

ACS OF ANCHORAGE, INC.  
TARIFF FCC NO. 1  
TRANSMITTAL NO. 15

July 30, 2002

DESCRIPTION AND JUSTIFICATION

ACS of Anchorage, Inc. ("ACS-ANC") proposes to modify its tariff to reflect a new forecasting method for switched access minutes of use. Below is an explanation of the methodology used to arrive at the new demand.

ACS-ANC Switched Access Minutes of Use Forecast

The forecast for the number of switched access minutes of use (MOU) is based on monthly data covering the period April 1999 through March 2002. This data series, shown below, represents the actual MOU per the Carrier Access Billing System ("CABS"), less the number of misdirected toll MOU due to local interconnection.

Date	MINUTES OF USE
Apr-99	45,583,870
May-99	43,052,436
Jun-99	42,370,301
Jul-99	41,092,625
Aug-99	44,418,237
Sep-99	42,133,006
Oct-99	40,529,520
Nov-99	42,645,847
Dec-99	46,553,340
Jan-00	41,069,591
Feb-00	42,810,409
Mar-00	40,000,755
Apr-00	42,761,944
May-00	40,120,874
Jun-00	40,347,071
Jul-00	40,889,487
Aug-00	42,476,012
Sep-00	43,064,946
Oct-00	40,587,300
Nov-00	39,736,262
Dec-00	37,233,995
Jan-01	38,946,820
Feb-01	37,904,969

ACS OF ANCHORAGE, INC.  
TARIFF FCC NO. 1  
TRANSMITTAL NO. 15

July 30, 2002

DESCRIPTION AND JUSTIFICATION

Date	MINUTES OF USE
Mar-01	35,831,013
Apr-01	38,763,188
May-01	38,384,765
Jun-01	40,475,531
Jul-01	36,397,169
Aug-01	42,415,326
Sep-01	41,497,113
Oct-01	39,696,429
Nov-01	41,073,086
Dec-01	39,279,684
Jan-02	38,995,802
Feb-02	40,613,185
Mar-02	37,367,784

A graph of the series shows an identifiable downward trend over time. Also, from exogenous information, we know there was a promotional program in effect impacting MOU between November 2000 and the first part of June 2001. Also, there was a clear impact on switched access minutes of use in response to the events of September 11, 2001. This information was used in specifying a forecasting model.

The forecasting model was specified as the log (log to the base e) of the access minutes of use variable being a linear function of time, a dummy variable defined to equal one over the period in which the promotional program was in effect and zero otherwise, and a dummy variable defined to equal one for September 2001 and zero otherwise plus a constant term.

Preliminary results were examined using regressions diagnostics to identify any data outliers in the series (D. Belsley, E. Kuh, and R. Welsch, Regression Diagnostics, John Wiley and Sons, Inc., 1980). This analysis indicated that three observations were outliers and had a disproportionate impact on the coefficient estimates - December 1999, March 2001, and July 2001. To mitigate the effects of these outliers on all coefficient estimates, three separate dummy variables were defined for these months (i.e, equal to one for the respective months and zero otherwise) and included in the final specification.

After correcting for first order serial correlation ( $\rho = -0.38$  with a standard error of 0.13 indicating that it is statistically significantly different from zero at the one percent level), the monthly growth rate was estimated to be -0.2437 percent with a standard error of

ACS OF ANCHORAGE, INC.  
TARIFF FCC NO. 1  
TRANSMITTAL NO. 15

July 30, 2002

DESCRIPTION AND JUSTIFICATION

0.0390 (indicating that it is statistically significantly different from zero at the 1 percent level). The coefficient of determination for the regression is 0.7138.

This growth rate was applied to the historical series to obtain a forecast of the number of switched access minutes of use for the period July 2002 to June 2003 of 460,543,402 minutes.

Dividing the revenue requirement for local switching by the demand of 460,543,402 reduces the local switching rate to \$.006358 per MOU. Use of this demand also reduces the information surcharge rate to \$.028691 per 100 access MOU.