

## X-FACTOR CALCULATION FOR SPECIAL ACCESS

In its SFNPRM (¶ 88), the Commission requests comment on whether the CenturyTel plan should contain a productivity factor and how such a factor could be accurately calculated. In this Appendix, data on NECA's special access rates are used to estimate an imputed X-factor, based on the trend in rates from mid-1995 to the present. Although special access has become an increasingly important local exchange service in recent years, the CenturyTel plan did not address the regulation of special access rates. AT&T believes that a conventional price cap mechanism, including an X-factor that reflects ongoing gains in ILEC productivity, is appropriate for regulating special access rates.

Appendix B-1 shows TRP data for Voice Grade and High Capacity (DS1) services taken from NECA's 1995 and 2003 annual filings. Rates, demand quantities, and revenues for the 1995-96 tariff year are shown on the left-hand side of the table, with similar data for the 2003-04 tariff year shown in the center. (These services accounted for approximately 81% of total special access revenue in the first year and 63% in the last year.)

Revenues for both tariff periods are then adjusted to obtain the revenue requirements associated with an 11.25% rate of return, using data from the Rate of Return Reports (FCC Form 492) filed by NECA.

- As shown in Appendix B-2, the rate of return on special access was 11.41% for the January 1995 to December 1996 period, a period that encompasses the 1995-96 tariff year. Revenue requirements are calculated on the basis of an 11.25% return on investment and a 39% marginal income tax rate, using the formula shown in line 7.<sup>1</sup> For the 1995-96 reporting period, these revenue requirements amounted to 99.85% of the actual revenues for special access, as indicated by the "revenue requirement factor" on line 8.
- For calendar year 2003, the historical period that most closely matches the 2003-04 tariff year, the rate of return for special access was 17.08%. The calculations in lines 7 and 8 in Appendix B-2 indicate that the revenue needed to provide an 11.25% return amounts to \$284.7 million, with a "revenue requirement factor" of 90.41%.

The revenue requirement factors calculated in Appendix B-2 are used to adjust the revenues in Appendix B-1 to obtain the underlying revenue requirements associated with the Voice Grade and High Capacity rates. The imputed X-factor is based on the trend in these revenue requirements from mid-1995 to the present.

The right-hand side of Appendix B-1 shows that application of a price cap mechanism with a 6.05% X-factor, using the 1995-96 rates as the starting point, would have provided revenues for the 2003-04 prospective period sufficient for an 11.25% rate of return. The rates

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<sup>1</sup> This calculation reflects the change in state and federal income tax obligations that would accompany a change in revenue, based on a composite 39% marginal tax rate. That is, income tax obligations are assumed to change by 39% of the change in revenue.

and revenues shown on the right-hand side of Appendix B-1 (“Price cap simulation”) are those that result from applying a series of 8 successive price cap adjustments with a 6.05% X-factor to the initial 1995-96 rates, which has the effect of reducing the initial rates by 24% over the entire period. The 6.05% figure was selected because it results in the same amount of revenue for the 2003-04 period as do the actual July 2003 rates adjusted to provide an 11.25% return. 6.05% thus constitutes the imputed X-factor for NECA’s Voice Grade and Hi-cap special access services over the 1995 to 2003 period.

The calculation of annual price cap adjustments is shown on the lower portion of the table. These adjustments consist of a traditional “GDPPI – X + Z” mechanism where,

- Prices are adjusted on July 1<sup>st</sup> of each year, with each rate element reduced by the same percentage.
- GDPPI is the percentage change in the GDP Price Index between the fourth quarter of the previous year and the fourth quarter of the year before that.
- X is the productivity factor.
- Z is an adjustment for exogenous cost changes, measured as a percentage of revenue.

Two exogenous cost adjustments are included here. First, the initial 1995-96 rates are reduced slightly to provide an 11.25% rate of return by applying the 99.85% “revenue requirement factor” calculated in Appendix B-2. This is shown as a -0.15% downward adjustment included in the July 1996 price cap adjustment.<sup>2</sup> The impact of access reform in 2002, which shifted TIC revenues to special access, is also included here as an exogenous cost. According to data presented in NECA’s June 17, 2002 TRP filing, this shift had the effect of increasing special access revenue requirements by 7.1663%. This effect was thus included as a 7.1663% upward adjustment in the July 2002 price cap adjustment.

The imputed X-factor of 6.05% calculated here is similar to the 5.02% X-factor for special access that was calculated in AT&T’s previous comments on the MAG plan.<sup>3</sup> It should be noted, however, that the data here are incomplete, with 37% of NECA’s special access revenues for 2003-04 not included. The Commission should obtain data for the other NECA services, such as DS-3 service, as well as data from other carriers. With the data compiled in the same format as in Appendix B-1, an industry-wide imputed X-factor for special access could easily be calculated.

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<sup>2</sup> The -0.15% figure is obtained by subtracting 1 from the 99.85% revenue requirement factor.

<sup>3</sup> Comments of AT&T Corp., in Multi-Association Plan for Regulation of Interstate Services of Non-price Cap Incumbent Local Exchange Carriers and Interexchange Carriers (filed Feb. 14, 2002), Appendix A, pp. 7-8. The 5.02% X-factor was calculated for a shorter time period – 1995 to 2000 – and did not include any adjustment for variations in the rate of return.