

1 BELLSOUTH TELECOMMUNICATIONS, INC.
2 DIRECT TESTIMONY OF THOMAS E. (TOM) FORTENBERRY
3 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4 DOCKET NOS. 980946-TL, 980947-TL, 980948-TL, 981011-TL,
5 981012-TL, AND 981250-TL
6 APRIL 9, 1999

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9 Q. PLEASE STATE YOUR NAME AND COMPANY NAME AND ADDRESS.

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11 A. My name is Tom Fortenberry. I am employed by
12 BellSouth Telecommunications, Inc. as a Manager of
13 Network Forecasting. My business address is Rm.
14 N4H1, 3535 Colonnade Pkwy., Birmingham, AL 35242.

15
16 Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

17
18 A. I began employment with Southern Bell in 1966 as a
19 technician. I graduated from Memphis State
20 University in 1973 with a Bachelor of Science degree
21 in Electronics Technology. I was promoted to
22 management in Outside Plant Engineering in 1974. I
23 have held various positions in Central Office
24 Engineering, Planning and Budgets and since

25

1 January 1, 1998, I have been a manager in Network
2 Forecasting.

3

4 Q. HAVE YOU TESTIFIED PREVIOUSLY?

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6 A. No. I have not testified previously in any
7 proceedings.

8

9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

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11 A. The purpose of my testimony is to support BellSouth's
12 reservation of space for future growth of equipment
13 by describing how the geographic forecast fits into
14 the provisioning process.

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16 **ISSUE 2: WHAT FACTORS SHOULD BE CONSIDERED BY THE**
17 **COMMISSION IN MAKING ITS DETERMINATION ON BELLSOUTH'S**
18 **PETITIONS FOR WAIVER AND TEMPORARY WAIVER OF THE**
19 **REQUIREMENT TO PROVIDE PHYSICAL COLLOCATION FOR THE**
20 **FOLLOWING CENTRAL OFFICES:**

21

- 22 a) **Daytona Beach Port Orange**
23 b) **Boca Raton Boca Teeca**
24 c) **Miami Palmetto**
25 d) **West Palm Beach Gardens**

1 e) North Dade Golden Glades

2 f) Lake Mary

3

4 Q. WHAT IS A GEOGRAPHIC FORECAST?

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6 A. BellSouth has several levels of forecasts. We have
7 Company, State (or GEO), Turf (sometimes referred to
8 as District), and Wire Center level forecasts. The
9 state of Florida has two GEOs, North and South. As
10 it pertains to this specific situation, the
11 forecasts being described for the six Central
12 Offices in question are known as Wire Center Level
13 Forecasts. The Wire Center Level forecast is a
14 prediction of growth for future years of individual
15 products or groups of products within a Wire Center.
16 We often group several products together and refer
17 to this grouped forecast as the Total Access Line
18 (TAL) forecast. This group of products known as TAL
19 includes both residential and business lines. Non-
20 Switched and High Speed units are forecasted in
21 addition to the TAL forecast. The intended use of
22 the Wire Center Level forecast is for inventory or
23 capacity management.

24

25 Q. WHO MAKES THIS FORECAST?

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2 A. BellSouth's Network and Carrier Services department
3 employs GEO forecasters responsible for preparing
4 Wire Center Level forecasts. I am the Manager of
5 this group. These forecasters generally have years
6 of experience in other areas of the Company and are
7 usually selected because of their strong analytical
8 and statistical skills. The forecasters are trained
9 on the use of analytical tools such as Time Series
10 and Regression models that enable them to analyze
11 large amounts of data and predict future growth.

12

13 Q. HOW IS A FORECAST MADE?

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15 A. Forecasts are made by analyzing internal historical
16 product data, such as residential and business lines,
17 applying external economic indicators, such as Gross
18 Domestic Product (GDP) growth and Consumer Price
19 Index (CPI), Unemployment Rates, and any promotional
20 efforts, such as Additional Line sales campaigns,
21 that might alter historical trends. Any local
22 knowledge (such as a new factory or large business
23 locating in a given wire center) that might alter
24 past trends is also applied to the forecast.

25

1 Q. HOW MUCH HISTORICAL DATA IS CONSIDERED?

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3 A. BellSouth's historical data varies by product. Some
4 products have history dating back to 1994. However,
5 forecasters usually use only the past three to five
6 years when building a forecast because the recent
7 past is usually a better indicator of the future.

8

9 Q. WHERE IS THIS DATA KEPT?

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11 A. The data is kept in a forecast system BellSouth calls
12 Strategic Market Analysis System (SMAS). In addition
13 to being a repository of historical data, SMAS
14 contains applications and statistical tools that are
15 used to analyze the data and project future demands.
16 SMAS also has the capability of taking a "tops down"
17 number developed for a larger geographic area, (State
18 or District) and spreading it to the wire centers
19 included in the larger area.

20

21 Q. HOW OFTEN IS A FORECAST MADE?

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23 A. Forecasts are made twice a year at the wire center
24 level. Products that require units of switching
25 equipment or outside facilities are forecasted for

1 ten years, current year plus nine years. In
2 addition, individual wire center forecasts
3 validations are provided upon request in the event
4 that the current forecast is several months old.

5

6 Q. HOW OFTEN HAS A FORECAST BEEN PERFORMED ON THE SIX
7 OFFICES IN QUESTION?

8

9 A. Generally, a forecast is performed twice a year.
10 There may have been some years when only one Wire
11 Center Level forecast was performed.

12

13 Q. WHAT CHECKS ARE MADE TO VERIFY THE ACCURACY AND
14 PRECISION OF THE FORECAST?

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16 A. As a Forecast Manager, I make some validations of
17 the forecast such as view over view comparisons and
18 graph the results to determine if the forecast seems
19 reasonable when compared to the Wire Center's
20 history. In addition, we have Forecast Assurance
21 personnel that make additional reviews to ensure the
22 forecast is reasonable. We use commercial
23 forecasting programs such as Forecast Pro (Trademark
24 of Business Forecast Systems) and SmartForecasts for
25 Windows, (Trademark of SmartSoftware, Inc.) that

1 make use of several statistical models to analyze
2 our data and help us build a forecast. We also
3 publish tracking reports that contain analysis and
4 notes about why actual units deviate from the
5 forecast. While performing this monthly analysis,
6 if a given wire center's actual units seem to be
7 veering out of range and appear to put the annual
8 forecast in jeopardy, we revise the forecast and
9 notify the users of the revised forecast.

10

11 Q. WHO USES THE FORECAST?

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13 A. Switch, Circuit and Loop Capacity managers use the
14 forecast for sizing and timing of growth projects.
15 These managers compare the forecast to the existing
16 capacity and determine what additional capacity is
17 required for their particular discipline.

18

19 Q. HOW DO THE CAPACITY MANAGERS GET THE FORECAST?

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21 A. When the forecast is completed, it is transmitted to
22 personnel who load the forecast into other systems,
23 such as the Network Switching Plan. The data is
24 processed and sent to an application that generates
25 Demand and Facility (D&F) charts. D&F charts show

1 historical data plotted on a graph that can be
2 interpolated or trended to indicate future demand.
3 D&F charts are used by Switch Capacity Managers to
4 determine when to provide additional switching
5 capacity and how much capacity to provide based on
6 the forecast.

7

8 Q. WHO ELSE RECEIVES THE FORECAST?

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10 A. The forecast is also passed on to Loop Capacity
11 Managers via their system called Loop Engineering
12 Information System (LEIS). The Loop Capacity
13 Managers use the forecast to determine the timing and
14 sizing of Outside Plant cables. The forecast is also
15 passed on to Circuit Capacity Managers, who use the
16 forecast to assist in determining the timing and
17 sizing of circuit facilities.

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19 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

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21 A. Yes, it does.

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