

**A STUDY OF ELECTRICITY COSTS  
AND CONSUMPTION AT THE  
UNIVERSITY OF HAWAII**

**Preliminary Report**

**A Report to the Governor and the Legislature of the State of Hawaii**

**Submitted by the**

**Legislative Auditor of the State of Hawaii  
Honolulu, Hawaii**

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## FOREWORD

The General Appropriations Act of 1987 (Act 216) included a provision (Section 181) requesting the Legislative Auditor to conduct a two-year study of electricity costs and consumption of the University of Hawaii, including but not limited to a review of its budget projections compared to actual costs and consumption and an assessment of its efforts at energy conservation. The Legislature further requested the Legislative Auditor to submit a preliminary report prior to the 1988 legislative session and a final report by the 1989 legislative session. The report included herewith constitutes the preliminary response to this legislative request.

Due to time and resource limitations, it was impossible to cover all aspects of legislative concern during the initial phase of the study. Hence, the focus of this preliminary report is on the university's budgeting and expenditure of funds for electricity. In our final report, the spotlight will shift to the university's overall management of electricity costs and its energy conservation and cost control efforts.

We wish to acknowledge the cooperation and willing assistance extended to our staff by the president, other top officials, and other affected personnel of the University of Hawaii, and by staff members of the Public Utilities Commission of the State of Hawaii and of the several electric utility companies operating in Hawaii.

Clinton T. Tanimura  
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## **Chapter 1**

### **INTRODUCTION AND BACKGROUND**

Pursuant to Section 181 of the General Appropriations Act of 1987 (Act 216), the Legislative Auditor is conducting a two-year study of electricity costs and consumption of the University of Hawaii (UH). This is a report of the findings of the first year of the study. A final report will be made prior to the convening of the 1989 regular session of the Legislature.

#### **Objectives of the Study**

The objectives of the study are:

1. To determine UH electricity costs and consumption, its sources of funding for electricity, and other relevant factors.
2. To assess the reasonableness and adequacy of UH electricity budget for the Fiscal Biennium (FB) 1987-89.
3. To evaluate UH existing and planned electrical energy conservation measures.
4. To identify problems affecting the UH approach to budgeting for electricity and to electrical energy conservation, and to recommend possible solutions to these problems.

#### **Scope of the Study**

The focus of the first year of this study was on UH's general fund electricity costs, consumption, and budgeting, with particular attention given to UH's

supplemental budget request for electricity for Fiscal Year (FY) 1988–89. The study largely involved UH's institutional support programs under which most of its electricity costs are budgeted. There is an institutional support program for each of the units under the universitywide system which include the University of Hawaii at Manoa (UH–Manoa), the University of Hawaii at Hilo (UH–Hilo), West Oahu College, Honolulu Community College, Kapiolani Community College, Leeward Community College, Windward Community College, Kauai Community College, and Maui Community College. Of these programs, attention was given primarily to UH–Manoa's institutional support program which represents over 60 percent of UH's total general fund electricity budget for the current biennium.

In the second year, the study will focus on UH's electrical energy conservation programs and on its overall management of electricity costs.

### **Organization of the Report**

This report is divided into two chapters. Chapter 1 is this introduction. It also provides some background information on UH's electricity budget, appropriations, costs, and consumption. Chapter 2 presents our findings and recommendations relating to several aspects of the budgeting and expenditure of electricity funds at UH.

### **Background**

To provide a framework for considering the budgeting and expenditure of electricity funds at UH, background information is set forth below relating to UH's electricity budget, appropriations, costs, and consumption.

**Subject of continuing legislative concern.** The UH is a major consumer of electricity which it purchases from electric utility companies serving the areas where the university's various facilities are located. As the result of sharp increases in the rates charged for electricity in FY 1980-81 and FY 1982-83 (caused by worldwide conditions affecting the price of fuel oil), UH incurred large deficits in its electricity accounts and was forced to request supplemental funding from the Legislature. Although other consumers (including other state agencies) were similarly affected, the impact on the university was especially noticeable due to its heavy usage of electrical energy.

The Legislature provided UH extra funding in FY 1981-82, but as a result began to take special interest in this particular item in UH's overall budget. During the ensuing years, however, electricity rates began to fall almost as rapidly as they had previously risen (due again to factors affecting the worldwide price of fuel oil). Thus, instead of deficits, surpluses began to show up in UH's electricity accounts. These, in turn, gave rise to new concerns on the part of the Legislature--namely, about how UH used the extra funds and about how to prevent such large excesses from recurring.

In trying to deal with these concerns, the Legislature encountered difficulties in obtaining a clear picture of what was happening to electricity expenditures at UH and of how UH was managing this aspect of its responsibilities. It asked UH to conduct a number of studies of its electricity costs and consumption and to explore ways to conserve electricity. In response to these requests, UH submitted reports on its studies in November of 1982, 1983, and 1984.

In addition, the Legislature has highlighted UH's electricity appropriations since 1983 by including special provisos relating to electricity in the various affected

appropriations acts. Generally, the effect of these provisos has been to specify the kilowatt hour usage and rate assumptions underlying the electricity appropriations included for UH. However, for FY 1986–87, the proviso was amended to state that the indicated appropriations were to be used *only* for electricity costs. Then, in the General Appropriations Act of 1987 (covering FB 1987–89), the proviso reverted basically to its previous form<sup>1</sup> but included the request for the Legislative Auditor to conduct this study.

Normally, utility service might be considered a line item in an agency's budget and therefore not a matter of great concern from the perspective of program budgeting. However, when a particular item becomes quite large in itself and is subject to control through management action, then it might be considered a subprogram that is worthy of special attention. Such seems to be the case with respect to UH's electrical energy activities. By way of comparison, the appropriations for the current biennium for electricity are greater than the total appropriations for each of UH's separate campuses except UH–Manoa, UH–Hilo, and Leeward Community College. Yet, very much smaller subprograms within the individual campuses receive detailed attention in the budget process. As for management action, there are numerous things which can be done to conserve energy and reduce costs in operations as large as UH (not the least of which is keeping track of electricity usage and costs and knowing on a current and accurate basis what is happening in this area of responsibility).

Due to time and resource limitations, it was impossible for us to cover all aspects of legislative concern during the initial phase of our study. Therefore, for this interim report, we decided to concentrate on what has been happening with respect to the budgeting and expenditure of funds for electricity over the past

several years and into the current biennium. This is for the purpose of laying out as clearly as possible for the Legislature an overall picture of the funding UH has received for electricity and of how it has used this funding. For our final report, we intend to focus upon UH's overall management of electricity costs and upon its energy conservation and cost control efforts.

**Electricity in the UH budget and appropriations for FB 1987–89.** Electricity is generally budgeted by UH as a line-item in its operating budgets, primarily in the institutional support programs for its nine campus units. There is also some electricity budgeted in other programs. See Appendix A for a listing of the affected appropriations for FB 1987–89 by program and type of funding.

Appropriations to UH for electricity for FB 1987–89 total \$18.7 million, including \$9.1 million for FY 1987–88 and \$9.4 million for FY 1988–89. Over \$16 million, or 86 percent, is in state general funds. Revolving funds provide for \$2.4 million, or 13 percent, and special funds account for \$0.2 million, or 1 percent.

With a total of \$13.5 million, UH–Manoa programs together constitute over 72 percent of UH's biennium electricity appropriations. Of the remaining, \$1.9 million, or 10 percent, is for UH–Hilo programs, while \$3.2 million, or 17 percent, is for the community colleges. The institutional support program for UH–Manoa alone has 56 percent of the total, and 63 percent of all general funds.

**Electricity costs and consumption.** The UH's annual general fund electricity costs and consumption over the past ten years are presented in Table 1.1, including total costs, total kilowatt-hour consumption, and average cost per kilowatt-hour.

Table 1.1  
 University of Hawaii  
 Electricity Costs, Consumption, and  
 Average Price in General Funds  
 For Fiscal Years 1977-78 Through 1986-87

	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
Total Cost (\$)	3,927,081	4,467,580	5,450,840	7,990,203	10,218,112	9,201,140	8,998,699	9,280,238	8,489,279	7,051,443
Total Consumption in Kilowatt-Hours (KWH)	96,586,658	98,144,856	99,754,081	97,872,064	95,947,444	93,202,853	94,255,441	97,438,286	105,245,584	111,633,139
Average Cost Per Kilowatt (\$/KWH)	0.0407	0.0435	0.0546	0.0816	0.1065	0.0987	0.0955	0.0952	0.0807	0.0632

Sources: University of Hawaii internal memorandum dated October 16, 1985, Subject: Final FY 1984-85 General Fund Electricity Report; and data provided by the University of Hawaii Budget Office.

Most of UH's general fund electricity costs are incurred by eight programs, including the organized research and institutional support programs at UH-Manoa, and the institutional support programs of UH-Hilo and Honolulu, Kapiolani, Leeward, Maui, and Kauai Community Colleges. Together, these programs account for 97 percent of UH's FY 1986-87 general fund electricity costs.

Table 1.1 also shows that UH's general fund electricity costs have fluctuated over the past decade. Total costs rose from \$3.9 million in FY 1977-78 to a high of \$10.2 million in FY 1981-82. Since then total costs have steadily declined, dropping to \$7 million in FY 1986-87. For the ten-year period, there was a net increase in total annual costs of \$3.1 million.

The shifts in total annual costs are attributable to changes in both consumption and the price, or rate, of electricity (in terms of the average cost per kilowatt-hour). The amounts and rates of change of these factors are given in Tables 1.2 and 1.3. As shown in Table 1.2, consumption has fluctuated from year to year. In total, it has increased by 16 percent from FY 1977-78 to FY 1986-87. However, the larger factor in the overall increase in total costs over the last ten years was a higher rate for electricity. Table 1.3 shows that the average cost per kilowatt-hour was greater in FY 1986-87 than in FY 1977-78, i.e., up from 4.07 cents to 6.32 cents, or a 55 percent increase. As the data indicate, changes in consumption have been to a lesser degree and at a more moderate pace than changes in price. Another difference is that price has been on the decline in the past five years whereas consumption has been rising since FY 1983-84.

Table 1.2  
 University of Hawaii  
 Electricity Consumption in Kilowatt-Hours  
 For Fiscal Years 1977-78 Through 1986-87

	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
Kilowatt-hours	96,586,658	98,144,856	99,754,081	97,872,064	95,947,444	93,202,853	94,255,441,	97,438,286	105,245,584	111,633,139
Change from Previous Year		+1,558,198	+1,609,225	-1,882,017	-1,924,620	-2,744,591	+1,052,588	+3,182,845	+7,807,298	+6,387,555
Percent of Change		+1.6	+1.6	-1.9	-2.0	-2.9	+1.1	+3.4	+8.0	+6.1

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Sources: University of Hawaii internal memorandum dated October 16, 1985, Subject: Final FY 1984-85 General Fund Electricity Report; and data provided by the University of Hawaii Budget Office.

Table 1.3

University of Hawaii  
Average Cost Per Kilowatt-Hour  
For Fiscal Years 1977-78 Through 1986-87

	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
Average Cost per Kilowatt-Hour	4.07¢	4.55¢	5.46¢	8.16¢	10.65¢	9.87¢	9.55¢	9.52¢	8.07¢	6.32¢
Change From Previous Year		+0.48¢	+0.91¢	+2.70¢	+2.49¢	-0.78¢	-0.32¢	-0.03¢	-1.45¢	-1.75¢
Percent of Change		+11.8.	+20	+49.5	+30.5	-7.3	-3.2	-.3	-15.2	-21.7

Sources: University of Hawaii internal memorandum dated October 16, 1985, Subject: Final FY 1984-85 General Fund Electricity Report; and data provided by the University of Hawaii Budget Office.



## Chapter 2

### REVIEW OF THE UNIVERSITY OF HAWAII'S ELECTRICITY COSTS AND BUDGET

For a number of years, the Legislature has been concerned about the budgetary implications of electricity consumption at the University of Hawaii (UH). In this chapter, we address these concerns and examine in some detail the university's practices with regard to budgeting and expending its funds for electricity.

#### **Summary of Findings**

1. Over the past six fiscal years, UH appropriations for electricity have exceeded actual requirements by a cumulative total of more than \$9 million, or approximately \$1.5 million per year. Much lower than projected prices have been the primary cause of these surpluses. Most of the surpluses have been used by the university to defray operational expenses or to satisfy executive restrictions placed on the university's budget; only a very small portion has been used for energy conservation purposes.

2. Despite a specific legislative requirement that appropriations for electricity under the university's institutional support programs for Fiscal Year (FY) 1986-87 be used only for that purpose, UH used surplus funds from these appropriations for other purposes. As a result, only a part of the funds which should have lapsed actually did lapse.

3. Despite a legal requirement that surplus funds be lapsed and not carried forward to defray expenses incurred during a succeeding fiscal period, UH for a

number of years has carried forward some of its surplus electricity funds from one year and has used them to pay for electricity consumed in the following year. This practice has been continued into the current fiscal year with the result that one month's consumption, amounting to more than \$.5 million, has been paid for from last year's funds.

4. The supplemental budget request for FY 1988–89 which UH has submitted for electricity—amounting to more than \$1 million—lacks adequate justification and needs to be reevaluated and corrected before it is acted on by the Legislature.

### **Recurring Substantial Surpluses**

**Surpluses.** Back during the energy crisis of the 1970s and early 1980s, UH faced real problems in meeting deficits in its electricity accounts. However, in every fiscal year since 1981–82, it has had surpluses left over from its general fund appropriations for electricity. The amounts of these yearly surpluses are presented in Table 2.1. Surpluses over these years totaled \$9,061,846, or an average of one and a half million dollars annually for the six years. The surpluses ranged from a low of \$593,829 to a high of \$2,820,912, or from 5.2 percent to 23.5 percent of the amounts appropriated for electricity.

Table 2.1

University of Hawaii  
General Fund Electricity Appropriations,  
Costs, and Surpluses  
For Fiscal Years 1981-82 Through 1986-87

	FY 1981-82	FY 1982-83	FY 1983-84	FY 1984-85	FY 1985-86	FY 1986-87	Total
Appropriations	\$11,488,303	\$12,022,052	\$11,267,596	\$10,400,288	\$9,569,711	\$8,229,169	\$62,977,119
Actual Costs	10,894,474	9,201,140	8,998,699	9,280,238	8,489,279	7,051,443	53,915,273
Surplus	593,829	2,820,912	2,268,897	1,120,050	1,080,432	1,177,726	9,061,846
Surplus as % of Appropriations	% 5.2	23.5	20.1	10.8	11.3	14.3	14.0

Sources: University of Hawaii internal memorandum dated October 16, 1985, Subject: Final FY 1984-85 General Fund Electricity Report; and data provided by the University of Hawaii Budget Office.

More than half of these surpluses were from appropriations to UH-Manoa institutional support program. Over the six years, this program alone accounted for \$5.5 million, or 61 percent of the total. See Appendix B for a breakdown of these surpluses by program and year.

**Cause of surpluses.** These surpluses resulted primarily from actual prices or rates for electricity which were much lower than those projected at the time the electricity appropriations were made. There would have been even larger surpluses from price declines if UH's consumption of electricity had not also been more than projected, especially for UH-Manoa's institutional support program in the last biennium. Table 2.2 presents a comparison of appropriations and their underlying consumption and cost projections with actual data for three of UH's larger institutional support programs.

Table 2.2

University of Hawaii  
 Comparison of General Fund Electricity  
 Appropriations to Actual Costs and Consumption  
 of Three Selected Institutional Support Programs  
 for Fiscal Years 1985-86 and 1986-87

Program	FY 1985-86			FY 1986-87		
	Appropriations		%	Appropriations		%
	Act	Actual	Var.	Act	Actual	Var.
<u>UOH 106-Manoa</u>						
\$ Amount	6,217,062	5,610,254	- 9.8	5,223,824	4,535,842	-13.2
KWHs	64,761,067	78,243,313	+20.8	69,189,727	2,706,346	+19.5
Cost per \$/KWH	.0960	.0717	-25.3	.0755	.0548	-27.4
<u>UOH 216-Hilo</u>						
\$ Amount	781,963	738,864	- 5.5	781,058	660,756	-15.4
KWHs	5,374,317	5,863,553	+ 9.1	6,106,783	6,186,007	+ 1.3
Cost per \$/KWH	.1455	.1260	-13.4	.1279	.1068	-16.5
<u>UOH 305-Hon CC</u>						
\$ Amount	512,356	392,210	-23.5	387,565	340,273	-12.2
KWHs	4,463,027	4,485,149	+ 0.5	4,306,278	4,712,751	+ 9.4
Cost per \$/KWH	.1148	.0874	-23.9	.0900	.0722	-19.8

Sources: Act 300, SLH 1985; and data provided by the University of Hawaii Budget Office.

**How surpluses were used.** According to UH, it did not lapse any surplus electricity funds during these six years except for some from FY 1986-87 (due to the special limitation imposed by the Legislature on those moneys). The UH used these surpluses for various purposes, such as other operating expenses including supplies, equipment, salaries, other utilities, contractual and legal obligations, repairs, and maintenance. Also, some of the surpluses went to program relocations, facility renovations, a consultant, energy conservation measures, and executive

budget restrictions. As discussed more fully below, some of the excess funds were carried over from one year to pay for electricity in the following year.

Although a detailed breakdown of these expenditures was not readily accessible, available data show that over the years electricity funding surpluses were used mostly either to handle repairs and maintenance of facilities or to meet executive budget restrictions. Although these surpluses paid for some energy conservation measures data show that they were few and quite miniscule. For example, out of the \$2.3 million surplus from FY 1983–84, a total of only \$8,789 was used for this purpose. In a like manner, only \$578 of \$1.1 million from FY 1984–85, and a similarly small amount from FY 1985–86 were spent for energy conservation.

In summary, it may be said that UH had a substantial windfall as a result of rapidly declining electricity rates during the 1980s and then used this windfall as an overall cushion to meet other financial needs.

### **Improper Expenditure of FY 1986–87 Funds**

**Legislature limits use of electricity funds.** Due to its concern over UH using its electricity appropriations for other purposes, the Legislature placed restrictions on UH's electricity appropriations for FY 1986–87. This occurred in the form of an amendment to the proviso included in the general appropriations act relating specifically to authorized expenditures for electricity under UH's institutional support programs (each campus has such a program). Whereas the original language of the proviso stated that the appropriations were to "include the following amounts for electricity costs,"<sup>2</sup> the amended version was changed to state that the appropriations "shall be used *only* for electricity costs"<sup>3</sup> (emphasis added). Our

study shows that UH did not fully comply with this restriction and that its actions were not consistent on a systemwide basis.

**The issue of "electricity costs."** In response to the restriction, UH took issue with the meaning of the term "electricity costs" although it had been used in an accepted sense and context since 1983. The UH took the position that the Legislature's failure to define "electricity costs" allowed it to define the scope of the term and to expend these appropriations with fairly wide discretion.

The University Budget Office said that it initially felt that these electricity appropriations for FY 1986-87 were limited to the cost of electricity itself, i.e., the amounts billed by electric utility companies for electricity used by UH. It reconsidered its interpretation when funds were requested by UH-Manoa institutional support program for repair and cleanup of the Biomedical Sciences Complex that had been flooded in April 1987. Since damage to the electrical system of that building was involved, the Budget Office asked the Department of Attorney General (AG) whether those repairs could be covered out of the appropriations designated for electricity.

According to AG, it told the Budget Office that the proviso was very broad, did not define "electricity costs" as only billings for electricity, and therefore that costs related to providing electricity could also be considered valid uses of these funds. The Budget Office said that, based on that advice, it allowed \$59,000 for repairs at the biomedical building and \$19,000 more for other similar costs of UH-Manoa to be charged to the FY 1986-87 electricity appropriations for UH-Manoa institutional support program. These other costs included repairs for damages and construction of a protective fence for UH-Manoa substation, and replacement of worn-out parts for other areas of UH-Manoa electrical system.

However, we disagree that these expenditures were appropriate for the following reasons. The AG also noted that its review of the situation was limited to an interpretation of the proviso on its face; it addressed only the plain language of the law and did not probe its intent. By guiding its actions by this strictly technical interpretation, the Budget Office disregarded the definition of "electricity costs" that had been established by years of prior use of this term by the Legislature and UH in this context, and that had evidently been assumed by the Legislature to be mutually understood when the amendment was made. More specifically, electricity costs up to then had always been considered to mean electricity billings exclusively.

For example, UH itself has always presented data on and referred to only the cost of electricity billings when requesting and justifying appropriations for electricity to the Legislature. Also, UH has always defined such costs as only billings for its own internal purposes of monitoring, data gathering, reporting, and determining amounts of surpluses from these appropriations. Moreover, the Legislature has for years indicated that it meant electricity billings inasmuch as the relevant provisos in the appropriation acts have always been presented in terms of dollar amounts related to projected kilowatt-hour usages and projected average kilowatt-hour costs.

**Transfer of funds.** The UH also used some of its restricted electricity funds to pay for costs of another program. The Budget Office allowed the School of Medicine (part of UH-Manoa instruction program) to use \$282,000 of UH-Manoa institutional support program's electricity appropriations for FY 1986-87 purportedly for electricity consumed by the School of Medicine's clinical practice program at various hospitals in the community. According to the Budget Office, this expenditure was valid because it was for the payment of electricity.

The Budget Office said further that in this case it considered these electricity costs to be costs of the institutional support program, and that they were not necessarily costs of the School of Medicine just because they had traditionally been and were still budgeted and funded under the School of Medicine's operating budget. While the Budget Office acknowledged that the School of Medicine did not need funds for its electricity, and that part of the Budget Office's reason for this expenditure was to prevent lapsing of UH-Manoa's electricity appropriations as surplus funds, it said that this shift of costs was still justified as it made funds available to UH-Manoa instruction program that were needed to offset that program's deficit in funding for faculty salaries.

None of these reasons, however, provides adequate justification for this use of the restricted institutional support program funds. In the *first* place, costs that are budgeted and therefore funded under one program remain that program's costs unless the funds are specifically reallocated and a compensatory deduction is made in that program's budget. *Second*, this only had the appearance of an expenditure for electricity, but was actually a means of funding salaries of the instruction program as explained by the Budget Office itself. Funding salaries with these funds, albeit in a roundabout manner, was clearly contrary to the limitations placed on these funds.

Furthermore, the Budget Office allowed what amounted to a shift of funds from one level four program to another, i.e., the institutional support program to the instruction program, without following the required procedure for transfers of appropriations. Instead of obtaining authorization from the Governor for the transfer of funds between programs as required by the Department of Budget and

Finance, it charged the School of Medicine's electricity costs directly to the institutional support program's electricity appropriation thereby avoiding the process of executive review which might have stopped this improper transaction. Its action also prevented this shift of funds from being recorded properly as a transfer of funds to the instruction program.

**Compliance was inconsistent.** Our study also shows that UH's policy on expending its FY 1986-87 electricity appropriations under the institutional support programs was poorly communicated and inconsistently followed.

In September of 1986 when setting forth its reporting requirements for electricity to the campuses, the Budget Office notified them that "funds for electricity provided under Act 345/1986, the Supplemental Appropriations Act should only be used for electricity costs and may not be expended for other deferred expenses."<sup>4</sup> As in prior years, it defined "electricity costs" in those instructions as the amounts of actual billings for electricity consumed by the programs.

Subsequently, the community colleges used their electricity appropriations only for electricity billings and then gave up all funds remaining as surpluses. Together, they returned to the general fund a total of \$281,000 as surplus electricity appropriations.

This was in contrast to UH-Manoa which spent a total of \$360,000 for other expenses (including payments for electrical system repairs and the funds shifted to the instruction program). Still a different case was presented by UH-Hilo. It also spent some of its electricity appropriation for electricity-related costs in addition to electricity billings. Moreover, UH-Hilo used \$69,000 of its electricity appropriation for unbudgeted telephone, sewage disposal, and postage costs.

According to the community colleges, most were aware of the Budget Office's consideration of expenses other than electricity billings for electricity

appropriations, but, lacking specific guidelines from the Budget Office, they followed its September 1986 instructions. The UH-Hilo said that it exercised its own discretion in determining which expenses qualified as electricity related costs. Also, it thought that other utilities were eligible as in past years.

**Net effect of UH's actions.** The net effect of the various actions taken by UH to use the electricity appropriations for purposes beyond its regular electricity billings was to reduce the surplus in these appropriations and thereby reduce the amount of funds that had to be lapsed to the State's general fund at the end of the fiscal year. This is a clear violation of legislative intent. The total amount involved was in excess of \$400,000.

**The issue of limitations on electricity funds.** In its responses to us, UH has taken strong exception to the Legislature's attempt to limit UH's use of electricity appropriations. It has stated that it should be allowed full discretion to use surplus funds from these appropriations, because it has in turn borne the burden of past deficits by using other funds and deferring other expenses. Yet, the records show that UH has not had any deficits due to electricity costs since FY 1980-81. Further, the Legislature had assisted UH with supplemental funding in FY 1982-83 which, together with regular appropriations, covered remaining deficits, and also gave it a half a million dollars in surplus.

Although surpluses are not expected in this biennium, they are still possible due to the fluctuating cost of fuel oil, the component of electricity rates which is the most difficult to predict. As the Legislature did not limit UH's FY 1987-89 electricity appropriations to "electricity costs" as it did the FY 1986-87 funds, UH is of the opinion that in this biennium it may again use any electricity surpluses according to its own discretion.

Thus, if the Legislature still wishes to restrict these appropriations to electricity billings only, then it will have to take appropriate action to enunciate and enforce this policy. For example, if the Legislature does not want the university to use any windfall gains derived from rate reductions for purposes other than the purchase of electricity, then it should so specify. Conversely, if it does not want the university to be penalized for unforeseeable increases in electrical energy costs, then it should provide the means for the university to seek supplemental funds to meet the increased needs.

On the other hand, if the Legislature wants to encourage the university to pursue energy conservation and cost reduction as aggressively as possible, it may wish to let the university: (1) use excess funds for such purposes, (2) retain some or all of the savings which can be attributed to the university's own efforts at energy conservation and cost reduction, or (3) both.<sup>5</sup>

Finally, if the Legislature wants the university to keep expenditures for the purchase of electricity strictly segregated from other "electricity related" expenditures, then this should also be specified.

### *Recommendation*

*We recommend that the Legislature clarify the uses and conditions that it wishes to be applicable to appropriations for electricity for the University of Hawaii, including the handling of surpluses and deficits, the inclusion or exclusion of "electricity related" expenses, and any incentives it may wish to provide to encourage energy conservation and cost reduction on the part of the university.*

### **Improper Carry-Over of Funds Between Fiscal Years**

State law requires the lapsing of appropriations that are not used for expenses incurred during the given fiscal period. More specifically, it states in Section 40-66, HRS, that:

"Unless otherwise provided by law all sums of money which are appropriated to the public service for any fiscal period, and which are not expended during the period, shall lapse, and shall not be issued or applied in any future fiscal period to the particular service for which the appropriation has been made, unless a contract of engagement has been made and entered into before the expiration of the fiscal period by which a liability so to issue or apply the same has been incurred, and a certified copy of which contract or engagement has been deposited with the comptroller."

However, despite this provision, UH has for years failed to lapse its unused electricity appropriations under UH-Manoa institutional support program. After paying electricity bills and other program expenses, UH has carried remaining surplus funds into the following fiscal year and has used them to pay for some of the program's subsequent year's electricity bills. As a result, each year UH has assured itself of supplemental funding for electricity. The UH did not deny these violations but defended its action as necessary to prevent the recurrence of deficits in its electricity funding.

UH was uncertain as to when it began to retain surpluses for this purpose, but acknowledged that it had done so for some years. Available records show that since FY 1983-84 a total of approximately \$3,690,000 was used in this manner. This included \$970,946 from FY 1983-84 used for FY 1984-85 costs; \$1,060,590 from FY 1984-85 used for FY 1985-86; \$1,137,836 from FY 1985-86 used for FY 1986-87; and \$521,142 from FY 1986-87 used for FY 1987-88.

**More than \$.5 million carried forward into FY 1987-88.** While UH did not dispute what had been done in the other years, it disagreed that it had used any of

FY 1986–87 funds for FY 1987–88's costs. It held that the \$521,142 in question paid for the program's monthly electricity bill that covered costs for the second half of June and the first half of July 1987 (each monthly bill straddles two months), and therefore was a valid cost of FY 1986–87. It explained that proration of July's costs to separate out that portion from the bill would have been too difficult to do.

However, the issue is not the charges for July, but rather the entire June/July bill. As the law requires lapsing according to a given fiscal period, the question here is what constitutes FY 1986–87 electricity costs under this program in terms of its electricity bills. The fact that half of June's charges were in this bill does not automatically qualify any part of this bill as costs of FY 1986–87.

In fact, by all measures observed by UH itself, all of the June/July bill should have been paid as costs of FY 1987–88. For purposes of allocating electricity costs, UH has historically defined a fiscal year by its monthly electricity bills (each runs from the middle of one month to the middle of the next), designating the June/July bill as the first monthly bill of the fiscal year, and its May/June bill, as the last monthly bill for the year. This was consistently found to be the case in the program's financial records, statistics, budgets, and reports. Moreover, despite UH's claim that the 1987 June/July bill was part of FY 1986–87's costs, its own records reflect these as FY 1987–88 costs.

If that June/July bill were to be considered costs of FY 1986–87, it would be a major change for UH, a redefinition of its fiscal year period that would also require it to adjust its records of past electricity costs and consumption, financial and statistical record keeping framework, and other procedures such as its own billings for reimbursements, to keep consistent its data in terms of fiscal years. However, according to UH, it was not making such an overall redefinition. It explained that it

had considered the June/July bill to be FY 1986–87 costs in order to fund it with the FY 1986–87 electricity appropriation, but for all other purposes was still using the same billing parameters as in prior years to define a fiscal year's costs.

Thus, according to UH's own definition, the 1987 June/July bill represented costs of FY 1987–88 and should not have been paid from the FY 1986–87 electricity appropriation. By using FY 1986–87 funds as it did, UH again violated Section 40–66, HRS. More significantly, it has improperly provided itself with a \$.5 million supplement to its current year's electricity appropriation.

### *Recommendation*

*We recommend that the University of Hawaii in its handling of appropriations for electricity comply fully and strictly with legal requirements governing the lapsing of unused balances at the end of each fiscal year.*

### **Inadequate Justification for UH's FY 1988–89 Supplemental Budget Request for Electricity**

In September 1987, UH submitted to the Director of Budget and Finance its supplemental budget request for FY 1988–89 which included an additional \$1.1 for electricity. This amount consisted of \$969,786 for UOH 106, the institutional support program for UH–Manoa; and \$145,191 for UOH 906, the community college systemwide support program. Although the later amount was requested for UOH 906, details of that budget request show that it was actually for the institutional support programs of the Honolulu, Kapiolani, Leeward, Windward, Maui, and Kauai community colleges (UOH 305, 315, 325, 335, 505, and 605).

Our review of this budget request shows that it was not fully justified nor had UH fully assessed its needs. We found that rate projections were not adequately

supported, consumption projections were outdated, methodology systemwide was inconsistent, and other adjustments to the budget were needed.

**Inadequate justification for rates.** The UH said in its request that supplemental funding would be needed to pay for higher electricity rates in FY 1988–89 than the Legislature had provided for in appropriations made in 1987. However, its new rate projections were not sufficiently developed to justify its requests.

**UOH 106—institutional support program for UH–Manoa.** In presenting its request for supplemental funds for electricity at UH–Manoa, UH said that electricity rate increases in the next two years would cause a deficit by FY 1988–89. Using new cost projections for FY 1988–89 and the consumption projected in the 1987 General Appropriations Act, UH estimated that electricity costs would be \$6,109,679 in FY 1988–89, or \$969,786 more than the \$5,139,893 appropriated for that year.

The UH explained that it budgeted for rate increases according to the projection by Hawaiian Electric Company (HECO) of a .5-cent annual increase in cost per kilowatt hour for FY 1987–88 due to higher costs anticipated for fuel oil.<sup>6</sup> The UH said it also assumed the same increase for FY 1988–89. However, UH's supporting figures show an increase of 1.05 cents for FY 1987–88 and .51 cents for FY 1988–89, for a total increase of 1.56 cents over the two years. If UH had used rates calculated with a .5 cents annual increase as it had said, then a deficit of \$486,207 should be projected instead of the \$969,786 which had been requested. When asked the reason for this discrepancy, UH provided no more justification and said that it was possibly an error in calculation.

UOH 906—community college systemwide support. As previously indicated, UH also anticipates an increase in electricity rates for the community colleges by FY 1988-89. Its breakdown of the \$145,191 requested is shown as Table 2.3. The UH has explained that it projected the "new" rates shown in the table by adding a factor of 10 percent for inflation to the rates it listed under "\$/KWH" (which were taken from the proviso in the General Appropriations Act of 1987).

Table 2.3

University of Hawaii  
 Details from the Fiscal Year 1988-89 Supplemental Budget Request  
 for Electricity for the Community College  
 Systemwide Support Program

Projected Electricity Rate Increase  
 for 1988-89

Program	\$/KWH*	New Rates	KWH*	Total**	Budgeted*	Shortage
UOH 305 (Honolulu CC)	.0676	.0744	5,297,568	\$394,139	\$358,116	\$ 36,023
UOH 315 (Kapiolani CC)	.0824	.0906	4,059,242	367,767	334,482	33,285
UOH 325 (Leeward CC)	.0902	.0992	4,493,900	445,795	402,644	43,151
UOH 335 (Windward CC)	.0624	.0686	717,080	49,192	44,746	4,446
UOH 505 (Maui CC)	.1048	.1153	1,867,667	215,342	195,732	19,610
UOH 605 (Kauai CC)	.1348	.1483	1,953,840	289,754	263,378	26,376
Total additional requirements***						\$145,191

Source: University of Hawaii, FB 1987-89 Supplemental Operating Budget Requests, UOH 906 Community College Systemwide Support, dated August 11, 1987. Table is reproduced from this request.

\*From Section 181 of the General Appropriations Act of 1987.

\*\*KWHs multiplied by new rates.

\*\*\* This total that was submitted is erroneous. Amounts in this column actually total \$162,891.

In view of the wide fluctuations that have been occurring in electricity rates as reflected in Tables 1.1, 1.3, and 2.2, and especially of the fact that electricity rates have been declining over the past five years and only recently indicated some increase, we do not agree that a standard inflation factor should be used to make projections for electricity costs (for further discussion of this point, see page 29). However, if this method is used, it should at least be founded upon a base period of actual data. Yet, this was not done in this case. For its base, UH used rates that were included in the General Appropriations Act of 1987, which were only projections for FY 1988-89. Instead it should have used actual data for FY 1986-87 to project the 10 percent increase it estimated would occur from the time that it prepared its budget (summer of 1987) to FY 1988-89. If this had been done, a deficit of only \$60,129 would be projected for the community colleges instead of the \$145,191 UH included in its supplemental budget request. Table 2.4 presents a breakdown of the projection using FY 1986-87 actuals as the base rates.

Table 2.4  
 Projections of FY 1988-89 Electricity Costs  
 for the Six Community Colleges Included in the Community College  
 Systemwide Support Program's Supplemental Budget Request  
 Using FY 1986-87 Average Rates as a Base

Program	FY 1986-87 \$/KWH	FY 1986-87* \$/KWH + 10%	KWH**	Projected FY 1988-89 Cost	Budgeted Amount**	Projected Variance Surplus (Deficit)
UOH 305 (Honolulu CC)	.0722	.0794	5,297,568	\$ 420,627	\$ 358,116	\$( 62,511)
UOH 315 (Kapiolani CC)	.0814	.0895	4,059,242	363,302	334,482	( 28,820)
UOH 325 (Leeward CC)	.0689	.0758	4,493,900	340,638	402,644	62,006
UOH 335 (Windward CC)	.0644	.0708	717,080	50,769	44,746	( 6,023)
UOH 505 (Maui CC)	.9997	.1097	1,867,667	204,883	195,732	( 9,151)
UOH 605 (Kauai CC)	.1298	.1428	1,953,840	279,008	263,378	( 15,630)
Total projected shortage						<u>\$( 60,129)</u>

\*Rounded to the nearest .0001.

\*\*From General Appropriations Act of 1987.

**Need to update consumption projections.** In preparing its FY 1988-89 supplemental budget for electricity, UH used consumption estimates it prepared at the beginning of 1987 and which were included by the Legislature in the appropriations. However, we found that consumption was also a changing factor which should have been reassessed in the preparation of UH's budget request for supplemental funds.

**Implications for community colleges' budget.** The UH's consumption estimates for FY 1988-89 for the community colleges were based on estimates derived from actual data only for the first half of FY 1986-87, yet actual consumption for FY 1986-87 was considerably less than the amount thus estimated. When complete FY 1986-87 data are considered (and costs calculated with UH's inflation factor added to rates), deficits are still projected for four of the six campuses, but are offset by projected large surpluses for the other two. Therefore, the net effect would be that no supplemental funding would be required.

On the other hand, all of the campuses have indicated that they have or expect other operational and program changes which would impact on their FY 1988-89 consumption and which UH did not consider in its supplemental budget projections. For example, instead of savings in the next two years as had been projected, Leeward Community College now foresees an increase in its consumption of electricity.

**Large problem for UH-Manoa's institutional support program.** There is an even greater need to update consumption projections for the institutional support program at UH-Manoa, not only because of its size and therefore, its potentially larger impact, but also because indications are that the amount used in the FY 1988-89 supplemental budget request may be substantially underestimated.

The UH's projections of consumption for this program have been at great variance with its actual consumption in the last two years. In 1985, it had budgeted for 64.8 million kilowatt hours for FY 1985-86, but its actual consumption amounted to 78.2 million kilowatt hours, or 17 percent more than projected. Then, in 1986, UH budgeted for 69.2 million kilowatt hours for FY 1986-87, but in actuality it used 82.7 million kilowatt hours, exceeding its projections again by 16 percent.

While it was unable to pinpoint exactly the causes of its variances between budgeted and actual consumption, UH said that a large problem has been its inability to monitor changes on the campus affecting electricity consumption sufficiently to know what impact they are having. This is especially true with respect to new and replacement equipment purchases. Despite this concern, UH-Manoa had not examined its consumption needs in preparing its supplemental budget, yet had stated in its request that legislative provisions for consumption were sufficient.

**Need for a consistent and comprehensive method of budgeting for electricity.** Examination of UH's supplemental budget for electricity for FY 1988-89 shows that different methods of budgeting for rates and consumption were used for UH-Manoa and for the community colleges. In addition, budgeting did not consider all programs affected by variations in electrical rates and consumption.

**Rates.** In preparing its supplemental budget for electricity, UH used two methods for projecting electricity rates. It adopted the projections of HECO for UH-Manoa rates (except that it committed serious miscalculations in applying these projections), but used an inflationary increase for all of the community colleges. However, it seems more appropriate to consult with experts in the field than to apply a standard inflationary increase. *First*, the price of electricity has not experienced the same pattern of inflation generally seen in the prices of other goods

and services. In fact, it has declined in recent years (see Tables 1.1, 1.3, and 2.2). *Second*, inasmuch as electricity rates are determined mainly by the finances and operations of the affected electric utility companies and by the price of fuel oil, we found it to be generally recommended that consumers consider the rate projections of these companies in budgeting. We note that the the Public Utilities Commission can also provide relevant and important input in this matter.

If the rate projections from Table 2.4 (that assumed a 10 percent inflation increase) are compared with rates projected by the electric utility companies, then the latter show slightly larger increases for all except Maui Community College, for which a lesser increase was expected.<sup>7</sup> If these latter projections actually hold and consumption estimates also are greater as the colleges presently indicate, there may still be some need for supplemental electricity funding for these colleges.

**Consumption.** According to the various programs, they use differing guidelines to estimate increases in consumption for such changes as new buildings, new air conditioning, and savings from conservation projects. Also, UH–Manoa's institutional support program appears to be the only one that adds 1 percent to its consumption projections as an "aging" factor to address what it estimates as the impact of age on the efficiency and consumption of its electrical equipment. It would appear highly desirable for UH to assess these various methods and develop a consistent and justifiable approach to estimating future consumption demands.

**Other programs.** Although they were not addressed in UH's supplemental budget request, there are also funding issues concerning West Oahu College's (West Oahu) and UH–Hilo's institutional support programs that should also be considered.

Our study shows that most of West Oahu's electricity budget is also included in the budget of Leeward Community College (Leeward). This arises from the fact

that the former uses facilities belonging to the latter. According to Leeward, it has annually charged West Oahu for electricity costs associated with West Oahu's use of Leeward's facilities, primarily for air conditioning in off hours. But, both Leeward and West Oahu have included these amounts in reporting their electricity costs and consumption and in their budgets, with the result that electricity appropriations to both campuses provide for much of the same costs of West Oahu.

While acknowledging that its costs have therefore been overstated in the past, Leeward said that it now needs its entire appropriation as it has increased its own use of air conditioning to seven days a week. It said further that it would no longer be charging West Oahu for electricity. Consequently, West Oahu's appropriation for FB 1987-89 contains more than it needs (approximately \$21,000 per year).<sup>8</sup> However, West Oahu also projects an increase in electricity costs that should be considered in any adjustment to its budget.

Regarding UH-Hilo's institutional support program, it appears (by consumption and rate figures given) that a calculation or typographical error has made its FY 1988-89 electricity appropriation \$16,652 more than the Legislature intended. On the other hand, UH-Hilo also reports new plans for increased consumption which should be evaluated to determine if it offsets the apparent extra amount.

**Summary.** Based on the foregoing, it is quite apparent that UH's supplemental budget request for electricity for FY 1988-89 lacks adequate justification and should be thoroughly reassessed and reviewed before any final action is taken on it. It is important to note that at the time of this review, UH's request for supplemental funds for FY 1988-89 was based solely on its expectation that rates will be higher than those already provided for in present appropriations. Yet, projections of rates for FY 1988-89 at this time are really only guesstimates. No

one, including the electric utility companies, really knows how much rates will be then. This uncertainty has been emphasized by the electric utility companies and others.

Although rates may have increased some in this fiscal year, this does not at all mean that rates will continue to increase up to FY 1988-89. Data show that rates fluctuate not only from year to year but also from month to month. The cost of fuel oil is the key factor in projected rate increases, and this factor is subject to fairly rapid, wide, and unpredictable changes. Thus, if UH's supplemental budget request for electricity is only to meet a need that has yet to materialize, the Legislature might well consider deferring UH's request for additional funding for electricity until next year when the actual rate situation will be clearer. This would also give UH time to address its electricity budget deficiencies.

### *Recommendations*

*We recommend that the University of Hawaii develop a consistent and reasonable methodology for budgeting for electricity that delineates clearly the processes by which it projects rates and consumption and derives dollar requests. In so doing, it should give particular attention to improving the projection of its electricity consumption and making sure that all information on significant electricity usage, including existing, new, and expanded uses, is taken into consideration in the budgeting process.*

*We further recommend that the University of Hawaii utilize such a methodology to support the electricity budget requests which it submits to the Legislature, including any requests for supplemental appropriations during the current biennium.*

## NOTES

1. Section 181, Act 216, SLH 1987. Section 181 does not contain the word "only" that was added to the UH electricity appropriation proviso in the 1986 Supplemental Appropriations Act, but still differs from that of prior years. Where previously it was stated that the referenced appropriation "includes the following amounts for electricity costs", Section 181 says that the FY 1987-89 appropriation "includes the following *accounts* for electricity costs" (emphasis added). The Legislature did not indicate the meaning of this change.
2. Section 40, Act 301, SLH 1983; Section 40, Act 285, SLH 1984; and Section 135, Act 300, SLH 1985.
3. Section 135, Act 345, SLH 1986.
4. Memorandum to Acting Vice President Marsella, Vice President Yount, Chancellors Kormondy and Tsunoda, and State Director Inaba from Rodney Sakaguchi, Director, University Budget Office, Subject: Reporting Requirements for General Fund Electricity, September 11, 1986.
5. According to UH it is presently unable to measure accurately the impact of its cost containment efforts on its consumption.
6. Memorandum to Rodney Sakaguchi, Director, University Budget Office, from Allan Ah San, Director of Campus Operations, Subject: Supplemental Budget Request--Electricity Cost, August 13, 1987.
7. Based on rough estimates of FY 1988-89 rates provided by Hawaiian Electric Company, Inc.; Maui Electric Company, Ltd.; Hawaii Electric Light Company, Inc.; and Citizens Utilities Company, Kauai Electric Division; September, 1987.
8. Review of the records of the last three years shows that West Oahu College paid Leeward Community College a set amount of \$21,824 in FY 1984-85 and FY 1985-86 for electricity. Leeward Community College waived this charge in FY 1986-87 as any reimbursements would have been surplus funds and lapsed due to the Legislative restriction of that year's electricity appropriation. Consequently, West Oahu College paid only \$1,850 for electricity for its own administration buildings and had a surplus of \$22,338 out of its \$24,191 appropriation for FY 1986-87.

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**APPENDICES**

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APPENDIX A

University of Hawaii  
 Appropriations for Electricity, by Program and Type of Funding  
 for Fiscal Biennium 1987-1989

Program	Type of Funds	Amounts for FY1987-88	Amounts for FY1988-89	Total Amounts FB1987-89
<u>University of Hawaii, Manoa</u>				
UOH 101 Instruction--Manoa	General	\$ 62,568	\$ 65,133	\$ 127,701
UOH 102 Organized Research--Manoa	General	406,336	422,589	828,925
	Revolving	29,171	30,367	59,538
UOH 103 Public Service--Manoa	General	34,607	34,607	69,214
	Special	14,771	15,377	30,148
UOH 105 Student Services--Manoa	Special	61,252	63,763	125,015
	Revolving	793,188	825,709	1,618,897
UOH 106 Institutional Support--Manoa	General	5,062,957	5,139,893	10,202,850
	Special	7,914	8,238	16,152
	Revolving	187,702	195,398	383,100
UOH 881 Aquaria	General	33,831	33,831	67,662
UOH Manoa Total. . . . .	General	\$5,600,299	\$5,696,053	\$11,296,352
	Special	83,937	87,378	171,315
	Revolving	1,010,061	1,051,474	2,061,535
<u>University of Hawaii, Hilo and West Oahu College</u>				
UOH 214 Academic Support--Hilo	Special	\$ 1,747	\$ 1,819	\$ 3,566
UOH 215 Student Services--Hilo	Revolving	132,044	137,458	269,502
UOH 216 Institutional Support--Hilo	General	782,258	798,910	1,581,168
UOH 706 Institutional Support--West Oahu	General	22,228	22,228	44,456
UOH Hilo & West Oahu College Total. . . . .	General	\$ 804,486	\$ 821,138	\$ 1,625,624
	Special	1,747	1,819	3,566
	Revolving	132,044	137,458	269,502
<u>Community Colleges</u>				
UOH 301 Instruction--Honolulu CC	Revolving	\$ 17,223	\$ 17,929	\$ 35,152
UOH 302 Public Service--Honolulu CC	General	2,253	2,345	4,598
UOH 305 Institutional Support--Honolulu CC	General	347,300	358,116	705,416
	Special	9,298	9,679	18,977
UOH 315 Institutional Support--Kapiolani CC	General	273,424	334,482	607,906
UOH 325 Institutional Support--Leeward CC	General	362,015	402,644	764,659
UOH 335 Institutional Support--Windward CC	General	43,997	44,746	88,743
UOH 504 Student Services--Maui CC	Special	17,994	18,732	36,726
UOH 505 Institutional Support--Maui CC	General	177,682	195,732	373,414
UOH 605 Institutional Support--Kauai CC	General	263,378	263,378	526,756
UOH 906 Comm. Colleges--Systemwide Support	General	27,517	28,645	56,162
	Special	9,041	9,412	18,453
Community Colleges Totals	General	\$1,497,566	\$1,630,088	\$ 3,127,654
	Special	36,333	37,823	74,156
	Revolving	17,223	17,929	35,152
UOH System Total. . . . .	General	\$7,902,351	\$8,147,279	\$16,049,630
	Special	122,017	127,020	249,037
	Revolving	<u>1,159,328</u>	<u>1,206,861</u>	<u>2,366,189</u>
Grand Total . . . . .		<u>\$9,183,696</u>	<u>\$9,481,160</u>	<u>\$18,664,856</u>

Source: Data provided by the University of Hawaii Budget Office.

APPENDIX B

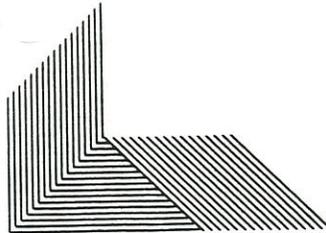
University of Hawaii  
 Amounts of Surplus General Funds  
 From Electricity Appropriations by Program  
 for Fiscal Years 1981-82 Through 1986-87

		FY1981-82	FY1982-83	FY1983-84	FY1984-85	FY1985-86	FY1986-87	Total
UOH 101	Manoa	\$( 6,234)	\$ 16,779	\$ 29,144	\$ 35,538	\$ 39,288	\$ 10,805	\$ 125,320
UOH 102	Manoa	4,216	125,854	171,781	105,819	104,671	60,792	573,133
UOH 103	Manoa	4,714	13,145	9,709	( 4,073)	5,635	4,083	33,213
UOH 106	Manoa	285,326	1,298,333	1,815,610	812,936	606,808	687,982	5,506,995
UOH 216	Hilo	106,491	539,241	27,239	29,590	43,099	120,302	865,962
UOH 302	Honolulu CC	1,919	5,040	1,485	2	708	249	9,403
UOH 305	Honolulu CC	22,009	193,227	27,246	55,010	120,146	47,292	464,930
UOH 315	Kapiolani CC	8,456	58,276	16,286	40,471	77,440	85,671	286,600
UOH 325	Leeward CC	20,386	152,443	75,043	12,910	16,152	46,903	323,837
UOH 335	Windward CC	4,754	31,533	7,645	828	4,784	10,408	59,952
UOH 505	Maui CC	26,556	95,396	32,504	3,869	(6)	15,566	173,885
UOH 605	Kauai CC	99,791	270,952	51,985	26,171	51,188	53,717	553,804
UOH 706	West Oahu	23,008	8,333	1,489	2,343	4,587	22,338	62,098
UOH 906	CC Systemwide	0	8,510	( 1,049)	0	3,477	6,327	17,265
UOH 881	Aquaria	( 7,563)	3,850	2,780	( 1,364)	2,455	5,291	5,449
UOH System Total		<u>\$ 593,829</u>	<u>\$2,820,912</u>	<u>\$2,268,897</u>	<u>\$1,120,050</u>	<u>\$1,080,432</u>	<u>\$1,177,726</u>	<u>\$9,061,846</u>

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Sources: University of Hawaii internal memorandum dated October 16, 1986, Subject: FY1984-85 General Fund Electricity Report; data provided by the University of Hawaii Budget Office.

THE OFFICE OF THE AUDITOR  
STATE OF HAWAII  
465 S. KING STREET, RM. 500  
HONOLULU, HAWAII 96813



CLINTON T. TANIMURA  
AUDITOR

July 27, 1987

Mr. Yukio Takemoto, Director  
Department of Budget and Finance  
State of Hawaii  
State Capitol, Room 411  
Honolulu, Hawaii 96813

Dear Mr. Takemoto:

I am writing to advise you that this office is in the process of carrying out several studies requested by the Legislature which affect your department in one way or another. Members of my staff have already been in communication with you concerning these studies so that you are informally aware of them. However, I would like to take this opportunity to provide you with formal notice of the projects and to thank you for the assistance and cooperation you have already extended to those working on the projects.

There are four projects involved. All four relate primarily to the University of Hawaii, but tangentially touch upon the Department of Budget and Finance. Two are carryover projects from last year while the other two were newly assigned to us during the 1987 legislative session. The projects are as follows:

1. A review of the administrative flexibility legislation affecting the Department of Education and the University of Hawaii as called for under Acts 320 and 321, SLH 1986.
2. A review of the recent administrative reorganization of the University of Hawaii as provided for under Section 145D of the Supplemental Appropriations Act of 1986 (Act 345) and under Section 207 of the General Appropriations Act of 1987 (Act 216).
3. A study of the budgeting for and control of personal services expenditures at the University of Hawaii as requested under Section 200 of the General Appropriations Act of 1987.
4. A study of electrical energy consumption, costs, budgeting, and conservation at the University of Hawaii as directed under Section 181 of the General Appropriations Act of 1987.

Mr. Yukio Takemoto, Director  
July 27, 1987  
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The project manager for the first three projects is Aileen Osaki. The project manager for the fourth project is Josephine Chang. All four projects will be under the general supervision and direction of Jess Walters.

Again, I want to thank you for the courtesies and help that you and members of your staff have already extended to our personnel working on these projects. We look forward to a continuing cooperative relationship.

Sincerely,

A handwritten signature in cursive script that reads "Clinton T. Tanimura".

Clinton T. Tanimura  
Legislative Auditor