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## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 990649B-TP

In the Matter of

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INVESTIGATION INTO PRICING OF UNBUNDLED NETWORK ELEMENTS (SPRINT/VERIZON TRACK).

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## VOLUME 7

Pages 893 through 1056

PROCEEDINGS: HEARING

**BEFORE:** CHAIRMAN LILA A. JABER

COMMISSIONER J. TERRY DEASON

COMMISSIONER BRAULIO L. BAEZ COMMISSIONER MICHAEL A. PALECKI COMMISSIONER RUDOLPH "RUDY" BRADLEY

DATE: Tuesday, April 30, 2002

TIME: Commenced at 9:00 a.m.

Betty Easley Conference Center Room 148\_ PLACE:

4075 Esplanade Way Tallahassee, Florida

REPORTED BY: JANE FAUROT, RPR

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Administrative Services

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> APPEARANCES: (As heretofore noted.)

FLORIDA PUBLIC SERVICE COMMISSION

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1		EXHIBITS		
2	NUMBER:		ID.	ADMTD.
3	54	Telcordia Technologies Web Page	927	ADITIO.
4	55	Alcatel Letter	927	
5	49 - 54		JLI	928
6 7	56	Verizon's Nonrecurring cost study (Confidential)	935	320
8	57	BIS-1 through BIS-3	1012	
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FLORIDA PUBLIC SERVICE COMMISSION

1	PROCEEDINGS
2	(Transcript follows in sequence from
3	Volume 6.)
4	CHAIRMAN JABER: Let's go ahead and reconvene the
5	hearing where we left it yesterday afternoon.
6	Mr. Hatch, you were finishing up your cross
7	examination.
8	MR. HATCH: Yes, ma'am.
9	DAVID G. TUCEK
10	continues his testimony under oath from Volume 6:
11	CONTINUED CROSS EXAMINATION
12	BY MR. HATCH:
13	Q Mr. Tucek, you were a participant in the Commission's
14	proceeding in 1998 that was dealing with the cost of basic
15	local service, is that correct?
16	A I believe so, yes.
17	Q Ms. Canzano is handing you an excerpt from the order
18	that stems from that proceeding. Just to give it some context,
19	there is the first few pages and then if you would turn to Page
20	231 and 232 of that excerpt and cruise through that for just a
21	moment and become familiar with it.
22	A I have read it.
23	Q Now, in that excerpt the Commission determined that
24	they would exclude the GTD-5 switch from a forward-looking
25	calculation of the cost of basic local service is that

correct?

Yes. it is. And the reason they did that is they viewed their objective as coming up with a generic set of inputs common to all carriers. They were not trying to identify company-specific costs as we are in this docket. Also, I note in the handout that you have given me that the Commission concludes that the AT&T witness did not provide sufficient evidence that the GTD switch is not forward-looking because of its technology.

So the reason they excluded it from the inputs in that docket is they did not feel it was representative of costs that would be suitable for generic costs in the USF docket, not because it was not suitable for Verizon's -- now Verizon's costs, then GTE's costs, company-specific costs in Florida.

Q Well, isn't the conclusion there that they do not believe it is likely an efficient provider in Florida would tend to purchase a GTD switch rather than a 5-EERDMS?

A That is their conclusion, however, Verizon would purchase a GTD-5 switch in Florida if the circumstances required it.

Q Have there been any significant purchases of GTD-5 switches in this country since, say, 1997?

A I don't know how to define significant. I can tell you that Verizon has purchased GTD-5 switches I think as recently as the end of 2001. We have plans to purchase GTD-5

1 | switches in 2002.

Q In what capacity, as a host or as a remote?

A These will be remote switches. The reason we are not purchasing GTD-5 hosts is the same reason we are not likely to purchase a 5E host or a DMS 100 or DMS 10 host. As I indicated yesterday in the entire Verizon footprint there are only four analog switches left. Those are really the only candidates for host switch replacement.

Actually, if you look at the combined footprint of Southwestern Bell which includes Ameritech and now Pacific Telecom, U.S. West, BellSouth, and Verizon there are only 139 analog switches left in that network. And that covers practically the whole company out of more than 14,000 switches out there. The digital lines are 96.5 percent of the total lines for those carriers, that is 3-1/2. That information tells me that there is going to be very few host switches purchased by any of those carriers, whether they be 5-ESSs, Nortel switches, or whatever vendor.

Q When you are modeling a forward-looking network you would model the most efficient forward-looking technology in that model, would you not?

A No, not necessarily. The TELRIC guidelines say that you assume that the wire center locations are fixed and you employ the most efficient technology. And as Doctor Ankum characterized it, you take the customer locations and you build

the network in between. There is nothing to say that the network that is in between or even the switch types have to change. It would be inefficient for GTE to replace all of its GTD-5s, just as it would be inefficient -- excuse me. Well, it would be inefficient for Verizon to replace all of its GTD-5s, just as it would be inefficient for Verizon to replace or to change the locations of its DLCs.

In fact, if we were going to maintain that you should model costs as if you were going to replace all the GTD-5s, you would have to take a hard look at the cost that the model assumed for the other switch types. The data I gave you on the penetration of digital line tells me that circuit switching manufacturers are pretty much a mature industry. And I doubt seriously they would replace -- they being Nortel and Lucent -- could replace all of the GTD-5s in Florida or in the former GTE footprint.

So those switch prices that you would put in the model under that assumption would not be representative of what you could actually incur. So by making it an assumption, you take one step back from what is happening in the real network and you are severing your costs from reality.

Q You mentioned that you have one analog switch left, is that correct, for Verizon Florida, I believe?

A No, I did not. Actually there are no analog switches in the former GTE footprint. In the entire Verizon footprint

1	there are only four, and of the four carriers I mentioned which
2	basically covers the country there is 139 of them, about
3	14,400-some-odd switches.
4	Q But if you were buying a switch today as a host
5	switch it would not be a GTD-5, is that correct?
6	A I can't say that.
7	Q One of the things that let me ask it a different
8	way. Is it your understanding that Doctor Ankum has criticized
9	the ICM as essentially not open and verifiable, would that be a
10	fair characterization?
11	A Yes, I think I covered that in my summary yesterday.
12	Q Could you turn to Verizon's response to Interrogatory
L3	Number 52 from AT&T, MCI, and FDN's third set of
L4	interrogatories?
L5	A I don't have that with me. Could you provide me a
L6	copy?
L7	Q I have one extra. I'm sorry, do you have that?
L8	A Yes, I have it.
L9	Q Could you read not into the record, but just
20	familiarize yourself with the interrogatory and Verizon's
21	response?
22	A I have read the response.
23	Q Now, in question Subpart B we asked if you can trace
24	the investment in the ICM backwards to individual investment
25	modules, and we also asked you if you could provide an

explanation of how to do that, is that correct?

A That is correct.

- Q And your response was?
- A Would you like me to read the response into the record?
  - Q If you would like, that will be fine?

A "Verizon objects to this request because it is unduly burdensome in that it seeks information or analyses that the ALEC coalition can generate on its own. Verizon has produced all of the source code underlying the calculations of the quantities in question, and the ALEC coalition is capable of analyzing that code on its own. Notwithstanding this objection, Verizon states it is possible to trace the calculations underlying the investment calculations referenced in this interrogatory and denies that its previous response is inadequate."

The response is exactly true, it is possible. If you are going to ask me what steps AT&T and MCI should take, I would suggest that they look to the witness that they hired in the BellSouth docket, Mr. Brian Pitkin. In my direct testimony I point out that in three states, Massachusetts, Virginia, and Pennsylvania, AT&T and MCI have sponsored modified versions of the FCC's model which required them to modify a code based platform based on Turbo Pascal.

Mr. Pitkin is the gentleman who is a consultant for

AT&T and MCI who has the ability and the knowledge to do that
and actually did it for that. Under cross examination in
Pennsylvania he maintained that the skill sets necessary to
review models that were code based or the requirement of having

those skills sets were common in the industry.

I guess you are asking us to do your work and that is what we are telling you in this response. I would also point out that in the order in the BellSouth part of this docket that the issue that BellSouth had only provided the parties, AT&T and MCI and the other ALECs, their source code in a PDF version came up. The Commission concluded there that BellSouth was not required to provide the source code at all, and that their actions did not hinder the ALEC coalition's analysis of BellSouth's model, which as I stated yesterday is a mixture of a code based and spreadsheet based model.

We have gone beyond that standard in our file and we have given you the code not only in a code based PDF form, which makes it easier to read, but the text file form which makes it easy for you to modify. All you need do is hire the people with the proper skill sets. Go over to the Borland website and I believe you can order it directly off the website. You get the development package known as Delphi Pascal, which is different than Turbo Pascal and I would like to explain why.

CHAIRMAN JABER: No. You know, I think the original

question, Mr. Tucek, was would you read the response in the record.

THE WITNESS: Yes, ma'am.

CHAIRMAN JABER: If your attorney on redirect wants to have you explain the difference in the software, I will be glad to allow it, but let's stick to the questions. And we have got to finish today, by the way.

THE WITNESS: Yes, ma'am.

## BY MR. HATCH:

Q Now, Mr. Tucek, if your model is so open and easily verifiable and user by parties, what you are asking us to do is go out an expend resources to hire a programmer to essentially dismantle your model for us. How is that easily open and verifiable?

A Well, I think it is easily open and verifiable by the standard established for this Commission. We have given you more information than BellSouth gave you in the other track and the Commission concluded that what they did did not hinder your ability to analyze the model. So if we have given you more and better access to the model's code, we have beat that standard. So it follows, necessarily, we haven't hindered you.

Q So what you are suggesting is just by virtue of providing more information, you have made it easy and open and verifiable, is that a fair characterization?

A What I'm saying is that based on the order in the

BellSouth track of the docket we were not required to provide you the code at all, but we did. Not only did we do it in the PDF form, we gave it to you in a form that makes it very amenable to analyzing the model.

Q The ICM is Verizon's model, and if we have a question about how it works and how to accomplish something that you say can be done, your only response is go figure it out yourself with hiring a programmer. Does that seem open and easily verifiable to you?

A No, that is not true. I will give you an example. I think in staff's amended first set of data requests, I believe it was Interrogatory Number 75 they asked us, "Tell us how the fill factors are calculated in ICM," and we gave them an explanation.

Doctor Ankum protests, for example, that he is not able to determine that. He also claims he read the testimony and data request responses. But, you know, when asked specific questions about how a certain calculation is done with the model, we did it. Also, we provided in response to a data request, I believe it was an AT&T data request, the supplemental response, I believe, an Excel file, it was named FLDROP.XLS or FL\_DROP.XLS, and what that spreadsheet does is it duplicates the modeling of drop links in ICM. It is a 54 meg file. Even on my PC at work, which will run ICM in 11 minutes, it's like wading through sand. That's why the model is code

lbased.

But you asked us and eventually we did produce that, because we were not required to do such a monumental analysis that you could do on your own. But I happen to do it in response, in preparation of my surrebuttal testimony, so we provided the file. So, yes, we have answered both staff's questions on how the model works and yours. What you are asking us to do here is to tell you everything. We have given you everything. Hire the people, read the code, and go at it.

Q If the Commission asked you the method and the steps to take in order to trace investment through the ICM, what would be your response, hire a programmer?

A I would tell the Commission that I would be unable to do that in the time that I would think they would find convenient, mainly because Verizon, like most companies these days, have scarce resources in terms of employees and we are busy working on other things that are going on in the industry.

At the same time, I personally have come before staff in this state on three occasions and have explained the concepts and the data flow of the model, of ICM in various stages. So we are willing to work with any parties on explaining how the model works, but if you are asking for a detail replication of what is best written in code in spreadsheet form, I think that is an unreasonable request whether it comes from the ALECs or the Commission.

By the way, I will mention that Mr. Pitkin was at the 1 2 last workshop, and I am surprised to see Doctor Ankum's 3 testimony, I thought we were going to see Brian. 4 MR. HATCH: No further questions. 5 MR. PERRY: I have no questions. 6 CROSS EXAMINATION BY MR. WEBER: 7 Good morning, Mr. Tucek. I'm Bill Weber from COVAD 8 Q 9 Communications. You said repeatedly in your summary yesterday, and it is also in your written testimony, that the ICM-Florida 10 11 produces reasonable results, correct? 12 Α That is correct. And I believe, obviously, that you are familiar with 13 14 TELRIC rules, TELRIC pricing rules? 15 Α Yes. I am. 16 And just so that we are all clear, there is no 17 requirement from the FCC that a TELRIC cost be reasonable in 18 the opinion of an ILEC, is there? 19 I can't say what the FCC's opinion on that is or if Α there is a specific requirement. I guess one can infer that 20 there is a requirement because they say their objective is to 21 22 estimate the cost the ILEC expects to incur. If we thought the cost was unreasonable it would not be what we expect to incur. 23 24 I believe, Mr. Tucek, the question was actually very 0 25 simple. Within the TELRIC rules themselves, can you find or

cite a specific requirement that a given TELRIC price be reasonable in the opinion of Verizon or another ILEC?

A Yes. Paragraph 685 in the FCC, which I reproduced in my surrebuttal testimony, at Line 21 through 25 in italics I have, "This benchmark, a forward-looking cost in existing network design, most closely represents the incremental cost that incumbents actually expect to incur in making network elements available to new entrants." To me that tells me that it represents a standard for reasonable cost.

Q But that is a different issue, isn't it, than whether or not -- that is an objective standard of reasonableness, that is not your standard of reasonableness, correct?

A The order from the FCC does not specifically say that the ILEC must determine that it is reasonable, if that is what you are asking.

Q Thank you. That is exactly what I'm asking. Now you cited the Commission's decision in the BellSouth case with regard to the provisioning of source code to ILECs. Do you recall that a few minutes ago?

A Yes.

Q Are there other areas of the Commission's decision in that part of this docket that Verizon finds to be relevant to this docket?

A Well, I read the order when it first came out, and I didn't read it with that question in mind. Actually, the

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portion I cited I missed the first time through, Mr. Jim Stegeman pointed it out to me last week, so I am unable to answer your question because I'm not sufficiently familiar with the order.

Q Mr. Tucek, I saw in your direct testimony and I heard you say yesterday that the ICM-Florida model estimates forward-looking costs based on Verizon's own engineering practices and guidelines, is that accurate?

A Yes.

Q And I guess another way of saying that is that it models it based on the plant that you have in place today, is that right?

A That doesn't say that at all.

Q Let's stick with your engineering practices and guidelines, then. Is it correct then that it is your position that Verizon's current engineering practices and guidelines are relevant to TELRIC pricing regardless of their efficiency or inefficiency?

A It is my testimony or my opinion that they are relevant. I don't know of any that would be characterized correctly as inefficient.

Q So in stating that they are relevant, then, it is fair to say that you are assuming that they are efficient?

A Yes, I am. And I guess I get to put my economist hat on. The reason for that is that for maybe the past three or

1	four year	s, five years maybe, we have been under price cap
2	regulatio	on and we have a tremendous economic incentive to be as
3	efficient	as possible because we get to keep the benefits of
4	that.	
5	Q	Now, I would like to ask you a few questions about
6	the assum	options that support the ICM-Florida model. The
7	network,	I believe you said, is modeled as if it were built all
8	at once u	using all new plant and technology, is that correct?
9	Α	That is correct.
10	Q	And I assume, then, or I would like you to confirm
11	that the	model does not include any load coils, is that
12	accurate?	
13	Α	Yes, that is correct.
14		MR. WEBER: Thank you. I have no further questions,
15	Madam Cha	irman.
16		CHAIRMAN JABER: Thank you, Mr. Weber.
17		Staff.
18		CROSS EXAMINATION
19	BY MR. FL	IDGE:
20	Q	Good morning, Mr. Tucek.
21	A	Good morning.
22	Q	During your deposition you discuss how ICM-Florida
23	builds DL	.Cs. Do you remember that conversation?
24	Α	Could you repeat the question, please.
25	Q	You described how ICM-Florida builds DLCs where DLCs

currently exist?

A Oh, places DLCs, yes.

Q But you indicated there were two exceptions. First there are instances where a feeder route exists, and in order to have ICM model this feeder route where it exists, a DLC was assumed to exist. Why is it necessary to assume a DLC exists there?

A Well, as the parties know, we asked for a longer extension than what we actually got. I think we asked for six months and got three. We are unable to change the model code in that time to allow the model to place a feeder route, which would be a copper feeder route if there is no DLC indicated in the model.

So, in order to preserve the architecture of the local outside plant, the feeder route design, where we had major feeder routes with no DLCs, we would place the DLC in the model, okay, and that does two things. It adds the DLC cost that is not there, but it also replaces that copper which would be fairly large cables with, in terms of the material cost, relatively cheap fiber. The placement cost in that feeder route between the fiber and the copper is about the same. The copper might be more expensive because it has more splices, but all in all that is why we did it. We don't think it skewed the cost up. It probably skewed them down a little bit, but it made it a more accurate result.

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So, in other words, the model constructs feeder 0 routes where they currently exist?

We tried to. For the main feeder routes that are going back to the office as well as the copper subfeeder to the DLC locations. And actually there is a late-filed exhibit on this and we identified the file for you. In that file you will see a length field between the control points. That is the actual route length that ICM models on those feeder routes. So that is another reason why making this change that we are able to make in that three-month period moves the model closer to the real network. Because the feeder routes that are out there today are there because that is where the customers are, that is where the right-of-way is. And so whether you place fiber, or copper, or, you know, you place one cable instead of two copper cables that might be out there today, at least you're getting the length right, the route distance right.

Well, how do they decide which existing feeder routes to model?

That was a very manual process. The ICAPs (phonetic) Α table is a user input, and we had three or four engineers who consulted with planning engineers in Florida who were familiar with Florida to look at the wire centers one at a time and tried to determine where the DLCs were, whether there is a major feeder route that wouldn't get picked up unless we put a DLC in the model.

Q Given that the model models feeder routes where they currently exist, how does this represent the least cost most efficient network configuration?

A Oh, that is an easy one to answer. Just look at the alternative, you are going to move the feeder routes, okay. Well, you will be moving them with a right-of-way that doesn't exist today, plus you would be abandoning all the support structure you might have today, say for poles or conduit.

Q Okay. The second exception you mentioned relates to where a customer-specific DLC presently exist in Verizon's network. is that correct?

A Yes. Would you like me to explain that?

Q No, I think we may get to it later. In such cases Verizon knows which customers are being served and how many lines are served out of the DLC, is that correct?

A I suppose so, yes.

Q If such a presumably small DLC were input into the ICM, would ICM assign adjacent grids to the DLC site, the result being that the DLC ends up serving many more lines than it actually does?

A Yes. And that is the reason we would take that -- it may not be a DLC, it would be a small fiber system. I guess we would call it a DLC. We take it out of the model because -- again, because we only had three months to make this change. If we put that location in the model what it does instead of a

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clustering like a lot of other models do where they just model the location of the DLC, it has to assign the grids to it. It does it on the basis of the nearest grid.

So if you have a customer that is, you know, 5,000 feet from the wire center and you happen to have a small fiber system, if you put that in the model a lot of those grids and customers in those grids that are around that small fiber system, the model is going to assign that location building a much larger DLC, and it is going to distort the cost, the actual cost of the network. So we had to take those small systems out. And the reason is because in the real network the customers -- the model we assign aren't served off that system, they are served by copper going back to the main distribution frame.

- 0 Do you have DGT-5 in front of you, it is the confidential exhibit?
  - Yes. I do. Α
- And does this exhibit show the total investment per 0 line for four types of switches?
  - Α Yes, it does.
  - 0 Okay. And one of these switch types is a GTD-5?
- Α That is correct. I might caution you that I am unable to answer questions, so I will tell you which ones -which switch is higher or lower because it is vendor information, that is why it is confidential. Not only the

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absent number, but the relative ordering.

I think I stated that. It was actually in red in the PDF file. It comes up kind of faded here. It says note that both the model investments shown below and the relative ordering of the three vendors are company and vendor

Okay. Well, then we will go on. Earlier you stated that Verizon last purchased GTD-5s early in 2002, is that

I think the switch was actually put in in December of 2001. Now that was not in Florida. that was in a different state. And if you are going to ask me which one, I can't recall.

Okay. What about for Florida? 0

No, there were none purchased in Florida for quite sometime. Mainly because Florida has been all digital. Well, backup. I can't say for certain when is the last time we purchased a GTD-5 remote in Florida, I just don't know. We may have answered that in a data request response.

Okay. Would you know if those switches augmented existing GTD-5s or those new branded GTD-5s additions to Verizon's network?

I had answered a related question earlier. Those were remote switches, so that would be an instance where in the

1	wire center you had an area of growth that was such that you
2	would put the remote in to serve those customers and take them
3	back to the office on fiber. They were not a new base unit.
4	Q Why didn't Verizon file the cost for UNE-P based on
5	IDLC?
6	A That was really a pricing and policy decision that
7	Mr. Trimble decided the price, the UNE-P is a loop plus a port.
8	However, ICM-Florida does have the capability of modeling IDLC
9	architecture and also changing the mapping code to give you a
10	UNE-P that is provisioned via IDLC.
11	Q If UNE-Ps were provided using IDLCs rather than
12	UDLCs, would the cost be less?
13	A Yes, it would.
14	MR. FUDGE: Those are all of staff's questions.
15	CHAIRMAN JABER: Thank you, Mr. Fudge.
16	Commissioners? Okay. Redirect.
17	MR. HUTHER: Thank you, Chairman Jaber.
18	REDIRECT EXAMINATION
19	BY MR. HUTHER:
20	Q Mr. Tucek, you were asked some questions this morning
21	by Mr. Hatch about whether or not ICM was open and verifiable,
22	do you remember that discussion?
23	A Yes, I do.
24	Q And you in response to Mr. Hatch's questions noted
25	that ICM is written in the Delphi programming language,

correct?

A Actually I said it was written with the Delphi Pascal development environment. Pascal is actually the language. The development environment are the tools that you use to write the code. If you go to the Borland website they will tell you that Delphi Pascal is their recommended environment for writing Windows based Pascal applications. Those tools are the editor to modify the code because it will do line numbering and indentation for you to make the code structured and easy to read. It is also the tools you need to compile the length of programs. The development package comes with the library of functions routine that come with the Pascal.

If you also go to the Borland website they talk about Turbo Pascal. It is no longer commercially available. I believe it says the DOS version is available in Europe while supplies last, and this is relevant to ICM's auditability. Because not only do we provide the code in text and PDF form, we wrote the program in a commercially available -- using a commercially available development package, whereas AT&T and MCI in the three states I mentioned used Turbo Pascal. And without that package, and you cannot buy it in the United States, you can't analyze the code.

Q Mr. Tucek, you mentioned that Turbo Pascal is no longer commercially available in the US. I am going to ask my colleague to distribute a document for you to review.

A I have the document.

MR. HATCH: Madam Chairman, I'm going to object. I didn't ask him anything about the software or the programs that were used in all of the program for the ICM. This is an attempt to supplement his testimony.

CHAIRMAN JABER: So your objection would be this didn't come up on cross examination?

MR. HATCH: Beyond the scope of my cross.

MR. HUTHER: It was very much within the scope of Mr. Hatch's cross. He inquired as to the openness and auditability of the ICM cost model. ICM, as Mr. Tucek has testified, is written in the Delphi programming language. Mr. Tucek explained that Delphi is commercially available, and that Turbo Pascal, which the cost model sponsored by AT&T and WorldCom in other state UNE proceedings is no longer commercially available.

CHAIRMAN JABER: Mr. Huther, this is the problem I have with how your witness took liberties and didn't stick to the question. Mr. Hatch's question, and I was listening carefully, related to reading a response from an interrogatory.

I am going to sustain the objection and you need to move on. In going forward with this hearing, please be aware I am listening to every question and every answer and you need to prepare your witnesses to stick to the questions.

MR. HUTHER: I understand, Chairman. I understood

1 that you in asking Mr. Tucek to move on allowed me the liberty 2 to inquire about the differences between Turbo Pascal and 3 Delphi and that's why I raised this. 4 CHAIRMAN JABER: For the questions that were part of 5 cross examination, and this was not a question directly asked 6 at cross examination. BY MR. HUTHER: 7 8 Mr. Tucek, do you recall being asked about Verizon's 0 response to AT&T, MCI, and FDN's third set of interrogatories, 9 10 Ouestion 52? 11 Α Yes. I do. 12 0 To your knowledge, did AT&T, MCI, or FDN seek to 13 compel an additional or more expansive response to Question 52? 14 Α Not to my knowledge. 15 Yesterday and this morning you were asked a series of 0 16 questions about ICM's use of IDLC, do you recall that? 17 Yes. I do. Α 18 Q And I believe Mr. Hatch's questions yesterday 19 pertained to the use of IDLC in modeling UNE-P, do you recall 20 that? 21 I do. 22 And I believe in your response to Mr. Hatch's Q 23 questions you indicated that the ICM does not model IDLC when 24 developing the cost for an unbundled two-wire loop, is that

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correct?

1	A Yes. Mr. Hatch asked me if we used IDLC or UDLC for
2	the two-wire loop, and I told him that we specifically used
3	UDLC for the two-wire loop.
4	Q Why is it that the ICM uses UDLC instead of IDLC?
5	A Well, as I have tried to explain earlier it is not
6	possible to unbundle a loop from an IDLC in a multicarrier
7	environment. Our DLC vendors have acknowledged this, the ALECs
8	have acknowledged this in their data request responses. And
9	actually one of the industry's leaders in designing standards
10	such as GR 303 is still soliciting funding support for research
11	to solve the problems in unbundling a loop from IDLC in a
12	multicarrier environment. And by the way, that industry leader
13	was Bellcore. It is now Telcordia.
14	Q Mr. Tucek, I have circulated a copy of a printout
15	from a Telcordia web page. Do you recognize this document?
16	A Yes. It's a hard composite of a web page that I
17	looked at over this weekend.
18	MR. HATCH: Could we see it before he asks any
19	further questions?
20	MR. HUTHER: I'm sorry, Mr. Hatch, I thought it had
21	been provided to you.
22	MR. HATCH: Go ahead.
23	CHAIRMAN JABER: Go ahead, Mr. Huther.
24	BY MR. HUTHER:
25	Q Could you please explain this document, Mr. Tucek?

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A Well, what this document tells me is that Telcordia, at least in the work plan for 2001, was soliciting industry funding and support to develop GR 303 based solutions for unbundling. So even though, for example, Doctor Ankum has given us some fairly old papers in Exhibit AHA-8, I don't think you can conclude from those papers that the industry is in agreement that it is possible to unbundle IDLC in a multicarrier environment.

- Q And just so the record is clear, Mr. Tucek, when was this web page, this printout downloaded from the web?
  - A This was printed on April 28th, 2002.
- Q You also indicated, Mr. Tucek, in response to counsel's questions, that Verizon's DLC vendors have indicated that issues remain and must be resolved before GR 303 can be unbundled in a multicarrier environment. Do you recall that?
  - A Yes, I do.
- Q Do you recognize the document that is being distributed now, it is a February 19th, 1999 letter from Alcatel?
- MR. HATCH: Madam Chairman, I seriously object to this entire line. These are prepared exhibits that he has had in anticipation. These were not necessarily raised on cross. For example, GR 303 was nowhere in the cross that I did nor any of the other parties to this case that I recall.

CHAIRMAN JABER: The objection, once again,

Mr. Huther --1 2 MR. HATCH: Beyond the scope. CHAIRMAN JABER: -- is beyond the scope of cross 3 4 examination. 5 MR. HUTHER: May I respond? 6 CHAIRMAN JABER: Yes. 7 MR. HUTHER: Mr. Hatch and Mr. Fudge inquired as to 8 why the integrated cost model that was filed here in Florida does not provision IDLC. This explains why Verizon's model 9 10 does not provision IDLC, because it cannot be unbundled in a 11 multicarrier environment. It is directly responsive to the questions that were asked. And maybe I should backup if there 12 is any doubt. 13 BY MR. HUTHER: 14 15 Is GR 303 an integrated digital --Q 16 CHAIRMAN JABER: Wait a second. Mr. Hatch, your objection is overruled. I do recall this line of questioning. 17 18 Go ahead. Mr. Huther. 19 MR. HUTHER: Thank you, Madam Chair. BY MR. HUTHER: 20 Mr. Tucek, do you recognize this document? 21 Q 22 Yes. I do. Α 23 Could you please describe it to the Commission? Q Well, it's a letter from Alcatel who actually 24 Α 25 manufactures the DSE Litespan which is the DLC that we included

1	in the model. It's to a Mr. Mike Nawrocki. Nawrocki is
2	spelled N-A-W-R-O-C-K-I. The relevant information on this
3	letter is Attachment A. Attachment A in the last paragraph
4	of the letter it says, "However, operating GR 303 in a
5	multicarrier and multi-VIG" VIG is virtual interface
6	group "environment introduces a number of significant
7	additional challenges to the industry that still must be
8	solved. These are summarized in Attachment A." Now, I'm not
9.	going to go through all of these, but I will tell you this,
10	that I actually spoke to Mr. Nawrocki about this and he offered
11	this letter to me to help me understand some of the problems.
12	And he said, "Well, this is a little data, but nothing has
13	changed." He is very active in trying to implement new
14	technology in Verizon. The one thing that I will comment on
15	here is
16	CHAIRMAN JABER: What question would you be
17	answering, Mr. Tucek, before you comment on anything?
18	THE WITNESS: I thought I was asked to explain the
19	document.
20	MR. HUTHER: That is correct.
21	CHAIRMAN JABER: Go ahead. And your comment will go
22	to explaining the document.
23	THE WITNESS: Yes, ma'am.
24	CHAIRMAN JABER: Okay.
25	THE WITNESS: Just to give you an idea of one of the

problems. At the very first bullet it says Litespan systems supports 1X.25 communications channels, X.25 is a communication protocol. At one time in my life I understood it. But what they are saying is that in order to talk to the remote terminal or DLC there is only one communications path and that presents a number of problems. One of the problems is that means the other switches which would belong to the other carriers must communicate with Verizon's switch. So their operating systems need to be compatible.

Another problem is that Verizon's switch or OSS needs to maintain a database of all of the number assignments in the remote terminal and needs to get that information from the ALECs, and they also need to maintain that themselves. So their operating systems need to be compatible. I think a big problem is also that alarm information, if there is some trouble in the RT, if subscribers are having problems can only go to one --

CHAIRMAN JABER: I'm sorry, where are you now on the document?

THE WITNESS: Oh, this all stems from the fact that there is only one communications channel.

CHAIRMAN JABER: Let's not deviate from just laying the foundation for this document. Stick to explaining what is on the document.

THE WITNESS: Well, actually it's the fourth bullet

No, the fifth bullet down, second from the bottom. Multiple carriers owning VIGs cannot monitor system alarms, okay. The alarm information goes to one network operating center, and these are people who sit at terminals all day and if an alarm comes up they try to restore service so that a subscriber doesn't even know they had the problem. They don't know if the problem is going to be in the RT, the Verizon switch, or the other switches. There has to be systems developed for these folks to communicate. That is a costly time-consuming process just to develop those systems.

The whole point of this is just to kind of reiterate, and you may already have it established beyond a shadow of a doubt with the ALEC's response, is that there are problems involved in the industry that an engineer can draw a box, a switch on a white board and connect them and say I can get the signal there, but it doesn't mean it is technically feasible if you can't present an entire solution to all the problems. And I will stop my answer there.

- Q Mr. Tucek, can I direct your attention to the second paragraph of the first page of this document, the paragraph beginning, "Alcatel has taken a lead"?
  - A Yes, I see it.

Q On the fifth line down a sentence begins, "This means that Litespan 2000 can be physically connected up to four Bell Atlantic switches." Do you see that?

Yes. I do. Α

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0 Is what is being described in that sentence referred to as multihosting?

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Yes, it is. Distinguished from multicarrier. because what the ILECs want is they want it to be available to their switches and their locations, they are the other carriers in the multicarrier. This is multihosting. It assume it works if there is only one carrier because you don't have any security problems, you only need to send the alarms to one network operations center because it is your network operations center. So multicarrier and multihosting are two different things.

And I have seen people confuse them in answering questions during conversation. I have seen Doctor Ankum's transcripts in the deposition where he has been asked about multicarrier and I believe he has answered with respect to multihosting.

0 Mr. Tucek, although this letter was dated February 19th, 1999, to your knowledge have the challenges summarized in Attachment A to the letter been resolved?

No, not to my knowledge. And as I indicated, Mr. Nawrocki volunteered that on his own. We talked to him about the letter.

MR. HATCH: Objection, hearsay.

THE WITNESS: And I --

CHAIRMAN JABER: Excuse me. 1 2 THE WITNESS: I'm sorry, ma'am. 3 CHAIRMAN JABER: The objection is hearsay. Now, the 4 question, Mr. Huther, before you respond to the objection was 5 to the best of your knowledge have these concerns been 6 resolved. That was the only question, so respond to the 7 objection and then address my concern. 8 MR. HUTHER: I believe Mr. Tucek's response or answer 9 was directly responsive to my question. Have the challenges 10 been resolved, and Mr. Tucek is explaining to the Commission in 11 response to my question. 12 CHAIRMAN JABER: So that calls for a yes or no answer 13 and now you have the objection of hearsay. 14 MR. HUTHER: All right. And I am curious to 15 understand what is hearsay about it. Mr. Hatch. He is 16 explaining a conversation that he has had with the author of 17 this letter or the recipient of this letter. 18 MR. HATCH: He is reciting the author of the letter 19 as an out-of-court statement moved to prove the truth of the 20 matter asserted. That is the definition of hearsay. 21 22

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MR. HUTHER: It is separate and apart from what I asked him. I asked if the answer has been resolved, and he said to his knowledge no. And he is communicating -- he is describing his understanding not to prove the truth of the matter asserted in this document or that the matters have been

1	resolved or that they haven't. He is communicating his own
2	conversation.
3	CHAIRMAN JABER: I am going to sustain the objection
4	as hearsay, and I would note the question did call for a yes or
5	no answer. Mr. Huther, ask your next question.
6	MR. HUTHER: I would like to have marked as a hearing
7	exhibit the Telcordia Technologies web page, the first document
8	that was distributed. And I believe we are up to I believe
9	Mr. Hatch had Exhibit 53, is that correct?
10	CHAIRMAN JABER: Yes. We are on Exhibit 54. Let me
11	get a short title from you. It is the Telcordia Technologies
12	web page?
13	MR. HUTHER: Yes, that is correct. And I would also
14	ask to have marked the Alcatel letter as Hearing Exhibit 55.
15	CHAIRMAN JABER: Okay. Alcatel, February 19th, '99
16	letter is Exhibit 55.
17	(Exhibit 54 and 55 marked for identification.)
18	BY MR. HUTHER:
19	Q One last question with respect to Alcatel.
20	Mr. Tucek, does Alcatel provide DLCs to Verizon?
21	A Yes, they do.
22	Q And are they accounted for in the ICM-Florida?
23	A Yes, they are.
24	MR. HUTHER: Those are all the questions I have.
25	Thank you.

1	CHAIRMAN JABER: Thank you, Mr. Huther. Let's go
2	back to exhibits, Verizon.
3	MR. HATCH: Madam Chair, I have one recross.
4	CHAIRMAN JABER: We don't do recross under this
5	Chairmanship's time. No recross.
6	Verizon, we have got Composite Exhibit 49, we have
7	got Exhibit 50, Composite Exhibit 51, Exhibit 52, Exhibit 54,
8	and 55. Those are yours.
9	MR. HUTHER: Yes, and I would move their admission.
10	CHAIRMAN JABER: Okay.
11	MR. HATCH: AT&T, MCI, FDN would move 53.
12	CHAIRMAN JABER: Okay. Hang on a second. Exhibit 49
13	is admitted into the record, Exhibit 50, 51, 52, 54, and 55.
14	And, Mr. Hatch, you have got Exhibit 53. Without
15	objection, Exhibit 53 is admitted into the record.
16	(Exhibits 49 through 55 admitted into the record.)
17	CHAIRMAN JABER: Mr. Tucek, thank you for your
18	testimony.
19	THE WITNESS: Thank you, Madam Chairman.
20	CHAIRMAN JABER: I would note our next witness is
21	Verizon Messrs. Richter and Dye. It looks like they are a
22	panel?
23	MS. TROY: Yes, that is correct.
24	CHAIRMAN JABER: And it is my understanding that you
25	all did propose a stipulation with respect to their testimony,

1	but there are some cross examination questions, is that
2	correct?
3	MS. TROY: Yes, that is correct.
4	CHAIRMAN JABER: Is that still the case before we
5	move forward?
6	MR. HATCH: Yes, Madam Chairman.
7	CHAIRMAN JABER: Okay. Call your next witnesses.
8	MS. TROY: Verizon calls Mr. Richter and Mr. Dye.
9	MR. FONS: Madam Chairman, would this be a convenient
LO	time revisit the Verizon/CLEC proposed stipulation?
l1	CHAIRMAN JABER: Sure. Mr. Fons, I knew you were
L2	here for a reason. Yes.
L3	MR. FONS: Thank you. If you will recall yesterday
L4	Sprint raised an issue with regard to a proposed stipulation
L5	between Verizon and the CLECs regarding the banding
L6	methodology, and Sprint raised the concern about a standard
L7	methodology or a uniform methodology for all the ILECs to use.
L8	It appears after yesterday's discussion that Sprint
L9	may stand alone in its position that there should be a
20	standard, a uniform methodology with regard to the pricing,
21	costing, and well, the pricing and costing of UNEs here in
22	Florida. We are not going to back away from our position, but
23	we would like to propose a solution to where we are as a result
24	of our statements yesterday.

While we reserve the right to continue to argue our

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position that the methodology should be uniform, Sprint Florida will not stand in the way of the parties and the Commission proceeding forward with the proposed stipulation between Verizon and the CLECs on the banding methodology to be used. Sprint Florida is not convinced that that stipulation is complete at this point in time, we don't see that it provides anything in particular about the banding, but we understand from conversations that there is something in mind, but it has not been fleshed out.

Sprint Florida would propose that once Verizon and the ALECs have fleshed out this banding methodology that Sprint Florida will attempt to enter into a stipulation with the ALECs in its proceeding using a similar banding methodology, whatever that is, the current banding methodology that Sprint Florida has proposed, or some other banding methodology. And then if the parties can reach a stipulation that Sprint Florida and the parties will present it to the Commission sometime before the staff has to provide its recommendation to the Commission. And then we would ask that the Commission vote upon that proposed stipulation at a convenient time, most likely the agenda conference.

CHAIRMAN JABER: Mr. Fons, thank you for stating your new position.

Verizon, any response?

MS. CASWELL: Just briefly. If I understand Mr.

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Fons' remarks correctly he has withdrawn Sprint's objections to the stipulation we have here and this stipulation resolves Issue 2B in total and partially Issue 2A. I think all the parties agreed to the stipulation, and I think staff is okay with it, and it is probably ripe for a vote at the Commission's discretion.

CHAIRMAN JABER: Well, let me make sure because what I heard staff say yesterday was that you haven't had time to evaluate the effect. And certainly I don't want to pressure staff into a recommendation. And, frankly, I don't feel like I have everything I need to take a vote, Commissioners, so although I appreciate Mr. Fons' clarification today for the record and his reservation of the opportunity to stipulate further among the parties, which is always something we appreciate, I don't see necessarily a reason to vote today. But, you know, if you have different thoughts, please feel free to share them with us.

COMMISSIONER DEASON: I agree, Madam Chairman. I'm interested in having staff do further analysis and make a recommendation, so I don't think it is necessary to vote on it today.

COMMISSIONER PALECKI: Madam Chairman, I believe that I agree, as well, but I would like to at least ask staff if they do have an opinion and if they are able to give us a recommendation today.

CHAIRMAN JABER: Absolutely. 1 2 COMMISSIONER PALECKI: Especially because it might 3 avoid some additional cross examination. 4 MR. FUDGE: Staff does not have a position at this 5 time, but we believe that the witnesses to this issue have 6 already testified and, therefore, the need to obviate further 7 cross examination will not be necessary. 8 COMMISSIONER PALECKI: Thank you. 9 MS. CASWELL: Madam Chair, just to get a 10 clarification. Would it be the case that staff will issue its 11 recommendation as usual on this issue or will it issue some 12 recommendation before that on the stipulation itself so that we 13 wouldn't even brief it? 14 CHAIRMAN JABER: I see. There may be some 15 efficiencies gained in having a separate recommendation prior 16 to when your briefs are filed. 17 MS. CASWELL: Okay. 18 CHAIRMAN JABER: When are your briefs due? 19 MS. CASWELL: June 15th or so. We have awhile. 20 CHAIRMAN JABER: We will be taking some breaks, so 21 why don't I allow all the parties to discuss that further. We 22 don't have to decide that right now, either, Ms. Caswell. 23 Go ahead, Ms. McNulty. 24 MS. McNULTY: I actually believe the briefs are due 25 the day after Memorial Day which is still in May. And I'm not

1	sure how many agenda conferences there are before that.
2	CHAIRMAN JABER: Okay. Let's work those details out
3	during the break, let you all talk about it some more.
4	MR. FONS: Commissioner Jaber, one other point and
5	that is if we can't reach a stipulation with the parties in ou
6	proceeding, that we will proceed with the positions that have
7	been stated in our testimony and in our prehearing statement
8	and it will be addressed in our briefs. And that we will stil
9	reserve the right to continue to argue uniform methodology.
10	CHAIRMAN JABER: Okay. Thank you, Mr. Fons.
11	MR. FONS: And may I be excused?
12	CHAIRMAN JABER: You may be excused. Are you serious
13	this time? All right. Let's go forward with the panelists.
14	Thank you, Mr. Fons, for clarifying your position as
15	of today. Were these witnesses sworn?
16	MS. TROY: Yes, they were.
17	
18	LARRY RICHTER AND TERRY DYE
19	were called as witnesses on behalf of Verizon Florida, Inc.,
20	and, having been duly sworn, testified as follows:
21	DIRECT EXAMINATION
22	BY MS. TROY:
23	Q Okay. Mr. Richter, let's begin with you. Would you
24	please state your name and address for the record.
25	A (By Witness Richter) My name is Larry Richter, I work

1	lat 600 Hid	dden Ridge, Irving, Texas.
2		
	Q	And how are you employed and in what capacity?
3	A	I am employed by Verizon. I am in the capacity of
4	Senior Sta	aff Consultant Witness.
5	Q	Mr. Richter, did you cause to be filed direct
6	testimony	in this proceeding consisting of 40 pages?
7	Α	Yes, ma'am.
8	Q	And was this testimony prepared by you or under your
9	direction	and control?
10	Α	Yes, ma'am.
11	Q	Are there any changes that you would like to make to
12	your direc	ct testimony?
13	Α	No, ma'am.
14	Q	If I were to ask you the questions contained in your
15	prefiled o	direct testimony, would your answers be the same?
16	A	Yes, they would.
17		MS. TROY: Madam Chair, I would ask that Mr.
18	Richter's	prefiled direct testimony be inserted into the record
19	as though	read.
20		CHAIRMAN JABER: The prefiled direct testimony of
21	Larry Rick	nter shall be inserted into the record as though read.
22	BY MS. TRO	DY:
23	Q	And, Mr. Richter, are you also sponsoring Verizon's
24	nonrecurr	ing cost study?
25		Yes ma'am

1	MS. TROY: And I would note that this cost study is
2	confidential. I would like to have Verizon's confidential
3	nonrecurring cost study marked for identification. I believe
4	it is Hearing Exhibit 56.
5	CHAIRMAN JABER: The nonrecurring cost study, which
6	is a confidential exhibit, shall be identified as Exhibit 56.
7	(Exhibit 56 marked for identification.)
8	BY MS. TROY:
9	Q Mr. Richter, did you also cause to be filed
10	surrebuttal testimony consisting of 34 pages?
11	A Yes, ma'am.
12	Q And was this testimony prepared by you or under your
13	direction and control?
14	A Yes, ma'am.
15	Q And are there any changes that you would like to make
16	to your surrebuttal testimony?
17	A No, ma'am.
18	Q If I were to ask you the questions contained in your
19	prefiled surrebuttal testimony, would your answers be the same?
20	A Yes, ma'am.
21	MS. TROY: Madam Chair, may I have Mr. Richter's
22	prefiled surrebuttal testimony inserted into the record as
23	though read.
24	CHAIRMAN JABER: The prefiled surrebuttal testimony
25	of Larry Richter shall be inserted into the record ars though

1 read.

MS. TROY: And I would note that there are no exhibits associated with Mr. Richter's surrebuttal testimony.

1		DIRECT TESTIMONY OF LARRY RICHTER
2		I. INTRODUCTION
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4	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
5	A.	My name is Larry Richter, and my business address is 600 Hidden
6		Ridge, Irving, Texas.
7		
8	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
9	A.	I am employed by Verizon Services Group as Consultant – Witness. I
10		am testifying here on behalf of Verizon Florida, Inc. (Verizon).
11		
12	Q.	WHAT ARE YOUR RESPONSIBILITIES IN THIS CAPACITY?
13	A.	I have the witness responsibility for supporting Verizon's non-recurring
14		wholesale, retail and access cost studies for all states in which the
15		former GTE operated. In this role, I work directly with the costing
16		group who prepares the cost study for filing.
17		
18	Q.	WHAT IS YOUR EDUCATIONAL BACKGROUND AND
19		EXPERIENCE IN TELECOMMUNICATIONS?
20	A.	I received a Bachelors Degree in Business Administration from
21		Northwood University, in Cedar Hill, Texas in 1995. I have been
22		employed by Verizon for over 32 years. I joined General Telephone
23		Company of California in 1968 working in the Outside Plant
24		Installation, Repair, and Maintenance Department. I transferred to
25		General Telephone Company of Southwest in 1973 and remained in

the same type job capacity. In 1975, I was promoted to management, where I was primarily associated with Network Operations in varying capacities, each with increasing responsibilities. These positions included First Line Supervisor, Area Support, and Service and Facilities Management. In 1987, I became manager of the DART (Dispatch, Assignment, Repair, and Test) Center for one of the largest service centers in Texas. In 1988, I accepted a position in the Finance group, providing Business Analysis, Service Results, and Budget creation and tracking for Network Operations and Engineering and Construction work groups. In 1996, I moved to a different Finance position, responsible for Capital Budget creation and tracking for the Company's Texas/New Mexico Region. In 1998, I accepted a position at GTE Service Corporation in the costing group responsible for cost study development for retail, wholesale, access, and collocation services. In 2000, I assumed the position of Staff Manager - Service Costs, with primary responsibility for testifying before state commissions in support of Verizon's cost studies.

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## Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE PUBLIC UTILITY COMMISSIONS?

21 A. Yes. I have testified before the California, Washington, Illinois, North 22 Carolina, Michigan, Ohio, and Hawaii public utilities commissions.

23

#### 24 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

25 A. I will present Verizon's study of the non-recurring costs caused by

1 Competitive Local Exchange Carriers (CLECs) when they order 2 unbundled network elements (UNEs) from Verizon. I discuss the 3 processes necessary to order, provision, and connect CLEC orders.

#### Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes. I am sponsoring Verizon's Non-Recurring Study. This study provides Verizon's detailed costs for processing UNE orders for CLECs. Mr. Bert Steele addresses Verizon's proposed non recurring rates in his testimony, while I address the underlying costs.

#### II. WHOLESALE COSTS IN SUPPORT OF NON-RECURRING CHARGES

Α.

#### Q. WHAT COSTS SUPPORT NON-RECURRING CHARGES?

Costs that support non-recurring charges are those incurred in processing and provisioning CLEC requests. For example, when a CLEC orders a two-wire loop, it pays for the cost of the loop through a monthly recurring charge (MRC). This MRC, however, does not reflect the costs an Incumbent Local Exchange Carrier (ILEC) incurs in processing and provisioning the CLEC's request--for example, the labor costs associated with Verizon's customer service representatives and the field technician who makes electrical connections. These costs are captured separately from the MRC and recovered through non-recurring charges (NRC).

1	Q.	PLEASE	PROVIDE	Α	SPECIFIC	EXAMPLE	OF	HOW	NON
2		RECURRI	ING COSTS	AR	E INCURRE	D.			

A. Assume a CLEC operating in Florida wants to order a two-wire loop. If the CLEC submits its order electronically, it will be delivered to one of Verizon's National Market Centers (NMCs). A Verizon customer service representative – who works exclusively on wholesale and UNE orders - will determine the complexity of the order, as different types of orders require different types of activities that create different costs. Generally, the more complex the order, the greater the costs.

Returning to our example, let's assume the CLEC's two-wire loop order (1) is a new order, (2) does not require any network design or engineering activities, (3) can be provisioned using standard network components maintained in inventory, and (4) does not require any special instructions for switch translation or routing. After evaluating the order, the customer service representative will designate the two-wire loop example used here as an "Exchange-Basic" order, which is the simplest type of UNE cost category. (As I discuss later in my testimony, Verizon places each UNE order into one of four categories: (1) Exchange – Basic; (2) Exchange – Complex; (3) Special / Advanced – Basic; and (4) Special / Advanced – Complex. Each of these categories has a distinct provisioning process and associated non-recurring costs.)

The order will flow through various Verizon work groups for

provisioning, including Verizon's Assignment Provisioning Centers (APCs), Business Response Provisioning Centers (BRPCs), Central Office (CO) Technicians, Field Technicians, and other specialized groups. As Mr. Steele explains, the CLEC that initiated this order will be charged the NRC to cover the costs incurred by these work groups.

In summary, when a CLEC places an order for a UNE, Verizon incurs non-recurring costs to provide the UNE. These non-recurring costs reflect the ordering, provisioning, and related activities required to process the CLEC's order and put that UNE in service. The monthly recurring and non-recurring costs are separate costs and reflect different investments and expenses.

# Q. HOW DID VERIZON CALCULATE ITS COSTS THAT ARE RECOVERED BY NON-RECURRING CHARGES FOR UNE ORDERING?

A. Verizon calculated its ordering costs in two steps. First, Verizon identified the activities that are incurred when a CLEC places an order. Verizon determined these costs by studying each activity needed to fulfill a particular CLEC request. Returning to the example above -- an order for a two-wire loop -- to calculate the appropriate variable costs, Verizon studied the time it takes for a NMC representative to (1) access the order, (2) review it, and (3) apply all the appropriate MRCs and NRCs and (4) complete the order into Verizon's ordering system. The studies for the Exchange-Basic loop are based on a sampling of

observations of actual customer service representative activities. (This sampling technique produces a statistical confidence level of +/- 5%). Verizon developed its costs based on these studies, and based on the actual loaded labor rate (LLR) in effect for the NMC which handles Florida orders. Again, different categories of UNEs have different non-recurring costs – generally, the more complex the order, the greater the non-recurring costs. The assignment of costs to the appropriate category of UNE is based on established principles of cost causation and ensures that CLECs bear the costs they cause.

Second, Verizon developed separate non-recurring costs to capture the significant costs incurred in fulfilling and provisioning CLEC orders. These include the cost of the computers used by the customer service representatives and the cost of the land and buildings for the NMCs, where the orders are sent to be processed. Verizon calls these the "NMC Shared/Fixed Costs," which total \$18.49 million per year for all of Verizon-West. (Verizon-West refers to the former GTE territory prior to the BA/GTE merger) The support for these costs is set forth in Verizon's Non-Recurring study. Verizon witness Steele explains how Verizon proposes to recover the NMC shared/fixed costs; my testimony supports the total annual shared/fixed cost of \$18.499 million.

Q. HOW DID VERIZON CALCULATE ASSIGNMENT PROVISIONING
CENTER (APC) AND BUSINESS RESPONSE PROVISIONING

CENTER	(BRPC)	COSTS?
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Verizon's cost team documented the provisioning process flows for the APC and BRPC. The cost team then utilized various work center reports to establish the hours expended for each activity required to provision each type of order, and the volume of activities handled for the hours expended. This information produced a time per activity calculation. The activity times were multiplied by the LLR for the APC and BRPC personnel to develop the costs. As I mentioned earlier, there are four basic categories of UNEs.

A.

Α.

## Q. HOW DID VERIZON CALCULATE CENTRAL OFFICE (CO) AND FIELD TECHNICIAN COSTS?

Verizon's cost team documented the installation process flows for the central office and outside plant activities. The cost team then utilized time and motion studies, system reports, order volumes, workgroup hours and Subject Matter Expert (SME) estimates to establish the hours expended for each activity required to install each type of order. The activity times were multiplied by the LLR for the central office and field personnel to develop the costs. These costs are grouped into the four basic categories of UNEs.

#### III. COST STUDY OVERVIEW

Q. WHAT COST MODEL PRINCIPLES DID VERIZON EMPLOY IN COMPLETING ITS COST STUDIES?

1	A.	Verizon's cost studies are based on long-run cost principles. The long-
2		run cost of a service is the amount by which a company's total costs
3		will increase as a result of offering that service. Long run refers to a
4		situation where capital and labor costs expected to be incurred by
5		Verizon are captured, to the extent possible, in the cost study.
6		Verizon's non-recurring cost methodology is:
7		(1) forward-looking;
8		(2) least-cost, based on planned systems and process
9		enhancements and corresponding efficiencies;
10		(3) long-run;
11		(4) based on incremental costs; and
12		(5) consistent with the principles of cost causation.
13		
14		In addition, as Messrs. Trimble and Steele explain, Verizon's cost
15		studies comply with the FCC's total element long-run incremental cost
16		(TELRIC) methodology, even though Verizon has never agreed with
17		this approach, and even though it has now been invalidated by the
18		Eighth Circuit Court. Verizon reserves the right to revise its cost
19		studies to the extent necessary when the issue of appropriate cost
20		methodology is finally settled at the federal level.
21		
22	Q.	WHAT ACTIVITIES ARE ADDRESSED IN THE COST STUDY?
23	A.	The activities are pre-ordering, ordering, provisioning and field work
24		necessary to provide UNEs and resold services to CLECs. They are
25		more fully described in Verizon's cost study.

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2	Q.	HOW	<b>WERE THE</b>	<b>ACTIVITIES</b>	TO BE	<b>STUDIED</b>	<b>DETERMINED?</b>
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A. As explained in our cost study, the activities to be studied were determined based on a work flow analysis that organized all of the work activities, by work group, performed to satisfy a CLEC's request for service.

# 8 Q. DOES VERIZON'S COST STUDY REFLECT THE 9 IMPLEMENTATION OF ELECTRONIC GATEWAYS FOR LSR 10 PROCESSING?

A. Yes. Verizon's operating support systems (OSS) solutions are industry-standard and in full compliance with the Act in providing non-discriminatory access to OSS functionalities. The Verizon CLEC Support Website (<a href="http://www.wwwclecsupport.com">http://www.wwwclecsupport.com</a>) provides information on Verizon-West's Secure Integrated Gateway System (SIGS) and Wholesale Internet Service Engine (WISE). CLECs can input LSRs directly into SIGs through a mechanized ordering system at their location or (if they do not have their own ordering systems) through WISE via the Internet, which transmits LSRs into SIGs.

## Q. DOES VERIZON'S NON-RECURRING COST STUDY SEPARATE MANUAL AND ELECTRONIC COSTS FOR ORDER RECEIPT?

23 A. Yes. Verizon identified the costs for orders received both manually and electronically since CLECs may submit orders by either option.

Α.

# Q. DOES THE STUDY REFLECT ENHANCEMENTS THAT WILL AFFECT SYSTEMS AND PROCESSES IN A FORWARD-LOOKING ENVIRONMENT?

Yes. Verizon's study accommodates the various ordering processes. It includes costs based upon manual LSR receipt, which apply when the CLEC does not utilize one of the mechanized options available. The time for handling the manual requests is in addition to the semi-mechanized processing time. Manual costs are only incurred when the CLEC is unwilling or unable to utilize a mechanized option to transmit LSRs to the NMC. In addition, Verizon's ordering process reflects adjustments for flow-through and expected efficiency gains, which are applicable to both the manual and semi-mechanized ordering processes.

To date, Verizon has provided CLECs with the ability to query in an electronic format all information necessary to process a pre-order request, as well as to receive from Verizon any responses, error messages, or selection information necessary to complete each request. Through WISE, the CLECs have the ability to pre-qualify loops that can support DSL service. This is accomplished through an internet solution that conforms with the Ordering and Billing Forum (OBF) standards and includes information on bridged tap location (length and quantity), the presence of load coils, loop length, the presence of pair gain devices and additional miscellaneous

information.

Verizon utilizes SIGS, the ordering interface, to access data from the Verizon ordering system or to transmit orders electronically for processing. Today, approximately 40% of UNE Exchange-Basic orders are mechanically generated without human intervention in response to electronic orders received from the CLEC. This is otherwise known as simple order flow through. Verizon has projected that UNEs will achieve the same level of flow through in the semi-mechanized environment. Verizon has also projected productivity improvements of 15% in the NMC due to planned projects to enhance OSS functionalities. The costs for the NMC personnel have been adjusted to reflect these enhancements.

# 15 Q. WOULD IT BE APPROPRIATE FOR VERIZON TO PERFORM A 16 STUDY IN WHICH ALL ORDERS ARE ELECTRONICALLY 17 PROVISIONED?

Α. No. Verizon's non-recurring cost study does not assume that all provisioning will be electronic because neither Verizon nor any other ILEC have systems that can provide 100% automatic processing end-to-end for all telecommunications requests. Nor is there any evidence that this will change. While many basic ordering functions can be processed mechanically, certain activities for all types of orders will remain manual because mechanization costs for every activity would create a situation where costs for mechanization exceed manual labor 

		•
1		savings.
2		
3		IV. TYPES OF UNE ORDERS
4		
5	Q.	PLEASE DESCRIBE THE UNE ORDER TYPES.
6	A.	There are five UNE order types processed through LSRs. Following
7		are descriptions of each UNE order type:
8		New - A New order for local wholesale UNE establishes a UNE or
9		combination for the first time or adds additional lines or telephone
10		numbers at an existing CLEC customer's location.
11		Change - A Change order applies when the CLEC requests
12		changes in central office switch features for an existing local
13		wholesale UNE; this can be either a "Change feature" or a
14		"Change Switch Feature Group" type order. A Change order also
15		applies when the CLEC requests a change in Central Office
16		Connection (the cross-connect between the CLEC's cage terminal
17		block and Verizon's terminal block(s) on the Main Distribution
18		Frame (MDF)) or changes in the field related to subloop element.
19		Disconnect - A Disconnect order for local wholesale UNE applies
20		when the CLEC requests that all or a portion of a local wholesale
21		UNE or combination be removed.
22		Record – A Record order applies when the CLEC changes existing
23		records without changing the UNE itself. An example of a record
24		order is a change of the billing address.
25		Migration - A Migration order applies when the CLEC requests

1		conversion of an existing UNE combination: Retail to UNE-P and
2		Resale to UNE-P. When the service is migrated from retail or
3		Resale to the UNE-P, Verizon must change the switch translations
4		to measured service.
5		• Migration as Is - A Migration as Is order applies when the
6		existing end user changes service from Verizon to a CLEC, or
7		from a CLEC to another CLEC, and the end user keeps the
8		same service. This type of order requires only the ordering
9		function and APC - activity; it does not require central office or
10		field installation activities. "Migration as Is" is applicable to
11		Exchange Basic and Exchange Complex products.
12		• Migration as Is +/ A Migration as Is +/- order type applies
13		when the end-user asks to add or delete a vertical feature from
14		his existing service, thus requiring the central office switch to be
15		updated for the requested feature change.
16		• Migration as Specified – A Migration as Specified order occurs
17		when the end user converts an existing Verizon retail service
18		(at a single location) or another provider's service to UNEs
19		provided by a different CLEC. The CLEC specifies the UNE or
20		UNE combinations to be migrated.
21		
22		V. UNE COSTS THAT SUPPORT NRCS
23		
24	Q.	PLEASE DESCRIBE COST CATEGORIES OF UNE ORDERS.
25	Α.	Verizon employs a process approach, rather than a product basis

approach, for developing non-recurring costs. As I noted, there are four categories of UNE orders: (1) Exchange – Basic; (2) Exchange – Complex; (3) Special / Advanced – Basic; and (4) Special / Advanced – Complex. Each of these categories has a distinct provisioning process and associated non-recurring costs. For each category, Verizon has identified costs and associated activities required to preorder, order, provision and update records for the UNEs. This approach allows Verizon to apply costs for any UNE request based upon the workflow of one of the four categories. In this way, Verizon is able to develop costs by mapping the product to the applicable process to determine the costs, rather than incurring the time and administrative expense to develop costs on a UNE-by-UNE basis.

Whether a UNE fits within an Exchange or Special/Advanced category depends on whether or not a UNE requires design and/or engineering. The Exchange category does not require design or engineering. The Special/Advanced category requires design and/or engineering work based on variables specific to the order placed by the CLEC.

A Basic or Complex category designation will also apply to each order. Basic requests can be provisioned using standard network components maintained in inventory without specialized instructions for switch translations, routing, and service arrangements. Complex requests require special instructions for the provisioning of the UNE to meet the customer's needs. The additional time associated with these

1 requirements drives the costs for these requests.

## 3 Q. ARE COSTS DEVELOPED FOR OTHER CLEC REQUESTS OR 4 REQUIREMENTS?

- 5 A. Yes. Due to additional activities that may be required to fulfill CLEC requests, Verizon has developed costs for the following services:
  - (1) CLEC Account Establishment Verizon establishes the CLEC account in each state billing system in which that CLEC orders UNEs. The NMC receives the CLEC account profile from the CLEC's account manager, reviews it for completeness and then enters the CLEC profile information and creates summary bill masters in Verizon-West's National Order Collection Vehicle (NOCV), which is Verizon-West's order processing system. Once the CLEC account has been established for a state, the CLEC may submit a local service request ("LSR") for processing;
    - (2) Coordinated Conversion A coordinated conversion may be requested by the CLEC if it wants to establish a specific appointment for the completion of the service order, and wants Verizon to contact it for authorization to proceed prior to beginning work, as well as after work is complete. This service includes only the additional costs caused by Coordinated Conversion and is in addition to the cost of the underlying LSR;
    - (3) Hot Cut Coordinated Conversion This service is the coordinated conversion mentioned above with the added feature that the CLEC, the Verizon coordinator and the Verizon technicians remain

on a conference call for the duration of the service order completion process. Each step of the process is completed sequentially following authorization from the CLEC. Since there is no way for Verizon to estimate or control the amount of time required for a Hot Cut Coordinated Conversion, the cost developed is for a conversion lasting up to one hour. Additional costs will be incurred for each quarter hour thereafter at Verizon's loaded labor rates for the Verizon employees involved;

(4) Expedite – An Expedite refers to a request by a CLEC to advance the completion of the LSR earlier than the next standard due date that is normally available. Instead of relying on the automated system for work scheduling, an Expedite requires a manual appointment-setting process in which NMC personnel must contact the Division Resource Management group to determine if the earlier completion interval is feasible. In addition to the costs shown in this study, overtime charges may apply if the work is done outside of the normal installation work time periods, or if other work is moved outside of the normal installation work time periods to accommodate the CLEC's expedite request.

#### VI. COSTS FOR DARK FIBER

## Q. WHAT COSTS DOES VERIZON INCUR FOR PROCESSING CLEC REQUESTS FOR DARK FIBER?

25 A. As Verizon's cost study reflects, it will incur costs for pre-ordering,

1		ordering, provisioning, central office and field installation activities
2		associated with CLEC dark fiber requests.
3		
4	Q.	PLEASE DESCRIBE THE PRE-ORDERING ACTIVITIES FOR DARK
5		FIBER.
6	A.	In the pre-ordering stage, Verizon must determine whether dark fiber is
7		available on the specific network segment requested by the CLEC. A
8		CLEC's request for dark fiber will fall into one of four categories,
9		according to the portion of Verizon's network in which the fiber may lie.
10		These categories are 1) inter-office facilities (IOF); 2) unbundled loop;
11		3) sub-loop feeder; and 4) sub-loop distribution.
12		
13		A pre-ordering request is sent via an Access Service Request (ASR)
14		form, which I will discuss in more detail later in my testimony. This
15		form goes through Verizon-West's National Access Contact Center
16		(NACC), which is the single-point of contact for access services in
17		place today in Verizon-West for processing inter-exchange carrier
18		(IXC) requests for interstate and intrastate access, both switched and
19		special. I will describe the functions of the NACC in detail in the
20		ordering section of my testimony.
21		
22		The NACC reviews the pre-ordering request and forwards it to the
23		Access Design and Network Design groups located in Verizon-West's
24		Engineering departments. These groups determine the feasibility and
25		availability of dark fiber for a particular network segment requested by

1	CLEC by accessing inventory records and performing verification
2	eps.

# 4 Q. HOW WERE COSTS DEVELOPED FOR PRE-ORDERING 5 ACTIVITIES COMPLETED BY THE NACC AND ENGINEERING 6 GROUPS?

A. Subject matter experts who have direct experience in these activities in the NACC, Engineering group, and headquarters staff support developed the work times associated with each of the activities performed for pre-ordering dark fiber. The work times were multiplied by the loaded labor rate (LLR) for each work group involved to develop the costs.

Α.

## Q. PLEASE DESCRIBE ORDERING ACTIVITIES ASSOCIATED WITH DARK FIBER REQUESTS.

As previously discussed, the CLEC will place its order for dark fiber through the ASR process. This process is somewhat different from the ordering process I described for other requests. For example, the CLEC would place its order for UNEs by means of a LSR submitted to Verizon-West's NMC. A dark fiber order, however, will be placed through Verizon-West's NACC and be processed as an ASR. The NACC's processes and systems for IXCs are closely aligned with the ones that will be required for processing dark fiber requests. For example, dark fiber orders are generally associated with the CLEC's infrastructure and facilities needed to support their network design for

serving multiple customers, whereas UNE unbundling is associated with the local loop for a CLEC end user.

A.

## Q. PLEASE DESCRIBE THE NACC ORDERING PROCESS FOR DARK FIBER REQUESTS FROM CLECS.

The NACC is located in Durham, North Carolina, and staffed by Service Consultants who interface with customers either manually or electronically, based on how the CLEC submits the Access Service Request ("ASR"). They are the same Service Consultants responsible for processing the IXC ASRs mentioned earlier. The NACC has existed for approximately 20 years in Verizon-West and has a great deal of experience in processing IXC requests for both switched and special access services. Once the NACC receives the ASR, it is checked for completeness and accuracy. The NACC then releases the order into Verizon-West's access order processing system, which routes it to the appropriate provisioning and central office/field installation groups involved with completing Florida orders.

## Q. HOW WERE THE COSTS DEVELOPED FOR ASR ORDERING ACTIVITIES FOR DARK FIBER?

A. Verizon-West, in conjunction with Arthur Andersen LLP, conducted time and motion studies of the activities performed by the Service Consultants in the NACC to establish the work time associated with the various types of orders handled there. Although dark fiber orders *per se* were not studied because the offering did not exist at that time, dark

fiber orders are processed in the same manner as dedicated non-switched transport orders. To derive the costs associated with dark fiber ordering, Verizon has therefore multiplied the work time for the dedicated non-switched transport order by the LLR for the NACC Service Consultants.

## Q. WHAT ARE THE PROVISIONING ACTIVITIES ASSOCIATED WITH DARK FIBER REQUESTS?

A. Dark Fiber ASRs are provisioned through Verizon-West's Business Response Provisioning Centers (BRPCs) located in Ft. Wayne, Indiana and Tampa, Florida. The BRPC has Plant Control Office (PCO) and design/engineering responsibilities for dark fiber UNEs. The BRPC receives the order from the NACC, verifies that the order is entered into the facility administration system, which is called Telecom Business Solutions (TBS), checks for accuracy and completeness, and enters a distribution code into TBS to route the order to the required work groups. The BRPC must access facility records in its inventory database, change the records to identify the network configuration requested by the CLEC, and create updated circuit and design layout reports (CLRs/DLRs).

## Q. HOW WERE COSTS DEVELOPED FOR PROVISIONING ACTIVITIES COMPLETED BY THE BRPC?

A. Cost managers used data from the TBS database to determine the number and type of orders or lines worked by each group in the BRPC.

ł		The BRPC productive nours were used to develop the time per ASR.
2		This work time was multiplied by the loaded labor rate ("LLR") for the
3		BRPC to develop the cost.
4		
5	Q.	PLEASE DISCUSS THE CENTRAL OFFICE AND FIELD WORK
6		ACTIVITIES ASSOCIATED WITH DARK FIBER REQUESTS.
7	A.	As discussed earlier, there are four types of requests processed via
8		the ASR process that CLECs may submit for dark fiber. Following are
9		the activities required for each type:
0		IOF – Requires central office jumper connection and
1		disconnection work, but no fieldwork.
12		<u>Unbundled Loop</u> – Central office jumper connection and
13		disconnection work is required. An outside plant techniciar
14		must be dispatched to complete the physical connection to the
15		CLEC termination point.
16		Subloop Feeder - Central office jumper connection and
17		disconnection work is required. An outside plant techniciar
18		must be dispatched to complete the physical connection to the
19		CLEC termination point.
20		Subloop Distribution - No central office work is required. Ar
21		outside plant technician must be dispatched to complete the
22		physical connection to the CLEC termination point.
23		
24	Q.	HOW WERE THE CENTRAL OFFICE AND FIELDWORK COSTS
25		DEVELOPED FOR DARK FIBER?

1	A.	For central office costs, "jumper-running" studies were conducted to
2		develop the time to install or remove one jumper cable. The time per
3		jumper was multiplied by the central office technician LLR to develop
4		the cost per jumper activity. Costs are based on the number of
5		jumpers required for each of the activities discussed above.
6		
7		Outside plant field work time is based on a "drive time" study that
8		provides the average time to reach the point of interconnection and
9		place a fiber jumper. Costs were calculated by multiplying the time for
10		the outside plant activity by the LLR for the outside plant technician.
11		
12		VII. COSTS FOR SUB-LOOP UNBUNDLING
13		
14	Q.	WHAT TYPES OF COSTS WILL VERIZON INCUR FOR
15		PROCESSING CLEC REQUESTS FOR SUBLOOP UNBUNDLING?
16	A.	Verizon will incur costs for ordering, provisioning, and central office
17		and field installation activities associated with CLEC sub-loop
18		unbundling requests. These costs may be found in Verizon's cos
19		study.
20		
21	Q.	PLEASE DESCRIBE THE ORDERING ACTIVITIES ASSOCIATED
22		WITH SUB-LOOP REQUESTS.
23	A.	Requests for sub-loops are submitted by CLECs to Verizon-West's

NMC by means of the LSR process I described earlier. The NMC

receives the LSR, checks it for accuracy, and applies all applicable

		. $oldsymbol{\epsilon}$
1		NRCs and MRCs. The NMC releases the order into Verizon's order
2		processing system, which then routes it to the appropriate provisioning
3		and central office/field installation groups involved in completing
4		Florida orders.
5		
6	Q.	HOW DID VERIZON DEVELOP THE COSTS ASSOCIATED WITH
7		ORDERING ACTIVITIES FOR SUB-LOOP UNBUNDLING?
8	A.	To determine the costs for sub-loop ordering, Verizon relied upon the
9		exchange-basic ordering process, which is initiated through an LSR.
10		Since the steps that are required to process a request for a sub-loop
11		element are the same as those required to process a request for the
12		exchange-basic element, this ordering process was used as a proxy
13		for sub-loop ordering.
14		
15	Q.	PLEASE DESCRIBE THE PROVISIONING ACTIVITIES
16		ASSOCIATED WITH SUB-LOOP REQUESTS.
17	A.	There are four categories of requests for sub-loops: 1) main
18		distribution frame (MDF) connection; 2) feeder connection; 3)
19		distribution connection; and 4) serving terminal connection (or "loop
20		drop"). These categories correspond to different portions of Verizon's

For each of these requests, Verizon's Assignment Provisioning Center (APC) must access facility records in its inventory database and change the records to identify the network configuration requested by

network that CLECs can request on an unbundled basis.

1 the CLEC.

Α.

## 3 Q. HOW WERE COSTS DEVELOPED FOR PROVISIONING 4 ACTIVITIES COMPLETED BY THE APC?

Verizon tracks activities based on the number of times the APC accesses or "touches" an order to provision it. The costs are based on the number of touches per order. This activity measure, for various order types, was collected by the cost managers from Verizon-West's NOCV system. The total of productive minutes of the APC for order touches is divided by the total number of touches to create the minutes per touch calculation. The cost per touch is calculated by multiplying the minutes per touch by the loaded labor rate for the APC.

Α.

# Q. PLEASE DISCUSS THE CENTRAL OFFICE AND FIELDWORK ACTIVITIES ASSOCIATED WITH SUB-LOOP REQUESTS.

As discussed earlier, there are four types of requests CLECs may submit for sub-loops. Central office and field work activities vary with the type of request. MDF and sub-loop feeder requests require central office jumper connection and disconnection. Sub-loop feeder and distribution requests require an outside plant technician to complete the physical connection to the CLEC facility. Fieldwork will also be required for some MDF requests. Serving terminal connection requests require an outside plant technician dispatch, but no central office work.

1	Q.	HOW WERE THE CENTRAL OFFICE AND FIELDWORK COSTS
2		DEVELOPED FOR SUB-LOOP UNBUNDLING?
3	A.	For central office costs, jumper-running studies were conducted to
4		develop the time to place or remove one jumper. The time per jumper
5		was multiplied by the central office technician's LLR to develop the
6		cost per jumper. Costs are based on the number of jumpers required
7		for each of the categories discussed above.
8		
9		Outside plant fieldwork time was determined by a special sub-loop
10		unbundling drive time and work activity study. Costs were calculated
11		by multiplying the time for the outside plant activity by the LLR for the
12		outside plant technician.
13		
14		VIII. COSTS FOR EELS
15		
16	Q.	WHAT IS AN EEL (EXTENDED ENHANCED LOOP)?
17	A.	An EEL is a combination of dedicated transport, multiplexing (when
18		required) and unbundled loops. An EEL combination allows an IXC
19		with CLEC status to aggregate UNE loops and transport them back to
20		their switch or distant node without having to collocate in a Verizor
21		central office where the loop originates. An ASR is required wher
22		requesting this UNE combination.
23		
24	Q.	WHAT COSTS WILL VERIZON INCUR FOR PROCESSING OF
25		ORDERS SUBMITTED BY CLECS FOR EELS?

1	A.	As shown in the cost study, Verizon will incur costs for ordering,
2		provisioning, central office and field connection activities associated
3		with the EEL request.
4		
5	Q.	HOW DID VERIZON DETERMINE THE ACTIVITIES AND
6		RESULTING NON-RECURRING COSTS ASSOCIATED WITH EEL
7		REQUESTS?
8	A.	EELs are processed in the same manner as dark fiber requests.
9		Therefore, my earlier discussion of activities and cost determination for
10		dark fiber requests applies equally to EEL requests.
11		
12	Q.	WHAT IS AN EEL MIGRATION?
13	A.	An EEL migration is when a CLEC requests that an existing special
14		access circuit be converted to an EEL with UNE rates.
15		
16	Q.	WHAT COSTS WILL VERIZON INCUR FOR PROCESSING OF
17		ORDERS SUBMITTED BY CLECS FOR EEL MIGRATION?
18	A.	As shown in the cost study, Verizon will incur costs for ordering and
19		provisioning activities associated with the requests. In order to
20		process an EEL migration request, a disconnect order is issued on the
21		existing circuit and an install order is issued to put the new rates into
22		effect. The two orders are necessary to remove the current billing and
23		circuit identifiers from the system and create a new billing location and
24		circuit identifier. The provisioning activity is necessary to remove the

previous circuit identifiers and add the new circuit identifiers. Circuit

1		identifiers (numbers) are used to identify circuits, just as telephone
2		numbers are used to identify voice grade service. Because the
3		circuit is already established, no central office or field connections are
4		necessary.
5		
6	Q.	HOW DID VERIZON DETERMINE THE ACTIVITIES AND
7		RESULTING NON-RECURRING COSTS ASSOCIATED WITH
8		MIGRATION TO EEL REQUESTS?
9	A.	EELs are processed in the same manner as dark fiber requests.
10		Therefore, my earlier discussion of activities and cost determination for
11		dark fiber requests applies equally to EEL requests.
12		
13		IX. COSTS FOR UNE-P
14		
15	Q.	WHAT COSTS WILL VERIZON INCUR FOR PROCESSING CLEC
16		REQUESTS FOR UNE-P?
17	A.	Verizon will incur costs for ordering, provisioning, central office and
18		field installation activities. UNE-P is a migration from retail or resale
19		services; as a result, central office or field installation activities are not
20		required.
21		
22	Q.	PLEASE DESCRIBE ORDERING ACTIVITIES ASSOCIATED WITH
23		UNE-P REQUESTS.
24	A.	UNE-P ordering applies when the CLEC requests conversion of
25		existing services, retail or resale, to UNE-P. Conversion orders wil

1		follow the "Resale Migration" process flow described previously in my
2		testimony. The ordering activities are handled by the NMC via the
3		LSR process, as I also described earlier.
4		
5	Q.	HOW WERE COSTS DEVELOPED FOR ORDERING ACTIVITIES
6		ASSOCIATED WITH UNE-P REQUESTS FROM CLECS?
7	A.	Work time studies were conducted during August 1999 in the NMC for
8		resale orders; this process is the same as used for UNE-P requests.
9		The work times were multiplied by the LLR for the NMC to develop the
10		costs.
11		
12	Q.	WHAT ARE THE PROVISIONING ACTIVITIES ASSOCIATED WITH
13		UNE-P REQUESTS?
14	A.	Provisioning activities include facility assignment and switch
15		translations (if required). The APC activities relate to touches required
16		to process a CLEC request.
17		
18	Q.	HOW WERE COSTS DEVELOPED FOR PROVISIONING UNE-P
19		REQUESTS?
20	A.	Verizon developed the minutes per occurrence based on the number
21		of touches in the APC and applied a factor for the probability of
22		occurrence that an order would require provisioning work. Many UNE-
23		P orders can be provisioned mechanically from network components in
24		inventory. For example, a "Migration as Is" requires only one switch
25		translation to convert to minute of use measurement. However, more

complex requests, such as "Migration as Specified" orders, require more manual provisioning due to switch translations, routing instructions, and service arrangements.

The work time per touch was weighted by the probability of occurrence and multiplied by the LLR for the APC to determine the costs associated with each type of migration order.

#### X. COSTS FOR LOOP CONDITIONING

A.

#### 11 Q. WHAT IS LOOP CONDITIONING?

Loop Conditioning is the removal of load coils and/or bridged taps from the local cable pairs. While load coils and bridged taps are an integral part of the copper, voice grade network, they impede the transmission of digital signals. If the CLEC requires copper pairs without load coil(s) or bridged taps(s) for the digital service it offers its customers, then the CLEC has the option of ordering Loop Conditioning from Verizon.

Α.

## Q. WHAT ARE THE ACTIVITIES REQUIRED FOR LOAD COIL AND /OR BRIDGED TAP REMOVAL?

When the CLEC requests a conditioned loop for a customer and the cable pair is loaded or has bridged taps, a request is sent to the local engineering department to analyze the network and draft a work order for the pair(s) to be deloaded or for the bridged tap(s) to be removed. The Engineering group will create a work order that will be sent to the

Outside Plant Construction forces outlining the work necessary to deload the cable pair or remove bridged tap(s). The Outside Plant Construction splicing group will complete the work order and advise the engineering group upon the completion of the activity. The Engineering group will then advise the Verizon NMC the order can be worked. All records are updated showing the change in the conditioning of the pair.

## Q. HOW WERE COSTS DEVELOPED FOR LOOP CONDITIONING ACTIVITIES?

A. Noted below are the steps used for calculating costs for (1) Load Coil removal and (2) Bridged Tap removal. These costs are detailed in Verizon's cost study.

(1) Load Coil Removal – The first criterion used in determining the cost of removal are the footages of aerial/buried and underground cable. This is because the amount of time for load coil removal differs based upon the type of cable. Florida-specific data was used to develop these costs.

The second criterion is the number of load coils to be removed. Load coils are placed on copper voice grade loops based on their distance from the central office using engineering distances for maximum transmission results. Florida-specific inventory of cable length was used to calculate the average number of load coils to be removed.

1
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Based on these two cost criteria, Verizon developed the average time per work order to remove load coils. This time was multiplied by the LLR for a Construction Cable Splicer. These costs are weighted by the ratio of aerial/buried to underground cable, and based on cable footages.

(2) Bridged Tap Removal – the engineering activities for bridged tap removal are the same to determine the number and location of load coils on a cable pair. The Construction Cable Splicer time was developed by SMEs in conjunction with field forces involved in bridged tap removal. Costs for removal are based on single and multiple occurrences.

#### XI. DEDICATED TRANSPORT AND SS7 ACCESS

Q. WHAT COSTS DOES VERIZON INCUR FOR PROCESSING CLEC
REQUESTS FOR DEDICATED TRANSPORT AND SS7 ACCESS
SERVICE?

19 A. Verizon incurs costs for ordering, provisioning, central office and field 20 installation activities associated with CLEC requests for dedicated 21 transport and SS7 access.

#### Q. HOW WERE COSTS DEVELOPED FOR THESE SERVICES?

A. Verizon-West has been provisioning these services for IXCs through the NACC for many years. I previously described the NACC and its processes. Additionally, the BRPC provisioning, the central office jumper work, and the outside plant installation work follow the same processes previously described. Verizon studied the work times associated with the activities for each of these services and developed costs based on the applicable LLRs described earlier for dark fiber. Where certain activities are not required, such as pre-ordering for dark fiber, these costs are not included.

#### XI. HOUSE AND RISER

#### 11 Q. PLEASE DESCRIBE HOUSE AND RISER.

12 A. House and riser cable is cable that is located inside a building that
13 provides access from the entrance facility to each of the floors or wiring
14 locations within the building. This type of arrangement is usually found
15 in multiple story buildings.

## Q. WHAT COSTS DOES VERIZON INCUR FOR PROCESSING CLEC REQUESTS FOR ACCESS TO HOUSE AND RISER CABLE?

19 A. Verizon will incur costs for ordering, provisioning, and field work
20 activities associated with CLEC requests for access to house and riser
21 cable.

## Q. PLEASE DESCRIBE THE ORDERING ACTIVITIES FOR ACCESS TO HOUSE AND RISER.

25 A. Requests for house and riser cable access are submitted by CLECs to

1 Verizon-West NMC by means of the LSR process I described earlier. 2 The NMC receives the LSR, checks it for accuracy, and applies all 3 applicable NRCs and MRCs. The NMC releases the order into 4 Verizon's order processing system, which then routes it to the 5 appropriate provisioning and central office/field installation groups 6 involved in completing Florida orders. 7 8 Q. HOW DID VERIZON DEVELOP THE COSTS ASSOCIATED WITH 9 ORDERING ACTIVITIES FOR HOUSE AND RISER? 10 Α. To determine the costs for house and riser ordering, Verizon relied on 11 the exchange and advanced/special elements order type for this 12 ordering process, similar to the Network Interface Device (NID) order 13 type. 14 15 Q. PLEASE DESCRIBE THE PROVISIONING **ACTIVITES** 16 ASSOCIATED WITH HOUSE AND RISER. 17 Α. The APC will access the facility records database and change the 18 records to identify the network configuration requested by the CLEC. 19 20 HOW WERE THE COSTS DEVELOPED FOR THE PROVISIONING Q. 21 **ACTIVITES FOR HOUSE AND RISER?** 22 Α. Verizon tracks activities based on the number of times the APC 23 accesses or "touches" an order to provision it. The costs are based on 24 the number of touches per order. This activity measure, for various 25 order types, was collected by the cost managers from Verizon-West's

1		NOCV system. The total of productive minutes of the APC for order
2		touches is divided by the total number of touches to create the minutes
3		per touch calculation. The cost per touch is calculated by multiplying
4		the minutes per touch by the loaded labor rate for the APC.
5		
6	Q.	PLEASE DESCRIBE THE FIELD WORK ACTIVITES ASSOCIATED
7		WITH HOUSE AND RISER.
8	A.	To disconnect and connect the cables in the field, a trip to the
9		customer location by the technician is necessary. The technician will
0		break (disconnect) one jumper and install one jumper. The jumper
1		break will be to remove the existing jumper from Verizon entrance
2		facilities to the house and riser cable. The install jumper will be to
3		install a jumper from the CLEC block to the house and riser cable.
4		
15	Q.	HOW WERE THE COSTS DEVELOPED FOR THE FIELD WORK
6		ACTIVITIES FOR HOUSE AND RISER?
17	A.	The costs for the field work activities are based on drive time and
18		jumper running studies conducted by Verizon. This study provides the
9		average time to travel to a customers premise and then perform the
20		jumper activity at a customers premise.
21		
22		XIII. LINE AND STATION TRANSFER
23		
24	Q.	PLEASE EXPLAIN VERIZON'S LINE AND STATION TRANSFER.
25	A.	The line and station transfer applies only to customers being served by

1		DLCs. Line and station transfer is to be applied when copper facility
2		can be freed up in order to satisfy a CLEC's request for a copper
3		based technology.
4		
5	Q.	WHAT COSTS DOES VERIZON INCUR WHEN PROVIDING LINE
6		AND STATION TRANSFER?
7	A.	Verizon will incur provisioning, engineering, central office work, and
8		field installation work for line and station transfer.
9		
10	Q.	PLEASE DESCRIBE THE ACTIVITIES ASSOCIATED WITH
11		PROVISIONING LINE AND STATION TRANSFER.
12	A.	Once the transfer is approved and scheduled, provisioning will be
13		responsible for creating and sending the jumper list to the central office
14		and routing the order to the field technician for the facility change in the
15		field. When the order is complete the facility records are updated with
16		the new information.
17		
18	Q.	HOW DID VERIZON DEVELOP THE COSTS FOR PROVISIONING
19		LINE AND STATION TRANSFER?
20	A.	Verizon tracks activities based on the number of times the APC
21		accesses or "touches" an order to provision it. The costs are based on
22		the number of touches per order. This activity measure, for various
23		order types, was collected by the cost managers from Verizon-West's
24		NOCV system. The total of productive minutes of the APC for order
25		touches is divided by the total number of touches to create the minutes

1		per touch calculation. The cost per touch is calculated by multiplying
2		the minutes per touch by the loaded labor rate for the APC.
3		
4	Q.	PLEASE DESCRIBE THE ACTIVITIES ASSOCIATED WITH
5		CENTRAL OFFICE WORK FOR LINE AND STATION TRANSFER.
6	A.	The central office technician is responsible for breaking or installing
7		jumpers to transfer the customers to the assigned facility locations,
8		cable pair or DLC location.
9		
10	Q.	HOW DID VERIZON DEVELOP THE COSTS FOR CENTRAL
11		OFFICE WORK FOR LINE AND STATION TRANSFER?
12	A.	The costs for the central office are based on time and jumper costs
13		from the "Jumper Study". The central office technician may break or
14		install jumpers.
15		
16	Q.	PLEASE DESCRIBE THE ACTIVITIES ASSOCIATED WITH FIELD
17		WORK FOR LINE AND STATION TRANSFER.
18	A.	The field work activity has two components, engineering and field
19		installation. The engineer will design the rearrangement of the facilities
20		between the DLC and copper cable. The engineer will research and
21		analyze the facility records to determine if the transfer can take place.
22		The engineer may make a site visit if necessary. The engineer will
23		create a design cut sheet and release the information to be worked.
24		The field installation activity is similar to sub-loop activity when the
25		technician runs imprers at the field location for the proper connections

7		i ne field activity will be coordinated with the central office technician.
2		
3	Q.	HOW DID VERIZON DEVELOP THE COSTS FOR FIELD WORK
4		FOR LINE AND STATION TRANSFER?
5	A.	The engineering costs are based on an engineering SME estimate of
6		the activities and time for the transfer of the facilities. The field
7		installation time is based on the sub-loop cross connect activity. These
8		activities are based on a "Cross Box Jumper and Drive Time Study"
9		conducted by Verizon.
10		
11		XIV. MECHANIZED LOOP PRE-QUALIFICATION
12		
13	Q.	PLEASE EXPLAIN VERIZON'S MECHANIZED LOOP PRE-
14		QUALIFICATION PROCESS.
15	A.	The FCC Remand Order mandates that the ILEC provide requesting
16		CLECs with nondiscriminatory access to the same detailed information
17		about the loop that is available to the ILEC. The Mechanized Loop Pre-
18		Qualification ("MLPQ") process provides a means for a CLEC to
19		perform loop qualification analysis. It provides the requesting CLECs
20		with nondiscriminatory access to the same information that was used
		with hondisonminatory access to the same information that was access
21		in Verizon's retail ADSL offering.
21 22		
		in Verizon's retail ADSL offering.
22		

same detailed information about the loop that is available to the ILEC. This information is made available to the CLECs through Verizon's MLPQ process. The information includes: (1) composition of the loop material, including but not limited to: fiber optics or copper; (2) the existence, location and type of any electronic or other equipment on the loop, including but not limited to, digital loop carrier or other remote concentration devices, feeder/distribution interfaces, bridge taps, load coils, pair-gain devices, disturbers in the same or adjacent binder groups; (3) the loop length, including the length and location of each type of transmission media; (4) the wire gauge(s) of the loop, and (5) the electrical parameters of the loop, which may determine the suitability of the loop for various technologies.

Α.

## Q. HOW WAS THE COST TO ESTABLISH THE MLPQ PROCESS DEVELOPED?

Verizon incurred approximately \$1.014 million in transition costs for the mechanized loop pre-qualification project during 2000. This includes the costs for two Data Processing Service Requests (DPSR) that provided for the equipment and software to access and interface the systems that contain the facility information. The systems involved in providing this information worked independently and had only limited interface capabilities. The need to interface these systems did not exist until the request for MLPQ. The Business Analysis Group tracked the financial costs of the two DPSRs. The DPSRs provisioned for CLEC access to WISE, AAIS, and other systems that contain the

1		facility information. Software was also needed to format a response
2		back to the requester that contained the facility information requested.
3		
4	Q.	HOW DOES A CLEC USE THE MLPQ PROCESS TO PERFORM
5		LOOP PRE-QUALIFICATION?
6	A.	CLECs utilize a Graphic User Interface ("GUI') on Verizon's internet
7		based Wholesale Internet Services Engine ("WISE") to access the
8		MLPQ capabilities. This access was chosen because CLECs currently
9		have access to this interface and utilize it on a regular basis. The
10		CLEC access the MLPQ form and enters either a working telephone or
11		a valid address into the system. WISE interfaces with a report
12		generation program which in turn access several different systems
13		providing the CLEC with the following information.
14		NPA and NXX
15		Local Termination CLLI
16		Existence of a pair gain or DLC and if present, the type
17		Existence of DAML in the loop
18		Type of loop length provided (actual or electronic measurement)
19		Loop length
20		Loop length by gauge of cable
21		Type of any load coils
22		Quantity of load coils
23		Location of load coils
24		Quantity of bridged taps
25		Location of bridged taps

1		rype and number of disturbers in the feeder cable of the loop
2		Type and number of disturbers in the distribution cable of the loop
3		Composition of the feeder and distribution cables
4		Wire center name
5		OBF response codes and descriptions
6		
7		XV. CONCLUSION
8		
9	Q.	PLEASE SUMMARIZE YOUR TESTIMONY.
10	A.	Verizon has developed a comprehensive and well supported non-
11		recurring cost study that conforms to current FCC principles and
12		addresses all of the non-recurring activities Verizon must perform to
13		provide UNE products to CLECs. The Commission should approve
14		these costs for use in pricing Verizon's unbundled network elements.
15		
16	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
17	A.	Yes.
18		
19		
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23		
24		
25		

#### 1 SURREBUTTAL TESTIMONY OF LARRY RICHTER

2

3

#### I. INTRODUCTION

#### 4 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 5 A. My name is Larry Richter, and my business address is 600 Hidden
- 6 Ridge, Irving, Texas, 75015.

7

#### 8 Q. ARE YOU THE SAME LARRY RICHTER WHO FILED DIRECT

#### 9 TESTIMONY IN THIS DOCKET?

10 A. Yes.

11

#### 12 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

13 Α. I will respond to the Rebuttal Testimony of ALEC Coalition witness 14 Sydney L. Morrison, filed on January 30, 2002. In particular, I will 15 address Mr. Morrison's recommendation that Verizon Florida Inc.'s 16 ("Verizon") proposed nonrecurring charges be drastically reduced. In 17 effect, Mr. Morrison is asking the Florida Public Service Commission 18 ("Commission") to accept his unsupported assertions over the informed 19 judgment of Verizon personnel, who (over the course of many years) 20 have been involved personally in the design and operation of a real-21 world telecommunications network and base their recommendations 22 on detailed time and motion and work sampling studies, as well as 23 input from subject matter experts ("SMEs") who perform the relevant 24 functions. In short, Mr. Morrison's suggested changes to Verizon's 25 nonrecurring cost ("NRC") Study ("Study") must be rejected as 1 incorrect, arbitrary and unsound.

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3 II. MR. MORRISON'S RECOMMENDATIONS ARE BASED ON A 4 LIMITED REVIEW OF A SUBSET OF NRCS AND LACK EMPIRICAL 5 SUPPORT

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#### Q. HAS MR. MORRISON REVIEWED OR ANALYZED THE SYSTEMS 8 OR PROCESSES UPON WHICH VERIZON'S NRCS ARE BASED?

Mr. Morrison's recommendations are based solely on his No. admittedly cursory review of Verizon's NRC Study. (Morrison Direct at 7.) Mr. Morrison was only instructed to review a handful of the NRCs in Verizon's Study. (Morrison Depo. at 42 (Morrison acknowledging that he was only asked to review unbundled loop, unbundled port, and enhanced extended links ("EELS").) While alleging that his analysis was circumscribed by "limited time and resources" (Morrison Direct at 7), in fact, Mr. Morrison was unhampered by budgetary or other constraints (Morrison Depo. at 43-44, 60.) Thus, it was purely his own decision to conduct the limited analysis he did. (Morrison Depo. at 80.) This inadequate review of a subset of Verizon's NRCs, is an insufficient basis upon which to significantly reduce Verizon's NRCs, as Mr. Morrison proposes, and stands in stark contrast to the in-depth study and extensive surveys of numerous employees conducted by Verizon. Indeed, Mr. Morrison admits that he did not conduct a single survey, nor did he consult with anyone to validate the accuracy of the work time estimates he proposes. (Morrison Depo. at 95-96.) This is

surprising given that Mr. Morrison has never personally observed any of the activities corresponding to the values he was "adjusting" in Verizon's NRC Study, (Morrison Depo. at 93-94), and has conducted no empirical analysis of Verizon's operations to support the values he advocates. (Morrison Depo. at 92.) Mr. Morrison's recommendations - based on nothing more than his unsubstantiated opinion and an admittedly limited review -- must be rejected.

A.

## 9 Q. SHOULD THE COMMISSION GIVE ANY WEIGHT TO MR. 10 MORRISON'S RECOMMENDATIONS?

No. Mr. Morrison attempts to justify his recommendations by stressing his "30-plus" years of experience in the telecommunications field. His experience, however, is completely divorced from the crux of an NRC analysis -- the processing and provisioning of ALEC orders by an Incumbent Local Exchange Carrier ("ILEC"), operating in the United States, in a post-1996 Telecommunications Act ("1996 Act") environment.

19 ...

First, Mr. Morrison has no experience with regard to the current manner in which local service requests ("LSRs") are commonly provisioned. He has never worked in an ILEC service center or business office. (Morrison Depo. at 8-9.) He has never personally entered an LSR (Morrison Depo. at 93-94), nor has he (or anyone under his supervision) ever provisioned an unbundled network elements ("UNE") order. (Morrison Depo. at 36.) And, to the extent

Mr. Morrison has had any experience in studying or designing other companies' ordering or provisioning systems, he asks the Commission to trust his recollections of what he has "witnessed or encountered" (Morrison Direct at 15) in those jobs, rather than any empirical analyses or other objective proof.

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Second, a large part of Mr. Morrison's experience relates to foreign telecommunications networks, in which service orders are processed and provisioned in different manners from those of domestic networks. With respect to both of the foreign carriers for which he consulted, the wireline business accounted for 10% or less of their entire operation, (Morrison Depo. at 17-18, 26), and the volume of orders handled by these foreign ALECs was miniscule in comparison with the amount of orders processed by Verizon and other domestic ILECs. As Mr. Morrison admitted, the amount of orders provisioned by the foreign carriers was "relatively low." (Morrison Depo. at 33-34.) As a result. the procedures followed and systems used by these foreign ALECs to process and provision service orders is undoubtedly less complex than those of domestic ILECs operating significantly larger networks and provisioning considerably more orders. At bottom, Mr. Morrison asks the Commission to accept that his experience consulting for two ALECs abroad is somehow relevant to this proceeding; however, as Mr. Morrison explained, the foreign countries in which he worked did not have any "distinct requirements or anything that looked like the 1996 Telecommunications Act. What you had were agreements that we came up with with our competitors as to how we would interconnect." (Morrison Depo. at 30.) This is a far cry from the manner in which ILECs process and provision UNE orders in the U.S. today.

Finally, Mr. Morrison has little, if any, relevant experience with respect to the processing and provisioning of ALEC orders by an ILEC. While Mr. Morrison states that he has processed orders for U.S. West, this experience dates back to 1988 -- a little less than a decade before the passage of the 1996 Act. (Morrison Depo. at 12.) In the end, this Commission's decision must be based on competent and substantial evidence. Mr. Morrison has provided no such evidence -- the Commission simply cannot accept his arbitrary revisions to Verizon's NRC Study.

## Q. HOW DO YOU RESPOND TO MR. MORRISON'S COMPLAINTS THAT HE DID NOT HAVE A SUFFICIENT AMOUNT OF TIME TO REVIEW THE MODEL?

19 A. I am surprised by Mr. Morrison's claim that he had only "limited time" to
20 review Verizon's Study (Morrison Direct at 7), given that it was filed
21 nearly three months before Mr. Morrison filed his testimony, and,
22 during that time, Mr. Morrison was unhampered by budgetary or other
23 constraints. (Morrison Depo. at 43-44, 60.) Moreover, Mr. Morrison's
24 alleged time constraints are at odds with his own testimony, in which
25 he states that he conducted an "in-depth" review of Verizon's NRC

Study and "developed a very good sense" for the appropriateness of its results. (Morrison Direct at 9.)

Α.

## 4 Q. DO YOU AGREE WITH MR. MORRISON'S CLAIMS THAT 5 VERIZON'S NRC STUDY IS CUMBERSOME AND OVERLY 6 COMPLEX?

No. Although Verizon's NRC Study is comprehensive, it is far from overly complex and cumbersome; to the contrary, it is well documented and largely self-explanatory. Section 1 of the NRC Study explains how the Study was completed, how to use it, how the worksheets fit together, and how calculations were made. It includes a rate summary of the NRCs developed in the Study. Section 1, at pages 1-2, also describes the contents of each tabbed section of the Study to enable the user to minimize search time for a specific item. In addition, there are narratives at the beginning of the Ordering (Tab 2), Provisioning (Tab 3), and Field Work (Tab 4) sections that describe the operating process, cost components, and method of calculations within each section.

Section 1, at pages 3-4, has a "Study Navigation" guide that explains the hyperlinks, page-numbering scheme, and source and destination columns. For example, each page in the Study has a source entry and a destination entry for the calculations presented on that page. The source entry shows the work sheet or note where the information comes from. The destination entry shows where the calculations on

the page appear going forward in the Study. This system makes it easy to follow a cost as it progresses through the Study to the summary pages in Section 1.

Any comprehensive cost study necessarily includes a substantial amount of information, but Verizon has deliberately designed its Study to simplify the process of tracing the flow-through of costs. Mr. Morrison never specifies why, exactly, he believes Verizon's NRC Study is unduly complicated, and never once contacted Verizon for any guidance or additional information to help him understand the Study. Given these considerations, Mr. Morrison's criticisms of the Study ring hollow.

Α.

## Q. DO YOU AGREE WITH MR. MORRISON'S CRITICISMS OF THE HARD-CODED VALUES CONTAINED IN VERIZON'S NRC STUDY?

No. As Mr. Morrison admits, the use of hard-coded values (i.e., manually entered values) is fairly common in a cost study. (Morrison Direct at 14; Morrison Depo. at 76.) These hard-coded values, as Mr. Morrison concedes, are not set in stone -- they are every bit as adjustable as the other values contained in Verizon's NRC Study. (Morrison Depo. at 76.) In fact, Mr. Morrison acknowledges that "some of the hard-coded values were the only things that I could effectively change." (Morrison Depo. at 76 (emphasis added).) Nevertheless, Mr. Morrison makes the specious claim that Verizon's hard-coded values somehow hindered his analysis. Had Mr. Morrison been truly

interested in learning about the source of Verizon's hard-coded values, he could have easily traveled to Dallas and reviewed Verizon's source documentation. (Morrison Depo. at 78.) Mr. Morrison chose not to do so -- a decision that was purely his own, and in no way dictated by the restrictions of his employer or client. (Morrison Depo. at 79, 130.)

Moreover, Mr. Morrison's claim that Verizon failed to provide references or cites to the hard-coded values is simply inaccurate. (Morrison Direct at 13-14.) The source information can be found either within the source column of the Study worksheets or, if all the values in the column are from the same source, in the column header. Notes in the Study identify whether a hard-coded value is derived from SME input, work sampling study, or time and motion study.

# 15 Q. MR. MORRISON COMPLAINS THAT HE WAS UNABLE TO 16 DOWNLOAD VERIZON'S NRC STUDY AND RETAIN THE LINKS. 17 (MORRISON DIRECT AT 25.) COULD HE HAVE EASILY 18 RETAINED THE LINKS?

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Yes. Mr. Morrison's criticisms seem to be based largely on his lack of proficiency in downloading, manipulating, and analyzing cost models. As is common in cost modeling, and with many software-based applications, Verizon's NRC Study included a "Readme" file, which explained in detail how to properly download Verizon's NRC Study to a personal computer. (Morrison Depo. Ex. 2.) This file clearly explains that, in order to maintain the features that allow the Study to be easily

navigated, the files contained on the CD-ROM must be downloaded directly to the user's hard drive. However, Mr. Morrison (and apparently his colleague Mr. Gose) disregarded this explicit instruction and copied the files to a separate folder on their hard drive (Morrison Depo. at 51), an error that effectively eliminated much of the Study's user friendliness.

Notwithstanding this error, there are Microsoft Excel functionalities that allow the user to trace the derivation of the NRCs in Verizon's Study. By turning off the "Edit in Cell" feature, Mr. Morrison could have double clicked on a value to trace it back to its source. (Morrison Depo. at 59.) Alternatively, Mr. Morrison could have used Microsoft Excel's audit features to trace the proposed values with equal ease and accuracy. (Morrison Depo. at 58-59.)

Α.

Q. MR. MORRISON ALSO STATES THAT HE WAS NOT ABLE TO LOCATE APPENDIX TAB 1 FOR DETAILS OF THE WORK SAMPLING STUDY. (MORRISON DIRECT AT 13.) IS HIS CONFUSION JUSTIFIED?

No. The navigation information in Section 1, page 3, of the Study explains that Appendix locations are designated with an "A," followed by a page number. So, Appendix Tab 1 appears as page A1 in the Study. Again, it appears that Mr. Morrison's alleged difficulty with the Study may have been caused by his failure to thoroughly review the navigational aids and instructions.

1		
2	l.	MR. MORRISON'S PROPOSED REDUCTIONS TO VERIZON'S
3		NRCS ARE INAPPROPRIATE AND RESULTS-ORIENTED
4		
5	Q.	DO YOU AGREE WITH MR. MORRISON'S CLAIM THAT HE COULD
	Q.	
6		TELL "SOMETHING IS WRONG" WITH VERIZON'S PROPOSED
7		NRCS BY COMPARING THEM TO OTHERS ADOPTED AROUND
8		THE COUNTRY? (MORRISON DIRECT AT 10.)
9	A.	Mr. Morrison's claim is unfounded. What Mr. Morrison fails to
0		recognize is that companies have different types of systems, which
11		dictate the activities to be performed and the quality of the services
2		offered. Thus, each company's costs will necessarily reflect the
3		company-, state-, and area-specific operating conditions pursuant to
14		which the carrier provides service. Even simple comparisons between
15		similar-sounding features in different companies may not yield any
16		useful results. Furthermore, as Verizon witness Dennis Trimble
17		explains, it is not appropriate to set rates based on comparisons to
18		Verizon's rates ordered in other states. (Trimble Surrebuttal at 7-8.)
19		
20		In any event, this proceeding is intended to set nonrecurring charges
21		for Verizon, based on Verizon's costs in Florida. The only permissible
22		and feasible way to accomplish this is by reviewing Verizon's NRC

Verizon's Florida Study are of no consequence.

Study for Florida -- the rates of other companies, here or in other

states, for features that may or may not be comparable to those in

With this in mind, the absurdity of Mr. Morrison's comparison of Verizon's and BellSouth's charges to migrate an ALEC customer to the unbundled network element platform ("UNE-P") becomes obvious. (Morrison Direct at 10.) Moreover, Mr. Morrison is making the classic apples-to-oranges comparison. Mr. Morrison compares BellSouth's electronic service order rate of \$1.52, with Verizon's manual order rate of \$22.99, and perhaps does not realize that BellSouth's connection rate is for a 2-wire voice grade loop with 2-wire port, switch as-is, while Verizon's connection rate includes the loop, port, and shared transport.

Compounding these errors is Mr. Morrison's (and ALEC Coalition witness Dr. August Ankum's) erroneous assumption that Verizon's costs should not be any higher than BellSouth's because "Verizon is the largest ILEC in the United States." (Morrison Direct at 10; Ankum Direct at 12.) Mr. Morrison offers no basis for this assertion -- perhaps because there is none. As Verizon witness David Tucek explains, the cost characteristics of Verizon's local operations in Florida have not changed as a result of the Bell Atlantic/GTE merger. (Tucek Surrebuttal at 23.)

## Q. CAN YOU RESPOND TO MR. MORRISON'S CLAIM THAT VERIZON USES A "VERY INDIRECT METHOD" TO DETERMINE THE TIME SPENT ON EACH ORDER?

25 A. Yes. Mr. Morrison states that "[t]he key to any good NRC model is

accurate information on times required to perform activities," because the times will drive the costs that are the basis for the nonrecurring charges. (Morrison Direct at 11.) He then criticizes Verizon for using "a very indirect method for determining the minutes per order" and offers an example of the calculations used to establish one particular process.

As an initial matter, using an "indirect method" to determine work times does not necessarily mean that the calculated work times, or their associated costs, are wrong. Moreover, Verizon's development of its work times and related cost estimates is based on sound reasoning and widely-accepted survey methodologies. The processing times for service orders vary greatly depending on the type of service being ordered. As such, determining the average time required to conduct various activities does not lend itself to a random selection of orders or service representatives. Instead, Verizon, with the assistance of Arthur Andersen, used a work sampling method to develop a weighted average for each specific activity based upon observations, taken in 15-minute intervals, of all the activities of National Order Referral/Entry Center ("NOREC") service representatives during a two-week period.

In addition to work sampling, Verizon gathered information on work times through work sampling surveys, time and motion studies, and input from SMEs performing relevant functions. These objective and proven methods of measuring work times stand in stark contrast to Mr.

Morrison's unrecorded recollections of observations made at unspecified times and locations during the last 30 plus years.

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## Q. IS MR. MORRISON'S CONCERN ABOUT VERIZON'S USE OF AN "INDIRECT PERCENTAGE" IN DEVELOPING ITS WORK TIMES VALID? (MORRISON DIRECT AT 14-15.)

No. Mr. Morrison fails to understand the nature and appropriateness of Verizon's indirect percent. Verizon uses an indirect percent to capture the costs associated with activities that normally occur in connection with the provisioning of LSRs, but are simply not captured by the specific activities listed in Verizon's work sampling survey -- the reason being that a survey simply cannot capture the panoply of activities that service representatives engage in during the course of a day. For example, often times, when there is an error with an ALEC service order, a representative must consult with a supervisor or call the ALEC to remedy the discrepancy. Other times, a service representative must devote additional time arranging for expedited treatment of a given order. Resolving problems such as this and handling special requests were not included in the work sampling survey conducted by Verizon. All of these activities, along with many others, are vital to the accurate and timely processing of service orders and must be accounted for in any work time estimates. Verizon's indirect percent is designed to do just that.

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Moreover, Mr. Morrison's claim that Verizon's indirect percent has

been as much as 128% is incorrect. (Morrison Direct at 128.) The highest indirect percent identified in Verizon's NRC Study is substantially lower for the unbundled loop exchange basic order processing. (This number is confidential; see Section A1, pg. 35, cell J42.) By changing the number of observations for a given activity, Mr. Morrison may have been able to derive an indirect percent of 128%. His result, however, is meaningless.

Changing the observations on the worksheet, as Mr. Morrison has done, also changes the Total Productive Direct Minutes, because the Total Productive Direct Minutes are a product of the observations multiplied by the 15-minute observation increment. When the Total Productive Direct Time is lowered and the Indirect Time remains the same, the percentage derived in the Indirect Percentage will be higher. This is a prime example of why changing certain data on the worksheets and not accounting for the change within the remaining, related data will produce inappropriate results.

## Q. IS MR. MORRISON'S RECOMMEDED FLOW-THROUGH RATE APPROPRIATE AND ACHIEVABLE?

A. No. Mr. Morrison recommends a flow-through rate of 95%-98% and claims that such efficiencies are somehow achievable. (Morrison Direct at 15.) In fact, nothing could be further from the truth.

The primary reason for disruption of order flow-through is input errors, and the chief source of input errors is the ALECs themselves. Notwithstanding the "significant investment" ALECs may have made to reduce errors and the associated transaction costs (Morrison Rebuttal at 17), ALECs routinely submit LSRs with missing or incorrect information. When this occurs -- despite the best efforts of the National Market Center ("NMC") representatives, who endeavor to remedy obvious problems and allow for immediate processing -- the order will often not "flow through" Verizon's electronic gateway system properly. Mr. Morrison's almost-perfect flow-through rate could only be achieved if ALECs submitted error-free orders virtually all the time. In the real world, this is simply not possible.

Estimating costs, as Mr. Morrison proposes, based on a flow-through rate that is much higher than is actually achieved, eliminates any incentive for the ALECs to provide more accurate LSRs for processing and would deny Verizon proper cost recovery. By contrast, Verizon's flow-through rate properly reflects actual experience and thus allows Verizon to recover the costs incurred to process the type of error-prone LSRs that are typically received. As the ALECs become more proficient, the flow-through percentage will increase, thereby lowering the cost of processing the LSRs. The percentage can be adjusted in the NRC Study very easily. Moreover, Verizon's Study assumes a 15% productivity improvement in the processing of the LSRs.

In addition, a 100% mechanized system is impossible. Morrison admits, there are instances in which the automated provisioning of UNE orders would not be cost effective. To use the example cited by Mr. Morrison, when a group of UNE orders "are of incredibly low volume" (i.e., are rarely purchased by ALECs), there is no cost benefit to mechanizing. (Morrison Depo. at 85.) Mr. Morrison also acknowledges that some service orders, such as DS-1s and DS-3s, require design work (Morrison Depo. at 86), and in such cases, full automation is precluded by the very nature of the service order. Moreover, complex orders will never be able to flow through without manual intervention, and editing software will never be able to account for every conceivable variation of a service order -- even if it could (which it cannot), the equipment would be cost prohibitive. Indeed, even assuming Mr. Morrison's premise were true -- that full mechanization was achievable and preferable -- he concedes that, given the choices made by ALECs in submitting their service orders, some labor (i.e., manual processes) will always be necessary. (Morrison Depo. at 84.) Tellingly, Mr. Morrison cannot identify a single ALEC that has attained 100% mechanization. (Morrison Depo. at 87.)

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## Q. ARE MR. MORRISON'S CLAIMS REGARDING THE EXISTENCE OF MORE EFFICIENT EQUIPMENT AND SYSTEMS CREDIBLE?

No. Throughout his testimony, Mr. Morrison makes specious claims about the existence of equipment and systems that are more efficient and almost fully mechanized. Mr. Morrison's assertions, however, are

1 unfounded. Mr. Morrison was only able to identify one system, being 2 used by one company (SBC Communications), that he claims has 3 achieved 98%-99% flow-through (Morrison Depo. at 34). Mr. Morrison 4 was unable to provide any details as to the extent or geographic area 5 in which this system was being deployed. (Morrison Depo. at 34-35.) 6 7 Moreover, even if such systems were widely-available, which they are 8 not, Mr. Morrison fails to account for the additional costs that would be 9 incurred should an ILEC implement such facilities. (Morrison Depo. at 10 120-121.) Mr. Morrison cannot have it both ways -- he cannot tout the 11 benefits of efficient mechanized systems, yet fail to account for the 12 costs of implementing them. 13 14 Q. DID MR. MORRISON CHANGE THE FLOW-THROUGH FACTOR IN 15 THE NRC MODEL? 16 Α. No. Mr. Morrison did not change the flow-through factor itself, but 17 rather changed the number of observed activities "as a proxy." In fact, 18 Mr. Morrison did not even attempt to change the flow-through factor, 19 though this was certainly an available option. (Morrison Depo. at 91.) 20 21 WERE MR. MORRISON'S RESULTS PRE-DETERMINED? Q. 22 Α. Yes. In fact, Mr. Morrison admits as much. Mr. Morrison concedes

that he adjusted the number of observations contained in Verizon's

Study to arrive at a pre-determined work time, which he alone believed

to be appropriate for a particular task. (Morrison Depo. at 90.) Mr.

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Morrison did not perform or rely upon any empirical analysis of an ILEC's operations to support the work times he advocates. (Morrison Depo. at 92.) Indeed, Mr. Morrison offers no documentation or other support for his proposed flow-through rate (Morrison Depo. at 87-88), other than to say that the work times are "in line what [he] had witnessed or encountered in [his] experience." (Morrison Depo. at 91.) In short, Mr. Morrison's adjustments are intended to generate predetermined results that conform to his experience alone. (Morrison Depo. at 96.)

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### Q. ARE THERE OTHER PROBLEMS ASSOCIATED WITH CHANGING THE NUMBER OF OBSERVATIONS IN VERIZON'S NRC STUDY?

Yes. Mr. Morrison's random, unsubstantiated changes destroy the integrity of the Study data. The purpose of the observations is to determine the necessary activities and associated work times for processing the LSR. Verizon agrees with Mr. Morrison's observation that the key to a good NRC cost study is accuracy and the integrity of the work time information upon which it relies. As noted above, the observations recorded in Verizon's NRC Study are derived from a number of objective and reliable sources, including work sampling, time and motion studies and input from SMEs. Reliance upon these sources produced volumes of data, all of which is well documented and available for review upon request, as Verizon explained in responses to both ALEC Coalition and Commission Staff discovery.

1 himself of this wealth of information. (Morrison Depo. at 79, 130.)

### Q. WHAT ARE THE CONSEQUENCES OF REDUCING THE NUMBER OF OBSERVATIONS TO ACHIEVE A PRE-DETERMINED RESULT?

A. Reducing the number of observations for one activity necessarily affects a variety of other activities. By arbitrarily reducing the number of observations for a given activity to achieve a pre-determined result, Mr. Morrison has wittingly or unwittingly distorted the cost estimates for a number of associated activities. The integrity of the entire work time study is sacrificed in the process.

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## 12 Q. PLEASE COMMENT ON MR. MORRISON'S "REDUCTION 13 FACTOR."

As I mentioned earlier, Mr. Morrison did not recalculate all of Verizon's approximately 300 ordering and provisioning NRCs; he only analyzed and recalculated the costs of the handful of NRCs he was directed to evaluate. For the vast majority of NRCs, Mr. Morrison simply applies a "reduction factor." (Morrison Direct at 8.) Specifically, Mr. Morrison recommends reducing all of Verizon's ordering NRCs by 50% and Verizon's provisioning activities by 33%. (Morrison Direct at 9.) There is absolutely no data or analysis to support these reductions; they are based solely on Mr. Morrison's purported "good sense of the inherent magnitude by which the Verizon cost model overestimates actual, forward-looking NRCs." (Morrison Direct at 9.) This "good sense," unsupported by objective, empirical analysis, is a wholly insufficient

1		basis upon which to reduce Verizon's NRC rates.
2		
3	Q.	IS MR. MORRISON CORRECT THAT VERIZON'S WORK TIMES
4		ARE LARGELY UNSUBSTANTIATED? (MORRISON DIRECT AT 9.)
5	A.	No. Verizon has taken great care to ensure the information used in its
6		NRC Study is accurate and correctly reflects the activities performed to
7		provide the service requested. The time and motion and work
8		sampling studies conducted at the ordering centers are fully
9		documented and accurately capture the activities and work times
10		associated with processing and provisioning various types of orders
11		Verizon's SMEs, likewise, provide reliable work time estimates, as they
12		are engaged in and intimately familiar with the relevant tasks. The fac
13		that Mr. Morrison never bothered to review the volumes of data
14		underlying the studies casts serious doubt on the sincerity of his
15		claims.
16		
17	IV.	MR. MORRISON'S PROPOSED ADJUSTMENTS TO SPECIFIC
18		NRCS ARE ENTIRELY ARBITRARY AND DEMONSTRATE A
19		FUNDAMENTAL MISUNDERSTANDING OF THE MANNER IN
20		WHICH LSRS ARE PROCESSED AND PROVISIONED
21	Q.	WHAT CHANGES DOES MR. MORRISON PROPOSE WITH
22		RESPECT TO ORDERING COSTS? (MORRISON DIRECT AT 18
23		26, 32, 36.)
24	A.	Mr. Morrison proposes changes to the work times and costs
25		associated with the activities involved in establishing a new order

1 establishing a disconnect order, pre-ordering, and record orders.

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- Q. MR. MORRISON REDUCES THE DISCONNECT ORDER ENTRY

  VALUE BASED ON HIS VIEW THAT THE DISCONNECT RECORD

  IS GENERATED "WITH MINIMUM INPUT." (MORRISON DIRECT

  AT 30.) IS THAT CHANGE JUSTIFIED?
  - No. Apparently, Mr. Morrison does not understand the manner in which manual disconnect orders are processed. Mr. Morrison asserts that customer information contained within Verizon's secure integrated gateway ("SIGS") can be accessed to assist in the creation of a disconnect order. (Morrison Direct at 30.) This is simply not true with respect to orders sent manually. When an ALEC submits an order manually, a Verizon representative must populate a variety of fields within SIGS with information provided by the ALEC. As Mr. Morrison acknowledged, SIGS is merely a "gateway" (Morrison Depo. at 114-115), and as such, does not retain data concerning ALEC customers which can be used to complete the disconnect order. Thus, contrary to Mr. Morrison's claims, there is a significant amount of input necessary to complete a manually-submitted disconnect order.

Moreover, even if an ALEC could use its own database to populate the disconnect request, if the LSR is transmitted manually, the Verizon representative will still need to input the disconnect data manually into SIGS. In such a case, use of the ALEC's database to prepare the disconnect LSR may have saved the ALEC time; however, by virtue of

1		the manual transmittal, Verizon would not realize the same processing
2		efficiencies.
3		
4	Q.	DO YOU AGREE WITH MR. MORRISON'S CONTENTION THAT
5		THE COSTS ASSOCIATED WITH A DISCONNECT ORDER ARE
6		INAPPROPRIATELY INCLUDED IN THE "NEW" NRC
7		COMPONENT?
8	A.	No. Mr. Morrison's assertion that the costs of a disconnect order are
9		inappropriately included in the "New" NRC component is simply not
10		true. Although the activities performed to create a disconnect order
11		are not initiated until the ALEC requests a disconnect, the cost of
12		conducting the disconnect is properly included with the initial cost of
13		obtaining service. This is a widely-accepted practice among ILECs, as
14		collecting disconnect costs when service is terminated is often difficult,
15		and in some cases impossible.
16		
17	Q.	MR. MORRISON SET THE PREORDERING OBSERVATION TO
18		ZERO BECAUSE HE COULD NOT SEE THE NEED FOR
19		"EXTENSIVE PREORDERING ACTIVITY." (MORRISON DIRECT AT
20		31.) PLEASE COMMENT ON THIS ALLEGATION.
21	A.	Preordering allows the ALEC to obtain information for the processing
22		of a LSR (e.g., telephone number and due date). (See Summary at
23		Section 1, pg. 20 and Ordering at Section 2, pgs. 4-5.) Typically, an
24		ALEC will fax a request to Verizon seeking the desired information and
25		Verizon representatives will manually enter the data into SIGS, which

then creates a temporary order in the National Order Collection Vehicle ("NOCV"). Verizon then informs the ALEC of the order completion data and a firm LSR is sent within 24 hours.

Mr. Morrison's claim that Verizon's preordering activities are not adequately explained is untrue. Verizon's NRC Study documentation explains that the preordering function allows the ALEC to reserve a telephone number or a service due date, verify an address as one in Verizon's territory, determine what services are available in the central office, etc. (Section 1, page 20.) Had Mr. Morrison just read the materials provided to him, his questions would have been answered.

Mr. Morrison's claimed inability to understand why Verizon's preordering activities are necessary is hard to grasp (Morrison Direct at 31.) Mr. Morrison need look no further than his own clients to understand why Verizon's pre-ordering processes exist. Verizon's preordering activities are implemented at the ALECs' request, for the ALECs' sole benefit. Perhaps Mr. Morrison "can think of no need for such extensive preordering activity" (Morrison Direct at 31) because he does not have any experience with the ordering processes of companies obligated to provide UNEs to competitive carriers. The ALECs Mr. Morrison helped establish in Malaysia and Switzerland had no such requirements and the incumbents for which Mr. Morrison worked in the U.S. were under no such obligation at the time he was employed.

A.

## Q. DO YOU AGREE WITH MR. MORRISON'S CONTENTION THAT ALL ORDER ENTRIES SHOULD BE INPUT IN A MANNER THAT AUTOMATICALLY POPULATES THE TRACKING PROCESS?

No. Mr. Morrison claims that the tracking mechanism should be automatically populated upon receipt and input of an LSR. (Morrison Direct at 19; Morrison Depo. at 90.) However, Mr. Morrison misunderstands the purpose and nature of the information that is put into the tracking system. The tracking system is designed to provide an ALEC with the order number and date, and thus does not contain all of the information contained within a LSR order. Moreover, to automate the function, as Mr. Morrison suggests, would require developing an interface between SIGS and the tracking system, which would not be cost effective given the low quantity of manual orders being processed and the limited amount of information input into the tracking system.

Α.

## Q. DOES MR. MORRISON UNDERSTAND THE RECORD ORDER COMPONENT OF AN UNBUNDLED LOOP NRC?

No. Mr. Morrison claims that the record order component of an unbundled loop duplicates components already included in the new order component. (Morrison Direct at 22.) This is incorrect. Mr. Morrison does not understand that the activities required to create a record order are distinct from the activities required to create a new order. A record order is requested *after* service has been established.

It is used to change some portion of the information on the customer's record (e.g., customer name, billing address, etc.), but not the service facilities themselves. As such, a new LSR must be created and processed just like a new order. This is not "duplicative of components already accounted for in other stages of cost development" (Morrison Direct at 22) -- this information is not known at the time a service order is first created. Accordingly, as with a new order, to the extent ALECs transmit their record orders manually, a Verizon representative will need to input the information received into SIGS.

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# Q. ARE MR. MORRISON'S REDUCTIONS TO VERIZON'S SERVICE CONNECTION WORK TIMES JUSTIFIED? (MORRISON DIRECT AT 32-34, 38, 42.)

No. Mr. Morrison's recommended work times for service connection are wholly inadequate to complete the job being performed. Again, Mr. Morrison has no support for his opinion -- only an unjustified assertion that the Study's work times are somehow incorrect.

For example, Mr. Morrison's reduction in the work time associated with provisioning an EEL is emblematic of his failure to appreciate the processes necessary to provide the service at hand. For example, Mr. Morrison completely disregards the functions performed by the span technician, who is tasked with installing any repeater equipment in the circuit -- equipment that could be in the central office, in the outside plant facility or at the customer's premises. Mr. Morrison's description

1		of the work activities necessary to complete an EEL order ignores		
2		these necessary activities.		
3				
4	Q.	MR. MORRISON REDUCES THE TIMES FOR ADVANCED		
5		SERVICES REQUESTS ("ASRS") FOR EELS. (MORRISON		
6		DIRECT AT 40-42.) ARE THESE REDUCTIONS VALID?		
7	A.	No. ASRs are very involved, multiple-page orders that require the		
8		involvement of numerous Verizon provisioning departments. In		
9		general, Mr. Morrison provides no support for his recommended work		
10		times for ASRs. Indeed, he admits that he has no first-hand		
11		experience in the service center or business office of a		
12		telecommunications carrier (Morrison Depo. at 8-9), and has never		
13		personally processed a UNE order. (Morrison Depo. at 36.)		
14				
15		In particular, Mr. Morrison challenges the time involved in verifying the		
16		accuracy of an ASR. In doing so, Mr. Morrison ignores the complexity		
17		of the orders many involve multiple circuits, while others require		
18		certain types of equipment to be ordered and configurations of		
19		equipment to be addressed. Even though an engineer will design the		
20		circuit, the representative who takes and creates the order has to		
21		precisely input all the particulars of the ALEC request. For these		
22		reasons, quality checks are numerous.		
23				
24		Mr. Morrison also challenges the time involved in inputting a manually-		
25		transmitted disconnect order. In fact, disconnect orders are often		

rather complex. Many disconnect requests apply only to certain services at a given location, while others apply only to a portion of the circuits or equipment. In such instances, the existing records must be removed from the system and replaced with new records that identify the new service, circuit or equipment arrangement. Moreover, the disconnect request may be for circuits at different locations, which may interface with other carriers who will need to be apprised of the new situation. Verizon's work times accurately reflect the complicated and time-intensive nature of these essential activities. Mr. Morrison fails to appreciate the complexities. Given these considerations, there is no basis upon which the Commission can adopt Mr. Morrison's revised work times.

Α.

# Q. DO YOU AGREE WITH MR. MORRISON'S CLAIMS REGARDING THE RUNNING OF JUMPER CABLES AND THE DEPLOYMENT OF COSMIC FRAMES? (MORRISON DIRECT AT 33, 38, 45.)

No. Mr. Morrison's suggestion that jumper cables can be run very quickly is dependent on the existence of a network in which COSMIC frames, or other single-sided main distribution frame technology, are widely deployed. (Morrison Depo. at 108-109.) In the real world, however, this is not the case. In fact, the use of COSMIC frames is very limited in Verizon's serving areas. As a result, and as Mr. Morrison admits, the time to run a jumper "would be significant multiples" of the time proposed by Mr. Morrison -- approximately a two or threefold increase. (Morrison Depo. at 110.) Moreover, Mr.

Morrison makes no allowance for the additional costs associated with the ubiquitous deployment of COSMIC frames, upon which his recommendations depend.

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# 5 Q. DO YOU AGREE WITH MR. MORRISON'S SUGGESTION THAT 6 JUMPERS REMAIN IN PLACE FOLLOWING A DISCONNECT 7 ORDER?

No. Mr. Morrison suggests that jumpers need not be removed on a disconnect request. In a retail or resale mode that may be true, but not with respect to UNEs. When unbundled ports or loops are requested by ALECs, jumpers are typically run to blocks on the Main Distribution Frame that is connected to the ALEC's equipment. When the ALEC requests a disconnect, the jumper must be removed to free up the ALEC's block, as well as the ILEC's loop or port. Freeing up this jumper allows the ALEC to assign another customer to that position, and from the ILEC's perspective the port or loop would be available for assignment to a retail or other ALEC. As a result, jumpers can no longer be left in place as was the custom in the 1960s or 1980s when Mr. Morrison was a Bell employee.

- Q. DO YOU AGREE WITH MR. MORRISON'S CLAIM THAT THERE IS
  A LINKING ERROR IN THE FIELDWORK PORTION OF THE
  CALCULATION FOR INSTALLATION OF A BASIC UNBUNDLED
  LOOP? (MORRISON DIRECT AT 34.)
- 25 A. Yes. Mr. Morrison is correct that for the Unbundled Loop Basic and

1		Non-Digital there is an incorrect link. The work times for the fieldwork					
2		are correct; however, when the appendix summary pages were					
3		created the cells were linked incorrectly. Verizon is in the process of					
4		correcting this inadvertent error. In any event, Mr. Morrison offers no					
5		valid reason to depart from the times reported.					
6	Q.	ARE MR. MORRISON'S REDUCTIONS TO THE FIELDWORK					
7		ACTIVITIES APPROPRIATE?					
8	A.	No. Mr. Morrison's reductions are based on nothing more than his					
9		personal experience. In contrast, Verizon's work times for the					
10		fieldwork portion of its Study, are based on the actual times collected					
11		from Standard Time and Activity Reporting ("STAR"), which are used					
12		by the field technicians to report their time and record their activities.					
13		This system records the exact time required to complete an order					
14		activity.					
15							
16	Q.	PLEASE COMMENT ON MR. MORRISON'S CHANGES IN THE					
17		WORK TIMES FOR PROVISIONING OR ASSIGNING FACILITIES					
18		FOR SERVICE REQUESTS. (MORRISON DIRECT AT 32-33, 38,					
19		42.)					
20	A.	Mr. Morrison ignores Verizon's studies and work sheets, which					
21		accurately describe the activities necessary to provision or assign					
22		facilities in connection with an ALEC service request. Once again, his					
23		changes to the associated work times are based solely on some					

arbitrary and uninformed sense of what the values should be.

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1	Q.	MR. MORRISON SUGGESTS THAT VERIZON'S NRCS INCLUDE				
2		NUMEROUS UNNECESSARY VERIFICATIONS FOR AN LSR.				
3		(MORRISON DIRECT AT 20.) IS HE CORRECT?				
4	A.	No. Mr. Morrison would have the Commission believe that human				
5		error can be all but eliminated from the order processing system. This				
6		is an unrealistic and unattainable goal. As Mr. Morrison concedes:				
7		People really don't work this way. People work				
8		like, I'm going to type this into the system, and				
9		then they do, and then they don't turn around and				
10		then come back and say, 'Now I'll check it and see				
11		how accurate I really was on the initial input.'				
12		They just don't do that. (Morrison Depo. at 102.)				
13		Mr. Morrison is correct that trained personnel are less likely to make				
14		mistakes; however, not even Mr. Morrison can claim that a trained				
15		technician will not make any errors in the order input process.				
16		(Morrison Depo. at 106.) As such, Verizon's verification activities will				
17		always remain integral to the efficient and accurate operation of its				
18		order processing and provisioning systems.				
19						
20		Even assuming that Verizon intended to increase the amount of orders				
21		that are verified electronically, Mr. Morrison acknowledges that a				
22		carrier is essentially at the mercy of its vendors should it wish to				
23		upgrade its systems and achieve greater levels of electronic				
24		verification. (Morrison Depo. at 97-98.) Admittedly, such upgrades				
25		would take months and, not surprisingly, Mr. Morrison has not				

1 accounted for the cost of such systems in his proposed changes. 2 (Morrison Depo. at 97-98.) The ease with which Mr. Morrison makes 3 his unsubstantiated claims certainly does not reflect the degree of 4 effort it would take to implement his recommendations. 5 6 Q. DO YOU AGREE WITH MR. MORRISON THAT OFF-LINE 7 PROCESSING INVOLVES A HOST OF UNSUBSTANTIATED 8 ACTIVITIES? (MORRISON DIRECT AT 20-21.) 9 Α. No. The off-line processing group is responsible for handling the more 10 complicated and complex LSRs, as well tracking any special projects 11 (e.g., short-term tracking reports, late order reports, state projects, miscellaneous disconnects, etc.), all of which are not typically part of 12 13 the LSR process. Some of the off-line activities were explained in 14 response to Staff discovery, and all of these activities are fully 15 documented and available for review. Mr. Morrison chose not to avail 16 himself of this opportunity. 17 MR. MORRISON ADVISES THE COMMISSION TO REJECT ALL OF 18 Q. 19 THE NATIONAL MARKET CENTER ("NMC") COSTS. (MORRISON DIRECT AT 23-24.) IS THIS RECOMMENDATION JUSTIFIED? 20 21 Α. No. This recommendation is based upon the absurd and untenable 22 assumption that both retail and wholesale orders should be processed from a single processing center. Mr. Morrison obviously fails to 23 24 appreciate the critical differences between retail and wholesale order

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processing. The wholesale product offerings to ALECs (e.g., loops,

ports, UNE-Ps, etc.) bear no resemblance to retail product offerings (e.g., residential single-line service, etc.). Moreover, the wholesale ordering process -- electronic gateway via SIGS or manual faxed order -- is quite different from the retail ordering process -- direct call from the end user to the Customer Contact Center. Given these fundamental differences in products and services, and their associated methods and procedures, it would not be practical efficient for a service representative to handle both wholesale and retail orders.

Recognizing these important distinctions, Verizon established the NMCs to work with the ALECs and process their orders. The NMC service representatives are specially trained to be knowledgeable about wholesale products and services and the processing of wholesale orders. They are also supported by ALEC escalation teams who are primarily responsible for resolving ALEC issues and problems. Given that there are many more retail centers than NMCs, and that the retail centers are organized on a region and/or product specific basis, sending ALEC requests to the retail centers would increase the number of handoffs in processing. Thus, Verizon's NMCs ensure a much more efficient operation.

Contrary to Mr. Morrison's suggestion, it is not feasible or practical to combine Verizon's retail and wholesale order processing into one center. Indeed, Mr. Morrison was not aware of a single ILEC that provisions its retail and wholesale orders out of the same facility.

(Morrison Depo. at 74.)

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Even assuming Verizon's wholesale and retail ordering functions could be combined into one center -- which they cannot -- it could only be done at significant expense. Mr. Morrison makes no allowance for the additional costs associated with merging the facilities and personnel of the two types of order processing centers. For example, Mr. Morrison admits that personnel training, center build-out and furnishing, and staffing would all be necessary should Verizon combine its retail and wholesale order processing systems. (Morrison Depo. at 72-73.) However, nowhere in his analysis does Mr. Morrison account for the additional costs associated with absorbing Verizon's wholesale ordering process into its retail ordering process. (Morrison Depo. at As Mr. Morrison admits, his elimination of NMC is purely 74-75.) conceptual, and the cost impacts he describes are correct only if one assumes that the two types of ordering centers had been combined from day one. (Morrison Depo. at 73-74.) Obviously, such hypothetical musings are not legitimate support for a NRC cost study.

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Moreover, Mr. Morrison's claim that Verizon's operation of separate wholesale and retail ordering centers is somehow "discriminatory" is absurd. (Morrison Direct at 24.) As Mr. Morrison was forced to acknowledge, no state or federal regulatory commission, and no state or federal court, has ever determined that the operation of separate retail and wholesale service order processing centers is discriminatory.

1		(Morrison Depo. at 71-72.) Indeed, no state regulatory commission			
2		has ever ordered that an ILEC's retail and wholesale ordering centers			
3		be merged into one facility. (Morrison Depo. at 74.) Nor are there any			
4		requirements, regulatory or otherwise, that would necessitate such an			
5		outcome. (Morrison Depo. at 74.)			
6					
7	Q.	PLEASE SUMMARIZE YOUR TESTIMONY			
8	A.	Mr. Morrison's revisions to Verizon's NRC Study are unjustified and			
9		unsupported. Mr. Morrison's unsubstantiated opinions and results-			
10		oriented adjustments are no substitute for Verizon's objective, well-			
11		documented work time studies, analyses, and cost calculations. The			
12		Commission should approve Verizon's NRC Study because it			
13		accurately and reliably captures the costs that Verizon will incur when			
14		processing and provisioning ALEC service orders.			
15					
16	Q.	DOES THIS CONCLUDE YOUR SURREBUTTALTESTIMONY?			
17	A.	Yes.			
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Q Mr. Dye, good morning. Please state your name and address for the record?

A (By Witness Dye) My name is Terry R. Dye. The address is 600 Hidden Ridge, Irving, Texas.

Q And how are you employed and in what capacity?

A I am employed by Verizon as Manager of Pricing Policy.

Q And, Mr. Dye, are you adopting the prefiled direct testimony of Bert I. Steele consisting of 31 pages and three Exhibits BIS-1 through BIS-3?

A Yes, I am.

BY MS. TROY:

Q And why are you adopting Mr. Steele's prefiled direct testimony?

A Since filing his direct testimony, Mr. Steele has since retired.

Q And are you adopting the corrections made to Mr. Steele's direct testimony and the associated exhibits which were filed on December 17th, 2001?

A Yes, I am.

Q Are there any other changes that you would like to make to Mr. Steele's prefiled direct testimony?

A Yes, there is. On Page 24 of his direct testimony, Line 8, it should simply refer to the loop rather than line sharing. So the sentence beginning on Line 6 of Page 24 should

1	read, "For the two-wire UNE loop, the rate is 102.84 for the
2	initial line on the LSR, which recovers the cost incurred in,"
3	scratch the word "the," and put "provisioning," insert the
4	
5	words "the loop," and scratch the rest of the sentence.
	Q Okay. And with that correction, and the corrections
6	that were filed on December 17th, 2001, if I were to ask you
7	the questions contained in Mr. Steele's prefiled direct
8	testimony, would your answers be the same?
9	A Yes, they would.
10	MS. TROY: Madam Chair, may I have Mr. Steele's
11	prefiled direct testimony inserted into the record as though
12	read by Mr. Dye?
13	CHAIRMAN JABER: Yes. The prefiled direct testimony
14	of Bert I. Steele as adopted by Terry R. Dye, shall be inserted
15	into the record as though read.
16	BY MS. TROY:
17	Q And, Mr. Dye, with the corrections to the exhibits
18	that were filed on December 17th, 2001, are the exhibits to
19	this testimony true and correct to the best of your knowledge?
20	A Yes, they are.
21	MS. TROY: I would like to have the Exhibits BIS-1
22	through BIS-3 marked as Composite Hearing Exhibit Number 57.
23	CHAIRMAN JABER: Sure Composite Exhibit 57 is
24	comprised of BIS-1 through BIS-3.
25	(Composite Exhibit 57 marked for identification.)

1	BY MS. TROY:		
2	Q And, Mr. Dye, did you also cause to be filed		
3	surrebuttal testimony consisting of four pages?		
4	A Yes, I did.		
5	Q And was this testimony prepared by you or under your		
6	direction and control?		
7	A Yes, it was.		
8	Q Are there any changes that you would like to make to		
9	your prefiled surrebuttal testimony?		
10	A No.		
11	Q If I were to ask you the questions contained in your		
12	prefiled surrebuttal testimony, would your answers be the same		
13	A Yes.		
14	MS. TROY: Madam Chair, may I have Mr. Dye's prefile		
15	surrebuttal testimony inserted into the record as though read.		
16	CHAIRMAN JABER: The prefiled surrebuttal testimony		
17	of Terry R. Dye shall be inserted into the record as though		
18	read.		
19	MS. TROY: And I would note that there are no		
20	exhibits associated with Mr. Dye's surrebuttal testimony.		
21			
22			
23			
24			
25			

#### **DIRECT TESTIMONY OF BERT I. STEELE**

#### 3 I. INTRODUCTION

### Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.

7 A. My name is Bert I. Steele. My business address is 600 Hidden Ridge
8 Drive, Irving, Texas 75038. I am employed by Verizon Services Group as
9 Manager - Pricing / Policy and I am representing Verizon Florida
10 Incorporated ("Verizon" or "Company"), formerly GTE Florida
11 Incorporated, in this proceeding.

Α.

#### Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.

I have a Bachelor of Science Degree in Mathematics from Gannon University and a Master of Engineering Degree from Pennsylvania State University. I joined General Telephone Company of Pennsylvania in 1972. Since then, I have worked for various GTE companies in marketing services, pricing, costing, product management, valuation engineering, and regulatory. For the past five years, I have been responsible for formulating and implementing pricing and costing policies for GTE's regulated services as related to the Telecommunications Act of 1996 ("Act"). With Verizon, I am responsible for supporting the Company's pricing proposals and associated policies for regulated services.

#### 1 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY

Yes. I have testified on numerous occasions in the area of
 telecommunications ratemaking, cost methodologies and in proceedings
 related to the Act. I have testified in the states of Alabama, California,
 Florida, Hawaii, Illinois, Indiana, Michigan, North Carolina, Oklahoma,
 Oregon, Pennsylvania, South Carolina, Texas, Virginia, and Wisconsin.

Α.

COMMISSIONS?

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

The purpose of my testimony in this proceeding is to present Verizon's proposed non-recurring rates for ordering and service connection of wholesale unbundled network elements ("UNEs"). Specifically, my testimony addresses Issue 6, concerning the recovery of non-recurring costs. I also address Issues 9a and 12, concerning proposed non-recurring rates or charges for UNEs and combinations of UNEs. In addition, my testimony responds to Issue 11a by presenting proposed non-recurring rates for loop (or line) conditioning, including the situations where the rates should be applied. Finally, I address Issue 11b by proposing non-recurring rates that recover Verizon's loop qualification costs.

My testimony is divided into five parts. Part I is the Introduction. Part II addresses UNE ordering and service connection pricing and related policy issues. In this discussion, I provide Verizon's pricing methodology and its linkage to the Act and the FCC's First Report and Order

implementing the Act. (Implementation of the Local Competition Provisions in the Telecomm. Act of 1996, First Report and Order, 11 FCC Rcd 15499 (1996) (the "First Report and Order").) Part III addresses Issue 6, regarding the recovery of non-recurring costs. Part IV addresses Verizon's proposed non-recurring rates for UNEs and UNE combinations in response to Issues 9a, 11a, 11b and 12. These rates are intended to recover Verizon's costs for orders received from and service connection performed on behalf of competitive local exchange carriers ("CLECs"), also referred to in Florida as alternative local exchange companies ("ALECs"). Finally, part V summarizes my testimony.

#### Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes. I am sponsoring the non-recurring rates in Verizon's Wholesale
UNE Pricing Schedule, which includes both recurring and non-recurring
rates, and which is being submitted at Staff's request with Verizon's cost
studies. I am also sponsoring the following three exhibits:

1. Exhibit BIS-1, Wholesale Non-Recurring Rate Summary:

This exhibit provides Verizon's proposed non-recurring rates supporting its UNEs and UNE combinations.

2. Exhibit BIS-2, Wholesale Non-Recurring Rates - Supporting Detail:

This exhibit provides the supporting detail for Exhibit BIS-1. It identifies the cost elements or rate additives included in each of the proposed non-recurring rates. The rate additives for the National Market Center ("NMC") shared / fixed costs and the loop qualification costs identified on Exhibit BIS-2 are presented in this testimony. Verizon

	witness Larry Richter supports the remaining cost element data listed on			
	the exhibit.			
	3. Exhibit BIS-3, Rate Support for Recovery of NMC Shared / Fixed and			
	Loop Qualification Costs:			
	Exhibit BIS-3 provides a summary of the total NMC shared / fixed			
	costs and loop qualification costs and addresses cost recovery by			
	calculating the per-order rate additives included in Verizon's proposed			
	ordering rates. The calculation of each per-order rate additive is included			
	in this testimony, as is the rationale for each of the rate additives.			
Q.	HOW DOES YOUR EXHIBIT BIS-1 RELATE TO VERIZON'S			
	WHOLESALE UNE PRICING SCHEDULE?			
A.	I support the non-recurring rates in Verizon's Wholesale UNE Pricing			
	Schedule, while Mr. Trimble supports the monthly recurring rates. The			
	non-recurring rates are the same as the rates listed in my Exhibit BIS-1.			
	The exchange and advanced service order items listed in my Exhibit BIS-			
	1 were mapped to the UNEs listed in Verizon's Wholesale UNE Pricing			
	Schedule based on the following information:			
	□ Exchange Basic: 2-wire loop; 2-wire subloop; 4-wire loop; 4-wire			
	subloop; NID; basic port; coin port; 2-wire loop-basic port UNE-P; 2-			
	wire loop-coin port UNE-P.			
	wire loop-coin port UNE-P.  Exchange Complex Non-Digital: 2-wire loop; basic port; 2-wire loop-			

1		ISDN PRI port UNE-P.			
2		Advanced Basic: 2-wire loop / 4-wire loop (when ILEC engineering is			
3		requested to determine digital compatibility); 2-wire CDT; 4-wire CDT.			
4	۵	Advanced Complex Digital: DS1 loop; DS3 loop; DS1 port; ISDN PRI			
5		port; DS1 loop-DS1 port UNE-P; DS1 loop-ISDN PRI port UNE-P;			
6		IDT; DS1 CDT; DS3 CDT; dark fiber; EELs; SS7.			
7					
8					
9		II. PRICING POLICY ISSUES			

11 Q. DOES THE ACT ENTITLE VERIZON TO RECOVER ITS ORDERING

#### AND SERVICE CONNECTION COSTS FROM CLECS? A. Yes. While Congress required ILECs, such as Verizon, to open their networks to competition, it also sought to ensure that ILECs would be compensated for the reasonable costs incurred in complying with this mandate. Section 252(d)(1) of the Act states that interconnection and UNE rates should be "just and reasonable" and "based on the cost (determined without reference to a rate-of-return or other rate-based

mandate. Section 252(d)(1) of the Act states that interconnection and UNE rates should be "just and reasonable" and "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable)." Accordingly, Verizon should not be expected to subsidize competitive entry by CLECs – whenever Verizon provides a UNE to a CLEC, it should be compensated for its "just and reasonable cost." The Eighth Circuit Court has affirmed this principle: "Under the Act, an incumbent LEC will recoup the costs involved in providing interconnection and unbundled access from the competing carrier making

requests" (lowa Utilities Bd. v. FCC, 120 F.3d 753, 810 (8th Cir. 1997) (emphasis added)). In addition, with specific reference to operating support systems ("OSS") costs, a federal district court upheld findings that ILECs are entitled to recover their OSS costs from CLECs, stating: "Because the electronic interfaces will only benefit the CLECs, the ILECs. . . should not have to subsidize them. . . . AT&T is the cost causer, and it should be the one bearing all the costs; there is absolutely nothing discriminatory about this concept." (AT&T Communications of the South Central States, Inc., v. BellSouth Telecommunications Inc., et al., 20 F. Supp. 2d 1097 (Ky. Fed. Dist. Ct. 1998).)

## 12 Q. DO VERIZON'S PROPOSED NON-RECURRING RATES COMPORT 13 WITH THE TELRIC APPROACH REFLECTED IN FCC RULES 51.501 –

**51.511?** 

A. Yes. Verizon's cost studies and proposed rates submitted in this proceeding comport with the cost study approach reflected in the FCC's pricing rules, including rule 51.505(b)(1), which has been invalidated by the Eighth Circuit Court. (Iowa Utils. Bd. v. FCC, 219 F.3d 744 (8<sup>th</sup> Cir. 2000).) While Verizon has always opposed the FCC's TELRIC standard, the Company has been obliged to go forward with its FCC-compliant studies in this docket, given that the issue of appropriate cost methodology has not yet been resolved at the federal level. I would emphasize, however, that Verizon reserves its right to revise its costs and proposed rates once this issue is settled.

1		III. RECOVERY OF NON-RECURRING COSTS (ISSUE 6)				
2						
3	Q.	UNDER WHAT CIRCUMSTANCES, IF ANY, IS IT APPROPRIATE TO				
4		RECOVER NON-RECURRING COSTS THROUGH RECURRING				
5		RATES?				
6	A.	Generally, it is not appropriate to recover non-recurring costs through				
7		recurring rates. If a cost is incurred only once, it should be recovered				
8		through a one-time payment. Otherwise, the party that has incurred the				
9		cost (here, the ILEC) acts as nothing more than a lender: it incurs an				
10		immediate cost, but recovers its cost over time through a series of				
11		payments.				
12						
13		There are two exceptions to this general rule. First, parties sometimes				
14		agree to recover non-recurring costs through a monthly recurring rate. In				
15		such instances, however, the parties' contract contains an early				
16		termination provision, under which the buyer must pay its bill in full or				
17		continue to make monthly payments (plus appropriate interest) even if it				
18		discontinues operation.				
19						
20		Second, a company may charge a monthly recurring price for a non-				
21		recurring cost where the cost object has a reasonably certain revenue-				
22		producing life and is expected to be reusable by different customers. A				
23		traditional example is the local loop - rather than assess a one-time				
24		charge to an end user to recover the total cost of the loop, Verizon and				

25

other ILECs assess monthly recurring charges. In the past, ILECs were

fairly certain that the local loop would be in service for a given period of time and that customers would continue to use it (and thus pay for it) over this entire period. Given the passage of the Act and the presence of facilities-based carriers, however, there is much more uncertainty, which must be reflected in the ILECs' cost of capital. In the same vein, ordering and connection costs are truly customer specific and are caused by an activity that is not reusable; therefore, a non-recurring recovery mechanism has always been the most appropriate for these types of costs.

Α.

Q. PLEASE PROVIDE AN EXAMPLE OF HOW UTILITIES MAY EMPLOY
NON-RECURRING CHARGES FOR RECOVERY OF ONE-TIME
COSTS.

Many utilities assess a one-time "special construction charge" where a customer requests a facility that is not usually deployed and is not reasonably certain to be used by future customers. For example, suppose a customer requests an exceptionally large and costly special telecommunications facility to serve that customer's particular business needs. If the ILEC believes the facility is not likely to be used by subsequent tenants, it may assess a one-time charge to recover the entire cost of the facility.

Most ILECs, including Verizon, have tariff provisions that allow them to assess such a charge under the circumstances described above. For example, Section A5 of Verizon's General Services Tariff, which is titled

1		"Charges Applicable Under Special Conditions" gives the Company the		
2		authority to institute one-time charges in cases that involve uncertain cost		
3		recovery, unusually expensive equipment, no immediate prospect of		
4		reusing the plant provided, and various other special circumstances.		
5				
6		This one-time pricing structure is used because it best matches the cost		
7		to the cost causer. In fact, if the ILEC were required to charge a monthly		
8		recurring charge for the special facility and the customer subsequently		
9		abandoned the plant, the ILEC would suffer a "stranded cost" that would		
10		ultimately be borne by its other customers.		
11				
12	Q.	ARE VERIZON'S PROPOSED NON-RECURRING RATES OR		
13		CHARGES BASED ON THE PRINCIPLES YOU'VE OUTLINED?		
14	A.	Yes, the Company's proposed non-recurring charges capture the		
15		ordering and connection costs that are caused by the cost causer (e.g.,		
16		the CLEC).		
17				
18		IV. PROPOSED NON-RECURRING RATES		
19		(ISSUE 9a, 11a, 11b and 12)		
20				
21	Q.	HOW WERE THE NON-RECURRING RATES FOR ORDERING AND		
22		SERVICE CONNECTION DETERMINED?		
23	A.	The Company has developed proposed rates that link the costs realized		
24		by Verizon with the cost causer, the CLEC. The non-recurring rates for		
25		service ordering and service connection activities are based on their cost		

studies discussed by witness Larry Richter. Verizon is not proposing to mark-up the costs that support its proposed non-recurring rates in this proceeding. As such, these non-recurring rates are based on the cost of the activities with no additional mark-up applied for common costs. Accordingly, the development of the non-recurring rates is essentially a simple process of mapping the appropriate cost elements to each rate element and adding them up.

Α.

#### Q. PLEASE DESCRIBE VERIZON'S PROPOSED WHOLESALE NON-RECURRING RATE STRUCTURE.

Verizon's proposed non-recurring rate structure, with separate rates for a relatively large number of possible CLEC requests, is quite specific. The benefit of having this type of detail in the rate structure is that it ensures that the rates charged will be as close as possible to Verizon's ordering and service connection costs.

The proposed non-recurring rates consist of ordering and service connection charges that apply when a CLEC places a wholesale UNE order with Verizon. Ordering charges are based on the costs for processing CLEC requests by Verizon customer service representatives. The service connection charges are based on the cost of facility assignment, central office activity, field installation, and other work necessary to get the CLEC's request properly into service. Both ordering and service connection charges depend on what the CLEC is requesting.

t	venzon proposes v	verizon proposes wholesale non-recurring rates for the following types or		
2	CLEC requests:	CLEC requests:		
3	Local Whole	Local Wholesale		
4	1.	Unbundled Loop		
5	2.	Unbundled Port		
6	3.	Unbundled Network Element –Platform Combination		
7		("UNE-P")		
8	4.	Unbundled Subloop		
9	5.	Loop Qualification		
10	6.	Loop Conditioning		
11				
12	Network Wh	nolesale		
13	1.	Unbundled Network Interface Device ("NID")		
14	2.	Dedicated Transport		
15	3.	Signaling System 7 ("SS7")		
16	4.	Enhanced Extended Link Combinations ("EELs")		
17				
18	Miscellaneo	ous Wholesale		
19	1.	Coordinated Conversions		
20	2.	Hot-Cut Coordinated Conversions		
21	3.	Expedites		
22	4.	Customer Record Search		
23	5.	CLEC Account Establishment		
24				
25	The non-recurring	rate structure is defined further for each element		

Given an unbundled loop request, for example, the relevant non-recurring rate would depend on whether it is for an exchange service (which does not require design or engineering) versus an advanced service (which requires design or engineering); on whether the request is for a basic service (which is provisioned using standard network components without specialized instructions) versus a complex service (which requires special instructions and provisioning); and on whether the request is for an initial service (a new service), a subsequent service (a change to an existing service), a changeover as is, or a changeover as specified. Additional detail is shown in Verizon's Non-Recurring Study, Section 1.

# 12 Q. WHAT ARE THE NON-RECURRING RATES THAT VERIZON 13 PROPOSES FOR ORDERING AND SERVICE CONNECTION THAT 14 SUPPORT UNES AND UNE COMBINATIONS?

A. A summary of proposed rates is provided in Exhibit BIS-1. Additional pricing detail supporting these rates is provided in Exhibit BIS-2 and Exhibit BIS-3.

Verizon proposes to establish separate rates for ordering and service connection. Ordering charges are identified for the initial order and for subsequent orders, when applicable. Initial ordering rates are applied per order for the first time or as additional UNEs are added to serve a CLEC's customer. Subsequent ordering rates are applied per order when a CLEC requests changes to a customer's account that do not affect the type of UNE being provided. The ordering rates are further identified by

the ordering process chosen by the CLEC, either manual or semimechanized. Service connection charges are provided for the initial line and for additional lines that terminate at the same service address and are included on same CLEC order. This is the case for the loop, port, UNE-P, subloop, loop qualification, loop conditioning, and line and station transfer. In addition, rates for loop conditioning, if requested, are identified for service connection only because order processing is incorporated into the proposed rates for each applicable CLEC order.

### Q. PLEASE EXPLAIN FURTHER THE TWO TYPES OF NON-RECURRING RATES.

12 A. The two types of non-recurring rates are the ordering rate and the service connection rate.

The <u>ordering rate</u> reflects the costs Verizon incurs when CLECs place orders for a UNE or for a UNE combination. To place an order, the CLEC must submit a Local Service Request ("LSR") for a loop, NID, circuit switch port, UNE-P, subloop, line sharing and for coordinated conversions. An Access Service Request ("ASR") is submitted for dark fiber, dedicated transport, SS7 and EELs. These orders are submitted by the CLEC either electronically or manually (*i.e.*, via a facsimile).

The <u>service connection rate</u> reflects the cost of provisioning that order or activity. It is a charge designed to recover the provisioning, central office and field costs required for the UNE or UNE combination. The service connection rates apply to each CLEC request consistent with the work

performed and cost realized by Verizon to satisfy the order. For instance, the non-recurring charge to remove bridged taps is designed to recover the costs of sending a technician to the field to remove the bridged taps.

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#### WHAT COSTS DO THESE NON-RECURRING RATES RECOVER? Q.

Α. The non-recurring rates capture the costs that are caused by the CLECs' 7 requests for UNEs.

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The Company incurs three types of costs: (1) the variable costs (principally, labor costs) that arise when workers review, process, and provision CLEC orders; (2) the shared / fixed costs for the computers, buildings, and similar facilities devoted to fulfilling CLEC requests at Verizon's National Market Centers; and (3) the costs associated with the development of OSS functions. This third category of costs includes Verizon's OSS transition and transaction costs. Transition costs are those incurred to establish mechanized systems. Transaction costs are those incurred in processing CLEC orders. Verizon understands that both types of OSS costs will be addressed in a later proceeding specifically addressing OSS. However, Verizon's non-recurring rate proposal here includes recovery of its loop qualification costs. Although the Commission determined that such costs were "OSS-related" in BellSouth's UNE proceeding, it concluded that rates should be set now because CLECs desire mechanized loop qualification (termed "Loop Make-Up" in BellSouth's case) and it is a new offering mandated by the FCC and not previously considered by this Commission. (Investigation into Pricing of Unbundled Network Elements, Order No. PSC-01-1181-FOF-Tp (May 25, 2001).) As such, the parties agreed to add Issue 11(b) in this proceeding, to specifically address loop qualification.

The <u>ordering</u> non-recurring rates include recovery of (1) variable ordering costs, (2) NMC shared / fixed ordering costs, and (3) an amount for the recovery of the OSS transition costs for Verizon's Mechanized Loop Pre-Qualification ("MLPQ") process. There are other OSS-related non-recurring costs associated with ordering, but, as noted, I understand these costs will be addressed later in a separate proceeding.

The <u>service connection</u> non-recurring rates are designed to recover the variable provisioning costs incurred in fulfilling CLEC orders. None of the NMC shared / fixed costs or OSS transition / transaction costs are included in Verizon's proposed rates for service connection.

The amounts for the NMC shared / fixed costs are added to each non-recurring ordering rate for all LSRs. The proposed amount for the OSS MLPQ transition costs is added to each non-recurring ordering rate for line sharing LSRs. (Again, other applicable OSS costs will be addressed in a separate proceeding.) Including these amounts in the non-recurring rates acts to spread recovery of these costs over time and thus allows CLECs to pay for these NMC shared / fixed and OSS costs in installments. If the Commission disagrees with this rate structure, then the costs must be wholly recovered through some other mechanism (e.g.,

1		a non-bypassable surcharge on all CLEC bills or all end-user bills, or a	
2		one-time charge assessed to all CLECs).	
3			
4	Q.	PLEASE PROVIDE AN EXAMPLE OF THIS RATE DEVELOPMENT	
5		PROCESS AS DOCUMENTED ON YOUR EXHIBIT BIS-2.	
6	A.	Consider the case of an initial CLEC request for a standard UNE two-wire	
7		loop with no special design or engineering required.	
8			
9		There are two basic non-recurring rates that are developed with this type	
0		of request - ordering and service connection. The ordering charge is	
1		either manual or semi-mechanized, depending on how the order was	
2		placed. A manual order is typically one that Verizon receives by	
13		facsimile. If additional units are ordered, then an additional unit service	
14		connection non-recurring rate will apply for all additional units.	
15			
16		The non-recurring rates for the standard UNE two-wire loop are	
17		essentially the sum of the various cost components associated with	
18		completing this CLEC request. Using this example, the variable	
19		components are as follows:	
20			
21		Exchange-Basic-New – Ordering and Service Connection Costs. In	
22		this case, the two-wire loop UNE is for an exchange service (it does	
23		not require design / engineering), is considered basic (standard	
24		provisioning), and is new (it is an initial request for service). As shown	
25		in the non-recurring cost study sponsored by Mr. Richter, these	

include ordering (100% manual and semi-mechanized) and service connection (initial unit and additional units) costs. The ordering costs are primarily associated with the time that Verizon's customer service representatives must spend processing this type of request (e.g., order entry into National Order Collection Vehicle, providing local service confirmation to the CLEC, jeopardy notification, and error correction). The service connection costs include the costs for facility assignment (e.g., assignment of outside plant facilities and central office line equipment for the service ordered), central office activity (e.g., running jumpers on the Main Distribution Frame, Intermediate Distribution Frames, or Tie Cable Frames), and field installation (e.g., cross-connect activity at the Feeder / Distribution Interface, cross-connect box, pedestal or pole, or NID).

Exchange-Basic-Disconnect — Ordering and Service Connection Costs. This is the cost associated with the disconnection of a two-wire loop UNE. As addressed in more detail by Mr. Richter, there will be ordering costs and service connection costs. The ordering costs are primarily associated with the time to process the order. The service connection costs includes the costs for facility assignment (e.g., update Company records, remove the jumper connection associated with the 2-wire loop at the MDF or equivalent; generate a jumper list for the central office technician; close out the order) and central office activity (e.g., remove the jumper at the MDF or equivalent).

 Pre-ordering Costs. Pre-ordering involves the customer service representative entering the end-user information, providing a telephone number (if requested), and verifying that vertical services are available (if requested) to set up the customer record in advance of the normal ordering process. Pre-ordering costs will often be realized on manual orders.

 Record Order Costs. Processing CLEC orders causes record order costs when the CLEC changes existing service records without changing the service itself.

Using this example, the ordering components or rate additives for the NMC shared / fixed costs and OSS costs are as follows:

• National Market Center – Shared / Fixed Costs. Verizon not only provides customer service representatives to process CLEC orders, but must also provide these representatives with the necessary infrastructure to do their jobs. For instance, there are costs incurred for the NMC building which houses the representatives, for the interactive voice response (IVR) systems, and for office furniture and personal computers. Costs of this nature make up NMC shared / fixed costs. As discussed below, a reasonable pro-rata share of these shared / fixed costs must be allocated to each order that is processed at the NMC in order for Verizon to recoup its cost of

providing this infrastructure.

• Operating Support Systems Costs. Verizon has expended a considerable amount of resources to upgrade its OSS to give CLECs the access to the same system information that Verizon utilizes for itself, as well as to provide the information technology and data processing necessary to support CLEC access to the OSS. Without these system enhancements, Verizon's service representatives would not be able to readily process CLEC requests. As addressed below, a reasonable pro-rata share of Verizon's loop qualification costs is included in each CLEC order for line sharing. The recovery of other OSS costs will be addressed in a separate Commission proceeding.

As shown in Exhibit BIS-2, the ordering and service connection rates for an initial CLEC request for a UNE loop are simply the sum of the Exchange-Basic-New, Exchange-Basic Disconnect, Preordering, Record Order, NMC shared / fixed, and relevant OSS costs. No additional mark-up to recover common costs is included in the proposed rate development.

### Q. WAS EACH RATE ELEMENT DEVELOPED IN A FASHION SIMILAR TO THIS EXAMPLE?

A. Yes. The rate development process is similar for the other rate elements and involves identifying the appropriate cost elements that are associated with the ordering and connection of each type of CLEC request and

summing them into the rate elements. This development is shown in detail in Exhibit BIS-2, with additional support provided in Exhibit BIS-3.

### Q. WHAT ARE THE NMC SHARED / FIXED COSTS AND MLPQ COSTS AS ADDRESSED IN EXHIBIT BIS-3?

The NMC shared / fixed costs are related to the establishment and ongoing maintenance of the NMCs that are dedicated to processing LSRs submitted by CLECs. The NMCs exist only to process these LSRs and would not be required if Verizon did not provide UNEs to CLECs. The costs identified for Verizon's MLPQ (loop qualification) process encompass the specific system development and enhancement costs necessary to establish the MLPQ process. Mr. Richter provides further detail regarding these NMC shared / fixed and MLPQ costs.

Α.

#### 15 Q. PLEASE DESCRIBE THE ORDERING PROCESS FOR UNE 16 REQUESTS AS IT PERTAINS TO THE NMC.

The CLEC may submit an LSR to establish a UNE or UNE combination electronically or manually, via facsimile. Electronically submitted LSRs are received by one of Verizon's NMCs. The NMC serves as the single point of contact for pre-ordering and ordering local network UNEs, including UNE combination requests. Verizon has three NMCs, located in Durham, North Carolina; Ft. Wayne, Indiana; and Coeur d'Alene, Idaho. If the CLEC submits the LSR manually, Verizon's off-line work group in San Angelo, Texas enters the LSR into Verizon's Secure Integrated Gateway System ("SIGS"). Once entered into SIGS, the order

1 flows into the NMC for processing.

### 3 Q. HOW WERE THE VARIABLE AND NMC SHARED / FIXED COSTS 4 DEVELOPED?

A. The variable costs were developed based on the time needed to process the different types of CLEC orders. Verizon Witness Richter's testimony explains how the costs were developed by studying the different activities associated with different types of CLEC requests and by applying current labor rates. The NMC shared / fixed costs were developed based on the costs actually incurred, as described in the Verizon cost study sponsored by Mr. Richter. Again, Verizon proposes to recover these costs through an additional amount included in the non-recurring rate for each LSR. As is documented in my Exhibit BIS-2 and Exhibit BIS-3, whenever a CLEC places an order involving the NMCs, the CLEC's "ordering" non-recurring rate includes \$4.44 for recovery of shared / fixed NMC costs. This amount was developed by taking the annual NMC shared / fixed costs of \$18.498 million and dividing it by the 4.170 million average annual CLEC orders expected over the 2001-2005 period.

### Q. PLEASE DESCRIBE THE ISSUES ASSOCIATED WITH MLPQ COST RECOVERY.

22 A. The Company proposes a non-recurring rate additive amount for 23 recovery of the transition cost that Verizon realized to allow CLECs to 24 perform loop qualification utilizing the MLPQ process. Given that MLPQ 25 costs should be recovered from CLECs (because they are the parties demanding the service), the most efficient pricing structure is one based on access to and use of Verizon's systems. Thus, it is appropriate to establish a loop qualification rate additive based on the relevant OSS costs and the forecasted number of orders expected by the ILEC to provision services to CLECs. It is a relatively straightforward and simple matter to take the total relevant costs and divide them by the forecasted orders to calculate the loop charge.

Α.

### 9 Q. WHAT RATE ADDITIVE IS VERIZON PROPOSING FOR THE 10 RECOVERY OF MLPQ COSTS?

Verizon proposes to charge an additional \$0.51 per CLEC line sharing request for recovery of these MLPQ costs. The calculation is straightforward and detailed in Exhibit BIS-3. Specifically, the \$0.51 LSR rate additive is the total MLPQ transition costs of \$1.014 million incurred in 2000, divided by the three-year projected demand for line sharing LSRs of 2.005 million. As such, the proposed rate additive is designed to recover the \$1.014 million in OSS MLPQ transition costs incurred over the 2.005 million CLEC line sharing requests expected over the 2001 – 2003 time period.

Q.

Α.

# RECOVERY PERIODS DIFFERS FROM THE DEMAND FORECAST? Given the inherent uncertainty in demand forecasts and to ensure that Verizon recovers all of these costs, Verizon proposes that the per-LSR rate additives remain in place until 2.005 million line sharing LSR orders

WHAT IF THE TOTAL NUMBER OF LSRS FOR THE THREE-YEAR

Revised 12-17-01

have been processed within the old GTE serving territories. The per-LSR rate additives could be applied beyond the three-year recovery period if demand forecasts are overstated. This method provides a fair and equitable means of recovering Verizon's MLPQ transition costs.

Q.

Α.

YOU HAVE ADDRESSED VERIZON'S PROPOSED RECOVERY OF ITS
VARIABLE COSTS, ITS NMC SHARED / FIXED COSTS AND ITS
MLPQ COSTS. PLEASE PROVIDE AN EXAMPLE OF THESE COST
ELEMENTS OR RATE ADDITIVES USING THE PROPOSED NONRECURRING RATES LISTED ON EXHIBIT BIS-1.

Exhibit BIS-1 lists the proposed ordering and service connection rates for a 2-wire loop (*i.e.*, an exchange-basic loop). The total cost of <u>ordering</u> (using the semi-mechanized method) is \$36.91 and the proposed non-recurring rate equals this cost (as stated above, without a common cost mark-up). Exhibit BIS-2 also provides the detail supporting this rate, including the variable costs associated with this order <u>plus</u> a share of the NMC shared / fixed costs. The exhibit also provides a place marker for OSS costs to be addressed in a separate proceeding (*i.e.*, these OSS costs are to be determined ("TBD") in separate proceeding). The proposed non-recurring rate of \$36.91 is also provided below by rate element or cost recovery component.

23	Rate Element Component	Amount Per-LSR Order
24	Variable Ordering Cost	\$32.47
25	NMC Shared/Fixed Cost	\$ 4.44

Revised 12-17-01
OSS Transaction-Specific Cost TBD in separate proceeding
OSS Transition Costs TBD in separate proceeding
Total \$36.91

Exhibit BIS-1 also provides the total cost and proposed non-recurring rates for service connection. For the 2-wire UNE loop, this rate is \$102.84 for the initial line on the LSR order, which recovers the costs incurred in provisioning of line sharing. This service connection non-recurring rate includes the variable costs. It does not include a share of the NMC shared / fixed cost, since the NMC cost is caused by the ordering and not the service connection. Likewise, the service connection rate does not include OSS costs. Both NMC shared / fixed costs and MLPQ costs, from a cost recovery perspective, are addressed in Verizon's proposed non-recurring rates for LSR orders (*i.e.*, in the ordering rates and not the service connection rate).

A.

# Q. VERIZON PROPOSES A SERVICE INQUIRY CHARGE FOR DARK FIBER. PLEASE ADDRESS THIS CHARGE IN MORE DETAIL.

Verizon has established a pre-ordering process, or dark fiber inquiry, to determine if dark fiber is available between the locations and in the quantities specified by the CLEC. The charge for this preordering activity is based on Verizon's costs to review its cable records and is listed on Exhibit BIS-1 as "Advanced – Service Inquiry Charge" in the "Unbundled Dark Fiber" section of the exhibit. The inquiry charge is separate from other non-recurring charges or rates for ordering and connection of dark

1		fiber interoffice transport, loops and subloops.
2		
3	Q.	PLEASE EXPLAIN HOW THE PROCESS FOR ORDERING
4		UNBUNDLED DARK FIBER WILL WORK FOR BOTH LOOP AND
5		INTEROFFICE FACILITIES.
6	A.	First, a CLEC must submit an ASR Service Inquiry for each dark fiber
7		interoffice facility or loop / subloop facility requested so that Verizon can
8		initiate a review of its cable records to determine if dark fiber is available
9		between the locations and in the quantities specified. Verizon's plant
10		records for dark fiber are not mechanized at this time. Therefore, an
11		extensive manual effort is required by two different engineering groups to
12		determine whether unused fiber capacity even exists. Verizon proposes
13		to recover the costs associated with this effort through a non-recurring
14		"Advanced - Service Inquiry Charge."
15		
16		Once the fiber information is provided to the CLEC, and assuming the
17		CLEC has pre-established its collocation arrangement or point of
18		connection, it can then submit a firm order through the ASR process.
19		Proposed non-recurring rates for ordering and connection will be applied
20		with the firm order. These proposed rates are shown in my Exhibit BIS-1
21		
22		To obtain access to dark fiber in the subloop, as is the case for al
23		subloop facilities, the CLEC must be pre-positioned via Verizon's
24		feeder/distribution interface application process. Access to interoffice

dark fiber, or the central office end of the dark fiber loop or subloop,

requires the CLEC to be collocated in each central office, similar to how it gains access to other UNEs today.

Α.

# Q. BESIDES DETERMINING IF FIBER IS PHYSICALLY AVAILABLE, DOES VERIZON USE ANY OTHER CRITERIA TO DETERMINE THE AVAILABILITY OF DARK FIBER?

Yes. The FCC, in its UNE Remand Order, gave state commissions the ability to establish reasonable limitations on access to dark fiber to meet concerns about an ILEC's ability to provide service as a carrier of last resort ("COLR"). (Implementation of the Local Competition Provisions of the Telecomm. Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696, at para. 199 (1999) (the "Remand Order")). Such limitations are appropriate here.

Because Verizon is a COLR, it must ensure that sufficient network transmission capacity exists to meet its service commitments. Requiring ILECs to make their reserve capacity available to new entrants discourages otherwise efficient investment. Although Verizon is not proposing to reserve unused fiber for its own use, the Company will implement several reasonable limitations on dark fiber to ensure that it can meet its COLR obligations as well as enable maintenance and restoration activities. First, Verizon may reserve dark fiber for maintenance / emergency restoration purposes or to satisfy customer orders for fiber related services or for future growth. Second, the Company does not allow competitors in any two-year period from leasing

more than 25% of the dark fiber in a given segment of the network. Further, Verizon reserves the right to revoke leased fiber from CLECs with 12 months notice, upon establishing need to the satisfaction of the Commission, and also reserves the right to take back underused (less than OC-12) fiber.

Α.

### Q. VERIZON HAS PROVIDED PROPOSED NON-RECURRING RATES FOR LOOP CONDITIONING. WHAT IS LOOP CONDITIONING?

Under the FCC's Line Sharing Order, ILECs are required to "condition" loops to allow requesting carriers to offer advanced services. (Deployment of Wireline Services Offering Advanced Telecomm. Capability and Implementation of the Local Competition Provisions of the Telecomm. Act of 1996, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, 14 FCC Rcd 20912 (1999) (the "Line Sharing Order")). Loop conditioning is the removal of load coils and/or bridged taps or electronics from the local cable pairs at the CLEC's request to allow line sharing to occur. While load coils and bridged taps have been, and for some loops, continue to be, an integral part of the copper voice grade communications network, they impede the transmission of digital signals. If the CLEC requires copper pairs without load coil(s) or bridged tap(s) for the digital service it offers its end-user customers, then the CLEC has the option of ordering loop conditioning from Verizon.

#### Q. DO THE LOOP CONDITIONING NON-RECURRING RATES APPLY TO

1	<b>ALL LOOPS REQ</b>	<b>UIRING LOOP</b>	<b>CONDITIONING?</b>
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Α. Yes. In the BellSouth UNE proceeding, the Commission correctly concluded that the FCC's Remand Order allows ILECs to charge for loop (or line) conditioning on all loops, whether over or under 18,000 feet in length. Consistent with this holding, Verizon will assess its loop conditioning non-recurring charge or rate, regardless of the loop length, when the CLEC specifies on the LSR that loop conditioning is required. These non-recurring rates, as listed in my Exhibit BIS-1, reflect the costs that Verizon will incur to conditioning loops at the request of CLECs.

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#### Q. WILL LOOP CONDITIONING BE PROVIDED UNDER ALL 12 **CIRCUMSTANCES?**

A. Loop conditioning will not be provided in cases where such conditioning significantly degrades traditional voice band service that Verizon offers to its end-users. This is in accordance with paragraph 85 of the FCC's Line Sharing Order, which states that "if conditioning a particular loop for shared-line xDSL will significantly degrade that customer's analog voice service, incumbent LECs are not required to condition that loop for shared-line xDSL."

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### Q. VERIZON HAS ALSO PROPOSED NON-RECURRING RATES FOR LINE AND STATION TRANSFER. WHAT IS LINE AND STATION

23 TRANSFER?

24 Α. A line and station transfer involves moving an existing Verizon end user 25 off copper facilities and onto fiber, in order to free up copper facilities for a CLEC requesting a line sharing arrangement. A line and station transfer is also done to swap an existing facility off of digital loop carrier and onto copper facilities in order to provision a copper facility for a CLEC requesting a line sharing arrangement. A line and station transfer can be completed in one step (transferring to an existing spare facility) or can be in two steps (when the transfer involves an existing end user move).

Α.

## Q. HOW DOES VERIZON INTEND TO APPLY ITS NON-RECURRING RATES FOR LINE AND STATION TRANSFER?

Verizon will charge a non-recurring rate when a one- or two-step transfer must be completed in order to accommodate a CLEC request for a copper-based facility. The service connection rates apply to the initial and additional lines that terminate at the same service address and are included on the same CLEC order.

#### V. SUMMARY

Α.

#### 18 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

My testimony provides the proposed non-recurring rates for UNEs and UNE combinations as well as for loop conditioning. These rates are intended to recover Verizon's costs for orders received and service connections performed on behalf of the CLECs. They are based on costs with no mark-up for common costs, since the Company is not proposing to mark-up the costs that support its proposed non-recurring rates in this proceeding.

The proposed non-recurring ordering and service connection rates for UNEs, UNE combinations and for loop conditioning are listed in Verizon's Wholesale UNE Pricing Schedule (Company Exhibit 1) and my Exhibit BIS-1. Additional pricing support is provided for in Exhibit BIS-2 and Exhibit BIS-3.

Non-recurring rates are provided for both manual and semi-mechanized ordering processes, and for initial and subsequent orders. The rates for service connection are provided for both initial and additional lines that terminate at the same service address and on the same CLEC order. This is the case for all proposed service connection rates with the exception of those for dedicated transport, SS7, dark fiber and EELs. The service connection rates for these UNEs and UNE combinations are applied on a per-order basis.

The rates for ordering include recovery of variable, NMC shared / fixed and loop qualification costs. Verizon's proposal to recover its NMC shared / fixed costs and its loop qualification (or MLPQ) costs on a perorder basis properly links costs to the CLEC cost causer. Verizon's proposed non-recurring rates do not include recovery of its other OSS costs, as these costs will be dealt with in a separate Commission proceeding.

The proposed rates for service connection for both UNEs and loop

'		conditioning do not include Nivio shared / fixed costs, or loop qualification
2		costs. Only the variable costs are included in the service connection
3		rates. The rates for loop conditioning are provided for bridged tap
4		removal, load coil removal and for both bridged tap and load coil removal.
5		These rates are applicable when the CLEC requests loop conditioning
6		on an LSR order.
7		
8		Finally, Verizon reserves the right to revise its UNE costs and proposed
9		rates, pending conclusion of the appeals of the Eighth Circuit Court's
10		decision invalidating certain of the FCC's UNE pricing rules.
11		
12	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
13	A.	Yes.
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1		SURREBUTTAL TESTIMONY OF TERRY R. DYE
2		
3		I. <u>INTRODUCTION</u>
4		
5	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TITLE.
6	A.	My name is Terry R. Dye. My business address is 600 Hidden Ridge
7		Drive, Irving, Texas, 75038. I am employed by Verizon Services
8		Group as Manager - Regulatory and am representing Verizon Florida
9		Inc. ( "Verizon" or "the Company") in this proceeding.
10		
11	Q.	DID YOU FILE DIRECT TESTIMONY IN THIS PROCEEDING?
12	A.	No, but I am now adopting the Direct Testimony filed by Mr. Bert
13		Steele, who retired from Verizon after he submitted his Direct
14		Testimony in this case.
15		
16	Q.	PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND
17		WORK EXPERIENCE.
18	A.	I received a Bachelor of Science Degree in Economics in 1977 and a
19		Master of Arts Degree in Economics in 1979, both from the University
20		of Missouri. Upon graduation, I was employed as a Planner with the
21		Missouri Department of Natural Resources. In 1981, I took a job as an
22		Economist in the Communications Department of the Missouri Public
23		Service Commission. There, I was responsible for the review and
24		preparation of testimony, exhibits and cost support data submitted in
25		association with tariff filings and for making recommendations on those

1		filings.
2		
3		In January 1984, I accepted a position as a Rate Manager in the
4		Economics and Rates Department of the Illinois Commerce
5		Commission. In that capacity, I had general rate design responsibility
6		over telephone utility matters in the Rate Design Section.
7		
8		I joined Contel Telephone Operations in January 1985 as a Senior
9		Financial Analyst in the Pricing Group of the Revenue Department.
10		was promoted to Pricing Manager in December 1987.
11		
12		With the merger of Contel and GTE in 1991, I accepted the position of
13		Rate Design Manager with GTE Telephone Operations. From January
14		1993 to January 1994, I held the position of New Services Manager in
15		the Pricing Department, and then I was assigned my current position.
16		
17		
18	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY STATE
19		COMMISSIONS?
20	A.	Yes. I testified here recently in the Verizon/Sprint arbitration case
21		(Docket No. 010795-TP) and have testified on numerous occasions in
22		the area of telecommunications ratemaking and cost methodologies in
23		Missouri, Illinois, South Carolina, West Virginia, New York, Hawaii,
24		Oregon, Pennsylvania, Ohio, Illinois, South Carolina, Indiana,
25		Wisconsin, Kentucky, Arkansas, New Mexico, Alabama, Washington,

1 Texas, and New York.

#### 3 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

4 A. The purpose of my testimony is to rebut Mr. Ankum's Rebuttal

5 Testimony regarding Verizon's non-recurring charges (NRCs).

### 7 Q. IS VERIZON'S A LA CARTE SWITCH FEATURE PROPOSAL

8 CUMBERSOME FROM AN ORDERING STANDPOINT, AS DR.

ANKUM ASSERTS (ANKUM REBUTTAL TESTIMONY (RT) AT P.

10 89)?

Α.

No. It is necessary for an ALEC to inform Verizon, on a customer-by-customer basis, which switch features the particular end-user desires to have. This information must be conveyed to Verizon's switch so that it knows how to provision those specific features. Verizon cannot automatically turn on all features for every ALEC line, as Dr. Ankum would suggest. Many switch features cannot co-exist with other switch features, and there is no need to activate features the customer does not want. Forcing Verizon to activate all switch features, regardless of what the end user orders, would be inefficient and would deny Verizon recovery of the specific costs incurred for particular switch features. Verizon's proposal properly contains prices for these individual features; they should not all be included in the recurring rate for the port, as Dr. Ankum suggests.

#### Q. DR. ANKUM ALSO ASSERTS THAT "NON-RECURRING CHARGES

FOR INDIVIDUAL FEATURES...ARE ENTIRELY AVOIDED IF THE FEATURES COME AUTOMATICALLY WITH THE SWITCH PORT"

(ANKUM RT, P. 90). PLEASE COMMENT ON THIS ASSERTION.

Mr. Ankum's premise is incorrect. He implies that if there were no monthly recurring charges (MRCs) associated with the individual features, then all features would automatically be provisioned with the switch port. As I just explained, such an arrangement is not only inefficient and costly, it is not possible. Even if there were no recurring rates associated with provisioning individual features, the ALEC must still indicate on the Local Service Request (LSR) form which features they would like turned up for a particular port. The NRCs for ordering and provisioning the port and any associated features are independent of the MRC rate structure for the recovery of the switch feature costs. Under Verizon's proposed NRC rate structure, there are no NRCs specifically for individual features on an initial order. There are. however, costs associated with change orders related to features and Verizon does charge an NRC if a CLEC makes a change in the switch features after the initial order. Again, regardless of the recurring rate structure for the individual features, the company will incur costs to process these orders and to activate and deactivate selected features. The NRCs associated with these change orders are independent of the recurring rate structure.

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Α.

#### 24 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

25 A. Yes, it does.

BY MS. TROY:

Q Mr. Richter, would you please briefly summarize your testimony?

A (By Mr. Richter) Yes, ma'am. Good morning. My name is Larry Richter, and I am sponsoring the Verizon Florida UNE wholesale nonrecurring cost study that was filed on November the 7th, 2001. Verizon's nonrecurring cost study identifies the costs associated with ordering, provisioning, central office, and outside plant field activities necessary to process a local service request from an ALEC or an access service request from a DLEC. Verizon has taken great care to present a nonrecurring cost study that accurately depicts the actual processes and activities that are necessary to handle the ALEC or DLEC request for service. Verizon's study correctly estimates the costs that Verizon incurs when processing and provisioning service to the ALECs and the DLECs.

Verizon's nonrecurring study is comprehensive, easy to understand, easy to navigate and to analyze. Each page of the study has a source and destination entry to tell the reader where the costs come from and where the cost is going as we go forward in the study. While there is undoubtedly a large amount of information contained in the Verizon nonrecurring cost study, Verizon has endeavored to simplify the process of tracing the flow-through of the cost from its origination to the comprehensive summary sheets and then onto the rate sheets.

The auditing process can also be accomplished with the electronic copy that was provided on the CD ROM.

The nonrecurring cost study is arranged in separate sections, one being ordering, one being provisioning, one being field work, each of which I will briefly describe. The ordering portion of the nonrecurring cost study develops costs from manual and semi-mechanized order processing and is based on work sampling and time and motion studies conducted in facilities that actually process these requests. These studies calculate the nonrecurring processes that are necessary to process that particular request. And it takes the specific activities involved of processing the order, estimates an average time, and then uses a labor rate to actually calculate the cost.

The work sampling is an accepted method of taking a sample group of individuals who actually perform the activities and record their activities on a prescribed interval. A time and motion study, as the name implies, is an actual time and motion study that does the observation and also the actual time to complete that particular activity.

The provisioning portion of the cost study is based on the activities conducted in the assignment provisioning center. This center assigns the outside plant facility portion of the loop and it also assigns the central office equipment. The assignment provisioning center also has the ability to

route that order either to the central office or to the field process if the field trip is actually necessary. The assignment provisioning center calculations is based on data of the quantity of orders that are actually sent to the provisioning center and then the time that is used in the provisioning center to accomplish the tasks that they need to do.

The field work portion of the cost study is performed in the central office and in the outside plant facilities. The central office activities being those items basically running jumpers inside the central office, and that time is based on studies that have been done to actually capture the time to run the jumpers. And there is also a drive time study there of the technician having to go from a host office to a remote.

For the outside plant field activities the technician reports his time into a data system via drivers and functions, and we utilize that information to determine the activities and the time to perform those activities in order to complete an order.

The Verizon nonrecurring cost study is based on accurate and reliable data that can be validated by the substantial data that was provided in the cost study or that has been made available for anyone to look at. Verizon and Arthur Andersen employees spent a large amount of time collecting this data, interviewing the subject matter experts,

о 

who are Verizon employees who actually work in these centers where the activities take place in order to develop this study.

In short, Verizon has devoted considerable time and resources to preparing detailed time and motion studies and work sampling studies to determine the actual processes and activities necessary to process an LSR and ASR.

In contrast, the ALEC coalition suggests that unsubstantiated adjustments can be made to Verizon's nonrecurring cost study based solely on opinions of a consultant. The ALEC coalition proposals are no substitute for Verizon's objective, well-documented work time studies and analysis and cost calculations. The ALEC coalition challenges the time estimates contained in Verizon's nonrecurring cost study. However, the coalition only analyzed a handful of order types, and their overall analysis is based primarily on the consultant's unjustified opinions.

The coalition proposes a number of wholesale changes to portions of Verizon's nonrecurring cost study that are unwarranted, unsubstantiated, and based upon unrealistic and inaccurate time estimates. As such, the coalition's proposed changes are inappropriate and should be rejected.

The Commission should approve Verizon's nonrecurring study because it accurately and reliably captures the costs that Verizon will incur to process and provision ALEC and DLEC service requests. Thank you.

Q Thank you, Mr. Richter.

Mr. Dye, would you please summarize your testimony?

A (By Witness Dye) Sure. Good morning. I'm here today to sponsor Verizon's nonrecurring rates for ordering and service connections associated with UNEs. My testimony primarily addresses Issue 6 concerning the recovery of nonrecurring costs. I also address Issue 9A and 12 concerning proposed nonrecurring rates or charges for UNEs and UNE combinations. In addition, my testimony responds to Issue 11A by presenting nonrecurring rates for loop conditioning including the situation where the rates should be applied.

Finally, I address Issue 11B by proposing nonrecurring rates that recover Verizon's loop qualification costs. As I indicated my testimony sponsors the nonrecurring rates for UNEs and UNE combinations as well as loop conditioning. These rates are intended to recover Verizon's costs for orders received and service connections performed on behalf of the ALECs. The rates are based on the costs with no markup for the recovery of common costs.

It is generally not appropriate to recover one-time customer-specific costs for nonreusable assets or services through recurring rates. If a cost is incurred once for a specific customer it should be recovered through a concurrent one-time payment from that customer. This would include one-time costs associated with processing service orders and

connecting the service. Recovering the service in a recurring rate structure would put recovery of those costs in jeopardy since there is no assurance that the customer will continue to use the service over the recovery period.

Likewise, services or customers that do not cause the cost to be incurred should not be responsible for recovery of the costs in the recurring rates. The proposed nonrecurring ordering and service connection rates for UNEs, UNE combinations, and for loop conditioning are listed in Verizon's wholesale UNE pricing schedule, that is Company Exhibit 1, and my Exhibit BIS-1 with additional pricing support provided in Exhibits BIS-2 and 3.

Nonrecurring rates are provided for both manual and semi-mechanized orders and for initial and subsequent orders. The rates for service connection are provided for both initial and additional lines that terminate at the same service address on the same order. This is the case for all proposed service connection rates with the exception of those for dedicated transport, SS7, dark fiber, and EELs. The service connection rates for these UNEs and UNE combinations are applied on a per order basis.

The rates for ordering include recovery of variable, NOMC shared and fixed, and loop qualification costs. Verizon's proposal to recover the NOMC shared and fixed costs and its loop qualification costs on a per order basis properly links

the costs to the ALEC cost causer. Verizon has proposed to recover a reasonable pro rata share of its loop qualification costs, which amount to 51 cents from each ALEC line sharing order. Verizon's proposed nonrecurring rates do not include recovery of other OSS costs as these costs will be dealt with in a separate Commission proceeding.

The proposed rates for service connection for both UNEs and loop conditioning do not include NOMC shared and fixed costs or loop qualification costs and only the variable costs are included in the service connection rates. The rates for loop conditioning are provided for bridged tap removals, load coil removals, and/or both bridged tap and load coil removal. The charges for line conditioning will apply whenever carriers request Verizon to remove bridged taps and/or load coils from UNE loops in order for the requesting carrier to offer the end user advanced services. These rates are applicable whenever the ALEC requests loop conditioning. Thank you.

 MS. TROY: Thank you. Mr. Richter and Mr. Dye are available for cross examination.

(Transcript continues in sequence with Volume 8.)

1	STATE OF FLORIDA )
2	: CERTIFICATE OF REPORTER
3	COUNTY OF LEON )
4	T 14ME EAUDOT DDD OL 1 0 000 0 0 0 0 0
5 6	I, JANE FAUROT, RPR, Chief, Office of Hearing Reporter Services, FPSC Division of Commission Clerk and Administrative Services, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.
7	'
8	IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this
9	transcript constitutes a true transcription of my notes of said proceedings.
10	I FURTHER CERTIFY that I am not a relative, employee,
11	I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in
12	connected with the action, nor am I financially interested in the action.
13	DATED THIS 6th day of May, 2002.
14	
15	- Vene Turis
16	Chief, Office of Hearing Reporter Services  FPSC Division of Commission Clerk and
17	Administrative Services
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