## Yale Hydroelectric Project FERC Project No. 2071

Exhibit D - Statement of Costs and Financing

PacifiCorp Portland, Oregon April 1999

### **EXHIBIT D CONTENTS**

1.0	INTRODUCTION	1					
2.0	PROJECT WORTH AT TAKEOVER	1					
	2.1 ESTIMATE OF NET INVESTMENT	1					
	2.2 FUTURE INVESTMENT AND FUTURE OPERATION AND MAINTENANCE EXPENSE	1					
	2.3 ESTIMATE OF SEVERANCE DAMAGES	2					
3.0	ANNUAL PROJECT COSTS	3					
4.0	VALUE OF PROJECT POWER	3					
5.0	FINANCIAL RESOURCES	4					
	TABLES						
Tab	ple 2.1-1. Estimate of project worth (1998 x 1,000 dollars)	2					
	ble 3.0-1. Annual project costs						
	ble 4.0-1. Value of power for the Yale Project						
	ole 5.0-1. Statements of consolidated income and retained earnings						

#### 1.0 INTRODUCTION

PacifiCorp owns and operates the Yale Hydroelectric Project (FERC Project No. 2071). The initial license was issued on April 30, 1951 and expires on April 30, 2001. PacifiCorp seeks a new license for the project. This application for new license is submitted in 3 volumes which contain the following:

Volume I Initial Statement and Exhibits A, B, C, D, F, G, and H.

Volume II Exhibit E

Volume III Appendices to Exhibit E

Exhibit D is a statement of costs and financing. The information contained in this exhibit is organized into several sections and generally follows the list of information required in 18 CFR, Section 4.51(e).

Following this introduction, Section 2.0 discusses financial data related to the worth of the project if taken over. Section 3.0 describes annual project costs, while Section 4.0 summarizes the value of project power. The last Section, 5.0, is a statement of financial resources.

### 2.0 PROJECT WORTH AT TAKEOVER

The following section estimates the fair market value of the Yale Project in the event the project is taken over at the end of the license term. Under Section 14 of the Federal Power Act, PacifiCorp would be entitled to receive its net investment plus severance damages. Based on this, the fair market value of the Yale Project is \$78,082,000 (1998 dollars). The estimate is based on a 30-year economic analysis corresponding to a 30-year license period. Project worth is estimated using 1998 dollars and is discussed below.

### 2.1 ESTIMATE OF NET INVESTMENT

The estimate of PacifiCorp's net investment in the Yale Project is based on historical cost less accumulated depreciation. Based on this calculation, the net book value of the Yale Project (including relicensing costs to date) is \$33,066,000 as of December 31, 1997 (Table 2.1-1).

# 2.2 FUTURE INVESTMENT AND FUTURE OPERATION AND MAINTENANCE EXPENSE

Over the life of a new license, PacifiCorp anticipates making necessary additional investments into the Yale Project. The license preparation expense is estimated to be \$6,000,000 (1998 dollars). The costs of proposed enhancements for the Yale Project are unknown at this time. PacifiCorp is pursuing an alternative approach to relicensing its hydroelectric projects on the Lewis River, and is asking FERC to simultaneously process

each license application, based on reaching and filing a comprehensive Settlement Agreement. PacifiCorp has asked that FERC defer finalization of the Yale License Application to coincide with filing of the other project applications (2004), at which time PacifiCorp will know the costs of proposed Yale enhancements.

Table 2.1-1. Estimate of project worth (1998 x 1,000 dollars).

Cost Component	Estimated Value (1,000 dollars) <sup>6</sup>
Net Present Value of Replacement Energy <sup>1</sup>	150,826
Net Present Value of Future O&M <sup>2</sup>	18,079
Net Present Value of Future Investment <sup>2</sup>	9,753
Net Present Value of Future Income Tax Payments	44,912
Fair Value <sup>3</sup>	78,082
Net Investment <sup>4</sup>	33,066
Severance Damages <sup>5</sup>	45,016

Based on 30-year levelized energy cost of 25.12 \$/MWH (includes a levelized capacity/ancillary component).

In the interim period, PacifiCorp is proposing several interim measures to enhance resources affected by the Yale Project. These interim enhancements (described in Vol. II, Exhibit E of the License Application) are expected to cost approximately \$2,600,000 (1998 dollars). Repair and/or replacement of major project components, such as the runner and plant modernization, is estimated at \$7,650,000 (1998 dollars).

The present value of future operation and maintenance expense (based on 30 years of operation) for the project is estimated at \$13,433,000 (1998 dollars).

### 2.3 ESTIMATE OF SEVERANCE DAMAGES

Severance damages associated with the Yale Project if taken over were estimated by calculating the 1998 net present value of the costs of replacement energy, and subtracting planned future investments, future O&M and administrative and general (A&G) costs, and net investment to date. Based on this formula, PacifiCorp estimates that minimum severance damages for project takeover would be \$45,016,000. As shown in Table 2.1-1, this is the estimate for the net present value of replacement energy (\$150,826,000), less the value of foregone future operation and maintenance and A&G, and investment costs (\$18,079,000 and \$9,753,000, respectively). The net investment is subtracted from the fair value estimate to arrive at an estimate of severance damages.

<sup>&</sup>lt;sup>2</sup> Based on capital construction and Operation and Maintenance (O&M) cost estimates for project modifications and enhancement measures as outlined in Exhibits A and E, which have been converted to 1998 dollars.

<sup>&</sup>lt;sup>3</sup> Fair value is the net present value of replacement energy less the net present values of future O&M and investments.

<sup>&</sup>lt;sup>4</sup> As of December 31, 1997.

<sup>&</sup>lt;sup>5</sup> Severance damages are the fair value less net investment.

<sup>&</sup>lt;sup>6</sup> All dollars excluding net investment present valued to 1998.

### 3.0 ANNUAL PROJECT COSTS

The estimated levelized annual cost for the Yale Project is 13.91 \$/MWH. The components that make up the annual cost estimate are presented below in Table 3.0-1. The estimated average annual generation for the project will be 611,370 MWh, as detailed in Exhibit B.

Table 3.0-1. Annual project costs.

Cost Component	Levelized <sup>1</sup>		
(\$1,000s)	Annual Cost	\$/MWH	
Net Investment of \$33,066 as of 12/31/97			
Fixed Cost <sup>2</sup>	5,034	7.84	
Administrative and General	577	0.90	
Planned Investment of \$9,753			
Fixed Cost <sup>2</sup>	1,725	2.69	
Administrative and General	160	0.24	
Operation and Maintenance <sup>2</sup>	1,437	2.24	
TOTAL	8,933	13.91	

<sup>&</sup>lt;sup>1</sup> Assuming 1998 base year with 3.0 percent inflation, 30-year life, and 10.1 percent discount rate.

### 4.0 VALUE OF PROJECT POWER

Based on an estimated 30-year levelized energy cost, which includes levelized and ancillary services cost, the value of power for the Yale Project is summarized in Table 4.0-1.

Table 4.0-1. Value of power for the Yale Project.

Dependable MW <sup>1</sup>	69.8	
Expected energy MWh <sup>2</sup>	611,370	
Levelized annual value (in thousands)	16,133	
Levelized \$/MWH	25.12	

<sup>&</sup>lt;sup>1</sup> Based on estimated average annual generation.

The levelized annual value of the project reflects the costs associated with the replacement value of the power generated by the Yale Project.

<sup>&</sup>lt;sup>2</sup> Based on incremental after tax cost of capital as of January 1, 1998 at 10.1 percent and minimum 30-year life. Includes components for depreciation, income taxes, deferred taxes, ad valorem taxes, and taxes other than income.

 $<sup>^{2}\,</sup>$  Based on increasing water with drawal, upgrading controls, and replacing runner.

### 5.0 FINANCIAL RESOURCES

PacifiCorp is a large investor-owned utility with extensive experience in the design, construction, operation, and maintenance of electric power generating projects. Millions of dollars are budgeted annually for the operation and maintenance of PacifiCorp's hydroelectric projects.

Financial data, published in the 1997 PacifiCorp Annual Report and illustrating the Company's financial resources, are presented in Table 5.0-1.

Table 5.0-1. Statements of consolidated income and retained earnings.

Millions of dollars, except per share						
amounts/for the year	1997	1996	1995			
Revenues	\$6,278.0	\$3,803.7	\$2,806.8			
Expenses						
Operations and Maintenance	4,394.0	1,949.3	1,291.6			
Administrative and general	334.4	244.8	186.6			
Depreciation and amortization	476.9	423.8	333.7			
Taxes, other than income taxes	99.8	99.4	104.3			
Special charges	170.4					
Total	5,475.5	2,717.3	1,916.2			
Income from Operations	802.5	1,086.4	890.6			
Interest Expense and Other						
Interest expense	439.5	415.0	336.4			
Interest capitalized	(12.5)	(11.4)	(14.9)			
Minority interest and other	40.6	16.2	(24.7)			
Total	467.6	419.8	296.8			
Income before income taxes	334.9	666.6	593.8			
Income taxes	109.5	236.4	191.8			
Income from continuing operations	225.4	430.2	402.0			
before extraordinary item						
Discontinued Operations (less applicable	454.3	74.7	103.0			
income tax expense)						
Extraordinary loss from regulatory asset	(16.0)					
impairment (less applicable income tax						
expense)						
Net Income	663.7	504.9	505.0			
Retained Earnings, January 1	782.8	632.4	474.3			
Cash dividends declared						
Preferred stock	(20.0)	(29.1)	(38.4)			
Common stock per share of \$1.08	(320.0)	(317.9)	(306.6)			
Preferred stock retired	(0.2)	(7.5)	(1.9)			
Retained Earnings, December 31	\$1,106.3	\$782.8	\$632.4			
Earnings on Common Stock (Net income less preferred dividend requirement)	\$640.9	\$475.1	\$466.3			
Average number of common shares outstanding (Thousands)	296,094	292,424	284,272			
Earnings per Common Share	\$2.16	\$1.62	\$1.64			