

Dave



THE WASHINGTON WATER POWER COMPANY

Book Depreciation Study
of Electric Properties
as of December 31, 1997

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dispersion patterns indicated by these actual survivor curves were identified by visually fitting lowa-type standard curves to each of the actual curves and plotting the results. This visual approach ensures that the data contained in the actual survivor curves, and input data, and the trends are available to the analyst, and that the analyst does not allow computer calculations to be the sole determinant of study results.

The actuarial method of Life Analysis will not produce meaningful results for Production Plant, because the actuarial method will provide a misleading indication of both average service life and dispersion without extensive terminal retirement experience. In addition, the history does not include experience representative of the possibility for the refurbishment of Centralia.

For accounts having little retirement experience or having retirement experience that is not an adequate indication of the expected mortality characteristics of surviving property, evaluation of the significance of history played a major role in selecting the mortality characteristics shown on Schedule 3. Examples of these evaluations and their effects are discussed later.

SALVAGE AND COST OF REMOVAL ANALYSIS

Salvage and cost of removal experience from 1983 through 1997 was the basis for determining the net salvage factors shown on Schedule 3. The analysis was done in a manner that allows selection of separate salvage and cost of removal factors for most depreciable property groups. The analysis consisted of calculating the experienced salvage and cost of removal factors for each property group by dividing salvage and cost of removal amounts by the original cost of the retired property. Factors are expressed as percentages, and were calculated for annual, rolling and shrinking bands of retirement experience. For many property groups, the factors were plotted and the trends were illustrated by linear regression.

The Company has relevant interim salvage and cost of removal experience for Production Plant, but has no terminal salvage and cost of removal experience for steam units. The interim net salvage factors selected for

Production Plant reflect actual experience. The terminal net salvage factors selected for Steam Production Plant reflect the nature of the facilities and removal cost estimates of other utilities for modern plants. An amount of \$40 per kW was used to compute the current estimate of final removal cost. This amount was escalated at 3% to terminal retirement date and used in the rate calculation procedure. The Company has no terminal retirement experience for combustion turbine and diesel units.

The average dollar age of retirements of Distribution Plant is young relative to the expected age of surviving property at retirement. This results in overstating the salvage factors and understating the cost of removal factors applicable to surviving property, if history serves as the sole basis for net salvage determination. Salvage factors are overstated because young property is more likely to be reused than junked and the salvage value of reused items is much higher than scrap value. Cost of removal factors are understated because the amount of inflation reflected in the cost to remove young property is much less than the amount that will be reflected in the cost to remove the surviving property. The average age of original installations at retirement is equal to the average service life, meaning that the average age of surviving property at retirement will be higher than the average service life and much higher than the age of current retirements. Reaction to this situation resulted in the adjustment to historical cost of removal percentages shown in Column 9 of Schedule 6.

As with the Life Analysis, the results of the Salvage and Cost of Removal Analysis were evaluated to the extent considered necessary to ensure applicability to the surviving property. The considerations were similar in nature to those applicable to the Life Analysis.

EVALUATION OF ACTUAL EXPERIENCE

Life Analysis and Salvage and Cost of Removal Analysis involve the measurement of what has occurred in the past. History is often a misleading indication of the future. There are many kinds of events that can