in the amortization of book accumulated depreciation variances to insure complete recovery of capital over the life of the property.

The reserve variance amortization developed in this study is based on the variance between the book accumulated depreciation and the calculated accrued depreciation where the variance exceeds five percent of the calculated accrued depreciation and an amortization period equal to the composite remaining life for each property group. The calculated accrued depreciation or theoretical reserve is based on the mid-year convention. This accounting convention assumes that property is in service for six months in the year it is installed.

The composite remaining life for use in reducing accumulated depreciation variances is derived by compositing the individual equal life group remaining lives in accordance with the following equation:

$$Composite\ Remaining\ Life = \frac{\sum (\frac{Book\ Cost}{Life} \times Remaining\ Life)}{\sum \frac{Book\ Cost}{Life}}.$$

The book costs and lives of the several equal life groups which are summed in the foregoing equation are defined by the estimated future survivor curve.

Inasmuch as book cost divided by life equals the whole life annual accrual, the foregoing equation reduces to the following form:

$$Composite\ Remaining\ Life = \frac{\sum Whole\ Life\ Future\ Accruals}{\sum Whole\ Life\ Annual\ Accruals}.$$

or

$$Composite\ Remaining\ Life = \frac{\sum Book\ Cost - Calc.\ Reserve}{\sum Whole\ Life\ Annual\ Accrual}.$$