

TESTIMONY OF  
PETER C. YOUNG

DIRECTOR, PRICING DIVISION  
ENERGY SERVICES DEPARTMENT  
HAWAIIAN ELECTRIC COMPANY, INC.

Subject: Revenue Requirements and  
Customer Impact

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

INTRODUCTION

- Q. Please state your name and business address.
- A. My name is Peter C. Young and my business address is 220 South King Street, Suite 1201, Honolulu, Hawaii.
- Q. What is your position with the Company?
- A. I am the Director of the Pricing Division of the Energy Services Department at the Hawaiian Electric Company, Inc. My experience and background are listed in HECO-1100.
- Q. What is the scope of your testimony?
- A. My testimony discusses the revenue requirements and the forecasted impact on customer rates and the average residential bill for the Campbell Industrial Park Generating Station and Transmission Additions (“CIP Generating Station”) project.

ANNUAL REVENUE REQUIREMENTS

- Q. Were annual revenue requirements calculated for the CIP Generating Station project?
- A. Yes. Revenue requirements were calculated for all the costs associated with the CIP Generating Station project. The project costs were estimated by Mr. Isler. (See HECO T-9.)
- Q. Please describe how the annual revenue requirements for the CIP Generating Station project are presented.
- A. The annual revenue requirements for the CIP Generating Station project are presented and totaled in HECO-1101. The revenue requirements for the various components of the CIP Generating Station project, e.g., the new generating

1 station, the new transmission line, the modifications at the transmission  
2 substations, the communications equipment, and the land, are shown in  
3 HECO-1102. The present values of the total annual revenue requirements at  
4 various discount rates are also provided in HECO-1101.

5 Q. What discount rates were used?

6 A. The following discount rates were used:

7 0% discount rate. Discounting a stream of payments with a 0% discount  
8 rate is equivalent to no discounting. Therefore, the total annual revenue  
9 requirements discounted at 0% is equal to the total non-discounted annual revenue  
10 requirements (i.e., present value and future value are the same).

11 3% discount rate. The 3% discount rate approximates the inflation rate for  
12 O&M and capital expenditures.

13 8.8% discount rate. The 8.8% discount rate represents HECO's weighted  
14 average after-tax cost of capital assumed in this calculation.

15 12% discount rate. The 12% discount rate was used to show the results of  
16 discounting the stream of payments with a discount rate greater than 8.8%.

17 The revenue requirements for each of the discount rates should be evaluated along  
18 with other factors such as the annual revenue requirements and amount of up-front  
19 investment.

20 Q. What is the net present value of the annual revenue requirements for the  
21 community benefits package, in 2009 dollars and using an 8.8% discount rate?

22 A. The net present value in 2009 dollars is approximately \$182.0 million. (See  
23 HECO-1101.)

24

25

1 RATE IMPACT

2 Q. When would the cost for the CIP Generating Station project be included in the  
3 electric rates charged to customers?

4 A. Any rate increase to recover the cost associated with the CIP Generating Station  
5 project would need to be included in a separate general rate increase request to the  
6 Commission by HECO, and would be filed at a later date.

7 Q. How was the potential rate impact on each of HECO's rate classes calculated?

8 A. Estimated revenue requirements for the peak year (2010) were allocated to the  
9 different rate classes (Schedule R, G, J, H, P, F) based on the demand cost  
10 allocation factors used in HECO's current rate case (Docket No. 04-0113). These  
11 demand allocation factors were used to allocate to rate classes the test year costs  
12 upon which the proposed HECO rates are based.

13 These demand cost allocation factors were derived from the cost of service  
14 study proposed in HECO RT-22 in Docket No. 04-0113. The cost of service  
15 study provides the mechanism to classify, categorize and allocate the costs of  
16 serving the different rate classes, since the costs are not recorded or reported by  
17 cost type such as customer-related cost, energy-related cost, or demand-related  
18 cost, nor are they reported by rate class schedules. HECO's cost of service study  
19 methodology is based on the National Association of Regulatory Utility  
20 Commissioners cost allocation methodology, which classifies generation-related  
21 costs and transmission-related costs as demand costs.

22 The allocated revenue requirements were then converted into cents per kWh  
23 by dividing them by the sales forecast for 2010 for the different rate classes. The  
24 results represent the estimated rate impacts for the different rate classes. For  
25 purposes of determining the bill impact on the average residential customer, usage

1 of 667 kWh per month is assumed. The bill impact on an average residential  
2 customer is presented in HECO-1104. The average residential customer's  
3 monthly bill in 2010, the year after the CIP Generating Station is estimated to be  
4 placed in service, is estimated to increase about \$2.38 per month.

5 Q. Who pays for the costs associated with the CIP Generating Station project before  
6 the Company is permitted to recover the costs in general rates?

7 A. The Company and its shareholders in effect pay for the costs associated with the  
8 CIP Generating Station project until they are recognized as rate case expenses and  
9 reflected in approved rates.

10

11

SUMMARY

12 Q. Please summarize your testimony.

13 A. In terms of revenue requirements, the net present value (in 2009 dollars and  
14 assuming an 8.8% discount rate) of the revenue requirements for the CIP  
15 Generating Station project is approximately \$182.0 million. The potential  
16 incremental bill impact in 2010 for the average residential customer is  
17 approximately \$2.38 per month, assuming the CIP Generating Station project is  
18 placed in service in 2009.

19 Q. Does this conclude your direct testimony?

20 A. Yes, it does.

21

22

23

24

25