Exhibit ____ (TRF-5)

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

IN THE MATTER OF THE PETITION FOR ARBITRATION OF AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST AND TCG SEATTLE WITH QWEST CORPORATION PURSUANT TO 47 U.S.C. § 252(b)	**DOCKET NO. UT-033035**

EXHIBIT TRF-5

TO

DIRECT TESTIMONY OF THOMAS R. FREEBERG

ON BEHALF OF

QWEST CORPORATION

(Disputed Issue Nos. 3, 5, 17, 18, 19, 21, 30, and 34)

September 25, 2003

Identification of Internet-bound Traffic

Background

Qwest creates a billing record for every call exchanged with a CLEC on an interconnection trunk group. These records can help determine if individual called numbers are those of an Internet Service Provider or not. A mathematical algorithm is applied to a week of records associated with traffic from an individual trunk group. The week should not include holidays. A Classification and Regression Tree (CART) model classifies each called number as either a probable modem or non-modem. Modems associated with facsimile machines are distinguished from other modems.

Input

The following data is collected from each call record.

-call code…110 or 119…(110 is Qwest–to-CLEC, 119 is CLEC–to-Qwest)
-call date
-calling number
-called number
-call success indicator (0 = successful, 1 = unsuccessful)
-call conversion length
-call time of day (minutes past midnight where, e.g. 3:05AM = 185.0)

Methodology

Input is processed to calculate variables including Number of Callers (NC), Average Minutes of Use per Caller (AMOU), Average Holding Time (AHT) and Total Minutes of Use (TMOU) associated with each called number. Called numbers with less than 2500 TMOU per week or AHT less than 5 minutes per call are eliminated in a pre-screen. This frequently eliminates 99% of all called numbers.

The remaining called numbers are used to construct a CART. The CART uses NC, AMOU, AHT and TMOU to split called numbers into two groups. At each node of a decision tree, the algorithm uses a variable to split data. The process is repeated until further splitting fails to reduce the number of misclassified observations.

Modem Identifier

In general, a called number is classified as an ISP modem if TMOU is greater than 2500 minutes, AHT is greater than 5 minutes, and AMOU is greater than 45 minutes. Called numbers with fewer than 6 callers and AHT more than 12 minutes are excluded. In practice, the model misclassifies approximately 8% of the numbers and creates a minute-of-use estimate approximately 1% too large.

Because the model creates misclassification, the list of probable modems is presented to a Modem Identifier program. The program dials probable modem numbers and attempts a modem protocol handshake. Human involvement allows for listening-in to mechanized and manual calling. Disconnect messages, no answer messages, busy tone and facsimile modem protocol can further eliminate numbers.

Summary

This model was created in 1999. More than a dozen carriers have interacted with Qwest to validate the model's utility.