BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of	
Petitions by AT&T Communications of the Southern States, Inc., MCI Telecommunications Corporation and MCI Metro Access Transmission Services, Inc., for arbitration of certain terms and conditions of a proposed agreement with GTE Florida Incorporated concerning interconnection and resale under the Telecommunications Act of 1966.	DOCKET NO. 960847-TP DOCKET NO. 960890-TP

SECOND DAY - MID-MORNING SESSION

VOLUME 8

Pages 888 through 1012

PROCEEDINGS: **HEARING**

BEFORE: CHAIRMAN SUSAN F. CLARK
COMMISSIONER J. TERRY DEASON
COMMISSIONER JULIA L. JOHNSON
COMMISSIONER DIANE K. KIESLING
COMMISSIONER JOE GARCIA

DATE: **Tuesday, October 15, 1996**

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: ROWENA NASH HACKNEY
H. RUTHE POTAMI, CSR, RPR
Official Commission Reporters

APPEARANCES:
(As heretofore noted.)

WITNESSES - VOLUME 8

EXHIBITS - VOLUME 8

P R O C E E D I N G S

(Transcript follows in sequence from Volume 7.)

DON PRICE

having been called as a witness on behalf of MCI Telecommunications Corporation and MCI Metro and, having been duly sworn, continuese his testimony as follows:

CONTINUED CROSS EXAMINATION

BY MR. GILLMAN:

Q Mr. Price, let's go to account No. 6623. That's account that you assume 90%, correct.

A I believe that's correct, yes.

Q And I think -- I guess you were already asked about the carrier access expenses. Those expenses have not been removed, have they?

A No, because there's no accepted methodology for performing that kind of assignment of costs below the state separated numbers.

Q Do you know what percentage GTE Florida's revenues for access compares to retail?

A No, I don't. We are not talking about revenues though, we are talking about cost in my calculation.

Q Those carrier access expenses would not go

away, would they, once GTE starts its wholesale operations? Starts reselling services?

A No. But by virtue of my not having taken that into account, there is a benefit because, as I testified previously, the fact that we did not take that into account means that the discount that I'm proposing is lower than it would otherwise be.

Q You have not removed those expenses, have you?

A No, I have not. And, again, that would be nearest to GTE's benefit.

Q Have you also removed any costs related to service ordering?

A Well, there's no specific category. I mean, if you look at that line in DGP Exhibit 5, whatever that amount is, we've included 90% of that in our calculation. So there's no attempt to distinguish, if you will, the various types of costs that are in that account.

Q That was probably not a good question. Service ordering costs are included within that account; are they not?

A I believe that's correct, yes.

Q And GTE will still incur service ordering costs even on a wholesale basis, won't it?

A Yes. Although as we've proposed, we think those costs will be less than what they are today on an end user basis.

Q So those costs will remain even after GTE begins reselling, won't they?

A Some level of costs will remain, yes.

Q And those -- I mean, those aren't even accounted within the 90%, right? The 10% difference between 90 and 100, that's only for future expenses, right?

A I don't understand your question.

Q Well, I thought you testified that the reason the FCC presumed 90% was to take into account new costs created by wholesale activities.

A No. I'm sorry if that's what I said. Because what I meant to say and what I should have said is that there's really two types of costs that the FCC's Order would have reflected in that 90%. One would be new costs, the other would be continuing costs that are associated with wholesaling.

Q Does MCI, they presently have a national account manager with GTE, do they not, to handle its wholesale activities?

A I don't know specifically, but that certainly wouldn't surprise me.

Q And they have a separated department, so to speak, to just handle MCI; do they not?

A I'm sorry, I may not have understood your question. Are you referring to GTE's structure or MCI's structure?

Q GTE's structure, I'm sorry.

A I don't know if they have a whole separate department. I know that there are personnel that perform those types of functions.

Q Specifically for MCI?

A My recollection is that there are specific personnel assigned to all of the major carriers.

Q And you would expect that same sort of service when you purchase local services on a resale basis; would you not?

A I'm having a little trouble making the leap between the fact that there's a separate department and the, quote, same level of service that you just asked in your question.

Q Well, GTE provides and incurs costs to provide wholesale services to MCI presently; does it not?

A There are account management costs that GTE incurs today with respect to MCI as an interexchange carrier customer, yes.

Q And those costs were to be included in one of these accounts, would they not?

A That's my understanding.

Q And these costs will increase, will they not, to the extent that MCI purchases not only access but also resale local service?

A I don't know.

Q Okay. Doesn't a wholesaler -- mustn't a wholesaler continue to do a product development of its services?

A Yes, I think so. I think the situation that we are looking at here is a little bit different than looking at GTE as just a wholesaler though.

Q Isn't that what the FCC's presumption was, that everything should be looked at as if GTE was only a wholesaler with no retail operations?

A I'm not sure that that's the case with respect with to the calculation of the wholesale discount. I mean, what I've testified in is that it is appropriate to capture, in the calculation of the discount, all of GTE's costs associated with retailing. But that in itself is only one part or one step in the process, because the next step is the application of that amount. And that application is only done to the services that are sold at wholesale.

So to the extent that GTE continues to incur product development costs for its retail operations, it will recover those costs the same way it always has from its retail operation.

Q But doesn't GTE also incur product development costs for wholesale services?

A If you are asking me, do I think GTE would develop products solely in order to provide them to MCI as its retail competitor. No, I don't believe that at all.

Q Well, what you believe -- if such a product was developed, a new wholesale product, there would be a product development cost in doing so, wouldn't there?

A Yes, if a new product for wholesale were developed, there would be product development costs.

The problem that I'm having with your line of questioning is that I envision that GTE will be looking at product development as its -- in its role as a retail provider to end users. It will be much more focussed on that particular activity, especially if we are to move towards a competitive market, than it will be sitting around trying to think up new ways to provide services to its competitors on a wholesale basis.

Q Well, let's take that assumption. So GTE comes up with a new service that it provides to its retail customers. So in providing that service, would it be fair to say that there would be a fair amount of costs that would be incurred in developing or inventing that product?

A I could agree that there could likely be some costs. Whether it would be a, quote, fair amount of costs, whether it would be marginally different from what has been incurred in the past, I don't know.

Q There would be costs incurred; would there not?

A Yes.

Q And there would be costs incurred in training the staff to support that new service and changing the tariffs and doing whatever else it needs to develop that service. Would you agree with that?

A Yes. Again, I don't know how that would differ. I have no basis to know that that would differ significantly from what's been incurred in the past.

Q And if MCI purchased that service for resale, it would not be required -- or there would be no need to duplicate all of those product development expenses, would there?

A In a purely resale environment, I guess the answer would be no.

Q And by the same token, those product development costs would not be avoided in that situation, would it?

A I'm not sure that I can make that connection between this question and the prior question.

Q So you don't understand the question?

A I thought your previous question was would there be a need for the wholesaler to incur costs. And I said in a purely resale environment, I guess not. And then your next question was whether or not those costs would be avoided. And I thought we were talking about MCI's costs or the costs of one of your retail competitors.

Q Those costs for product development would not be avoided, would they? GTE would have to incur those product development costs to provide it on a retail or wholesale basis?

A Well, have to? No. It would not have to at all. It could incur whatever costs it chose to incur in its role as a retail provider.

Q All right, I apologize. Assuming -- and you've agreed with me that those costs would be incurred as for product development. Assuming that

costs are incurred to develop a new product, those costs would not be avoided whether sold to a retail or to a wholesaler or wholesale purchaser?

A I can agree with that, again with the caveat that I don't know anything about the ongoing level and how that compares to historic levels of cost that would be booked to that account.

Q MCI recommends that carrier specific branding be opposed; is that correct?

A Could you repeat the question?

Q Isn't MCI requesting GTE to provide MCI specific branding?

A Yes.

Q And there would be an expense to providing such branding?

A Yes.

Q And this would be an added expense created by wholesale?

A Some expense, yes.

Q What account would that go into?

A There are a couple of different aspects to branding as MCI has proposed it in this proceeding. One of which would involve branding of operator services and directory assistance calls. So I would assume that the costs associated with that aspect of

our proposal would probably wind up in account 6621 for call completion services with respect to branding associated with such things as contacts with the repair center or customer contact where a service, a truck, GTE rolls a truck to one of the MCI customers premises. Those types of account weren't taken into account at all in our calculation.

Q Okay. Now, you are proposing -- or are you, or is that AT&T -- to avoid 100% of GTE's operator and directory assistance costs?

A Well, I'd say it this way. We took into account 100% of the cost associated with call completion and number services in the calculation of our discount. That is slightly different than the, quote, retailing costs that I've otherwise taken into account. The point being here that there will be a separate revenue stream to GTE associated with that if it's provided to MCI. And if MCI takes its own operator services or directory assistance, then it would not be appropriate for us to pay you for those costs when we are incurring the same costs ourselves to provide similar services.

Q And there are separate rates for operator services and directory assistance; are there not?

A Are you asking me about GTE's tariffs?

Q Yes, I'm sorry. I'm asking about GTE.

A In some instances yes, and other instances no. I mean, I don't know that you charge, for example, when a local customer picks up and says "I'm having trouble dialing a local number, can you complete that for me." I just don't know if that's a separate charge for GTE in Florida.

Q There are charges for these two services; are there not?

A Well, I can agree that GTE is compensated for that somehow through its rate structure. I just don't know the extent to which there are separate charges expressly for those functions.

Q You don't know one way or the other?

A Right.

Q Is it MCI's position that GTE should be required to resell promotional -- or discount promotional rates even if the promotion is less than three months?

A The 90-day period is probably an appropriate cut off for whether or not GTE is required to provide promotional services on a resale basis.

Q Is it MCI's position that GTE must offer all contract services at the same discount?

A Yes.

Q Would this apply also to competitive bidding sort of situations where, say, for example, GTE provides a competitive bid and MCI would be able to provide a bid for the same service, just at a 17% discount?

A I'm having a little difficulty because I can't really envision a scenario where services would be provided via contract, unless there were some mechanism whereby GTE faced some competition for that service.

So I guess what I'm saying is I can't envision a contract in an other-than-competitive scenario, unless the Commission just simply decides that they don't like tariffs anymore, and you can provide all your services via contract.

Q Well, what scenario are you -- when I ask you about whether GTE should have to discount its contract services, whether that was your position, what sort of contract services do you have in mind?

A Whatever offerings you provide via contract, as opposed to via tariff, those, in my view, are telecommunication services. With the exception of telecommunication services that are provided to carrier customers, my understanding of the Act is that GTE has the responsibility to make such services

available.

Q And might not there be a situation in the future that GTE, MCI and AT&T will be going head to head trying to get a customer for services provided under contract?

A Might there be? Yes, I suppose there might be.

Q And it's your position, is it not, that GTE would make its bid and do -- incur whatever costs are necessary in coming up with that service. And MCI would be able to buy it from GTE, sell it to the customer at a 17% discount?

A I hadn't really thought of that scenario.

Q It's true, isn't it?

A It's possible, I guess. The fact of the matter is that because GTE will presumably have recovered its retail costs associated with that contract, then the costs of retailing are in there. And as those costs are backed out appropriately, but by virtue of the fact that they would no longer be incurred --

Q Mr. Price, how did the retail cost recover, we didn't get the contract?

A I'm sorry, I misunderstood your hypothetical.

Q I guess I maybe didn't -- I'm assuming that MCI is going to get the contract if they are able to offer it at a 17% discount. GTE still provides the service. All MCI is, is a middleman, and they get a 17% discount. Isn't that a likely scenario?

A I don't know how likely it is. As I said, I'd never even thought of it until this morning.

Q You also contend, do you not, that GTE should be required to resell even below cost services; is that correct?

A Yes. As I stated earlier, my understanding of the obligation that GTE has under the Act is, unless it is a service that's provided to a carrier it's obliged to provide that service at a price that's reflects its cost associated with retailing. And the exclusion -- I'm sorry, the exclusion of those costs.

Q In your opinion, would facilities-based local competition be developed if ALECs can obtain below cost services at even a further discount at resale?

A Well, yes. As I've stated in my summary, I think the future of facilities-based competition hinges a great deal on the extent to which retail -- I'm sorry, resale is made available. And the fact is that to the extent that the costs of retailing are

reflected in the avoided cost discount, then GTE is no better and no worse off selling an above cost service or a below cost service or any other service than it would otherwise be because it will not incur the cost of retailing in that scenario.

So it will have the same margin on any given account, any given customer, whether it provides it as a retailer or as a wholesaler. And you would be indifferent.

Q Wouldn't you agree with me that there's very little incentive for a competitor to build its own facilities when it can buy it from GTE at not only a below cost rate but a discounted below cost rate?

A Well, I think you've made a lot of assumptions in that question. First of all, I'm not convinced, based on the evidence that I've seen, that GTE offers any particular services, quote, below cost today. So, I mean, if I were to assume that that were the case, then I think the next question that's raised by your question is whether or not there would be, quote, very little incentive to build facilities. No, I can't agree with that. I think carriers will have incentives to build facilities by virtue of the fact that they will serve their customers and have control of their customers over those facilities.

If there happens to be one particular customer or account along a route that GTE serves, quote, below cost, as you put it, that probably will have very little, if any, impact on the planning of your competitors that are already putting facilities in the ground to provide services over those facilities.

Q Is there a distinction in your mind between a pathway and poles, ducts, conduits and right of ways?

A Yes.

Q Would you agree with me that the word "pathway" is more expansive than poles, ducts, conduits and right of way?

A You may be surprised, but, yes, I would agree with you.

Q And the word "pathway" is not used in the Telecommunications Act, is it?

A I would have to go back and look at the language in Section 224. I just don't recall.

Q Okay. Now, on Page 45 of your direct testimony on this subject, Lines 17 to 19, you state that the ILEC should be required to reserve poles, conduits and right of ways for MCI's use for 90 days after MCI makes the request?

A Yes.

Q And then MCI would have an additional six months to put its facilities on there?

A Yes, that's true. If I could clarify, I think in many instances that six-month period will be a span that GTE would need in order to perform the make-ready functions: tying up other lines on poles so that those wouldn't be involved, possibly damaged as a result of the new attachment or making ready conduit or inner duct space.

So it's really a protection for GTE because GTE will likely have other projects in the pipeline that would prevent it from getting to MCI's project immediately. So this is to give GTE an opportunity to manage the various projects that it is engaging in so it won't have to turn away from its own projects and turn to MCI's requests immediately.

Q Is it your understanding that if another ALEC came in during that nine-month period, that GTE would not be permitted to provide that ALEC space if no additional space existed?

A Essentially, a maximum of nine months. And if I might clarify the process. We are talking at the end of 90 days we are envisioning a process whereby we would actually have some kind of a license agreement

or some contract, if you will, with GTE for the use of specific facilities and a specific route. There would likely already have been some money changing hands to compensate GTE for at least a portion of the make-ready work that it envisions necessary as a result of this request. So as I say, there's already a contract in place at the end of 90 days, and the six-month period is simply to give GTE an opportunity to do what's necessary to accomplish that make-ready work.

If you've looked carefully at the MCI contract, you'll see that if that's not done within the six-month span, if we've not begun our work, then the entire route would revert back, if you will, to the pool of available assets for all carriers to utilize.

Q Mr. Price, let's go to your rebuttal testimony on Page 9.

A All right, sir.

Q And specifically, your response to the question that appears on Page 4. And the question is: What is your response to Mr. Bailey's claim at Page 9 of his testimony that defies logic to allow only the electric utilities to deny access on grounds of capacity, safety, reliability and generally applicable

engineering practices. And you gave an answer there.

My question is: Is it MCI's position that GTE should not be permitted to deny access to its poles, conduits or right of ways on the grounds of capacity, safety, reliability and generally applicable engineering practices?

A Yes. I thought that was the purpose of this part of my rebuttal.

Q So GTE should not be concerned about the safe and reliable provision of utility service in your view?

A Well, actually, sir, I think all of us in this industry should be concerned with those things. I don't think that gives you a preferential right to avoid your responsibility under the Act to make those kinds of assets available to all telecommunications carriers and any other carrier that may have a right under the Act to use them.

Q Even if it creates safety concerns?

A Well, I suspect that you are aware of the fact that MCI has a pretty good reputation worldwide for providing telecommunications services. I cannot think, as I sit here right now, the reason why MCI's engineers would come to GTE with a request that would create safety or reliability concerns either for us or

our customers or GTE or its customers.

Q I mean, maybe they wouldn't be aware of it until GTE told them.

A Well, those kinds of things can be resolved, I think, between the engineers. What I'm objecting to is a blanket award of a right to GTE to unilaterally make that kind of determination on its own behalf and prevent us from having access to some of those facilities.

Q On Page 5 of your rebuttal testimony, Lines 8 to 13, where you are state in the future all local service providers should utilize a 1-800 number to reach their respective repair centers and, you say, in the Bell Atlantic service territories.

Are you aware that GTE is already utilizing a 1-800 number for repair calls?

A No, I'm not, but if I could just clarify. The point of this part of my testimony wasn't to say that they should, but that that is one way of getting around the dialing parody concern.

Q So it's not an issue with MCI and GTE any longer, is it?

A If you are telling me that you are not using 611, I would accept that subject to check and agree that that would certainly go a long ways toward

resolving that concern.

Q On Page 6 of your testimony regarding the Bell Atlantic agreement, recent agreement, have you read that agreement?

A Yes, I have.

Q And wasn't that agreement to test an AIN solution to this problem?

A I don't recall the exact wordings. I thought there was a bit stronger commitment than that. I know that there's the similar commitment by Southwestern Bell with AT&T in Texas.

Q Where they are trying to test this as a solution; is that correct?

A Yes. And if I might just real quickly, any new AIN capability that would be deployed would need some testing. So it's not unique to this particular scenario that we would be talking about a new AIN application. Any such application would need to be tested before it was fully deployed.

Q Sure, and standards developed. Would you agree?

A No, I don't agree with that because AIN is being provided today pursuant to standard. So the creation of a new AIN application would not necessarily require new standards.

Q Well, is AIN presently being used to provide selective routing as you refer to in this question?

A Well, not to my knowledge. But again, that doesn't mean that new standards must be developed for that particular application.

Q Now, you find fault, as I understand, with the fact that GTE's avoided cost study determines prices on a nationwide basis; is that correct?

A Among other things, yes.

Q Does MCI have a nationwide retail operation?

A Well, MCI and its affiliates provide services throughout the western hemisphere.

Q And it's done on a centralized basis; is it not?

A Some functions are performed more centrally than others, yes.

Q I mean, it's not unusual for a company to realize economy of scales and having, say, a nationwide retail operation, as opposed to a different retail operation in each specific state?

A Well, I guess I'm not real sure what you mean by retail operation. I mean, MCI has some things that are performed more centrally than others. And I would assume that that's the same -- the same is true for most providers that operate on a regional or a

nationwide basis.

Q And you would agree with me that the reason companies provide it on a region wide or nationwide basis is to experience some economies of scales to reduce their overall costs?

A That could be one reason among many, yes.

Q You've not looked at GTE's avoided cost studies; is that correct?

A Yes, I have.

Q You've looked at it since your testimony?

A Yes.

MR. GILLMAN: I have no further questions. Thank you.

CHAIRMAN CLARK: Staff.

CROSS EXAMINATION

BY MS. BARONE:

Q Good morning, Mr. Price.

A Good morning.

Q Do you have a copy of Staff's Exhibits DGP-6 and 5? And DGP-6 and DGP-7, I'm sorry.

A Yes, I do.

Q DGP-6 is your deposition transcript. Do you have any corrections or changes to make to that exhibit? It also includes your Late-Filed Deposition Exhibits 1 and 2.

A There should be an errata sheet to that deposition, but I don't see it attached.

Q Would you have a copy with you, sir?

A I do not. I would need to confer with counsel to see whether we have one here in the room.

CHAIRMAN CLARK: Ms. Barone, we will just note that the deposition transcript, the Exhibit DGP-6, will include the errata sheet.

MS. BARONE: Thank you, Madam Chairman. That Staff requests that DGP-6 be marked for identification at this time.

CHAIRMAN CLARK: It will be marked as Exhibit 24.

(Exhibit 24 marked for identification.)

MS. BARONE: Thank you.

Q **(By Ms. Barone)** So, also, do you have DGP-7 which is MCI's response to GTE's first set of interrogatories 1 through 48?

A Yes, I do.

Q Were they prepared by you under your supervision?

A At the risk of giving you the answer that you may not expect, no.

MS. BARONE: Mr. Melson, can you stipulate this into the record?

MR. MELSON: MCI no has problem with the stipulation.

MS. BARONE: Madam Chairman, Staff requests that DGP-7 be marked for identification at this time.

CHAIRMAN CLARK: We'll identify it as Exhibit 25.

(Exhibit 25 marked for identification.)

MS. BARONE: Thank you.

Q **(By Ms. Barone)** Mr. Price, on Page 30 at Line 14 of your direct testimony, you state that Section 251(b)(3) of the 1996 Act requires LECs to permit nondiscriminatory access to telephone numbers. Would you please explain what MCI wants this Commission to decide regarding access to telephone numbers in this proceeding, and what issues remain outstanding?

A There are no outstanding issues on that. That was simply a discussion of -- actually, the point there didn't have to do so much with the -- I think I'm going to start over from the very beginning. I'm sorry.

With respect to the provision of telephone numbers, the issue is not one of assignment of numbers, but one of MCI's ability to obtain listing information. MCI's requested in this proceeding that

GTE make available all of the directory listing information. And our preference would be that that be done in either an electronic exchange or via magnetic tape so that MCI could utilize that information in providing its own directory assistance services.

Q Has GTE agreed to provide both of those?

A Not to my knowledge.

Q So if GTE were to provide access to telephone numbers as it does today, then this wouldn't meet all of MCI's needs? Is that your testimony?

A That's correct. I believe I touched -- bear with me, I'm just looking at my rebuttal testimony real quickly.

I touched on this briefly at Pages 6 and 7 of my rebuttal testimony where I point out that what we are not looking for is what Mr. Wood described in his testimony as an interface where we would be able to launch a query that would then get to GTE's systems and extract the appropriate listing information from GTE's systems. I was really responding to that, which appeared to be the concern of Mr. Wood's testimony. And the point of my testimony here is what I said earlier, which is, our preferred method would be simply to obtain on a daily or regular feed from GTE the entire database such that we could load that

database onto our systems and use our own operators to launch queries to our own databases for that. We believe that's consistent with the Act.

And the point of my rebuttal testimony was that there's no -- there should be very little, if any, implementation costs associated with that because the data is probably already stored today in magnetic format in GTE's systems.

Q Can you explain why GTE states that they cannot provide that to MCI?

A No, I cannot.

Q Why is it that the way GTE provides access to telephone numbers won't meet MCI's needs today? Are you familiar with how they do that?

A I'm not sure I'm familiar with how they've proposed to do that in a carrier environment except to say that they would allow us to utilize their directory assistance in a sort of a resold manner. In other words, where we would simply buy their entire directory assistance platform from them and pay them a fee for each time that one of our customers requested directory assistance of the GTE operator.

What we are proposing is to take all of that in house to MCI, use our own operators and simply get from them the listing information, and then query our

systems for the same information when we get a call for directory assistance.

Q So you are not aware of whether GTE's proposal would enable MCI to get that information on a daily basis?

A My recollection is that they have opposed that.

Q They have?

A That's my recollection.

Q But you are not sure in what fashion they propose to do that?

A I didn't catch part of that.

Q But you are not sure in what fashion they propose to do that? I think earlier you stated that you wanted that on magnetic tape in another fashion. But are you familiar with what fashion GTE Florida would provide that on a daily basis?

A No, I'm sorry, I'm not. I'm not completely familiar with how they've proposed to do that.

Q Sir, if they have agreed to provide that to MCI on a daily basis and MCI has requested that on a daily basis, how is it that the way they've proposed will not meet MCI's needs to have that on a daily basis?

A I think it would, given the assumption in

your question that they've agreed to do that.

Q You stated that MCI wants it in a magnetic form, and what was the other form?

A Well, the information could be provided either on magnetic tape or through some kind of an electronic interchange.

Q Are there any other benefits to having that information in those two forms other than daily basis?

A Well, the benefit arises not so much from how it's obtained, except, obviously, you want it in a fashion that allows you to get it into your system in a readable format quickly. So that the benefits -- either one of those is really fine. It's just a matter of having access to the information in a way that allows it to be utilized quickly, as opposed to paper directories, for example.

Q Now, the number administrator has guidelines to follow in the assignments of telephone numbers; isn't that correct?

A The number administrator has guidelines for the assignment of NXX or central office codes, yes.

Q If GTE complies with these guidelines, what else would MCI propose GTE do to provide access to telephone numbers?

A Well, from a number assignment standpoint

where the industry is headed, the FCC's North American Numbering Counsel is now beginning its work to take over the responsibilities that have been performed by the Bell operating companies, and perhaps in some areas GTE, for the assignment of NPAs, for example, for the assignment of NXX codes. So we are hopefully, quickly moving to a scenario where that entire process of number assignment and administration will be competitively neutral. I don't know of any issues that remain for this Commission to decide in that regard.

Q Issue 29 in this proceeding discusses rates, terms and conditions for access to code assignments. What rate issue do you think needs to be resolved in this proceeding regarding access to code assignments?

A Well, as I read GTE's position at that issue, it says that no one should impose fees or charges. So to that extent, I don't know that there are any rate issues.

Q Sir, I would like to direct your attention to your rebuttal testimony for MCI on Page 2. You indicate that the act does not mandate GTE to provide nontelecommunication services, such as voice mail and inside wire services, on a wholesale basis. So are you saying that these services should not be resold?

A I'm sorry, I found the reference at Page 2, but there weren't any explicit references to particular services. That's why I was a little confused by your question.

Q Well, I'll retract that and state: What about nontelecommunication services? Do you believe those should be resold?

A I think they should be. I mean, if we were in a competitive marketplace, GTE would have every incentive to provide whatever services its wholesale -- I'm sorry, its retail competitive customers would want to offer. So I think that those services should be available for resale, although the question is whether or not a discount would apply for a nontelecommunications service. I'm not going to sit here today and argue that the Act requires that they make nontelecommunication services available at a discount.

Q Sir, can you give me an example of a nontelecommunication service that you believe needs to be resold?

A Probably the best example I could think of would be inside wire maintenance. That is a -- again, as a nonattorney, as I read the definition in the Act of Telecommunications Service, it has to do with the

transmission of information, the traditional common carrier type of definition.

Voice mail -- I'm sorry. Inside wire -- I think that was a Freudian slip -- inside wire does not involve the transmission -- inside wire maintenance does not involve the transmission of information, although there have been instances in other regions of the country where MCI has lost accounts because the end user did not want to lose the inside wire maintenance feature that they had with the incumbent.

Q Sir, I realize you are not an attorney, but would you agree, subject to check, that inside wire is a nonregulated service?

A I'm hesitating because I'm certainly not familiar with how that's treated here in Florida. So I would accept, subject to check, that that's the case here in Florida.

Q On Page 15 of your rebuttal in the MCI docket at Lines 13 through 17, you list three restrictions that would meet a public policy test. In your opinion, are there any other restrictions based on the Act that could apply to resold services?

A No. I think these represent the maximum restrictions that should be permitted. Because to go beyond this would then, as I've stated, would provide

GTE with an opportunity to avoid its otherwise applicable obligation to provide all of its telecommunication services for resale at a discount.

Q Sir, I have few question regarding Mr. Wellemeyer's rebuttal testimony. On Page 5, at Lines 9 through 25, and Page 6, lines through 8, he states that GTE will not offer for resale the following services: any promotional offerings, public pay telephone lines and semipublic pay telephone lines. Do you believe this is appropriate?

A Well, I've already discussed with Mr. Gillman the issue of promotions, and I think I've agreed that the 90-day period that was envisioned in the FCC Order is probably a reasonable point at which to make the distinction between whether or not the promotion should be made available for resale or not.

With respect to the other two examples, the two that I recall anyway, I don't -- it's not clear to me that those two examples represented telecommunication services that were provided to carriers. And so, I guess there's a bit of fuzziness in my mind as to the distinction between a service that's a telecommunications service that's offered to a carrier and a telecommunications service that's offered to some other entity that may not be an end

user.

And the pay phone lines is an example, I guess, of where some of that fuzziness would occur because I don't think most pay phone providers are necessarily carriers. Some may be. But to make that blanket restriction would appear to preclude the resale of pay phone lines, and I don't know that serves a particular public policy benefit at all.

Q So do you agree that pay telephones should not be resold?

A No, I think they should be. I mean, based on my understanding of what's required in the Act with the fuzziness that I've talked about.

Q Mr. Wellemeyer also states in his rebuttal on Page 6, at Lines 12 through 25, through Page 7, Lines 1 through 7, that GTE will offer for resale but not at wholesale rates, the following services: any services already priced at wholesale rates, operator services, and directory assistance services and nonrecurring charge services.

Do you believe this is appropriate? Would you like me to repeat the list?

A Just the list, please.

Q Any services already priced at wholesale rates, operator services, and directory assistance

services, and nonrecurring charge services. And the question again is that GTE states that it will offer for resale but not at wholesale rates, those services. Do you think that's appropriate? If so, why; and if not, why not?

A I'm going to start at the end because that one to me is the most clear one. I'm not sure what a nonrecurring charge service is. I mean, almost every service has nonrecurring charges. If what he is saying is that nonrecurring costs associated with providing a service in a wholesale environment should not be discounted, that really sort of gets into the whole issue of what the appropriate nonrecurring charge should be anyway.

If we are talking about the issue that Mr. Gillman and I discussed at some length, we believe that as we move into an environment where the kinds of operational interfaces and systems and processes that should exist come into play, then we believe that the nonrecurring charges to MCI should be less than what the end user charges -- nonrecurring charge are for end users today. Because you have got a situation where the end user calls the business office and interacts with a business office representative in order to set up the service. We will be taking on

that function. We will be compiling the service order, if you will, in our view of the world after these processes and systems are developed. And we'll be sending over or providing electronically to GTE all of the information that it needs in order to set up that account.

So I guess I agree with him in one sense, which is that the nonrecurring charges that exist today and their end user tariffs really don't have any bearing on the kinds of costs that MCI should pay in the new world tomorrow for the setting up of accounts, because we are talking about GTE performing different kinds of functions for at least a portion of those activities.

Looking at the other two examples that were in his testimony, the wholesale -- services that are priced at wholesale and operator services and DA. I'm back to my qualification under the Act, that if it's a service that's provided to end users -- I'm sorry. If it's a service that's provided to other than carriers, then it should be provided for resale and it should be provided at discount rates. I don't see how they get around the obligation under the statute just by saying that it's a service that's, quote, wholesale priced, unless it is provided to a carrier. In which case, I

would agree with the exclusion, if you will.

Q Sir, I'd also like you to give your opinion on Mr. Wellemeyer's statement on Page 8 of his rebuttal where he states that GTE is not willing to offer existing contract service arrangements for resale at wholesale rates, but will agree to offer new contract services for resale at wholesale rates.

And, again, the distinction is between existing contract service arrangements and new contract service arrangements.

A Oh, I'm sorry. You started with the question and, I'm sorry, I was writing down the issue.

I don't see the distinction. I mean, I'm not sure why new services that are provided under contract should be treated any differently than old services, unless GTE plans to change its pricing that it proposes in the marketplace in order to reflect the fact that it may have to provide the service on a resale basis.

It seems to me that if MCI can provide something of benefit to the customer that has an existing contract, it should be permitted that opportunity. And I just don't know why there's a distinction between yesterday and tomorrow.

Q Sir, in your opinion, are the USOA accounts

provided in the FCC's Order for determining the avoided cost, appropriate for determining the wholesale discount under the Act?

A Well, for the most part, I think we -- obviously, we took great care to try to follow as closely with the FCC's Rules and Order as we could in our recommendation here, although the recommendation that we had originally made to the FCC went far beyond -- or at least went beyond what the FCC ultimately came down on by including a number of other accounts that we believe we should not have to pay for in a wholesale environment.

And so, yes, we tried to track as closely with the FCC's Order as we could, but we also proposed to include other costs beyond those which the FCC utilized in its Order and Rules in arriving at an appropriate discount.

Q I understand that you tried to track the FCC's Order, but do you think that the accounts that the FCC's Order includes are appropriate?

A Yes.

Q And are they appropriate for determining the wholesale discount, is the specific question?

A Yes. Again, with the caveat that that's the best available public information that we had to

utilize, yes.

MS. BARONE: Thank you. That's all I have.

CHAIRMAN CLARK: Commissioners. Redirect.

MR. MELSON: Just a couple.

REDIRECT EXAMINATION

BY MR. MELSON:

Q Mr. Price, as a follow up to this very last set of questions, did I understand you to say that MCI's original proposal to the FCC would have counted as avoided amounts in additional accounts that are not reflected in the FCC's Order?

A Yes. Those are -- if you look at my Exhibit DGP-5 again, beginning at Line 24, there are eight different accounts that were included in our original proposal to the FCC that were excluded in this analysis in conformance with the FCC's Rules and Order.

Q If we did not have the FCC's Rules and Order but had only the Act, would the exclusion of costs in those additional accounts, in your opinion, be consistent with the Act?

A Yes.

Q I want to go back, follow up on one line of questions. Mr. Gillman asked you about a competitive bidding situation. In a competitive bidding

situation, would MCI normally have knowledge of its competitor's bid?

A Not until after the contract was let, no.

Q And if MCI was awarded the contract based on its bid, does GTE have any contract service to that customer to be resold?

A I certainly wouldn't think so.

MR. MELSON: That's all I've got.

CHAIRMAN CLARK: Exhibits.

MR. MELSON: MCI would move 21, 22, and 23.

CHAIRMAN CLARK: Without objection those exhibits are admitted in the record.

MS. BARONE: Staff moves 24 and 25.

CHAIRMAN CLARK: Without objection those exhibits are admitted in the record.

We'll go ahead and take a break until 20 after, and then we will begin with Mr. Powers. Okay thank you.

(Exhibits 21 through 25 received in evidence.)

CHAIRMAN CLARK: We'll reconvene the hearing. Mr. Parks, have you been sworn in?

WITNESS PARKS: Yes, I have.

CHAIRMAN CLARK: Okay.

PAUL POWERS

was called as a witness on behalf of MCI Telecommunications Corporation and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MS. MCMILLIN:

Q Mr. Powers, please state your name and business address.

A Paul Powers, 8521 Leesburg Pike, Vienna, Virginia, 22182.

Q By whom are you employed and in what capacity?

A MCI, local service network engineering and the local interconnect planning group.

Q Mr. Powers, are you adopting the direct testimony of Drew Caplan which was filed in this docket on August 26th, 1996 and consists of 48 pages?

A Yes, I am.

Q And on September 24th, 1996 did you cause to be filed a replacement for Pages 1 and 2 of Mr. Caplan's testimony which substitutes information about your background and experience for that of Mr. Caplan?

A Yes, I did.

Q With those substitute Pages 1 and 2, do you

have any changes or corrections to that testimony?

A Yes, I have one. Page 11 of my direct testimony, Line 9, the number "54" should read "554". That is all.

Q Have you prefiled rebuttal testimony in this docket dated September 30th, 1996 and consisting of 11 pages?

A Yes, I have.

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

A No, I don't.

Q With the substitute Pages 1 and 2 to the direct testimony and with the corrections you identified, if I were to ask you the same questions today, would your answers be the same?

A Yes, they would.

MS. MCMILLIN: At this time, Madam Chairman, I would ask that Mr. Powers' direct and rebuttal testimony be inserted in the record as though read.

CHAIRMAN CLARK: That testimony will be inserted in the record as though read.

DIRECT TESTIMONY OF PAUL R. POWERS

ON BEHALF OF

MCI TELECOMMUNICATIONS CORPORATION AND

MCImetro ACCESS TRANSMISSION SERVICES, INC

(MCI/GTEFL ARBITRATION DOCKET)

(SUBSTITUTE FOR AUGUST 26, 1996 TESTIMONY OF DREW CAPLAN)

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Paul R. Powers, and my business address is 8521 Leesburg Pike, Vienna, Virginia 22182.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by MCI Telecommunications Corporation as Senior Staff Specialist II with MCI's Local Services Network Engineering. In this position I am responsible for the design and implementation of local interconnection between MCI and local exchange companies. I have also provided technical support for interconnection negotiations with Ameritech, US West, Pacific Bell and GTE.

Q. PLEASE GIVE A BRIEF DESCRIPTION OF YOUR BACKGROUND AND WORK EXPERIENCE.

A. I have a Bachelor of Arts degree from the State University of New York

and a Master of Business Administration degree from the University of Maryland Graduate School of Management. I have attended numerous courses and seminars specific to the telecommunications industry, including technical vendor training in switching.

Before assuming my current position, I was a Technical Consultant II with MCI's Government Systems Marketing group. In that capacity I was the technical manager for government pay telephone contracts, including contracts in the Pacific Bell, Ameritech, Bell Atlantic, and GTE territories. Prior to that, I was a Staff Specialist for MCI's Network Capacity Planning. In that position I designed circuit configurations and physical plant locations for MCI's Operator Services network, forecasted traffic and hardware and software requirements for shared voice and data networks, and developed automated tracking systems to monitor progress of local exchange company compliance with 800 and 900 service testing and evaluation requirements.

Q. HAVE YOU PREVIOUSLY TESTIFIED?

A. No, but I did make a presentation on local interconnection and collocation issues to the Minnesota Public Utilities Commission in August, 1996.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address the following topics: (1) ***the MCI Local Network:*** an overview of the local network that MCI is installing; (2) ***the Interconnection of Networks:*** the steps necessary to

interconnect MCI's local network with the ILEC network so that all forms of traffic can be exchanged between the networks; (3) ***Access to Unbundled Network Elements:*** a description of unbundled network elements that MCI is requesting and how MCI proposes to gain access to these unbundled elements; and (4) ***Collocation:*** a description of collocation arrangements required under the Act and under the FCC's recent order. I will also discuss related issues such as ordering and provisioning that play a critical role in the success or failure of interconnection and use of unbundled elements.

Network unbundling will allow MCI and other competitive local exchange companies ('CLECs") to provide a wide variety of new products to a broad array of customers using portions of the ubiquitous ILEC network combined with differentiating network elements provided by the CLEC. Interconnection, effective network unbundling, and procedures to make collocation viable are essential in order for competition to become a reality in the local exchange market.

MCI'S LOCAL NETWORK

Q. PLEASE DESCRIBE THE LOCAL NETWORK MCI IS INSTALLING.

A. To understand MCI's need for interconnection, access to unbundled elements and collocation, it is necessary to understand MCI's local network and how MCI plans to use that network to provide local service. MCImetro is MCI's subsidiary in charge of constructing local networks and, from a technical perspective, interconnecting MCI's local network with the ILEC's network. To understand MCImetro's network, how it has

evolved, and how it will continue to evolve, it is necessary to understand the history of MCImetro. MCImetro began its corporate life as a special access provider, also known as a competitive access provider (CAP). Special access providers provide high capacity network facilities to mid and large business customers for the purpose of originating and terminating interexchange traffic directly to or from the interexchange carrier. As such, MCImetro's original network consisted of a limited set of fiber optic rings in several urban areas.

In January 1994, MCI made the decision to expand MCImetro to offer switched local services. Beginning with the fiber rings, MCI embarked on a capital construction program with two major goals. First, MCImetro had to expand its existing fiber ring facilities to reach more customer buildings and construct new rings in other urban areas. Second, MCImetro had to install local switches to provide switched services. (MCI's interexchange switches were not suitable for handling local traffic without significant modifications.) Over the last two and one half years, MCI has invested over $700 million in its local network. As a result, as of the date of my testimony, MCI's local networks, nationwide, consist of approximately 2,600 route miles of fiber rings and 13 switches.

While MCI's local network is growing, it is still small compared to the ubiquitous reach of the ILECs' networks. While MCImetro has been building local networks for just over 2 years, the ILECs have been building local networks for over one hundred years. While MCI's local network passes by several thousand buildings in mostly urban areas, the

ILECs' networks reach into practically every building and home in the country. While MCImetro has installed 13 local switches, the ILECs collectively own over 23,000 local switches. It is not an overstatement to say that the ILECs' networks are practically everywhere.

Q. WHAT IS MCI'S GOAL IN PROVIDING LOCAL SERVICE?

A. MCI's goal is to reach a broad array of customers, business and residential, to provide local services that are consistent across geographic areas and are differentiated from today's monopoly offerings. Thus, while total service resale is part of MCI's local efforts and will in some circumstances be MCI's vehicle for initial entry into the local market, resale alone will not allow MCI to differentiate its service or develop consistent services across geographic areas. In order to reach that goal, and enable true competition in the local services market, MCI and other competitive local exchange carriers (CLECs) must be able to create and offer their own services. The primary means of achieving this is through deployment of MCI's own local facilities. This has been the path that MCI has chosen to date. However, as mentioned earlier, MCI's significant investment in switching and network construction over the past two plus years has only allowed it to reach a maximum of several thousand buildings, mostly in urban areas. Network unbundling, discussed in more detail below, will allow MCI and other CLECs to provide a broad array of new products to a much larger group of customers using portions of the ubiquitous ILEC network combined with differentiating network elements provided by the CLEC. Without

effective ILEC network unbundling, real competition will not become a reality.

One further item is worth noting. MCI's local network has a substantially different architecture than that of the ILEC. ILEC networks, developed over many decades, employ an architecture characterized by a large number of switches within a hierarchical system, with relatively short subscriber loops. By contrast, MCI's local network employs state-of-the-art equipment and design principals based on the technology available today, particularly optical fiber rings, that does not require the deployment of as many switches. In general, there is a trade-off between the number of switches and the length of the local loop. The fewer the switches deployed in any given territory, the longer the loop length necessary to serve customers, and vice versa. In any given service territory, MCI will have deployed fewer switches than the ILEC. In general, at least for now, MCI's switches all serve areas at least equal in size if not greater than the serving area of the ILEC tandem. For example, in Baltimore, Bell Atlantic uses two access tandems to serve the Baltimore local calling area. MCI uses just one. Thus, MCI's one switch in Baltimore serves an area actually greater than the service area of either of BA's tandems. Similarly, in New York, NYNEX has six tandems access that serve the New York Metropolitan LATA; initially, MCI has deployed one switch to serve the same geography. This last point becomes critical later in my testimony as I discuss reciprocal compensation arrangements for transport and termination of traffic.

In sum, MCI's recent but very real experience in deploying local

services gives it a unique perspective on what it takes to make competition a reality. Our "hands on" experience allows us to be very clear on what will be required in the areas of implementing network interconnection and gaining access to unbundled ILEC network elements.

INTERCONNECTION OF NETWORKS

Q. WHAT IS INTERCONNECTION AND WHY IS IT IMPORTANT?

A. Building a local network means nothing unless that network can be seamlessly interconnected with the ILEC's network and with the networks of other telecommunications carriers. In the context of my testimony, interconnection means the linking of networks. The point at which MCI's local network physically connects to the ILEC's network is called the interconnection point (IP), or sometimes the point of interconnection (POI). This definition of "interconnection" is consistent with how the FCC defined that term at Paragraph 176 of the First Report and Order in CC Docket No. 96-98, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 (the "Order"). Connection of unbundled elements ("access to unbundled elements") to the MCI network is discussed later in my testimony.

The IP plays a critical role in overall interconnection. From a financial perspective, the IP represents the "financial demarcation" -- the point where MCI's network ends and the ILEC's "transport and termination" charges begin. From an engineering perspective, there are variety of things that must happen at the IP to make interconnection seamless and complete. In my testimony, I focus on the engineering

aspects, but obviously the financial ramifications have a significant impact on how we interconnect and exchange traffic with the ILEC. Therefore, there also is a later discussion about the financial implications of interconnection.

Q. WHAT IS REQUIRED TO PHYSICALLY LINK MCI's LOCAL NETWORK WITH THE NETWORKS OF INCUMBENT LOCAL EXCHANGE CARRIERS?

A. From MCI's viewpoint, physical linking of networks is not a daunting engineering task. Carriers have interconnected networks -- local network to local network and interexchange network to local network -- for years. Thus, physical linking is neither new nor overly complicated.

Physical linking of networks involves the following steps:

- The physical connection of MCI's facilities to the ILEC facilities at the interconnection point (IP).

- The establishment of trunking arrangements for the exchange of local traffic, for the exchange of intraLATA and interLATA toll traffic, for "operator-to-operator" calls, for directory assistance calls, for 911/E911 calls, and for "transit" traffic.

- The physical connection of MCI's signaling network and the ILEC's signaling network so that signaling information can be exchanged.

I discuss these steps in more detail below.

1. Interconnection Point (IP) for exchange of traffic

Q. WHAT ISSUES ARE INVOLVED IN THE ESTABLISHMENT OF AN INTERCONNECTION POINT (IP)?

A. From an engineering perspective, establishment of the IP includes determination of where the IP is located, the method of interconnection, and the types of facilities that will be used to carry traffic back and forth over the IP.

a. Location of the IP

Q. PLEASE DISCUSS THE LOCATION OF THE IP.

A. As the Act and the FCC Order states, the ILEC must provide interconnection "at any technically feasible point within the ILEC's network." (Final Rules, Section 51.305(a)(2)) Thus, MCI, as the new entrant, is permitted to select the IP from any point in the ILEC's network where it is technically feasible to physically interconnect networks and exchange traffic. (Order, at Paragraph 220, footnote 464) Specifically, MCI must have the ability to select the location or locations of any IP so long as it is within the LATA that contains the end offices for which traffic will be exchanged. Moreover, as the FCC Order notes, "technically feasible" under this definition "refers solely to technical or operational concerns, rather than economic, space, or site considerations." Thus, so long as the ILEC can -- from a technical perspective -- take the traffic from the IP and terminate it to any

particular end office, then that IP is technically feasible.

I raise this because of a special problem MCI has faced in New York with NYTEL. NYTEL has attempted to make MCI establish IPs at each of their access tandems in the LATA that covers the Metropolitan New York City area. There are six such access tandems in that LATA. Clearly, for a new entrant such as MCI, physically building out facilities to establish an IP at each of those access tandems would be a time consuming and expensive proposition, delaying the ability of MCI to offer service in that LATA and making it more expensive than necessary to offer that service.

The "technical feasibility" portion of the FCC Order precludes NYTEL from insisting on this build out, and here's why. MCI already has established an IP with NYTEL in Manhattan. Because of NYTEL's extensive transport network in the LATA, it is technically feasible for NYTEL to take traffic from that IP and transport it to any end office in the LATA, regardless of which access tandem that end office subtends. Therefore, that IP can -- and at MCI's discretion should -- serve as the IP for the entire LATA. I also note that Ameritech and MFS have agreed to a single IP per LATA.

Naturally, however, any decision on where an IP is located or whether to use more than one IP will have an impact on the transport portion of any transport and termination compensation paid to the ILEC. If MCI chooses to have only one IP in the LATA, for example, the transport charges that MCI must pay as part of "transport and termination" for local calls will reflect the increased distance that calls

must travel from the IP to the particular end office where they terminate. This will be discussed in more detail later in my testimony where I address the financial implications of network interconnection.

At section 51.305(a)(2) of its Rules, the FCC identifies the minimum set of places where the ILECs must provide interconnection, but explicitly states in that section that interconnection must be provided at "at any technically feasible point within the incumbent LEC's network." Thus, the FCC explicitly did not limit potential IPs to these locations (Order at paragraphs 209, 549, 550, 551, 552, 553, and 554). It is technically feasible to establish an IP at most points on the ILEC network where ILEC facilities meet each other or meet other facilities (either the ILEC's or some other entity's facilities).

In engineering terms, facilities are always connected with each other at what are called "cross-connect points." Cross-connect points, as the name implies, are places in any network where one facility can be connected to another, either manually or electronically. With a manual cross connect, two facilities are physically connected by means of a third piece called a "jumper." Simply put: Wire A comes in to a point on the cross to connect apparatus, and Wire B comes in on another point. Then a jumper is used connect Wire A to Wire B. A main distribution frame (MDF) or any similar "patch panel" is an example of a manual cross-connect device. With an electronic cross-connect, there is no jumper wire, rather, the "jumper connection" is performed electronically. A DCS (digital cross connect system) is an example of an electronic cross connect.

IP's do not have to be limited to residing at an ILEC tandem or end office switch. The FCC's Order specifies some potential interconnection points; each one of those is a "cross-connect point," as I have defined that term, in either a tandem switch or an end office switch. There are other cross-connect points in the ILEC network, however. For example, MCI's switches are generally located in commercial office buildings. For any particular MCI switch, the ILEC will also have network facilities into that building that end at what is called a "telco closet." A telco closet in this sense includes -- or can technically support -- a cross-connect device. Thus, an ILEC telco closet in a commercial building can also serve as an IP. In fact, MCI interconnects with Ameritech at such telco closets now in Detroit. Thus, this type of IP is certainly technically feasible.

b. Methods of Interconnection

Q. PLEASE DISCUSS THE VARIOUS METHODS OF INTERCONNECTION.

A. The FCC permits any method of interconnection that is technically feasible. (Order at paragraph 549) In its Order, the FCC discusses three specific methods of interconnection: physical collocation, virtual collocation, or meet point. (Order at paragraph 553) Collocation, either virtual or physical, is well known from a technical perspective and is discussed later in my testimony.

Meet point arrangements are also well known. Under a typical "meet point" arrangement, MCI and the ILEC would each "build out" to a meet point. Under this type of arrangement the official "IP" -- as I have

been using that term -- is the point where the ILEC build out connects to the rest of the ILEC network. The "limited build out" to the meet point is the financial responsibility of each party and is part of what the FCC calls the "reasonable accommodation of interconnection." (Order at paragraph 553)

A variation of this is what I refer to as "mid-span meet." Under this arrangement, MCI and the ILEC would jointly provision the fiber optic facilities that connect the two networks and share the financial and other responsibilities (as detailed below) for that facility. In this situation, the facilities do not actually join at a "cross-connect point" but are spliced together. This is essentially the method of interconnection that MFS and Ameritech agreed to. Thus, it is certainly technically feasible.

c. Types of facilities at the IP

Q. WHAT TYPES OF FACILITIES CAN BE USED AT THE IP?

A. Having determined the location of the IP, it is necessary, from an engineering perspective to determine the types of facilities that will be used to interconnect. The types of facilities that are used to link the networks, regardless of the types of traffic carried, are well known both to MCI and to the ILECs. Network interconnection may occur at light (fiber) level, or at DS3, DS1, or voice-grade levels.

2. Trunking and Interconnection of Signaling Networks

Q. WHAT ARRANGEMENTS SHOULD BE PROVIDED FOR THE TRUNKING OF TRAFFIC?

A. Once networks are physically connected via the facilities and arrangements as described above, then it is necessary from an engineering perspective to partition those facilities into various types of trunk groups required to carry the different types of traffic that are necessary for complete interconnection. Based on our experience, MCI believes that traffic should be segregated as follows:

- a separate trunk group that carries local traffic, non-equal access intraLATA interexchange traffic, and local transit traffic to other LECs.
- a separate trunk group for equal access interLATA or intraLATA interexchange traffic that transits the ILEC network.
- *separate trunks connecting* MCI's switch to each 911/E911 tandem.
- a separate trunk group connecting MCI's switch to the ILEC's operator service center. This permits MCI's operators to talk to the ILEC's operators. Operator-to-operator connection is critical to ensure that operator assisted emergency calls are handled correctly and to ensure that one carrier's customer can receive busy line verification or busy line interrupt if the other end user is a customer of a different LEC.
- a separate trunk group connecting MCI's switch to the ILEC's directory assistance center where MCI is purchasing the ILEC's unbundled directory assistance service.

With regard to the first requested trunk group, the Commission should note that there is no technical requirement to segregate local and

intraLATA interexchange traffic on separate trunk groups. Indeed, it is often more efficient to "pack" a trunk with both local traffic and interexchange traffic. Because these types of traffic are "rated" differently, however, the receiving carrier would either have to discern between types itself or have to rely on reporting by the sending carrier, via a "percent local usage" (PLU) or similar reporting mechanism. The trunk segregation detailed above is an initial architecture that meets MCI's immediate needs for interconnection. As MCI's network evolves, and as we seek to provide new services, there may be a requirement for a further or different combination of traffic types. For example, it may be efficient for MCI to aggregate local and interexchange traffic on a single trunk. It is incumbent upon the ILEC to prove that a request for a revised traffic combination is technically infeasible.

Q. WHAT SIGNALLING SHOULD BE PROVIDED WITH RESPECT TO THESE TRUNK GROUPS?

A. The trunk groups that connect the networks will require specific signaling characteristics. The trunks that carry local and interexchange traffic are generally similar to the industry standard Feature Group D trunks with CCS7 signaling. MCI requires CCS7 signaling on all trunks used to pass local and interexchange traffic. The specific details about the interconnection of signaling networks is discussed later in my testimony where I address access to unbundled elements. MCI also requires that the trunks used to carry local and interexchange traffic are configured with B8ZS Extended Superframe (ESF). B8ZS ESF is required to support

the transmission of 64Kbps ("Clear Channel") traffic between the networks of ILECs and CLECs. Without Clear Channel transmission, subscribers of ILECs and CLECs would not be able to terminate various types of switched data traffic, including some ISDN applications.

Trunks can also be either one-way or two-way. Generally, two-way trunking is more efficient than one-way trunking for traffic that flows in both directions (for example, local and interexchange traffic), since, with two-way trunking, fewer trunks are needed to establish the interconnection than are needed when ILECs insist only on one-way trunking. The FCC has recognized the benefits of two-way trunking by ordering ILECs to make them available upon a CLEC's request (Order, Paragraph 219).

Q. YOU PREVIOUSLY MENTIONED THAT THE FINANCIAL IMPLICATIONS OF INTERCONNECTION MUST BE CONSIDERED. WHAT ARE THE FINANCIAL IMPLICATIONS WHICH ARISE IN CONNECTION WITH THE PHYSICAL LINKING OF NETWORKS?

A. Whenever networks are interconnected and traffic is exchanged, a major issue between the parties -- bluntly stated -- is "Who pays for what?" Fortunately, the FCC Order provided some very specific definitions that help determine financial responsibility. As noted above, the IP is the point where the MCI network physically connects with the ILEC network. Generally, therefore, each carrier is responsible for bringing or getting its facilities to the IP.

When an MCI customer makes a local call to an ILEC customer,

MCI will hand off that call to the ILEC at the IP. MCI then must pay the ILEC compensation for the "transport and termination" of that local call. (Final Rules, Section 51.701) The FCC has separately -- and specifically -- defined "transport" and "termination" in this context. (Order at Paragraph 1039) "Transport" is defined as "the transmission and any necessary tandem switching of local telecommunications traffic ... from the interconnection point between the two carriers to the terminating carrier's end office switch that directly serves the called party...." (Final Rules, Section 51.701(c)) "Termination" is defined as "the switching of local telecommunications traffic at the terminating carrier's end office switch...." (Final Rules, Section 51.701(d)) Thus, the IP determines the point at which MCI (when it is terminating local traffic to the ILEC) must begin paying transport and termination compensation to the ILEC.

Conversely, when an ILEC must hand over local traffic to MCI for MCI to "transport and terminate," the ILEC must use the established IP. For the ILEC to be allowed to do anything else would eviscerate the FCC's requirement that the ILEC permit the use of two-way trunking. Thus, the IP also serves as the point at which the ILEC must begin payment of "transport and termination" to MCI when it terminates a local call on MCI's local network.

It is important to note that in Section 51.711 of the Final Rules the FCC has determined that "rates for transport and termination of local telecommunications traffic shall be symmetrical." In addition, the FCC has decided that "where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the

incumbent LEC's tandem switch, the appropriate rate for the carrier other than the incumbent LEC is the incumbent LEC's tandem interconnection rate." I noted previously that MCI's switch clearly serves a geographic area comparable to the area served by the ILEC's tandem. Therefore, MCI believes it is appropriate for it to charge the ILEC the tandem interconnection rate (defined as tandem switching plus the average transport between an ILEC tandem and the subtending end offices plus the local switching rate) for calls terminating to MCI's network. In addition, the ILEC and MCI will share the cost of the facilities used to interconnect the networks as defined by the location of the IP.

The FCC also determined, in section 51.709 of the Final Rules, that "the rate of a carrier providing transmission facilities dedicated to the transmission of traffic between two carriers networks shall recover only the costs of the proportion of that trunk capacity used by an interconnecting carrier to send traffic that will terminate on the providing carrier's network."

Q. COULD YOU GIVE AN EXAMPLE OF HOW THE SELECTION OF AN IP AFFECTS THE FINANCIAL ARRANGEMENTS?

A. Yes, given all this, it is possible to walk through two examples to describe how the selection of the IP affects the "transport and termination" charge that both MCI and the ILEC must face.

Example 1: MCI Collocates at the Wire Center Housing an Access Tandem to Which MCI Needs to Trunk.

In this example, MCI has established a collocation at the wire

center housing a tandem; the collocation will be designated as the IP. Two-way trunking will be established between the MCI switch and the ILEC tandem via the collocation facilities.

- The Transport and Termination Charges to MCI for calls terminating on the ILEC network are:
  (1) tandem switching and transport from the tandem to the end office where the call terminates (based on average transport from ILEC tandem to subtending end offices); plus
  (2) termination at the end office.

  The total rate paid by MCI in this case is also known as the Tandem Transport and Termination rate or Tandem Interconnection Rate.

- The Transport and Termination Charges to the ILEC for calls terminating on MCI's network are:
  (1) Transport from the IP to the MCI switching center (as discussed in Final Rules, Section 51.709), plus
  (2) The symmetrical Tandem Transport and Termination.

  In this example, the ILEC pays for the transport from the IP at its access tandem to the MCI switching center because MCI has provided the facilities from that switching center to the IP, and the ILEC is using those facilities to transport local traffic from the IP back to the MCI switching center. Once the call reaches the MCI switching center, however, MCI is permitted to charge the ILEC a transport and termination rate equal to the ILEC's tandem

interconnection rate since MCI's switch serves an area comparable (if not larger) than the area served by the ILEC's tandem switch. (Final Rules, Section 51.711(3))

As detailed above, the specific symmetrical tandem transport and termination rate should be calculated as follows:

- Tandem switching rate, plus
- Shared transport based on average mileage from the ILEC tandem to the various end offices that subtend that tandem.

Example 2: IP At an Agreed to Meetpoint

In this example, MCI will jointly provision interconnect facilities to an agreed to meetpoint at a technically feasible location on the ILEC's network. The IP is at this meetpoint. MCI and the ILEC will establish two-way trunking to both an access tandem and an end office via these interconnection facilities.

o The Transport and Termination charges to MCI for traffic terminating to the ILEC via the tandem switch are:

(1) transport from the IP to the access tandem; plus

(2) the Tandem Interconnection/Transport and Termination Rate, as described in Example 1.

o The Transport and Termination charges to ILEC for traffic terminating to MCI via the tandem switch are:

(1) transport from IP to the MCI switching center; plus

(2) the symmetrical ILEC Tandem Interconnection/Transport and

Termination Rate.

- The Transport and Termination charges to MCI for traffic terminating to the ILEC via direct end office trunking (bypassing the tandem switch) are:
  (1) transport from the IP to the ILEC end office switch, plus
  (2) the local termination rate.

- The Transport and Termination charges to the ILEC for traffic terminating to MCI via the direct end office trunking are:
  (1) transport from the IP to the MCI switching center, plus
  (2) the symmetrical ILEC Tandem Interconnection/Transport and Termination Rate.

There are, of course, other options and possibilities, but the concept will be the same. The IP will delineate not only the physical point where one network ends and another begins, but also will determine the transport and termination charges that each carrier must pay to one another.

ACCESS TO UNBUNDLED NETWORK ELEMENTS

Q. WHY IS IT IMPORTANT FOR MCI TO HAVE ACCESS TO THE UNBUNDLED ELEMENTS OF THE INCUMBENT LOCAL EXCHANGE COMPANIES' NETWORKS?

A. As noted previously, MCI desires to offer local service as broadly as possible to both residential and business customers. MCI's local network, however, currently consists of high capacity fiber rings in

downtown areas. While some residential apartment buildings may be accessible via MCI's fiber ring, this network, by itself, simply does not have the reach to serve a broad base of residential and business customers. Additionally, although MCI continues to implement local service switching centers throughout the nation, its capacity for providing switched services is extremely limited. Each of the 13 switches that MCI has implemented to date is capable of serving only 30,000 to 50,000 customers -- a drop in the bucket compared to the national base of over 100 million customers. To reach this larger base, MCI must have access to the unbundled elements of the ILEC's ubiquitous network.

Q. WHAT IS THE EFFECT OF THE FCC ORDER ON THE ISSUE OF WHICH UNBUNDLED ELEMENTS MUST BE MADE AVAILABLE BY THE ILECs?

A. The FCC's order mandates a set of seven unbundled elements that the ILEC must make available. The FCC ordered this first set of elements with the explicit recognition that further unbundling may be appropriate today, but it did not have the necessary information on the record to make such judgments, and therefore left that to the states to determine. It also indicated that further unbundling will be appropriate in the future. The FCC rules explicitly allows the states to order more unbundling on a case by case basis. MCI, in this arbitration, requests the Florida Commission to order unbundling beyond the minimum set in the FCC's order since there are additional elements that meet the FCC criteria. In addition, as networks evolve, it will be necessary on occasion to request additional unbundled elements. MCI is requesting an expedited bona fide

request process to accomplish that future unbundling. That process is described in the testimony of MCI witness Don Price. The FCC's minimum set of elements includes some network elements, as defined in the Act, such as operator services and directory assistance, that are discussed in Mr. Price's testimony.

Q. WHAT ARE THE UNBUNDLED NETWORK ELEMENTS REQUESTED BY MCI AND HOW DOES MCI PROPOSE TO GAIN ACCESS TO THEM?

A. The FCC rules require the ILECs to unbundle a set of elements, but do not specify a method of implementation to ensure the unbundled elements are usable to requesting carriers. This task must be performed by state commissions. Although access to these elements is necessary, it is not sufficient for CLECs to be viable providers: the terms and conditions at which they are available also effect our viability. In the following testimony, I will review each element to give this Commission some direction on how to best ensure proper implementation by the ILECs. I will also describe the additional elements that meet the FCC criteria and that the Florida Commission should include in the ILEC's initial unbundling requirements. For each element, I will provide a basic description of the element, why that element is necessary to be unbundled, and how MCI proposes to gain access to that element from an engineering perspective.

A. Connecting Unbundled Elements

Q. PLEASE DESCRIBE HOW UNBUNDLED NETWORK ELEMENTS ARE

CONNECTED.

A. Physical unbundled network elements (elements other than call processing databases) interconnect to other network elements or to CLEC collocations in a similar fashion. The elements terminate at some type of cross-connect devices (these devices can be Main Distribution Frames, or DS-1 or DS-3 cross-connect devices, for example). To connect the unbundled network element to either another element or to an MCI collocation (which also terminates at a cross-connect device), the ILEC must supply connecting cabling, which includes jumper wires to connect positions within a cross-connect device as well as house cabling running between the two cross-connect devices. Both the jumper cabling and house cabling are, very simply, just wires. There are no electronics or other intelligence associated with this cabling. Arranging this cabling may appear to be a minor issue in the larger scheme of unbundling of the network -- in fact, identical connection cabling and is routinely provisioned by the ILECs to connect its own network elements today. However, we have found, through first-hand experience, that the untimely, inaccurate and expensive provisioning of such cabling can be a significant bottleneck to network unbundling.

Each physical network element detailed below must also include the cabling required to make it operational, unless otherwise noted.

B. Elements the FCC Ordered to be Unbundled

1. Local Loop

Q. WHAT ARE LOCAL LOOPS AND HOW SHOULD THEY BE PROVISIONED?

A. The FCC defines the local loop as "a transmission facility between a distribution frame [cross-connect], or its equivalent, in an incumbent LEC central office, and the network interface device at the customer premises. This includes, but is not necessarily limited to, two- wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS1-level signals. " (Order at paragraph 380)

As the definition implies, unbundled loops end at the distribution frame of the ILEC. As discussed earlier, appropriate cabling will be required to connect the unbundled loop's frame appearance to other cross-connect points to access other network elements or MCI's or a third party's collocation. This cabling must be efficient and available in a timely fashion. Otherwise, it will not be financially feasible for MCI to utilize unbundled loops and MCI's ability to reach residential and small business customers will be extremely curtailed.

MCI anticipates provisioning unbundled loops in a variety of ways, each of which is clearly supported by the FCC rules. These methods include, but are not limited to:

- connecting the unbundled loop to an MCI collocation where MCI has placed digital loop carrier equipment (DLC) or other subscriber loop electronics of its choice. The DLC or DLC-type equipment will then be connected to interoffice transport facilities, either owned by MCI or leased from the ILEC or third party, that connect the collocated space to MCI's network
- combining the unbundled loop to other unbundled network

elements, such as ILEC provided transport or switching

- connecting the unbundled loop to a third party collocation for provision of transport or other services

Several things are critical to make these arrangements work. First, there must not be unreasonable delays in establishing collocation, and the costs for collocation must be economically sound. In New York, for example, establishing collocations can sometimes take up to nine months and cost over $50,000 to just build the "collocation cage." This kind of delay and expense is intolerable. Second, MCI must have the ability to place the electronics of its choice in the collocated space. Some ILECs, such as Pacific Bell, have denied MCI's request to have this choice and thus in essence hold "veto power" over MCI's network design. Not only will this restriction prevent MCI and other CLECs from efficiently capturing the unbundled loop, it will delay the deployment state of the art network and limit our ability to differentiate our services from the ILEC. All of these issues are later in my testimony in the collocation discussion.

Q. WHAT ARRANGEMENTS SHOULD BE MADE FOR TRANSFERRING SERVICE TO MCI FROM AN ILEC?

A. Another issue is important when it comes to gaining access to unbundled loops -- coordinated (or "hot") cutovers. When MCI gains an existing ILEC customer and needs that unbundled local loop to serve that customer, then that local loop will need to be "cut over" from the ILEC to MCI. Mechanically, this is not a complex task; it only involves the movement of jumper wires on the MDF. Most importantly, however, the

cutover cannot result in significant "downtime" for the customer's telephone line. Not only could that customer's safety be jeopardized, but such a degradation of service would be a significant disadvantage in switching service to MCI.

MCI proposes the following procedure for coordinated cutovers:

(1) On a per order basis, the ILEC and Metro will agree on a scheduled conversion time, which will be a designated two-hour time period within a designated date.

(2) The ILEC will coordinate activities of all ILEC work groups involved with the conversion. This coordination will include, but not be limited to, work centers charged with manual cross-connects, electronic cross-connect mapping, and switch translations (including, but not limited to, implementation of interim local number portability translations).

(3) The ILEC will notify MCI when conversion is complete.

(4) End user service interruptions will be minimized and should not exceed five minutes.

2. Network Interface Device

Q. PLEASE DESCRIBE THE UNBUNDLED ELEMENT KNOWN AS THE NETWORK INTERFACE DEVICE.

A. The Network Interface Device (NID) is "the cross-connect device used to connect LEC loop facilities to inside wiring not belonging to the LEC." The FCC Order, at paragraphs 392 and 393, describes the need for access to the NID. In summary, it is necessary on many occasions when serving large residential or office buildings in order to gain access to the

inside wiring that is not owned by the ILEC.

According to the FCC Order, MCI should be able to gain access to the ILEC NID by connecting its own NID to the ILEC NID. This form of NID-to-NID connection is technically feasible and does not raise reliability concerns. It will be incumbent upon the ILEC to demonstrate that such connection is not feasible, and, if not, to detail the specific building locations at which such connection is not feasible. We expect that generally cabling to connect the NIDs will be provided by the ILECs.

If connection to the NID involves a cutover of live customer traffic at that premise, then the cutover procedures described above must be followed.

3. Switching Capability

Q. WHAT SWITCHING CAPABILITY SHOULD BE UNBUNDLED?

A. Switching capability unbundling is defined in the FCC Rules by two distinct switch functions: local switching and tandem switching.

a. Local Switching

Q. WHAT IS LOCAL SWITCHING AND HOW SHOULD IT BE PROVISIONED?

A. In Section 51.319(c)(1)(i) of the FCC Rules, the local switching capability network element is defined as:

> (A) line-side facilities, which include but are not limited to, the connection between a loop termination at a main distribution frame and a switch line card;
>
> (B) trunk-side facilities, which include but are not limited to,

the connection between trunk termination at a trunk-side cross-connect panel and a switch trunk card; and

(C) all features, functions, and capabilities of the switch, which include, but are not limited to:

(1) the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to the incumbent LEC's customers, such as a telephone number, white page listing, and dial tone; and

(2) all other features that the switch is capable of providing, including but not limited to custom calling, custom local area signaling service features, and Centrex, as well as any technically feasible customized routing functions provided by the switch.

In this context, features, functions, and capabilities includes: i) all basic switching functions, ii) telephone numbers, iii) directory listing, iv) dial tone, v) signaling, and vi) access to directory assistance, vii) access to operator services, viii) access to 911, ix) all vertical features the switch is capable of providing; and x) any customized call routing features.

Access to local switching is at the ILEC end office. There are two points of access: the main distribution frame (or equivalent) and the trunk-side cross-connect. ILEC switching may be connected to MCI-provided loops, MCI-provided transport facilities, ILEC-provided loops, ILEC-provided transport facilities, or loops or transport facilities provided

by a third party. MCI will require the ILEC to connect these elements as described above in "Connecting Unbundled Elements."

Q. WHO SHOULD DETERMINE HOW CALLS PLACED BY MCI CUSTOMERS ARE ROUTED?

A. MCI will be responsible for establishing how its customers calls will route, and for specifying in advance a trunking scheme to make such routing possible. Such trunking will be either supplied by MCI, or will be comprised of other unbundled network transport elements (dedicated or shared), or a combination of the two. The ILEC must make available to MCI any switch-supported trunk interface for the provision of network trunking, including SMDI interfaces for MCI-supplied voice mail services. Customer specific routing will be implemented via line class codes or equivalent switch-specific methods. Such routing will allow MCI to designate routing for that customer's service, for each of the following call types:

- 0+/0- calls
- 911 calls
- 411/DA calls
- InterLATA calls specific to PIC or regardless of PIC
- IntraLATA calls specific to PIC or regardless of PIC
- 800/888 calls, prior to database query
- Call forwarding of any type supported on the switch, to a line or a trunk
- Any other customized routing that may be supported by the

ILEC switch

On the line side, MCI must be able to purchase any line service available on the switch, including but not limited to POTS services, Centrex services, and ISDN BRI services, with all of their vertical features and signaling options. On the trunk side, MCI must be able to purchase any customer trunk service available on the switch, including but not limited to DID, DOD, 2-way, and ISDN PRI trunk services.

b. Tandem switching

Q. WHAT IS TANDEM SWITCHING AND HOW SHOULD IT BE PROVISIONED?

A. The tandem switching capability network element is defined by the FCC as:

(1) trunk connect facilities, including but not limited to the connection between trunk termination at a cross-connect panel and a switch trunk card;

(2) the basic switching function of connecting trunks to trunks; and

(3) the functions that are centralized in tandem switches (as distinguished from separate end-office switches), including but not limited to call recording, the routing of calls to operator services, and signaling conversion features.

This unbundled element is necessary to be able to perform a variety of functions including transit functions. The transit function is

critical for new entrants to efficiently interconnect with other CLECs, IXCs and small independent carriers that home off the ILEC tandem. Until traffic levels justify the direct connection of these carriers, the ILEC tandem is the only method to interconnect all carriers in a market. (See also the FCC Order at paragraph 425)

MCI should be able to gain access to this unbundled element at the tandem switch location. Access will always be at a trunk cross-connect device serving the tandem switch. This cross-connect point will be connected to other unbundled elements, third party networks or MCI's collocation as described in "Connecting Unbundled Elements."

4. Interoffice Transmission Facilities

Q. WHAT ARE INTEROFFICE TRANSMISSION FACILITIES AND HOW SHOULD THEY BE PROVISIONED?

A. The FCC defines interoffice transmission facilities "as incumbent LEC transmission facilities dedicated to a particular customer or carrier, or shared by more than one customer or carrier, that provide telecommunications between wire centers owned by incumbent LECs or requesting telecommunications carriers, or between switches owned by incumbent LECs or requesting telecommunication carriers." Interoffice transmission facilities are customarily defined as either shared facilities or dedicated facilities.

The shared interoffice transmission is the path between end offices and a tandem, or between end offices, that is shared by multiple carriers. This element is necessary to connect the tandem switching

function to the local switching function. (See FCC Order at paragraph 441) In addition, MCI will purchase the shared transport element between ILEC end offices in conjunction with the purchase of the unbundled local switching element.

MCI will gain access to the shared interoffice transport facilities at the trunk cross-connect at the end office and/or the trunk cross connect at the tandem switch. This cross-connect point will be connected to other unbundled elements, third party networks or MCI's collocation as described in "Connecting Unbundled Elements."

Dedicated transmission facilities are transport facilities used exclusively for the requesting carrier's traffic and connect one or more of the following points: ILEC end offices, ILEC tandems, ILEC serving wire centers, other carrier wire centers or switching centers, IXC points of presence, collocated equipment at any ILEC end or tandem office. Such facilities shall be all technically feasible transmission capabilities, including but not limited to: DS0, DS1, DS3, and all optical levels.

Q. SHOULD MCI BE PROVIDED ACCESS TO DARK FIBER AS AN UNBUNDLED ELEMENT?

A. Although the FCC did not specifically require that the ILECs make available unbundled optical fiber or "dark fiber," MCI contends that dedicated transport must also include dark fiber, which from an engineering perspective is simply another level in the transmission hierarchy. Because network construction for the initial placement of fiber facilities is timely and costly since it involves permits, road work,

conduit placement, etc., telecommunications carriers typically install large quantities of fiber cables. Therefore, we believe that many of the ILECs have the dark fiber available where they have upgraded their facilities from copper plant and should be required to provide plant records to detail where excess capacity exists.

Dark fiber is necessary for MCI to expand its network reach with the flexibility of installing electronics that comport to its network architecture. This flexibility is essential for MCI to strategically deploy efficient new technologies into its network. Without this network element, MCI's only choices are to undertake the timely and expensive construction effort to place its own fiber in the ground or to purchase the use of "lit" (fiber with electronics) transport services from the ILEC. It does not make sense to require MCI to purchase the use of ILEC electronics where spare fiber capacity is available; in fact, using the ILEC's existing electronic technology forces MCI to be held captive to the ILEC's network technology and design rather than being allowed to deploy new, more efficient technologies that are consistent across geographic locations.

MCI and other carriers should be able to request availability of dark fiber on a particular route. The ILEC should respond to that request within 10 days on availability on that route or comparative alternative route and specify all available splice points and specifications of the fiber optic plant. If the fiber is available, MCI will meet the ILEC at its specified splice points (usually in a manhole) with its own fibers. MCI will then deploy its own electronics at its network sites.

Q. WHAT ARE DIGITAL CROSS-CONNECT SYSTEMS, AND HOW SHOULD THEY BE PROVIDED?

A. The FCC Order, at paragraph 444, requires that ILECs provide requesting carriers access to digital cross connect system functionality. They describe the DCS as a device that "aggregates and disaggregates" high-speed traffic. In general, the DCS provides for transmission level changes within a transport route, or where two transport routes meet. Aside from providing electronic software controlled multiplexing of facilities at different transmission levels, DCS also provides automated cross connection of transmission facilities at like levels, for the purposes of "grooming" facilities to optimize network efficiency. Types of DCSs include but are not limited to DCS 1/0s, DCS 3/1s, and DCS 3/3s, where the nomenclature 1/0 denotes interfaces typically at the DS1 rate or greater with cross-connection typically at the DS0 rate. This same nomenclature, at the appropriate rate substitution, extends to the other types of DCSs specifically cited as 3/1 and 3/3. Types of DCSs that cross-connect Synchronous Transport Signal level 1 (STS-1s) or other Synchronous Optical Network (SONET) signals (for example, STS-3) are also DCSs, although not denoted by this same type of nomenclature. DCS may provide the functionality of more than one of the aforementioned DCS types (for example, DCS 3/3/1 which combines functionality of DCS 3/3 and DCS 3/1).

Devices that provide similar aggregation and disaggregation functions via manual cross-connections are generally referred to as "multiplexors." Because of their functional similarity to the DCS, we

interpret the FCC's DCS directive to include multiplexors such as M13s and channel banks.

ILECs routinely provide both DCS (including multiplexor) functions today to interexchange carriers in conjunction with dedicated transport services. MCI agrees that DCS supports transport services, but also requests that the ILEC be required to provide this function in combination with dedicated transport or separately so MCI can combine DCS with its own transport or that supplied by other parties.

MCI will gain access to the digital cross-connection system at the appropriate (optical, DS3, DS1, voice grade level) cross-connection device serving the DCS. This cross-connect point will be connected to other unbundled elements, third party networks or MCI's collocation as described in "Connecting Unbundled Elements."

5. Signaling Networks, Call-Related Databases, and Service Management Systems

a. Signaling Systems

Q. WHAT ARE UNBUNDLED SIGNALING SYSTEMS AND HOW SHOULD SIGNALLING NETWORKS BE INTERCONNECTED?

A. As explained in the FCC Order, signaling systems "facilitate the routing of telephone calls between switches SS7 networks use signaling links to transmit routing messages between switch, and between switches and call-related databases." (at paragraphs, 455, 456) The Order goes on to state that "incumbent LECs are required to accept and provide signaling in accordance with the exchange of traffic between interconnecting

networks." It concludes that "the exchange of signaling information may occur through an STP to STP interconnection." (at paragraph, 478)

The FCC also identifies a need for the ILECs to offer unbundled access to their STP and signaling link elements. (Order at Paragraph 479) MCI concurs that such access is required on non-discriminatory terms and conditions. However, it is clear from the ensuing discussion in paragraphs 479 - 483 that access to unbundled signaling links and STP ports is intended to allow new entrants to obtain signaling services from the ILEC. This eliminates the CLEC's burden of installing their own signaling networks. This requirement is clearly distinct from the requirement to connect signaling networks for support of traffic exchange as described in the previous paragraph of this paper.

Interconnection of the signaling networks facilitates routing of telephone calls flowing from the ILEC to the CLEC and from the CLEC to the ILEC. It also is required for the provision of certain CLASS services such as caller ID, automated callback, and automated recall, as well as the transmission of 64 kbps ("clear channel") calls flowing in both directions. Thus, the connecting carriers must share the burden of signaling network interconnection in support of traffic exchange.

MCI proposes that this be accomplished as follows:

- In each LATA, there will be two signaling points of interconnection (SPOIs). The requirement for two SPOIs is driven by the critical importance attached by all parties to signaling link diversity.
- Each party will designate one of the two SPOIs in the

LATA. A SPOI can be any existing cross-connect point in the LATA. Since each party will designate a SPOI, we believe that both parties will be incented to select reasonable and efficient SPOI locations.

- Each signaling link requires a port on each party's STP. We propose that each party provide the necessary ports on its STPs without explicit charge.

The SS7 interconnection shall provide connectivity to all components and capabilities of the ILEC SS7 network. These include:

- ISDN Services User Part (ISUP) signaling for calls between MCI and ILEC switches
- ISUP signaling for calls between MCI and other networks that transit through the ILEC switched network.
- Translations Capability Applications Part (TCAP) messaging in support of querying SCP-housed databases, and TCAP messaging in support of CLASS services

b. Call Related Databases

Q. WHAT ARE CALL RELATED DATABASES AND WHY ARE THEY IMPORTANT?

A. As defined by the FCC, call related databases are databases, other than operations support systems, that are used in signaling networks for billing and collection or the transmission, routing, or other provision of a telecommunications service. An incumbent LEC shall provide access to its call-related databases, including, but not limited to, the Line

Information database, Toll Free Calling database, downstream number portability databases, and Advanced Intelligent Network databases, by means of physical access at the signaling transfer point linked to the unbundled database.

Access to Call-Related databases provides for the centralized intelligence that governs the disposition of calls. Additionally, service control points (SCPs) serve as the means by which subscriber and service application data is provided, and maintained. The databases provide, in response to an SS7 inquiry, the information necessary to provide a service or deliver a capability.

For MCI to be able to gain access to call-related databases, the following requirements must be met:

- The ILEC must provide MCI billing and recording information to track database usage.

Specific to LIDB:

- The ILEC must enable MCI to store in the ILEC's LIDB any customer line number or special billing number record, whether ported or not, for which the NPA-NXX is supported by that LIDB.

- The ILEC must perform the following LIDB functions for MCI's customer records:
  - billing number screening
  - calling card validation
  - data screening function

Specific to LNP Database:

- The ILEC LNP SCP must return to the MCI switch:
  - appropriate routing for ported numbers
  - industry specified indication for non-ported numbers, and
  - industry specified indication for non-ported NPA-NXX

Specific to AIN Applications:

- The ILEC must provide MCI with descriptive and detailed technical information regarding each of the ILEC's AIN applications housed in its AIN SCPs.

- The ILEC must routinely provide MCI with information regarding database and application capacity available on each of its AIN SCPs.

- The ILEC must allow MCI to gain access to another party's applications housed in the ILEC AIN SCPs, assuming that MCI has gained written notification from that third party permitting MCI to make use of its applications.

c. Service Management Systems

Q. WHAT ARE SERVICE MANAGEMENT SYSTEMS AND HOW SHOULD THEY BE PROVISIONED?

A. The FCC defines Service Management Systems as computer databases or systems not part of the public switched network that, among other

things, interconnect to the service control point and send to that service control point the information and call processing instructions needed for a network switch to process and complete a call, and provide a telecommunication carrier with the capability of entering and storing data regarding the processing and completing of a call.

The FCC ordered that the ILEC make its SMS and AIN Service Creation Environment available to CLECs for creation and downloading of AIN applications, on a non-discriminatory basis. (Paragraph 493) It is MCI's belief that, in order for this requirement to be met:

- The ILEC must make SCE hardware, software, testing, and technical support resources available to MCI in a similar fashion to how they make such resources available to themselves.
- The ILEC must partition its SCP so as to protect MCI's service logic and data from unauthorized access or execution.
- The ILEC must provide training and documentation to MCI at parity with that provided to itself.
- The ILEC must provide MCI secure LAN/WAN and dial-up remote access to its SCE/SMS.
- The ILEC must allow MCI to create applications and download data without ILEC intervention.

The Operations Support Systems Functions and Operator Services Directory Assistance are addressed in the testimony of Don Price.

C. Additional Unbundled Elements

Q. WHAT ADDITIONAL UNBUNDLED ELEMENTS SHOULD THE

COMMISSION ORDER GTEFL TO PROVIDE?

A. MCI requests the Florida Commission to immediately order at least one additional unbundled element beyond the FCC minimum set: Loop Distribution. This element, described below, meets the guidelines detailed in the FCC rules that give the state authority to order additional elements. MCI plans to pursue further unbundled network elements in the future that include, but are not limited to: additional AIN (advanced intelligent network) unbundling, data switching, and further unbundling of the local loop.

1. AIN

Q. WHY IS NONDISCRIMINATORY ACCESS TO AIN CAPABILITY IMPORTANT?

A. The elimination of all discriminatory access to AIN capability will become increasingly important as more and more innovative new services depend on that capability. MCI expects to be introducing such services within a year, and to be able to move forward with our plans we must have appropriate access to the capability. In particular, in order to provide new services that are consistent across geographic locations and make the most creative use of MCI's existing intelligent network platforms, we believe that it is extremely important the state commissions order the ILECs to interconnect their signaling systems to MCI applications/databases housed in MCI AIN SCPs. The FCC noted that the record on the technical feasibility of such interconnection was not clear, and encouraged state commissions to consider this issue. (Order at

paragraph 502) MCI believes that such interconnection is technically feasible, and plans to present detailed testimony on this issue, and to propose appropriate industry trials, in several states that have been at the forefront of Local Number Portability implementation. We then plan to use the results of those proceedings to extend the interconnection practice to other states via the BFR process. The BFR process is discussed fully in the testimony of Mr. Price.

2. Loop Distribution

a. Definition

Q. PLEASE DEFINE THE LOOP DISTRIBUTION THAT MCI WANTS THE COMMISSION TO REQUIRE GTEFL TO UNBUNDLE AT THIS TIME.

A. Loop Distribution is the portion of the loop from the network interface device at the customer premise to the feeder distribution interface. Per Bellcore specifications, there are three basic types of feeder-distribution connection: i) multiple (splicing of multiple distribution pairs onto one feeder pair); ii) dedicated ("home run"); and iii) interfaced ("cross-connected"). While older plant uses multiple and dedicated approaches, newer plant and all plant that uses DLC or other pair-gain technology necessarily uses the interfaced approach. The feeder-distribution interface (FDI) in the interfaced design makes use of a manual cross-connection, typically housed inside an outside plant device ("green box") or in a vault or manhole.

b. The need for unbundled loop distribution plant

Q. WHY DOES MCI NEED UNBUNDLED LOOP DISTRIBUTION PLANT?

A. Loop distribution is necessary to give MCI flexibility in deploying loop facilities by permitting MCI to use its own loop feeder plant where available. (See FCC Order at paragraph 390) Lack of loop distribution will impair MCI's ability to provide local service because it will increase MCI's costs unnecessarily in those instances where it does not require the ILEC's loop feeder plant, but nonetheless requires the ILEC's distribution plant. As MCI and other CLECs expand their facilities-based, efficient SONET networks, they may be located very near an FDI and only require the loop distribution to reach multiple customer premises. However, without this sub-loop element available for purchase, CLECs will be forced to purchase the whole loop, even though they have their own facilities that could be used for a portion of the loop. MCI does not want to have to purchase functional elements in the ILEC's networks that it can efficiently provide itself using new technologies. Thus, an appropriate level of granularity is required for the unbundled local loop so CLECs can make a rational lease vs. build decision in smaller increments. Without this sub-loop element, competitive carriers will be forced to build full loops to multiple customer premises on a speculative basis (which is timely and costly) rather than economically and efficiently replace portions of the leased network with constructed facilities. Replacing the feeder portion of the loop is the most efficient method for CLECs to evolve to a facilities based carriers.

c. Access to loop distribution

Q. HOW SHOULD ACCESS TO UNBUNDLED LOOP DISTRIBUTION BE PROVIDED?

A. Access to loop distribution is technically feasible in general for feeder distribution connections in the interface design. The ILEC can make available connecting block capacity within its Interfaced FDI for connection of MCI's copper feeder facilities. This can either be capacity within its terminal block or an additional terminal block. MCI will require an interval of 30 days to make a FDI ready for provisioning. These make-ready activities include:

- Review of available capacity and other engineering issues and confirmation of committed make-ready date (5 days after order).
- Interval of 5 days from request for make ready to delivery of a make-ready firm order commitment (FOC).
- Physical preparation of the FDI, including making available feeder block capacity through block expansion, addition of an additional block, or removal of unneeded ILEC feeder facilities, and preparation of the FDI for entrance of MCI's feeder cable.
- Delivery of feeder block designation and assignments to MCI.
- Testing the installation of MCI's feeder cables through the feeder block via cooperatively developed loopback tests.

MCI's responsibilities will include delivery of copper feeder cable to the ILEC designated manhole or other interface point serving the FDI, with enough spare cable to extend from the interface point to the FDI. MCI may elect to include spare copper pairs in the cable for repair and growth.

Once in place, MCI will order distribution elements to all addresses served by the FDI on a customer order basis. MCI will be responsible for selecting the feeder cable assignment within the order. The ILEC will be responsible for manually cross-connecting the appropriate distribution cable to MCI's selected feeder and cooperatively testing service between the customer demarcation point and MCI's selected feeder termination point. The standard interval for this activity should be two business days.

Feeder/Distribution unbundling in situations where the ILEC has deployed Multiple or Dedicated designs, as well as unbundled purchase of Loop Electronics and Loop Feeder, will be requested via a bona fide request process.

COLLOCATION

Q. WHAT ARE THE ARRANGEMENTS WHICH MUST BE IN PLACE FOR COLLOCATION TO BE VIABLE?

A. The terms and conditions for collocation for interconnection and access to unbundled network elements are different -- broader -- than those that were needed in the past for competitive access providers. As of today, the terms and conditions surrounding collocation serve as a barrier to enable competitive entry. The FCC has recognized this and has taken four corrective measures. We urge this Commission to ensure proper procedures are put in place to make collocation viable:

1. **Ability to collocate subscriber loop electronics, such as Digital Loop Carrier, in the Central Office.** The current collocation rules, terms

and conditions that only allow the placement of basic transmission equipment in the Central Office were not designed with access to unbundled elements in mind, and give the ILEC a de facto bottleneck veto on CLEC network design plans. (Order at paragraph 580)

2. **Ability to purchase unbundled dedicated transport to the collocation facility**, rather than physically construct from the CLECs network to the ILEC Central Office. (Order at paragraph 590)

3. **Ability to interconnect with other collocators in the same Central Office**. This ability is necessary to allow the expedient and economic interconnection of CLECs networks for the exchange of local traffic or for the use of one another's facilities via negotiated business arrangements. (Order at paragraph 594)

4. **Ability to collocate via physical or virtual facilities.** (Order at paragraph 565)

As mentioned earlier in my testimony, MCI has experienced unacceptably long intervals in establishing collocations. Because collocation is such a fundamental requirement for competitive entry, we request this Commission to mandate a maximum three month interval for physical and a two month interval for virtual collocations.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

REBUTTAL TESTIMONY OF PAUL R. POWERS

ON BEHALF OF MCI

DOCKET NO. 960980-TP

September 30, 1996

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Paul R. Powers and my business address is 8521 Leesburg Pike, Vienna Virginia.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes, I have previously adopted the direct testimony filed by Drew Caplan in this docket on August 26, 1996.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is respond to the testimony of Mr. Ries regarding GTE's proposed restrictions on collocation, to respond to Mr. Wood's testimony on various unbundling issues, and to respond to Mr. DellAngello's proposal for AIN unbundling.

Q. AT PAGES 7-8 AND 12-16 OF HIS TESTIMONY, MR. RIES STATES THAT ALECS SHOULD NOT BE PERMITTED TO PLACE ANY AND ALL KINDS OF EQUIPMENT IN COLLOCATED SPACE. WHAT IS MCI'S POSITION ON THE TYPE OF EQUIPMENT WHICH SHOULD BE PERMITTED IN COLLOCATED SPACE?

A. Throughout his testimony, Mr. Ries seems to focus merely on

equipment which might be needed for interconnection. For example, at page 17, he criticizes AT&T for asking for more than what might be required for interconnection. While interconnection is clearly a critical issue, access to unbundled loops is also important for a fair competitive environment. At a minimum, MCI should be permitted to place in collocated space any equipment that is needed to allow MCI to efficiently access unbundled elements. GTE argues that only equipment that is technically necessary to provide basic transmission service, such as circuit termination equipment, should be permitted. If this were the case, MCI would not be able to access unbundled elements in an efficient and effective manner.

One item in particular that it is critical for MCI to be able to place in collocated space is Digital Line Concentrator (DLC). The DLC allows MCI to concentrate loops and build its network in the most efficient manner possible. For example, with a DLC MCI would be able to transport to its switch from the GTE central office the equivalent of 672 unbundled loops over as few as 4 T-1s. Without such concentration capability, MCI network costs will be significantly increased. In addition, the DLC allows MCI to create a compatible interface to its switches to support unique MCI products and services.

GTE's position that only such equipment that is necessary to provide basic transmission service should be allowed would force MCI to build an inefficient network, thereby increasing costs to consumers. In

addition, MCI's ability to create innovative products and services would also be impaired.

Q. AT PAGES 14-15 OF HIS TESTIMONY MR. RIES STATES THAT IT WOULD BE HARMFUL IF ALECS WERE ABLE TO PLACE ANY EQUIPMENT THEY WANTED IN COLLOCATED SPACE BECAUSE ONE COMPETITOR MIGHT COME IN AND USE UP ALL THE SPACE. HAVE ANY OF THE ILECS WITH WHOM MCI IS SEEKING TO COLLOCATE ESTABLISHED POLICIES WHICH RESPOND TO THIS CONCERN? IF SO, PLEASE DESCRIBE THE POLICIES.

A. Both NYNEX and Pacific Bell have considered this issue and have established policies which MCI believes are a good faith attempt to bring fairness to this process. These RBOCs have assessed space availability and have adopted a general policy that any ALEC seeking to collocate can lease up to 400 square feet of space in a central office. The ALEC cannot warehouse the space. That means the ALEC must within a reasonable time place within the space equipment used to provide service. The space cannot be used simply for storage. An ALEC can request additional space, and such requests will be assessed on a case by case basis. GTE's bald assertion that harm will occur because a single ALEC might come in and use up all the space is thus totally without merit. As reflected in the NYNEX and Pacific Bell policies, steps can be taken to prevent this alleged "harm" from occurring.

On reading Mr. Ries' testimony it appears that GTE is trying to position itself as wearing a white hat by expressing concern about one ALEC taking advantage of another. If GTE wanted to create a fair competitive environment, then it would have focused its energies on creating a policy to create a level playing field, rather than simply saying the sky is falling.

Q. AT PAGES 8 AND 17-19 OF HIS TESTIMONY MR. RIES STATES THAT ALECS SHOULD ONLY BE ABLE TO COLLOCATE AT CENTRAL OFFICES, SERVING WIRE CENTERS, TANDEM SWITCHES. HE GOES ON TO STATE THAT COLLOCATION SHOULD BE PERMITTED AT REMOTE UNITS ONLY IF A GIVEN UNIT OFFERS ROUTING OR RATING CAPABILITY. ARE THERE ANY PLACES WHERE COLLOCATION SHOULD NOT BE ALLOWED?

A. Collocation is appropriate in whatever GTE structures have network facilities, subject only to real space limitations and to a requirement that each party bear its own costs to collocate. The determination as to whether space is available should be made on a case-by-case basis. The Commission should not establish a general rule restricting collocation based on a naked statement that certain structures usually have limited space available. In addition, the fact that certain functions may or may not be performed at a facility is not relevant. To be competitive, MCI must be able to design its network as efficiently as possible. Collocation should thus be restricted only where there is a real issue as to space availability, and the Commission should not allow

GTE to limit collocation simply because a particular network function may or may exist at the location.

Q. AT PAGES 9 AND 20-21 MR. RIES CONTENDS THAT ALECS SHOULD NOT BE GIVEN THE OPTION TO DEMAND VIRTUAL COLLOCATION UNLESS THERE IS FIRST A FINDING THAT PHYSICAL COLLOCATION IS NOT FEASIBLE. WHAT IS WRONG WITH THIS APPROACH?

A. Mr. Ries spends most of his testimony focused on the alleged pitfalls of physical collocation. He argues repeatedly for limitations on physical collocation -- where, what and how. For Mr. Ries then to argue that virtual collocation should only be allowed where physical collocation is not feasible is totally disingenuous. Like many of the other ILECs, GTE opposed physical collocation in the regulatory arena for years, asserting that virtual collocation was adequate. At times there may be situations where MCI wants to physically collocate with GTE. At other times MCI may want to make use of virtual collocation. There is absolutely no reason for GTE to suggest that an ALEC must exhaust one approach before the other is available, other than to slow market entry of the ALECs.

Q. AT PAGES 9 AND 21 MR. RIES TALKS ABOUT THE NEED FOR GTE TO HAVE THE RIGHT TO IMPLEMENT REASONABLE SAFETY AND SECURITY MEASURES WHEN COLLOCATION IS ESTABLISHED. WHAT IS MCI'S POSITION ON SAFETY AND SECURITY MEASURES?

A. MCI does not object in principle to allowing GTE to take "reasonable"

safety and security measures. However MCI believes GTE must bear the costs of such measures, since GTE in all likelihood will unilaterally determine what actions are allegedly necessary to insure safety and security. In addition, the Commission should insure that no steps are taken by GTE in the name of protecting its network which unreasonably use central office or other space that might otherwise be available for collocation.

Q. AT PAGES 10-11 AND 22-23 OF HIS TESTIMONY MR. RIES CONTENDS THAT GTE SHOULD NOT BE REQUIRED TO ALLOW COLLOCATORS HOUSED ON GTE PROPERTY TO CROSS-CONNECT WITH EACH OTHER IN ORDER TO BYPASS THE GTE NETWORK. HE GOES ON TO STATE THAT PENDING JUDICIAL REVIEW OF THE FCC ORDER GTE WILL PERMIT SUCH CROSS-CONNECTION IF CERTAIN CONDITIONS ARE MET. ARE THE CONDITIONS SET FORTH BY MR. RIES REASONABLE?

A. No, they are not, except that MCI of course would pay for costs it incurs in connection with such cross-connects. It appears that what GTE is attempting to do with these conditions is to prohibit such cross-connections and to prevent new entrants from developing networks in the most efficient and effective manner possible. GTE states such cross-connections will be at its option, and will only be allowed when the connected equipment is used for interconnection with GTE or access to GTE's unbundled network space. Cross-connections between ALECs is in the best interests of

competition, and an ILEC such as GTE should not be given the option to prevent this activity from occurring, nor be permitted to prohibit an ALEC from using collocated facilities for purposes other than access to GTE as long as the ALEC is purchasing GTE services. Moreover the FCC order specifically authorizes such interconnection.

Q. AT PAGES 14-15 AND 17 OF HIS TESTIMONY MR. WOOD DESCRIBES GTE'S POSITION RELATIVE TO ALEC CONNECTION TO THE GTE NID. IS MCI REQUESTING DIRECT CONNECTION TO THE GTE NID?

A. Mr. Wood states that although the FCC does not require it, GTE will allow an ALEC to connect its loops directly to GTE's NID, provided that such interconnection does not adversely affect GTE's network. This offer sounds generous until one realizes that to gain the direct NID connection one must establish that such connection will not adversely affect GTE's network. Mr. Wood does not state how this determination is to be made or whether it is to be made on a NID by NID basis. As a result, MCI will not seek to connect its loops directly to the GTE NID. Instead, MCI will connect its NID to the GTE NID, thereby avoiding an endless discourse about possible adverse impacts to GTE's network that would only serve to delay market entry.

Q. AT PAGES 15 AND 18-24 OF HIS TESTIMONY MR. WOOD STATES THAT SUBLOOP UNBUNDLING (I.E., THE SEPARATION OF THE LOOP INTO DISTRIBUTION, FEEDER AND LOOP CONCENTRATOR/

MULTIPLEXER) SHOULD BE DETERMINED ON A CASE BY CASE. MR. WOOD PLACES SIGNIFICANCE ON THE FACT THAT THERE ARE NOT PHYSICAL CONNECTIONS AT ALL LOCATIONS WHERE SUBLOOP UNBUNDLING MIGHT OCCUR AND HE CAUTIONS ABOUT POSSIBLE HARMS THAT MIGHT ARISE IF MULTIPLE PARTIES WERE ALLOWED ACCESS TO GTE CROSS CONNECTION LOCATIONS. WHAT IS MCI SEEKING RELATIVE TO SUBLOOP UNBUNDLING?

A. MCI is asking for subloop unbundling where there is an existing cross-connect in the ILEC network. MCI is not at this time requesting subloop unbundling where there is not an existing cross-connect in the ILEC network. While MCI might at a later date submit a bona fide request (BFR) for such unbundling, MCI can enter the market now if it can obtain subloop unbundling where there is a an existing cross-connect. In addition, MCI is not demanding that it have access to the GTE cross-connect location. MCI will allow GTE to perform activities at the cross-connect location on its behalf. Given this approach, the concerns raised by Mr. Wood are not relevant to MCI. There is one other point worth noting. Mr. Wood suggests that subloop unbundling should be determined on a case-by-case basis. Any time case-by-case decisions are made there are delays. It is critical for the Commission to establish rules that provide a clear path forward and that eliminate ongoing opportunities for the ILECs to stall competitive entry.

Q. AT PAGES 15-16 AND 24 TO 28 MR. WOOD DISCUSSES GTE'S

POSITION ON SWITCH UNBUNDLING. HE RAISES ISSUES RELATIVE TO COST, TECHNICAL FEASIBILITY, CAPACITY CONSTRAINTS AND LOST REVENUES. WHAT IS THE BOTTOM LINE OF HIS TESTIMONY?

A. Mr. Wood's testimony is most interesting. He goes on for several pages stating why switch unbundling *should not be required.* However, despite all the concerns raised, he makes the offer at page 17 to unbundle the switch so long as GTE recovers its costs and does not lose access charge revenues. It seems that despite all the protestations as to what is and is not feasible, capacity constraints, etc., GTE's position comes down to one of money. GTE and other ILECs made extensive arguments at the FCC on the issue of unbundled switching and the FCC found that it was technically feasible to provide access to the local switching element in the ILEC central office. (FCC Order, paragraph 415) *The FCC expressly ordered unbundling of the* local switching element and tandem switching. (FCC Rules, Section 51.319(c)) Thus while Mr. Wood recites the litany of technical feasibility arguments, I believe his real concern is money. The Commission should therefore order that switching must be unbundled, and should set a price for unbundled switching in accordance with the FCC's rules.

Q. IN HIS DISCUSSION ON SWITCH UNBUNDLING AT PAGES 16 AND 24-25, MR. WOOD DISCUSSES PROBLEMS ASSOCIATED WITH SELECTIVE CALL ROUTING. IN PARTICULAR HE RAISES THE CONCERN OF LINE CLASS CODE EXHAUST. HOW WOULD MCI

PROPOSE TO DEAL WITH THIS CONCERN?

A. MCI as a purchaser of switches for its own network often works with its switch suppliers to enhance switch features and functions. To the extent that line class code exhaust or other issues such as those raised in the letter attached to Mr. Wood's testimony as Exhibit No. AEW-4 exist, MCI believes the appropriate course of action is for GTE to proactively work with its switch vendors to find solutions to the alleged problems raised. These types of concerns, real or imagined, can be resolved through the vendor and supplier working together. In fact, GTE as a provider of access services to MCI has in the past shown a willingness to go to its switch vendors to obtain features and functions MCI stated it needed to provide services to its customers. Carrier Identification Parameter is one example. Thus what MCI suggests here is common practice. GTE is throwing up roadblocks rather than trying to come up with solutions.

Q. MR. DELLANGELO ADDRESSES UNBUNDLING OF ADVANCED INTELLIGENT NETWORK CAPABILITIES AT GREAT LENGTH AND INSISTS THAT GTE WILL PROVIDE AIN ACCESS ONLY ON A MEDIATED BASIS. DOES THIS MEET MCI'S REQUIREMENTS FOR AIN ACCESS?

A. Given the controversy that has been created regarding unmediated access to AIN functionality, MCI will not seek unmediated access at this time, although it may do so in the future through a BFR process.

MCI does need the ability to store its applications in GTE's Service Control Point (SCP). MCI also needs the ability to access GTE's SCP, both through MCI's own switch and through unbundled switching purchased from GTE. MCI understands that GTE is willing to provide access in this manner, thus eliminating issues regarding AIN access for the time being.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Q (By Ms. Mcmillin) There were no exhibits attached to either your direct testimony or rebuttal testimony, were there?

A That's correct.

Q Please summarize both your direct and rebuttal testimony.

A Chairman Clark, members of the Commission, good morning. I'm Paul Powers of MCI's local network engineering group. As a member of the local interconnect planning group, I'm responsible for the design, planning and implementation of MCI's local switch network.

My full-time job is to actually manage the interconnection of MCI's switch network with that of the incumbent local exchange carriers. MCI has already installed 13 local switches with a like number to come in the coming year, including local switches in Miami and Orlando. I have personally managed the interconnects with GTE in Seattle, Washington, Portland, Oregon and Los Angeles, California.

The issues in this case are not abstract or theoretical to me. How this Commission resolves these issues will have a direct and measurable impact on the way that I'm able to deliver competitive local service to the consumers of Florida.

My testimony identifies MCI's initial technical requirements for interconnection, unbundling and collocation. These are basic building blocks for allowing competition in local service. My testimony is to identify these elements that MCI requires, including the NID, local loop distribution, local loop switching with selected routing, signalling AIN transmission, including dark fiber and physical and virtual collocation.

There are two points I hope the Commission will take away from my testimony. Number one, interconnection unbundling and collocation are not new; and, number two, that the devil is in the details. Interconnection unbundling and collocation are not new. They've been done in the long distance market and between independents for quite some time.

GTE claims technical infeasibility, but attempts to support its claims with either it costs too much or it will be difficult to keep records, or the dreaded harm to the network. These appear to be the same arguments that we heard before, waged at the time of AT&T's divestiture.

I urge the Commission to ask the question why. Why is GTE taking this tack? No monopolist has ever welcomed competition with open arms. It has

taken the vigorous efforts of commissions such as this to monitor and ensure competition.

Number two, the devil is in the details. I strongly urge this Commission to ensure that the ultimate result of this proceeding is a real implementable, enforceable contract with technical specifics so we can all get down to work to provide the competitive services to the consumers of Florida. Thank you.

MS. MCMILLIN: Mr. Powers is available for cross.

CHAIRMAN CLARK: Mr. Tye.

MR. TYE: No questions.

CHAIRMAN CLARK: Mr. Gillman.

MR. GILLMAN: Thank you, Chairman Clark.

CROSS EXAMINATION

BY MR. GILLMAN:

Q Good morning, Mr. Powers.

A Good morning.

Q When you said there's the devil in the details, I mean, isn't that true with interconnection requests as well, that -- or an unbundling request, that one request may be very different from another request with respect to the network?

A That's true.

Q And it wouldn't be unreasonable, would it, for those requests that require GTE to incur additional sums to unbundle the loop, that MCI should pay for those, is it?

A I'm not sure I follow.

Q Well, would you agree with me that certain unbundling requests may create additional costs on behalf of GTE to provide the unbundling request?

A Perhaps. I don't know that for sure.

Q Okay. Assuming there were some costs, it would not be unreasonable for MCI to pay for those costs, would it?

A As long as they are -- I guess they would be included in the costs of the actual unbundled element.

Q Do you think those costs ought to be included in the unbundled loop rate?

A I believe that they are.

Q Do you believe that they're included in Mr. Woods' analysis under the Hatfield model?

A I'm not sure.

Q You don't know one way or the other?

A No. I'm not familiar with the Hatfield model.

Q But it is your opinion that those costs ought to be included?

A It would be reasonable, yes.

Q If they are not included, it would be reasonable, then, that MCI would have to pay for those costs and on a case-by-case basis for a specific unbundling request?

A I guess to the extent that that cost or that request only benefits MCI and no other carrier, including GTE.

Q How would GTE benefit from providing the unbundled loop to MCI?

A I believe that GTE is going to be compensated for loops.

Q Okay. So, I mean, you're not opposing if there are additional costs, that somehow GTE will be compensated for that?

A I can't speak to all the costs. I'm not a cost witness.

Q Might there also be technical questions that would arise in some requests for unbundled loops and -- or with respect to some unbundled loops and they wouldn't arise with respect to others?

A I imagine that's possible, yes.

Q And the companies would have to negotiate those technical details out before an unbundled loop would have to be provided by GTE?

A Yes, I believe so.

Q Drawing your attention to Pages 15 to 16 beginning on Line 23 on page 15.

MS. MCMILLIN: Is this of the direct testimony?

MR. GILLMAN: Direct.

Q **(By Mr. Gillman)** Where you refer to that -- also requires that the trunks used to carry local and interexchange traffic are configured with B8ZS extended superframe, and then you go on to explain that if a line isn't conditioned with -- isn't configured with that superframe. And MCI would be willing to pay for that additional upgrade, would it not?

A I think I stated before that any -- MCI would willing to be pay for any portion that is directly for its use and does not benefit any carrier, including GTE going forward.

Q I guess my question is, you're not expecting GTE to upgrade all of its loops while waiting for MCI's request?

A No.

Q It would be done on a case-by-case basis?

A I believe that's the way GTE would do it in their own network today, yes.

Q Now, are you saying that MCI could pick a point of interconnection that does not exist on GTE's network?

A I don't believe I made that point, no.

Q Are you saying that the point of interconnection could be picked unilaterally by MCI at any point on the GTE network?

A I believe at any technically feasible point, yes.

Q And GTE would have no say in that except for the argument that it's not technically feasible?

A I believe that's correct.

Q I want to draw your attention to Page 19 of your direct testimony, and I want to try to understand these two scenarios that appear on Page 19. If I understand your testimony correctly, when MCI -- when an MCI customer terminates a call on the ILEC network, MCI would pay tandem switching and transport; is that correct?

A Yes, if the tandems involved in the call -- yes.

Q Well, I'm asking about this scenario.

A Okay. Yes.

Q And then they would pay for a termination at the end office.

A Yes.

Q Now, is MCI proposing bill and keep in this case?

A I don't believe so.

Q You're proposing symmetrical rates?

A Yes.

Q So would these two be two separate charges, the tandem switching and transport, as well as the termination?

A If that's the way that GTE breaks them out, yes.

Q Now, in the second scenario, when a -- when GTE -- when a GTE customer would pay for -- would pay for termination on MCI's network, GTE would also be required to pay these two elements on a symmetrical basis to MCI?

A No.

Q They would not?

A No.

Q And is that because the transport is not going over the same lines as it is in the first example?

A No. First of all, the consumer, or actual subscriber, wouldn't be paying the rate. It would be inter-company transfer of funds. And the rate that

MCI would be charging would be a rate symmetrical to the tandem, the transport and the local termination.

Q So MCI would charge GTE these first two items on Line 6 and Line 9, would they not?

A No. Once again, it's a rate equal to those two items. It's not those two items individually.

Q One rate equals both of those items?

A Correct.

Q And then MCI would also charge the -- GTE an additional charge in addition to that, would it not?

A I'm not sure what charge --

Q What charge are you referring to from the -- in Line 16, transport from the IP to the MCI switching center?

A In the first example where a call is coming from an MCI switch to GTE's tandem, there would be an interconnection point between the two networks. GTE is able to charge MCI for the transport from the interconnection point to its tandem, the tandem switching charge, the tandem to end office transport, plus the local switching.

In turn, MCI -- a call flowing in the other way, MCI would charge GTE a symmetrical rate that would be equal to the tandem switching, the tandem to end office transport, and the end office switching,

plus the transport from the interconnection point back to MCI's switch.

Q So GTE would pay an additional rate for the transport from the interconnection point to the MCI switching center; correct?

A It would depend on where the interconnection point actually occurred.

Q Well, in this example the interconnection point is in the tandem, is it not?

A That's correct.

Q So they would pay an additional charge from the tandem to MCI's switching center?

A That's correct.

Q As I understand it, I think from either testimony or maybe some of the oral testimony from some of the parties, that MCI or ALECs in general will not have near as many central offices as incumbent LECs, will they?

A Initially, no. Over the long term, I can't say.

Q And at least initially, is it MCI's plan to serve the state of Florida with just one central office?

A No. I think in my opening statement I already indicated that MCI already has switches

installed in Miami and Orlando.

Q Okay. I'm sorry. Will the Orlando switch serve the Tampa area?

A It may, yes.

Q And where would MCI propose the interconnection point be?

A I'm not quite sure exactly where the interconnection point would be; either at GTE's Tampa tandem or at a collocation point.

Q Would you agree with me that the charge that GTE would have to pay to MCI for the transport from the IP to the MCI switching center, that that point would run from the tandem all the way to Orlando?

A I'm not sure if that's exactly how that's planned to be calculated. I imagine those details would be provided in the contract for Orlando -- or for Orlando and Tampa, the interconnect in Tampa.

Q I'm sorry. I didn't understand that.

A That may not necessarily be the case, that we would ask GTE to pay for transport all the way back from Tampa to Orlando; but I don't know the specifics of the contract with GTE.

Q Well, on Page 19 of your testimony, Line 16, it says -- you talk about the ILEC, not GTE, so maybe that's a difference -- for calls terminating on the

MCI's network are transported from the IP to the MCI switching center.

If you assume that GTE's tandem, the interconnection point is in GTE's tandem in Tampa, isn't it MCI's position that GTE would have to pay transport all the way to Orlando?

A Once again, I'm not sure what the specific contract language with GTE would say.

Q So with respect to point 1 there, it's not for certain whether MCI would charge the entire transport route? Is that what you're saying?

A That's essentially true, yes.

COMMISSIONER DEASON: Excuse me just a second. You keep referring to the contract language. What contract?

WITNESS POWERS: At the point at which we're going to need to interconnect with GTE we're going to have to enter into a contract for interconnection which will spell out the details of where we will interconnect and how the charges will affect each of the companies; and I'm not sure that that has been tendered yet to GTE.

Q **(By Mr. Gillman)** By contrast, the transport that MCI would pay in this instance would just be between GTE's tandem and GTE's end office?

A Now, the transport, the initial transport would be from the interconnection point, wherever that's established, to a GTE tandem.

Q Well, in your example the interconnection point is in the tandem, is it not?

A In this example. Okay. Yes.

Q So GTE would pay transport to the tandem to the end office where the call terminates; is that right?

A Can you tell me which way the call is flowing?

Q MCI originated.

A A call originating from MCI, that would be -- MCI would expect the tandem switching, the tandem to end office transport, and the end office switching.

Q Would you agree with me, I guess at least as you state it there in Lines 16 and 17, that the farther away MCI places its switching center, that the higher the cost would be for transport to GTE?

A I'm not sure if the structure of the -- of how the charges would be if it's mileage sensitive.

Q You don't know what MCI would charging for transport?

A Correct. I'm not sure if it's a mileage

sensitive basis.

Q Has MCI done any studies as to what it costs to terminate a call?

A Not to my knowledge. I'm not sure.

COMMISSIONER DEASON: Let me ask another question. Would all of these issues go away if you simply had a bill and keep framework?

WITNESS POWERS: I think there's still the issue of where the companies -- the actual point of interconnection.

COMMISSIONER DEASON: I'm talking about who pays who for what and how long a distance and all of this that we're discussing here.

WITNESS POWERS: No, I don't believe that bill and keep addresses the actual underlying facilities between the companies. It's where the interconnection point would actually be, and how the companies pay for that -- their share of where the interconnection point is between them.

So I think that's been an issue in several of the other states where bill and keep has been ordered. Oregon, in particular, we had an issue with that where bill and keep was ordered, but the interconnection point was not specified. And the incumbent there attempted to place a build-out

requirement on MCI to interconnect at all of its end offices in order to achieve bill and keep. So the interconnection point is extremely important in this issue.

Q (By Mr. Gillman) I'm correct, am I not, Mr. Powers, that the FCC in its First Report and Order did not require GTE to provide unbundled access to dark fiber?

A The FCC declined to consider dark fiber; that's correct.

Q And dark fiber is not used to provide telecommunications services, is it?

A Not as it sits dark, no.

Q Drawing your attention to, I guess, Page 42 of your direct testimony where you talk about AIN. In fact -- I'm sorry. Let's just go to your rebuttal testimony on Page 10.

Just to confirm, MCI is not seeking unmediated access to GTE's AIN at this time; is that correct?

A Correct.

Q Would you agree with me that there needs to be some -- or are you proposing industry trials and further investigation on this issue?

A I believe there have been some trials

already conducted that show the capability of AIN, and several of the incumbents are already using AIN within their network. I believe to have that fully implemented, AIN applications would need to be tested before they're introduced.

Q I mean, now back to your direct testimony on 43, Lines 2 to 3 -- and I should say Mr. Caplan's testimony -- where you propose appropriate industry trials. What do you expect to obtain? What sort of information would come out of those industry trials?

A I believe they will prove technical feasibility.

Q I'm sorry?

A I believe that they will prove technical feasibility of AIN.

Q Well, is it just a matter of proof, or will they make it technically feasible?

A I believe there will be more proof than is available today because of carriers already using it within their own networks.

Q But there's no unbundling of the AIN triggers at this point, is there?

A No.

Q I mean, would you expect maybe industry-wide standards to come out of those trials?

A I would expect additional standards to come out of those trials, yes.

MR. GILLMAN: I have nothing further. Thank you.

CHAIRMAN CLARK: Staff?

CROSS EXAMINATION

BY MS. CANZANO:

Q Good morning, Mr. Powers.

A Good morning.

Q Could you just clarify for Staff what exactly have you agreed to regarding AIN?

A I don't believe that we have any current agreement with GTE on AIN.

Q But you're not requesting unmediated access at this time?

A That's correct.

Q Had you originally requested that?

A I believe it was our original intent when the first direct testimony was filed that we were seeking additional AIN unbundling, and we further -- we've withdrawn that from the direct testimony.

Q Okay. I just wanted to clarify that. Thank you. In your rebuttal testimony on Pages 5 and 6, you discuss the topic of security measures for collocation. Do you recall that?

A Yes.

Q Please explain specifically which safety and security measures proposed by GTE are unreasonable in your opinion.

A Could you give me a reference to the line that you're actually speaking to?

Q Yes. It starts at the bottom of Page 5 of your rebuttal testimony starting on Line 21 and then going through Line 7 of Page 6.

A I believe that the -- as is stated here, that reasonable safety and security measures would be to provide standard fire suppression, power and breaker capabilities, electrical breaker capabilities. Standard for collocation is a chain-link area, and I believe that measures beyond that that would require anything more than the standard fire and power requirements would be unreasonable.

Q To your knowledge, has GTE proposed any other measures that you consider unreasonable?

A Not to my knowledge at this point. I don't believe we have gotten any collocation for local service yet with GTE.

Q Is it more efficient to offer the same services that GTE provides by combining unbundled elements rather than purchasing this service at

wholesale?

A Is it more efficient? I'm not sure I can speak to that. But I think by putting together unbundled elements, MCI can add value to the customer in putting them together in a unique way and combining them with additional MCI products and services.

Q So you think by combining those unbundled elements, you might provide a unique service? Is that your response?

A Yes.

Q Are there any technical efficiencies?

A As far as we may bundle -- we may take several unbundled elements and put them together to provide a product or service that isn't provided by GTE today, and we may exclude some elements that they currently include in one of their service offerings.

Q Is it also more efficient in terms of cost?

A I'm not sure. Not being an economist, I'm not sure.

Q Okay. Well, thank you.

MS. CANZANO: Staff has no further questions.

CHAIRMAN CLARK: Commissioners. Redirect.

MS. MCMILLIN: Just a few, Chairman Clark.

REDIRECT EXAMINATION

BY MS. MCMILLIN:

Q Mr. Powers, to go into a few areas that were explored on cross examination, you were asked some questions about a single point of interconnection. Can you explain why MCI wants a single point of interconnection?

A I believe to start with a single point of interconnection, when MCI will go into a particular city such as Miami, Orlando and will be installing a switch, that the interconnection with the incumbent should occur initially at only one point.

MCI shouldn't be required to be burdened with what's known as a build-out requirement to build out to multiple points in the incumbent's network. I believe that that imposes a burden on new entrants and makes it difficult to enter new markets.

As networks mature, I imagine additional interconnection points would make sense from an engineering efficiency point, make sense as the networks begin to expand that the companies will find engineering efficiencies to interconnect at more than one point, and for network reliability and survivability, that makes sense in the long term.

Q You also were asked some questions

pertaining to dark fiber. Why does MCI take the position that dark fiber should be unbundled and why is that important?

A As an engineer, I'm not sure I really see the distinction between dark fiber and an unbundled loop. Both of them provide just a transmission path. I understand why in a competitive environment one company would want to keep -- hold something back from another competitor. But since this is not necessarily a competitive environment yet and GTE has these assets, these unused assets in the ground available for their use at any time, I'm not sure why they're withholding this element as opposed to an unbundled loop.

Q You also were asked some questions about MCI's position on unmediated access to AIN functionality, and just to clarify, is this something MCI is putting on the table for now, or is it something that that may be raised again in the future?

A Definitely this will be raised again, I think. At this time MCI is not requiring unmediated access, but will look for a solid, bona fide request process that in the future, as this develops and as MCI's network matures, that we'll be requesting additional AIN capabilities.

Q And my last question, Mr. Powers, pertains to some questions regarding the details of items that would be negotiated in an agreement. Apart from those details, is it MCI's position that the generalities with regard to those items can be resolved by the Commission or should be addressed by the Commission?

A Yes. I think the Commission needs to set the groundwork under which the specific contractual arrangements can be based on, and we hope that the Commission does that and is very specific so that there can be no vagueness as to what they mean.

MS. MCMILLIN: I have no further questions. Thank you.

CHAIRMAN CLARK: Thank you, Mr. Powers.

(Witness Powers excused.)

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CHAIRMAN CLARK: Mr. deCamp.

MS. MCMILLIN: Yes. MCI would call Timothy deCamp.

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(Transcript continues in sequence in Volume 9.)