# **Local Exchange Carrier Depreciation Reserve Percents**

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# **Abstract**

I 1980, the Federal Communications Commission changed its procedures and orientation with respect to the prescription of depreciation rates for telephone companies. This paper examines the effect of these changes on the depreciation reserve percents of local exchange carriers.

### Introduction

Twenty years ago, the Federal Communications Commission ("FCC") radically changed its approach to the prescription of depreciation rates for telephone companies. The FCC's Report and Order in Docket No. 20188 adopted Straight Line Equal Life Group ("SLELG") and remaining-life depreciation procedures. More importantly, the FCC changes its orientation. As the FCC has stated:

In 1980, the Commission departed from its previous practice of relying largely on historical experience to project lives and began to rely on analysis of company plans, technological developments, and other future oriented studies.<sup>2</sup>

The purpose of this paper is to examine the effect of these changes on the depreciation reserve percents of local exchange carriers ("LECs").

# **LEC Depreciation Reserve Percents**

The FCC and others have long relied upon the depreciation reserve for insight into the workings of the depreciation process. The FCC staff had stated:

The depreciation reserve is an extremely important indicator of the depreciation process because it is the accumulation of all past depreciation accruals net of plant retirements. As such, it represents the amount of a carrier's original investment that has already been return to the carrier by its customer.<sup>3</sup>

The FCC recognition of the reserve level as an indicator of depreciation process can best be understood by examining a steady rate example. Assume that we start with a stable environment in which the average age of plant is 9 years and the

expected life of plant is 27 years. In this case, the add rate, retirement rates and straight-lien accrual rate are all 3.7 percent, and the reserve level is stable at 33 percent of plant in service (9 years/27 years.<sup>4</sup>

- If the add rate were to increase above 3.7 percent, the reserve level would go down. This would not be a cause for concern, since the average age of plant would similarly represent a lower percent of its expected life.
- If the retirement rate were to increase above 3.7 percent, the reserve level would go down. This would be a cause for concern, since it would indicate that the expected life of plant is shorter than previously expected. If the expected life is shorter, the average age of plant would represent a higher percent of its expected life, and reserve should higher, not lower than 33 percent.
- If the accrual rate were to increase above 3.7 percent, the reserve level would go up. This would not appropriate absent a reduction in the expected life of the plant, since it would indicate that the average age of plant is higher that 33 percent of its expected life.

In summary, a declining reserve percent would be a reason for concern absent indications that it is merely the result of growth in plant. On the other hand, a rising reserve percent is generally a positive sign that the depreciation process is working well. Indeed, absent indications that the expected life of plant is decreasing, it might be a sign that accrual rates are too high.

Table 1 displays depreciation reserve levels and various plant rates since 1946 for all LECs providing full financial reports to the FCC, Figure

1 plots the LEC depreciation reserve percent as shown in Column m of Table 1. As shown on Figure 1, reserve percents decreased steadily following World War II due to industry growth. These declines continued through the 1970s due in part to accrual rates which were too low. The FCC's change to forward-looking depreciation practices in the early 1980's, however, resulted in a dramatic rise in reserve levels after 1980. The composite reserve level rose from 18.7 percent in 1980 to an historic high of 52.1 percent 1999. This track record indicates that the depreciation process has worked well since 1980.

Confirmation of the forward-looking nature of current FCC prescription can be gained by comparing the 1999 composite accrual rate of 7.2 percent (Table 1, Page 3, Column 1) to the 1999 retirement rate of 3.6 percent (Table 1, Page 3, Column k). The prescription of an accrual rate much higher than the current retirement rate indicates an expectation that the retirement rate will be much higher in the future. If the FCC were prescribing depreciation rates based upon historical indicators, it would be prescribing rates in the range of 3 to 5 percent.

Table 2 summarizes that the latest data available on depreciation reserve levels for the large LECs by jurisdiction. A scan of Column c reveals that the dramatic increase in LEC reserve percents since 1980 is ubiquitous. January 1, 2000, book reserves are as follows for the major LEC holding companies.

BellSouth	54.9 percent
SBC	52.0
Verizon	51.5
Qwest	52.8

Table 2 also displays the theoretical reserve as of Jaunury1, 2999, for each jurisdiction of each LEC (Column d) and compares these levels to booked reserve levels. Overall, the large LECs reports a depreciation reserve surplus of \$11.2 billion, or 3.8 percent, as of January 1, 20000. The surplus by major LEC holding company is:

BellSouth	\$2.7 billion
SBC	3.3
Verizon	4.2
Qwest	1.0

#### Conclusion

The FCC's 1980 change in procedures and orientation has resulted in dramatically higher depreciation reserve levels. It must be noted, however, that many LEC representatives contend that depreciation reserve levels are still too low, and FCC prescribed lives still too long.

Since the depreciation process, by its nature, is based upon future expectations, it will be many years before we will know whether the LECs entered the 21<sup>st</sup> Centruy with depreciation reserves that were lower – or higher – than they need be. The benefit of hindsight, however, allows us now to conclude that the change begun by the FCC in 1980 achieved their intended purposes. For many past and present members of the Society of Depreciation Professionals who helped chart the course of telephone depreciation over the past 20 years, a tip of the hat it in order.

#### **References:**

- <sup>1</sup> Amendment of Part 31 (Uniform System o fo Accounts for Class A and Class B Telephone Companies) so as to permit depreciable property to be place in groups comprised of units with expected equal life for depreciation under the straight-line method, Docket No. 20188, Report and Order, FCC 80-650, released December 5, 1980.
- <sup>2</sup> 1998 Biennial Regulatory Review- Review of Depreciation Requirements for Incumbent Local Exchange Carriers, CC Docket No, 98-137, Reports and Order, FCC 99-397, released December 30, 1999, para. 5.
- <sup>3</sup> Report on Telephone Industry Depreciation, Tax and Capital/Expense Policy, Accounting and Audis Division, April 15, 1987 ("AAD Report"), pp. 5-6.
- <sup>4</sup> Reserve will stabilize at 33 percent assuming a triangular (straight-line) mortality curve. See Notes for Engineering Economics Courses, American Telephone and Telegraph Company, Engineering Department, 1966, p. 121.

<sup>&</sup>lt;sup>5</sup> AAD Report, p. 7

Table 1 – Pant Related rates of All Reporting LECs (Dollars in Millions)

	Telecommunications Plant in Service							EOY	AVG	Add	Retire		
	воу	EOY	Average	Increase	Add	Ret	Deprec	Reserve	Reserve	Rate	Rate	Deprec Rate	Reserve Percent
1946													
1947 1948													
1949													
1950													
		1											
		-											