charges for Kahe city water costs to HP000336 for each available month of 2004.
- b. All supporting information for the Company's proposed expense amount.
- c. Explain any revisions required to properly reflect Kahe city water costs in the test period.

CA-IR-665

Ref: HECO Responses to CA-IR-2, Attachment 3A at page 21, RA=PIN, Recycle H9 Boiler Chem Cleaning.

Please provide the following information regarding this \$400,000 expense that was added into test year projected expenses upon "recycle" of the budget:

- a. Explain why this activity and cost was not originally included in the budget.
- b. Describe the reasons for the modification to the budget to include this item.
- c. What has been the historical frequency of such boiler chemical cleaning activities by outside contractors?

CA-IR-666

Ref: HECO Responses to CA-IR-2, Attachment 3A at pages 17 and 21, RA=PIN, Iwelei Pipeline Pigging.

Please provide the following information regarding this \$160,000 plus \$80,000 [recycle added] expense that was added into test year projected expenses upon "recycle" of the budget:

- a. Explain why this activity and cost was only partially included in the budget.
- b. Describe the reasons for the modification to the budget to increase the cost of this item.
- c. What has been the historical frequency and cost of such pipeline pigging activities by outside contractors in each of the past five years?

CA-IR-667

Please provide a detailed monthly breakdown of first quarter 2005 actual non-fuel Production Operations and Maintenance expenses by RA, NARUC Account and Expense Element in hard copy and magnetic media (Excel format).

CA-IR-668

Ref: HECO Responses to CA-IR-2, Attachment 3B at page 6, RA=PIA Software and Consulting Services.

According to the workpaper, \$249,419 is included in test year expense for various new software maintenance and support agreements. Please respond to the following:

- a. Provide a breakdown of actual incurred costs to-date in 2005 by month for each line item within the “NOTES” descriptions.
- b. Explain changes that have occurred regarding software deployment and cost levels, reconciling such information into the response to part (a) in comparison to the test year comparisons.

CA-IR-669

Ref: CA-IR-142 response from HECO

HECO WP-408 shows historical system net heat rate from 1999 through 2003 at approximately 10,400 btu/kWh. The response to CA-IR-142 shows the system net heat rate for 2004 is 10,621 btu/kWh. Please explain why the system net heat rate increased to 10,621 btu/kWh.

CA-IR-670

Ref: T-4.

- a. Please provide the energy generated by Generating Unit by month for 2004.
- b. Please provide the HECO system energy requirement and peak demand by month for 2004.

CA-IR-671

Ref: Exhibit 504, Page 1 and CA-IR-147 response from HECO.

Exhibit 504, page 1 shows the amount of purchased energy from Tesoro decreased from 5,449,573 kWh (2003) to 3,677,119 kWh (2004). Please explain why energy from this resource decreased.

CA-IR-672

Ref: CA-IR-131 and CA-IR-128 responses from HECO.

HECO updated the Power Supply Operation and Maintenance 2005 Schedule and the A, B and C heat rate constants. Please provide hourly data in electronic spreadsheet and hard copy formats of the updates and revisions made to the production simulation model.

CA-IR-673

Ref: WP-406.

- a. How is Equivalent Forced Outage Rate of the Generating Units modeled in the P-Month Production Simulation Model?
- b. Energy purchased from the supplier H-Power, is shown in WP-406, Equivalent Forced Outage Rate with an Availability of 90%. This table indicates Equivalent Forced Outage Rates for HECO generating units. However, H-Power does not have an Equivalent Forced Outage Rate. Was the H-Power Equivalent Forced Outage Rate modeled differently than for the other generating units? If so, how?

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWENTY-FIRST SUBMISSION OF INFORMATION REQUESTS

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- b. State all facts and reasons supporting each claimed privilege and objection;
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DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWENTY-FIRST SUBMISSION OF INFORMATION REQUESTS

Witness T-13, Mr. Ernest Shiraki.

CA-IR-674 Ref: HECO responses to CA-IR-251, CA-IR-254, CA-IR-425 and HECO-1310 (HEI Billings).

In the confidential portion of the response to CA-IR-251, the Company provided total 2003 HEI expenses (excluding intercompany billings) by activity, showing only the HEI costs that directly charged or partially allocated to HECO. CA-IR-254 sought, in part, the identification of the types of costs retained by HEI and not billed to HECO, HELCO or MECO. CA-IR-425 referred to the response to CA-IR-254 and requested, in part, a detailed breakdown of the HEI expenses retained by HEI for calendar years 2003, 2004 and 2005. Although the response to CA-IR-425 indicated that the HEI forecast is not prepared at an activity level, the Company did not provide actual HEI retained costs in 2003 or 2004 by activity. Confidential page 3 of the response to CA-IR-251 represents a recap of the detailed HEI billing to HECO in 2003 by activity group, identifying four activity groups (ACQ, COM, LEG and STR) with either "zero" activity or otherwise retained by HEI (i.e., not billed to HECO). Please provide the following:

- a. Does HEI incur costs that are charged to the above activities (ACQ, COM, LEG and STR) and retained by HEI (i.e., not billed to HECO, HELCO and MECO)? If not, please explain.
- b. Does HEI incur other costs that are not charged to the above activities that are also retained by HEI? Please explain.
- c. Referring to item (a) above, please provide detailed information for calendar year 2003 comparable to confidential pages 4 through 159 of CA-IR-251 for the above activities (ACQ, COM, LEG and STR) whose costs were retained by HEI. If the requested information is not available, please explain.
- d. Referring to item (b) above, please provide detailed information for calendar year 2003 comparable to confidential pages 4 through 159 of CA-IR-251 for the identified activities or categories of expense whose costs are retained by HEI. If the requested information is not available, please explain.

CA-IR-675

Ref: HECO responses to CA-IR-254 and CA-IR-513 (Government and Community Relations).

In response to CA-IR-254, the Company indicated that HEI retains, or does not bill, costs associated with various activities, including government relations and community relations functions. In response to CA-IR-513, HECO provided copies of the written job

descriptions for certain public affairs and government relations positions, which include legislative responsibilities. Please provide the following:

- a. Please explain the rationale for HEI's retention of the costs associated with the government, legislative and community relations functions.
- b. Please provide written position descriptions for each HEI employee involved in government, legislative and community relations functions, regardless whether the related costs are retained by HEI.
- c. Referring to the HEI job descriptions provided in response to item (b) above, do any of the HEI employees engage in lobbying activities? Please explain.
- d. Referring to the HECO job descriptions provided in response to CA-IR-513, do any of the HECO employees engage in lobbying activities? Please explain.
- e. Why has HECO not proposed to eliminate any portion of the test year costs associated with governmental relations and public affairs (see CA-IR-513) that are largely or partially associated with legislative activities? Please explain.

CA-IR-676

Ref: HECO responses to CA-IR-254 and CA-IR-513 (Government and Community Relations).

Please provide a copy of all written lobbying/legislative activity logs and other reports produced by HECO/HEI to document and communicate legislative efforts and the status and/or impact of legislation, to be proposed or then pending, to management personnel in 2003, 2004 or 2005, to-date.

CA-IR-677

Ref: HECO response to CA-IR-254 and CA-IR-513, HECO-1310 and HECO-1312 (Government & Community Relations).

Please provide the following:

- a. Does HECO bill HEI for any portion of the test year costs associated with governmental relations and public affairs (see CA-IR-513) that are largely or partially associated with legislative activities? If so, please explain the basis for such cost assignment/allocation and provide the amount billed in 2003 as well as the 2005 test year forecast.
- b. Referring to item (a) above, does HEI record such billings from HECO in Activity COM or LEI or some other activity whose costs are retained by HEI? Please explain. If any such costs are billed back to HECO, please provide the amount thereof included in the 2005 test year forecast.

Ref: HECO responses to CA-IR-251, CA-IR-252 and CA-IR-419 (HEI Billings).

In response to CA-IR-419, HECO stated that it will be updating the 2005 test year forecast of HEI billings to HECO to reflect more current allocation factors and more current estimates. Please provide the following:

- a. Please provide HEI 2004 information, comparable to the 167 page response to CA-IR-251, which supports the 2004 amounts input on pages 3 through 6 of the response to CA-IR-419.
- b. In response to CA-IR-252, the Company provided supporting documentation underlying the HEI allocation factors used in HECO's original test year forecast (HECO-1310) as well as the updated factors applied in the HEI update attached to CA-IR-419. Please provide a copy of all workpapers, spreadsheet files and any other supporting documentation used in quantifying the following updated HECO allocation factors set forth on pages 3 through 6 of the response to CA-IR-419, which do not appear to have been provided in the response to CA-IR-252:
 1. ACC 018: 40.9%
 2. PEN 022: 50.0%
 3. STO 0xx: 67.1%

- c. Please provide a copy of all workpapers, spreadsheet files and any other supporting documentation used to quantify each adjustment to the 2004 actual HEI charges to HECO, as set forth on pages 3 through 6 of the response to CA-IR-419 and briefly described in the footnotes thereto.

CA-IR-679

Ref: HECO response to CA-IR-423 (HEI Billings).

In response to the referenced response, HECO indicated that subsidiaries “derive their equity from two sources: parent company equity infusions (common stock or paid in capital) or earnings left by the parent company in the subsidiary (retained earnings) after taking into account the respective companies’ regulatory requirements.” Please provide the following:

- a. Please provide all equity infusions to each individual subsidiary operation by year since 1995 (i.e., the last rate case).
- b. For each subsidiary operation, please identify and describe the “respective companies’ regulatory requirements.”

Witness T-9, Mr. D. Yamamoto

CA-IR-680

Ref: HECO-901 (Customer Accounts Expense).

Please update HECO-901 to include 2004 actual results.

Ref: HECO-901, HECO-905 and HECO-906 (Uncollectibles).

Please provide the following information:

- a. HECO-901 includes a multi-year comparison of the charges to Account 904, Uncollectible Expense. Please confirm that the historical information for calendar years 2000-2003 reflect accrual basis accounting for uncollectible expense. If this cannot be confirmed, please explain.
- b. Referring to item (a) above, please describe the methodology employed by HECO to determine the monthly amount of uncollectible expense recorded in Account 904 and provide a copy of the supporting documentation showing how that methodology was applied for a recent, representative month.
- c. Please provide the source data underlying the \$832,000,000 of estimated electric sales revenues for the test year, appearing on HECO-905, and reconcile that amount with the Company's forecast of electric sales revenue under present rates of \$994,032,000 (HECO-2301).
- d. Referring to HECO T-9 (page 20) and HECO-906, please provide the graph and underlying electric sales revenues and net write-offs used to generate HECO-906 as well as the 0.10% factor for the period ending April 2004. Please

provide the information in both hard copy and an Excel spreadsheet file.

- e. Referring to HECO-905, please provide the calculation details underlying the 0.13% uncollectible factor.

CA-IR-682

Ref: HECO T-9, pages 19-21, and HECO response to CA-IR-75 (Uncollectibles).

The referenced testimony generally discusses HECO's experience with uncollectible accounts and points to HECO-906 for a historical comparison of uncollectibles as a percent of revenues. The referenced testimony also indicates that the local economy has not recovered as completely as expected and seems to imply that a higher uncollectible factor (0.13%) is warranted. In support, HECO-907 represents a chart of residential and commercial accounts outstanding for 60-days or more. Please provide the following information:

- a. Is the above summary accurate? If not, please clarify any material misstatements.
- b. In response to CA-IR-75, HECO provided gross write-offs, recoveries and net write-offs by month during calendar years 2000-2004, showing that gross and net write-offs in 2004 were lower than any other year. Please explain the decrease in the 2004 write-off activity, identifying and

describing any changes in write-off policies, collection activities, etc. that materially contributed to this result.

Witness T-19, Ms. Gayle Ohashi

CA-IR-683

Ref: HECO reponse to CA-IR-518 regarding pension expense payment lag.

Please provide the following in this regard:

- a. Please clarify for which plan year each payment date/amount provided in response to part (a) of the noted request relates to.
- b. Please clarify the response to part (b) of the noted request. The first part of the response indicates that "minimum required contribution(s) for a plan year must be made within 8-1/2 months of the last day of that plan year." The second part states "[i]n addition, minimum contribution amounts are due on quarterly basis....for a calendar plan year." How can the quarterly minimum contribution amounts be calculated when one doesn't even know what the minimum contribution will ultimately be?
- c. Referring to part (b) above, what applicability would the first noted contribution date (i.e., 8-1/2 months after the end of the plan year) have if the second noted minimum contributions already requires an earlier quarterly funding within the given calendar plan year.

Witness T-18, Ms. L. Nagata

CA-IR-684

Ref: HECO responses to CA-IR-216 and CA-IR-525 regarding prepayment account.

Please provide the following:

- a. Describe the events, transactions or change in conditions causing the Prepaid rent account (16601000) balance to decline in the second half of 2004 and actually go negative in January 2005.
- b. When is the King St. property rent typically "prepaid?"
- c. Describe for what period the King St. rent is typically prepaid (i.e., quarterly in advance, monthly in advance, other)?
- d. Provide the balance associated with the prepayment of King St. property rent for each month of 2004.

Witness T-4, Mr. R. Sakuda

CA-IR-685

Ref: T-4.

Please provide actual monthly and annual heat rates, gross and net generation for each generating unit for the years 2001 through 2004.

CA-IR-686

Ref: Response to CA-IR-501 and CA-IR-131.

- a. HECO's response to CA-IR-501 is the input data files to P-Month Simulation Model, including the Thermal Maintenance Schedule, a data file named HE05TYM1.umd.

In file HE05TYM1.umd, HECO modeled scheduled maintenance for several generating units on certain dates. HECO's response to CA-IR-131 of Test Year 2005 Planned Outage Schedule (Revision Date 01/12/04) does not show the same generating unit maintenance schedules as was provided in file HE05TYM1.umd. Please indicate if the response to CA-IR-131 or the response to CA-IR-501 is correct?

- b. If the data file HE05TYM1.umd is incorrect please provide the correct data file.

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWENTY-SECOND SUBMISSION OF INFORMATION REQUESTS

INSTRUCTIONS

In order to expedite and facilitate the Consumer Advocate's review and analysis in the above matter, the following is requested:

1. For each response, the Company should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response should there be an evidentiary hearing;
2. Unless otherwise specifically requested, for applicable schedules or workpapers, the Company should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
3. When an information request makes reference to specific documentation used by the Company to support its response, it is not intended that the response be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, Company instructions, or any other relevant authoritative source which the Company used.
4. Should the Company claim that any information is not discoverable for any reason:
 - a. State all claimed privileges and objections to disclosure;

- b. State all facts and reasons supporting each claimed privilege and objection;
- c. State under what conditions the Company is willing to permit disclosure to the Consumer Advocate (e.g., protective agreement, review at business offices, etc.); and
- d. If the Company claims that a written document or electronic file is not discoverable, besides complying with subparagraphs 4(a-c), identify each document or electronic file, or portions thereof, that the Company claims are privileged or will not be disclosed, including the title or subject matter, the date, the author(s) and the addressee(s).

DOCKET NO. 04-0113

HAWAIIAN ELECTRIC COMPANY, INC.

TWENTY-SECOND SUBMISSION OF INFORMATION REQUESTS

Witness T-15, Ms. Julie Price.

CA-IR-687

Ref: HECO response to CA-IR-337 (revised Pension & OPEB Costs).

It is unclear, from the information provided, whether the \$7,014,500 of OPEB costs set forth on revised HECO-1504 includes or excludes retiree electric discounts for purposes of quantifying the updated 2005 forecast. In order to clarify, please state whether such retiree discounts are included therein and provide additional underlying support for the updated forecast similar to HECO-1506.

Witness T-16, Ms. T. Sekimura.

CA-IR-688

Ref: HECO response to CA-IR-615 (Rent Expense).

CA-IR-615(a) requested the revenue requirement effect of HECO's proposed capital lease treatment of the renegotiated King Street lease as compared to an operating lease. Please provide the following:

- a. Referring to page 5, please explain and contrast the concepts of "capital lease for book and ratemaking" versus "capital lease with recovery based on lease payments." In other words, how are these scenarios conceptually different?

- b. Referring to item (a) above, does HECO consider either of these scenarios as recognizing the cost of the King Street lease as an “operating” (i.e., non-capital) lease? If so, please define the term “operating lease” as applied by HECO.
- c. Please provide the operating lease revenue requirement as originally requested.
- d. HECO-1605 (original filing) quantified HECO’s portion of the old King Street lease at approximately \$506,000, which should approximate the revenue requirement effect of that lease. CA-IR-615, page 5, summarizes the 2005 revenue requirement under two capital lease scenarios at \$1.993 million and \$1.643 million. Do these amounts latter represent HECO’s share of the annual revenue requirement under the renegotiated King Street lease?
 - 1. If not, please quantify HECO’s share, showing all calculations.
 - 2. Please provide a detailed explanation of and support for the significant increase in ratepayer cost, identifying all added ratepayer benefits unique to the renegotiated lease.
- e. Both scenarios appear to include a return on investment. Please explain why operating lease treatment would include

a return on investment in quantifying overall revenue requirement.

CA-IR-689

Ref: HECO responses to CA-IR-616 (Rent Expense).

CA-IR-616(c) sought an explanation for HECO's use of 235-month period rather than a 240-month period for purposes of amortizing the fair market value of the King Street leased property. The response indicated that the five month difference is associated with the effective date of the lease beginning December 1, 2004, while CA-IR-260 assumed the lease would be executed on May 1, 2005.

Please provide the following:

- a. Please provide a citation to and copy of all authoritative support for the cited concept (i.e., using a shorter amortization period based on lease execution, rather than effective date).
- b. Please explain why HECO has not or should not have recorded accrual journal entries for lease amortization for the months of December 2004 through April 2005, instead electing to spread the same total lease costs over the shorter 235-month period.
- c. Does the Company believe that the Commission is required to adopt HECO's proposed capital lease amortization treatment for Hawaii ratemaking purposes? If so, please

provide a citation to and copy of all authoritative support relied upon by the Company in reaching this conclusion.

Witness T-17, Mr. Lon Okada.

CA-IR-690

Ref: Lon Okada's direct testimony pages 22 through 24.

Please provide the following regarding the American Jobs Creation Act of 2004:

- a. All internal studies and analyses undertaken to estimate its impact upon HEI/HECO's tax liability for 2005 and subsequent years.
- b. All studies, reports and other correspondence received from HEI/HECO's outside tax experts regarding the interpretations of the Act and the probable impact upon HEI/HECO's tax liability for 2005 and subsequent years.
- c. The Company's best estimate, including all underlying calculations and assumptions, of the impact of the Act upon HEI/HECO's tax liability for 2005 and subsequent years.

Witness T-19, Ms. Gayle Ohashi.

CA-IR-691

Ref: HECO-1904 & responses to CA-IR-98 & CA-IR-356 (Pension Asset).

Please provide the following:

- a. The response to CA-IR-98 increases the 12/31/04 pension asset balance on HECO-1904 from \$65.899 million to

\$81.085 million. It is unclear whether HECO also intends to increase the 12/31/05 forecast balance from the \$65.899 million set forth on HECO-1904 to \$81.085 million. Please explain and provide a copy of any supporting documentation.

- b. In response to CA-IR-356, HECO provided the calculation of the average accumulated deferred income tax reserve balance (\$3.322 million) HECO included in rate base associated with the pension asset. In light of the revisions to the pension asset balances referenced in item (a) above, has the Company also revised the calculation of the average rate base amount for the related ADIT reserves? If so, please provide the revised amount, including any supporting documentation.
- c. It is unclear how the ADIT reserve reduction to rate base in the Company's original filing (\$3.322 million) was determined.
 - 1. Please provide additional support for the ADIT reserve offset to rate base, showing the amount of the cumulative pension timing difference multiplied by the composite income tax rate.
 - 2. If the cumulative pension timing difference provided in response to item (c)1 above is not equal to the

\$65.899 million pension asset, please explain and reconcile any differences.

Witness T-22, Ms. E. Seese.

CA-IR-692

Ref: HECO response to CA-IR-587 (Employee Service Discounts).

The referenced response generally describes the electric discount provided to employees and retirees. The response to CA-IR-587(f) indicates that the retiree discounts are included in FAS106 cost. HECO T-15, p. 11, indicates that the Company eliminated the retiree FAS106 costs to avoid duplicating the retiree electric discount already recognized in the form of lower revenues. Please confirm that HECO does not record an expense accrual associated with the electric discount provided to active employees, as the discount is already recognized in operating results via reduced revenues. If this cannot be confirmed, please explain and quantify the amount of any expenses included in the 2005 test year forecast.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **DIVISION OF CONSUMER ADVOCACY'S INFORMATION REQUESTS** was duly served upon the following parties, by personal service, hand delivery, and/or U.S. mail, postage prepaid, and properly addressed pursuant to HAR § 6-61-21(d).

WILLIAM A. BONNET
VICE PRESIDENT, GOVERNMENT AND COMMUNITY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P. O. BOX 2750
Honolulu, Hawaii 96740-0001

1 copy

DARCY ENDO-OMOTO
ACTING DIRECTOR-RUGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P. O. BOX 2750
Honolulu, Hawaii 96740-0001

1 copy

THOMAS W. WILLIAMS, JR.
PETER Y. KIKUTA
GOODSILL ANDERSON QUINN & STIFEL
1800 Alii Place
1099 Alakea Street
Honolulu, Hawaii 96813

1 copy

DR. KAY DAVOODI
Utilities Rates and Studies
NAVFAC Washington
1314 Harwood Street, S.E.
Washing Navy Yard, DC 20374-5018

1 copy

RANDALL Y.K. YOUNG
Associate Counsel (Code 09C)
Naval Facilities Engineering Command, Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96830-3134

1 copy

DATED: Honolulu, Hawaii, June 22, 2005.


