BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for emergency relief ) DOCKET NO. 980800-TP by Supra Telecommunications \& Information Systems against Bellsouth ) Telecommunications, Inc., concerning collocation and interconnection agreements.

VOLUME 2
Pages 177 through 382

PROCEEDINGS:
HEARING

## BEFORE :

ACTING CHAIRMAN J. TERRY DEASON COMMISSIONER SUSAN F. CLARK COMMISSIONER E. LEON JACOBS, JR.

DATE:
Wednesday, October 21, 1998
TIME:

PLACE:

REPORTED BY:
NANCY S. METZKE, RPR, CCR
(As heretofore noted.)

FO,
C \& N REPORTERS TALIAHASSEE, FLORIDA (850)697-8314

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(Transcript continues in sequence from Volume 1)
COMMISSIONER DEASON: Call the hearing back to order. Ms. White.

MS. WHITE: Yes.
DAVID A. NILSON
continues his testimony under oath from Volume.
CONTINUED CROSS EXAMINATION

BY MS. WHITE:

Q Mr. Nilson, I want to try to get a better handle on this ascent TNT piece of equipment. Now one end would be the PBX on a customer's premises, correct?

A I'm sorry, could you say it --
Q Well, you said that you hook up to a PBX, connect to a PBX, right?

A Yes, ma'am.
Q So you would have a PBX on a customer's premises, right?

A Yes.

Q And then what would that PBX be connected to?
A The PBX would be directly connected to the ascend SS7 box, the ascend TNT box which --

Q Okay. Let me stop you. Where would that box be located?

A In the central office.

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Q Okay. And then what would that be connected to?
A It would be connected to unbundled network
elements between the central office and the customer's PBX.

Is this microphone working?
Q I'm sorry?
A I'm not sure if this microphone is working.
Q The lights --
A The lights are all off.
Q No, it's working. Maybe not.
COMMISSIONER JACOBS: No, it's not.
COMMISSIONER DEASON: You got here just in time
to fix the mikes.
Can you hear okay?
(Court reporter nodded head affirmatively)
COMMISSIONER DEASON: Well, I'm hearing fine too, so let's go.

Q Okay. So the ascend SS7 gateway in the central office would be connected to unbundled network elements, correct?

A Sure, unbundled 4-wire loops, yes.
Q Okay. So where does the switching take place?
A The switching takes place within the TNT chassis itself.

Q Okay. And what is the ascent TNT switching? Is it switching data? Is it switching voice conversations?

Which?
A It has the capability of switching both, ma'am.
Q Okay. What will Supra be using it to switch?
A Both, ma'am.
Q Okay. The -- So when a customer, where the PBX is located, picks up their phone and dials a BellSouth customer 20 miles away, that call will be routed and switched through the ascent TNT?

A Yes, using the SS7 A link connection to make that call set up and call completion.

Q Okay. But the SS7 gateway doesn't actually do any of the switching, right? It doesn't actually switch the call, does it?

A Yes.
Q Okay.
A I mean it would be switching it -- in your for example, you talked about switching between a Supra customer and a Bellsouth customer. The system would switch the Supra customer from a Supra unbundled network element on to a trunk heading to a Bellsouth tandem.

Q Using the ascent TNT?
A Correct. Exclusively.
Q Okay.
A Without requiring the support of the Class 5 switch to perform that function.
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Q Okay. Now let's just talk for a few brief minutes about the Cisco remote access concentrators. Is that a switch?

A I'm not certain if it could be classified as a switch.

Q Okay. What does it do?
A That's more of a traditional remote access concentrator in which it, in a space efficient manner, mounts modems that are then interconnected, and the data streams from those modems can then be directed to specific pieces of equipment or data networks that they need to be connected to.

Q Okay. And those modems don't switch calls, do they?

A Not in the case of the Cisco system, ma'am, no.
Q Okay. And, again, the remote access, Cisco remote access concentrator is used to move data from one place to the other?

A Certainly. I mean one of the applications for that is -- as I pointed out earlier, we haven't asked for collocation of desks or terminal in the spaces, so that is one of the methods we are going to be using for doing maintenance and provisioning of our switches. In addition to its capability for transmitting data traffic to data networks, it has the capacity to be connected to every
piece of equipment within our central office arrangement.
Q Okay. Now let's go back to the ascent TNT for a second. When you use the ascent TNT to transmit data, you are transmitting data from the PBX to someplace else, right?

A That's one method of operation, yes.
Q Okay. Where would you be transmitting it to?
A In that case it could be used to create a virtual private network between the sites of a corporation that are remotely located in two different cities. It could be used to connect data traffic to the Internet, to any major data network, like Time Net.

Q Okay. Now can you tell me the difference between telecommunications services and enhanced services?

A A specific legal definition?
Q No, not a legal definition, just in your own words what your understanding is.

A Well, as $I$ understand the contention in this issue is that telecommunications services are those services that are capable of providing voice transmission, dial tone capability similar to what we are all used to having, for example, in our home or place of business. Enhanced services would be those services that utilize the function of a computer processing unit to extend what can be done over the unbundled network elements and the rest of

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the telephone network, commonly known as the PSTN.
Q Okay. Now one last question on the equipment, and you may have answered this before, and $I$ apologize if so; but the ascent $T N T$, that can also be used to route Internet protocol, correct?

A Well, again, I object to the use of the word "route" because the specific construction of the equipment is to switch that type of traffic, but --

Q It switches Internet traffic?
A Yes, ma'am.
Q Now going back to something else you said in your summary you said you stood in Supra's collocation space at the Miami Grande office?

A Yes, ma'am.
Q And there were no firewalls at that place?
A That's correct.
Q Now the collocation space that's been allotted to Supra at the Miami Grande office, build-out hasn't begun on that yet, has it?

A They were working on the space the day we were there.

Q On your space, Supra's space?
A They were pulling cables up through the cable access.

Q Okay. Has Supra submitted an accurate firm order
application for this office?
A Yes, ma'am.
Q And when was that?
A We submitted our first application on that on September 1st. Nancy Nelson came back with a request for clarification on a number of items, and we made a second filing. The date I don't have in my head. It was probably several weeks ago.

Q Was there substantial difference between the first order, firm order application you filed in that office and the second?

A No.
Q There was not a substantial difference in the number of racks required?

A Between the first firm order and the second? No.
Q There wasn't a substantial difference in the amount of wiring requested?

A No.
Q There wasn't a substantial difference in the number of bays requested?

A No.
Q Has BellSouth accepted that firm order application for the Miami Grande office, do you know?

A We have not received any written confirmation at this point.

Q Now I'd like to ask you a couple of questions on one of your late-filed deposition exhibits. It's Exhibit Number 2, and I understand this is proprietary, and we spoke before we started back to the hearing, so I will do my best to try not to get into any confidential proprietary information.

Essentially what this is, is a space requirement projection for Supra for various central offices and the backup for that space projection; is that a fair characterization?

A What the staff requested me to do was submit our equipment forecasts to explain what we would use the second two hundred square foot reserve space in the central office for.

Q Okay.
A This is a projection that would identify that traffic, those customers, and that equipment necessary to perform.

Q And it's my understanding you've asked for two hundred square feet in each office, the Glades and the Gardens, correct?

A Just a minute.
(WITNESS REVIEWED DOCUMENT)
MS. SUMMERLIN: Nancy --
A That's correct.

MS. SUMMERLIN: Can I interject and just ask for a clarification? Are you talking about for future use?

MS. WHITE: No, I was just asking, your initial
application was for two hundred feet in each of these offices.

MS. SUMMERLIN: For the initial. Okay, I'm sorry. BY MS. WHITE (Continuing) :

Q Is that right?
A Because this projection that you are holding in your hand now goes beyond what we've currently applied for.

Q Right.
A Okay.
Q So when it says on here your initial collocation, that's the two hundred square feet you've asked for in these offices; is that right?

A That's correct.
Q And what you mean by first growth is that you'd like an additional two hundred square feet in each of these offices?

A Right, and this is the justification for that.
Q Okay. So now after you have four hundred square feet, this exhibit shows what you would have in that space?

A That's correct.
Q Okay. And I know this is an aggregate number,
but it shows that in the Glades office you'd have 29 total bays and in the Gardens office you'd have 41 total bays; is that right?

A That's correct.
Q Okay. Now there are several columns in this -on the first page of this exhibit, and there are individual bay numbers beneath it for each central office, and I don't want to get into proprietary information. I wondered if you could tell me what functionality these columns of equipment represent?

A All right. The first five columns represent the core administration and control of the switch.

Q Okay. What does that mean? What does that do?
A Well, in order for the switch to operate, there has to be certain administration functions running on a computer within a Class 5 switch. The first two columns both represent the command and control center, if you will, of the Class 5 switch. There are two columns because in some offices we chose one particular configuration of switch, and in the other office we chose a smaller configured switch which uses a different cabinet configuration. The third column is, you know, the networking setup that has been talked about in this case over in several offices, and the other two cabinets represent additional support and storage for data within
the switch.
Q Okay. Could you continue on?
A The next column is the power distribution cabinet. The following two Erames represent additional internal switch communication capabilities. The following column is the -- represents the cabinet supporting digital trunk provisioning.

Q Okay. And let me stop there a minute because the numbers under that column are the largest numbers on the individual sheet of paper, right?

A Certainly, and that's understandable.
Q Okay. And why is that understandable?
A Because those are the circuits that are both used for provisioning 4-wire circuits out to customer locations as well as for communicating back to the Bellsouth tandem, to communicating to long distance carriers and to communicating to our network between our other additional switches. That's basically the cabinet that provisions the Tl circuits out of the switch.

Q Okay. And would you continue on with the columns?

A The next three columns represent support for 2-wire copper loop circuits. The following cabinet is -well, it's the DSX panel, which is termination for both DS-1 and DS-3 type circuits. It provides a demarcation
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point within the collocation space.
The following, the final column represents -essentially that's digital loop carrier equipment.

Q Okay. Where on this sheet would I find where you've put the ascent TNT or the Cisco remote access concentrator?

A That would be on the following page.
Q Oh, okay.
A What you've looked at on that first page is specifically the configurations of the Class 5 switching elements we plan to collocate, nothing else other than the Class 5 switch itself.

Q Okay. What is on this -- I'm looking at the second page now, and I see where you have the columns of ascend equipment. You also have a couple of columns called Paradyne. Is that another manufacturer?

A Correct.
Q What are you obtaining from that manufacturer?
A Is that considered proprietary or .-
Q Well, I mean I'm not necessarily looking for the model number of the equipment. What functionality are you obtaining out of that equipment?

A All right. Well, this particular division Paradyne is a spinoff from AT\&T, and they are supplying us with DSL equipment.

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Q Okay. What does that do?
A DSI equipment is equipment that can be used to provision high-speed data services over regular POTS lines. It also is used for infrastructure within our network to support outlying telephone installations, for example, to support a high-density installation in a strip mall, things of that nature. The DSL equipment simultaneously provides voice and data connections over a single copper pair.

Q Now on the third page of the exhibit, I believe would be the backup for the first two pages?

A To a certain extent, but largely it's included because it shows completely different information relating to trunk and line usage, but it does -- it does roll up into the requirements for the switching equipment as well.

Q And the -- I think we've already talked about this, and $I$ know the numbers are definitely proprietary; but I'm going to ask you about the column at the far left, the description column. Do you see the section entitled "ISP Traffic From Supra Subscribers?"

A That's correct.
Q And the first line under that is, is that minutes slash --

A Minutes per month.
Q Minutes per month. Internet service traffic, is
that what it is from unbundled loops?
A Right. I think you can notice from that it's one of the smallest categories of traffic in the entire traffic analysis.

Q Well, if you go over - Explain the difference between the next to the last column on that and the last column because the next to the last column is Golden Glades, right?

A Okay. What we have done here is the sheet you are looking at represents all the offices whose access tandem is the Golden Glades tandem.

Q Okay.
A As a natural result of that, the local switching element in Golden Glades also uses Golden Glades as an access tandem. That is why Golden Glades is repeated twice. The far right-hand column represents aggregated traffic at the tandem location for the purposes of tandem and interconnection aggregation; whereas, the Golden Glades column to the left of that represents essentially local traffic in the Golden Glades' office.

Q Let me ask you this: Is that number in the total, the far right-hand column, is that proprietary?

A I would say it was. I'm not sure I'm the authority on what is proprietary or not, but I assume that it is.
$Q$ Well, would you agree with me that under minutes per month Internet service traffic from unbundled loops, which is from Supra's customers, you're projecting over seven figures, seven figures per month?

A Yes.
Q Okay. All right. Mr. Ramos also threw a question to you. He said that the late-filed deposition exhibit to Mr. Milner's deposition, that that information showed only a $5 \%$ growth rate for these offices, and when $I$ asked him what that included and how that number was reached, he said to ask you. So I'm asking you?

A When we -- We've represented that $5 \%$ figure from several different sources. Initially the first place we keyed into that was on analysis of BellSouth's annual reports and other publicly filed documents. But in terms of what Mr. Ramos testified to this morning, that's related to a summary of the traffic provided in Mr. Milner's late-filed deposition where we went through and analyzed. that portion of the graph forecast that represented service to subscribers and took that as a ratio from year to year to what's currently being served.

Q Okay. So what you base your $5 \%$ growth rate on was just the growth in access lines?

A That's correct.
Q So you didn't take into account the
interconnection trunks needed for interexchange carriers, ALECs or other entities like that?

A Well, you have to look at both sides of the switch to take care of that. We certainly took into consideration all the large amounts of expansion that are currently being done in the area of the DLC support.

Q Okay.
A And that's definitely trunking requirements.
Q So is the answer that you did take it into account or you did not?

A I believe we did.
Q But you took -- you only looked at the growth rate of access lines, correct and extrapolated that to the other companies?

A The 5\% figure represents growth in customer circuits, yes.

Q Now Mr. Nilson, you're vice president of systems design and interconnection for Supra; is that correct?

A Yes, ma'am.
Q Are you an officer of the company?
A No, I'm not.
Q And who do you report to?
A I report to Mr. Lewis Bender.
Q And is that as of a week ago, approximately?
A Yes.

Q Okay. And prior to that, you reported to Mr. Ramos?

A That's correct.
Q And you're an electrical engineer not by educational degree but by experience?

A From my studies in college and from my experience over the past 25 years, yes.

Q And your experience has been in the microwave industry, the heart pacemaker industry, and aircraft communication systems?

A That's correct.
Q Do you have any experience in the designer configuration of a public switch network central office?

A If you are asking if I've ever been employed by Bellsouth or any of the other RBOCs, no, I do not.

Q No, I'm not asking you if you've been employed by Bellsouth or the other RBOCs. I'm asking if you have any experience in designing or the configuration of a public switch network central office?

A I've had a good deal of experience interfacing with that network but not with actually designing the network itself.

Q Okay. Have you had any experience in the actual configuring of space in a public switch network central office?

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A Configuring space?
Q Uh-huh.
A That's pretty much what $I^{\prime}$ ve been attempting to do the entire time I've been working for Supra.

Q Okay. But that's where your experience has been, right, with Supra?

A Yes, ma'am.
Q Prior to the walk-throughs through the North Miami Golden Glades and the West Palm Beach Gardens office, had you ever physically been inside an incumbent local exchange company's central office?

A I didn't hear the entire question.
Q Prior to the walk-throughs that we had at the North Dade Golden Glades office and the West Palm Beach Gardens office, had you ever physically been inside an incumbent local exchange company's local office?

A No, ma'am.
Q Okay.
MS. WHITE: That's all I have. Thank you. COMMISSIONER DEASON: Staff. CROSS EXAMINATION

BY MS. KEATING:
Q Good afternoon, Mr. Nilson. I've just got a couple of questions, and they relate to your floor plan diagram.

A All right.
Q You'd indicated certain areas in blue, and I believe you said that those were the areas where Supra preferred to collocate; is that correct?

A Yes, we prepared that per your request.
Q Okay. Could you explain to us what it is about those areas that you indicated in blue, why they are preferred by Supra for collocation?

A I'll be glad to. Shall we have the overlays put back up again?

Q That would be helpful.
COMMISSIONER JACOBS: While they are doing that, Mr. Nilson, I had mentioned -- I'm glad this came up because you had indicated there had been some, I think it was frames that had been removed that created some space; is that correct?

WITNESS NILSON: Yes.
COMMISSIONER JACOBS: If when you -- as you go through this, could you just point that out for me? Well, let me ask you this question: Was any of that space used in your request for space? Were you looking at that space for your request?

WITNESS NILSON: Specifically in terms of Erames of equipment that were removed from the central office?

COMMISSIONER JACOBS: Right. Right. Were you
looking at any of that space to fulfill your request, or was that just going to the point to indicate that those growth projections had not met their original, the original requirement?

WITNESS NILSON: In some areas we looked at places where equipment had been removed, and in other places where equipment was removed it was of a fragmented nature and was being used by BellSouth then to allow space to what they call turnaround space where they have put new equipment in, hook it up, get it working and then take the old equipment out; and in those cases, no, we did not approach those particular spaces.

COMMISSIONER JACOBS: I see.
WITNESS NILSON: So your answer is both yes and no.

COMMISSIONER JACOBS: I understand. Thank you. WITNESS NILSON: One of the places where the answer is yes is here in this first option. If you refer to the Option Number 1, I'll go down through some of the reasons that we identified this area as potentially for collocation. The first reason is that in quite close proximity to one another there is access to both the isolated and integrated ground plains. That allows us to install both our switching and our transmission equipment in one physically isolated region. If you notice, it's
kind of off in a corner of the central office. It's in close proximity to the main distribution frame from which all of the unbundled loops are provisioned from.

The fact that it's off to the corner of the central office leads one to think that there is a potential for constructing the fire walls if it's deemed they are necessary in that particular area, and the particular equipment that was installed in the area, the integrated ground plane, is of the nature of what Commissioner Jacobs just asked about. It's largely equipment that's coming to the end of its life. There are a lot of empty frames in that area and apparently was a place where some of the older equipment had been installed at one time and a lot has been removed.

Additionally, one of the reasons we focused on that particular area to cover the needs of the switching equipment on the isolated ground plane is that the -- we were told during the walk through that the MAP terminals located in that location were duplicated and functioned by additional terminals located in the upper left-hand corner of the central office where there are additional terminals ostensibly used for the same purpose. So we weren't asking in this case to remove the only means of access to that switch, just one of the duplicated means.

BY MS. KEATING (Continuing):

Q And what about the other areas you've indicated in blue?

A Okay. In this Option 2 area, we chose the right-hand blue region which is on the isolated ground plane because during the Volume 2 Production of Documents we discovered in POD Number 27 that the space reserved in that area would account for six to seven years growth on the tandem switch and up to 25 years growth on the operator services switch in that area, and we seen that -- we felt that given that long a projection forward that it would be reasonable to ask that that space be turned over for the purposes of collocation.

The blue area to the left is in an area that BellSouth has identified is available for virtual collocation. It sits on the integrated ground plane; therefore, it's suitable for the installation of transmission equipment; and we chose it predominantly because it had already previously been identified as one of the available collocation spaces in the office.

Q Could you explain to me the difference -- you've got an Option 2 here that you just explained, and then on your Option 3 for this office, you've just got color coded the places you just described that has vertical collocation that is on the integrated ground plane?

A I'd be glad to. I've explained that quite a few
times in the last week. It seems to hit everybody the same way.

What Option 3 represents is a choice of two particular spaces, one on the first floor, one on the second floor. The one on the first floor to supply the integrated ground plane, the one on the second floor to supply the isolated ground plane. So for the purposes of my Option 3, you actually have to look at two sheets of paper to see the entire area. The space, again, set aside on the first floor is that integrated ground plane area that $I$ already explained in Option 2 why that was chosen.

On the second floor -- on the second floor, which is the next page and is represented by the overlay they are putting up right now, that area, again, in Volume 2, POD Number 27 is identified as being four to five years future growth space for the $01 T$ tandem and the DSO local switch in that office; and there is also a statement in there that that time period could be extended considerably beyond that period by the process of the LM to LCM upgrades that have previously been testified as already in progress in that office. So we knew that from that estimate there was approximately four to five years capacity in that area and that they had the ability to make that a larger amount of time, so we selected that for being returned for purposes of collocation.

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Q And for the West Palm Beach Gardens office? A Again, in the West Palm Beach Gardens office, let's take the upper right-hand area. That's space that sits in the integrated ground plane area suitable for transmission equipment, close proximity to the main distribution frame from which the unbundled network elements need to be provisioned, so we get good close proximity to make those connections in a clean fashion. And the other reason is that it's in an area where virtual collocation has been granted to another customer, so we didn't think it would be all that unreasonable to ask for that area. I would point out that there were numerous other places where that could have been selected. That was just one suggestion that we've made.

Regarding the location of switching down in the lower left-hand corner, that represents growth in their 04 tandem space. There is three lineups of switching equipment provided for, and we also noticed during the walk-through that at least three frames of the lineups that are currently installed are installed with dummy panels, which means they are not currently being used for service.

Leaving that portion aside, the three lineups of
14 frames each at a rate that has been testified to as seven frames per year of growth represents a six-year growth space. So we estimated that where they've reserved

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six years of growth space that it would be reasonable to ask that some of that space be returned for collocation purposes.

Q I'd like to direct your attention to the upper left-hand corner of that chart.

A Yes, ma'am.
Q And I'm looking at two particular areas, the first one is the OCC administrative. It looks like uncrating; is that correct?

A Yes, ma'am.
Q Okay. And then right next to that, "Equipment staging."

A Yes.
Q Is there anything about those two areas that make them unsuitable for physical collocation?

A No, not at all. Quite honestly, these proposals were produced under a time crunch. We could have gone on and selected additional spaces within the Gardens office, but this was the amount of work we were able to prepare and get it submitted to you by the time limits we had.

Q But they're not -- while they may be suitable for physical collocation, they are not necessarily preferred like the areas you've indicated in blue?

A I don't know if I want to make that statement. We would like to collocate our equipment in this office.

Provided we have a, you know, a technically good place to mount our equipment, we would be satisfied with collocation.

Q Okay. Well, if I could direct your attention back to the North Dade Golden Glades floor plan.

A Yes, ma'am.
Q And over on the left-hand side is the "Work Area Restoration."

A Yes, ma'am.
Q Is there anything about that area that makes it unsuitable.

A Not at all. Indeed, that's already surrounded with -- I can't certify that it's a fire-rated wall, but it's certainly surrounded by the type of walls that are similar to a fire-rated wall, and it could be used for collocation purposes. We did mark it in red, the available spaces, because we noticed that at some point during the walk-through process the purpose of that room had been changed; therefore, we determined, or we assumed that the original purpose for that room as administrative space had been decided as not as important as another use.

Q Thank you, Mr. Nilson.
MS. KEATING: That's all we have.
COMMISSIONER DEASON: Commissioners.
(NO RESPONSE)

THE COURT: Redirect.

REDIRECT EXAMINATION

BY MS. SUMMERLIN:
Q Mr. Nilson, I've got just a few questions. First of all, let me go back to something that was mentioned by Ms. White. Do you believe that BellSouth under the Telecommunications Act has a duty to maximize space available for physical collocation?

A Yes.
Q Do you believe that that includes updating equipment that is obsolete and/or under-utilized?

A Yes.

Q Okay. On the proprietary exhibit, your late-filed -- it's identified DAN-2. On the page where you were going through with Ms. White, I think it's the third page. She was pointing you to a column under the heading, "ISP Traffic From Supra Subscribers," under that section.

A Yes, ma'am.
Q She was talking to you about the far-right figure for the first category under that, which was the minutes per month, ISP from unbundled loops, and she was pointing out that that was a seven-figure aggregate amount; is that correct?

A That's correct.
Q Okay. Is it --

A That, by the way, represents traffic that solely exists on Supra's network. It's not traffic that interconnects to BellSouth in any way.

Q Okay. On the second line of -- right directly underneath that category, it's got minutes per month, ISP from PBX T1s.

A That's correct.
Q Is the figure in that farthest right column, the aggregate figure, also a seven figure or in excess of seven figures?

A That's correct.
Q Okay.
A And, again, that's traffic that's strictly from Supra subscribers to data networks under our control and doesn't transit BellSouth's network.

Q Okay. Is there - or let me just ask you a couple of the things about the ascend TNT to try to follow it with what Ms. White said. Does the ascend TNT SS7 generate call detail records for billing?

A Yes, it does.
Q Okay. Is there a reason BellSouth should be glad that Supra wants to deploy the TNT SS7 platform?

A In my opinion, yes. The predominant purpose that this particular piece of equipment was designed for is to off load the public switch telephone network from
congestion. The particular attributes of this switch allow calls to be routed through this, either data or voice calls without burdening the BellSouth access tandems; and for that purpose, we are actually doing them a service.

Q Okay. Does the ascend TNT SS7 support TCAP and AIN services?

A Yes, and Release 3.
Q What exactly are these services?
A Those are advanced services that are traditionally supported by Class 5 switching platforms.

Q Okay. Does BellSouth provide these services?
A Yes, they do.
Q What equipment does Bellsouth use to provide these services?

A Their Class 5 telephone switches.
Q Okay. Does ascend TNT SS7 route voice and fax and data calls?

A Yes, in Release 4 it will. Yes.
Q Okay. What are these services exactly when you talk about voice -- just voice fax and data?

A That's the ability for the switch to handle traditional voice circuits or data circuits transparently across a broad band rather than a narrow band network for trunking and space efficiency.

Q Okay. Does Bellsouth provide these services?

A Yes, they do.
Q What equipment does BellSouth use to provide these services?

A Their Class 5 switches.

Q Is it your understanding that Bellsouth's position has been that a CLEC can physically collocate any equipment in an arrangement as long as it provides both telecommunications services and enhanced services from the same arrangement?

A Yes, that is provided for by CFR 47.
Q How do you define the term "arrangement?"
A "Arrangement," I would refer back to numerous documents that we receive on a daily basis from BellSouth that talks about arrangement in terms of the entire collocation that we are attempting to make in a given central office. That would include power frames and unbundled network elements, basically our entire space in the equipment that is enclosed within it.

Q Okay. When you talk about the concept of a one-source provider, does that mean that a company needs to provide all of the basic telecommunications services?

A Yes.

Q Is that what Supra's business plan is?
A Oh, absolutely.
Q Does that mean that Supra wants to provide local
service?

A Yes.

Q Does BellSouth provide local service?
A Yes, they do.
Q Does BellSouth provide long distance?
A Well, not directly, through Bellsouth Long Distance, and I understand it's provisioned through Bellsouth Mobility using those two affiliates, Yes.

Q Okay. Does Supra want to provide long distance?
A Yes.
Q Does Supra want to provide Internet services?
A Yes.
Q Does BellSouth provide Internet service?
A Through BellSouth.net, yes.
Q Is it Supra's position that it must be able to provide these services to be able to compete with BellSouth?

A Yes.
Q Okay. You have stated to Ms. White that you haven't spent a lot of time configuring BellSouth central offices. Exactly what kind of experience have you had that gives us authority to be talking about this subject matter?

A Most of the work that I've done over the years has been in project and program management where $I$ have either been required to plan and forecast requirements of

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various types, and additionally look at floor space requirements in manufacturing facilities to support required needs in advance. This was done under several industries governed by either the Department of Defense or the Food and Drug Administration.

Q Have you had extensive vendor contact?
A All my life, yes.
Q Okay. Does having extensive vendor contact give you an opportunity to get educated on the most technologically advanced aspects of the areas you are looking at?

A Yes.
Q Has that happened in this situation dealing with the ascend TNT?

A Absolutely. Sometimes it's a two-way street. Sometimes we educate the vendors. It's sometimes a necessity that information flow from us to them as well.

Q Is it true that you've had extensive interaction with the three major switch vendors?

A Absolutely, not only interaction but visits to numerous of their facilities, discussions with their design and project planning engineers.

MS. SUMMERLIN: I have no further questions.
COMMISSIONER DEASON: Exhibits.
MS. SUMMERLIN: Supra would like to move the

Exhibit 23.
COMMISSIONER DEASON: Without objection Exhibit 23 is admitted.

MS. SUMMERLIN: Supra would call Mark Graham. Whereupon,

MARK C. GRAHAM was called as a witness on behalf of supra and, after being duly sworn, testified as follows:

DIRECT EXAMINATION BY MS. SUMMERLIN:

Q Mr. Graham, would you please give your name and address for the record?

A My name is Mark Graham. My address is 2670 Southwest 27 th Avenue in Miami, Florida, 33133.

Q Did you prefile direct testimony in this proceeding consisting of 11 pages?

A Yes, I did.
Q Okay. And would your answers to these questions be the same if I asked you these questions here today?

A Yes, they would.

Q Do you have any changes or corrections to your testimony?

A No.
MS. SUMMERLIN: I would ask that Mr. Graham's direct testimony be inserted into the record as though
read.

COMMISSIONER DEASON: Without objection it shall be so inserted.

MS. SUMMERLIN: Rebuttal, I'm sorry.
COMMISSIONER DEASON: I'm sorry?
MS. SUMMERLIN: I misspoke and said direct. It was rebuttal testimony.

COMMISSIONER DEASON: Very well.

SUPRA TELECOMMUNICATIONS \& INFORMATION SYSTEMS, INC.
REBUTTAL TESTIMONY OF MARK C. GRAHAM BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 980800-TP
September 21, 1998
Q. PLEASE STATE YOUR NAME AND ADDRESS.
A. My name is Mark C. Graham. My business address is 2620 S.W. $27^{\text {th }}$ Avenue, Miami, Florida 33133.
Q. BY WHOM ARE YOU EMPLOYED?
A. I am employed by Supra Telecommunications and Information Systems, Inc., as Vice President, Voice Mail.
Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?
A. During my telecommunications career, I have attended numerous technical courses related to my work with various employers.
Q. WHAT IS YOUR TECHNICAL EXPERIENCE?
A. I have attached as exhibit MCG-RT1 my resume detailing my technical experience. In 1979, I began my career in the telephone business with GTE Automatic Electric as a field installer. Automatic Electric was a telephone company switch manufacturer. That position primarily involved installing central office additions to older mechanical early electronic switches. My next position was with GTE of the Southwest based in Bryan, Texas. There.।
continued working in GTE central offices throughout the region installing smaller projects such as remote line test equipment.

In 1984, I began work for Northern Telecom as a field installer and later as an installation supervisor based in Richardson, Texas. During this period I installed a number of DMS250 switches for various long distance companies including MCl , Sprint and others. The DMS250 is very similar physically to the DMS100s and DMS200s located at both the North Dade Golden Glades and the West Palm Beach Gardens central offices. I was the installation supervisor for the first DMS300 international switch in the United States for Sprint in New York City.

After three years, I took a position in the technical assistance group at Northern Telecom in Morrisville, North Carolina, supporting their DMS100 product line and requiring occasional on-site support throughout the area from Virginia to Florida.

1 left Northern Telecom in 1989 for a position at Siemens Public Switching in Boca Raton, Florida. My first position there was as an installation supervisor for Siemens' EWSD product, installing local central office switches at sites in Illinois, Florida, Pennsylvania and Wisconsin. Although the product was very different from Northern Telecom's DMS series, the installation requirements within the central office environment were identical.

I was later promoted to First Office Application engineer for Siemens where I designed test plans for new products and features and then tested those products in the field.

In 1992, I left Siemens to work for Boston Technology, a voicemail system manufacturer based in Wakefield, Massachusetts. Boston Technology
has since been acquired by Comverse and is now known as Comverse
Network Systems. My employment at Comverse for the past eight years has been as a Senior Field Engineer. Although my headquarters was based in Massachusetts, my primary responsibility was in the BellSouth region from North Carolina to Louisiana. The job consisted of installing new systems, typically five cabinets, within the central offices and upgrading these systems with additional hardware and software.

## Q. WHAT EXPERIENCE HAVE YOU HAD INSIDE LOCAL EXCHANGE COMPANY CENTRAL OFFICES?

A. I have spent much of my career installing equipment in central offices for various RBOCs over the past nineteen years. I have also spent a good deal of time in many BellSouth central offices over the past eight years.

## Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY BEING

 FILED TODAY?A. My testimony is filed in rebuttal to direct testimony filed in this proceeding by Mr. W. Keith Milner, Mr. James D. Bloomer, Mr. David Thierry, and Mr. T. Wayne Mayes, on Issues 1-5 in this proceeding.
Q. DO YOU AGREE WITH MR. MILNER'S CONCLUSION THAT THERE IS NOT SUFFICIENT SPACE TO PERMIT SUPRA PHYSICAL COLLOCATION IN THE NORTH DADE GOLDEN GLADES AND WEST PALM BEACH GARDENS CENTRAL OFFICES?
A. No. Based on my review of documents and other materials in this proceeding and my own walk-through of the North Dade Golden Glades and West Palm Beach Gardens central offices, it is my opinion that BellSouth has failed to take many actions which could increase the amount of available space for physical collocation in these central offices.

## Q. WHAT SPECIFIC ACTION COULD BELLSOUTH TAKE IN THESE TWO

 CENTRAL OFFICES WHICH COULD INCREASE THE AMOUNT OF AVAILABLE SPACE FOR PHYSICAL COLLOCATION?A. From my observations during the walk-throughs of both of these central offices, it is clear that BellSouth is utilizing out-dated arrangements of work stations that require more space than is necessary. These work stations are wasteful because the individual employees do not require numerous desks and terminals to perform the tasks required. The great majority of the time, no employee will be sitting at most of the terminals in the central office. It is technically feasible to monitor ail of the switches in a central office from a remote location. Therefore, it is technically feasible to monitor those switches from a single location in the central office. BelliSouth could greatly increase the amount of available space by consolidating the numerous maintenance and administrative or "MAP" positions throughout both of these central offices. There are numerous technical options that can be utilized. One such option is BellSouth could install computer work stations that are set up to monitor numerous switches as opposed to having a separate work station and DEC VT220 or equivalent computer terminal for almost every switch in the central office. One technology I have seen used to reduce terminal and work station
space requirements is a switchbox used to allow one terminal to access mutliple computers. The specific example I have seen involves the use of equipment from Black Box corporation. This same configuration could drastically reduce the space requirements of the terminal and work stations within these central offices at a minimal expense to BellSouth and resulting in easier and quicker access by the technicians in the process.

BellSouth could also incorporate many more of the monitoring computer work stations into the frames, which would eliminate the need for so many MAP positions to be scattered throughout these central offices.
Q. IS THERE ANY OTHER ACTION BELLSOUTH COULD TAKE TO INCREASE THE AMOUNT OF SPACE AVAILABLE IN THESE TWO CENTRAL OFFICES?
A. Yes. Based on my observations during the walk-throughs of these two central offices, BellSouth could remove inoperable equipment and cables to increase available space.
Q. ARE THERE STILL OTHER ACTIONS THAT BELLSOUTH COULD TAKE to increase the available space in the north dade golden GLADES AND THE WEST PALM BEACH GARDENS CENTRAL OFFICES?
A. It is apparent from my observations during the walk-throughs of these two central offices that BellSouth has scattered supply cabinets and file cabinets and piles of various equipment and supplies throughout these central offices in a disorganized fashion. The North Dade Golden Glades central office has a supply room that could be redesigned to accommodate a much greater *
amount of storage than the storage for which it is currently being utilized. This would permit the removal of the clutter and cabinets spread throughout the central office.

The West Palm Beach Gardens central office has an extremely large supply room with a very high ceiling that could easily be redesigned and reorganized to accommodate all of the supply storage needs of this central office. This reorganization and redesign would free up a significant amount of space in many areas of this central office.

BellSouth also stated that several areas of space were being utilized as "staging" areas for current projects being done by vendors. While working for Siemens, one of our installations in Pontoon Beach, Illinois, had very little existing space and no room in the central office for support materials such as cables, installation hardware, and tools. Our solution was to leave the support materials in a truck outside the central office until needed. This eliminated the need for us to maintain space within the central office for such materials. A similar method could be used by BellSouth to reduce the floorspace requirements of vendors within the central offices in question.
Q. HAS IT BEEN YOUR EXPERIENCE THAT MORE TECHNOLOGICALLY ADVANCED EQUIPMENT REQUIRES LESS AND LESS PHYSICAL SPACE? A. Yes.
Q. HAS IT BEEN YOUR EXPERIENCE THAT THE NEED FOR SPACE IN CENTRAL OFFICES HAS INCREASED OR DECREASED IN THE LAST FEW YEARS GENERALLY SPEAKING?
A. It has been my experience over the last nineteen years that the trend in telecommunications equipment utilized by local exchange carriers is for that equipment to become smaller and smaller with larger and larger capacity.
Q. BASED ON THIS EXPERIENCE, WOULD YOU EXPECT THE GROWTH FIGURES AND THE CONCOMITANT NEED FOR SPACE FOR A LOCAL EXCHANGE CARRIER TO BE INCREASING OR DECLINING ON A YEARLY BASIS, SPEAKING IN GENERAL TERMS?
A. I would expect growth figures to be declining and, therefore, the local exchange carrier's need for future space to be decreasing on a yearly basis.
Q. IN YOUR WALK-THROUGHS OF THE NORTH DADE GOLDEN GLADES AND THE WEST PALM BEACH GARDENS CENTRAL OFFICES, DID YOU NOTICE ANY FIRE WALLS BETWEEN BELLSOUTH'S TELECOMMUNICATIONS EQUIPMENT AND THAT OF ANY OTHER COMPANY LOCATED IN THESE CENTRAL OFFICES?
A. No. I did not observe any fire walls between BellSouth's telecommunications equipment and that of other companies located in these central offices.

In fact, I have personally observed the equipment of a BellSouth subsidiary physically collocated in a BellSouth central office within the past twelve months and I did not observe any fire wall construction of any sort.
Q. DO YOU HAVE ANY COMMENT BASED ON YOUR EXPERIENCE ON THE REASONABLENESS OF A THREE MONTH TIME FRAME FOR

BELLSOUTH TO COMPLETE THE PREPARATION OF THE SPACE FOR THE PHYSICAL COLLOCATION OF SUPRA'S TELECOMMUNICATIONS EQUIPMENT IN THESE TWO CENTRAL OFFICES?
A. Supra is not requesting an enclosed space in BellSouth's central offices and, as I previously stated, I have not observed fire wall construction around the equipment of other companies in these central offices or in other BellSouth central offices. Therefore, the preparation of the space for the type of equipment Supra wishes to physically collocate should not involve "construction" or other elaborate measures. Therefore, a three month time frame should be very generous.

## Q. ARE YOU FAMILIAR WITH THE TELECOMMUNICATIONS EQUIPMENT LOCATED IN CENTRAL OFFICES AND UTILIZED BY LOCAL EXCHANGE CARRIERS?

A. Yes. I have installed and worked with similar equipment for long distance carriers throughout my career. I have also installed voicemail equipment for BellSouth in various BellSouth central offices through the nine state BellSouth territory.
Q. IN YOUR EXPERIENCE, DO LOCAL EXCHANGE CARRIERS HAVE REMOTE ACCESS CONCENTRATORS AND ROUTERS LOCATED IN THEIR CENTRAL OFFICES THAT ARE UTILIZED FOR THE ROUTINE PROVISION OF LOCAL EXCHANGE TELECOMMUNICATIONS SERVICES?
A. Yes.

## Q. WHY WOULD A LOCAL EXCHANGE CARRIER NEED REMOTE ACCESS CONCENTRATORS AND ROUTERS TO PROVIDE LOCAL EXCHANGE TELECOMMUNICATIONS SERVICES?

A. Local exchange carriers use this equipment to send and receive information inside central offices for basic local exchange telecommunications services. Remote access concentrators consist of banks of modems. As an example, the Boston Technology voicemail systems I installed for BellSouth typically had a bank of modems installed. These modems were used to deliver data to and from surrounding central offices for delivery of Message Waiting Indication (Stutter Dialtone) to the switches from the voicemail system. Also, these modems were used as remote access ports for remote alarm monitoring, mailbox provisioning, billing data acquisition and remote maintenance.

The FCC has recognized the importance of national standards for the attachment of electronic equipment in central offices and has specifically addressed this issue in Paragraph 163 of the FCC's Order 98-188, as follows:

To facilitate competition in the local loop, we tentatively conclude that there should be uniform national standards for attachment of electronic equipment (such as modems and multiplexers) at the central office end of a loop by incumbent LECs and new entrants. The requirements would apply to both incumbent

LEC and new entrant equipment. The requirements would serve the same role, for the
attachment of equipment to the central office end of a loop, as do the Part 68-Connection of Terminal Equipment to the Telephone Network - rules for the attachment of customer premises equipment. Currrently, each incumbent LEC set its own requirements for central office equipment, and each has its own processes for certifying equipment before it can be connected to loop plant. This increases new entrants' costs and time to market. A simple set of national requirements would reduce new entrants' costs, speed their time to market, and reduce confusion. We seek comment on the content of these requirements. We also seek comment on whether central office equipment complying with these requirements should be certified, and if so, how.

The above quotation indicates that the FCC has recognized the importance of national standards in how central office equipment is connected. It is apparent that the FCC recognizes the necessity of modems and multiplexers as equipment necessary for the provision of local exchange telecommunications services. If Supra is denied the opportunity to utilize such basic equipment in the provision of its services, it will not be able to provide useful competition to

1 BellSouth, which is the point of Supra's desire to physically collocate in these
2. two central offices.

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A. Yes.

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BY MS. SUMMERLIN (Continuing):
Q Mr. Graham, did you also prefile an exhibit that is your resume that was attached to your rebuttal testimony and it's identified as MCG-1RT?

A Yes, I did.
Q So that is basically just your resume that you prepared.

MS. SUMMERLIN: Okay. I would ask that
Mr. Graham's exhibit be identified for the record as Number 24.

COMMISSIONER DEASON: It will be so identified.
MS. SUMMERIIN: Okay.
BY MS. SUMMERLIN (Continuing) :
Q Okay. Mr. Graham, have you prepared a summary of your rebuttal testimony?

A Yes, I have.
Q Okay. Would you give that summary now before you proceed to go into the video presentation?

A Certainly.
Q Okay.
A Hello. I've been employed by various telephone switch vendors and voice mail equipment manufacturers for the past 19 years. During this time I've spent the majority of my working life installing, testing and upgrading this equipment inside central offices throughout
the country. It is my opinion that the central offices in question, Golden Glades and West Palm Beach Gardens, currently have sufficient space to provide physical collocation for Supra's equipment. In addition, my testimony presents some reasonable options which could be used by BellSouth to generate even more space. Were these central offices not tandem offices through which most of our customers phone calls will be routed, the issue of space would not be so critical. But with the current market share that BellSouth commands, this issue is of prime importance to my company.

My testimony also addresses the requirement of Supra to be allowed to install modems and routers within the physical collocation space commonly termed "remote access concentrators." What I'm referring to here is the ascend TNT as well as the Cisco equipment. This equipment can and will be used to provide Supra the ability to provision, maintain, collect billing information and to provide alarming capability remotely. Identical in function to BellSouth's various modems and routers but more space efficient. It will also be used to provide direct basic telephony functions to PBX customers and to provide ISDN basic rate and ISDN primary rate services to customers. The ability to provide these services and to access our equipment remotely is simply mandatory to any
physical collocator.
Finally, my testimony addresses the BellSouth requirement of installation of fire walls separating Supra's equipment from BellSouth's. I have seen first-hand examples of virtual collocator's equipment located within BellSouth's central office without fire wall construction. I have seen first hand a separate BellSouth Internet subsidiary collocated within a BellSouth central office without fire wall construction. I have heard testimony from BellSouth that the fire wall requirement is being required by local municipalities and building codes. Yet, if this were so, why would BellSouth specifically state in its company-wide collocation guide that walls will be constructed? It is interesting that BellSouth will allow separate collocators to erect equipment without walls between them yet requires them to be located between their own equipment and that of the physical collocators. It is, therefore, my belief that the issue of walls and their inherent space requirements are a desire of BellSouth, not one of local ordinances. As such, this desire should be superseded in cases of restricted space where no codes require fire walls, and the burden of this expense for any walls not required by local ordinances should be placed upon those who desire it.

It is for these reasons that I appear here today
and present my rebuttal testimony as well as a videotaped walk-through of the central offices in question. I ask that the Commission review the testimony of my company and determine the validity of our arguments which are crucial to the success of our fledgling company. Thank you very much.

Q Mr. Graham, you've now got your video presentation to present?

A Yes, I'll try to keep it as brief as possible. Due to not being able to actually edit and cut out things, I'm going to have to be doing some fast forwarding and rewinding. Also, I would ask that I have some help in just demonstrating what areas we are viewing on the tape.

I'm going to start with the Golden Glades walk-through. As I mentioned before, these tapes comprise, I believe it was seven hours worth of videotape, so we'll do our best to get through them as quickly as possible. I ran it through yesterday just to see how long it would take. I'm anticipating about a half hour.

The first area I'm going to be describing is this area where the old STP is currently located. That is here, if $I$ can get it to play correctly.
(VIDEO PLAYED)
A Most sections won't be as long as this one. I just want to -- this is one of our crucial areas.

COMMISSIONER CLARK: Mr. Nilson, will you show us where we are looking on your --
(Mr. Nilson indicates)
WITNESS NILSON: The STP is in this area (indicates). The 03 and 04 --

COMMISSIONER DEASON: Mr. Nilson, I'm sorry, you cannot be testifying at this point. You don't even have a microphone, unless you want to take another mike.

A As he is saying, the equipment you are looking at there will be removed. This is the existing STP that is going to be removed as well as the extra space shown, which has been described in the tape as being for the 0 -- for the STP, the 03 T and the 04 T switches.

The next area that we proceeded to was the middle red block. That's it (indicates) As stated in the tape here, this is for the 04 T switch.
(VIDEO PLAYED)
A That's this area here (indicates). That was an interesting statement right there, this is the only area open for the 04 T switch. We have just seen earlier space designated for the 04 T switch.

We will now proceed to --
COMMISSIONER JACOBS: So the first area was --
WITNESS GRAHAM: The first area was designated as space for growth of the $S T P$, the $03 T$, and $04 T$ growth space.

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COMMISSIONER JACOBS: And then the second is designated for growth for a separate switch.

WITNESS GRAHAM: Just for 04T.
COMMISSIONER JACOBS: Tandem? That's the tandem?
WITNESS GRAHAM: That's the tandem.
COMMISSIONER JACOBS: Okay.
A The next area is the blue area actually currently shown here, the virtual collocation, slash, future transmission area.
(VIDEO PLAYED)
A That was that area in blue.
The next section is an area that we have not got marked in red. It's above the current air handing unit. It's similar to the room that will be available for the air handling unit when it's moved later on.

MS. WHITE: Ms. Summerlin, I'm a little confused. I thought that the portions of the tape that you were going to show was only going to correspond to the red areas.

WITNESS GRAHAM: Because of the limited space currently in the air handling we felt like it would be better to show the same amount of space that will be cleared up when it's moved; however, if you'd like, I can skip that part. We've certainly got plenty.

MS. WHITE: I just wanted to make sure I understood what we were watching.

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MS. SUMMERLIN: No, I don't understand that we had made that representation. We were primarily focusing on those areas, but also other areas that we thought were important. We gave you the flagging stops so that you could know that ahead of time.
(VIDEO PLAYED)
A The next area we'll be moving on to is what is marked as "Work Area Restoration OCC Admin." That's this area here (indicates).
(VIDEO PLAYED)
A The next area is the DAX terminal area. That's actually -- yeah, that's within that area. We are just here demonstrating some of the various terminal equipment that's located within the office.

COMMISSIONER JACOBS: If I recall, in this office there is one collocator there now, virtual collocator there now? Not in this office?

WITNESS GRAHAM: I think that's in the other office, if I'm not mistaken.

A I'm afraid some of this - - these video tapes don't tend to be terribly accurate, so my numbering system isn't always right. This was some of the terminal equipment $I$ was attempting to show.
(VIDEO PLAYED)

A Again, this is terminals and work stations within
the occupied area. There is obviously quite a bit of this sort of terminal equipment. I'm just using this as a demonstration of one of the areas.

The next area I'm going to be showing is the transmission maintenance area. This area is currently houses a lot of terminal equipment which you'll see shortly.
(VIDEO P.LAYED)
A As said, there is a monitor for each switch.

The next section is the -- is just the
demonstration of some unused space in DSX racks. This speaks to the issue of fragmented space throughout the office. Again, $I$ apologize, the timing is not accurate.
(VIDEO PLAYED)

A What I'm trying to demonstrate is above these DSX panels there is quite a bit of space open up there that is not currently being used.

The next area I'm going to show is the MAP positions in the northeast corners. These are where the current terminals for the tandem and STP switches are. That's the area.
(VIDEO PLAYED)
A With a little luck he'll turnaround and start showing the terminals. That's what I'm trying to show. Again, this is the area for maintenance of the 03 T and

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$04 T$-- no, no, no, the STP, apparently, switches.
The next area I'm going to go to, we traveled upstairs at this point; and if we can get the second floor plan put up there. This is the area designated as computer base training area, CBT area and the southeast area. That would be this area here.
(VIDEO PLAYED)
A I'll now proceed to the MAP positions for the tandem and local switches. Again, these are -- Actually, I've lost my tape. I'm going to fast forward to that part. This is the area here where there are, again, multiple terminals for controlling the different switches, tandem switch and the local switch.
(VIDEO PLAYED)
A The next area I would like to proceed to is the staging area in the northwest. The reason I call it the staging area, there is currently vendors in that location who have put their equipment for installations physically located in that area.
(VIDEO PLAYED)
A I'm sorry, this is not the part that I was trying to show. I'm trying to get back to the beginning of this area. There we go.
(VIDEO PLAYED)
A As you can see, there is quite a bit of space
there open at the moment. They are showing for 01T growth. I'm not going to subject you to any more views of the floor.

The last on this tape is just an example of an internally mounted monitor, which is basically a work station within the frames as opposed to a separate table and work station setup. Obviously, my number is off here again. These were the terminals to which $I$ was referring.
(VIDEO PLAYED)
A By housing the terminals inside the bays, obviously that greatly reduces the floor space required for maintenance areas.

Now I'd like to proceed to the West Palm Beach Gardens video. The first area we'll be seeing here is the maintenance and administration area.
(VIDEO PLAYED)
A The next area is the SCP expansion in the northeast area.
(VIDEO PLAYED)
A The next scene is a demonstration of some modems within the Bellsouth office which are used for similar purposes to the ones we'd like to install; however, I think you'll --
(VIDEO PLAYED)
A I'm going to back it up.

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(VIDEO PLAYED)
$\square$
A The next area I'd like to show is more of the SCP expansion area.
(VIDEO PLAYED)
A Again, here are some internally mounted terminals.

The next area $I^{\prime} d$ like to go to is terminal areas for the STP, which at one point was part of the mainframe but now is freed up. I believe that's the top right red area. That's this area.
(VIDEO PLAYED)
A The next area is for the northeast red area labeled "Future Transmission, DSX-1 Lineup."
(VIDEO PLAYED)
A The next area $I$ would like to go to is labeled "Tightened Expansion," in the center.
(VIDEO PLAYED)
A The next area I'd like to go to is labeled as "Future Toll Growth Space." It's basically right beside the area we just now looked at.
(VIDEO PLAYED)
A I'm sorry, I don't think I correctly identified this area. This is over here (indicates). This is the area I'm referring to.
(VIDEO PLAYED)

A I'd now like to continue to another place with modems within the office. These particular modems are described as being used for customers to configure the DAX equipment.
(VIDEO PLAYED)
A Again, obviously this equipment sitting on a shelf like that is not a very efficient use of space; and, again, our -- the equipment that we want to put in will greatly improve that space efficiency.

I'd now like to proceed to the tandem growth area in the southwest. Overshot.
(VIDEO PLAYED)

A The next area I'd like to show is the MAP area for the tandem and local switches in the northwest area. I would also point out the statement concerning the center area, that this center terminal can monitor every switch in the building except for the SCP.
(VIDEO PLAYED)
A The next area I'd like to show is labeled as "Staging and Transmission Administration" areas in the northwest area. That's it right there (indicates).
(VIDEO PLAYED)
A I'm almost finished here. The next area I'd like to show is, again, the area where the $C O$ supervisor has his work space. That is currently identified as just below the
future virtual collocation area. I'm hoping to be able to stop on the virtual collocation area. Unfortunately, the cameraman doesn't always oblige what I'd like to see.
(VIDEO PLAYED)
A The next area I'd like to show is, again, an example of a terminal mounted inside the frames. This is just within the work space area. Again, an example of much more efficient work space.
(VIDEO PLAYED)
A This is what I'm referring to here.
(VIDEO PLAYED)
A The next area is, again, a demonstration of internal fragmented space. In this particular case there are approximately 12 to 14 frames worth of equipment scattered within the switch.
(VIDEO PLAYED)
A And the final area I'd like to show is just another example of modems within the, within BellSouth office use. "For a Customer to Interface to our Switch" is the description.
(VIDEO PLAYED)
A Again, as the tape runs along, the numbering goes off more.
(VIDEO PLAYED)
A And that concludes the video testimony.

MS. SUMMERLIN: Tender the witness for cross. COMMISSIONER DEASON: Ms. White. MS. WHITE: Yes.

CROSS EXAMINATION
BY MS. WHITE:
Q Good afternoon, Mr. Graham. My name is Nancy White. I represent Bellsouth Telecommunications. Does the FCC allow an incumbent local exchange company to separate the collocating carrier's space from the incumbent's facilities?

A The collocator's carrier space from the incumbent facility. I don't know the answer to that.

Q Okay. Have you got the Code of Federal Regulations with you, particularly section 51.323(I)?

A I do not have that with me.
Q Okay. Would you accept, subject to check, that that reads: "An incumbent $L E C$ may require reasonable security arrangements to separate a collocating telecommunications carrier's space from the incumbent LEC's facilities?"

A I will have to take your word on it.
Q I can show it to you if you don't want to accept my word.

A I accept your word.
Q Okay. Does Supra intend to put voice mail
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equipment in its physical collocations?
    A I believe so, yes.
    Q Does Supra intend to put Internet equipment in
its physical collocations?
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A I do not believe so.
Q Is voice mail considered an enhanced service?
A I don't know the answer to that.
Q Is Internet service considered an enhanced service?

A I would assume so.
Q Now you've had a lot of experience in the voice mail arena; is that right?

A Definitely.
Q So with your experience in the voice mail arena, are you familiar with the FCC orders on when and if and how a Bell operating company can put enhanced service equipment in its central office?

A No, I am not.
Q Now I'm a little confused with the question (sic) you gave me just a few minutes ago. You said that Supra did not intend to put Internet equipment in the physical collocation area.

A I guess I would need you to define Internet equipment.

Q Okay. Well, equipment that can provide Internet
service.

A We are expecting to put equipment in that has the ability to be able to access Internet services.

Q Well, and doesn't Supra intend to be an Internet service provider?

A Yes, but that equipment we don't plan to locate within the facility.

Q Okay. Where are you going to put that equipment?
A It's outside of my range, but $I$ would assume we are going to have servers and that sort of equipment located somewhere.

Q Now one of your ideas for coming up with some space in these central offices is to take the vendor staging areas, which we just saw a little bit of, and put those materials in a truck and park the truck outside the central office until the vendor needs it; is that right?

A This is a method that $I^{\prime}$ ve personally used in the past.

Q Okay. And when you used that method, where was that central office located?

A It was in Pontoon Beach, Illinois.

Q And would you agree with me that that's a rural area?

A Yes, I will not argue.
Q Would you agree me that the Golden Glades office
is in a very urban neighborhood?
A Yes.
Q Your title is vice president of voice mail?
A That's right.
Q And you report to Mr. Bender now, but a week ago it was Mr. Ramos?

A That's correct.
Q Okay. And your experience has been in the installment of switches for Nortel and Siemens and the installation of voice mail equipment for Converse Technology?

A That's right.
Q Your expertise here today isn't in the equipment side, is it, the equipment that I spoke to Mr. Nilson about?

A I'm familiar with central offices equipment as of about ten years ago.

Q Okay. And you've never had any experience designing a public switch network central office, have you?

A Installation, yes. Designing, no.
Q Okay. Thank you.
MS. WHITE: I have nothing further.
COMMISSIONER DEASON: Staff.
MS. KEATING: Staff has no questions.
COMMISSIONER DEASON: Commissioners.
(NO RESPONSE)
COMMISSIONER DEASON: Redirect.
MS. SUMMERLIN: No redirect.
COMMISSIONER DEASON: Exhibits.
MS. SUMMERLIN: We'd, Supra would move Exhibit 24.

COMMISSIONER DEASON: Without objection exhibit
24 is admitted.
Thank you, Mr. Graham.
We'll take a 10 -minute recess at this time.
(BRIEF RECESS TAKEN)
COMMISSIONER DEASON: Call the hearing back to order.

Ms. White.
MS. WHITE: Yes. BellSouth calls David Thierry. Whereupon,

## DAVID THIERRY

was called as a witness on behalf of Bellsouth and, after being first duly sworn, testified as follows:

DIRECT EXAMINATION
BY MS. WHITE:
Q Mr. Thierry, would you please state your name and address for the record?

A My name is David Thierry. My business address is 675 West Peachtree Street in Atlanta, Georgia.

Q By whom are you employed and in what capacity?
A I'm employed by BellSouth Telecommunications, Inc. as manager in the interconnection services pricing division.

Q Have you previously caused to be prepared and prefiled in this case direct testimony consisting of eight pages?

A Yes, I have.
Q Do you have any additions, changes or corrections to make to that testimony at this time?

A Yes, I do.
Q Would you please give those?
A I've got two minor corrections, one in my direct testimony, one in my rebuttal testimony.

Q Okay. Well, why don't you just give us the corrections in your direct at this time.

A Direct testimony on page 2, line 12, please insert Issue Number 4 as I omitted that when I was typing up my testimony. I addressed the issue. I just did not list it in the introductory section of my testimony.

Q What is the other change in your direct testimony?

A Actually, just the one, and then identical change in rebuttal.

Q And did you have two exhibits attached to your

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direct testimony labeled DT-1 and DT-2?
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    A Yes, I did.
    Q Do you have any changes to those exhibits?
    A No, I do not.
        MS. WHITE: Mr. Deason, I'd like to ask that the
    direct testimony of Mr. Thierry be moved into the record.
    COMMISSIONER DEASON: Without objection it shall
    be inserted into the record.
    BELLSOUTH TELECOMMUNICATIONS, INC.
DIRECT TESTIMONY OF DAVID THIERRY
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET No. 980800-TP

SEPTEMBER 10, 1998
Q. PLEASE STATE YOUR NAME, ADDRESS AND POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.
A. My name is David Thierry. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am employed by BellSouth Telecommunications, Inc. ("BellSouth" or "the Company") as Manager Interconnection Services Pricing.

## Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. My education includes a Bachelor of Arts in Economics from Emory University, Atlanta, Georgia in June of 1985. My professional career with BellSouth spans over ten years and includes experience in the development of service cost studies, the development of tariffs, and physical collocation contract negotiations. I am also responsible for developing interpretations of the provisions within physical collocation contracts.

# Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC SERVICE COMMISSION? 

A. No, I have not testified previously in any proceedings.
Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
A. The purpose of my testimony is to address issues raised resulting from a joint issue identification meeting between BellSouth and Supra Telecommunications and Information Systems, Inc. ("Supra") pursuant to Florida Public Service Commission Docket No. 980800-TP. Specifically, I 4 will address Issues $1,3 \mathrm{~B}, 3 \mathrm{C}$,лand 5 in this docket. As such, my testimony will focus on BellSouth's requirement to provide for physical collocation arrangements to Supra, pursuant to the terms and conditions of the Collocation Agreement between BellSouth and Supra ("Agreement"), specifically with regard to the North Dade Golden Glades and West Palm Beach Gardens BellSouth Central Offices.

# ISSUE 1. IS BELLSOUTH REQUIRED TO PROVIDE PHYSICAL COLLOCATION IN THE GOLDEN GLADES AND WEST PALM BEACH GARDENS CENTRAL OFFICES PURSUANT TO THE COLLOCATION AGREEMENT BETWEEN BELLSOUTH AND SUPRA? 

## Q. PURSUANT TO THE COLLOCATION AGREEMENT BETWEEN BELLSOUTH AND SUPRA, IS BELLSOUTH REQUIRED TO PROVIDE

## PHYSICAL COLLOCATION IN ITS CENTRAL OFFICES IN ALL CIRCUMSTANCES?


#### Abstract

A. No. There is no provision of the Agreement that imposes an obligation on BellSouth to fulfill each and every request for a physical collocation arrangement requested by Supra. The terms and conditions of the Agreement are limited to those instances where BellSouth has adequate space available to provide physical collocation. The Agreement specifically contemplates space being available. The introductory provisions of the Agreement state the conditions under which the agreement is entered into, specifically "Whereas, BellSouth has space available in its Central Office(s) which Interconnector desires to utilize." A copy of the Agreement is attached as Exhibit DT-1.

\section*{Q. WHAT OCCURRED WHEN SUPRA SUBMITTED APPLICATIONS FOR SPACE IN BELLSOUTH'S FLORIDA CENTRAL OFFICES?} A. Between May 2, 1998 and May 16, 1998, Supra submitted applications to BellSouth for physical collocation arrangements in seventeen (17) Central Offices in Florida. On May 6, 1998, BellSouth responded to Supra, via electronic mail, stating that BellSouth did not have space available for physical collocation in two (2) of the seventeen (17) central offices, specifically, the North Dade Golden Glades and West Palm Beach Gardens Central Offices. A copy of this response is attached as Exhibit DT-2. BellSouth's response was pursuant to the requirements of the


Agreement. Section IV.A of the Agreement (Exhibit DT-1) requires the response to include "space availability." BellSouth's response was also consistent with the FCC's First Report and Order which states:

If 575: "Incumbent LECs are not required to physical collocate equipment in locations where not practical for technical reasons or because of space limitations..."

## ISSUE 3 (B). IS THERE SUFFICIENT SPACE TO PERMIT PHYSICAL COLLOCATION FOR SUPRA IN THE GOLDEN GLADES AND WEST PALM BEACH GARDENS CENTRAL OFFICES? IF NOT, WHAT OBLIGATION, IF ANY, DOES BELLSOUTH HAVE UNDER THE COLLOCATION AGREEMENT TO MAKE SPACE AVAILABLE AT THESE TWO CENTRAL OFFICES TO PERMIT PHYSICAL COLLOCATION BY SUPRA?

Q. UNDER THE COLLOCATION AGREEMENT, DOES BELLSOUTH HAVE AN OBLIGATION TO RENOVATE OR ADD TO THE CENTRAL OFFICE to make space available to permit physical collocation BY SUPRA?
A. No. BellSouth is not obligated under the Agreement to renovate or add to the central office to accommodate Supra's request. As to the section of the Agreement that speaks to renovation or upgrade to Central Office space or support mechanisms (Section IV.F of the Agreement), this renovation or upgrade will only be performed in those Central Offices that
have space available for physical collocation. The renovations and upgrades contemplated in the Agreement are renovation or upgrades, where space is available, to accommodate the collocation of equipment in a BellSouth Central Office by a party that is not BellSouth. On the issue of renovation or construction of additional space, the Agreement is in compliance with the FCC's First Report and Order which states: II 585: "We [FCC] further conclude that LECs should not be required to lease or construct additional space to provide physical collocation to interconnectors when existing space has been exhausted."

ISSUE 3 (C). IS THERE SUFFICIENT SPACE TO PERMIT PHYSICAL COLLOCATION FOR SUPRA IN THE GOLDEN GLADES AND WEST PALM BEACH GARDENS CENTRAL OFFICES? IF THERE IS AN OBLIGATION TO MAKE SPACE AVAILABLE TO SUPRA, HOW SHOULD THE COSTS BE ALLOCATED?
Q. ISSUE 3 (C) IS CONCERNED WITH HOW COSTS SHOULD BE ALLOCATED IF BELLSOUTH WERE OBLIGATED UNDER THE AGREEMENT TO MAKE SPACE AVAILABLE TO SUPRA IN CENTRAL OFFICES WHERE NO SUCH SPACE EXISTS. HOW DO YOU RESPOND?
A. BellSouth has no obligation under the Agreement to provide collocation space where no such space is available. Therefore, the question of cost allocation is not relevant.

## ISSUE 4. IN WHAT TIME FRAME IS BELLSOUTH REQUIRED TO PROVIDE PHYSICAL COLLOCATION TO SUPRA PURSUANT TO THE COLLOCATION AGREEMENT?

## Q. HOW DO YOU RESPOND TO ISSUE 4 REGARDING PHYSICAL COLLOCATION PROVISIONING TIME FRAMES PURSUANT TO THE AGREEMENT?

A. BellSouth is bound only by the requirement of the Agreement (Section IV.F of Exhibit DT-1) to "make reasonable efforts to provide for occupancy of the collocation space on the negotiated date and will advise Interconnector of delays." BellSouth individually negotiates the specific interval for each collocation request based on a number of factors. As discussed in Mr. Mayes and Mr. Milner's written testimony, several mitigating factors that are outside BellSouth's control, such as permitting interval, local building code interpretation and unique construction requirements, affect the provision interval.

The Florida Public Service Commission has issued guidelines regarding the time frames to provide physical collocation space in Florida (Order No. PSC-96-1579-FOFTP). Although the Commission's Order was an
arbitration order between parties that did not include Supra, BellSouth uses the Commission's Order as a guideline when providing physical collocation space to all collocators in Florida. BellSouth believes it is operating within the parameters of the Commission's guidelines by negotiating time periods on a per request basis. The Commission, in Order No. PSC-98-0595-PCO-TP, issued on April 27, 1998, stated that: "As stated in the Order, the parties may reach an agreement as to the time for a particular request. The purpose of the three month time frame is to serve as a guideline of what we consider reasonable. We find that our Order is clear as to our intent that the parties to a request for collocation would attempt to resolve any problems with that time frame on a case by case basis, and would only come to use if they were unable to resolve their problems." BellSouth uses best efforts to complete Supra's collocation installations, and indeed all collocation installations in Florida, as soon as possible and, when feasible, within the three month interval prescribed in the Florida Commission's Order.

ISSUE 5. PURSUANT TO THE COLLOCATION AGREEMENT, WHAT
TELECOMMUNICATIONS EQUIPMENT CAN AND WHAT
TELECOMMUNICATIONS EQUIPMENT CANNOT BE PHYSICALLY
COLLOCATED BY SUPRA IN BELLSOUTH'S CENTRAL OFFICES?

## Q: PURSUANT TO THE COLLOCATION AGREEMENT, WHAT TYPES OF EQUIPMENT IS SUPRA AUTHORIZED TO PLACE IN ITS PHYSICAL COLLOCATION ARRANGEMENTS?

A: Section III.A of the Agreement, executed by Mr. Ramos (Supra) on July 21, 1998, states that "BellSouth shall permit Interconnector to place, maintain, and operate in the Collocation Space any equipment that Interconnector is authorized by BellSouth and by Federal or State regulators to place, maintain, and operate in collocation space and that is used by Interconnector to provide services which Interconnector has the legal authority to provide." BellSouth permits the placement of equipment in physical collocation arrangements where such equipment is utilized for the purposes of providing telecommunications services through interconnection or through access to unbundled network elements. Even though neither federal nor state regulators require the placement of switching equipment in physical collocation arrangements, BellSouth has voluntarily authorized the placement of such equipment in physical collocation arrangements located within its central offices. As discussed in Mr. Milner's written testimony, BellSouth does not permit the collocation of equipment that will be used only to provide enhanced services or information services.

## Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

MS. WHITE: And I would like to ask that the exhibits attached to Mr. Thierry's direct testimony be labeled as the next exhibit number.

COMMISSIONER DEASON: Exhibit 25.
BY MS. WHITE (Continuing):
Q Mr. Thierry, you also filed rebuttal testimony in this case consisting of ten pages?

A Yes, I did.
Q Do you have any changes, additions or corrections to make to the rebuttal testimony at this time?

A Yes, I do. As I mentioned, on page 2, line 1, please insert issue number 4.

Q If I were to ask you the same questions that are posed in your prefiled direct and rebuttal testimony today, would your answers to those questions be the same?

A Yes, they would.
Q Did you have one exhibit attached to your rebuttal testimony labeled DT-3?

A Yes, I do.
Q Do you have any changes to those exhibits?
A No, I do not.
Q Okay.
MS. WHITE: I'd like to have the exhibits -excuse me, I'd like to have the rebuttal testimony moved into the record as if read.

COMMISSIONER DEASON: Without objection it shall

BELLSOUTH TELECOMMUNICATIONS, INC.
REBUTTAL TESTIMONY OF DAVID THIERRY BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET No. 980800-TP

SEPTEMBER 18, 1998
Q. PLEASE STATE YOUR NAME, ADDRESS AND POSITION WITHBELLSOUTH TELECOMMUNICATIONS, INC.
A. My name is David Thierry. My business address is 675 West PeachtreeStreet, Atlanta, Georgia 30375. I am employed by BellSouthTelecommunications, Inc. ("Be||South" or "the Company") as Manager -Interconnection Services Pricing.
Q. ARE YOU THE SAME DAVID THIERRY WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING?
A. Yes.
Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?A. The purpose of my testimony is to rebut the testimony of Olukayode A.Ramos and David A. Nilson, witnesses for Supra Telecommunicationsand Information Systems, Inc. ("Supra"). I will rebut their testimony relating to Issues 1,3B,3C, Jand 5 in this docket. As such, my testimony will focus on BellSouth's requirement to provide for physical collocation arrangements to Supra, pursuant to the terms and conditions of the Collocation Agreement between BellSouth and Supra ("Agreement"), specifically with regard to the North Dade Golden Glades and West Palm Beach Gardens BellSouth Central Offices.
Q. ON PAGES 2 AND 3 OF HIS TESTIMONY, MR. RAMOS STATES THAT SUPRA "GRUDGINGLY" SIGNED THE COLLOCATION AGREEMENT WITH BELLSOUTH BECAUSE BELLSOUTH REPRESENTED THAT NO CHANGES WOULD BE ALLOWED TO THE AGREEMENT. HOW DO YOU RESPOND?
A. Mr. Ramos' statements do not reflect BellSouth's policy toward negotiating physical collocation agreements. On July 16, 1997, BellSouth sent Mr. Ramos a copy of the standard physical collocation agreement as a starting point for our negotiations. I have attached a copy of the letter BellSouth sent to Mr. Ramos with the standard collocation agreement as Exhibit DT-3. The letter states in part that "BellSouth [is] pleased to enter into negotiations with Supra ... with the intent of developing a mutually acceptable agreement." The letter is dated Wednesday, July 16, 1997. Mr. Ramos signed the Agreement on the following Monday (July 21, 1997). I am surprised that Mr. Ramos characterizes his signing the Agreement as "grudgingly" when only two business days elapsed between the day BellSouth sent the draft agreement to Supra and the day

Mr. Ramos signed it. I am further surprised that Mr. Ramos would have so readily signed any agreement that contains language he so strongly opposes.

## ISSUE 1: IS BELLSOUTH REQUIRED TO PROVIDE PHYSICAL COLLOCATION IN THE GOLDEN GLADES AND WEST PALM BEACH GARDENS CENTRAL OFFICES PURSUANT TO THE COLLOCATION AGREEMENT BETWEEN BELLSOUTH AND SUPRA? <br> Q: $\quad$ SUPRA'S WITNESSES STATE THAT, PURSUANT TO THE AGREEMENT, BELLSOUTH IS REQUIRED TO PROVIDE PHYSICAL COLLOCATION IN THE GOLDEN GLADES AND WEST PALM BEACH CENTRAL OFFICES. THEY FURTHER STATE THAT BELLSOUTH HAS NOT CONTESTED THIS ISSUE. HOW DO YOU RESPOND?

A. I disagree. As Mr. Bloomer's testimony discusses, BellSouth does not have space available for physical collocation in the Golden Glades or West Palm Beach Gardens central offices. BellSouth is, therefore, not required to provide physical collocation space to Supra at either of these locations. The terms and conditions of the Collocation Agreement are limited to those instances where BellSouth has adequate space available to provide physical collocation. There is no provision in the Agreement that imposes an obligation on BellSouth to fulfill each and every request for a physical collocation arrangement requested by Supra. The Agreement specifically contemplates space being available. The
introductory provisions of the Agreement state the conditions under which the agreement is entered into, specifically "Whereas, BellSouth has space available in its Central Office(s) which Interconnector desires to utilize." A copy of the Agreement is attached to my direct testimony as Exhibit DT-1.

ISSUE 3: IS THERE SUFFICIENT SPACE TO PERMIT PHYSICAL COLLOCATION FOR SUPRA IN THE GOLDEN GLADES AND WEST PALM BEACH GARDENS CENTRAL OFFICES?
B. IF NOT, WHAT OBLIGATION, IF ANY, DOES BELLSOUTH HAVE UNDER THE COLLOCATION AGREEMENT TO MAKE SPACE AVAILABLE AT THESE TWO CENTRAL OFFICES TO PERMIT PHYSICAL COLLOCATION BY SUPRA?
C. IF THERE IS AN OBLIGATION TO MAKE SPACE AVAILABLE TO SUPRA, HOW SHOULD THE COSTS BE ALLOCATED?
Q. SUPRA WITNESSES, MR. RAMOS AND MR. NILSON, STATE THAT BELLSOUTH SHOULD MAKE SPACE AVAILABLE FOR PHYSICAL COLLOCATION IN NORTH DADE GOLDEN GLADES AND WEST PALM BEACH GARDENS CENTRAL OFFICES EVEN THOUGH BELLSOUTH HAS DEMONSTRATED THAT NO SUCH SPACE EXISTS. HOW DO YOU RESPOND?
A. I disagree. As stated above, Mr. Bloomer's testimony establishes that BellSouth does not have adequate space available to provide physical
collocation at these central offices. BellSouth is not obligated under the Agreement to renovate or add to a central office to accommodate Supra's request for physical collocation where space for physical collocation is not available. While Section IV.F of the Agreement speaks to renovation or upgrade of Central Office space or support mechanisms to provide physical collocation, this section is applicable only to those Central Offices that have space available to accommodate the placement of collocated equipment in a BellSouth Central Office by a party that is not BellSouth. As I stated in my direct testimony, the Agreement is in compliance with the FCC's First Report and Order on the issue of renovation or construction of additional space:

If 585: "We [FCC] further conclude that LECs should not be required to lease or construct additional space to provide physical collocation to interconnectors when existing space has been exhausted."
Q. ISSUE 3(C) IS CONCERNED WITH HOW COSTS SHOULD BE ALLOCATED IF BELLSOUTH WERE OBLIGATED UNDER THE agreement to make space available to supra in central OFFICES WHERE NO SUCH SPACE EXISTS. SUPRA CONTENDS THAT BELLSOUTH SHOULD MAKE SPACE AVAILABLE AND ALLOCATE THE COSTS AS RECOMMENDED BY THE FLORIDA PUBLIC SERVICE COMMISSION IN THEIR FINAL ORDERS ON THE FLORIDA PUBLIC SERVICE COMMISSION DOCKETS 960757-TP, 960833-TP, 960846-TP. HOW DO YOU RESPOND?
A. As stated above, BellSouth has no obligation under the Agreement to provide space for physical collocation arrangements where no such space is available. Therefore, the question of cost allocation is not relevant. However, in those central offices where space for physical collocation is available, BellSouth will provide physical collocation to Supra at either the Regional rates listed in the Agreement, or work with Supra to amend the Agreement to provide physical collocation in Florida at Florida specific rates.

## ISSUE 4: IN WHAT TIME FRAME IS BELLSOUTH REQUIRED TO PROVIDE PHYSICAL COLLOCATION TO SUPRA PURSUANT TO THE COLLOCATION AGREEMENT?

Q. IN THEIR TESTIMONY, SUPRA WITNESSES MR. RAMOS AND MR. NILSON STATE THAT BELLSOUTH IS REQUIRED BY THE AGREEMENT TO PROVIDE PHYSICAL COLLOCATION TO SUPRA WITHIN THREE (3) MONTHS, AS MANDATED BY THE FLORIDA PUBLIC SERVICE COMMISSION. HOW DO YOU RESPOND?
A. BellSouth is only bound by the Agreement to "make reasonable efforts to provide for occupancy of the collocation space on the negotiated date and will advise Interconnector of delays" (Section IV.F of Exhibit DT-1). As cited by Supra's witnesses Mr. Ramos and Mr. Nilson, the Florida Public Service Commission issued guidelines regarding the time frames

BellSouth should provide physical collocation space in Florida (Order No. PSC-96-1579-FOFTP, issued December 31, 1996). What Mr. Ramos and Mr. Nilson do not recognize is that the Florida Public Service Commission further clarified this Order on April 27, 1998 (Order No. PSC-98-0595-PCO-TP):
"As stated in the Order, the parties may reach an agreement as to the time for a particular request. The purpose of the three month time frame is to serve as a guideline of what we consider reasonable. We find that our Order is clear as to our intent that the parties to a request for collocation would attempt to resolve any problems with that time frame on a case by case basis, and would only come to us if they were unable to resolve their problems."

BellSouth is operating within the parameters of the Florida Public Service Commission's guidelines by negotiating time periods on a per request basis. Furthermore, as I stated in my direct testimony, the Commission's Order was an arbitration order between parties that did not include Supra. However, BellSouth uses the Commission's Order as a guideline when providing physical collocation space to all collocators in Florida, including Supra. BellSouth will use best efforts to complete Supra's physical collocation installations in Florida as soon as possible and, when feasible, within the three month interval outlined in the Commission's Order. There are, however, circumstances over which BellSouth has no control. This is discussed in Mr. Mayes' direct testimony.

Q: IN HIS TESTIMONY, MR. RAMOS CLAIMS BELLSOUTH HAS NOT DEMONSTRATED TO SUPRA WHY ADDITIONAL TIME IS NECESSARY IN THE COMPLETION OF SUPRA'S COLLOCATION ARRANGEMENTS. HOW DO YOU RESPOND?
A. I disagree with Mr. Ramos. In his statement, I assume Mr. Ramos is referring to the Florida Public Service Commission's requirement from its Order PSC-96-1579-FOF-TP which states, in part:
"If [the parties] cannot agree to the required time for a particular request, BellSouth must demonstrate why additional time is necessary."
and, as referenced above from Florida Public Service Commission Order No. PSC-98-0595-PCO-TP:
"We find that our Order [PSC-96-1579-FOF-TP] is clear as to our intent that the parties to a request for collocation would attempt to resolve any problems with that time frame on a case by case basis, and would only come to us if they were unable to resolve their problems."

When BellSouth receives an application for physical collocation, it provides to the requestor a written physical collocation application response which includes estimated provisioning intervals for planning purposes. When BellSouth receives a Bona Fide Firm Order, it negotiates the actual provisioning time frame for each physical collocation request. At the time of the joint issue identification meeting, Supra had
not provided Bona Fide Firm Orders for physical collocation in Florida to BellSouth. BellSouth had, therefore, not made any commitments as to the time required to complete work for Supra's requests. Thus, Mr. Ramos' claims are baseless.

## ISSUE 5: PURSUANT TO THE COLLOCATION AGREEMENT, WHAT TELECOMMUNICATIONS EQUIPMENT CAN BE AND WHAT TELECOMMUNICATIONS EQUIPMENT CANNOT BE PHYSICALLY COLLOCATED BY SUPRA IN BELLSOUTH'S CENTRAL OFFICES?

Q. SUPRA'S WITNESS MR. RAMOS STATES THAT "BELLSOUTH HAS NO RIGHT WHATSOEVER TO LIMIT THE TYPE OF EQUIPMENT THAT SUPRA CAN COLLOCATE IN BELLSOUTH'S CENTRAL OFFICES..." HOW DO YOU RESPOND?
A. I disagree. Mr. Ramos cites in his testimony Section III.A of the Agreement, which states in part:
"Nature of Use. BellSouth shall permit Interconnector [Supra] to place, maintain and operate in the Collocation Space any equipment that Interconnector is authorized by BellSouth and by Federal or State regulators to place, maintain and operate in collocation space and that is used by Interconnector to provide services which Interconnector has the legal authority to provide."

The Agreement clearly states the equipment Supra is permitted to place in a physical collocation space is limited not only by Federal and State regulators, but by BellSouth policy, as well. As I stated in my direct testimony, BellSouth permits the placement of equipment in physical collocation arrangements where such equipment is utilized for the purposes of providing telecommunications services through interconnection or through access to unbundled network elements. Mr. Milner's direct testimony further addresses BellSouth's policy by stating, in part, "Where [the] equipment can also provide information services, the telecommunications carrier may offer information services through the same arrangement, so long as it is also offering telecommunications services through the same arrangement. ... BellSouth [does] not permit the collocation of equipment that will be used only to provide enhanced services or information services" (Page 11).
Q. DOES THIS CONCLUDE YOUR TESTIMONY?
A. Yes.

MS. WHITE: And I'd like to have the exhibit attached to Mr. Thierry's rebuttal testimony labeled as an exhibit.

COMMISSIONER DEASON: Exhibits 26. BY MS. WHITE (Continuing) :

Q Mr. Thierry, would you please give your summary?
A Yes. Good afternoon. We handed out a summary of the cites that I'll mention from the collocation agreement between Bellsouth and Supra, from the Telecommunications Act of 1996, and from the FCC's First Report and Order released on August 8th, 1996. They are here for your easy reference. The entire agreement is attached to my direct testimony.

The purpose of my testimony is to address five of the issues raised during the joint issue identification meeting between Bellsouth and Supra. I am responsible for the development of contract language that supports Bellsouth policy, and I oversee the negotiation of physical collocation contracts, so I'll address Issues 1, 3B, 3C, 4, 5, as they relate to the physical collocation agreement between Bellsouth and Supra.

Issue 1. The first issue deals with whether Bellsouth is required by the collocation agreement to provide physical collocation in the North Dade Golden Glades and the West Palm Beach Gardens central offices.

The answer is no. The agreement states that BellSouth is obligated to provide physical collocation in central offices where there is adequate space to do so. The agreement clearly states that BellSouth will provide physical collocation where, and I quote, BellSouth has space available in its central offices, end quote. This position is in compliance with the Telecommunications Act and the FCC's First Report and Order. Our planners have reviewed these two offices and have found that there is not adequate space available for physical collocation.

The next issue, Issue 3B, asks what obligation BellSouth has under the BellSouth/Supra agreement to make space available for physical collocation in the two central offices that I mentioned. The collocation agreement does not obligate BellSouth to provide physical collocation in central offices where there is no space available. Our position is in compliance with Paragraph 585 of the FCC's First Report and Order which states that incumbent LECs are not required to construct additional space for physical collocation when existing space has been exhausted.

In their rebuttal testimony, Supra's witnesses strung together several definitions of "upgrade," "improve" and "develop." This series of definitions is inconsistent with the BellSouth/Supra agreement. The bottom line is, BellSouth is not obligated by the BellSouth/Supra
agreement, the Telecommunications Act or the FCC's Order to add or lease additional space where existing space has been exhausted.

Issue 3. Issue 3 asks how costs should be allocated if BellSouth were obligated under the agreement to make physical collocation space available in these central offices. Because BellSouth is not obligated under the agreement between Bellsouth and Supra to provide physical collocation where no space is available, the question of cost allocation is not relevant in these two central offices; however, in central offices where there is space available for physical collocation, Bellsouth will build a common collocation area.

The renovations or upgrades addressed in Section $4 F$ of the agreement refer to the building of this common collocation area. This common area separates BellSouth's equipment from all of the collocators' equipment. The common area is where the individual collocation spaces are built for each collocator, whether each individual collocation space is enclosed or not. The costs of building the common area are prorated across all the collocators in the central office based on how much floor space each collocator occupies. The way we prorate these costs is described in the agreement, the section $4 F$ and in Note 2 of Exhibit A.

Issue 4 deals with what time frame Bellsouth is bound by the agreement to provide physical collocation to Supra. We are bound by Section $4 F$ of the agreement to negotiate the date which each collocation space will be made available on a case-by-case basis. We use a three-month time frame recommended by the Florida Public Service Commission as our target provisioning interval. By negotiating each request and by using the three-month guideline as our target, we are clearly acting within this Commission's guidelines in the order issued on December 31st, 1996, and then reiterated in the order issued on April 27th, 1998.

The final issue, Issue 5, deals with what types of equipment Supra is authorized to place in its physical collocation arrangements pursuant to the agreement. Section $3 A$ of the agreement states that Supra may only install equipment that they are authorized by Bellsouth and by state or federal regulators to place.

In his testimony, Supra's witness, Mr. Ramos, states that BellSouth has no right whatsoever to limit the type of equipment that Supra can collocate in Bellsouth's central offices. This is simply not true. Again, section $3 A$ of the collocation agreement between Bellsouth and Supra limits the equipment supra can place in its collocation space to that which is authorized by Bellsouth and by

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federal or state regulators.
In summary, BellSouth is acting in compliance with the agreement entered into with Supra

Telecommunications and Information Systems. Thank you. This concludes my summary.

MS. WHITE: Mr. Thierry is available for cross examination.

COMMISSIONER DEASON: Ms. Summerlin. CROSS EXAMINATION BY MS. SUMMERLIN:

Q Good afternoon, Mr. Thierry. I'm Suzanne Summerlin for Supra.

A Good afternoon.

Q A few minutes ago in your summary you said something along the lines of, and correct me if I'm wrong when $I$ quote this, our planners have reviewed the space and determined that no space is available. Is that what you said in your summary?

A That is correct, and those planners are here to testify to that fact.

Q Okay. When exactly did they do that review?
A I'm not aware of the date of the review.
Q Are you aware of whether the application that Supra filed for physical collocation for these offices was ever sent to the planners in the normal course of the

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process that Bellsouth follows?
A Well, in the normal course of business, the process, the application is the trigger event for the planners to be notified to verify whether there is space available in any particular central office. So I assume, yes, the application did reach them which triggered the application response that let Supra know the space availability situation in those two central offices.

Q What exactly, what kind of evaluation took place, do you know?

A I understand there is a rigorous formula that is followed by our space planners, and they'll be describing that later today in their testimony.

Q Are you aware of whether that rigorous formula was utilized prior to Supra's applications for physical collocation being denied?

A Prior to or as a result of?
Q Prior to the denial.
A I am not sure.
Q So you're not aware that the individuals who normally get the application did not get it in this situation? You're not aware of that?

A Whose application would you be addressing?
Q I'm talking about Supra's application for physical collocation at each of the two central offices
that we are talking about in this case.
A would you restate? I thought you mentioned a different application other than the supra application going to those central offices to trigger that analysis.

Q Okay. What I'm talking about here, or what I'm trying to address is your statement that your planners have reviewed the situation and determined that there is no space available; and I'm just asking: Do you know whether that rigorous formula was utilized prior to the denial of Supra's application?

A Prior to the denial. I did not hear your statement of denial. The application would have been received by those planners. The space would have been assessed, and the denial would have resulted from the results of that assessment.

Q So it's your testimony that you are aware that that rigorous review was done before Supra's applications were denied?

A From my understanding of our conversations with the witnesses that I've had, yes, that application did trigger the analysis; and, yes, it was done for those central offices.

Q You're not aware of the fact that the FCC waiver was the basis for the denial?

A I know that there was a waiver in place from

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years gone by that summarized the space available in that central office, and that was the trigger, or that was -that was the information that was relied upon in the application response.

Q That was the information that was -- So there really was no evaluation of Supra's application when it was filed?

MS. WHITE: Well, and I'm going to object from the standpoint that $I$ believe he has already testified on several occasions that the people who looked at the space are here and will be testifying and that those are the appropriate people to be asked these questions.

COMMISSIONER DEASON: Ms. Summerlin.
MS. SUMMERLIN: I totally agree that those people should be asked, and they will be. I am just asking Mr. Thierry about the statement that he made in his summary that the planners have reviewed the space and determined that no space was available, and I'm simply asking at what point did they do that.

COMMISSIONER DEASON: You may answer the question.

WITNESS THIERRY: Pardon me?
COMMISSIONER DEASON: You may answer the question to the extent you have knowledge.

A The space analysis was done in, I imagine the
last several months. I'm not aware of the actual date that it was performed.

Q So it was performed subsequent to the denials?
A I do not know.
Q You have testified that you are responsible for the negotiation of collocation agreements; is that correct?

A I am responsible for supervising the negotiation of collocation agreements. In addition to that, $I$ am responsible for making sure the language within the agreements matches Bellsouth policy and is in accordance with regulations.

Q Okay. In your knowledge of this agreement, is it your understanding that BellSouth has a firm requirement that it needs to meet in terms of preparing space for a physical collocator within a certain time frame?

A What we do is negotiate each central office collocation space on a case-by-case basis. We let the collocator know when we can make that space available, and that is the firm date that we use.

In the event that there is a permitting problem, which will be addressed later by one of our witnesses, that may delay the production of that collocation space, there may be some adjustment or modification or negotiations required to that date. But that is our date that we provide collocation space.

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Q Is there -- what you basically said a minute ago is that you let the collocator know when the space will be available; is that right?

A Yes, we do.
Q So if the collocator, such as supra or another ALEC or CLEC does not agree that the date that you, or Bellsouth believes is an appropriate date for that space to be available, what option does the ALEC or CLEC have?

A They can notify us that that date doesn't work, and our SMEs can go back and check the dates and see if there are any work efforts that can be run in parallel to compress the time frame. If that's not possible and the date that is provided still isn't acceptable to the collocator, then they can go to the PSC and seek a resolution of that situation.

Q So, basically, they don't have any option but to come to the Commission; is that what you're saying?

A That's what the Commission has outlined that we do; so, yes, that's the procedure.

Q So the 90-day or three-month guideline is not a firm commitment for BellSouth; is that correct?

A The 90-day guideline is exactly that; it's a guideline. It's what we shoot for. In best cases we can beat that date. We can meet that date. In some cases we have to exceed that date based on what work is required for

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that particular central office in that particular collocation space.

Q What kind of reasons would put BellSouth in a position not to meet that three-month deadline?

A The reasons that I'm aware of would be significant work that's required in the central office, but I would prefer to leave that -- I'd prefer to leave that question to be responded to by our space planners and our facility planners as they are the people who are involved with planning the collocation space and the due dates.

Q So you don't really know what kinds of conditions would cause that to be a problem?

A I have a general idea, and I have a working knowledge of what may cause a problem; and the working knowledge is basically what I need when I'm negotiating with a customer. In certain instances, significant construction requirements such as fire rated walls can create delays in producing a collocation space.

Q Are there any other reasons that the three-month period couldn't be met?

A I'm sure there are, but I'm not aware of them at this point.

Q Is there any place in the contractual agreement, the collocation agreement, where the collocator is put on notice as to what those types of things might be?

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A We have an application response, and then we have a firm order response; and in that firm order, that information is discussed with the collocator on a case-by-case basis.

Q But that's not included in the collocation agreement, is it?

A In the collocation agreement we address what we respond or the information that gets back to -- the information that is due back to the collocator in a general sense in that we reply to that response; but, no, we don't delineate what sorts of delays may occur.

Q Now you've got the collocation agreement attached to your testimony, don't you?

A Yes, I do.
Q Can you look at Section 2 C of the agreement? It appears to be Page 3 on the document I'm looking at, Page 3 of the collocation agreement.

A One moment. Yes.
Q Okay. That paragraph is titled "Occupancy." Based on the language in this paragraph, and I'll just read it very quickly, and then $I$ want to just ask you a question or two, and then that is pretty much what I'm going to ask you today; but, "BellSouth will notify interconnector that the collo --

COMMISSIONER DEASON: I'm sorry, do you intend to
read this whole paragraph into the record?
MS. SUMMERLIN: Well, I didn't want to start somewhere where it didn't make any sense. I was just going to read the first part. I'm not going to read the whole thing.

COMMISSIONER DEASON: Okay. Please proceed.
MS. SUMMERLIN: I'm trying to be very quick about this. BY MS. SUMMERIIN (Continuing):

Q All right. Let me just say this: "-- the collocation space is ready for occupancy. "Interconnector must place operational telecommunications equipment in the collocation space and connect with BellSouth's network within 180 days after receipt of such notice. BellSouth may consent to an extension beyond 180 days upon a demonstration by interconnector that circumstances beyond its reasonable control prevented interconnector from completing installation by the prescribed date. If interconnector fails to place operational telecommunications equipment in the collocation space within 180 days and such failure continues for a period of 30 days after receipt of written notice from Bellsouth, then and in that event, interconnector's right to occupy the collocation space terminates and BellSouth shall have no further obligations to interconnector with respect to
said collocation space." And I'm not going to go on to finish the paragraph, but would you agree that that puts a firm obligation on the physical collocating company?

A Yes, I do; however, the collocator is our customer, and we are not in the business to run them out of the central office. What we do is have this language in place to prevent a collocator from taking a lot of space, not using it, and essentially using up a lot of space, wasting a lot of space in the central office that another CLEC could use. What we do is we look to see whether there has been a good-faith effort to place the equipment within 180 days, and if there has and there is some sort of delay, say there is a delay in the shipment of some switching equipment, then we will allow them to extend that another 30 days.

Q That's a discretionary decision by BellSouth though, isn't it?

A Yes, it is.
Q What is your interpretation of the language in the collocation agreement that says that the collocator may place any equipment that the collocator deems desirable for the conduct of business?

A You would be referring to the personalty section of the agreement?

Q Let me locate exactly what I'm referring to here.

A That's 3G.
Q Okay. Yes, personalty is what we are talking about.

A Right.
Q What is your interpretation of that language?
A That language in my mind allows the physical collocator to place equipment such as a desk, a computer, a chair, things that are needed in the everyday business, everyday running of their little central office space there within the collocation agreement. This section of the agreement in no way offsets the equipment language that we have elsewhere in the agreement. The two work together. You have to read the entire agreement as a whole and interpret it as a whole.

Q So it's your testimony that Paragraph G -- 3G does not deal with the interconnector or the collocator's equipment and facilities?

A What I'm saying is that this needs to be read with the equipment language elsewhere in the contract which restricts certain type of equipment to what is authorized by BellSouth and federal or state regulators.

Q So it really doesn't mean that it's the facilities and equipment that the collocator deems desirable?

A Equipment other than the telecommunications and
equipment addressed elsewhere, such as desks and PCs, chairs, office supplies, things like that.

Q You said earlier that the option that the physical collocator has if the, BellSouth were to say that the time frame is not met would be to come to the PSC to file a complaint?

A Which time frame was that?
Q In other words, if BellSouth doesn't meet the time frame to -- the three-month guideline, that the only option that the CLEC really would have would be to come to the Commission?

A Well, the Commission's desire was to have the parties of the collocation agreement or arrangement work it out amongst themselves, and if we couldn't come to a negotiated agreement, then as a last resort we would go to the PSC.

Q Well, I guess what I asked you earlier is what option -- if BellSouth says that they can't meet the three-month time frame, what negotiation takes place?

A In the firm order process, the response to the firm order, there is a date given. I believe it's handled by the account team coordinator and the INAC, and I probably should provide you the -- that's the abbreviation, INAC. It stands for interexchange network access coordination. They work with the collocator to negotiate

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that date.

Q I guess -- I'm just going to ask you one last time: What negotiation takes place if BellSouth says it can't meet that time frame? What can the CLEC do?

A As $I$ stated earlier, if the date that is presented to the CLEC isn't amenable to their plans, then we can go to the PSC and try to resolve our differences there.

Q So that basically means a complaint process for the CLEC?

A I'm not sure what legal steps are taken in that instance. It may be a complaint, but I'm not sure.

Q Okay.
MS. SUMMERLIN: No further questions. COMMISSIONER DEASON: Staff. CROSS EXAMINATION

BY MS. KEATING:
Q Good afternoon, Mr. Thierry. I'm Beth Keating for Commission staff.

A Good afternoon.
Q And I would just like to ask you about a statement that is in both your direct and rebuttal testimony, and it's the question of cost allocation is not relevant since there is no space available.

A Correct.

Q Suppose the Commission did, however, decide that space were available in these central offices, how do you think that costs should be allocated?

A As $I$ stated in my opening statement, the cost of the entire collocation common area would be allocated across those collocators that occupy, in their individual spaces, that collocation space.

Q So if space just had to be prepared only for Supra, would the cost be split between Supra and Bellsouth, or would Supra bear the burden of all those costs?

A Supra would bear the burden of those costs, yes.
Q The entire burden or a certain percentage?
A The entire burden, which is why we would prefer to build a large common area to spread those costs across several collocators if possible.

Q Thank you, Mr. Thierry.
COMMISSIONER DEASON: Commissioners.
(NO RESPONSE)
COMMISSIONER DEASON: Redirect.
MS. WHITE: I just have one question.

REDIRECT EXAMINATION

BY MS. WHITE (Continuing):
Q With regard to section $2 C$ of the agreement concerning the 180 days for the ALEC to place their equipment, is Bellsouth in the business of unreasonably
withholding its consent for an extension of time?
A I'm sorry, I couldn't hear you.
Q In connection with Paragraph $2 C$ of the agreement concerning the 180 days that a collocator has to put the equipment in, is BellSouth in the business of unreasonably withholding its consent for an extension of time?

A No, we are not.

Q Thank you.
MS. WHITE: I have nothing further. May this
witness be excused?
COMMISSIONER DEASON: Yes, and --

MS. WHITE: And I would move Exhibits 25 and 26.

COMMISSIONER DEASON: Without objection Exhibits

25 and 26 are admitted.
Ms. Summerlin, are you calling the next witness?
MS. WHITE: No, the next witness is --
MS. SUMMERLIN: No, sir. I think BellSouth has got somebody up next. We altered the order of witnesses. Staff had a list with the new --

COMMISSIONER DEASON: Well, it says Witness Tipton, but it says requested by Supra, according to my list.

MS. WHITE: Well, I think I've agreed to put them on. I've agreed that they'll --

COMMISSIONER DEASON: You are going to sponsor
the witness?
MS. WHITE: -- that they'll be here and we'll sponsor them.

COMMISSIONER DEASON: Okay. Please proceed.
MS. WHITE: Not the usual way, but -- BellSouth calls Pam Tipton. And it's Tipton, T-i-p-t-o-n. DIRECT EXAMINATION BY MS. WHITE:

Q Ms. Tipton, could you please state your name and address for the record?

A My name is Pam Tipton. I'm employed at 675 West Peachtree Street, Atlanta, Georgia for BellSouth Telecommunications, Incorporated.

Q And what is your job?
A I'm currently product manager, interconnection services.

Q And what is the product that you manage?
A I manage virtual and physical collocation.
Q And you have no prefiled direct or rebuttal testimony; is that right?

A That is correct.
Q So would you please give us a little summary of what your job duties are and why you were deposed in this case?

A Okay. Certainly.

Good afternoon. As I said, my name is Pam Tipton, and I'm here today to address questions regarding the processes used by CLECs to request collocation arrangements from BellSouth and the processes Bellsouth uses to respond to those requests and to provide those collocation arrangements.

I have over ten years' experience in the telecommunications industry, and responsibilities have varied from developing regional methods and procedures for special access services, management of customer operation centers and implementation of large-scale service projects; but since 1995, I've served as the project manager, and more recently as the product manager, for virtual and physical collocation. In this capacity, I have worked issues at both the state and the federal level.

Part of my responsibilities as project manager was to ensure that BellSouth had adequate procedures in place to handle and implement customer requests for collocation. I am completely familiar with the processes used; that is, the customer -- how the customer request flows through the process, and I'm generally familiar with the departments that are involved and their responsibilities in handling those requests. I led the team of subject matter experts who developed the interdepartmental methods and procedures and who wrote the

BellSouth collocation handbook.
In my current assignment as product manager, I manage and implement policies established by others within Bellsouth in response to requirements of the Federal Communications Commission and this Commission for both virtual and physical collocation. I am familiar with Bellsouth's obligations under the Telecommunications Act and the FCC's First Report and Order as well as with this Commission's requirements. On a frequent and regular basis I interact with and provide guidance to our field forces, Bellsouth's interconnection agreement negotiators and Bellsouth's account teams for its CLEC customers.

In regards to this case, I have responded to interrogatories and data requests. I was also deposed last week. In addition, I was asked by Keith Milner to assist in providing a status of supra's requests at the request of Commission staff at Keith's deposition.

In producing the status report, I reviewed all of the 15 applications that we are proceeding on where Supra has placed firm orders for the offices where we have space. I've also reviewed the bona fide firm orders which -- or excuse me, the firm orders which are not yet bona fide that Supra has submitted on those same 15 offices.

BellSouth's written response to Supra's initial
applications represents a firm commitment from Bellsouth to provision space, power and infrastructure which will accommodate the specifications that they indicated on their initial application. But Supra's firm orders represent significant changes in those specifications, sometimes doubling the amount of rack space and significantly increasing the number of wiring terminations requested to terminate at their point of -- at the point of termination bay. Thus, these modifications have greatly modified the terms and conditions under which BellSouth is to offer space, power and network infrastructure to support these arrangements. Thus, Bellsouth is currently reassessing the firm orders that have been submitted to BellSouth and will be re-responding to Supra regarding the requirements for interval and cost estimates in order to proceed with those requests.

Thank you, and this concludes my summary.
MS. WHITE: Ms. Tipton is available for cross examination.

COMMISSIONER DEASON: Ms. Summerlin.
MS. SUMMERLIN: Thank you.
CROSS EXAMINATION
BY MS. SUMMERLIN:
Q Ms. Tipton, good afternoon. I'm Suzanne Summerlin.

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A Good afternoon.
Q What is Bellsouth's policy regarding the equipment that can be physically collocated by a CLEC or an ALEC?

A Bellsouth allows in physical collocation the equipment which is used to provide telecommunications services that is also used to interconnect to Bellsouth's network or access Bellsouth's unbundled network elements. We include in that both switching equipment and transmission equipment. For virtual collocation, Bellsouth allows the placement of transmission equipment.

Q Okay. What is the strategic management organization?

A I do not know what their specific, I guess, mission is; but the organization, to my knowledge, looks at overall market conditions, helps evaluate BellSouth's strategy in meeting market needs. I'm sure that they perhaps evaluate policy decisions on a global basis, and I'm not sure if that applies to BellSouth Corporation or just Bellsouth Telecommunications, Inc.

Q Okay. Do you remember attending a meeting on April -- or actually, $I$ guess, sort of a conference type thing, a regional INAC meeting, on April 22 nd through the 24 th of 1997 in Atlanta?

A Yes, vaguely $I$ do remember that we had a meeting
during that time frame.
Q Okay. I have an exhibit to be identified. It's called "BellSouth's Physical Collocation Offering," and I would ask that it be identified as Exhibit 27.

COMMISSIONER DEASON: It will be so identified.
MS. SUMMERLIN: And we will pass it around so that everyone can have one. BY MS. SUMMERLIN (Continuing):

Q Okay. Ms. Tipton, this exhibit is an item from the meeting that I just mentioned, a regional INAC meeting, that occurred April 22nd, 23rd, 24 th of 1997, that you said that you believe you remember attending.

A Okay.
Q What I'm interested in here is I would assume that this would have been something you would have attended and experienced, this particular discussion here?

A Yes, probably.
Q Does this sound like it would have been something you would have been in?

A Yes, it certainly does.
Q Okay. The third page of this exhibit, or this document, has several bullets up here, and it says up at the top, "Assumptions."

A Okay.
Q And you can see the unartfully indicated bullet
with the X by it?
A Uh-huh.

Q This states that the strategic management organization has recommended expanding the allowable equipment complement to include routers, switches and modem. pools in addition to the transmission equipment currently allowed. Can you tell me anything about that? Do you remember that discussion or what that --

A Actually, yes, I can, because I participated with a few members of the strategic management organization, I guess over the past three years, on several occasions in discussions when BellSouth has reevaluated any of its collocation policies. In this particular case, at this point in time, the strategic management organization had come and asked me specifically about the reconsideration of the policy, expanding the policy.

Like with any business, Bellsouth reevaluates its policy decisions sometimes on a frequent basis, depending on the particular subject. And at this point in time, they had decided to reevaluate the equipment that we allowed in collocation spaces, had initially decided to recommend broadly expanding that equipment complement; and the final policy decision was that the allowable equipment would be expanded to include only switching equipment instead of all of the types of equipment that you see here.

Q Okay. Can you give us some idea of what the discussion was that came to that conclusion?

A Yes, I can. In general, it, we came to -- and I say we, because $I$ have been -- I've participated in these decisions, but $I$ have not been the ultimate authority to make the decision. But the things that we looked at in making this evaluation were what our other obligations were under the $F C C$ 's requirements, which really preexisted or predated the Telecommunications Act; and those specific requirements that I'm speaking of are the FCC's Open Network Architecture Guidelines, the Non-Structural Safeguards and Requirements that BellSouth has as well as the Computer Inquiry 3 guidelines.

While I'm not specifically familiar with the actual wording of those particular guidelines, I certainly have a general understanding of their implications on our collocation policy. And my understanding of those requirements is that Bellsouth is obligated to treat all enhanced service providers or information service providers in a nondiscriminatory fashion and provide a comparably efficient interconnection to those enhanced service provider or Internet service provider, information service provider customers.

The equipment was limited in our collocation offering because, first of all, Bellsouth as a regulated
entity may have its enhanced services operations located within its central offices. Provided that we follow those non-structural safeguards and requirements by the FCC, part of those safeguards include price disadvantaging, those enhanced service operations, because we have to treat them from a pricing perspective as if they are physically located two miles outside of our central office. So when they purchase services from BellSouth, which they are required to do like any other enhanced provider, they have to pay a two-mile minimum local channel rate; so they are not afforded the efficiencies of a collocation arrangement per se.

So to get back to why the equipment was restricted, we did not want to encourage enhanced services equipment to be placed in a collocation arrangement because we are not required by the FCC to allow the collocation of enhanced services equipment, and because we have these comparably efficient interconnection requirements, if we allowed one entity to collocate that was an enhanced service provider, we would have to provide either the ability for all enhanced service providers to collocate or provide a comparably efficient interconnection; so that means pricing services as if they were inside the CO when we might not have space to give them at that collocation.

BellSouth looks first to its requirements in the

Telecommunications Act to provide collocation in all the central offices where possible for our ALEC customers. We, therefore, want to ensure that we do not make any business decisions which might rapidly exhaust the available space for our ALEC customers. So we had to look at our space concerns, how allocating space to ESP customers may rapidly exhaust that space, what types of equipment ESPs may be placing, not advantaging one category of customers over another, say an ALEC. We have several ALECs who currently are collocating in our offices who are providing both telecommunications services as well as enhanced services or information services, which is what I understand as well Supra is interested in doing. And for those customers we did not want to disregard the requirements we had under the Computer 3 Comparably Efficient Interconnection ONA rules and give an advantage to ALECs that were collocated providing both telecom and enhanced services. We didn't want to give the advantage to them over the enhanced service provider who cannot get in our central office because they are not an ALEC.

Q Okay. So let me ask you: What I'm getting from what you're saying is that BellSouth is concerned that it not harm enhanced service providers and information service providers and that that's the reason why BellSouth is denying this opportunity to all CLECs?

A I would say that our first concern is ensuring that we meet the requirements of the $E C C$ 's regulations that they've put in place under the Open Network Architecture and Computer 3 process, and that requirement is providing the comparably efficient interconnection; and it is also requiring parody of treatment of all enhanced service providers and information service providers.

Q Is Supra, to your knowledge, an enhanced service provider?

A Based on the information that has been told to me by the account team members who have discussed supra's plans, it is my understanding that supra is both a telecommunications service provider and an enhanced service provider. It is my understanding from Mark Cathe and Nancy Nelson and others who directly participated on calls, conference calls with Mr. Ramos and also with Mr. Nilson back in the April, May and June time frame that supra's intentions were certainly to provide local exchange service as well as Internet service; and Internet service is an enhanced service.

Q So your understanding is that Bellsouth's position is based on its view of Supra as an enhanced service provider?

A No, that is not what $I$ said.
Q Well, let me just ask you, why would it -- why
would what BellSouth allows Supra to physically collocate have anything to do with enhanced service providers?

A Because there is a portion of Supra which is acting as an enhanced service provider, and we have the obligation to treat that portion of Supra the same way we treat all other enhanced service providers. We certainly are not restricting Supra's ability to compete as a telecommunications service provider, but we have to keep -be mindful of our requirements in the treatment of Supra's enhanced services operations.

Q Is it not BellSouth's policy that if a CLEC or an ALEC provides telecommunications services and enhanced services from the same arrangement that that's perfectly appropriate to physically collocate the equipment that will be in that arrangement?

A Oh, certainly. But our policy also states that we will not allow the collocation of equipment that is used solely to provide enhanced services, and when performing -As I stated in my deposition, when we perform an analysis of the equipment, we look at each piece of equipment individually; and we do that evaluation for both the compliance with the NEBS criteria as well as the functionality of that equipment. So where an arrangement may constitute the entirety of what is placed in the central office, we certainly recognize that ALECs may be

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providing both enhanced and telecommunications services through that arrangement and utilizing that equipment; but what we do not allow is the equipment which actually performs the enhanced functionality to be placed in the central office.

Q Doesn't it hurt Supra in its effort to compete with BellSouth if BellSouth treats Supra as if it were an enhanced services provider and denies it the opportunity to physically collocate the equipment it needs to provide enhanced services?

A No, not in my opinion.
Q It does not hurt Supra in its ability to compete with BellSouth to do that?

A In my opinion it does not.
Q And explain your answer, please?
A First of all, you know, BellSouth has made available space to place the equipment necessary to compete with BellSouth's telecommunications services, and that is my understanding of the intent of the Act. As far as my involvement in compliance with the Act, I'm required to provide for collocation space for ALEC customers to provision telecommunications services.

Q Let me ask you, if it does not hurt Supra to deny this, then are you not basically saying it's irrelevant to Supra's business that you, that BellSouth denies that

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opportunity?
A No, absolutely not.
Q So how can you say it doesn't hurt supra's ability to compete?

A Well, it's my understanding listening to the testimony this morning, I believe it was Mr. Graham indicated that Supra has plans -- does not have plans to locate their enhanced services equipment in the BellSouth central office, so I'm kind of confused about what you're asking because evidently supra already had made plans, at least for certain portions of the network, to be placed in locations other than the central office.

Q Okay. Let me clarify my question. Does it hurt Supra's ability to compete with BellSouth if BellSouth denies Supra the opportunity to physically collocate equipment that will help Supra provide Internet service?

A You know, I'm sorry, I don't know how else to answer the question. In my opinion $I$ don't think that it hurts their ability to compete. I certainly am not qualified to address the, you know the deployment plans for enhanced services. I'm not familiar with how Bellsouth actually deploys and markets its enhanced services, so to the best of my ability, I can simply say that it doesn't appear to me that it disadvantages Supra in competing --

Q Okay.

A -- as an enhanced service provider. I mean, and I say that because all other enhanced service providers are not within our central office, so I'm not sure I understand --

Q Well, are all of the other enhanced service providers CLECs?

A No, not all of them, but some of them are.
Q Why does the company choose -- why would a company want to physically collocate its equipment, any kind of equipment, in BellSouth's central office?

A I would say that companies would choose to physically collocate because it provides an efficient means of interconnecting to our network. As I said in my deposition, most customers, you know, starting back with the original expanded interconnection orders from the FCC and the expanded interconnection order from this Commission, it was to provide a more efficient interconnection to customers who want to interconnect with our network and compete directly with our services; and it provides that efficient interconnection because the traditional local channel which used to be purchased from our tariffed services is eliminated and replaced by a cross-connect element, which is a great reduction in cost to the competitive provider on a service-by-service basis.

Q So physical collocation of equipment results in a
cost savings to a CLEC?
A Yes.

Q Okay. So if BellSouth denies a CLEC the opportunity to physically collocate equipment, then that is going to cause the CLEC's cost to be increased; is that correct?

A Once again, BellSouth is only following the requirements as laid out by the FCC , which does not require us to collocate enhanced services equipment and requires us to comply with the ONA Computer 3 requirements. So in saying that, it is to no greater disadvantage than any other -- the method by which any other enhanced services provider must compete in the industry.

Q Okay. Let me just ask you one more time and get you to say yes or no, please: If BellSouth denies a CLEC the opportunity to physically collocate certain pieces of equipment, that is going to increase the cost to that CLEC; is that correct?

A Yes, it will increase the cost only for those services provided through the arrangement which is not physically collocated.

Q I want to read a sentence to you out of a letter that was written to Mr. Ramos by Marcus Cathe. It is an exhibit to Mr. Milner's deposition, I believe. Let's see, no, direct testimony, I'm sorry. It's Mr. Milner's direct
testimony exhibit that is identified here as WKM-1.
MS. WHITE: Before you read it, I would like to give a copy to the witness so that she can see the context in which the letter is written.

MS. SUMMERLIN: Sure. We don't have an extra copy.

MS. WHITE: I'll give her my copy.
MS. SUMMERLIN: Okay.
BY MS. SUMMERLIN (Continuing):
Q All right. Ms. Tipton, have you got this letter?
A Yes.
Q It's dated July 14th, 1998 at the top.
A Yes.
Q Mr. Milner's -- I mean Mr. Cathe, Marcus B. Cathe's letter to Mr. Ramos has the statement that clearly stated BellSouth's policy is as follows: "BellSouth offers physical collocation arrangements to telecommunications service providers for the purposes of interconnection as well as for the purposes of the telecommunications carrier gaining access to BellSouth's unbundled network elements. BellSouth will permit the placement of equipment in the physical collocation arrangement where such equipment is utilized for the purposes of providing telecommunications services through interconnection or through access to unbundled network elements. Where that equipment can also
provide information services, the telecommunications carrier may offer information services through the same arrangement so long as it is also offering telecommunications services through the same arrangement."

Okay. Do you agree with that statement?
A Yes, I do.
Q If the equipment that supra wants to physically collocate meets those requirements, is it your opinion that BellSouth should be permitting it?

A Yes. To the extent that the equipment that Supra wants to place is being placed to provision telecommunications services, if that particular equipment which provides telecommunications services can also provide enhanced services, then it can be placed.

Q So what you're doing is placing a further restriction --

A No, I'm just --
Q -- on that statement?

A No, I'm simply clarifying what the statement actually says. And if you'll allow me just one moment, please, to find the sentence again. It says: "Bellsouth will permit the placement of equipment in the physical collocation arrangement where such equipment is utilized for the purposes of providing telecommunications services." The next sentence says: "Where that equipment --" it
specifies that equipment "-- can also provide information services, the telecommunications carrier may offer information services through the same arrangement." And I'm simply clarifying that to the extent a particular piece of equipment that is placed for the purpose of providing telecommunication services can also provide some enhanced functionality that it can be placed. And an example of that, in my understanding, the code of Federal Regulations delineates enhanced information services, and part of that definition includes acting on format or content, storing and retrieval and that type of thing. And in discussing this policy and ensuring that we are putting in place policies which also reflect what Bellsouth does for itself, an example of a piece of equipment which is used for telecommunications services but also performs enhanced functionalities are ATM equipment.

Now I'm certainly not an equipment expert, but someone explained to me how that is a good example of equipment that many telecommunications service providers are using today. And an ATM switch has to necessarily act on either format or content or protocol or something to perform its functions that it does to make ATM an efficient technology in providing telecommunication services.

Q Did you listen to the testimony earlier today regarding the ascend TNT equipment?

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A I was here for parts of that discussion but not all of it.

Q Well, to the extent that you heard that testimony, would the ascend equipment not meet the requirements of providing telecommunications services as well as enhanced services?

A I'm not qualified to answer that question.
Q How about a remote access concentrator?
A I certainly don't know what that is.
Q You don't know what that is?
A No, I'm sorry.
Q Okay. Just one second. I think I'm through. I just have to check.

Ms. Tipton, I have a document here that has already been entered into the record as part of the production of documents.

MS. SUMMERLIN: Nancy, it's notes from the June 10th, '98 INAC collocation conference call. I believe it's something we used in the deposition, so I think you've both already seen it. Let me see if we can -- Let me just -I'm trying to figure out what the best way to do this is. Just one second.

BY MS. SUMMERLIN (Continuing):
Q We are just looking for a copy so we can show it to you and I can read this, and then that is all we're
using it for.
A Okay.
(DOCUMENT TENDERED TO THIS WITNESS)
Q Okay. Ms. Tipton, do you have that?
A Yes, I do.
Q Okay. This is like Page 2 of 3 for the notes from the June 10th, 98 , INAC collocation conference call. Would you have been involved in that conference call?

A Most likely I would, and the participant list indicates that $I$ was on this particular call.

Q Okay.
A I tend to participate in all of them.
Q Okay. Paragraph 6 talks about intervals here, and what $I$ would like to do is to -- I'll just -- I guess for want of doing it a better way is just read it very quickly. It's just a short paragraph, and you have it there, and then I'm just going to ask you a question. I'll just pick out the sentence that starts with, "Pam," and I assume that's you?

A Uh-huh.
Q "Pam suggested that we develop a tool for determining the intervals for multiple orders which would allow for a longer response time for a large volume of orders. She said that legal has a concern about making a customer, quote, who wants to take away more of our

[^0]business, end quote, via multiple collocations wait longer for our response."

And then the next sentence says: "We may have to respond to all inquiries in 20 or 30 business days and adjust our work force to handle the demand. The collocation steering committee will assist --" it says "will assist will addressing this issue." I guess "in addressing this issue." What exactly was that discussion about?

A If you will first allow me to clarify something as I did in my deposition as well.

Q Sure.
A But for the benefit of the commissioners, there is a quote that Ms. Summerlin has read which states, quote, legal had a concern about making a customer, quote, who wants to take away more of our business, end quote, via multiple applications, wait longer for a response. And what I clarified in the deposition is that in our discussion with our legal counsel that handles collocation, they were providing that quote as if a customer were stating that. We were expressing our concerns over how to best handle customers who are interested in doing a simultaneous deployment of their network all at once, and that is indicative as well to what Supra has done. So for the record, I just wanted to clarify that quote was put in
quotes because our counsel was saying it as if she were in the customer's position so that we would be mindful of how a customer might feel in developing our methods and procedures when that process was done.

I'm sorry. Would you mind restating your
question? I just wanted to ensure that we got the same clarification that we discussed in the deposition.

Q My question was: What was that about? And I think you got to what I'm trying to get to.

A Most of it, okay.
Q As you did as well in the deposition also. Let me just ask you as the final question: Collocators who want to deploy multiple collocations will take away more of Bellsouth's business, won't they?

A Yes, they will.
Q Okay. Thank you.
MS. SUMMERLIN: No further questions.
COMMISSIONER DEASON: Staff.
MS. KEATING: Staff has no questions.
COMMISSIONER DEASON: Commissioners.
(NO RESPONSE)
MS. WHITE: I just have two on redirect.
REDIRECT EXAMINATION

BY MS. WHITE:
Q Ms. Tipton, you said that one of the reasons for
analyzing the equipment is to see if it meets NEBS criteria, $N-E-B-S$. What does that stand for, and what does it do?

A Oh, okay. And I'm sorry for not clarifying that. NEBS criteria are network equipment building standards which are industry standards and $I$ believe have been established by BellCore. The industry has these network equipment building standards in place to rate equipment on various levels, and I believe there are three levels of NEBS compliance.

For collocation BellSouth requires NEBS level one compliance, which basically means that the equipment must meet safety and electrical wiring standards. Some other RBOCs have put in place requirements addressing the actual performance of the equipment, but Bellsouth simply reviews the equipment that is submitted for collocation to ensure that it meets, at a minimum, NEBS level one compliance and has been NEBS level one certified so that it, for example, can pass the fire spread test. I think the example I used in my deposition is the NEBS testing sees if a piece of equipment that is operational for $X$-number of hours will not spontaneously burst into flames or something to introduce a hazard to the central office.

Q And my other question is: Where do other ESPS that are also ALECs put their ESP equipment?

A I don't know specifically, but they are locating them in a site outside of the central office. In some cases, it is in a property that is very close to the central office. One of our ALEC customers has actually been able to acquire some retail space directly across the street from our central office in Atlanta.

Q Thank you.
MS. WHITE: I have nothing further. May
Ms. Tipton be excused?
COMMISSIONER DEASON: Yes, you may.
MS. SUMMERLIN: Supra would move Exhibit 27.
COMMISSIONER DEASON: without objection Exhibit
27 is admitted.
Ms. White, you may call your next witness.
MS. WHITE: We would call Barbara Cruit,

C-r-u-i-t.
COMMISSIONER CLARK: Ms. Summerlin, do you want to pick up this confidential exhibit here?

MS. SUMMERLIN: We can do it now. I was going to do it either now or at the end of the day, but we'll get it now if you all are through with it.

Whereupon,

## BARBARA CRUIT

was called as a witness on behalf of Bellsouth and, after being duly sworn, testified as follows:

DIRECT EXAMINATION
BY MS. WHITE:
Q Ms. Cruit, could you please state your name and address for the record?

A My name is Barbara Cruit, and my business address is 18560 Northwest 27 th Avenue in Miami, Florida.

Q By whom are you employed and in what capacity?
A I'm employed by BellSouth Telecommunications, Incorporated, and I'm the director of South Florida capacity management.

Q Ms. Cruit, you did not file prefiled direct or rebuttal testimony, so would you please give a short summary about the issues upon which you were deposed?

A I'll do that. Thanks.
I'm here to support the process and the results of BellSouth's forecasted requirements for central office equipment growth in the Golden Glades and West Palm Beach Gardens offices. The current environment for projecting future equipment requirements is significantly different than it was in the past.

In the past, the network was relatively stable and we relied heavily on forecasts received for BST line growth and interexchange carrier access; however, due to the following reasons that have occurred over the past 24 months, we have revised our process for projecting

[^1]equipment requirements. Those changes are: The increased use of the Internet and the inherent increased demand on the network. The second one is the introduction of CLEC networks and the need to interconnect those networks, and the last is the increased demand for wireless interconnection. The demand on the network is no longer stable. It's no longer predictable. Therefore, because of a lack of a forecast from these influences, Bellsouth capacity managers rely heavily on trended demand to determine capacity exhaust and equipment relief.

We project equipment requirements for the next 12 to 18 months based on the actual demand of the past 12 to 18 months. Of course we use judgment in applying that trended forecast to the equipment requirements when we are aware of an unusual occurrence that has taken place. Another change from the past is that we are deploying hardware equipment to last approximately 18 months and deploying the expensive electronics or plug-ins as referred to them as the demand occurs, approximately every six months in this volatile access tandem switches. This allows us to economically and quickly respond to interconnecting customer demands.

I'd like to walk you briefly and at a very high level through the process that capacity managers use to determine the equipment requirements in these offices, and

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I'll start with our switching offices, our switching systems. The switching systems are in three categories. We have some access tandems in these offices, local offices, and then TOPS or operator services switches. I'll start with the access tandem.

The access tandems provide trunks for interconnection to other carrier networks. The central offices that we are discussing here house three Bellsouth access tandems. These switches are the primary point of interconnecting with other carriers, whether they be interexchange carriers, wireless carriers, CLECs or other independent companies. It is critical that Bellsouth be able to continue equipment growth in these switches in order to allow traffic to traverse from one carrier's network to another.

The switch capacity manager trends the projection of trunks based on the most resent projection of the demand. DS-Is or trunks are driven by interconnection to the CLEC networks, the interexchange carrier networks, the wireless networks, as well as BST own end users access to interconnect providers. No forecast is provided by any of these carriers, therefore, trending is used.

In the particular offices that we are talking about, in the West Palm Beach Gardens OT office, we are seeing four hundred T1s per year growth. That is

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approximately a $17 \%$ growth in that access tandem. In the Golden Glades O1T which serves South Dade and the Keys, we are experiencing five hundred Tls of growth per year, which is approximately $19 \%$ growth. And then in the Golden Glades $04 T$ office, which serves North Dade and Broward, we are experiencing approximately 370 T 1 s , approximately $16 \%$ growth.

In our local offices, there are two switches, one in each office, that support the local office requirements. These are driven by both line requirements, or access line requirements, and trunk requirements. So for line requirements, the switch capacity manager receives a wire center forecast of lines. In addition, the outside plant loop capacity manager receives that same forecast and he forecasts the growth of the digital systems for the outside plant that are to be integrated into the office based on the forecast of lines and his knowledge of the wire center growth and the activity. He provides that forecast to the switch capacity manager who turns that system forecast into digital lines and assumes the remainder to be analog line requirement.

The switch capacity manager, his requirements and projections are trued up based on the most history data and the knowledge of unusual activities. In addition, the switch capacity manager considers services to be provided
such as caller ID, calling name delivery and others, and then determines the equipment requirements to satisfy all those demands. And it's very complicated, and that's the very high level of summary I'd like to tell you about lines.

For trunk requirements, however, due to the recent volatility of local trunking demand driven especially by the Internet service provider access, and PRI, primary rate interface ISDN hubbing arrangements, the interoffice trunk requirements are based on most recent current trends of trunking requirement. And the switch capacity manager determines those requirements and turns them into equipment needs. For these particular offices, we are experiencing approximately a $5 \%$ line growth in the West Palm Beach Gardens local switch and less than a $2 \%$ line growth in the Golden Glades switch.

On to the third type of switch that is in these offices. We call them TOPS, telephone operator position systems. They serve the operator services requirements. The demand for these offices is driven by the need to expand or modernize the operator services network. In doing that, it requires the replacement of some old technology with newer technology.

The next area beyond switching is circuit and transport equipment. In these two offices, in the west

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Palm Beach Gardens office we are projecting 16 bays per year growth; in Golden Glades 22 bays per year growth. This is primarily driven by the need to provide carrier interconnection and customer-driven smart ring sales.

In projecting the future needs, the circuit capacity manager identifies the needs for test access, metallic repeater equipment, SONET equipment, digital cross connect system growth and associated cross connect panels. This person, the capacity manager, considers local and message trunk growth, ISP trunk growth, interexchange carrier and CLEC trunk requirements. They also have to consider the expected growth for customer-driven SONET-based smart rings as well as interoffice SONET rings. They are also an interface to the outside plant capacity manager who provides requirements to them to place equipment in this area as well for next-generation digital loop carrier equipment, loop multiplexors and fiber distribution frames. The circuit capacity managers considers all of these above requirements, and when they are requested they provide the common systems capacity manager with an estimated equipment requirement.

My capacity managers also project the needs of power equipment. Power equipment is identified -- needs are identified through our Lucent power planner where we have out-sourced the planning for this equipment for

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rectifiers and batteries. In addition, the power capacity manager plans the replacement and the upgrades for optional standby engines.

And lastly, the equipment that is also in this office is the STPs and SCPs. This equipment is planned by the regional planning and engineering center and a regional center that monitors the capacity of these switches and provides the frame requirements to the common systems capacity manager.

Finally, the common systems capacity manager, of which two of them are here today, ensure that all the installed equipment is properly shown on the office floor plan, that all outstanding orders for adding or removing equipment are reflected on those plans and that the equipment bay projections from all these resources are shown accurately.

Thank you. That completes my summary of the process and the results of the forecasted equipment requirements.

MS. WHITE: Ms. Cruit is available for cross examination.

COMMISSIONER DEASON: Ms. Summerlin. CROSS EXAMINATION BY MS. SUMMERLIN:

Q Good afternoon, Ms. Cruit. I'm Suzanne Summerlin

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for Supra.
MS. SUMMERLIN: I have Ms. Cruit's deposition transcript and the documents that we intend to cross her on that came from Mr. Milner's confidential exhibits, and we have that in a confidential envelope to pass out right now, and so we'll do that. We've already moved all of this into the record, so this is just for the demonstrative purposes. And then I also have two other exhibits that I need to get recognized, but I guess we can do that when we get to that.

I'm going to go ahead and ask that these two exhibits be identified, and I'll start with them please. The first one is the petition for waiver filed by BellSouth for the North Dade Golden Glades office. That is identified as being in CC Docket 91-141, and it has on it a received stamp February 16th, 1993. And I would ask that that be identified as 28 , I believe was the next one.

COMMISSIONER DEASON: It will be so identified. MS. SUMMERLIN: And then the other exhibit that $I$ need identified, it would be number 29, would be the west Palm Beach Gardens petition for waiver which is in CC docket 91-141 and CC Docket Number 80-286; and that has a receive stamp in the upper right-hand corner of November 18, 1993.

COMMISSIONER DEASON: That will be identified as

Exhibit 29.
MS. SUMMERLIN: 29, okay. BY MS. SUMMERLIN (Continuing) :

Q Ms. Cruit, I know from the fact that we deposed you that you were not responsible for filing these petitions for waiver in your shop because you weren't employed in that particular shop, were you, at that point in time; is that correct?

A That's correct.
Q But just for purposes of talking about BellSouth's projections, I want to talk to you about this, but I'm not going to hold you responsible for knowing what happened specifically in this situation because I know that you did not yourself -- you were not in charge of the shop when this happened.

Let's look at the West Palm Beach Gardens petition for waiver. That will be the one that has got the November 18th, and that would be Exhibit 29 . And in this petition for waiver that was filed and evidently submitted November 18th, 1993, on Page 3, Paragraph 3, there is a discussion regarding the West Palm Beach Gardens central office, and I want to specifically talk about one statement in that paragraph, which is technically the second sentence in the paragraph, and I'll just read it: "BellSouth has reserved 21 hundred square feet for projected growth of the

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switches over a two-year period." And the rest of the -That's basically all there is about future growth for that office. And, actually, what may be useful for everyone is to just point out that the entire discussion about this central office is in that paragraph here. And to be, you know, fair about what is in there, it says: "There are four switches and associated peripheral equipment consisting of polling equipment, circuit equipment, $D C$ power and main distribution frame located in the Garden CO." And then it has the sentence I just read: "Bellsouth has reserved 21 hundred square feet for projected growth of the switches over a two-year period." Then it says: "An additional 23 hundred square feet comprised of entrance lobby, bathroom facilities and a mechanical room for HVAC --" which is heating ventilation and air conditioning, I assume "-- is classified as unavailable space.

When you look at a sentence like that, basically this indicates that at this point in time, November 18th, 1993, BellSouth was reserving 21 hundred square feet that it projected to be needed for a two-year period; is that correct?

A Apparently that's what it's saying, but I'm really not your witness for this type of discussion because I am not in a position to discuss reserved space in terms of square footage. I can discuss equipment projections
for -- to support the projections that the common systems capacity managers have, so I'm not familiar with this, and I can't even speak to the 21 hundred square feet or the additional 23 hundred square feet.

Q I understand what you've clarified in your deposition, that you are not the person who translates these projections into square feet, I understand that totally, but isn't it true that the people who do translate it into square feet rely on your projections?

A On the equipment projections, that is true.
Q So someone in the shop that you're in, not -- you were not there then, I recognize that, because you began that position in '95, so obviously you weren't there; but somebody in your shop had to provide the projections on which this statement was based; is that not correct?

A I assume that it is. I really don't know how the process was handled back in this time frame. I cannot speak to how this was developed back then. I'm sorry, I can't. I would like to, but $I$ can't.

Q Okay. But you have -- do you have any reason to think that the structure of Bellsouth on this issue was different at that point in time?

A I don't have --
Q What I mean is, do you have any reason to think that there wasn't a shop just like the one that you are
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operating in that provided these projections at that time?
A Well, we have been significantly reorganized since this time, the time frame that you are talking about. We went through a major reorganization in 1994 and 1995, so I don't know how it was done back then.

Q Okay.
A Now I can tell you though that the equipment projections have increased dramatically since this time frame. As you will recall in the deposition and in the production of documents, we looked at the equipment forecast back in the '92/'93 time frame, and they were relatively flat; but as I discussed in my summary, the explosion of equipment requirements has taken off in the last 18 to 24 months. So I can see why there would be a significant difference between what is required for space now as compared to then.

Q Okay.
A I mean that's all I can say.
Q And I appreciate -- Are you through?
(WITNESS NODDED HEAD AFFIRMATIVELY)
Q I appreciate what you're saying, and I understand where you're coming from on that. I guess what I'm trying to get you to tell me, since you are the witness BellSouth has put on -- or, no, I'm sorry, you are the witness --

A For equipment.

Q No, I'm sorry, let me restate it. I surrender already before you get up and yell.

You are the witness that BellSouth identified when Supra asked for someone who was a projections or forecasting expert?

A For equipment, yes.
Q For the company for equipment?
A Yes.
Q And for that reason, that's why I'm asking you.
A Okay.
Q Because nobody else here today will tell me that they can tell me about projections.

A I can't tell you how that 21 hundred square feet was projected, what it was based on. I don't know.

Q Okay. But let me just ask this question: Is it fair to say that somebody at BellSouth made that projection?

A I think that's probably fair to say.
Q Okay. Okay.
A How they did it, or who did it, I don't know.
Q Okay.
MS. SUMMERLIN: Okay. We have located one other exhibit that relates to this, and I would ask that this be identified as Number 30.

COMMISSIONER DEASON: It will be so identified.

BY MS. SUMMERLIN (Continuing) :
Q This one -- this order has a stamped date of February '94 at the top, and it's a Memorandum Opinion and Order of the Federal Communications Commission issued in CC Docket Number 91-141.

Ms. Tipton, do you have this exhibit yet?
A Ms. Cruit? No, I don't.
Q I'm sorry, I'm calling you the wrong name. I'm sorry. Ms. Cruit, you didn't get it yet?

A No.
Q I'm sorry, we thought we were handing them out. I miscommunicated.
(DOCUMENT DISTRIBUTED)
Q Okay. Do you have it, Ms. Cruit?
A I do.
Q Okay. If you look at page 2 of this FCC order, this order granted BellSouth's request for the waiver, and on Page 2 there is a Section 2 that deals with pleadings, Paragraph A talks about Bellsouth. What I need to point to is what it says about: "At its Gardens central office in Palm Beach Florida, Bellsouth alleges that 23 hundred square feet of office space are unavailable for physical collocation because this space is used for entrance and bathroom facilities and a mechanical room containing heating, ventilation and air-conditioning equipment.

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Bellsouth also has reserved 21 hundred square feet within that office for projected growth."

In its reply BellSouth states that six hundred of this 21 hundred square feet are needed for three years of growth for a DMS-200 access tandem switch and a DMS-100 switch to provide local switching. BellSouth asserts that another six hundred feet are needed for a DMS-200, a TOPS operator switch and a DMS signal transfer point, STP. Finally, BellSouth claims that the remaining 900 square feet must be reserved for main distribution frame growth and maintenance administration.

I guess what I would ask you if you can respond to it at all: Does this appear to be the same kind of projection that you would make now in terms of you would be saying that a certain amount of equipment is going to be needed for a certain period of time?

A I would tell -- as a switch capacity manager or a circuit capacity manager or a power capacity manager, I would tell the common systems capacity managers how many frames of growth I project in the next two to three years.

Q Okay. And someone like that would have been behind this request basically in terms of in the --

A That's what I would do now.
Q Yeah, okay. Okay. So you don't have any knowledge specifically about what happened with all these
specific items, and we'll have to ask somebody else to know whether or not these projections panned out the way BellSouth proposed that they thought they would? You don't know that; is that --

A No.
Q That's what you're saying.
A Right, I don't know how -- what these were based upon.

Q Okay.
A I do know that the dynamics of these offices are great, and I know that -- and, in fact, you have observed in your tours that the offices change week to week. Equipment is added. Equipment is removed. Space is reorganized, so it is not a surprise to me that in four or five years that there are significant changes in this office.

Q Okay. So --
A Because they are volatile dynamic offices.
Q Okay.
A And the forecasts have changed significantly.
Q Okay. So that means that sometimes space gets freed up; is that right?

A Yes, as --
Q In a dynamic situation?
A As equipment is modernized, it does, yes.

Q Okay. Are you aware of whether Supra's request for physical collocation was evaluated in light of that dynamic environment?

A I am not aware of that.
Q Okay. I guess just to make one sentence on this other Exhibit 28, and just simply to point out that there was a specific projection made for the North Dade Golden Glades office. If you look at the first attachment to this petition for waiver, there is a chart at the top that says "Expanded Interconnection, Docket Number 91-141, Central Office Inventory for Bellsouth Telecommunications," and it - - on the locations, it lists North Dade, and then it says Golden Glades for the central office name?

A I don't know where you are. Can you --
Q Okay. I'm sorry.
A Which, where --
Q If you will look at the petition for waiver that has the date February 16th, 1993, at the top --

A Okay.
Q -- that deals with North Dade Golden Glades, so just look to the first attachment.

MS. WHITE: Well, if it will hurry things along, BellSouth will stipulate that attached to the petition for waiver is a projection, if that will help.

MS. SUMMERLIN: That's all I'm going to do, is
ask -- just point out that one statement, okay? BY MS. SUMMERLIN (Continuing):

Q Have you found it?
A I am at an attachment. Is it this one?

Q Yes.
A Okay.
Q All I'm trying to point out is that there is on this document for the North Dade Golden Glades central office under the column "Vacant Reserve Space," the figure one thousand square feet, okay?

A Yes, I see that.

Q Okay. And consistent with what you've just testified on the other petition for waiver, you have no idea where that came from or what has happened or anything else about it?

A That is correct.
Q Okay. If it's true that today in Mr. Bloomer's testimony he had stated that Bellsouth is reserving substantially more space than that thousand square feet today, does that not indicate that something was -- some kind of problem occurred with the projections that were made when this petition for waiver was filed?

A No, I don't assume that because I told you that the conditions have changed dramatically; and I would expect, because we have seen the growth rates that $I$ stated
in my summary, that we would be reserving more space for future growth than we did in this time frame. So that doesn't tell me that there was anything wrong with the projections at the time.

Q Okay.
A As you've seen on the documents that we've produced, the growth rate in that time frame was much less than it is today, significantly less.

Q Okay. If it was significantly less and one thousand square feet was said to be needed for the immediate future at that point in time, if a great deal more space than that is left now, doesn't that suggest a problem with that projection?

A No, because that time frame that you are projecting was the '93/'94 time frame. We are now projecting '98/'99, 2000; so, no, it doesn't.

Q If there has been no change to the building that we are talking about in terms of any additions of space, doesn't it suggest that the projections that were made at that time may have been faulty?

A The equipment projections?
Q Yes.

A No, it doesn't.
Q What could have happened, to answer that question?

A What could have happened to what?
Q What $I$ am saying to you is that at that point in time -- we have just looked at two petitions for waiver filed by, BellSouth, both of which indicate that five years ago, approximately five years ago Bellsouth believed that substantially less space was left and available for future use than it says is now available today?

A Well, as $I$ indicated just a minute ago, the office is dynamic, there are always changes. There is equipment being removed. There is equipment being added. We are modernizing. We are replacing equipment.

Q Okay. Modernizing would mean that the equipment -- the more advanced technology would require smaller or less equipment maybe?

A Well, by modernizing $I$ meant that we are putting in equipment that will provide additional functionality than the equipment that is being replaced.

Q Does that mean that the equipment, the space needed for the equipment to serve the same demand is less?

A Not necessarily.
Q Well, then how do you answer the question of the fact that there is more space available in these offices now than there was -- that BellSouth claimed there was when they filed these petitions for waiver? Something has -Do you not concede that something has to be an explanation
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for this?
MS. WHITE: Okay. All right. I'm going to have to object at this point. She has answered this question fives times, that no she doesn't think anything is wrong. She said what she bases her answer on. She said that she doesn't know what the projections were based on in ' 93 and she is doing the best can. Ms. Summerlin obviously wants this witness to say something that she either doesn't -that either Ms. Cruit doesn't agree with or doesn't know the answer to.

COMMISSIONER DEASON: Ms. White, you can stop. The objection is sustained. The question has been asked and answered.

Ms. Summerlin, you may move on.
MS. SUMMERLIN: I'll be happy to move on. BY MS. SUMMERLIN (Continuing):

Q Ms. Cruit, I passed out our deposition transcript and a couple of confidential exhibits and hopefully you have that.

A No.
Q You do not have that?
A No, I do not. Oh, here it is.
Q Okay. I just have a few questions on a couple of the things that we talked about at your deposition. There are two -- there should be two items there.

A Okay.
Q That are two different stapled sections of several charts.

A Okay.
Q These are -- do you recognize these charts from Mr. Milner's exhibit --

A Yes.
Q -- that is already in the record now?
A Yes, I do.

Q Okay. One of these sets of charts has in the bottom right-hand corner an identifier of NDAD, obviously North Dade, Florida, Golden Glades central office. Do you recognize which one I'm talking about?

A Yes.
Q Okay. And the first one is labeled 32.1.
A Okay.
Q And I guess -- I just want to ask you a couple of questions about the forecasts. These are forecasts that you -- your shop made; is that right?

A Well, we used the forecast, and these charts are -- this is a mechanized tool that my organization uses, these charts.

Q Okay.
A So when you say forecasts, we need to talk about which forecasts you are talking about, but I am familiar
with this, and we can walk through it if you'd like.
Q Well, I guess what I'm asking is did your group generate these?

A The charts?
Q Yeah.
A Yes.
Q Okay. That's all I was trying to get.
A Not necessarily the forecasts, but the charts, yes.

Q Okay. Who generated the forecasts?
A Well, we need to .- I need to know which one you are talking about because if it's line forecasts for the overall office, that is developed by one organization. If it's a forecast of digital systems, that's developed by another. If it's the remaining analog, that's another.

Q Okay. Are these --
A So if you'll tell me more, I'll be glad to answer your question.

Q Okay. I was under the impression that you were above those various groups; is that not correct?

A No. No, I don't have a forecasting organization.

Q Okay. So you take --
A Where we do not receive a forecast we develop our own, and it's based on projections of the last 12 to 18
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months' history.
Q Okay. So --
A So where we do receive a projection, or a forecast, we use it; and that's what's plotted on some of these charts.

Q Okay. So all -- what you can tell me is what the forecasting approach is that's being used at this time? Can you tell me that?

A Yeah, I can talk to you about that.
Q Okay. I know that you said earlier today that the forecasting approach that Bellsouth is using has dramatically changed in the last couple of years; is that right?

A That is right.
Q And what is the basis -- what is the basic idea of that change? I mean how has it changed?

A The basic -- Well, in the past, we used to receive forecasts for lines and trunks. Today, we re -I receive a forecast for lines, network access lines from the forecasting organization. We do not receive a forecast for trunks because of the demand of the interconnection and the demands coming from the interconnecting carriers. They consider that market intelligence, competitive information; and, therefore, especially on trunks and, you know, that's where we are doing our own forecasting and basing it on

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current most recent history, we are developing our own because we cannot get a forecast of interconnecting trunks from the carriers.

Q Okay. But is it true that at some point Bellsouth has to come up with a projection?

A Absolutely.
Q For each of these items?
A Yes. Yes.
Q Okay. Whether you get something from somebody else or not; is that right?

A Yes. Uh-huh.
Q Okay. Is it true that what has really happened is that now instead of using several years worth of data you use 12 to 18 months worth of data to project what your situation is going to be?

A Well, rather than using an input of a forecast, we now base trunking demands on the most recent 12 to 18 months.

Q Is that what was done back -- you told me in '95 and '96, I think, that there was a different approach used. How does this approach differ from that?

A We would receive forecasts from interexchange carriers -- See, the change is that we are interconnecting now with many more players than we used to interconnect with, and so we had established a relationship
of sharing information with the interexchange carriers. They would provide to us a forecast of what they would expect to need to turn up. That we would plow into our forecasts, and we would know what demand to project.

In today's world, because of the explosion of the Internet and not having a forecast of that demand, because of the interconnection with other CLECs where we haven't developed that relationship yet, because of the interconnection of wireless and their marketing strategies, we do not receive a forecast from all of those various players. And so based on that, we are projecting our current trends for the next 12 to 18 months and purchasing equipment based on our most current 12 to 18 months, in light of not having anything else. For trunking I'm talking about.

Q Okay. What do you use for lines right now?
A We have a forecasting organization that provides us a forecast of network access lines on our local switches, not on the access tandems, because I told you the tandems are just trunking interconnection; but on the local switches, we receive a line forecast. And in my summary I said that line forecast goes to both the switch capacity manager and the loop capacity manager who is planning the outside plant. They take those forecasts, the loop capacity manager turns that into systems that need to be
deployed in the field that they plan to integrate into the switch. They provide that to the switch capacity manager who takes that information along with the knowledge of the overall forecast and determines the analog and digital requirements.

Q Okay. So is it fair to say that your forecasts today are based on less information than your forecasts were in '93 and '94?

A Could you be more specific what kind of switch your talking about? Are you talking --

Q For any of your switches.
A No, I don't think that's fair to say for the local switches. For the access tandems, yes, it is based on the -- we are trending our data based on the most recent 12 to 18 months worth of history for the access tandems. For the local switches I just went through the process that we are using.

Q The local switch forecasting is exactly the same as it was when you first got involved in that organization in '95?

A For lines.
Q For lines?
A For lines, and for trunks we are utilizing a trended demand because of the Internet explosion and the access from the end user to their Internet service

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provider.
Q Okay. So you said that it was correct to say that your forecast for trunks are based on less information?

A Trended. They are trended. I don't know if it's less or more. I mean it's what has recently happened in the current past, and we have nothing else to go on other than history. We don't get a forecast from our end users of who they are going to access for their Internet provider. We don't know what they are going to use their access lines for. We do know that they are accessing Internet service providers, and so we have to have demand -- we have to have capacity in that office to carry their access requirements, regardless of where it's going to.

Q Yeah. I understand what you're saying. I'm just trying to clear up for my understanding that what you're saying is that the trunk forecasting that you do now as opposed to the trunk forecasting you did in '95 is based on less information?

A It's based on different information, how about that? We can agree on that.

Q Not necessarily. I'm trying to understand.
A Well, in the past --
Q You said before that it was less information. I believe earlier in your statement today you said that, and

I just wanted to --
A I don't know that $I$ said less. I just said it's different. I said it's different. I said that demand on the network is no longer stable and predictable; therefore, because of a lack of a forecast for the influences that $I$ discussed, we rely heavily on trended demand to determine capacity exhaust.

Q Okay. In '95 when you did a trunk forecast, how much historical data did you use? Did you go back three or four years at that time?

A We had as much data as we have today, and in '95 when we were doing trunk forecasts, they would look at the access line increase, and they would project that into a trunk requirement; and the network was stable, and so they used about the same number of trunks to lines to project as they had in service. Today, the usage on the network is increasing substantially, and so they cannot use that same trunk-to-line ratio, so we are projecting the demand of the trunk network.

Q Okay. You just said then you had as much data as you have today; is that what you just said?

A We have -- Yes. Data in terms of history; is that what you mean, history data?

Q Yeah, my understanding of what you have said today is that you now use 12 to 18 months of data; whereas,
in the past, you used substantially more data in terms of more period of time, historical period of time.

A No, not period of time. It has nothing to do with the period of time. The reason that we've changed is that the influences on the network changed significantly 12 to 18 to 24 months ago, and that's why we are using the most recent demand rather than trying to look back and use an average of the last four years or use the old process where we were using a line-to-trunk ratio. We are using current history to try to project, to stay ahead of customer demand.

Q Okay. Did you use an average of the last four years back in ' 95 to do this forecasting?

A No, we didn't use an average.
Q Okay. Did you use --
A We used --
Q I'm sorry. Go ahead.
A For trunks we used a line-to-trunk ratio. We projected the number -- we knew the number of lines projected for the forecast. We applied that line to trunk ratio and any other known changes that were occurring in that office, and they developed -- we developed a trunk forecast based on that.

Q Okay. I'm going to end this real quick, but I just want to ask you one more time: In 1995 when you

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started in this position, did you use only 12 to 18 months worth of data to make your forecasts for trunks?

A No.
Q What did you use?
MS. WHITE: Again, this question has been asked and answered.

COMMISSIONER DEASON: The question has been asked and answered, Ms. Summerlin. You can move on.

COMMISSIONER CLARK: Then if it is, I'm not clear of the answer, and I apologize.

COMMISSIONER DEASON: Well, I apologize, when we get to you asking questions, you can ask your question at that point.

COMMISSIONER CLARK: Okay. All right.
COMMISSIONER DEASON: But it's clear to me. Ms. Summerlin, you need to move along.

COMMISSIONER CLARK: Let me follow up on that point. Would it be fair to say that you have -- with regard to your trunks and lines, you used to be able to rely on your projections of lines to determine your trunks because you were, generally speaking, the sole provider of those lines?

WITNESS CRUIT: Yes.

COMMISSIONER CLARK: All right. Now you are no longer the sole provider of those lines; is that correct?

WITNESS CRUIT: Well, the lines that are being served by our local office we are the sole provider of those, but the difference is the usage of those lines is extremely different than it was then. Then it was traditionally voice traffic. Now a lot of that usage is data traffic. It's access to the Internet. That started --

COMMISSIONER CLARK: All right. Do you know --
WITNESS CRUIT: I'm sorry, go ahead.
COMMISSIONER CLARK: Do you know what is coming in over a line?

WITNESS CRUIT: No, we do not. It is a, 1FR, 1F, 1F -- 1FB. It's a line. A line is a line. It comes into the office, and it uses the network equipment in that office. When the line is up or being used much longer today than it was in the past, it requires additional trunking facilities.

COMMISSIONER CLARK: And it's that information that you don't have so you can project the number of trunks; is that correct?

WITNESS CRUIT: That's correct, and so, because we don't know how much the subscribers in these particular offices are utilizing or going to utilize their lines for Internet access or any other data demand, we are projecting the demand of trunks based on the most current 12 to 18
months worth of history because we think that more accurately reflects the demand of the future.

COMMISSIONER CLARK: Okay. Do you think it would be fair to say that because you are not -- you don't have the information about what is coming in on those lines now that your projection of trunks will be less reliable than if you did have all that information on the lines?

WITNESS CRUIT: It's probably less reliable, but it's the only method that we have of projecting trunking today.

COMMISSIONER CLARK: I'm not faulting your method. I'm just trying to get --

WITNESS CRUIT: Yes, it's not as reliable as we would like it to be. We would like customers to have a separate line and know that it's going to be used for Internet access and know when it's going to be used and have an average projection, but we don't know. All we know is that they have a line. They might have an additional line, but as they come into the office, I don't even know which ones are additional lines, which ones are primary lines. I just know a line is a line. Traditionally it's been used for voice. It's being used much, much more today for data generating a lot more traffic usage on the network and, therefore, I have the trunks -- I need to have the trunks, or we incur blocking in the office.

COMMISSIONER CLARK: Right.
WITNESS CRUIT: And we don't want to do that, so we are really trying to stay ahead of the demand.

COMMISSIONER CLARK: But you say -- and I
understand the reason you don't have that information is your competitors don't want to provide it to you, and I think that's understandable. But it does make your ability to project what you need more volatile?

WITNESS CRUIT: Absolutely, it does.
BY MS. SUMMERLIN (Continuing):
Q Ms. Cruit, I would like to look just a couple of seconds at these two different charts on the North Dade Golden Glades and the one set that starts with the 32.1 in the bottom right-hand corner. Can you describe for me, or explain to me, I guess, what the dotted line is the projection for -- or the forecast; is that right?

A Yeah.
Q Okay. Is that basically a flat growth projection or a very close to flat?

A You are talking about on the first page?
Q Yes, it should say North Dade Golden Giades 32.1 at the bottom right.

A Yes. That's -- remember when $I$ was talking about the lines being served in the office, I said that some of them are served on an analog.

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Q Yes. I --
A -- like analog terminations, others are served by digital. So these particular ones that you are looking at on the front page are analog line terminations. This is made up of equipment types that are LMs, which are old peripherals; and LCMs, which are new peripherals.

Q Okay. So when we look at what you are currently experiencing as demand, that's the lower line to the left, the solid line?

A Demand is the solid line. The projection is the dotted line.

Q Okay. And then your capacity is the line above?
A The upper line.
Q The upper line?
A Uh-huh.

Q So does that indicate that you have greater capacity than is needed for your current business as well as the projection?

A Yes, it does.
Q Okay.
A In this particular case, but I would like to explain that because that excess capacity is the old type of equipment, what we call line modules. Those line modules cannot provide caller ID type services, so we are replacing those line modules as the caller iD service
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requirements or the forecasts for caller ID lines. At that growth rate we are providing additional new modules to support the conversion of the old to the new, and as we do that, we add new modules and pull out the old.

Q Okay.
A So that capacity is required until we are able to replace the old modules.

Q Okay. The second sheet -- the second sheet in this group has got 32.1 in the bottom right-hand corner.

A Yes.
Q This projection is a rising up in the future apparently, the dotted line. Does this show that you have a lot more capacity that is planned than what the forecast seems to indicate will be needed?

A No, I don't think so. In '99 it indicates about what, three months prior to the demand actually materializing that the equipment is being installed. And as I told you in my deposition, this is made up of several different kinds of equipment. It's made up of -- I hate to get into this -- TR008 equipment requirements, which is a BellCore standard and TR303 requirements. That's defined by the outside plant in how they plan to administer the allocation area or the serving area that they are treating, and so depending on how they plan equipment growth, $I$ take it into the central office to terminate whatever their

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equipment requirements are; so I really plan it based on systems, which I don't believe you have included here, and turn it into digital lines that that's going to serve.

Q Okay. Ms. Cruit, let's move past the next one to the one that says at the very top, "SLC96, dash, Working."

A It says on the top "SLC96-Working?"
Q Yeah, and --
A Oh, I'm sorry. Okay, I see that.
Okay. You see what I'm talking about?
A Uh-huh.
Q Okay. Where this dotted line is, it appears to be leaping up from where your demand, your current demand line is. Can you explain where that's coming from, or what that --

A Well, I can explain that the dotted line indicated that we needed relief where we provided it. The solid line indicates that the demand on these particular systems is not as great as they thought it would be.

Q Okay. Let's move to the next one. Up at the top it says is "SLC96-Assigned?"

A Right, that is the same as the previous one. One is just systems that are assigned; the other is systems that are working.

Q All right. And so it's the same basic reasoning?
A Well, it's the same equipment.

Q All right. Let's see, on the last sheet in this section, up at the top it's got "DS-1 Trunks."

A Yes.
Q Okay. When I talked with you at the deposition, you said that this very high or steep increase in demand was due to two anomalies; is that correct?

A It was due to switch replacements that we are installing new offices that are digital offices and we need to turn up trunks to both of those offices during a conver -- during the conversion time frame. We have trunks going from, in this case, Golden Glades to the old analog switch and to the new digital switch. And so, yes, this is -- the steep rise is because we have those trunks turned up simultaneously, and then it comes back down. You see it coming back down in one case. In the other it will go back up and then come back down. So I think my point in the deposition was that in this case we wouldn't use that steep riser to project our future requirements for DS-1 trunks in this office. We would use the lower points on that curve to determine when we needed future relief.

Q You don't really show a forecast on this one?
A I don't show a forecast here, no.
Q Okay. On the next sheet that at the top says -well, actually it says "Units Divisions Equals 40," but I don't see --

A On the side, ISDN, BRI; is that the one you are looking at?

Q Yeah. Can you explain exactly what -- This forecast appears to be eventually going in a downward trend, but the capacity seems to be very high.

A Well, and that's based on the current demand. This is ISDN lines. We know that customers are buying BRI, which is basic rate interface ISDN lines for computer access. We think that, in fact, this drives the trunks as well. So, you know, based on the forecast or based on the demand, the forecast is significantly understated. That would also account for the under run on the other one. We've over run the forecast in basic rate interface, but yet we have under run the other; so we have provisioned based on the demand, the most recent demand.

Q So the forecast -- the demand line ends at a certain location, and obviously the demand has gone over what your forecast was, but your forecast is not -- you don't seem to have changed the forecast upwards, but the capacity level seems to be very high in comparison?

A Well, that's what -- well, very high compared to what?

Q To the forecast.
A Well, but that's because this forecast we received from that forecasting organization, which we have

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not gotten an updated one, so that's why I say we are trending based on history so that we can make sure we have the capacity and not have to deny customers' requests for service.

Q Okay. On the next page, which we have written in nice scrawled handwriting, primary rate interface, this forecast seems to be quite extreme here. Can you explain how that, where that comes from when the demand curve does not seem to be nearly that steep?

A The demand has not materialized here as the forecast indicated that it would, and so as a result, we have not provisioned the equipment. I guess the point to learn from all of this is that we are trying to provision based on the current demand. We are not putting equipment in our offices. We are not filling up space just because we have a forecast that tells us to do so. We are using judgment. We are applying it on the most recent history so that we can use our capital efficiently as well as our floor space.

Q Isn't this an example of where your forecasts have been pretty way off?

A Yes, this is an example of where the forecast is off by about 20 , I mean if you call 20 units significant. I don't. But apparently it looks like it is because of the scale, but it's really not.

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Q I don't have any further questions.
A Okay.
MS. SUMMERLIN: Thank you.
COMMISSIONER DEASON: Staff, how much do you have for this witness?

MS. KEATING: Staff has no questions.
COMMISSIONER DEASON: Commissioners.
COMMISSIONER CLARK: I'm sorry, but $I$ did not understand. What did you do to come up -- did you say you knew that with respect to the 21 hundred square feet for projected growth that was in your petition -- I guess it is in '93 -- how did you say that was arrived at, or how you think it was arrived at?

WITNESS CRUIT: I said I didn't know because I wasn't there. I am not aware of the process that was used to develop that.

COMMISSIONER CLARK: I'm sorry, I thought I heard four years somewhere for something. No?

WITNESS CRUIT: No, I don't think so.
COMMISSIONER CLARK: That's fine. I may have misheard. But this, but the way you used to do it was you had information about the lines and you could make projections?

WITNESS CRUIT: Right.
COMMISSIONER CLARK: When did you no longer use
that type of projection, at what point?
WITNESS CRUIT: In the last 18 to 24 months, and the real driver for that -- that's what you need to understand -- the real driver for that is the change in the environment, the explosive Internet, the CLEC, the wireless interconnection. All of those things have changed the way that we plan. If we were using those old planning processes, we would not be meeting service requirements today. So we have changed it in reaction to the environment, and that happened 18 to 24 months ago when all of those things started happening.

COMMISSIONER CLARK: Okay. When did you start
doing trending?
WITNESS CRUIT: In the past 12 to 18 months. When we started -- really we started when we saw the Internet access, which was in late -- two years ago -- '96. Late ' 96 when all of the Internet service providers went to a flat-rate pricing, that's what really caused the usage on the network to increase dramatically. We saw that in early ' 97, and we began using this other process as we saw the demand increasing significantly. And as we got more history and we saw that it wasn't a one-time event, that it was going to continue to occur, we decided that in light of the environment we needed to change our process. And that's when we went to a trend rather than using, you

[^2]know --
COMMISSIONER CLARK: Describe to me how you do the trending.

WITNESS CRUIT: well, I wish I had a -- Can we give them a chart that was in the deposition on like one of tandems so they can see that? Can we share that with them? Because then you would be able to see the past.

MS. WHITE: Ms. Summerlin, did you handout the --
MS. SUMMERLIN: We handed out some of your charts in that confidential exhibit.

WITNESS CRUIT: Oh, okay, let me find one. Well, no, this is just my transcript, right?

MS. SUMMERLIN: No, the charts that we were talking about; is that what --

WITNESS CRUIT: Oh, but those are just the local offices. They really have very little influence on the space requirements in these offices. What really is driving the space requirements in these offices are the access tandems which we haven't talked about at all. I'll answer your question. A picture says a thousand words, but we are looking at -- If you could see this picture that I have, you could see that the demand in the '94, '95, '96 time frame was relatively stable, but then in late '96 and '97, it --

COMMISSIONER CLARK: When you say it was stable,
was it flat or --
WITNESS CRUIT: It wasn't flat, but it was growing slightly.

COMMISSIONER CLARK: Okay.
WITNESS CRUIT: Like probably 4 or $5 \%$.

COMMISSIONER CLARK: Each year it grew by about the same amount?

WITNESS CRUIT: Right.
COMMISSIONER CLARK: Okay.
WITNESS CRUIT: And then in '97 you can see the steep of the curve, which is the demand, increases significantly. So we are taking - because we want to anticipate that increased demand due to the changing environment, we take the last 12 to 18 months, whatever looks appropriate in the particular situation, and we are projecting that another 12 to 18 months, and we are provisioning equipment based on the most current history.

COMMISSIONER CLARK: You just assumed the curve is going to be, have the same --

COMMISSIONER JACOBS: Slope.
COMMISSIONER CLARK: -- slope? Thank you.
WITNESS CRUIT: Yes, we are, until we see something different. So far that's what it looks like, but until we see the conditions change again, that's what we are doing. 12-month, 12- to 18-month window. We are providing the expensive plug-ins on six-month intervals. We are putting in the hardware for about a 12-month, 12- to 18-month period, providing the plug-ins on a six-month interval. If we see the demand take a downward trend, that job, rather than being a 12-or 18 -month hardwire job, may be a 24-month job, which is still well within our planning guidelines for economically provisioning offices.

COMMISSIONER CIARK: Is it Your testimony that what is driving -- and tell me what is -- I just was trying to look for my prehearing order, but I don't see it. What is your projected -- What have you reserved for projected growth in the Garden central office?

WITNESS CRUIT: In West Palm Beach Gardens?
COMMISSIONER CLARK: Right.
WITNESS CRUIT: It is my understanding that the testimony of the space reserved for the Gardens' tandem is six to eight frames per year, and what we are actually experiencing is more like 10,10 to 11 frames per year based on this most current trend. In the local office, I believe the trend is based on six frames per year. For the TOPS it's based on one or two frames a year.

COMMISSIONER CLARK: Now let me just ask you, is the local or the TOPS, are your projections for those, the
space or the frames you need for that, very different than what you were projecting in 19 --

WITNESS CRUIT: In the earlier period?
COMMISSIONER CLARK: In 1993, yeah.
WITNESS CRUIT: Not significantly because this new projection mainly applies to the access tandems. It is slightly impacted, but our line projections are what's really driving the frame requirements for the local switch; and in the top switch it's basically the modernization of that equipment to provide additional services for operator services.

COMMISSIONER CLARK: Let me maybe ask Ms. White. How much are you projecting in reserve space for the west Palm Beach Gardens central office for growth? What have you -- What is your number there? I just don't remember.

MS. WHITE: I believe it's 31 hundred.

COMMISSIONER CLARK: Okay. And how many years growth do you think the 31 hundred -- I mean, Ms. Cruit, do you know how many years growth that is supposed to cover?

WITNESS CRUIT: Two to three is my understanding, and I need to look over at my -- our experts over there that will be testifying on space requirements.

COMMISSIONER CLARK: Let me ask you this: In 1993 your petition says you were reserving 21 hundred square
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feet for projected growth of the switches over a two-year period. Now I take it you are projecting 31 hundred for a two- to three-year period.

WITNESS CRUIT: You said the first number was for how much growth, how many years?

COMMISSIONER CLARK: No, two years.
WITNESS CRUIT: For two years? I think probably
what you're saying is correct, but I'm not sure. I'm not real familiar with all those square footage numbers, sorry. I can tell you that I know for a fact that the floor space and the equipment requirements in these offices has increased mainly due to the access tandem requirements. COMMISSIONER CLARK: You can tell me that?

WITNESS CRUIT: I can tell you that.
COMMISSIONER CLARK: Okay. Thank you.
COMMISSIONER DEASON: Redirect.
MS. WHITE: I have no redirect.
COMMISSIONER DEASON: Exhibits.
COMMISSIONER JACOBS: I'm sorry, I did have --
COMMISSIONER DEASON: Oh, I'm sorry.
COMMISSIONER JACOBS: I had a question.
Actually, Suzanne took care of part of it, but there was another one that I had.

When you -- first of all, do you adjust? It sounds like from your responses to Commissioner Clark once

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you have that curve in place you don't really go back and adjust it until you have some subsequent events to indicate that the demand is changing.

WITNESS CRUIT: Well, for trunks. That's what we are talking about primarily, on the trunks. As we relook at provisioning every six months, we look at that trend. As we are approaching exhaust of that equipment, we relook at the trend and we determine whether that is still appropriate, whether it -- how much we should provision on that relief job. So about every six months we are looking at our trunking projection so that we can provision accordingly.

COMMISSIONER JACOBS: Now is it appropriate to ask you about the actual physical equipment in the office? What I'm thinking of --

WITNESS CRUIT: You can ask and I'll try.
COMMISSIONER JACOBS: Okay. What I'm thinking of is how would that demand cor -- We've had testimony that because of upgrades in technology that you can handle higher capacities with equipment that takes up less physical space, and my question is not so much about the details of that, but do you consider that in your planning?

WITNESS CRUIT: Yes, we do consider that, but that is not always a fact, what you just stated, that new equipment has a smaller footprint or higher density. We do

[^3]try to do that when that equipment is available, but sometimes the newer equipment is providing additional functionality and, therefore, is not denser.

COMMISSIONER JACOBS: Okay.
WITNESS CRUIT: Or does not have a smaller
footprint.
COMMISSIONER JACOBS: Okay.
WITNESS CRUIT: But we do consider it, yes.
COMMISSIONER JACOBS: Thank you.
COMMISSIONER DEASON: Exhibits.
MS. SUMMERLIN: Supra would move 28,29 and 30.
COMMISSIONER DEASON: Without objection Exhibits 28, 29 and 30 are admitted.

MS. SUMMERLIN: And I'm not sure if I moved 27 earlier or not.

COMMISSIONER DEASON: I believe you did, and if not, it's admitted without objection.

MS. WHITE: May Ms. Cruit be excused?
COMMISSIONER DEASON: Yes, she may. We are going to take a 10 -minute recess.
(BRIEF RECESS)
COMMISSIONER DEASON: Call the hearing back to order.

Ms. White.
MS. WHITE: Yes, Commissioner Deason, in order

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to -- in the hopes of moving things along, we are going to put up Mr. Ream and Mr. Rubin. They'll each give their summary and their presentation using the floor plans that have been handed out, and then Ms. Summerlin and staff can cross examine each individually, so it's a panel kind of for presentation purposes but still individual cross examination. Whereupon,

GUY J. REAM
JEROME RUBIN
were called as witnesses on behalf of BellSouth and, after being previously sworn, testified as follows:

DIRECT EXAMINATION

BY MS. WHITE:

Q So with that, Mr. Ream would you please state your name and address for the record.

A (Witness Ream) Yes. My name is Guy Ream, and my work address is 6451 North Federal Highway, Ft. Lauderdale.

Q And by whom are you employed and in what capacity?

A (Witness Ream) I'm employed by Bellsouth Telecommunications, and I'm a common systems capacity manager.

Q And have you caused to be prefiled in this case rebuttal testimony consisting of seven pages and no
exhibits.

A (Witness Ream) Yes.
Q Do you have any changes to your testimony at this time?

A (Witness Ream) Yes, I do.
Q Would you please give those changes?
A (Witness Ream) Okay. On Page 2-- these are typos -- on Page 2, Line 17, it says "signal transformer point." That should say "transfer point," "signal transfer point."

On line 18 where it says "signal control point," and then in parentheses it says "STP," that should be "SCP." And then on line 19 where it says, "This office also houses three virtual collocators," it should be "two virtual collocators."

Then on the next page, on Page 3, Line 24 , there is a sentence that starts, "It is located in the middle of this ground plane." That should be crossed out and should be replaced with the words, "This space is not suitable for collocation."

I apologize for that. I didn't have a chance to proof read it before it was sent to the Commission.

Q With those changes, if I were to ask you the questions that are in your direct -- in your rebuttal testimony today, would your answers be the same?
A (Witness Ream) Yes.
MS. WHITE: And I'd like for Mr. Ream's rebuttal
testimony to be inserted into the record.
COMMISSIONER DEASON: Without objection it shall be so inserted.

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BELLSOUTH TELECOMMUNICATIONS, INC.
REBUTTAL TESTIMONY OF JEROME RUBIN
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 980800-TP

September 18, 1998
Q. PLEASE STATE YOUR NAME, COMPANY NAME, AND ADDRESS.
A. My name is Jerome Rubin. I am employed by BellSouth Telecommunications, Inc. as a Common Systems Capacity Manager - Network Operations - South Florida Capacity Management. My business address is 18560 NW \(27^{\text {th }}\) Avenue Room 330, OpaLocka Florida, 33056
Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
A. I graduated from the University of Miami in Miami,Florida in 1971 with a Bachelor of Science degree in Electrical Engineering. I began employment with BellSouth in 1972 as a 1A Electronic Switching System (1AESS), Equipment Engineer. In 1977 I transferred into the Maintenance Engineering group, responsible for Mini Computer support. In 1986, I transferred into the Network Special Assembly group as the South Florida Special Assembly Coordinator. In 1996, I transferred into the Common Systems Capacity Manger (CSCM) group. In this present position as a CSCM, I am responsible for generating Central Office Profiles that specifies plans for the orderly growth

5 Q. HAVE YOU TESTIFIED PREVIOUSLY?

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

9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY? for is the North Miami Golden Glades Central Office.

HAVE YOU TESTIFy PREVIOUSLY?

1 A. I will support BellSouth's reservations of space for future growth of the equipment in the Golden Glades Central Office.. 03T; one Signal Transfer Point Switch designated STP; and various Transmission circuit and Power equipment. of equipment in the Central Office. One of the central offices I am responsible

\section*{Q. WHAT EQUIPMENT IS LOCATED IN THE GOLDEN GLADES OFFICE?}
A. The Golden Glades building houses a Local Switch, Designated DS0; Two Toll Tandems designated 01T, and 04T; One Operator Service Switch designated
Q. HOW DOES BELLSOUTH DETERMINE THE AMOUNT OF FLOOR SPACE NEEDED TO BE RESERVED FOR EQUIPMENT GROWTH?
Switch capacity managers use wire center fore casts
A. Wire Center Forecasts, which specify the number of subscriber lines to be 5 served in an office, and Demand and Facility Charts-afe used for determining and demand and facility charts for determining
switch Center equipment Additions. Circuit capacity managers use Switch Centere equipment-additions. A mechanized planning tool, "Facility a mechanized planning tool, facility equipment planning Equipment Planning System (KEPS) -generates "Planning-Work Station" systems, or FEPS, to generate planning work station reports Reports", that are used for determining circuit equipment-addititens? that are used for determining circuit equipment additions. Equipment additions are based on historical data, current usage, and future. projections. Equipment needs are subject to change due to changes in demand, marketing plan philosophy, as well as, funding.
Q. BELLSOUTH HAS RESERVED 3596 SQUARE FEET FOR FUTURE GROWTH OF THE SWITCH, CIRCUIT, AND POWER EQUIPMENT IN GOLDEN GLADES. WHAT IS THE JUSTIFICATION FOR THIS GROWTH NUMBER?
A. The first floor of the central office houses an Operator Services Toll switch it also includes a signal transfe designated O3T, a Toll Tandem designated 04T, Transmission Circuit point sesignates STP equipment, and Power equipment. There are 987 square feet reserved for and STP future growth of the 03 T and 04 T . There are 1576.5 square feet reserved for future growth of Transmission circuit equipment, and 142 square feet reserved for future growth of power equipment.

The second floor at Golden Glades houses a Local Switch, designated DS0, a Toll Tandem designated 01T, and Power equipment. There are 890.5 square feet reserved for future growth of the DS0 and 01T. The power room is full and does not have space to add battery stings.

The anticipated growth for the entities listed is as follows:

162 square feet are reserved for future growth of the DSO(Local Switch).
This growth is primarily predicated on the growth of Calling Number Delivery. The older existing Line Modules do not support Caller Identification (CID), and, therefore, in order for this office to keep pace with the demands for this service, new equipment is required.

378 square feet have been reserved for future growth of the 01 T (Toll Tandem). This growth is a result of increased interoffice calling, and increased demands from Internet Service Providers and Alternative Local Exchange Carriers. This growth will reduce the overall future space on the second floor by 540 square feet. It does not take into account the end aisles, or fire aisle requirements.

54 square feet have been reserved for future growth of the 03 T (Operator Services Toll Tandem). Equipment supplying data links to the Host Switch in West Palm Beach was obsolete and was replaced.

297 square feet are reserved for future growth of the 04 (Toll Tandem). This growth is a result of increased interoffice calling, and increased demands from Internet Service Providers and Alternative Local Exchange Carriers.

42 square feet are reserved for future growth of the STP(Signal Transfer Point). The STP switch provides routing instructions to the central office switches for
virtually all calls from a centralized, redundant data base. This reserved growth for O3T, O4T, and the STP will reduce the overall future space on the first floor switch area by 393 square feet. It does not take into account the end aisles, or fire aisle requirements.

707
502 square feet have been reserved for future growth of Transmission Circuit. This is a combination of Fiber Optic Terminal frames, Digital and fiber cross connect frames, Multiplex frames and Miscellaneous Transmission frames.

228 square feet have been reserved for future growth of virtual collocation arrangements. Equipment to be placed in these arrangements consists of miscellaneous transmission equipment frames. Firm orders have been received for installation of 10 equipment frames in 1998.

142 square feet have been reserved for future growth of power equipment. This addition is planned to make sure that the office has sufficient power reserves in case of a commercial power failure, hurricane, or any natural disaster.
This growth will reduce the overall future space on the first floor by 14650
square feet. It does not take into account the end aisles, fire aisle requirements,
or ground plane restrictions.

DOES THE CENTRAL OFFICE HAVE ANY LIMITATIONS FOR ADDING EQUIPMENT?
A. Yes. It should be understood that there are areas and equipment lineups in the central office that do not lend themselves to adding equipment frames. This can be due to Fire Aisles, wide access aisles for bringing equipment into the building and placing it where it is needed, ground plane restrictions, (which dictate a 7 foot separation from isolated and integrated ground plans), and cable rack congestion, which prevent any cabling from reaching the equipment. There are also situations that prevent equipment lineups from growing the entire length of an aisle, because placing equipment will not leave sufficient space in the front or back of the equipment for access by personnel.

\section*{Q. DOES THIS CONCLUDE YOUR TESTIMONY?}
A. Yes

BY MS. WHITE (Continuing) :
Q Mr. Rubin, would you please state your name and address for the record?

A (Witness Rubin) It's Jerome Rubin, and my work address is 18560 Northwest \(27 t h\) Avenue, Opa Locka, Florida.

Q And by whom are you employed and in what capacity?

A (Witness Rubin) BellSouth Telecommunications. Capacity, as a common systems capacity manager.

Q Okay. And have you caused to be prefiled in this case rebuttal testimony consisting of six pages and no exhibits?

A (Witness Rubin) Yes.
Q And if I were to ask you -- Do you have any changes to that testimony?

A (Witness Rubin) Yes, I do.
Q Okay. Could you give those changes?
A (Witness Rubin) On Page 2, Line 24, the answer, I would like to change that to read "Switch capacity managers use wire center forecasts and demand and facility charts for determining switch center equipment additions. Circuit capacity managers use a mechanized planning tool, facility equipment planning systems or FEPS to generate planning work station reports that are used for determining circuit equipment additions."

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And then on Page 3, Line 15, I want to add after 04T, "that it also includes a signal transfer point switch designated STP."

And then on line 17 where it says there are 987 square feet reserved for future growth of the 03T, 04T, after that \(I\) want to add "and STP."

Q And Mr. Rubin, could you move a little closer to your microphone?

A (Witness Rubin) Sorry.
Q Thank you.
A (Witness Rubin) And then on Page 5, Line 8, the first entry, change that to 707 square feet. And then on Line 21 , the end of the sentence, change that to 1470 . And that is all the changes.

Q Okay. If I were to ask you the questions that were asked in your prefiled rebuttal testimony today, with the changes that you've just made, would your answers be the same?

A (Witness Rubin) Yes, they would.
MS. WHITE: And I would like to have Mr. Rubin's testimony, rebuttal testimony inserted into the record as though read.

COMMISSIONER DEASON: Without objection it shall be so inserted.

BELLSOUTH TELECOMMUNICATIONS, INC. REBUTTAL TESTIMONY OF GUY REAM BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 980800-TP

SEPTEMBER 18, 1998
Q. PLEASE STATE YOUR NAME, COMPANY NAME, AND ADDRESS.
A. My name is Guy Ream. I am employed by BellSouth Telecommunications, Inc. Common System Capacity ManagerNetwork Operations. My business address is 6451 North Federal Highway, Ft. Lauderdale, Florida 33308.
Q. HAVE YOU TESTIFIED PREVIOUSLY?
A. No, I have not testified previously in any proceedings.
Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
A. I began employment with Bell Telephone Laboratories in 1966 as a technician. I relocated to Florida and began working for BellSouth in 1972 as central office craft employee. In 1984, I was promoted to management in the Network Department. I have held various positions
in circuit design, equipment planning and ordering and for the last four years I have been a Common Systems Capacity Manager. I monitor and coordinate plans for equipment additions or removals in 12 central offices, one of which is the West Palm Beach Gardens Central Office.

\section*{Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?}
A. The purpose of my testimony is to rebut testimony filed in this docket by Supra Telecommunications and Information Systems witnesses, David A. Nilson and Olukayode A. Ramos.

\section*{Q. WHAT EQUIPMENT IS LOCATED IN THE WEST PALM BEACH GARDEN CENTRAL OFFICE?}
A. The West Palm Beach Central Office houses a local switch, a tandem Transfer switch, an operator services switch, a Signal Point Switch SCP (STP), Signal Control Point (SFP) Switch, and various transmission two circuit and power equipment. This office also houses thee virtual collocation arrangements.
Q. HOW DOES BELLSOUTH DETERMINE THE AMOUNT OF FLOOR SPACE NEEDED TO BE RESERVED FOR EQUIPMENT GROWTH?

Wire Center Forecasts, which estimate the number of subscriber lines to be added in an office, and Demand and Facility Charts are used for determining switching equipment additions. A computerized planning tool called Facility Equipment Planning System (FEPS) is used to track and plan transport facilities, trunk terminations and the circuit equipment that is required to support them. Equipment additions are based on historical data, current usage, and future projections. Equipment needs are subject to change due to changes in demand, marketing plan philosophy, as well as, funding.
Q. BELLSOUTH HAS RESERVED 3197 SQUARE FEET IN THE WEST PALM BEACH GARDENS CENTRAL OFFICE FOR FUTURE GROWTH. WHAT JUSTIFICATION DO YOU HAVE FOR RESERVING THIS AMOUNT OF SPACE?
A. The 3197 square feet in the West Palm Beach Gardens Central Office are distributed across the central office in eight separate locations, ranging from some as small as 68 square feet to as large as 712 square feet. The following paragraphs describe each of those eight areas.

712 square feet have been reserved for the Tandem switch for growth.
This growth space reserved is in the middle of the isolated ground This space is not suitable plane of the existing switch equipment. Histocated the middle of this for collocation ground plane because the collocator's equipment uses integrated
grounding and BellSouth does not place integrated equipment within isolated switch grounding. BellSouth projects that 12 to 16 bays will be added in this area in the 1999-2000 time frame. This would make the dimensions of the remaining space too small for collocation. In addition, an exit aisle runs through this area that would reduce the square footage.

246 square feet are reserved in the power area. A new 48 volt battery string is being added next year. After this addition, the remaining space will only support one more 48 volt battery string. These additions are planned by BellSouth's power vendor to make sure that the office has sufficient reserves in case of a commercial power failure

68 square feet are reserved for miscellaneous toll equipment that does not have to be placed next to each other or in close proximity to existing toll equipment. This area is too small for collocation for reasons that Mr . Bloomer discusses in his testimony.

143 square feet are reserved for fiber optic frame growth. This amount of space is also too small for collocation. This area is too small for collocation for reasons that Mr. Bloomer discusses in his rebuttal testimony 403 square feet are reserved for STP and SCP growth. Equipment additions are planned to augment the existing equipment in 1999 and 2000 which require that the space not be blocked by a co-locators equipment.

686 square feet have been reserved for toll growth. This area presently has a virtual collocator in the middle of the space, creating two separate areas. One area is occupied by the Central Office Supervisor and the other area is reserved for a new DSX1 line up to be installed in 1998. In both areas, the existing overhead racking prevents a collocation area from being walled off.

329 square feet have been reserved for a TOPS DMS switch which is used for Operator Services. This space is next to the existing switch and is required for growth. This area is also used as a temporary vendor staging area for new equipment additions to the office.

526 square feet have been reserved for the local DMS switch. This area is in two sections that abut the existing switch. The growth of the local switch is projected to be about 12 frames per year. This space temporarily is being used as an administrative and installation vendor staging area until such time as the space is required for needed switch growth.

8 A. Yes. It should be understood that not every square foot of space can
In each of the preceding eight cases, the unoccupied space is adjacent to a type of technology that is continuing to grow or space that is planned for use by BellSouth in the next two years.

\section*{Q. ARE THERE OTHER FACTORS IN THE CENTRAL OFFICE THAT} LIMIT THE SPACE AVAILABLE? hold a piece of equipment and that space must be provided in front of and behind the equipment for access by installation and service personnel. For example, a DMS switch frame that has a foot print of three square feet actually requires nine square feet of space because a two foot aisle is standard on the rear side of the equipment and a three foot aisle is standard on the front side of equipment. Wider cross aisles are required in certain parts of the office. These aisles are required by local fire codes for emergency egress of the office personnel. These wider aisles are also required so installation vendors can move large equipment bays in the office without causing service outage by hitting working equipment. Also it must be pointed out that certain types of equipment cannot be placed next to dissimilar types of technology. For example, batteries cannot be placed in toll equipment lineups and or transport equipment cannot be placed in switch equipment line ups. This is because different types of equipment could cause blocked aisles and equipment variances require unique power and grounding.

\section*{1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?}

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3 A. Yes.
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BY MS. WHITE (Continuing) :
Q Okay. Mr. Ream, would you proceed with your presentation? And for your presentation, the commissioners and the parties should look at the floor plan labeled "West Palm Gardens Central Office Floor Plan."

A (Witness Ream) Good evening. My name is Guy Ream, and I'm a common systems capacity manager for 12 offices in West Palm Beach and Broward County, one of which is West Palm Beach Gardens Central Office. In the capacity of the common systems capacity manager, my duties are to plan equipment additions and removals, to gather forecasts from the switch planners, our circuit planners, power planners and loop planners; and along with that is then to maintain a space study plan which is the blueprint that you have in front of you.

Along with that, \(I\) manage removals by identifying the equipment to the circuit or switch capacity manager via the central office personnel on equipment that should be removed from the central office and identifying equipment for that, which allows for, you know, space for new equipment to be added and also to modernize. In some instances where we have obsolete equipment, \(I\) will identify it and get it pulled out of the office. With respect to that, in our Gardens central office, there are no unused bays in that particular office. We are in good shape that
way.
One of my other duties that I have is I identify potential problems in the central office. Because I have so many -- or I have 12 offices, that sometimes a problem. will creep up in one office, and you can apply it to the other 11 offices before it becomes costly or service affecting; so that's one of the things that I do. I'm out in the field all the time talking to the various people; so as a common systems capacity manager, that is one of my duties.

I work with the different work groups that we have as a kind of liaison between them. I work with the planners, the central office personnel, the ALECs and our installation vendors. Because they all speak different languages and have different requirements, I'm kind of a general contractor and am able to help them get their work done. And that's basically what a common systems capacity manager does.

I'm here today to explain to the Commission why I believe there is not sufficient space available in the Gardens central office for physical collocation. You have the handout, the space study plan, and we'll -- I want to go around to the different locations within the central office and explain the space that's there that doesn't have, presently have equipment in it and why that
particular space is not available for collocation.
In this office, when you look at this print, and this is something that \(I\) maintain, is the green squares and blocks within the office is actual equipment that is there today, presently there. The red indicates areas that we intend to grow new equipment in the future, so our offices are blocked out in such a manner so they can have orderly growth. And, if you will -- I know it's kind of difficult even for us to understand sometimes. If you can think of a central office as a parking lot, we have areas in this parking lot or in our central office that are fire lanes, just like any other place, that you can't park equipment in because you have to get emergency vehicles through, or in this case, get personnel through or equipment. We have areas within this central office that are -- take frames or base that are smaller than others, and that would be for compact car parking, if you will. And you know that if you have a compact car that is ten feet long and somebody parks a Lincoln next to it that the aisles get blocked, and we run into the same problem in our central offices if we try to put a dissimilar size equipment within an area. Our aisles are very narrow, and our personnel get -- the majority of the equipment aisles are very narrow, and our personnel have to get behind the equipment bays to check on wiring and things like that, and they have to get in front
of them to be able to place new plug-ins or do testing and things like that.

Our power area, I refer to as our bus and RV parking area. In the power room, or in this case the batteries, they are big, and they are extremely heavy; and you'll notice -- I skipped a point, and I apologize.

This also, this print also reads like a map. There are letters across the top, A, B, C, D, E, F and L-through \(L\), and there are numbers down the right-hand side, one, two, three, four. So if I could direct you to, in this case, to look at F-3, and that will take you down about in the middle of the office, and there are some long green blocks that say LO. I honestly don't -- Well the LO is actually and upside down 01. But those are battery strings, and you'll notice that they are spaced out a little more than other equipment; and the reason for that is they are so heavy that if we bunch them together they'll actually crack the floor, and so we have to space them out. Mr. Bloomer can talk to more to that if you have questions about that because he understands floor loading and, you know, concrete and how strong that is.

We also have what \(I\) would refer to as reserved parking. Just like out in front here, commissioners have reserved parking because it's the most efficient way for you to get in and out to conduct business. And we have
reserved parking, and that happens to be our maintenance positions. They are placed there so that our central office personnel can do the most efficient job in clearing troubles and analyzing our switches and things of that nature. And I'll talk more about these things.

We have loading zones which are our uncrating rooms and our vendor staging areas. It's just like at the mall, if you can't get new equipment into the stores, you can't sell anything. So we have loading zones for that, and that's sort of my analogy to a central office.

Now if you'll be patient with me, I'll try and go around the specific areas that were identified as spare -on the original charts that were red, which means we are vacant presently and also on the blue that Supra has suggested that we could collocate them, and I'll go along, and I have the coordinates here, and if you can follow me, we'll try it. If not, let me know, okay?

I would like to start you at C-1, and that is the lobby. That's the front door of the building. That's where our taped video tour started, so it's kind of a natural point for me to start. When we go through the lobby there, right into the area which would be B-3, this is our TOPS switch, and this is the TOPS host for the whole State of Florida. When somebody presses zero or operator on your phone, you go through this switch to get routed to

\footnotetext{
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}
the correct operator services position. So this is the main host for that. In Gardens there is a remote that is remoted off of this, and there are remotes in other places in the state. But this is the host for that.

The growth pattern for this, you'll notice is in red there to the left. I have blocked out in red the intended growth pattern. Now in testimony, we said that this switch is slow growing and only grows one to two frames a year, and certainly I have more area blocked out here than -- you know, it would be several years before that gets used up. But this is a study plan. It's a document that changes weekly, monthly and everything like that. We try and lay out an orderly progression for our offices to grow for the reason that we need to identify up front if we are running out of a specific area, so that's why that that's laid out that way.

Also, I would say that right to the bottom of that area called the TOPS switch growth, there is an air conditioner, AC pad it says, which is really at C-2. There is a big air duct there for the cold air return for the central office. It's, you know, it's eight by eight. And so that's the cold air return for that area.

Now this is one of the areas that we have identified as future switch and things like that and Supra has felt that we could collocate there or one of those
areas that when we had our walk through. The fact of the matter is that we could not erect the walls that they needed without blocking the air return for that office, and there's also an aisle that runs along that wall. So if we were to build a physical collocation space, there really is not enough room to create their two hundred square feet that they require.

To give you a little more perspective, and then hopefully I can move on faster, if you see a red square with a plus sign in it scattered through the office, and there is one right in that \(C-3\) area -- there's actually two of them -- those are columns in the office, and they are on 20 -foot centers, if you will. And that's typical of all our central offices because they're built to withstand, you know, bombs. They are very strong. So every 20 feet through the building you'll have one of these red squares with a plus inside, and those are columns, and so they are 20 foot -- they are 20 foot on center. So if you were to make a box out of four of them, that would be four hundred square feet; so maybe that will help you realize or understand what type of space we are talking about within the central office.
(Transcript continues in sequence in Volume 3)

DOCKET NO. 980800-TP, SUPRA HEARING, 10/21/98
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minutes about the Cisco remote access concentrators. is
that a switch?

A I'm not certain if it could be classified as a swltch.

Q Okay. What does it do?
A That's more of a traditional remote access concentrator in which it, in a space efficient manner, mounts modems that are then interconnected, and the data streams from those modems can then be directed to specific pieces of equipment or data networks that they need to be connected to.

Q Okay. And those modems don't switch calls, do they?

A Not in the case of the Cisco system, ma'am, no.
Q Okay, And, again, the remote access, Cisco remote access concentrator is used to move data from one place to the other?

A Certainly. I mean one of the applications for that is -- as 1 pointed out earlier, we haven't asked for collocation of desks or terminal in the spaces, so that is one of the methods we are going to be using for doing maintenance and provisioning of our switches. In addition to its capability for transmitting data traffic to data networks, it has the capacity to be connected to every

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Which?
A It has the capability of switching both, ma'am.
Q Okay. What will Supra be using it to switch?
A Both, ma'am.
Q Okay. The -- So when a customer, where the FBX
is located, picks up their phone and dials a BellSouth
customer 20 miles away. that call will be routed and
switched through the ascent TNT?
A Yes, using the SS7 A Link connection to make that
call set up and call completion.
Q Okay. But the SS7 gateway doesn't actually do
any of the switching, right? it doesn't actually switch
the call, does it?
A Yes.
Q Okay.
A I mean it would be switching it -- in your for
example, you talked about switching between a Supra
customer and a BellSouth customer. The system would switch
the Supra customer from a Supra unbundled network element
on to a trunk heading to a BellSouth tandem.
Q Using the ascent TNT?
A Correct. Exclusively.
Q Okay.
A Without requiring the support of the Class 5
switch to perform that function.

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piece of equipment within our central office arrangement
    0 Okay. Now Let's go back to the ascent TNT for a
    second. When you use the ascent TNT to transmit data, you
    are transmitting data from the PBX to someplace else,
right?
    A That's one method of operation, yes.
    Q Okay. Where would you be transmitting it to?
    A In that case it could be used to create a virtual
private network between the sites of a corporation that are
remotely located in two different cities. It could be used
to connect data traffic to the Internet, to any major data
network, Like Time Net.
    Q Okay. Now can you tell me the difference between
telecommunications services and enhanced services?
    A A specific legal definition?
    Q No, not a legal definition, just in your own
words what your understending is.
    A Well, as I understand the contention in this
issue is that telecommunications services are those
services that are capable of providing voice transmission,
dial tone capability similar to what we are all used to
having, for example, in our home or place of business.
Enhanced services would be those services that utilize the
function of a computer processing unit to extend what can
be done over the unbundled network elements and the rest of
2 one of your late-filed deposition exhibits. It's Exhibit
Number 2, and I understand this is proprietary, and we
spoke before we started back to the hearing, so lwILL do
my best to try not to aet into any confidential proprietary
information.
backup for that space projection: is that a fair
characterization?
the telephone network, commonly known as the PSTN.
Q Okay. Now one last question on the equipment, and you may have answered this before, and I apologize if so: but the ascent TNT, that can also be used to route Internet protocol, correct?

A Well, again, I object to the use of the word "route" because the specific construction of the equipment is to switch that type of traffic, but --

Q It switches internet traffic?
A Yes, ma'am.
Q Now going back to something else you said in your summary you said you stood in Supra's collocation space at the Miami Grande office?

A Yes, ma'am.
Q And there were no firewalls at that place?
A That's correct.
Q Now the collocation space that's been allotted to Supra at the Miami Grande office, build-out hasn't begun on that yet, has it?

A They were working on the space the day we were there.

Q On your space, Supra's space?
A They were pulling cables up through the cable access.

Okay. Has Supra submitted an accurate firm order

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Essentially what this is, is a space requirement
projection for Supra for various central offices and the

A What the staff requested me to do was submit our equipment forecasts to explain what we would use the second two hundred square foot reserve space in the central office for

Q Okay.
A This is a projection that would identify that traffic, those customers, and that equipment necessery to perform.

Q And it's my understanding you've asked for two hundred square feet in each office, the Glades and the Gardens, correct?

A Just aminute.
(WITNESS REVIEVED DOCUMENT)
MS. SUMMERLIN: Nancy --
A That's correct.
application for this office?
A Yes, ma'am.
Q And when was that?
A We submitted our first application on that on September 1st. Nency Nelson came back with a request for clarification on a number of items, and we made a second filing. The date I don't have in my head. It was probably several weeks ago.

Q Was there substantial difference between the first order, firm order application you filed in that office and the second?

A No.
Q There was not a substantial difference in the number of racks required?

A Between the first firm order and the second? No.
0 There wasn't a substantial difference in the amount of wiring requested?

A No.
Q There wasn't a substantial difference in the number of bays requested?

A No.
Q Has BellSouth accepted that firm order application for the Miami Grande office, do you know?

A We have not received any written confirmation at this point.

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MS. SUMMERLIN: Can I interject and just ask for a clarification? Are you talking about for future use?

MS. WHITE: No, I was just asking, your initlab apolication was for two hundred feet in each of these offices.

MS. SUMMERLIN: For the initial. Okay, l'm
sorry
BY MS. WHITE (Continuing):
Q is that right?
A Because this projection that you are holding in your hand now goes beyond what we've currently applied for.

Q Right.
A Okay.
Q So when it says on here your initial collocation,
that's the two hundred square feet you've asked for in
these offices; is that right?
A That's correct.
Q And what you mean by first growth is that you'd
Like an additional two hundred square feet in each of these offices?

A Right, and this is the justification for that.
Q Okay. So now af ter you have four hundred square
feet, this exhibit shows what you would have in that space?
A That's correct.
Q Okay. And I know this is an agoregate number,
but it shows that in the Glades office you'd have 29 total bays and in the Gardens office you'd have 41 total bays: is that right?

A That's correct.
Q Okay. Now there are several columns in this -on the first page of this exhibit, and there are individual bay numbers beneath it for each central office, and I don't want to get into proprietary information. I wondered if you could tell me what functionality these columns of equipment represent?

A All right. The first five columns represent the core administration and control of the switch.

Q Okay. What does that mean? What does that do?
A Well, in order for the switch to operate, there has to be certain administration functions running on a computer within a Class 5 switch. The first two columns both represent the command and control center, if you will, of the Class 5 switch. There are two columns because in some offices we chose one particular configuration of switch, and in the other office we chose a smaller configured switch which uses a different cabinet configuration. The third column is, you know, the network ing setup that has been talked about in this case over in several offices, and the other two cabinets represent additional support and storage for data within

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point within the collocation space.
The following, the final column represents --
essentially that's digital loop carrier equipment.
Q Okay. Where on this sheet would I find where you've put the ascent TNT or the Cisco remote access concentrator?

A That would be on the following page.
Q Oh, okay.
A What you've looked at on that first page is specifically the configurations of the Class \(5 \mathrm{switch} i n g\) elements we plan to collocate, nothing else other then the Class 5 switch itself.

Q Okay. What is on this -- l'm looking at the second page now, and I see where you have the columns of ascend equipment. You also have a couple of columns called Paradyne. Is that another manufacturer?

A Correct.
Q What are you obtaining from that manufacturer?
A Is that considered proprietary or --
Q Well, l mean l'm not necessarily looking for the model number of the equipment. What functionality are you obtaining out of that equipment?

A All right. Well, this particuler division Paradyne is a spinoff from ATsT, and they are supplying us with DSL equipment.
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the switch

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Q Okay. Could you continue on?
A The next column is the power distribution
cabinet. The following two frames represent additional
internal switch communication capabilities. The following
column is the -- represents the cabinet supporting digital
trunk provisioning.

Q Okay, And Let me stod there a minute because the numbers under that column are the largest numbers on the individual sheet of paper, right?

A Certainly, and that's understandable.
Q Okay. And why is that understandable?
A Because those are the circuits that are both used for provisioning 4-wire circults out to customer locations as well as for communicating back to the BellSouth tandem, to communicating to long distance carriers and to communicating to our network between our other additional switches. That's basically the cabinet that provisions the T1 circuits out of the switch

Q Okay. And would you continue on with the columns?

A The next three columns represent support for 2-wire copper loop circuits. The following cabinet is -well, it's the DSX panel, which is termination for both DS-1 and DS-3 type circuits. It provides a demarcation

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    Q Okay. What does that do?
    A DSL equipment is equipment that can be used to
    provision high-speed data services over regular POTS
Lines. It also is used for Infrastructure within our
network to support outlying telephone installations, for
example, to support a high-density installation in a strip
malL, things of that nature. The DSL equipment
simultaneously provides voice and data connections over a
single copper pair
Q Now on the third page of the exhibit, I belleve
would be the backup for the first two pages?
A To a certain extent, but largely it's included
because it shows completely different information relating
to trunk and line usage, but it does -- it does roll up
into the requirements for the switching equipment as well.
Q And the -- | think we've already talked about
this, and ! know the numbers are definitely proprietary;
but I'm going to ask you about the column at the far left,
the description column. Do you see the section entitled
"ISP Traffic From Supra Subscr ibers?"
A That's correct.
Q And the first line under that is, is that minutes
slash --
A Minutes per month.
Q Minutes per month. Internet service traffic, is

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that what it is from unbundled Loops?
A Right. I think you can notice from that it's one of the smallest categories of traffic in the entire traffic analysis.
Q Well, if you go over -- Explain the difference between the next to the last column on that and the last column because the next to the last column is Golden Glades, right?
A Okay. What we have done here is the sheet you are look ino at represents all the offices whose access tandem is the Golden Glades tandem.
Q Okay.
A As a natural result of that, the local switching element in Golden Glades also uses Golden Glades as an access tandem. That is why Golden Glades is repeated twice. The far right-hand column represents aggregated traffic at the tandem location for the purposes of tandem and interconnection agaregation; whereas, the Golden Glades column to the left of that represents essentially local traffic in the Golden Glades' office.
Q Let me ask you this: is that number in the total, the far right-hand column, is that proprietary?
A I would say it was. I'm not sure I'm the authority on what is proprietary or not, but 1 assume that it is.

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interconnection trunks needed for interexchange carriers, ALECs or other entities like that?

A Well, you have to look at both sides of the switch to take care of that. We certainly took into consideration all the large amounts of expansion that are currently being done in the area of the DLC support.

Q Okay.
A And that's definitely trunk ing requirements.
Q So is the answer that you did take it into account or you did not?

A \(\quad 1\) believe we did.
Q But you took -- you only looked at the growth rate of access lines, correct and extrapolated that to the other companies?

A The 5\% figure represents growth in customer circuits, yes.

Q Now Mr. Nilson, you're vice president of systems desion and interconnection for Supra: is that correct?

A Yes, ma'am.
Q Are you an officer of the company?
A No. l'm not.
Q And who do you report to?
A I report to Mr. Lew/s Bender.
Q And is that as of a week ago, approximately?
A Yes.

Q Well, would you agree with me that under minutes per month Internet service traffic from unbundled loops, which is from Supra's customers, you're projecting over seven figures, seven figures per month?

A Yes.
Q Okay. All rioht. Mr. Ramos also threw a question to you. He said that the late-filed deposition exhibit to Mr. Milner's deposition, that that information showed only a \(5 \%\) growth rate for these offices, and when ! asked him what that included and how that number was reached, he said to ask you. So l'm ask ing you?

A When we -- We've represented that 5\% figure from several different sources. Initially the first place we keyed into that was on analysis of BellSouth's annual reports and other publicly filed documents. But in terms of what Mr. Ramos testified to this morning, that's related to a summary of the traffic provided in Mr. Milner's late-filed deposition where we went through and analyzed that portion of the graph forecast that represented service to subscribers and took that as a ratio from year to year to what's currently being served.

Q Okay. So what you base your \(5 \%\) growth rate on was just the growth in access Lines?

A That's correct.
Q So you didn't take into account the
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A That's correct.
Q And you're an electrical engineer not by educational degree but by experience?

A From my studies in college and from my exper ience over the past 25 years, yes.

Q And your experience has been in the microwave industry, the heart pacemaker industry, and aircraft communication systems?

A That's correct.
0 Do you have any experience in the designer configuration of a public switch network central office?

A If you are asking if l've ever been employed by Bellsouth or any of the other RBOCs, no. I do not.

Q No, l'm not asking you if you've been employed by BellSouth or the other RBOCs. I'm asking if you have any experience in designing or the configuration of a public switch network central office?

A l've had a good deal of experience interfacing with that network but not with actually designing the network itself.

Q Dkay. Have you had any experience in the actual configuring of space in a public switch network central office?
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    A Configuring space?
    Q Un-huh
    A That's pretty much what I've been attempting to
    do the entire time I've been working for Supra.
Q Okay. But that's where your experience has been,
right, with Supra?
A Yes,ma'am.
Q Prior to the walk-throughs through the North
Mlami GoLden Glades and the West Palm Beach Gardens office,
had you ever physically been inside an incumbent loca.
exchange company's central office?
A \d didn't hear the entire question.
Q Prior to the walk-throughs that we had at the
North Dade Golden Glades office and the West Palm Beach
Gardens office, had you ever physically been inside an
incumbent local exchange company's local office?
A No, ma'am.
Q Okay.
MS. WHITE: That's alL I have. Thank you.
COMMISSIONER DEASON: Staff.
CROSS EXAMINATION
BY MS. KEATING:
0 Good afternoon, Mr. NiLson. l've just got a
couple of questions, and they relate to your floor plan
diagram.

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Looking at any of that space to fulfill your request, or was that just going to the point to indicate that those growth projections had not met their original. the original requirement?

WITNESS NILSON: In some areas we looked at places where equipment had been removed, and in other places where equipment was removed it was of a fragmented nature and was being used by BellSouth then to allow space to what they call turnaround space where they have put new equipment in, hook it up, get it working and then take the old equipment out; and in those cases, no, we did not approach those particular spaces.

COMMISSIONER JACOBS: 1 see
WITNESS NILSON: So your answer is both yes and no.

COMMISSIONER JACOBS: I understand. Thank you. WITNESS NILSON: One of the places where the answer is yes is here in this first option. If you refer to the Option Number 1, l'LL go down through some of the reasons that we identified this area as potentially for collocation. The first reason is that in quite close proximity to one another there is access to both the isolated and integrated around plains. That allows us to install both our switching and our transmission equipment in one physically isolated region. If you notice, it's
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            A AlLright.
            Q You'd indicated certain areas in blue, and I
    belleve you said that those were the areas where Supra
preferred to collocate; is that correct?
A Yes, we prepared that per your request.
Q Okay. Could you explain to us what it is about
those areas that you indicated in blue, why they are
preferred by Supra for collocation?
A l'll be glad to. Shall we have the overlays put
back up again?
Q That would be helpful.
COMMISSIONER JACOBS: While they are doing that.
Mr. Nilson, I had mentioned -- I'm glad this came up
because you had indicated there had been some, I think it
was frames that had been removed that created some space;
is that correct?
UITNESS NILSON: Yes
COMMISSIONER JACOBS: If when you -- as you go
through this, could you just point that out for me? Well,
Let me ask you this question: Was any of that space used in
your request for space? Were you looking at that space for
your request?
WITNESS NILSON: Specifically in terms of frames
of equipment that were removed from the central office?
COMMISSIONER JACOBS: Right. Right. Were you

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kind of off in a corner of the central office. It's in close proximity to the main distribution frame from which all of the unbundled loops are provisioned from.

The fact that it's off to the corner of the central office leads one to think that there is a potential for constructing the fire walls if it's deemed they are necessary in that particular area, and the particular equipment that was installed in the area, the integrated ground plane, is of the nature of what Commissioner Jacobs just asked about. It's largely equipment that's coming to the end of its life. There are a lot of empty frames in that area and apparently was a place where some of the older equipment had been installed at one time and a lot has been removed.

Additionally, one of the reasons we focused on that particular area to cover the needs of the switching equipment on the isolated ground Dlane is that the -- we were told during the walk through that the MAP terminals Located in that location were duplicated and functioned by additional terminals located in the upper left-hand corner of the central office where there are additional terminals ostensibly used for the same purpose. So we weren't asking in this case to remove the only means of access to that 4 switch, just one of the duplicated means
25 BY MS. KEATING (Continuing):

\section*{PAGE \(2 \varnothing 3\)}

Q And what about the other areas you've indicated n blue?

A Okay. In this Option 2 area, we chose the right-hand blue region which is on the isolated ground olane because during the Volume 2 Production of Documents we discovered in PDD Number 27 that the space reserved in that area would account for six to seven years arowth on the tandem switch and up to 25 years growth on the operator services switch in that area, and we seen that -- we felt that given that long a projection forward that it would be reasonable to ask that that space be turned over for the purposes of collocation.

The blue area to the left is in an area that BellSouth has identified is available for virtual collocation. It sits on the integrated ground plane; therefore, it's suitable for the installation of transmission equipment; and we chose it predominantly because it had already previously been identified as one of the available collocation spaces in the office.

Q Could you explain to me the difference -- you've got an Option 2 here that you just explained, and then on your Option 3 for this office. you've just got color coded the places you just described that has vertical collocation that is on the integrated ground plane?

A l'd be glad to. l've explained that aulte a few

Q And for the West Palm Beach Gardens office?
A Again, in the West Palm Beach Gardens office, Let's take the upper right-hand area. That's space that sits in the integrated ground plane area suitable for transmission equipment, close proximity to the main distribution frame from which the unbundled network elements need to be provisioned, so we get good close proximity to make those connections in a clean fashion. And the other reason is that it's in an area where virtual collocation has been granted to another customer, so we didn't think it would be all that unreasonable to ask for that area. I would point out that there were numerous other places where that could have been selected. That was just one suggestion that we've made.

Regarding the location of switching down in the Lower Left-hand corner, that represents growth in their 04 tandem space. There is three Lineups of switching equidment provided for, and we also noticed during the walk-through that at least three frames of the Lineups that are currently installed are installed with dummy panels. which means they are not currently being used for service.

Leaving that portion aside, the three Lineups of 14 frames each at a rate that has been testified to as seven frames per year of orowth represents a six-year growth space. So we estimated that where they've reserved
times in the last week. It seems to hit everybody the same way.

What Option 3 represents is a choice of two particular spaces, one on the first floor, one on the second floor. The one on the first floor to supply the integrated ground plane, the one on the second floor to supply the isolated ground plane. So for the purposes of my Option 3, you actually have to look at two sheets of paper to see the entire area. The space, again, set aside on the first floor is that integrated ground plane area that I already explained in Option 2 why that was chosen. On the second floor -- on the second floor, which is the next page and is represented by the over lay they are putting up right now, that area, again, in Volume 2. POD Number 27 is identified as being four to five years future growth space for the \(81 T\) tandem and the DSO Local switch in that office; and there is also a statement in there that that time period could be extended considerably beyond that period by the process of the LM to LCM uparades that have previously been testified as already in progress in that office. So we knew that from that estimate there was approximately four to five years capacity in that area and that they had the ability to make that a larger amount of time, so we selected that for being returned for purposes of collocation.

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six years of grow th space that it would be reasonable to ask that some of that space be returned for collocation purposes.

Q I'd like to direct your attention to the upper Left-hand corner of that chart.

A Yes, ma'am.
Q And I'm looking at two particular areas, the first one is the OCC administrative. It looks like uncrating: is that correct?

A Yes, ma'am.
0 Okay. And then right next to that, "Equipment staging."

A Yes.
Q Is there anything about those two areas that make them unsuitable for physical collocation?

A No, not at all. Quite honestly, these proposals were produced under a time crunch. We could have gone on and selected additional spaces within the Gardens office, but this was the amount of work we were able to prepare and get it submitted to you by the time limits we had.

Q But they're not -- while they may be suitable for physical collocation, they are not necessarily preferred Like the areas you've indicated in blue?

A I don't know if I want to make that statement. We would like to collocate our equipment in this office.

Provided we have a, you know, a technically good place to mount our equipment, we would be satisfied with collocation.

Q Okay. Well, if I could direct your attention back to the North Dade Golden GLades floor plan.

A Yes, ma'am.
Q And over on the Left-hand side is the "Work Area Restoration."

A Yes, ma'am.
Q Is there anything about that area that makes it unsuitable.

A Not at all. Indeed, that's already surrounded with -- I can't certify that it's a fire-rated wall, but it's certainly surrounded by the type of walls that are similar to a fire-rated wall, and it could be used for collocation purposes. We did mark it in red, the available spaces, because we noticed that at some point during the walk-through process the purpose of that room had been changed; therefore, we determined, or we assumed that the or ioinal purpose for that room as administrative space had been decided as not as important as another use.
© Thank you, Mr. Nilson.
MS. KEATING: That's all we have.
COMMISSIONER DEASON: Commissioners.
(NO RESPONSE)

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A That, by the way, represents traffic that solely
exists on Supra's network. It's not traffic that
interconnects to BellSouth in any way.

Q Okay. On the second Line of -- right directly underneath that category, it's got minutes per month, ISP from PBX Tis.

A That's correct.
Q Is the figure in that farthest right column, the agaregate figure, also a seven figure or in excess of seven figures?

A That's correct.
Q Okay.
A And, again, that's traffic that's strictly from Supra subscribers to data networks under our control and doesn't transit BellSouth's network

Q Okay. Is there -- or let me just ask you a couple of the things about the ascend TNT to try to follow it with what Ms. White said. Does the ascend TNT SS7 generate call detail records for billing?

A Yes, it does.
0 Okay. Is there a reason BellSouth should be olad that Supra wants to deploy the TNT SS7 platform?

A In my opinion, yes. The predominant purpose that this particular piece of equipment was designed for is to off load the public switch telephone network from

THE COURT: Redirect
redirect examination

\section*{BY MS. SUMMERLIN:}

Q Mr. Nilson, l've got just a few questions. First of all, let me go back to something that was mentioned by Ms. White. Do you belleve that BellSouth under the
Telecommunications Act has a duty to maximize space available for physical collocation?

A Yes.
Q Do you believe that that includes uddating equipment that is obsolete and/or under-utilized?

A Yes.
Q Okay. On the proprietery exhibit, your late-filed -- it's identified DAN-2. On the page where you were going through with Ms. White, I think it's the third page. She was polnting you to a column under the heading, "ISP Traffic From Supra Subscribers," under that section.

A Yes, ma'am.
Q She was talxing to you about the far-right figure for the first category under that, which was the minutes per manth, ISP from unbundled Loops, and she was pointing out that that was a seven-figure agoresate amount: is that correct?

A That's correct.
(a) Okay. is it --

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congestion. The particular attributes of this switch allow calls to be routed through this, either data or voice calls without burdening the BellSouth access tandems; and for that purpose, we are actually doing them a service.

Q Okay. Does the ascend TNT \(5 S 7\) support TCAP and AIN services?

A Yes, and Release 3.
Q What exactly are these services?
A Those are advanced services that are
traditionally supported by Class 5 switching platforms.
Q Okay. Does BellSouth provide these services?
A Yes, they do.
Q What equipment does Bellsouth use to provide these services?

A Their Class 5 telephone switches.
Q Okay. Does ascend TNT 557 route voice and fax and data calls?

A Yes, in Release 4 it will. Yes.
0 Okay. What are these services exactly when you talk about voice -- just voice fax and data?

A That's the ability for the switch to handle traditional voice circuits or data circuits transparently across a broad band rather than a narrow band network for trunking and space efficiency.

Q Okay. Does BellSouth provide these services?
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A Yes, they do
Q What equipment does BellSouth use to provide
these services?
A Their Class 5 switches.
0 is it your understanding that BellSouth's
position has been that a CLEC cen physically collocate any
equipment in an arrangement as long as it provides both
telecommunications services and enhenced services from the
same arrangement?
A Yes, that is provided for by CFR 47.
Q How do you define the term "arrangement?"
A "Arrangement," | would refer back to numerous
documents that we receive on a daily basis from BellSouth
that talks about arrangement in terms of the entire
collocation that we are attempting to make in a given
central office. That would include power frames and
unbundled network elements, basically our entire space in
the equipment that is enclosed within it.
Q Okay. When you talk about the concept of a
one-source provider, does that mean that a company needs to
provide all of the basic telecommunications services?
A Yes.
0 Is that what Supra's business plan is?
A Oh, absolutely.
Q Does that mean that Supra wants to provide Local

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various types, and additionally look at floor space
reauirements in manufacturing facilities to support
required needs in advance. This was done under several
industries governed by either the Department of Defense or the Food and Drug Administration.

Q Have you had extensive vendor contact?
A All my Life, yes.
Q Okay. Does having extensive vendor contact oive you an opportunity to get educated on the most
technologically advanced aspects of the areas you are
Looking at?

A Yes.
Q Has that happened in this situation dealing with the ascend TNT?

A Absolutely. Sometimes it's a two-way street. Sometimes we educate the vendors. It's sometimes a necessity that information flow from us to them as well.

Q Is it true that you've had extensive interaction with the three major switch vendors?

A Absolutely, not only interaction but visits to numerous of their facilities, discussions with their desion and project planning engineers.

MS. SUMMERLIN: I have no fur ther questions.
COMMISSIONER DEASON: Exhibits.
MS. SUMMERLIN: Supra would like to move the
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service?
A Yes.
Q Does BellSouth provide local service?
A Yes, they do.
Q Does BellSouth provide Long distance?
A Well, not directly, through Bellsouth Lons
Distance, and I understand it's provisioned through
BellSouth Mobility using those two affiliates, yes.
Q Okay. Does Supra want to provide Long distance?
A Yes.
Q Does Supra want to provide Internet services?
A Yes.
0 Does BellSouth provide Internet service?
A Through BellSouth.net, yes.
Q Is it Supra's position that it must be able to
provide these services to be able to compete with
BellSouth?
A Yes.
Q Okay. You have stated to Ms. White that you
haven't spent a lot of time configuring BellSouth central
offices. Exactly what kind of experience have you had that
gives us authority to be talking about this subject matter?
A Most of the work that I've done over the years
has been in project and program management where I have
either been required to plan and forecast requirements of

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Exhibit 23
    COMMISSIONER DEASON: Without objection Exhibit
23 is admitted.
    MS. SUMMERLIN: Supra would call Mark Graham.
Whereupon,
            MARK C GRAHAM
was called as a witness on behalf of Supra and, after being
duly sworn, testified as follows:
                                    DIRECT EXAMINATION
BY MS. SUMMERLIN:
    Q Mr. Graham, would you please give your name and
address for the record?
    A My name is Mark Graham. My address is 2670
Southwest 27 th Avenue in Miami, Florida, 33133.
    Q Did you prefile direct testimony in this
proceeding consisting of 11 Dages?
    A Yes, I did.
    Q Okay. And would your answers to these questions
be the same if 1 asked you these questions here today?
    A Yes, they would.
    Q Do you have any changes or corrections to your
testimony?
    A No.
        MS. SUMMERLIN: I would ask that Mr. Graham's
direct testimony be inserted into the record as though


BY MS. SUMMERLIN (Continuina):
Q Mr. Graham, did you also prefile an exhibit that is your resume that was attached to your rebuttal testimony and it's identified as MCG-1RT?

A Yes, I did.
Q So that is basically just your resume that you prepared.

MS. SUMMERLIN: Okay. I would ask that
Mr. Graham's exhibit be identified for the record as Number 24.

COMMISSIONER DEASON: It will be so identified. MS. SUMMERLIN: Okay.
BY MS. SUMMERLIN (Continuing):
Q Okay. Mr. Graham, have you prepared a summary of your rebuttal testimony?

A Yes, I have.
Q Okay. Would you give that summery now before you proceed to 00 into the video presentation?

A Certainly.
Q Okay
A Hello. I've been employed by var lous telephone switch vendors and voice mail equipment manufacturers for the past 19 years. During this time l've spent the majority of my working Life installing, testing and upgrading this equipment inside central offices throughout

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physical collocator.
Finally, my testimony addresses the BellSouth requirement of installation of fire walls separating Supra's equipment from BellSouth's. I have seen first-hend examples of virtual collocator's equipment located within BellSouth's central office without fire wall construction.
I have seen first hand a separate BellSouth Internet
subsidiary collocated within a BellSouth central office without fire wall construction. I have heard testimony from BellSouth that the fire wall requirement is being required by local municipalities and building codes. Yet, if this were so. why would Bellsouth specifically state in its company-wide collocation ouide that walls will be constructed? It is interesting that BellSouth will allow separate collocators to erect equipment without walls between them yet requires them to be located between their own equipment and that of the physical collocators. It is, therefore, my belief that the issue of walls and their inherent space requirements are a desire of BellSouth, not one of local ordinances. As such, this desire should be superseded in cases of restricted space where no codes require fire walls. and the burden of this expense for any walls not required by local ordinances should be placed upon those who desire it.

It is for these reasons that 1 appear here today
the country. It is my opinion that the central offices in question, Golden Glades and West Palm Beach Gardens, currently have sufficient space to provide physical collocation for Supra's equipment. In addition, my testimony presents some reasonable options which could be used by Bellsouth to generate even more space. Were these central offices not tandem offices through which most of our customers phone calls will be routed, the issue of space would not be so critical. But with the current market share that BellSouth commands, this issue is of prime importance to my company.

My testimony also addresses the requirement of Supra to be allowed to install modems and routers within the physical collocation space commonly termed "remote access concentrators." What l'm referring to here is the ascend TNT as well as the Cisco equipment. This equipment can and will be used to provide Supra the ability to provision, maintain, collect billing information and to provide alarming capability remotely. Identical in function to BellSouth's verious modems and routers but more space efficient. It will also be used to provide direct basic telephony functions to PBX customers and to provide ISDN basic rate and ISDN primary rate services to customers. The ability to provide these services and to access our equipment remotely is simply mandatory to any

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and present my rebuttal testimony as well as a videotaped walk-through of the central offices in question. ! ask that the Commission review the testimony of my company and determine the validity of our arguments which are crucial to the success of our fledaling company. Thank you very much.

Q Mr. Graham, you've now got your video presentation to present?

A Yes, l'll try to keep it as brief as possible. Due to not being able to actually edit and cut out things, l'm going to have to be doing some fast forwarding and rewinding. Also, I would ask that I have some help in just demonstrating what areas we are viewing on the tape.

I'm going to start with the Golden Glades walk-through. As l mentioned before, these tapes comprise, I believe it was seven hours worth of videotape, so we'll do our best to get through them as quickly as possible. I ran it through yesterday just to see how lons it would take. I'm anticipating about a half hour.

The first area l'm going to be describing is this area where the old STP is currently located. That is here, if l can get it to play correctly.

\section*{(VIDEO PLAYED)}

A Most sections won't be as long as this one. I just want to -- this is one of our crucial areas.
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COMMISSIONER CLARK: Mr. Nilson, will you show us where we are booking on your --
(Mr. Ni lson indicates)
UITNESS NILSON: The STP is in this area
(indicates). The 03 and 04 --
COMMISSIONER DEASON: Mr. Nilson, l'm sorry, you cannot be testifying at this point. You don't even have a microphone, unless you want to take another mike.
A As he is saying, the equipment you are looking at there will be removed. This is the existing STP that is going to be removed as well as the extra space shown, which has been described in the tape as being for the 0 -- for the STP. the 93T and the 04T switches.
The next area that we proceeded to was the middle red block. That's it (indicates) As stated in the tape here, this is for the $64 T$ switch.

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\section*{(VIDEO PLAYED)}
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A That's this area here lindicates). That was an interesting statement right there, this is the only area open for the 04 T switch. We have just seen earlier space designated for the 04 T switch.
We will now proceed to --
COMMISSIONER JACOBS: So the first area was -UITNESS GRAHAM: The first area was designated as space for growth of the STP, the 09 T , and $\emptyset 4 \mathrm{~T}$ growth space.

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had made that reoresentation. We were primerlly focusine had made that representation. We were primarlly focusing on those areas, but also other areas that we thought were important. We gave you the flagging stops so that you could know that ahead of time.

\section*{(VIDEO PLAYED)}

A The next area we'll be moving on to is what is marked as "Work Area Restoration OCC Admin." That's this area here (indicates).

\section*{(VIDED PLAYED)}

A The next area is the DAX terminal area. That's actually -- yeah, that's within that area. We are just here demonstrating some of the various terminal equipment that's located within the office.

COMMISSIONER JACOBS: if I recall, in this office there is one collocator there now, virtual collocator there now? Not in this office? UITNESS GRAHAM: I think that's in the other office, if I'm not mistaken.

A I'm afraid some of this -- these video tapes don't tend to be terribly accurate, so my numbering system isn't always right. This was some of the terminal equipment I was attempting to show. (VIDEO PLAYEDI
A Again, this is terminals and work stations within
94T -- no, no, no, the STP, apparently, switches.
    The next area I'm going to go to, we traveled
upstairs at this point; and if we can get the second floor
plan put up there. This is the area designated as computer
base training area, CBT area and the southeast area.
That would be this area here.
    (VIDEO PLAYED)
    A I'LL now proceed to the MAP positions for the
tandem and local switches. Again, these are -- Actually,
l've lost my tape. I'm going to fast forward to that
part. This is the area here where there are, again,
multiple terminals for controlling the different switches,
tandem switch and the local switch.
        (VIDED PLAYED)
    A The next area ! would like to proceed to is the
staging area in the northwest. The reason 1 call it the
staging area, there is currently vendors in that location
who have put their equipment for installations physically
located in that area.
        (VIDED PLAYED)
    A I'm sorry, this is not the part that I was trying
to show. I'm trying to get back to the beginnins of this
area. There we 90.
    (VIDEO PLAYED)
    A As you can see, there is quite a bit of space

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The next area l'd like to go to is terminal areas for the STP, which at one point was part of the mainframe but now is freed up. I believe that's the top right red area. That's this area. IVIDEO PLAYEDI
A The next area is for the nor theast red area Labeled "Future Transmission, DSX-1 Lineup."

IVIDEO PLAYEDI
A The next area I would like to 90 to is labeled "Tightened Expansion," In the center. (VIDEO PLAYED)
A The next area l'd like to 90 to is labeled as "Future Toll Growth Space." It's basically right beside the area we just now looked at.
(VIDEO PLAYED)
A I'm sorry. I don't think l correctly identified this area. This is over here (indicates). This is the area l'm referring to.
(VIDEO PLAYED)
there open at the moment. They are showing for \(01 T\) growth. I'm not going to subject you to any more views of the floor.

The last on this tape is just an example of an internally mounted monitor, which is basically a work station within the frames as opposed to a separate table
and work station setup. Obviously, my number is off here
again. These were the terminals to which I was referring. (VIDEO PLAYED)
A By housing the terminals inside the bays, obviously that areatly reduces the floor space required for maintenance areas.

Now l'd like to proceed to the West Palm Beach Gardens video. The first area we'll be seeing here is the maintenance and administration area.
(VIDEO PLAYED)
A The next area is the SCP expansion in the nor theast area. (VIDED PLAYED)
A The next scene is a demonstration of some modems within the BellSouth office which are used for similar purposes to the ones we'd like to install: however, I think you'll --
(VIDED PLAYED)
A I'm going to back it up.
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    shelf Like that is not a very efficient use of space; and,
    again, our -- the equipment that we want to put in will
    greatly improve that space efficiency.
            l'd now like to proceed to the tanden growth area
    in the southwest. Overshot.
            (VIDEO PLAYED)
    A The next area l'd like to show is the MAP area
    for the tandem and local switches in the nor thwest area. I
    would also point out the statement concerning the center
    area, that this center terminal can monitor every switch in
    the building except for the SCP.
        (VIDEO PLAYED)
    A The next area l'd like to show is labeled as
    "Staging and Transmission Administration" areas in the
    nor thwest area. That's it right there (indicates).
            (VIDEO PLAYED)
    A l'm almost finished here. The next area l'd Like
to show is, again, the area where the CO supervisor has his
work space. That is currently identified as just below the
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future virtual collocation area. I'm hopina to be able to stod on the virtual collocation area. Unfortunately, the cameraman doesn't always oblige what l'd Like to see.
(VIDEO PLAYED)
A The next area l'd like to show is, again, an example of a terminal mounted inside the frames. This is
just within the work space area. Again, an examole of much
more efficient work space.
(VIDEO PLAYED)
A This is what l'm referring to here IVIDEO PLAYED)
A The next area is, again, a demonstration of
internal fragmented space. In this particular case there
are approximately }12\mathrm{ to }14\mathrm{ frames worth of equidment
scattered within the switch.
(VIDED PLAYED)
A And the final area l'd like to show is just
another example of modems within the, within BellSouth
office use. "For a Customer to Interface to our Switch" is
the description.
IVIDEO PLAYEDI
A Again, as the tape runs along, the numbering goes
off more
(VIDED PLAYED)
A And that concludes the video testimony.

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equipment in its physical collocations?
    A I believe so, yes.
    Q Does Supra intend to put Internet equipment in
Its physical collocations?
    A I do not belleve so.
    Q Is voice mail considered an enhanced service?
    A I don't know the answer to that
    Q Is Internet service considered an entanced
service?
    A I would assume so.
    Q Now you've had a lot of experience in the voice
mail arena; is that right?
    A Definitely.
    Q So with your exper ience in the voice mail arena,
are you familiar with the FCC orders on when and if and how
a Bell operating company can put enhanced service equipment
in its central office?
    A No, I an not.
    Q Now l'r a little confused with the question (sic)
you gave me just a few minutes ago. You said that Supra
did not intend to put internet equipment in the physical
collocation area.
    A I guess ! would need you to define Internet
equipment.
    Q Okay. Well, equipment that can provide Internet

MS. SUMMERLIN: Tender the witness for cross. COMMISSIONER DEASON: Ms. White. MS. WHITE: Yes.

CROSS EXAMINATION
BY MS. WHITE:
Q Good afternoon, Mr. Graham. My name is Nancy White. I represent BellSouth Telecommunications. Does the FCC allow an incumbent local exchange company to separate the collocating carrier's space from the incumbent's facilities?

A The collocator's carrier space from the incumbent facility. I don't know the answer to that.

Q Okay. Have you got the Code of Federal Regulations with you, particularly Section 51.323(I)?

A 1 do not have that with me.
Q Okay. Nould you accept, subject to check, that that reads: "An incumbent LEC may require reasonable security arrangements to separate a collocating telecommunications carrier's space from the incumbent LEC's facilities?"

A I will have to take your word on it.
Q I can show it to you if you don't want to accept my word.

A I accept your word.
Q Okay, Does Supra intend to put voice mail.

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service
A We are expecting to put equipment in that has the ability to be able to access Internet services.

0 Well, and doesn't Supra intend to be an Internet service provider?

A Yes, but that equipment we don't olan to Locate within the facility

Q Okay. Where are you golns to put that equipment?
A It's outside of my range, but 1 would assume we are going to have servers and that sort of equipment Located somewhere.

0 Now one of your ideas for coming up with some space in these central offices is to take the vendor staging areas, which we just saw a little bit of, and put those materials in a truck and park the truck outside the central office until the vendor needs it; is that right?

A This is a method that l've personally used in the past.

Q Okay. And when you used that method, where was that central office located?

A It was in Pontoon Beach, ILlinois.
Q And would you agree with me that that's a rural area?

Yes, I will not argue.
Would you agree me that the Golden Glades office

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is in a very urban neighborhood?
A Yes.
Q Your title is vice president of voice mail?
A That's right.
Q And you report to Mr. Bender now, but a week ago
it was Mr. Remos?
A That's correct.
Q Okay. And your experience has been in the
installment of switches for Nortel and Siemens and the
installation of voice mail equipment for Converse
Technology?
A That's right.
Q Your expertise here today isn't in the equipment side, is it, the equipment that I spoke to Mr. Nilson about?

A I'm familiar with central offices equipment as of about ten years ago.

Q Okay. And you've never had any exper ience designing a public switch network central office, have you?

A Installation, yes. Designing, no.
Q Okay. Thank you.
MS. UHITE: I have nothina fur ther .
COMMISSIONER DEASON: Staff.
MS. KEATING: Staff has no questions.
COMMISSIONER DEASON: COMmissioners.
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Q By whom are you employed and in what capacity?
A I'm employed by BellSouth Telecommunications,
Inc. as manager in the interconnection services pricins division.

Q Have you previously caused to be prepared and prefiled in this case direct testimony consisting of eight Dages?

A Yes, ! have.
Q Do you have any additions, changes or corrections to make to that testimony at this time?

A Yes, 1 do.
- Would you please give those?

A l've got two minor corrections, one in my direct testimony, one in my rebuttal testimony.

Q Okay. Kell, why don't you just give us the corrections in your direct at this time.

A Direct testimony on page 2, Line 12, olease insert Issue Number 4 as 1 onitted that when 1 was typing up my testimony. I addressed the issue. I just did not List it in the introductory section of my testimony.

Q What is the other change in your direct testimony?

A Actually, just the one, and then identical change in rebuttal.

Q And did you have two exhiblts attached to your
(NO RESPONSE)
2 COMMISSIONER DEASON: Rediract.
MS. SUMMERLIN: No redirect.
COMMISSIONER DEASON: Exhibits.
MS. SUMMERLIN: We'd, Supra would Move Exhibit

COMMISSIONER DEASON: Without objection exhibit
24 is admitted.
Thank you, Mr. Graham.
We'll take a \(10-m\) inute recess at this time.
(BRIEF RECESS TAKEN)
COMMISSIONER DEASON: Call the hear ing back to
order.
Ms. White.
MS. WHITE: Yes. BellSouth calls David Thierry.
Whereupon,
DAVID THIERRY
was called as a witness on behalf of BellSouth and, after being first duly sworn, testified as follows:

DIRECT EXAMINATION
BY MS. UHITE:
Q Mr. Thierry, would you please state your name and address for the record?

A My name is David Thierry. My business address is
675 West Peachtree Street in AtLanta, Georgia.
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direct testimony labeled DT-1 and DT-2?
A Yes, I did.
Q Do you have any changes to those exhibits?
A No, 1 do not.
MS. WHITE: Mr. Deason, I'd like to ask that the
direct testimony of Mr. Thierry be moved into the record.
COMMISSIONER DEASON: Wi thout objection it shall
be inserted into the record.
direct testimony labeled $D T-1$ and $D T-2 ?$
$A$ Yes, I did.
$Q$ Do you have any changes to thase exhibits?
A No, I do not.
MS. UHITE: Mr. Deason, I'd like to ask that the
direct testimony of Mr. Thierry be moved into the record.
COMMISSIONER DEASON: Without objection it shall
be inserted into the record.

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Q Mr. Thierry, would you please state your name and
address for the record?
A My name is David Thierry. My business address is
675 West Peachtree Street in Atlanta, Georsia.

        COMMISSIONER DEASON: Without objection it shall
be inserted into the record.

MS. WHITE: And l'd Like to have the exhibit attached to Mr. Thierry's rebuttal testimony Labeled as an exhibit.

COMMISSIONER DEASON: Exhlblts 26. BY MS. WHITE (Continuing):

Q Mr. Thierry, would you please give your summary?
A Yes. Good afternoon. We hended out a summary of the cites that l'll mention from the collocation agreement between BellSouth and Supra, from the Telecommunications Act of 1996, and from the FCC's First Report and Order released on August 8th, 1996. They are here for your easy reference. The entire agreement is attached to my direct testimony.

The purpose of my testimony is to address five of the issues raised during the joint issue identification meeting between BellSouth and Supra. I ar responsible for the development of contract language that supports BellSouth policy, and I oversee the negotiation of physical collocation contracts, so l'LL address lssues 1, 3B, 3C, 4, 5, as they relate to the physical collocation agreement between BellSouth and Supra.

Issue 1. The first issue deals with whether
BellSouth is required by the collocation agreement to provide physical collocation in the Nor th Dade Golden Lades and the West Palm Beach Gardens central offices.
agreement, the Telecommunications Act or the FCC's Order to add or lease additional space where existing space has been exhausted.

Issue 3. Issue 3 asks how costs should be allocated if BellSouth were obligated under the agreement to make physical collocation space available in these central offices. Because BellSouth is not obligated under the agreement between BellSouth and Supra to provide physical collocation where no space is available, the question of cost allocation is not relevant in these two central offices: however, in central offices where there is space available for physical collocation, BellSouth will build a common collocation area.

The renovations or upgrades addressed in Section 4 F of the agreement refer to the building of this common collocation area. This common area separates BellSouth's equipment from all of the collocators' equipment. The common area is where the individual collocation spaces are built for each collocator, whether each individual collocation space is enclosed or not. The costs of building the common area are prorated across all the collocators in the central office based on how much floor space each collocator occupies. The way we prorate these costs is described in the agreement, the Section \(4 F\) and in Note 2 of Exhibit A.

The answer is no. The agreement states that BellSouth is obligated to provide physical collocation in central offices where there is adequate space to do so. The agreement clearly states that BellSouth will provide physical collocation where, and I quote, BellSouth has space available in its central offices, end quote. This position is in compliance with the Telecommunications Act and the FCC's First Report and Order. Our planners have reviewed these two offices and have found that there is not adequate space available for physical collocation.

The next issue, Issue 3B, asks what obligation BellSouth has under the BellSouth/Supra agreement to make space available for physical collocation in the two central offices that 1 mentioned. The collocation agreement does not obligate Bellsouth to provide physical collocation in central offices where there is no space avallable. Our position is in compliance with Paragraph 505 of the FCC's First Report and Order which states that incumbent LECs are not required to construct additional space for physical collocation when existing space has been exhausted.

In their rebuttal testimony, Supra's witnesses strung together several definitions of "upgrade," "improve" and "develod." This series of definitions is inconsistent with the BellSouth/Supra agreement. The bottom Line is, BellSouth is not obligated by the BellSouth/Supra

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federal or state regulators.
In summary. BellSouth is acting in compliance
with the agreement entered into with Supra
Telecommunications and Information Systems. Thank you.
This concludes my summary
MS. WHITE: Mr. Thierry is available for cross
examination.
COMMISSIONER DEASON: Ms. Summerlin.
CROSS EXAMINATION
BY MS. SUMMERLIN:
Q Good afternoon, Mr. Thierry. I'm Suzanne
Summerlin for Supra
A Good af ternoon.
Q A few minutes ago in your summary you said
something along the Lines of, and correct me if l'm wrong
when I quote this, our planners have reviewed the space and
determined that no space is avallable. Is that what you
said in your summary?
A That is correct, and those planners are here to
testify to that fact.
0 Okay. When exactly did they do that review?
A I'm not aware of the date of the review.
Q Are you aware of whether the application that
Supra flled for physical collocation for these offices was
ever sent to the planners in the normal course of the

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    that we are talking about in this case.
    A Would you restate? 1 thought you mentioned a
different application other than the Supra application
going to those central offices to trigger that analysis.
    Q Okay. What I'm talking about here, or what I'm
trying to address is your statement that your planners have
reviewed the situation and determined that there is no
space available; and l'm just asking: Do you know whether
that rigorous formula was utilized prior to the denial of
Supra's application?
    A Prior to the denial. I did not hear your
statement of denial. The apolication would have been
received by those planners. The space would have been
assessed, and the denial would have resulted from the
results of that assessment.
    Q So it's your testimony that you are aware that
that rigorous review was done before Supra's applications
were denied?
    A From my understanding of our conversations with
the witnesses that l've had, yes, that application did
trigger the analys/s: and, yes, it was done for those
central offices
    Q You're not aware of the fact that the FCC waiver
was the basis for the denial?

A \(\quad 1\) know that there was a waiver in place from
process that BellSouth follows?
    A Well, in the normal course of business, the
process, the application is the trigger event for the
olanners to be notified to verify whether there is space
available in any particular central office. So ! assume,
yes, the application did reach them which triggered the
application response that let Supra know the space
availability situation in those two central offices.
    Q What exactly, what \(k\) ind of evaluation took place,
do you know?
    A 1 understand there is a rigorous formula that is
followed by our space planners, and they' \(l l\) be describing
that later today in their testimony
    Q Are you aware of whether that rigorous formula
was utilized prior to Supra's applications for physical
collocation being denied?
    A Prior to or as a result of?
    - Prior to the denial.
    A 1 an not sure.
    0 So you're not aware that the individuals who
normally get the apolication did not get it in this
situation? You're not aware of that?
    A Whose adolication would you be addressing?
    Q I'm talking about Supra's application for
physical collocation at each of the two central offices
years gone by that summarized the space available in that central office, and that was the trloger, or that was -that was the information that was relied upon in the application response.

0 That was the information that was -- So there really was no evaluation of Supra's application when it was filed?

MS. WHITE: Well, and I'm going to object from the \(s\) tandpoint that 1 belleve he has already testified on several occasions that the people who looked at the space are here and will be testifying and that those are the appropriate people to be asked these questions.

COMMISSIONER DEASON: Ms. Summerlin. MS. SUMMERLIN: 1 totally agree that those peodle should be asked, and they will be. I am just asking Mr. Thierry about the statement that he made in his summary that the planners have reviewed the space and determined that no space was available, and I'm simply asking at what point did they do that. COMMISSIONER DEASON: You may answer the question.

WITNESS THIERRY: Pardon me? COMMISSIONER DEASON: You may answer the question to the extent you have knowledge.

A The space analysis was done in. I imagine the

Last several months. I'm not aware of the actual date that it was performed.

Q So it was performed subsequent to the denials?
A I do not know.
- You have testified that you are responsible for the negotiation of collocation agreements; is that correct?

A I am responsible for supervising the negotiation of collocation agreements. In addition to that, I am
responsible for making sure the language within the agreements matches BellSouth policy and is in accordance with regulations.

Q Okay. In your knowledge of this agreement, is it your understanding that BellSouth has a firm requirement that it needs to meet in terms of preparing space for a physical collocator within a certain time frame?

A What we do is negotiate each central office collocation space on a case-by-case basis. We let the collocator know when we can make that space available, and that is the firm date that we use.

In the event that there is a permitting problem, which will be addressed later by one of our witnesses, that may delay the production of that collocation space, there may be some adjustment or modification or negotiations required to that date. But that is our date that we provide collocation space.

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that particular central office in that particular collocation space.

Q What kind of reasons would put Bellsouth in a position not to meet that three-month deadline?

A The reasons that I'm aware of would be significant work that's required in the central office, but I would prefer to leave that -- I'd prefer to leave that question to be responded to by our space planners and our facility plenners as they are the people who are involved with planning the collocation space and the due dates.

Q So you don't really know what kinds of conditions would cause that to be a problem?

A I have a general idea, and I have a workina knowledge of what may cause a problem; and the working knowledge is basically what I need when I'm negotiating with a customer. In certain instances, sionificant construction requirements such as fire rated walls can create delays in producing a collocation space.

0 Are there any other reasons that the three-month period couldn't be met?

A I'm sure there are, but l'm not aware of them at this point.

0 Is there any place in the contractual agreement, the collocation agreement, where the collocator is put on notice as to what those types of things might be?

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is that you let the collocator know when the space will be available: is that right?
A Yes, we do.
Q So if the collocator, such as Supra or another ALEC or CLEC does not agree that the date that you, or BellSouth believes is an appropriate date for that space to be available, what option does the ALEC or CLEC have? A They can notify us that that date doesn't work, and our SMEs can 90 back and check the dates and see if there are any work efforts that can be run in parallel to compress the time frame. If that's not possible and the date that is provided still isn't acceptable to the collocator, then they can 80 to the PSC and seek a resolution of that situation. Q So, basically, they don't have any option but to come to the Commission; is that what you're saying? A That's what the Commission has outlined that we do: so, yes, that's the procedure.
Q So the 90-day or three-month guideline is not a
firm commitment for BellSouth: is that correct?
A The 90-day guideline is exactly that; it's a guideline. It's what we shoot for. In best cases we can beat that date. We can meet that date. In some cases we have to exceed that date based on what work is reauired for
Q Is there -- what you basically said a minute ago A Yes, we do.

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A We have an application response, and then we have a firm order response; and in that firm order, that information is discussed with the collocator on a case-by-case basis.

Q But that's not included in the collocation asreement, is it?

A In the collocation agreement we address what we respond or the information that gets back to -- the information that is due back to the collocator in a general sense in that we reply to that response; but, no, we don't delineate what sorts of delays may occur
© Now you've got the collocation agreement attached to your testimony, don't you?

A Yes, 1 do.
Q Can you Look at Section \(2 C\) of the agreement? it appears to be Page 3 on the document !'m Looking at, Page 3 of the collocation agreement.

A One moment. Yes.
Q Okay. That paragraph is titted "Occupancy." Based on the language in this paragraph, and I'll just read it very quickly, and then I want to just ask you a question or two, and then that is pretty much what l'm going to ask you today; but, "BellSouth will notify interconnector that the collo --

COMM:SSIONER DEASON: I'm sorry, do you intend to
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read thls whole paragraoh into the record?
MS. SUMMERLIN: Well, l didn't want to start
somewhere where it didn't make any sense. I was just going
to read the first part. I'm not going to read the whole
thing.
COMMISSIONER DEASON: Okay. Please proceed.
MS. SUMMERLIN: l'm trying to be very quick Bbout
this
BY MS. SUMMERLIN (Continuing):
Q All right. Let me just say this: "-- the
collocation space is ready for occupancy. "Interconnec tor
must place operational telecommunications equipment in the
collocation space and connect with BellSouth's network
Within 180 days after receipt of such notice. BellSouth
may consent to an extension beyond 180 days upon a
demonstration by interconnector that circumstances beyond
its reasonable control prevented interconnector from
completing installation by the preseribed date. If
interconnector fails to place overational
telecommunications equipment in the collocation space
within 180 days and such failure continues for a perlod of
30 days after receipt of written notice from BellSouth,
then and in that event, interconnector's right to occupy
the collocation space terminates and BellSouth shall have
no further obligations to interconnector with respect to

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    A That's 3G.
    Q Okay. Yes, personalty is what we are talking
    about.
A Right.
@ What is your interDretation of that language?
A That language in my mind allows the physical
collocator to place equipment such as a desk, a computer, a
chair, things that are needed in the everyday business.
everyday running of their Little central office space there
within the collocation agreement. This section of the
agreement in no way offsets the equipment language that we
have elsewhere in the agreement. The two work together.
you have to read the entire agrement as a whole and
interpret it as a whole.
Q So it's your testimony that Paragrach G -- 3G
does not deal with the interconnector or the collocator's
equipment and facilities?
A What l'm saying is that this needs to be read
with the equipment language elsewhere in the contract which
restricts certaln type of equipment to what is authorized
by BellSouth and federal or state regulators
Q So it really doesn't mean that it's the
facilities and equipment that the collacator deems
desirable?

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A Equipment other than the telecommunications and
said collocation space." And I'm not going to go on to
finish the paragraph, but would you agree that that puts a
firm obligation on the physical collocating company?

A Yes, I do; however, the collocator is our
customer, and we are not in the business to run them out of
the central office. What we do is have this Language in
place to prevent a collocator from taking a lot of space
not using it, and essentially using up a lot of space,
wasting a lot of space in the central office that another
CLEC could use. What we do is we look to see whether there
has been a good-faith effort to place the equipment within
180 days, and if there has and there is some sort of delay
say there is a delay in the shipment of some switching
equipment, then we will allow them to extend that another
30 days.
    Q That's a discretionary decision by Bellsouth
though, isn't it?
    A Yes, it is.
    0 What is your interpretation of the language in
the collocation agreement that says that the collocator may
place any equipment that the collocator deens desirable for
the conduct of business?
    A You would be referring to the personalty section
of the agreement?
    Q Let me locate exactly what l'm referring to here.

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equipment addressed elsewhere, such as desks and PCs,
chairs, office supplies, things Like that.

Q You said earlier that the optlon that the physical collocator has if the, BellSouth were to say that
the time frame is not met would be to come to the PSC to
file a comolaint?

A Which time frame was that?
Q In other words, If BellSouth doesn't meet the time frame to -- the three-month guideline, that the only option that the CLEC really would have would be to come to the Commission?

A Well, the Commission's desire was to have the parties of the collocation agreement or arrangement work it out amonast themseives, and if we couldn't come to a negotiated agreement, then as a last resort we would go to the PSC

Q Well, I guess what I asked you earlier is what option -- if BellSouth says that they can't meet the three-month time frame, what negotiation takes place?

A In the firm order process, the response to the firm order, there is a date given. I belleve it's handled by the account team coordinator and the INAC, and ! probably should provide you the -- that's the abbreviation, INAC. It stands for interexchange network access coordination. They work with the collocator to negotiate

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PAGE 2B5 SHEET 6
Good afternoon. As | said, my name |s Pam
Tipton, and l'm here today to address questions regarding
the processes used by CLECs to request collocation
arrangements from BellSouth and the processes BellSouth
uses to respond to those requests and to provide those
collocation arrangements.
I have over ten years' experience in the
telecommunications industry, and responsibilities have
varied from developing regional methods and procedures for
special access services, management of customer operation
centers and implementation of Large-scale service projects;
but since 1995, l've served as the project manager, and
more recently as the product manager, for virtual and
physical collocation. In this capacity, I have worked
issues at both the state and the federal level
Part of my responsibilities as project manager
was to ensure that BellSouth had adequate procedures in
place to handle and implement customer requests for
collocation. I am completely familiar with the processes
used; that is, the customer -- how the customer request
flows through the process, and l'm generally familiar with
the depertments that are involved and their
responsibilities in handling those requests. I led the
team of subject matter experts who developed the
interdepartmental methods and procedures and who wrote the

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applications represents a firm commitment from BellSouth to provision space, power and infrastructure which will accommodate the specifications that they indicated on their initial application. But Supra's firm orders represent significant changes in those specifications, sometimes doublina the amount of rack space and significantly increasing the number of wiring terminations requested to terminate at their point of -- at the point of termination bay. Thus, these modifications have greatly modified the terms and conditions under which BellSouth is to offer space, power and network infrastructure to support these arrangements. Thus, BellSouth is currently reassessing the firm orders that have been submitted to BellSouth and will be re-responding to Supra regarding the requirements for interval and cost estimates in order to proceed with those requests.

Thank you, and this concludes my summary
MS. WHITE: Ms. Tipton is available for cross examination

COMMISSIONER DEASON: Ms. Summertin.
MS. SUMMERLIN: Thank you.
CROSS EXAMINATION
BY MS. SUMMERLIN:
Q Ms. Tipton, good afternoon. I'm Suzanne Summerlin.

Bellsouth collocation handbook
In my current assignment as product manager, I manage and implement policies established by others within BellSouth in response to requirements of the Federal Communications Commission and this Commission for both virtual and physical collocation. I am familiar with BellSouth's obligations under the Telecommunications Act and the FCC's First Report and Order as well as with this Commission's requirements. On a frequent and regular basis I interact with and provide guidance to our field forces. BellSouth's interconnection agreement negotiators and BellSouth's account teams for its CLEC customers.

In regards to this case, I have responded to interrogatories and data requests. I was also deposed last week. In addition, ! was asked by Keith Milner to assist in providing a status of Supra's requests at the request of Commission staff at Keith's deposition

In producing the status report, 1 reviewed all of the 15 applications that we are proceeding on where Supra has placed firm orders for the offices where we have space. I've also reviewed the bona fide firm orders which -- or excuse me, the firm orders which are not yet bona fide that Supra has submitted on those same 15 offices.

BellSouth's written response to Supra's initial

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equipment that can be physically collocated by a CLEC or an
ALEC?

A BellSouth allows in physical collocation the equipment which is used to provide telecommunications services that is also used to interconnect to BellSouth's network or access BellSouth's unbundled network elements We inctude in that both switching equipment and transmission equipment. For virtual collocation, 8ellSouth allows the placement of transmission equipment.

Q Okay. What is the strategic management organization?

A I do not know what their specific, I guess, mission is; but the organization, to my knowledge, Looks at overall market conditions, helps evaluate BellSouth's strategy in meeting market needs. I'm sure that they perhaps evaluate policy decisions on a olobal basis, and I'm not sure if that applies to BellSouth Corporation or just BellSouth Telecommunications, Inc.

Q Okay. Do you remember attending a meeting on April -- or actually, l quess, sort of a conference type thing, a regional INAC meeting, on April 22nd through the 24th of 1997 in Atlanta?

A Yes, vaguely l do remember that we had a meeting
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during that time freme.
Q 0kay. I have an exhibit to be identified. It's
called "BellSouth's Physical Collocation Offering," and I
would ask that it be identified as Exhibit 27.
COMMISSIONER DEASON: it will be so identified.
MS. SUMMERLIN: And we will pass it around so
that everyone can have one.
BY MS. SUMMERLIN (Continuing):
Q Okay. Ms. Tipton, this exhibit is an item from
the meeting that I just mentioned, a regional INAC meeting,
that occurred Aoril 22nd, 23rd, 24th of 1997, that you said
that you believe you remember attending.
A Okay.
Q What I'm interested in here is I would assume
that this would have been something you would have attended
and experienced, this particular discussion here?
A Yes, probably.
Q Does this sound like it would have been something
you would have been In?
A Yes, it certainly does.
Q Okay. The third page of this exhibit, or this
document, has several bullets up here, and it says up at
the top, "Assumptions."
A Okay
Q And you can see the unartfully indicated bullet

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decisions, but I have not been the ultimate authority to
make the decision. But the things that we looked at in
making this evaluation were what our other obligations were
under the FCC's requirements, which really preexisted or
predated the Telecommunlcations Act; and those specific
requirements that I'm speaking of are the FCC's Open
Network Architecture Guidelines, the Non-Structural
Safeguards and Requirements that BellSouth has as well as
the Computer Inquiry 3 guldelines.
    While l'm not specifically familiar with the
actual wording of those particular guidelines, I certainly
have a general understanding of their implications on our
collocation policy. And my understanding of those
requirements is that BellSouth is obligated to treat all
enhanced service providers or information service providers
in a nondiscriminatory fashion and provide a comparably
efficient interconnection to those enhanced service
provider or Internet service provider. information service
provider customers.

The equipment was limited in our collocation
offering because. first of all, BellSouth as a regulated
with the \(X\) by it?
A Uh-huh.
Q This states that the strategic management organization has recommended expanding the allowable equipment complement to include routers, switches and modem pools in addition to the transmission equipment currently allowed. Can you tell me anything about that? Do you remember that discussion or what that --

A Actually, yes. I can, because I perticipated with a few members of the strategic management organization, I guess over the past three years, on several occasions in discussions when BellSouth has reevaluated any of its collocation policies. In this particular case, at this point in time, the strategic management orgenization had come and asked me specifically about the reconsideration of the policy, expending the policy.

Like with any business, BellSouth reevaluates its policy decisions sometimes on a frequent basis, depending on the particular subject. And at this point in time, they had decided to reevaluate the equipment that we allowed in collocation spaces, had initially decided to recommend broadly expanding that equipment complement: and the final policy decision was that the allowable equipment would be expanded to include only switching equipment instead of all of the types of equipment that you see here

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entity may have its enhanced services operations located within its central offices. Provided that we follow those non-structural safeguards and requirements by the FCC, part of those safeguards inc lude price disadvantaging, those enhanced service operations, because we have to treat them from a pricing perspective as if they are physically Located two miles outside of our central office. So when they purchase services from BelLSouth, which they are required to do like any other enhanced provider, they have to pay a two-mile minimum local channel rate; so they are not afforded the efficiencies of a collocation arrangement Der se.

So to get back to why the equipment was restricted, we did not want to encourage enhanced services equipment to be placed in a collocation arrangement because we are not required by the FCC to allow the collocation of enhanced services equipment, and because we have these comparably efficient interconnection requirements, if we allowed one entity to collocate that was an enhanced service provider, we would have to provide either the ability for all enhanced service providers to collocate or provide a comparably efficient interconnection: so that means pricing services as if they were inside the \(C 0\) when we might not have space to give them at that collocation. BellSouth looks first to its requirements in the
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Telecommunications Act to provide collocation in all the
centrsl offices where possible for our ALEC customers. We,
therefore, want to ensure that we do not make any business
decislons which might raoldly exhaust the available space
for our ALEC customers. So we had to look at our space
concerns, how allocating space to ESP customers may rapidly
exhaust thet space, what types of equipment ESPs may be
placing, not advantaging one category of customers over
another, say an ALEC. We have several ALECs who currently
are collocating in our offices who are providing both
telecommunications services as well as enhenced services or
information services, which is what I understand as well
Supra is interested in doing. And for those customers we
did not want to disregard the requirements we had under the
Computer 3 Comparably Efficient Interconnection ONA rules
and give an advantage to ALECs that were collocated
providing both telecom and enhanced services. We didn't
want to give the advantage to them over the enhanced
service provider who cannot get in our central office
because they are not an ALEC.
Q Okay. So let me ask you: What I'm getting from what you're saying is that BellSouth is concerned that it
not harm enhanced service providers and information service
providers and that that's the reason why BellSouth is
denying this opportunity to all CLECs?

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would what BellSouth allows Supra to physically collocate have anything to do with enhanced service providers?

A Because there is a portion of Supra which is acting as an enhanced service provider, and we have the obligation to treat that portion of Supra the same way we treat all other enhanced service providers. He certainly are not restricting Supra's ability to compete as a telecommunications service provider, but we have to keep -be mindful of our requirements in the treatment of Supra's enhanced services operations.

Q Is it not BellSouth's policy that if a CLEC or an ALEC provides telecommunications services and enhanced services from the same arrangement that that's perfectly appropriate to physically collocate the equipment that will be in that arrangement?

A Oh, certainly. But our policy also states that we will not allow the collocation of equipment that is used solely to provide enhanced services, and when performing -As I stated in my deposition, when we perform an analysis of the equipment, we look at each piece of equipment individually: and we do that evaluation for both the compliance with the NEBS criteria as well as the functionality of that equipment. So where an arrangement may constitute the entirety of what is placed in the central office, we certainly recoonize that ALECs may be
conference calls with Mr. Ramos and also with Mr. Ni Lson
back in the April, May and June time frame that Supra's
intentions were certainly to provide local exchange service
as well as Internet service; and Internet service is an
enhanced service.

Q So your understanding is that BellSouth's position is based on its view of Supra as an enhanced service provider?

A No, that is not what I said.
Q Kell, let me just ask you, why would it -- why

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providing both enhanced and telecommunications services through that arrangement and utilizing that equipment; but what we do not allow is the equipment which actually performs the enhanced functionality to be placed in the central office.

Q Doesn't it hurt Supra in its effort to compete with BellSouth if BellSouth treats Supra as if it were an enhenced services provider and denies it the opportunity to physically collocate the equipment it needs to provide enhanced services?

A No, not in my opinion.
Q It does not hurt Supra in its ability to compete with BellSouth to do that?

A In my opinion it does not.
Q And explain your answer, please?
A First of all, you know, BellSouth has made available space to place the equipment necessary to combete with BellSouth's telecommunications services, and that is my understandine of the intent of the Act. As far as my involvement in compliance with the Act. I'm required to provide for collocation space for ALEC customers to provision telecommunications services.

Q Let me ask you, if it does not hurt Supra to deny this, then are you not basically saying it's irrelevant to Supra's business that you, that BellSouth denies that
oppor tunity?
A No, absolutely not.
Q So how can you say it doesn't hurt Supra's ability to compete?

A Well, it's my understanding listening to the testimony this morning, I believe it was Mr. Graham indicated that Supra has plans -- does not have plans to locate their enhanced services equipment in the BellSouth central office, so l'm \(k\) ind of confused about what you're asking because evidently Supra already had made plans, at least for certain portions of the network, to be placed in Locations other than the central office.

Q Okay. Let me clarify my question. Does it hurt Supra's ability to compete with BellSouth if BellSouth denies Supra the opportunity to physically collocate equipment that will help Supra provide Internet service?

A You know. !'m sorry, I don't know how else to answer the question. In my opinion I don't think that it hurts their ability to compete. I certainly am not qualified to address the, you know the deployment plans for enhanced services. I'm not familiar with how BellSouth actually deploys and markets its enhanced services, 50 to the best of my bility. I can simply say that it doesn't appear to me that it disadvantages Supra in competing --

0 Okay.

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cost savings to a CLEC?
A Yes.
Q Okay. So if BellSouth denies a CLEC the

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opportunity to physically collocate equipment, then that is
going to cause the CLEC's cost to be increased; is that
correct?

A Once again, BellSouth is only following the requirements as laid out by the FCC, which does not require
us to collocate enhanced services equipment and requires us to comply with the ONA Computer 3 requirements. So in saying that, it is to no areater disadvantage than any other -- the method by which any other enhanced services provider must compete in the industry

Q Okay. Let me just ask you one more time and get you to say yes or no, please: If BellSouth denies a CLEC the opportunity to physically collocate certain pieces of equipment, that is going to increase the cost to that CLEC; is that correct?

A Yes, it will increase the cost only for those services provided through the arrangement which is not physically collocated

Q I want to read a sentence to you out of a letter that was written to Mr. Ramos by Marcus Cathe. It is an exhibit to Mr. Milner's deposition, l believe. Let's see, no, direct testimony, I'm sorry. It's Mr. Milner's direct
testimony exhibit that is identified here as UKM-1. MS. WHITE: Before you read it, I would like to give a copy to the witness so that she can see the context in which the letter is written. MS. SUMMERLIN: Sure. We don't have an extra copy

MS. WHITE: l'll give her my copy MS. SUMMERLIN: Okay

BY MS. SUMMERLIN (Continuing):
Q All right. Ms. Tioton, have you got this letter? A Yes.
Q It's dated July 14th, 1998 at the toD.
A Yes.
Q Mr. Milner's -- I mean Mr. Cathe, Marcus B.
Cathe's Letter to Mr. Ramos has the statement that clearly stated BellSouth's policy is as follows: "Bellsouth offers physical collocation arrangements to telecommunications service providers for the purposes of interconnection as well as for the purposes of the telecommunications carrier gaining access to BellSouth's unbundled network elements. BellSouth will permit the placement of eaulpment in the physical collocation arrangement where such equipment is utilized for the purposes of providing telecommunications services through interconnection or through access to 25 unbundled network elements. Where that equipment can also


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\] all of it.

Q Well, to the extent that you heard that
testimony, would the ascend equipment not meet the
requirements of providing telecommunications services as well as enhanced services?

A l'm not qualified to answer that question.
Q How about a remote access concentrator?
A 1 certainly don't know what that is.
Q You don't know what that is?
A No, l'm sorry.
Q Okay. Just one second. I think I'm through. I just have to check

Ms. Tipton, I have a document here that has already been entered into the record as part of the production of documents.

MS. SUMMERLIN: Nancy, it's notes from the June 10th, '98 INAC collocation conference call. I believe it's something we used in the deposition, so 1 think you've both already seen it. Let me see if we can -- Let me just -I'm trying to figure out what the best way to do this is. Just one second. BY MS. SUMMERLIN (Continuing):

Q We are just looking for a copy so we can show it to you and I can read this, and then that is all we're
spec ifies that equipment "-- can also provide information services, the telecommunications carrier may offer information services through the same arrangement."

And I'm simply clarifying that to the extent a particular piece of equipment that is placed for the purpose of providing telecommunication services can also provide some enhanced functionality that it can be placed. And an example of that, in my understanding, the Code of Federal Regulations delineates enhanced information services, and part of that definition includes acting on format or content, storing and retrieval and that type of thing. And in discussing this policy and ensuring that we are putting in place policies which also reflect what BellSouth does for itself, an example of a piece of equipment which is used for telecommunications services but also performs enhanced functionalities are ATM equipment.

Now I'm certainly not an equipment expert, but someone explained to me how that is a good example of equipment that many telecommunications service providers are using today. And an ATM switch has to necessarily act on either format or content or protocol or something to perform its functions that it does to make ATM an efficient technology in providing telecommunication services.

Q Did you Listen to the testimony earlier today regarding the ascend TNT equipment?

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using it for.
A Okay.
(DOCUMENT TENDERED TO THIS WITNESS)
Q Okay. Ms. Tipton, do you have that?
A Yes, I do.
Q Okay. This is like Page 2 of 3 for the notes
from the June 10th, '98, INAC collocation conference call.
Would you have been involved in that conference call?
A Most Likely l would, and the participant List
indicates that I was on this particular call.
Q Okay.
A 1 tend to participate in all of them.
Q Okay. Paraoraph 6 talks about Intervals here,
and what ! would like to do is to -- I'LL just -- I guess
for want of doing it a better way is just read it very
quickly. It's just a short paragraph, and you have it
there, and then l'm just going to ask you a question. I'LL
just pick out the sentence that starts with, "Pam," and I
assume that's you?
A Uh-huh.
Q "Pam suggested that we develop a tool for
determining the intervals for multiple orders which would
allow for a longer response time for a large volume of
orders. She said that legal has a concern about making a
customer, quote, who wants to take away more of our

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business, end quote, via multiple collocations wait Longer
for our response."
And then the next sentence says: "We may have to respond to all inquiries in 20 or 30 business days and adjust our work force to handle the demand. The collocation steer ing committee will assist --" it says "will assist will addressing this issue." I quess "in eddressing this issue." What exactly was that discussion about?
A if you will first allow me to clarify something as I did in my deposition as well.
Q Sure.
A But for the benefit of the commissioners, there

``` is a quote that Ms. Summerlin has read which states, quote, Legal had a concern about making a customer, quote, who wants to take away more of our business, end quote, via multiple applications, wait Longer for a response. And what 1 clarified in the deposition is that in our discussion with our legal counsel that handles collocation, they were providing that quote as if a customer were stating that. We were expressing our concerns over how to best handle customers who are interested in doing a simultaneous deployment of their network all at once, and that is indicative as well to what Supra has done. So for the record, I just wanted to clarify that quote was put in

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analyzing the equipment is to see if it meets NEBS criteria, \(\mathrm{N}-\mathrm{E}-\mathrm{B}-\mathrm{S}\). What does that stand for, and what does it do?

A Oh, okay. And l'm sorry for not clarifying that. NEBS criteria are network equipment bullding stenderds which are industry standards and I believe have been established by BellCore. The industry has these network equipment building standards in place to rate equipment on various levels, and 1 believe there are three levels of NEBS compliance.

For collocation Bellsouth requires NEBS Level one compliance, which basically means that the equipment must meet safety and electrical wiring standards. Some other RBOCs have put in place requirements addressing the actual performance of the equipment. but BellSouth simply reviews the equipment that is submitted for collocation to ensure that it meets, at a minimum, NEBS level one compliance and has been NEBS Level one certified so that it, for example, can pass the fire spread test. I think the example I used in my deposition is the NEBS testing sees if a piece of equipment that is operational for \(X\)-number of hours will not spontaneously burst into flames or something to introduce a hazard to the central office.

Q And my other question is: Where do other ESPs that are also ALECs put their ESP equipment?
quotes because our counsel was saying it as if she were in the customer's position so that we would be mindful of how
a customer might feel in developing our methods and
procedures when that process was done.
            I'm sorry. Would you mind restating your
question? I just wanted to ensure that we got the same
clarification that we discussed in the deposition.
    Q My question was: What was that about? And 1
think you got to what l'm trying to get to.
    A Most of it. okay.
    Q As you did as well in the deposition also. Let
me just ask you as the final question: Collocators who want
to deploy multiple collocations will take away more of
BellSouth's business, won't they?
    A Yes, they will.
    Q Okay. Thank you.
        MS. SUMMERLIN: No fur ther questions.
        COMMISSIONER DEASON: Staff.
        M5. KEATING: Staff has no questions.
        COMMISSIONER DEASON: Commissioners.
        (NO RESPONSE)
        MS. WHITE: 1 just have two on redirect.
        REDIRECT EXAMINATION
BY MS. WHITE:
    Q Ms. Tipton, you said that one of the reasons for

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A I don't know specifically, but they are locating
them in a site outside of the central office. In some
cases. it is in a property that is very close to the
central office. One of our ALEC customers has actually
been able to acquire some retall space directly across the
street from our central office in Atlanta.
    Q Thank you
    MS. WHITE: I have nothing fur ther. May
Ms. TiDton be excused?
    COMMISSIONER DEASON: Yes, you may.
    MS. SUMMERLIN: Supra would move Exhibit 27.
    COMMISSIONER DEASON: Without objection Exhiblt
    27 is admitted.
    Ms. White, you may call your next witness.
    MS. WHITE: Ve would call Barbara Cruit,
c-r-u-i-t.
            COMMISSIONER CLARK: Ms. Summerlin, do you want
to pick up this confidential exhibit here?
    MS. SUMMERLIN: We can do it now. I was going to
    do it either now or at the end of the day, but we'll get it
    now if you all are through with it.
    Whereupon,

\section*{BARBARA CRUIT}
was called as a witness on behalf of BellSouth and, after being duly sworn, testified as follows:

Q Ms. Cruit, could you please state your name and address for the record?

A My name is Barbara Cruit, and my business address is 18560 Nor thwest 27 th Avenue in Miami, FLorida

Q By whom are you employed and in what capacity?
A I'm employed by BellSouth Telecommunications, Incorporated, and I'm the director of South Florida capacity management

Q Ms. Cruit, you did not file prefiled direct or rebuttal testimony, so would you please give a short summary about the issues upon which you were deposed?

A l'Ll do that. Thanks.
I'm here to support the process and the results of BellSouth's forecasted requirements for central office equipment growth in the Golden Glades and West Palm Beach Gardens offices. The current environment for projecting future equipment requirements is significantly different than it was in the past.

In the past, the network was relatively stable and we relied heavily on forecasts received for BST Line growth and interexchange carrier access; however, due to the following reasons that have occurred over the past 24 months, we have revised our process for projecting

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l'Ll start with our switching offices, our switching systems. The switching systems are in three categorles. We have some access tandens in these offices, local offices, and then TOPS or overator services switches. I'LL start with the access tandem.

The access tandems provide trunks for interconnection to other cerrier networks. The central offices that we are discussing here house three BellSouth access tandems. These switches are the primary point of interconnecting with other carriers, whether they be interexchenge carriers, wireless carriers, CLECs or other independent companies. It is critical that Bellsouth be able to continue equipment growth in these switches in order to allow traffic to traverse from one carrier's network to another.

The switch capacity manager trends the projection of trunks based on the most resent projection of the demand. DS-1s or trunks are driven by interconnection to the CLEC networks, the interexchange carrier networks, the wireless networks, as well as BST own end users access to interconnect providers. No forecast is provided by any of these carriers, therefore. trending is used.

In the particular offices that we are talking about, in the West Palm Beach Gardens OT office, we are seeing four hundred T1s per year growth. That is
equipment requirements. Those changes are: The increased use of the internet and the inherent increased demand on the network. The second one is the introduction of CLEC networks and the need to interconnect those networks, and the last is the increased demand for wireless interconnection. The demand on the network is no Longer stable. It's no Longer predictable. Therefore, because of a lack of a forecast from these influences, Bellsouth capacity managers rely heavily on trended demand to determine capacity exhaust and equipment relief.

We project equipment requirements for the next 12 to 18 months based on the actual demand of the past 12 to 18 months. Of course we use judgment in apolying that trended forecast to the equipment requirements when we are aware of an unusual occurrence that has taken place. Another change from the past is that we are deploying herdware equipment to last approximately 18 months and deploying the expensive electronics or plug-ins as referred to them as the demand occurs, approximately every six months in this volatile access tandem switches. This allows us to economically and quickly respond to interconnecting customer demands.
l'd Like to walk you briefly and at a very high level through the process that capacity managers use to determine the equipment requirements in these offices, and

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approximately a \(17 \%\) growth in that access tandem. In the Golden Glades 01T which serves South Dade and the Keys, we are experiencing five hundred T1s of growth per year, which is approximately \(19 \%\) growth. And then in the Golden Glades \(04 T\) office, which serves Nor th Dade and Broward, we are experiencing approximately \(37 \emptyset\) T1s, approximately \(16 \times\) growth.

In our local offices, there are two switches, one in each office, that support the local office requirements. These are driven by both line requirements. or access line requirements, and trunk requirements. So for line requirements, the switch capacity manager receives a wire center forecast of lines. In addition, the outside plant loop capacity manager recelves that same forecast and he forecasts the growth of the digital systems for the outside plant that are to be integrated into the office based on the forecast of lines and his knowledge of the wire center growth and the activity. He provides that forecast to the switch capacity manager who turns that system forecast into digital lines and assumes the remainder to be analog line requirement.

The switch capacity manager, his requirements and projections are trued up based on the most history data and the knowledge of unusual activities. In addition, the switch capacity manager considers services to be provided
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such as caller ID, calling name delivery and others, and
then determines the equipment requirements to satisfy all
those demands. And it's very complicated, and that's the very high level of summary l'd Like to tell you about lines.
For trunk requirements, however, due to the recent volatility of local trunking demand driven especially by the Internet service provider access, and PRI, primary rate interface ISDN hubbing arrangements, the interoffice trunk requirements are based on most recent current trends of trunking requirement. And the switch capacity manager determines those requirements and turns them into equipment needs. For these particular offices, we are experiencing approximately a 5\% Line growth in the West Palm Beach Gardens Local switch and Less than a $2 \chi$ Line growth in the Golden Glades switch.
On to the third type of switch that is in these offices. We call them TOPS, telephone operator position systems. They serve the operator services requirements. The demand for these offices is driven by the need to expand or modernize the operator services network. In doing that, it requires the replacement of some old technology with newer technology
The next area beyond switching is circuit and transport equipment. In these two offices, in the Vest

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rectifiers and batteries. In addition, the power capacity manager plans the replacement and the upgrades for optional standby enoines.

And lastly, the equipment that is also in this office is the STPs and SCPs. This equipment is planned by the regional planning and engineer ing center and a regional center that monitors the capacity of these switches and provides the frame requirements to the common systems capacity manager

Finally, the common systems capacity manager, of which two of them are here today, ensure that all the installed equipment is properly shown on the office floor plan, that all outstanding orders for adding or removing equipment are reflected on those plans and that the equipment bay projections from all these resources are shown accurately.

Thank you. That completes my summary of the process and the results of the forecasted equipment requirements.

MS. UHITE: Ms. Cruit is available for cross examination

COMMISSIONER DEASON: Ms. SummerLin. CROSS EXAMINATION

BY MS. SUMMERLIN:
Q Good afternoon, Ms. Cruit. I'm Suzanne Summerlin

Palm Beach Gardens office we are projecting 16 bays per year growth; in Golden Glades 22 bays per year growth. This is primarily driven by the need to provide carrier interconnection and customer-driven smart ring sales

In projecting the future needs, the circuit capacity manager identifies the needs for test access, metallic repeater equipment. SONET equidment, digital cross connect system growth and associated cross connect panels.
This person, the capacity manager, considers Local and message trunk growth. ISP trunk growth, interexchange carrier and CLEC trunk requirements. They also have to consider the expected growth for customer-driven SONET-based smart rings as well as interoffice SONET rings. They are also an interface to the outside plant capacity manager who provides requirements to them to place equipment in this area as well for next-generation digital Loop carrier equipment, Loop multiplexors and fiber distribution frames. The circuit capacity managers considers all of these above requirements, and when they are requested they provide the common systems capacity manager with an estimated equipment requirement.

My capacity managers also project the needs of power equipment. Power equipment is identified -- needs are identified through our Lucent power planner where we have out-sourced the planning for this equipment for

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for Supra

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MS. SUMMERLIN: I have Ms. Cruit's deposition transcript and the documents that we intend to cross her on that came from Mr. Milner's confidential exhibits, and we have that in a confidential envelope to pass out right now, and so we'll do that. We've already moved all of this into the record, so this is just for the demonstrative purposes. And then I also have two other exhibits that 1 need to get recognized, but I guess we can do that when we get to that.
l'm going to go ahead and ask that these two exhibits be identified, and llll start with them please The first one is the petition for waiver filed by BellSouth for the North Dade Golden Glades office. That is identified as being in CC Docket 91-141, and it has on it a received stamp February 16th. 1993. And ! would ask that that be identified as 28,1 believe was the next one.

COMMISSIONER DEASON: It will be so identified MS. SUMMERLIN: And then the other exhibit that 1 need ident|fied, it would be number 29 , would be the West Palm Beach Gardens petition for waiver which is in CC docket 91-141 and CC Docket Number 80-286; and that has a receive stamp in the upper right-hand corner of November 18, 1993.

COMMISSIONER DEASON: That will be identified as

Exhiblt 29.
MS. SUMMERLIN: 29, okay,
BY MS. SUMMERLIN (Continuing):
Q Ms. Cruit, I know from the fact that we deposed you that you were not responsible for filing these petitions for waiver in your shop because you weren't employed in that particular shop, were you, at that point in time; is that correct?

A That's correct.
Q But just for purposes of talking about
BellSouth's projections, I want to talk to you about this, but l'm not going to hold you responsible for knowing what happened specifically in this situation because \(!\) know that you did not yourself -- you were not in charge of the shop when this happened.

Let's Look at the West Palm Beach Gardens petition for waiver. That will be the one that has pot the November 18th, and that would be Exhibit 29. And in this petition for waiver that was filed and evidently submitted November 18th, 1993, on Page 3, Paragraph 3, there is a discussion regarding the West Palm Beach Gardens central office, and I want to specifically talk about one statement in that paragraph, which is technically the second sentence in the paragraph, and l'll just read it: "BellSouth has reserved 21 hundred square feet for projected growth of the

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for -- to support the projections that the common systems capac ity manegers have, so I'm not familiar with this, and I can't even speak to the 21 hundred square feet or the additional 23 hundred square feet.

0 I understand what you've clarified in your deposition, that you are not the person who translates these projections into square feet. I understand that totally, but isn't it true that the people who do translate it into square feet rely on your projections?

A On the equipment projections, that is true.
Q So someone in the shod that you're in. not -- you were not there then, I recoonize that, because you began that position in '95, so obviously you weren't there: but somebody in your shop had to provide the projections on which this statement was based; is that not correct?

A I assume that it is. I really don't know how the process was handled back in this time frame. I cannot speak to how this was developed back then. I'm sorry, I can't. I would Like to, but I can't.

Q Okay. But you have -- do you have any reason to think that the structure of BellSouth on this issue was different at that point in time?

A I don't have --
Q What I mean is, do you have any reason to think that there wasn't a shop just like the one that you are
switches over a two-year period." And the rest of the -That's basically all there is about future growth for that office. And, actually, what may be useful for everyone is to just point out that the entire discussion about this central office is in that paragraph here. And to be, you know, fair about what is in there, it says: "There are four switches and associated peripheral equipment consisting of polling equipment. circuit equipment, \(D C\) power and main distribution frame located in the Garden CO." And then it has the sentence l just read: "BellSouth has reserved 21 hundred square feet for projected growth of the switches over a two-year Deriod." Then it says: "An additional 23 hundred square feet comprised of entrance lobby, bathroom facilities and a mechanical room for HVAC --" which is heating ventilation and air conditioning, 1 assume "-- is classified as unavai lable space.

When you look at a sentence like that, basically this indicates that at this point in time, November 18th, 1993, BellSouth was reserving 21 hundred square feet that it projected to be needed for a two-year period; is that correct?

A Apparently that's what it's saying, but l'm really not your witness for this type of discussion because I am not in a position to discuss reserved space in terms of square footage. I can discuss equipment projections

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operating in that provided these projections at that time?
A Well, we have been significantly reorganized since this time, the time frame that you are talking about. We went through a major reorganization in 1994 and 1995, so I don't know how it was done back then.

Q Okay.
A Now l can tell you though that the equipment projections have increased dramatically since this time frame. As you will recall in the deposition and in the production of documents, we looked at the equipment forecast back in the '92/'93 time frame, and they were relatively flat; but as 1 discussed in my summery, the explosion of equipment requirements has taken off in the last 18 to 24 months. So 1 can see why there would be a sionificant difference between what is required for space now as compared to then.

0 Okay.
A I mean that's all I can say.
Q And I appreciate -- Are you through? (WITNESS NODDED HEAD AFFIRMATIVELY)
Q I appreciate what you're saying, and I understand where you're coming from on that. I guess what l'm trying to get you to tell me, since you are the witness BellSouth has put on -- or, no, l'm sorry, you are the witness --

\footnotetext{
A For equipment.
}
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Q No, I'm sorry, Let me restate it. I surrender already before you get up and yell. \\
You are the witness that BellSouth identified when Supra asked for someone who was a projections or forecasting expert? \\
A For equipment, yes. \\
Q For the company for equipment? \\
A Yes. \\
Q And for that reason, that's why I'm asking you. \\
A Okay. \\
- Because nobody else here today will tell me that they can tell me about projections. \\
A I can't tell you how that 21 hundred square feet was projected, what it was based on. I don't know. \\
Q Okay. But Let me just ask this question: is it fair to say that somebody at BellSouth made that projection? \\
A \(\quad 1\) think that's probably fair to say. \\
Q Okay. Okay. \\
A How they did it, or who did it, I don't know. \\
Q Okay. \\
MS. SUMMERLIN: Okay. We have located one other exhibit that relates to this, and I would ask that this be identified as Number 30. \\
COMMISSIONER DEASON: it will be so identified.
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BY MS. SUMMERLIN (Continuing): \\
Q This one -- this order has a stamped date of February ' 94 at the tod, and it's a Memorandum Opinion and Order of the Federal Communications Commission issued in CC Docket Number 91-141. \\
Ms. Tipton, do you have this exhibit yet? \\
A Ms. Cruit? No, I don't. \\
Q I'm sorry, l'm calling you the wrong name. l'm sorry. Ms. Cruit, you didn't get it yet? \\
A No. \\
Q I'm sorry, we thought we were handing them out. \\
1 miscommunicated. \\
(DOCUMENT DISTRIBUTED) \\
© Okay. Do you have it. Ms. Cruit? \\
A 1 do. \\
Q Okay. If you look at page 2 of this FCC order, this order granted BellSouth's request for the waiver, and on Page 2 there is a Section 2 that deals with pleadines. Paragraph A talks about BellSouth. What I need to point to is what it says about: "At its Gardens central office in Palm Beach Florida, BellSouth alleges that 23 hundred square feet of office soace are unavallable for physical collocation because this space is used for entrance and bathroom facilities and a mechanical room containing heating, ventilation and air-conditioning equipment.
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BellSouth also has reserved 21 hundred square feet within that office for projected growth." \\
In its reply BellSouth states that six hundred of this 21 hundred square feet are needed for three years of growth for a DMS-200 access tandem switch and a DMS-100 switch to provide local switching. BellSouth asserts that another six hundred feet are needed for a DMS-200, a TOPS operator switch and a DMS signal transfer point, STP. Finally, BellSouth claims that the remaining 900 square feat must be reserved for main distribution freme growth and maintenance administration. \\
I guess what I would ask you if you can respond to it at all: Does this appear to be the same \(k\) ind of projection that you would make now in terms of you would be saying that a certain amount of equipment is going to be needed for a certain period of time? \\
A I would tell -- as a switch capacity manager or a circuit capacity manager or a power capacity manager, I would tell the common systems capacity managers how many frames of growth I project in the next two to three years. \\
0 Okay. And someone like that would have been behind this request basically in terms of in the -- \\
A That's what I would do now. \\
Q Yeah, okay. Okay. So you don't have any \\
knowledge specifically about what happened with all these
\end{tabular} & \begin{tabular}{l}
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specific items, and we'Ll have to ask somebody else to know whether or not these projections panned out the way \\
BellSouth proposed that they thought they would? You don't know that; is that -- \\
A No. \\
Q That's what you're saying. \\
A Right, I don't know how -- what these were based \\
upon. \\
Q Okay. \\
A I do know that the dynamics of these offices are \\
great, and ! know that -- and, in fact, you have observed \\
in your tours that the offices change week to week. \\
Equipment is added. Equipment is removed. Space is \\
reorganized, so it is not a surprise to me that in four or five years that there are significant changes in this office. \\
Q Okay. So -- \\
A Because they are volatile dynamic offices. \\
Q Okay. \\
A And the forecasts have changed significantly. \\
Q Okay. So that means that sometimes space gets \\
freed up; is that right? \\
A Yes, as -- \\
Q In a dynamic situation? \\
A As equipment is modernized, it does, yes.
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5 Q Okay. I quess just to make one sentence on this
other Exhibit 28, and just simply to point out that there
was a specific projection made for the North Dade Golden
Glades office. If you look at the first attachment to this
petition for waiver, there is a chart at the top that says
"Expanded Interconnection, Docket Number 91-141, Central
Office Inventory for BellSouth Telecommunications," and
it -- on the locations, it Lists North Dade, and then it
says Golden Glades for the central office name?
    A I don't know where you are. Can you --
    Q Okay. l'm sorry.
    A Which, where --
    Q If you will look at the petition for waiver that
has the date February 16th, 1993. at the top --
    A Okay.
    Q -- that deals with North Dade Golden Glades, so
just look to the first attachment.
    MS. WHITE: Well, if it will hurry things along,
BellSouth will stipulate that attached to the petition for
waiver is a projection. if that will help.
    MS. SUMMERL:N: That's all I'm going to do, is

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in my summary, that we would be reserving more space for future growth than we did in this time frame. So that doesn't tell me that there was anything wrong with the projections at the time.

Q Okay.
A As you've seen on the documents that we've produced, the growth rate in that time frame was much less than it is today, significantly less.

Q Okay. If it was sionificantly less and one thousand square feet was said to be needed for the immediate future at that point in time, if a great deal more space than that is left now, doesn't that suggest a problem with that projection?

A No, because that time frame that you are projecting was the '93/'94 time frame. We are now projecting '98/'99, 2000; so. no. It doesn't.

Q If there has been no change to the bulding that we are talking about in terms of any additions of space, doesn't it suggest that the projections that were made at that time may have been faulty?

A The equipment projections?
Q Yes.
A No, it doesn't.
Q What could have happened, to answer that question?
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ask -- just point out that one statement, okay?
BY MS. SUMMERLIN (Continuing)
Q Have you found it?
A l am at an attachment. Is it this one?
Q Yes.
A Okay.
@ All l'm trying to point out is that there is on
this document for the North Dade Golden Gledes central
office under the column "Vacant Reserve Space," the floure
one thousand square feet, okay?
A Yes, I see that.
Q Okay. And consistent with what you've just
testified on the other petition for waiver, you have no
idea where that came from or what has happened or anything
else about it?
A That is correct.
Q Okay. If It's true that today in Mr. Bloomer's
testimony he hed stated that BellSouth is reserving
substantially more space then that thousand square feet
today, does that not indicate that something was -- some
kind of problem occurred with the projections that were
made when this petition for waiver was filed?
A No. I don't assume that because I told you that
the conditions have changed dramatically; and I would
expect, because we have seen the growth rates that I stated

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filed by. BellSouth, both of which indicate that five years
ago, approximately five years ago BellSouth believed that
substantially less space was left and available for future
use than it says is now available today?
    A Well, as ! indicated just a minute ago, the
office is dynamic, there are always changes. There is
equipment being removed. There is equipment being added
We are modernizing. We are replacing equipment.
    Q Okay. Modernizing would mean that the
equipment -- the more advanced technology would require
smaller or Less equipment maybe?
    A Well, by modernizing I meant that we are putting
in equipment that will provide additional functionality
then the equipment that is being replaced.
    Q Does that mean that the equipment, the space
needed for the equipment to serve the same demand is less?
    A Not necessarily
    Q Well, then how do you answer the question of the
fact that there is more space available in these offices
now then there was -- that BellSouth claimed there was when
they filed these petitions for waiver? Something has --
Do you not concede that something has to be an explanation


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with this, and we can walk through it if you'd like.
Q Well, I guess what l'm asking is did your group generate these?

A The charts?
Q Yeah.
A Yes.
Q Okay. That's all I was trying to get.
A Not necessarily the forecasts, but the charts, yes

Q Okay. Who generated the forecasts?
A Well, we need to -- I need to know which one you are talking about because if it's line forecasts for the overall office, that is developed by one organization. If it's a forecast of digital systems, that's developed by another. If it's the remaining analog, that's another.

Q Okay. Are these --
A So if you'll tell me more, l'll be glad to answer your question.

Q Okay. I was under the impression that you were above those various oroups; is that not correct?

A No. No, I don't have a forecasting organization.

Q Okay. So you take --
A Where we do not receive a forecast we develop our own, and it's based on projections of the last 12 to 18
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\(2 \quad Q \quad\) That are two different stapled sections of
several charts.
A Okay.
Q These are -- do you recognize these charts from Mr. Milner's exhibit --

A Yes.
Q -- that is already in the record now?
A Yes, I do.
Q Okay. One of these sets of charts has in the bottom right-hand corner an identifier of NDAD, obviously North Dade, FLorida, Golden Glades central office. Do you recoanize which one I'm talking about?

A Yes.
Q Okay. And the first one is labeled 32.1.
A Okay.
Q And I guess -- 1 just want to ask you a couple of questions about the forecasts. These are forecasts that you -- your shod made: is that right?

A Vell, we used the forecast, and these charts are -- this is a mechanized tool that my organization uses, these charts.

Q Okay.
A So when you say forecasts, we need to talk about which forecasts you are talking about, but 1 am familiar

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months' history.
Q Okay. So --
A So where we do receive a projection, or a

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forecast, we use it: and that's what's plotted on some of
these cherts.

Q Okay. So all -- what you can tell me is what the forecasting approach is that's being used at this time? Can you tell me that?

A Yeah, 1 can talk to you about that.
Q Okay. I know that you said earlier today that the forecasting approach that BellSouth is using has dramatically changed in the last couple of years; is that right?

A That is right.
Q And what is the basis -- what is the basic idea of that change? I mean how has it changed?

A The basic -- Well, in the past, we used to receive forecasts for Lines and trunks. Today, we re -I receive a forecast for Lines, network access Lines from the forecasting organization. We do not receive a forecast for trunks because of the demand of the interconnection and the demands coming from the interconnecting carriers. They consider that market intelligence, competitive information; and, therefore, especially on trunks and, you know, that's where we are doing our own forecasting and basing it on
current most recent history, we are developing our own because we cannot get a forecast of interconnecting trunks from the carriers.

Q Dkay. But is it true that at some point
BellSouth has to come up with a projection?
A Absolutely.
Q For each of these items?
A Yes. Yes.
Q Okay. Whether you get something from somebody else or not: is that right?

A Yes. Uh-huh.
Q Okay. is it true that what has really happened is that now instead of using several years worth of data you use 12 to 18 months worth of data to project what your situation is going to be?

A Kell, rather than using an input of a forecast, we now base trunking demands on the most recent 12 to 18 months.

Q Is that what was done back -- you told me in '95 and '96, I think, that there was a different approach used. How does this approach differ from that?

A We would receive forecasts from interexchange carriers -- See, the change is that we are interconnecting now with many more players than we used to interconnect with, and so we had established a relationship

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deployed in the field that they plan to integrate into the switch. They provide that to the switch capacity manager who takes that information along with the knowledge of the overall forecast and determines the analog and digital requirements.

Q Okay. So is it fair to say that your forecasts today are based on less information than your forecasts were in '93 and '94?

A Could you be more specific what \(k\) ind of switch your talking about? Are you talking --

Q For any of your switches.
A No, 1 don't think that's fair to say for the Local switches. For the access tandems, yes, it is based on the -- we are trending our data based on the most recent 12 to 18 months worth of history for the access tandens. For the local switches 1 just went through the process that we are using.

Q The Local switch forecasting is exactly the same as it was when you first oot involved in that organization in '95?

A For lines.
Q For Lines?
A For lines, and for trunks we are utilizing a trended demand because of the Internet explosion and the access from the end user to their Internet service
of sharing information with the interexchange carriers. They would provide to us a forecast of what they would expect to need to turn up. That we would plow into our forecasts, and we would know what demand to project.

In today's world, because of the explosion of the Internet and not having a forecast of that demend, because of the interconnection with other CLECs where we haven't developed that relationship yet, because of the interconnection of wireless and their marketing strategies. we do not receive a forecast from all of those various players. And so based on that, we are projecting our current trends for the next 12 to 18 months and purchasing equipment based on our most current 12 to 18 months. in light of not having anything else. For trunking l'm talking about.

Q Dxay. What do you use for lines right now?
A We have a forecasting organization that provides us a forecast of network access Lines on our local switches, not on the access tandems, because 1 told you the tandems are just trunking interconnection: but on the local switches, we receive a line forecast. And in my summary 1 said that Line forecast goes to both the switch capacity manager and the Loop capacity manager who is plenning the outside plant. They take those forecasts, the loop capacity manager turns that into systems that need to be

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provider.
Q Okay. So you said that it was correct to say that your forecast for trunks are based on less information?

A Trended. They are trended. I don't know if it's Less or more. I mean it's what has recently heppened in the current past, and we have nothing else to 90 on other then history. We don't get a forecast from our end users of who they are going to access for their internet provider. We don't know what they are going to use their access lines for. We do know that they are accessing Internet service providers, and so we have to have demand -- we have to have cacacity in that office to carry their access requirements, regardless of where it's going to.

Q Yeah. I understand what you're saying. I'm just trying to clear up for my understanding that what you're saying is that the trunk forecesting that you do now as opposed to the trunk forecasting you did in ' 95 is based on less information?

A It's based on different information, how about that? We can agree on that.

Q Not necessarily. I'm trying to understand.
A Well, in the past --
Q You said before that it was less information. I believe earbier in your statement today you said that, and
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1 just wented to --
A I don't know that l said less. I Just said it's different. I said it's different. I said that demand on the network is no longer stable and predictable; therefore, because of a lack of a forecast for the influences that l discussed, we rely heavily on trended demand to determine capacity exhaust.
Q Okay. In '95 when you did a trunk forecast, how much historical data did you use? Did you go back three or four years at that time?
A We had as much data as we have today, and in ' 95 when we were doing trunk forecasts, they would look at the access line increase, and they would project that into a trunk requirement; and the network was stable, and so they used about the same number of trunks to Lines to project as they had in service. Today, the usage on the network is increasing substantially, and so they cannot use that same trunk-to-line ratio, 50 we are projecting the demand of the trunk network.
Q Okay. You just said then you had as much data as you have today; is that what you just sald?
A We have -- Yes. Data in terms of history: is that what you mean, history data?
Q Yeah, my understanding of what you have said today is that you now use 12 to 18 months of data; whereas,

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started in this position, did you use only 12 to 18 months worth of data to make your forecasts for trunks?

A No.
Q What did you use?
MS. WHITE: Again, this question has been asked
and answered.
COMMISSIONER DEASON: The question has been asked
and answered, Ms. SummerLin. You can move on.
COMMISSIONER CLARK: Then if it is, I'm not clear
of the answer, and I apologize.
COMMISSIONER DEASON: Kell, I apologize, when we
get to you asking questions, you can ask your question at
that point.
COMMISSIONER CLARK: Okay. All right
COMMISSIONER DEASON: But it's clear to me.
Ms. Summerlin, you need to move along.
COMMISSIONER CLARK: Let me follow UD on that
point. Would it be fair to say that you have -- with
regard to your trunks and lines, you used to be able to rely on your projections of Lines to determine your trunks because you were, generally speaking, the sole provider of those Lines?

WITNESS CRUIT: Yes.
COMMISSIONER CLARK: ALL right. Now you are no
Longer the sole provider of those lines: is that correct?
in the past, you used substantially more data in terms of more period of time, historical period of time

A No, not period of time. It has nothing to do with the period of time. The reason that we've changed is that the influences on the network changed significantly 12 to 18 to 24 months ago. and that's why we are using the most recent demand rather than trying to look back and use an average of the last four years or use the old process where we were using a line-to-trunk ratio. Ve are using current history to try to project, to stay ahead of customer demand.

Q Okay. Did you use an average of the last four years back in ' 95 to do this forecasting?

A No, we didn't use an average.
Q Okay. Did you use --
A We used --
Q I'm sorry. Go ahead.
A For trunks we used a Line-to-trunk ratio. We projected the number -- we knew the number of Lines projected for the forecast. We applied that line to trunk ratio and any other known changes that were occurring in that office, and they developed -- we developed a trunk forecast based on that

Q Okay. I'm going to end this real quick, but ! just want to ask you one more time: in 1995 when you

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WITNESS CRUIT: Well, the bines that are being served by our local office we are the sole provider of those, but the difference is the usage of those Lines is extremely different than it was then. Then it was traditionally voice traffic. Now a lot of that usage is data traffic. It's access to the Internet. That sterted --

COMMISSIONER CLARK: ALL right. Do you know -VITNESS CRUIT: l'm sorry, go ahead. COMMISSIONER CLARK: Do you know what is coming in over a Line?

WITNESS CRUIT: No, we do not. It is a, 1FR, \(1 F\), 1F -- 1FB. It's a line. A line is a line. It comes into the office, and it uses the network equipment in that office. When the bine is up or being used much Longer today than it was in the past, it requires additional trunking facilities

COMMISSIONER CLARK: And it's that information that you don't have so you can project the number of trunks; is that correct?

WITNESS CRUIT: That's correct, and so, because we don't know how much the subscr ibers in these particular offices are utilizing or going to utilize their lines for Internet access or any other data demand, we are projecting the demand of trunks based on the most current 12 to 18
months wor th of history beceuse we think that more accurately reflects the demend of the future.

COMMISSIONER CLARK: Okay. Da you think it would be fair to say that because you are not -- you don't have the information about what is coming in on those lines now that your projection of trunks will be less reliable than if you did have all that information on the lines?

WITNESS CRUIT: It's probably less reliable, but it's the only method that we have of projecting trunking today.

COMMISSIONER CLARK: I'm not faulting your method. I'm just trying to get --

WITNESS CRUIT: Yes, it's not as reliable as we would Like it to be. We would Like customers to have a separate Line and know that it's going to be used for Internet access and know when it's going to be used and have an average projection, but we don't know. All we know is that they have a line. They might have an additional Line, but as they come into the office, I don't even know which ones are additional Lines, which ones are primary Lines. I just know a bine is a line. Traditionally it's been used for voice. It's being used much, much more today for data generating a lot more traffic usage on the network and, therefore, ! have the trunks -- I need to have the trunks, or we incur blocking in the office.

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\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|r|}{343} \\
\hline 1 & 0 Yes. 1-- \\
\hline 2 & A -- Like analog terminations, others are served by \\
\hline 3 & digital. So these particular ones that you are looking at \\
\hline 4 & on the front page are analog Line terminations. This is \\
\hline 5 & made up of equipment types that are LMs, which are old \\
\hline 6 & peripherals: and LCMs, which are new peripherals. \\
\hline 7 & Q Okay. So when we look at what you are currently \\
\hline 8 & experiencing as demend, that's the lower line to the left. \\
\hline 9 & the solid line? \\
\hline 10 & A Demand is the solid Line. The projection is the \\
\hline & dotted bine. \\
\hline 12 & Q Okay. And then your capacity is the Line above? \\
\hline 13 & A The upper line. \\
\hline 14 & Q The upper Line? \\
\hline 15 & A Uh-huh. \\
\hline 16 & Q So does that indicate that you have greater \\
\hline 17 & capacity than is needed for your current business as well \\
\hline 18 & as the projection? \\
\hline 19 & A Yes, it does. \\
\hline 20 & Q Okay. \\
\hline 21 & A In this particular case, but 1 would like to \\
\hline 22 & explain that because that excess capacity is the old type \\
\hline 23 & of equipment, what we call line modules. Those line \\
\hline 24 & modules cannot provide caller ID type services, so we are \\
\hline & replacing those line modules as the caller ID service \\
\hline
\end{tabular}
    your competitors don't want to provide it to you, and 1
    think that's understandable. But it does make your ability
    to project what you need more volatile?
            HITNESS CRUIT: Absolutely, it does.
    BY MS. SUMMERLIN (Continuing):
            Q Ms. Cruit, I would Like to Look just a couple of
    seconds at these two different charts on the North Dade
    Golden Glades and the one set that starts with the 32.1 in
    the bottom right-hand corner. Can you describe for me, or
    explain to me. I guess, what the dotted line is the
    projection for -- or the forecast; is that right?
    A Yeah.
    Q Okay. Is that basically a flat growth projection
    or a very close to flat?
    A You are talking about on the first page?
    Q Yes, it should say North Dade Golden Glades 32.1
    at the bottom right.
    A Yes. That's -- remember when I was talking about
    the Lines being served in the office, I said that some of
    them are served on an analog.

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requirements or the forecasts for caller \(1 D\) Lines. At that growth rate we are providing additional new modules to support the conversion of the old to the new, and as we do that, we add new modules and pull out the old.

Q Okay.
A So that capacity is required until we are able to replace the old modules.

Q Okay. The second sheet -- the second sheet in this group has got 32.1 in the bottom right-hand corner.

A Yes.
Q This projection is a rising up in the future apparently, the dotted line. Does this show that you have a lot more capacity that is planned than what the forecast seems to indicate will be needed?

A No, I don't think so. In 'g9 it Indicates about what, three months prior to the demend actually
materializing that the equipment is being installed. And as 1 told you in my deposition, this is made up of several
different kinds of equipment. It's made up of -- I hate to
get into this -- TR068 equipment requirements, which is a BellCore standard and TR3g3 requirements. That's defined by the outside plant in how they olan to administer the allocation area or the serving area that they are treating, and so depending on how they plan equipment growth, 1 take it into the central office to terminate whatever their
equipment requirements are; so 1 really plan it based on systems, which 1 don't believe you have included here, and turn it into digital Lines that that's going to serve.

Q Okay. Ms. Cruit, let's move past the next one to the one that says at the very top, "SLC96, dash, Working."

A It says on the top "SLC96-Working?"
Q Yeah, and --
A Oh, I'm sorry. Okay, I see that.
Q Okay. You see what I'm talking about?
A Uh-huh.
© Okay. Where this dotted line is, it appears to be leaping ud from where your demand, your current demand
line is. Can you explain where that's coming from, or what that --

A Well, I can explain that the dotted Line indicated that we needed relief where we provided it. The solid line indicates that the demend on these particular systems is not as oreat as they thought it would be.

Q Okay. Let's move to the next one. Uv at the top it says is "SLC96-Assigned?"

A Right, that is the same as the previous one. One is just systems that are assigned; the other is systems that are working

Q All right. And so it's the same basic reasoning?
A Well, it's the same equipment.
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Q Yeah. Can you explain exactly what -- This forecast appears to be eventually going in a downward trend, but the capacity seems to be very high.

A Well, and that's based on the current demand. This is ISDN Lines. We know that customers are buying BRI, which is basic rate interface ISDN Lines for computer occess. We think that, in fact, this drives the trunks as well. So, you know, based on the forecast or based on the demand, the forecast is sionificantly understated. That would also account for the under run on the other one. We've over run the forecast in basic rate interface, but yet we have under run the other; so we have provisioned based on the demand, the most recent demand.

Q So the forecast -- the demand line ends at a certain location, and obviously the demand has gone over what your forecast was, but your forecast is not -- you don't seem to have changed the forecast upwards, but the capacity level seems to be very high in comparison?

A Well, that's what -- well, very high compared to what?

Q To the forecast.
A Vell, but that's because this forecast we received from that forecasting organization, which we have
section, up at the top it's got "DS-1 Trunks."

A Yes.
Q Okay. When 1 talked with you at the deposition, you said that this very high or steep increase in demand was due to two anomalies; is that correct?

A It was due to switch replacements that we are installing new offices that are digital offices and we need to turn up trunks to both of those offices during a conver -- during the conversion time frame. We have trunks going from, in this case, Golden Glades to the old analog switch and to the new diaital switch. And so, yes, this is -- the steep rise is because we have those trunks turned up simultaneously, and then it comes back down. You see it comina back down in one case. In the other it will go back up and then come back down. So 1 think my point in the deposition was that in this case we wouldn't use that steep riser to project our future reauirements for DS-1 trunks in this office. We would use the lower points on that curve to determine when we needed future relief.

0 You don't really show a forecast on this one?
A I don't show a forecast here, no.
Q Okay. On the next sheet that at the top says -well, actually it says "Units Divisions Equals 40," but I don't see --

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not gotten an updated one, so that's why I say we are trending based on history so that we can make sure we have the capacity and not have to deny customers' reauests for service.

Q Okay. On the next Dage, which we have written in nice scrawled handwriting, primary rate interface, this forecast seems to be quite extreme here. Can you explain how that, where that comes from when the demand curve does not seem to be nearly that steep?

A The demand has not materialized here as the forecast indicated that it would, and 50 as a result, we have not provisioned the equipment. I guess the point to Learn from all of this is that we are trying to provision based on the current demand. We are not putting equipment in our offices. We are not filling up space just because we have a forecast that tells us to do so. We are using judgment. We are aoplying it on the most recent history so that we can use our capital efficiently as well as our floor space.

Q Isn't this an example of where your forecasts have been pretty way off?

A Yes, this is an example of where the forecast is off by about 20,1 mean if you call 20 units significant. I don't. But apparently it Looks Like it is because of the scale, but it's really not.
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    Q I don't have any further questions
    A Okay.
        MS. SUMMERLIN: Thank you.
        COMMISSIONER DEASON: Staff, how much do you have
    for this witness?
        MS. KEATING: Staff has no questions.
        COMMISSIONER DEASON: Commissioners
        COMMISSIONER CLARK: I'm sorry, but I did not
    understand. What did you do to come up -- did you say you
    knew that with respect to the 21 hundred square feet for
    projected growth that was in your petition -- l guess it is
    in '93 -- how did you say that was arrived at, or how you
    think it was arrived at?
        WITNESS CRUIT: I said I didn't know because I
    wasn't there. I m not aware of the process that was used
    to develop that.
        COMMISSIONER CLARK: I'm sorry, I thought | heard
    four years somewhere for something. No?
        WITNESS CRUIT: No, I don't think so.
        COMMISSIONER CLARK: That's fine. I may have
    mlsheard. But this, but the way you used to do it was you
    had information about the lines and you could make
    projections?
        WITNESS CRUIT: Right
        COMMISSIONER CLARK: When did you no longer use
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    know --
        COMMISSIONER CLARK: Describe to me how you do
    the trending.
    WITNESS CRUIT: Vell, I wish I had a -- Can we
    give them a chart that was in the deposition on like one of
    tandems so they can see that? Can we share that with them?
    Because then you would be able to see the past
    MS. WHITE: Ms. Summer lin, did you hendout the --
    MS. SUMMERLIN: We handed out some of your cherts
in that confidential exhibit
    WITNESS CRUIT: Oh, okay, let me find one. Well,
no, this is just my transcript, right?
    MS. SUMMERLIN: No, the charts that we were
talking about; is that what --
    WITNESS CRUIT: Oh. but those are just the Local
    offices. They really have very little influence on the
    space requirements in these offices. What really is
    driving the space requirements in these offices are the
    access tandems which we haven't talked about at all. l'll
    answer your question. A picture says a thousend words, but
    we are Looking at -- If you could see this picture that I
    have, you could see that the demand in the '94. '95, '96
    time frame was relatively stable, but then in late '96 and
    '97, it --
    COMMISSIONER CLARK: When you say it was stable,
that type of projection, at what point?
WITNESS CRUIT: In the last 18 to 24 months, and the real driver for that -- that's what you need to
understand -- the real driver for that is the change in the
environment. the explosive Internet, the CLEC, the wireless
interconnection. All of those things have changed the way
that we plan. If we were using those old planning
processes, we would not be meeting service requirements
today. So we have changed it in reaction to the
environment, and that happened 18 to 24 months ago when all
of those things started happening.
    COMMISSIONER CLARK: Okay. When did you start
doing trending?
            UITNESS CRUIT: In the past 12 to 18 months.
When we started -- really we started when we saw the
Internet access, which was in late -- two years ago -- '96.
Late ' 96 when all of the Internet service providers went to
a flat-rate pricine, that's what really caused the usage on
the network to increase dramatically. We saw that in early
'97, and we began using this other process as we saw the
demand increasing significantly. And as we sot more
history and we saw that it wasn't a one-time event, that it
was going to continue to occur, we decided that in Lioht of
the environment we needed to change our process. And
that's when we went to a trend rather than using, you

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was it flat or --
WITNESS CRUIT: It wasn't flat, but it was
growing slightly.
COMMISSIONER CLARK: Okay.
WITNESS CRUIT: Like probably 4 or 5%.
COMMISSIONER CLARK: Each year it grew by about
the same amount?
WITNESS CRUIT: Right
COMMISSIONER CLARK: Okay
WITNESS CRUIT: And then in '97 you can see the
steep of the curve, which is the demand, increases
significantly. So we are tak ing -- because we want to
anticlpate that increased demand due to the changing
environment, we take the Last 12 to 10 months, whatever
Looks appropriate in the particular situation, and we are
projecting that another 12 to 18 months, and we are
provisioning equipment based on the most current history.
COMMISSIONER CLARK: You just assumed the curve
is going to be, have the same --
COMMISSIONER JACOBS: SLODe.
COMMISSIONER CLARK: -- sloDe? Thank you.
WITNESS CRUIT: Yes, we are, until we see
something different. So far that's what it looks like, but
until we see the conditions change again, that's what we
are doing

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12-month. 12- to 18-month window. We are providing the
expenslve plug-ins on six-month intervals. We are outting
in the hardware for about a 12-month, 12- to 18-month
period, providing the plug-ins on a six-month interval. If
we see the demand take a downward trend, that job, rather
than being a 12- or 18-month hardwire job, may be a
24-month job, which is still well within our planning
guidelines for economically provisioning offices.
COMMISSIONER CLARK: is it your testimony that
what is driving -- and tell me what is -- I just was
trying to Look for my prehearing order, but I don't see
it. What is your projected -- What have you reserved for
projected growth in the Garden central office?
WITNESS CRUIT: In West Palm Beach Gerdens?
COMMISSIONER CLARK: Right
WITNESS CRUIT: It is my understanding that the
testimony of the space reserved for the Gardens' tandem is
six to eight frames per year, and what we are actually
experiancing is more Like 10, 10 to 11 frames per year
based on this most current trend. In the Local office, I
believe the trend is based on six frames per year. For the
TOPS it's based on one or two frames a year
COMMISSIONER CLARK: Now let me just ask you, is
the local or the TOPS, are your projections for those, the

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feet for projected growth of the switches over a two-year perlod. Now I take it you are projecting 31 hundred for a two- to three-year perlod. UITNESS CRUIT: You said the first number was for how much growth, how meny years? COMMISSIONER CLARK: No, two years UITNESS CRUIT: For two years? 1 think probably what you're saying is correct, but I'm not sure. I'm not real familiar with all those square footage numbers. sorry. I can tell you that I know for a fact that the floor space and the equipment requirements in these offices has increased mainly due to the access tendem requirements.

COMMISSIONER CLARK: You can tell me that? WITNESS CRUIT: I can tell you that. COMMISSIONER CLARK: Okay. Thenk you. COMMISSIONER DEASON: Redirect. MS. UHITE: I have no redirect. COMMISSIONER DEASON: Exhibits. COMMISSIONER JACOBS: I'm sorry, I did have -COMMISSIONER DEASON: Oh, l'm sorry COMMISSIONER JACOBS: I had a question. Actually, Suzanne took care of part of it, but there was another one that I had.

When you -- first of all, do you adjust? it sounds like from your responses to Commissioner Clark once
space or the frames you need for that, very different then
what you were projecting in 19 --
UITNESS CRUIT: in the earlier period? COMMISSIONER CLARK: In 1993, yeah. WITNESS CRUIT: Not significantly because this new projection mainly apolies to the access tandems. It is slightly impacted, but our Line projections are what's really driving the frame requirements for the local switch: and in the top switch it's basically the modernization of that equipment to provide additional services for operator services

COMMISSIONER CLARK: Let me maybe ask Ms. White. How much are you projecting in reserve space for the West Palm Beach Gardens central office for growth? What have you -- What is your number there? I just don't remember. MS. UHITE: 1 believe it's 31 hundred. COMMISSIONER CLARK: Okay. And how many years growth do you think the 31 hundred -- 1 mean, Ms. Cruit, do you know how many years growth that is supposed to cover?

WITNESS CRUIT: Two to three is my understending, and 1 need to look over at my -- our experts over there that will be testifying on space requirements. COMMISSIONER CLARK: Let me ask you this: In 1993 your petition says you were reserving 21 hundred squere

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you have that curve in place you don't really go back and adjust it until you have some subsequent events to indicate that the demand is changing.

WITNESS CRUIT: Well, for trunks. That's what we are talking about primarily, on the trunks. As we relook at provisioning every six months, we look at that trend. As we are aoproaching exhaust of that equipment, we relook at the trend and we determine whether that is still appropriate, whether it -- how much we should provision on that relief job. So about every six months we are looking at our trunking projection so that we can provision accordingly.

COMMISSIONER JACOBS: Now is it appropriate to ask you about the actual physical equipment in the office? What l'm think ing of --

WITNESS CRUIT: You can ask and l'll try COMMISSIONER JACOBS: Okay. What I'm thinking of is how would that demand cor -- We've had testimony that because of upgrades in technology that you cen hendle higher capacities with equipment that takes up less physical space, and my question is not so much about the details of that, but do you consider that in your planning? WITNESS CRUIT: Yes, we do consider that, but that is not always a fact, what you just stated, that new equipment has a smaller footprint or higher density. We do
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BY MS. WHITE (Continuino):
Q Mr. Rubin, would you please state your name and
address for the record?
A (Witness Rubin\ lt's Jerome Rubin, and my work
address is 18560 Northwest 27th Avenue, Opa Locka, Florida.
0 And by whom are you employed and in what
capacity?
A (Witness Rubin) BellSouth Telecommunications.
Capacity, as a common systems cadacity manager.
Q Okay. And have you caused to be prefiled in this
case rebuttal testimony consisting of six pages and no
exhibits?
A (Witness Rubin) Yes.
Q And if I were to ask you -- Do you have any
changes to that testimony?
A (VItness Rubin) Yes, I do.
Q Okay. Could you give those changes?
A (Vitness Rubin) On Page 2, Line 24, the answer,
I would like to change that to read "Switch capacity
managers use wire center forecasts and demand and facility
cherts for determining switch center equlpment additions.
Circuit capacity managers use a mechanized planning tool,
facility equipment planning systems or FEPS to generate
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A (V)tness Rubin) Yes, I do.
Q Okay. Could you give those changes?
A (Vitness Rubin) On Page 2, Line 24, the answer, I would Like to change that to read "Switch capacity managers use wire center forecasts and demand and facility charts for determining switch center equipment additions. Circuit capacity managers use a mechanized planning tool, facility equipment planning systems or FEPS to generate planning work station reports that are used for determining circuit equipment additions."

And then on Page 3, Line 15, I want to add after 04T, "that it also includes a signal transfer point switch designated STP."

And then on Line 17 where it says there are 987
square feet reserved for future growth of the \(03 \mathrm{~T}, 04 \mathrm{~T}\), after that I want to add "and STP."

Q And Mr. Rubin, could you move a little closer to your microphone?

A (Witness Rubin) Sorry.
a Thank you.
A (Witness Rubin) And then on Page 5, Line 8, the first entry, change that to 707 square feet. And then on Line 21, the end of the sentence, change that to 1479 . And that is all the chenges.

Q Okay. If I were to ask you the questions that were asked in your prefiled rebuttal testimony today, with the changes that you've just made, would your answers be the same?

A (Witness Rubin) Yes, they would.
MS. WHITE: And I would Like to have Mr. Rubin's testimony, rebuttal testimony inserted into the record as though read.

COMMISSIONER DEASON: Without objection it shall be so inserted.

BY MS. WHITE (Continuing):
Q Okay. Mr. Ream, would you proceed with your presentation? And for your presentation, the commissioners and the parties should look at the floor plan labeled "West Palm Gardens Central Office Floor Plan."

A (Witness Ream) Good evening. My name is Guy Ream, and I'm a common systems capacity manager for 12 offices in West Palm Beach and Broward County, one of which Is West Palm Beach Gardens Central Office. In the capacity of the common systems capacity manager, my duties are to plan equipment additions and removals, to gather forecasts from the switch planners, our circuit planners, power planners and Loop planners; and along with that is then to maintain a space study plan which is the blueprint that you have in front of you.

Along with that, I manage removals by identifying the equipment to the circuit or switch capacity manager via the central office personnel on equipment that should be removed from the central office and identifying equipment for that, which allows for, you know, space for new equipment to be added and also to modernize. In some instances where we have obsolete equipment, I will identify it and get it pulled out of the office. With respect to that, in our Gardens central office, there are no unused bays in that particular office. We are in good shape that

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particular space is not availeble for collocation.
In this office, when you look at this print, and this is something that I maintain, is the green squares and blocks within the office is actual equipment that is there today, presently there. The red indicates areas that we intend to orow new equipment in the future, so our offices are blocked out in such a manner so they can have orderly growth. And, if you will -- 1 know it's kind of difficult even for us to understand sometimes. If you can think of a central office as a parking lot, we have areas in this parking lot or in our central office that are fire lanes. just like any other place, that you can't park equipment in because you have to get emergency vehicles through, or in this case, get personnel through or equlpment. We have areas within this central office that are -- take frames or base that are smaller then others, and that would be for compact cer parking. if you will. And you know that if you have a compact car that is ten feat lono and somebody parks a Lincoln next to it that the aisles get blocked, and we run into the same problem in our central offices if we try to put a dissimilar size equipment within an area. Our aisles are very narrow, and our personnel get -- the majority of the equipment aisles are very narrow, and our personnel have to aet behind the equipment bays to check on wiring and things like that, and they have to get in front
way.
One of my other duties that 1 have is 1 identify potential problems in the central office. Because 1 have so many -- or I have 12 offices, that sometimes a problem will creep up in one office, and you can apply it to the other 19 offices before it becomes costly or service affecting; so that's one of the things that I do. I'm out in the field all the time talking to the various people; so as a common systems capac ity manager, that is one of my duties

I work with the different work groups that we have as a kind of Liaison between them. I work with the Dlanners, the central office personne \(L\), the ALECs and our installation vendors. Because they all speak different Lenguages and have different requirements, I'mkind of a general contractor and am able to help them aet their work done. And that's basically what a common systems capacity menager does.
\[
\text { I'm here today to explain to the Commission why } ?
\] believe there is not sufficient space available in the Gerdens central office for physical collocation. You have the handout, the space study olan, and we'll -- I want to go around to the different locations within the central office and explain the space that's there that doesn't have, presently have equiprent in it and why that

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of them to be able to place new plug-ins or do testing and thinas like that.

Our power area, I refer to as our bus and RV parking area. In the power room, or in this case the batteries, they are big, and they are extremely heavy: and you'll notice -- I skipped a point, and I apologize.

This also, this print also reads like a mad. There are letters across the top, \(A, B, C, D, E, F\) and \(L\)-through \(L\), and there are numbers down the right-hend side, one, two, three, four. So if I could direct you to, in this case, to look at F-3, and that will take you down about in the middle of the office, and there are some long green blocks that say LO. I honestly don't -- Well the LO is actually and upside down 01. But those are battery strings, and you'll notice that they are spaced out a little more than other equipment; and the reason for that is they are so heavy that if we bunch them together they' \(L L\) actually crack the floor, and 50 we have to space them out. Mr. Bloomer can talk to more to that if you have questions about that because he understands floor loading and, you know, concrete and how strong that is.

We also have what 1 would refer to as reserved parking. Just like out in front here, commissioners have reserved parking because it's the most efficient way for 35 you to get in and out to conduct business. And we have


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areas that when we had our walk through. The fact of the matter is that we could not erect the walls that they needed without blocking the air return for that office, and there's also an aisle that runs along that wall. So if we were to build a physical collocation space, there really is not enough room to create their two hundred square feet that they require.

To give you a little more perspective, and then hopefully I can move on faster, if you see a red square with a plus sign in it scattered through the office, and there is one right in that C-3 area -- there's actually two of them -- those are columns in the office, and they are on 20-foot centers, if you will. And that's typical of all our central offices because thay're built to withstand, you know, bombs. They are very strong. So every 20 feet through the building you'll have one of these red squares with a olus inside, and those are columns, and so they are 20 foot -- they are 20 foot on center. So if you were to make a box out of four of them. that would be four hundred square feet: so maybe that will help you realize or understand what type of space we are talking about within the central office.
(Transcript continues in sequence in Volume 3)

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offices to grow for the reason that we need to identify up
front if we are running out of a specific area, so that's
why that that's laid out that way.

Also, I would say that right to the bottom of that area called the TOPS switch growth, there is an air conditioner, AC pad it says, which is really at C-2. There conditioner. AC Dad it says, which is really at C-2. Ther
is a big air duct there for the cold air return for the central office. It's, you know, it's elght by eight. And so that's the cold air return for that area.

Now this is one of the areas that we have identified as future 5 witch and things like that and Supra has felt that we could collocate there or one of those
the correct operator services position. So this is the main host for that. In Gardens there is a remote that is remoted of \(f\) of this, and there are remotes in other places in the state. But this is the host for that.

The growth pattern for this, you'll notice is in red there to the left. I have blocked out in red the intended growth pattern. Now in testimony, we sald that this switch is slow growing and only grows one to two frames a year, and certainly 1 have more area blocked out here than -- you know, it would be several years before that gets used un. But this is a study plan. It's a document that changes weekly, monthly and everything like that. We try and lay out an orderly proaression for our offices to grow for the reason that we need to identify up front if we are running out of a specific area, so that's why that that's laid out that way.```


[^0]:    C \& N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

[^1]:    C \& N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

[^2]:    $\mathrm{C} \& \mathrm{~N}$ REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

[^3]:    C \& N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

