ORIGINAL

DOCKET NO. 951232-TI [Telecommunications Services, Inc.]

WITNESS: Direct Testimony of Joseph Signorelli, Appearing on Behalf of Respondent,
            Telecommunications Services, Inc., as an adverse witness.

DATE FILED: June 15, 1998

1   BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

2

                              Docket 951232-T1
3   Filed: October 17, 1995

4

5   In Re: Dade County Circuit Court
     referral of certain issues in
6   Case No. 92-11654 CA 11 (Transcall
     America, Inc. vs. Telecommunications
7   Services, Inc. and Telecommunications
     Services, Inc. vs. Transcall America, Inc.
8   and Advanced Telecommunications Corp.) that
     are within the Commission's jurisdiction.
9   _____/

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11   888 Southeast 3rd Avenue
                              Fort Lauderdale, Florida
12   May 19, 1998
                              2:15 p.m.
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17   DEPOSITION OF JOSEPH SIGNORELLI

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22   Taken before Leslie Hanawalt, Court Reporter

23   and Notary Public for the State of Florida at Large,

24   pursuant to Notice of Taking Deposition filed in the

25   above cause.

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APPEARANCES

MESSER, CAPARELLO & SELF
BY: ALBERT T. GIMBEL, ESQUIRE
Appearing on behalf of the Plaintiff.

ADORNO & ZEDER, P.A.
BY: WESLEY PARSONS, ESQUIRE
Appearing on behalf of the Defendant.

PUBLIC SERVICE COMMISSION
BY: WILL COX, ESQUIRE (by phone)

ALSO PRESENT:

J. ELLIOTT MESSER, ESQUIRE

KATHY L. WELCH, CPA

_____

I N D E X

Witness	Dir.	Cr.	Cr.	Red.
JOSEPH SIGNORELLI	3	58	59	74

H. ALLEN BENOWITZ & ASSOCIATES
Dade * Broward * Palm Beach
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1   THEREUPON,

2   JOSEPH SIGNORELLI

3   was called as a witness by the Defendant and, having

4   been first duly sworn, testified as follows:

5   DIRECT EXAMINATION

6   BY MR. PARSONS:

7   Q   Could you state your name, sir.

8   A   Joseph Signorelli.

9   Q   Could you spell it, please.

10   A   S-i-g-n-o-r-e-l-l-i.

11   Q   Mr. Signorelli, my name is Wes Parsons, and

12   I'm the attorney for a company called

13   Telecommunications Services, Inc.

14   I'll have a number of questions for you today.

15   If you don't understand any question, please let me

16   know and I'll try to make it understandable; is that

17   agreeable, sir?

18   A   Yes.

19   Q   Where do you live, sir?

20   A   Boca Raton, Florida.

21   Q   Street address, please?

22   A   23289 Lago Mar Circle, Boca Raton, Florida,

23   Q   Where do you work, Mr. Signorelli?

24   A   Renaissance Cruises, Inc. in Fort Lauderdale,

25   Florida.

1   Q   What do you do there?

2   A   I am a computer consultant.

3   Q   How long have you worked for Renaissance

4 Cruises?

5   A   Since September of '92.

6   Q   What did you do before Renaissance?

7   A   I worked for Electronic Data Systems, EDS.

8 Actually between 1984 and 1992, without ever changing

9 jobs, I worked for about four or five different

10 companies.

11   Q   Could you name them, please?

12   A   TelTech Communications, Telus, ATC, LDDS, and

13 then EDS.

14   Q   At the time you worked for TelTech, Telus,

15 ATC, and LDDS, were you actually employed by EDS but

16 assigned to those companies; how does that work?

17   A   No. LDDS, or perhaps ATC just prior to the

18 merger with LDDS, decided to out source all the

19 information technology function to EDS, at which time

20 all the information technology employees were

21 transitioned to EDS's employ.

22   Q   So you actually started at TelTech and then

23 made your way up the food chain as the acquisitions

24 took place?

25   A   Correct.

1   Q   Can you tell me your educational background?

2   A   Bachelor of Science.

3   Q   From which college?

4   A   Rensselaer Polytechnic Institute in New York.

5   Q   When did you receive that?

6   A   1974.

7   Q   Was that in computer science?

8   A   Mathematics. And then various post-graduate

9 courses, but no degrees.

10   Q   What did you do after you graduated in 1974?

11   A   I became a junior entry level programer with

12 American Express Corporation in Manhattan.

13   Q   At some point, did you move to South Florida?

14   A   Yes, I was relocated by American Express to

15 Fort Lauderdale in 1978.

16   Q   When did you leave American Express?

17   A   In 1980.

18   Q   At some point, did you move into the field of

19 telecommunications?

20   A   Yes.

21   Q   When was that?

22   A   1984 when I was hired by TelTech.

23   Q   Am I correct, from 1984 to 1992 you worked

24 with TelTech?

25   A   No. Beginning of 1984 through the merger that

1   made us become Telus, and I believe that year was

2   approximately 1987 or 1988.

3   Q   What did you start out doing?

4   A   I was hired as the manager of computer

5   programming.

6   Q   Did you actually do any programming yourself?

7   A   Yes, but very little.

8   Q   What sort of programming went on at that time

9   in 1984 at TelTech?

10   A   When you say what kind, you mean what

11   languages or what applications?

12   Q   What sort of applications were you

13   programming?

14   A   The primary applications in long distance

15   telephony environment would be order entry, customer

16   service, rating, billing, and some other ancillary

17   applications.

18   Q   Would there be any realtime programming for

19   the switching services provided, or would that be in

20   the realm of engineering?

21   A   In terms of directing calls or in terms of

22   billing?

23   Q   Directing calls?

24   A   That would be in the engineering side.

25   Q   Was there a primary application billing at

1   that time?

2   A   I would have to say that billing is probably,

3   yes, the primary application. Obviously it's where

4   your revenue is going to originate.

5   Q   I've been asking you about when you started at

6   TelTech, did that pretty much persist in the same sort

7   of fashion throughout your tenure at TelTech and Telus?

8   A   Did what persist?

9   Q   That you worked on those particular areas of

10   which billing was the primary application?

11   A   Yes.

12   Q   Can you describe for me the data flow for the

13   billing system from the input, which I assume came from

14   the data from the switch, to the output in terms of

15   reports or invoices or whatever?

16   A   Calls are generated obviously by the switches

17   and those calls are then interfaced to -- I'll call it

18   the billing system, although there were a lot of

19   components of it. Originally, it was interfaced by

20   batch mode, which are magnetic tapes, and later on it

21   became interfaced through realtime mode, which was just

22   the communication link between telephone switches and

23   computer systems.

24   The first part of the billing phase would be

25   to ascertain whether or not the call was a billable

1   call. Once it was deemed billable, there was a process

2   where you would calculate the duration of the call and

3   price the call based on the tariff that was in effect.

4   And eventually based on that call's billing cycle, it

5   would eventually fall onto an invoice or bill, which

6   would go out to the customer with remittance. And the

7   customer would remit payment when payment is due.

8   Q   My client in this proceeding was a reseller.

9   Were there any differences in the billing arrangements

10 for a reseller who not only had customers of his own

11 who were being billed directly but himself received a

12 bill?

13   A   In which one of these companies and in which

14 one of these platforms?

15   Q   Good question. Let's talk about Telus and

16 ATC?

17   A   Actually, when they were Telus, I don't recall

18 having any resellers. When we merged with MicroTel and

19 became ATC, I recall the reseller traffic and reseller

20 billing to be done on a platform other than the ones

21 that I supported, which were the ones in Miami in the

22 and TelTech and Telus companies.

23   Q   When you say on a platform other than you

24 supported, what do you mean by that?

25   A   When we merged with MicroTel to become ATC, at

1 that time I was director, subsequent to my hiring, I

2 had been promoted to director of systems development.

3 When we merged with MicroTel and became ATC, I had a

4 cohort who was also a director of systems development,

5 and he was primarily in charge of the MicroTel billing

6 systems, and I stayed in charge of TelTech and Telus

7 billing systems.

8   Q   Who was your cohort?

9   A   Joe Hollop, H-o-l-l-o-p.

10   Q   Do you recall there being any resellers after

11 the acquisition by ATC?

12   A   Any new resellers?

13   Q   Or old resellers?

14   A   Yes, there was a reseller part of the

15 business, yes.

16   Q   TSI was one of those resellers?

17   A   I had never heard of TSI.

18   Q   Did you know the name of any of the resellers

19 that were customers of ATC?

20   A   None that come to mind at the moment, no.

21   Q   Do you recall there being any different

22 arrangements in place for billing as it applied to a

23 reseller?

24   A   As opposed to a nonreseller?

25   Q   Yes, sir.

1   A   I don't know because like I said, I had no

2 responsibility over those systems.

3   Q   That went through Joe Hollop?

4   A   Yes.

5   Q   Focusing on the Telus and ATC time frame

6 again, you mentioned that you got your data either

7 through tapes or by direct communications link. Do you

8 know of any backup of that data that you received

9 either through the direct link or through tape that was

10 kept at the switch level?

11   A   Yes. I believe that there was a certain

12 number of years' retention that those tapes, what we

13 call raw switch data, that was kept.

14   Q   Do you know what the policy was supposed to

15 be?

16   A   I believe seven years.

17   Q   Do you know if that was written down any

18 place?

19   A   Not that I recall.

20   Q   Did you have any responsibility for seeing the

21 retention of the tapes at the switch?

22   A   No.

23   Q   Do you know who was responsible for that?

24   A   That was the engineering side.

25   Q   Who was responsible for engineering at that

1 time?

2   A   Which company?

3   Q   Let's me start with Telus.

4   A   Telus was Rudy McGlashan.

5   Q   For ATC?

6   A   I believe it was still Rudy.

7   Q   Now, after the data arrived by direct link or

8 tape or pony express to your department, did you make a

9 back-up copy of it in any fashion?

10   A   No.

11   Q   What happened then if you lost a tape?

12   A   I don't know we would give the tapes back to

13 engineering when we're done with them.

14   Q   So you took the raw call data in whatever

15 format, and it was processed by your application

16 software?

17   A   Correct.

18   Q   Generally correct?

19   A   Uh-huh.

20   Q   Raw call data was organized and one record per

21 each call?

22   A   Yes -- actually, no. They would come in with

23 blocks, and you would have to slice the blocks to get

24 to individual records.

25   Q   Could you identify a particular call and

1   identify those records that had to be sliced together

2   to give you the data for that particular call?

3   A   Yes.

4   Q   Was there any fields within the records for a

5   call that would indicate whether that call was for a

6   customer of a particular reseller -- let's say my

7   client, TSI, for example?

8   A   At some point in the billing process, yes.

9   Because somewhere within that call there would be

10   either an off code or an ANI, which in the billing

11   system would tie back to an account or a customer. And

12   the customer would be under a certain tariff, and I

13   would assume the reseller would be under a specific

14   tariff.

15   Q   So actually for any particular record off the

16   raw call detail, you would have to take the off code or

17   the ANI and go to a different beta source to find out

18   if that's a TSI customer?

19   A   That's correct.

20   Q   What does the other data source have to go to

21   find out if it was a TSI customer, or a customer of any

22   other reseller?

23   A   What other data source?

24   Q   Yes, sir.

25   A   I'm trying to think if there would be any

1   others. What I mentioned is the most probable and

2   common and flow I'm most familiar with. If there was

3   an alternative way to do it, I don't recall.

4   Q   Somehow my client would get monthly reports of

5   its call activity for its customers. Do you know how

6   that was generated?

7   A   No.

8   Q   Did you ever see a list of TSI customers?

9   A   No.

10   Q   Do you know if there was ever a database

11   compiled of TSI customers?

12   A   No.

13   Q   Do you know if there was ever a database or a

14   list maintained of any sort of reseller customers for a

15   particular reseller?

16   A   I'm sure there had to be a way to create one,

17   but I don't know of any one that existed on an ongoing

18   basis.

19   Q   Was there some sort of code given to TSI as a

20   reseller to differentiate it from end users or other

21   resellers?

22   A   I don't know. I can only speculate.

23   Q   Did you ever see any evidence of that?

24   A   No.

25   Q   You mentioned that one of the first steps in

1   the billing process was to identify whether a call was

2   billable or not. What would nonbillable calls be?

3   A   Busies and ring no answers would be the

4   primary ones.

5   Q   Did you have any sort of nonbillable

6   designation for a call that lasted too long, more than

7   a hour or two hours, or whatever, 24 hours?

8   A   Can you repeat that?

9   Q   Sure. Let me try and ask it a different way.

10   Would a call that showed up as 25 hours in

11   duration still be a billable call?

12   A   A 25-hour call?

13   Q   Yes, sir.

14   A   It all depends on the answer qualifier.

15   Q   What is that?

16   A   Where I mentioned a ring and no answer and a

17   busy signal. Those are known as answer qualifiers.

18   There are also that designate the call was legitimately

19   connected and there was a conversation.

20   Q   The answer qualifier did indeed indicate that

21   the call was answered and it was legitimate, but the

22   call was 25 hours long, would it still pass through the

23   system as a billable call?

24   A   Sure. Yes.

25   Q   Was there any sort of systematic cutoff of

1   calls that were just too long even though they had a

2   legitimate answer qualifier?

3   A   I believe that there was a mechanism in place

4   to report on them because there's a very good

5   possibility of it in a case like a 25-hour call that

6   there is something in the switch that -- that a trunk

7   that was hung or something like.

8   Q   Have you ever heard the term stuck clock?

9   A   Stuck clock, no.

10   Q   Do you recall seeing a report on calls that

11 might indicate a hung trunk?

12   A   I can't remember actually seeing a report, no.

13   Q   Do you recall asking one of your subordinates

14 to create a report for that purpose?

15   A   Do I specifically recall that, no.

16   Q   I sense, sir, from your answers you have some

17 sort of recollection about a report of that sort.

18 Could you tell me what it is?

19   A   Well, I just know that we were aware of

20 conditions where -- I would call it where a trunk would

21 hang, hung trunk as opposed to stuck, whatever -- and

22 that we took steps to investigate calls unusual long

23 durations.

24   Q   Who investigated those sorts of calls?

25   A   That would be engineering people.

1   Q   Would that be Rudy McGlashan?

2   A   Not him individually, but within his

3 jurisdiction, yes.

4   Q   Now, an answer qualifier of no answer for a

5 call record should not have been billed; am I correct?

6   A   That's correct.

7   Q   Did you ever see any sort of problem with the

8 system where such a call was indeed passed along as a

9 billable call?

10   A   Yes.

11   Q   Under what circumstances did that occur?

12   A   There was a condition in the network where

13 some one-minute calls would show up as billable calls,

14 and eventually end up on bills. And we were aware of

15 it, and a lot of our customers were aware of it. Now,

16 this is back in the TelTech/Telus days. And there was

17 a policy put in place to credit people for those types

18 of calls.

19   Q   Was there a period of time where there were no

20 automatic credits for those sorts of calls?

21   A   No automatic credits?

22   Q   Were the credits ever automatic or did the

23 customer actually have to call and ask for the credit?

24   A   I believe the customers had to call and ask

25 for credits. Although, I do believe there was some

1   bigger customers that we proactively, in the spirit of

2   good sportsmanship, would go ahead and try to issue

3   credits early

4   Q   Was TSI ever one of the favorite customers?

5   A   Like I said, I don't recall anything about

6   TSI.

7   Q   What was the problem, just a software bug?

8   A   In the switch, yes.

9   Q   Was it a bug in the switch or software?

10   A   Switch software.

11   Q   By the time it got to billing, you just had it

12   as input?

13   A   Yes.

14   Q   Was it billings' job to look through that

15   input and filter out those sorts of records?

16   A   Well, it didn't have the capability of doing

17   it because something in the switch triggered it to a

18   billable status.

19   Q   Was the switch software at some point

20   debugged?

21   A   Yes. It eventually went away, not by

22   debugging, just by going to later versions of the

23   software and newer switches.

24   Q   Do you recall how long the bug persisted

25   before the newer version corrected it?

1   A   No.

2   Q   Was it as long as the acquisition by ATC of

3 Telus?

4   A   I couldn't answer that.

5   Q   Did you ever have a sense of the magnitude of

6 the mistake in billing due to that particular bug -- I

7 mean was it five cents every hundred dollars of call

8 volume, or can you give me some sense of that?

9   A   I can't recall that. I may have had that at

10 one time. I couldn't recall that today.

11   Q   Did anyone ever produce a written report on

12 the bug?

13   A   Nothing that strikes me.

14   Q   Is there a particular person who identified

15 that there was a bug in the switch software?

16   A   Again, that would be in the realm of the

17 engineering people.

18   Q   You don't know?

19   A   Don't know.

20   Q   Do you know, even though it's more in the

21 realm of engineering, do you know as you sit here today

22 if there was a particular person who identified the

23 bug?

24   A   I don't know.

25   Q   Did Dan Merritt have any involvement in

1 investigating the bug?

2   A   Dan Merritt didn't come on the scene until the

3 -- I guess it was the Telus/MicroTel merger -- and

4 problem had started well before that.

5   Q   So he had no role, to your knowledge?

6   A   He may have had a role on the MicroTel, he had

7 no role on the TelTech/Telus side.

8   When we merged with MicroTel, Dan had been

9 there for a considerable period of time. But I would

10 have no idea what his responsibilities were. He was

11 actually located in the data center.

12   Q   Who was the switch manufacturer?

13   A   Digital Switch Corp. I'm talking for Telus

14 primarily.

15   Q   Did Digital Switch Corp. also produce a

16 software that ran on the switch?

17   A   Yes.

18   Q   Did you ever complain to them about why are

19 you giving us buggy software?

20   A   I never talked to them, no.

21   Q   Did anyone feel that that was something that

22 ATC or Telus ought to be doing in regard to the digital

23 switch?

24   A   I would think that the engineering people, who

25 are the ones that had the relationship with the digital

1   switch, I would think they were in conversation.

2   Q   Are you aware of any bugs in the software,

3   either on the billing side or the switch side, that

4   would result in duplicate billing of calls -- one call

5   but two records for it?

6   A   Yes, I do.

7   Q   What was the nature of that?

8   A   Well, it was actual something on the switch

9   side. But we, in fact, put provisions in the billing

10   software to eliminate the billing of duplicate calls.

11   Q   Do you know what was going on on the switch

12   side?

13   A   I don't know.

14   Q   Did I describe the bug accurately when I said

15   one call, but multiple records?

16   A   No. One call that generated multiple records.

17   But the records were basically duplicates of each

18   other, and that's primarily what the fix was to

19   identify they were duplicates, and therefore discard

20   all but the real one.

21   Q   Did you ever entertain a theory of what might

22   be going wrong with the switch?

23   A   No.

24   Q   Did you ever hear anybody else venture a

25   theory?

1   A   No.

2   Q   Was that problem also corrected by an updated

3 service pack from the manufacturer?

4   A   To the best of my knowledge, yes.

5   Q   Do you know when the correction occurred?

6   A   I don't.

7   Q   Do you know if anybody investigated this

8 problem on behalf of ATC or Telus?

9   A   I don't know.

10   Q   Would this problem also have been within Mr.

11 McGlashan's realm?

12   A   Yes.

13   Q   Did the billing department actually write a

14 procedure or a program or module to ferret out the

15 duplicate records and delete them?

16   A   Yes.

17   Q   Were you in charge of that, sir?

18   A   Yes.

19   Q   Did you actually do the programing or somebody

20 else?

21   A   Somebody else.

22   Q   Who did the coding?

23   A   It could have been one of two or three

24 different people.

25   Q   Could I have their names, please?

1   A   Probably David Resposo. Second choice would

2 be Jeff Kennedy. And a third choice would be perhaps

3 Eugene Prescott.

4   Q   Did you review the software before it was

5 implemented?

6   A   Did I review it?

7   Q   Yes, sir.

8   A   I probably reviewed the test results, not the

9 programming data itself.

10   Q   What language was the program code in?

11   A   Well, we had several different languages.

12 When I started there, we were on Hewlett Packard

13 hardware platform. The language that was used to --

14 let's see, this is to check for the dups now?

15   Q   Yes.

16   A   It would be, I think, in all cases COBOL.

17   Q   Setting aside the dups for the moment, what

18 was the billing applications and other applications

19 coded in -- COBOL or other languages as well?

20   A   Well, when we were on a Hewlett Packard

21 hardware platform, they were in the RPG and COBOL. And

22 we eventually converted to a tandem hardware platform,

23 at which time they were in a language called tandem

24 assembly language and COBOL.

25   Q   Was it your professional opinion that COBOL

1   was a suitable language for doing this sort of

2   programming?

3   A   Yes.

4   Q   Were you familiar with the algorithms used in

5   the duplication program?

6   A   In the ones to find the dups and weed them

7   out?

8   Q   Yes, sir.

9   A   I'm familiar with it, yes.

10   Q   How should I refer to that?

11   A   Dedup.

12   Q   If you could run me through how dedup worked?

13   A   Basically, it tried to identify a duplicate

14   record meaning that the start time, the end time, the

15   answer qualifier, the ANI or off code of the call, the

16   destination phone number of the call, and the outbound

17   trunk group that the call went out on were all

18   identical.

19   Q   And when it found a set of matching calls in

20   that regard, it expunged all but one?

21   A   Yes.

22   Q   Before dedup was implemented, was there no way

23   of catching the duplicate calls?

24   A   Within the billing process?

25   Q   Yes, sir.

1   A   No, there really wasn't any way.

2   Q   Did Telus or ATC have any policy on crediting

3 for duplicate calls?

4   A   Yes, similar to the one-minute call policy.

5   Q   A customer had to complain?

6   A   I believe so, yes.

7   Q   Do you know when dedup was implemented?

8   A   I don't remember.

9   Q   Was it during the Telus days or after the

10 acquisition by ATC?

11   A   No, it was during the Telus days.

12   Q   Did dedup, in your experience, work in

13 catching every duplicate?

14   A   In theory, it certainly should. And I don't

15 recall any instances where it did not.

16   Q   You say "in theory" which makes me think of

17 what happened in practice?

18   A   I don't recall any -- I would think that if

19 some did get through, it would have eventually gotten

20 back to us, and we would have been asked to correct

21 whatever the problem was. But I don't recall that

22 happening.

23   Q   If you had multiple records and they were in

24 fact identical in all the fields that you described to

25 me, except that the ending time was different by a

1   matter of six seconds, that would not be caught by

2   dedup?

3   A   No, it should be caught.

4   Q   How was that?

5   A   I mentioned seven or eight different

6   variables. There were several combinations and

7   permutations of all those variables.

8   Q   So the records did not have to be absolutely

9   identical?

10   A   Not every single field in the record, no.

11   Q   What was the algorithm?

12   A   I don't recall the algorithm, but it's

13   physically impossible for a call -- for more than one

14   call to start exactly at the same time and go out on

15   the same trunk. So the logic could have been

16   abbreviated as start time and trunk group.

17   Q   Is a code for dedup available in anyplace in

18   the world?

19   A   Not that I'm aware of. It may be on some

20   backup tape that might still exist back from those

21   days, but I'm not aware.

22   Q   Some programers keep procedures as they go

23   along. You didn't do that for dedup or any part of it?

24   A   Don't follow your questioning.

25   Q   As a programer you know that code is often

1   incorporated into later programs when needed; is that a

2   fair statement?

3   A   Very fair statement.

4   Q   And to do that, you have to keep a record in

5   order to reuse it?

6   A   Close enough.

7   Q   You haven't kept a record of dedup or any part

8   of dedup, have you?

9   A   Me, personally?

10   Q   Yes.

11   A   No, not at all.

12   Q   Let me explore one thing with you. Do you

13   recall in dedup would it have been enough to get a

14   match only to have the trunk group and the start time

15   be identical among a set of calls?

16   A   Would it be possible to get two records with

17   the same exact start time and trunk group?

18   Q   No, I mean would dedup have caught that as a

19   duplication?

20   A   Thinking about it now, that's physically

21   impossible. I would think that would have been one of

22   the conditions that dedup would have caught, yes.

23   Q   Would dedup have caught other combinations of

24   variables as well?

25   A   If there were other permutations or

1   combinations of all the variables that I talked about,

2   yes.

3   Q   Could you tell me what other permutations and

4   combinations would have been captured by dedup as a

5   duplication?

6   A   Certainly. ANI and equal start time would be

7   physically impossible to have same ANI and same start

8   time and more than one record. And if I took all those

9   variables and wrote them all down, I could probably put

10 together sets and subsets of what dedup probably looked

11 like.

12   Q   When you talk about start times and end times,

13 are you talking about whole minutes, seconds, or what?

14   A   I'm talking about ticks.

15   Q   Six-second increments?

16   A   A three-second increment. And it's how the

17 switch recorded their times.

18   Q   Let me ask you if dedup would catch the

19 following two calls as duplicates.

20   A call starting at 040000 and lasting to

21 040100 --   •

22   A   Is that a duration being what?

23   Q   One minute.

24   A   Okay.

25   Q   Or 20 ticks. A call starting at 040030 and

1   lasting to 040130, same ANI, same trunk group.

2   A   That's a good question. My opinion would be

3   that the same ANI and same trunk group would be that

4   that should be caught by dedup process because of the

5   30-second overlap on the same trunk group.

6   Q   For comparison purposes, would dedup catch the

7   following: The first call is the same, the second call

8   is from 040103 to 040157?

9   A   That would not be a dedup.

10   MR. GIMBEL: I missed that last example.

11   MR. PARSONS: Two sequential calls.

12   BY MR. PARSONS:

13   Q   Let me ask you another question. Again, the

14   first example is the same. The second call is being

15   compared to again 040100. In other words, the same

16   three-second tick that the first call ended at and then

17   ends one minute later.

18   MR. GIMBEL: I'm going to interpose just a

19   continuing objection so I don't interrupt your

20   questioning as to his rendering an opinion on

21   whether or not dup or dedup would catch it. In

22   light of the fact I don't believe he designed the

23   program.

24   BY MR. PARSONS:

25   Q   You can answer, sir.

1   A   That would be right there one of those that

2 falls right on the cut line of what do you do when --

3 is it really possible to have a call end and another

4 call start immediately within the same tick. And I

5 believe it's probably possible if you understand how

6 ticks are set.

7   If you were to disconnect a call and

8 immediately get a dial tone again, that's possible to

9 be done on the same tick.

10   Q   Could it be done for an international call?

11   A   I don't think it -- I'm not sure if it differs

12 at all.

13   Q   You would have to go through an international

14 trunk and domestic circuit?

15   A   I don't believe that that would change things

16 at all. Because the tick is set when you get dial

17 tones. The way you get dial tone for international

18 calls versus domestic calls is the same.

19   Q   When were the start times and end times

20 recorded, was it when the circuit was ceased or some

21 other point?

22   A   No. Start time of the call?

23   Q   Yes.

24   A   When you get a dial tone.

25   Q   And ending time?

1   A   When the party disconnects. That's within an

2 equal access scenario.

3   Q   Now, did you simply take dedup off line when

4 the switch manufacturer upgraded the software of the

5 switch?

6   A   I don't recall if we did or didn't.

7   Q   Do you know if dedup was still running at the

8 time you left EDS?

9   A   When I left EDS, this billing platform did not

10 exist.

11   Q   Now, another sort of call that was not

12 supposed to be billable was an off code of a busy

13 signal, sir?

14   A   You mean an answer qualifier?

15   Q .   Answer qualifier.

16   A   That's correct.

17   Q   Was there any sort of bug such that those

18 calls were indeed billed on certain times?

19   A   In which one of the billing platforms?

20   Q   The platforms used by Telus and ATC.

21   A   I can only speak for Telus. I can't speak for

22 ATC.

23   There was a period of time, yes, where that

24 answer qualifier would actually be billed if the call

25 duration of a certain length.

1   Q   What length was that?

2   A   I believe it was greater than one minute.

3   Q   Just to bring this down to earth for me,

4   someone dialed a busy signal and left the phone off the

5   hook, 66 seconds goes by, they could have been billed

6   by Telus?

7   A   That's correct.

8   Q   Was that a bug in the switch software again?

9   A   No, that would be in the billing.

10   Q   Was that corrected at some point?

11   A   Yes.

12   Q   Were you the person supervising the programing

13   that lead to the correction of that bug?

14   A   No. I believe it was corrected after we had

15   taken other responsibilities.

16   Q   Was it common knowledge that that sort of bug

17   existed as your tenure of supervisor of the programers

18   at Telus?

19   A   Common knowledge amongst whom?

20   Q   The programers.

21   A   I would say no.

22   Q   Was it discovered by some particular

23   individual?

24   A   In the programming side?

25   Q   By anyone at Telus or ATC?

1   A   It was actually programed purposely -- on

2   purpose.

3   Q   What was the purpose?

4   A   To generate additional revenue.

5   Q   Do you know who made the decision to program

6   that into the system?

7   A   Who gave the direction?

8   Q   Yes, sir.

9   A   It would have been Joan Neptune from TelTech.

10   Q   Were you the person that was ordered to do

11   that by Miss Neptune?

12   A   I would have been, yes. Not necessarily true,

13   I take that back.

14   There was a period of time where I reported

15   directly to her, and then there's a period of time

16   there was an intermediary between she and I.

17   Q   Do you recall being instructed to make that

18   programming change to the system by Miss Neptune?

19   A   If I recall the specific conversation?

20   Q   Or do you recall it generally?

21   A   No.

22   Q   Even though you don't recall the

23   instruction --

24   A   Because it may have been through the

25   intermediary.

1   Q   Do you recall the intermediary so instructing

2 you?

3   A   No, I don't.

4   Q   Who was the intermediary?

5   A   His name was Ray Yeager.

6   Q   Even though you don't recall the instruction

7 from Miss Neptune or Ray Yeager, do you recall actually

8 recall making the programming change?

9   A   I would not have made it personally, no.

10   Q   Do you recall instructing one of your people

11 to make the programming change?

12   A   Once, again, no, I don't recall the specific

13 person or conversation.

14   Q   Even though you don't recall the specifics,

15 that programing change was made to the system; is that

16 correct?

17   A   Yes.

18   Q   Do you know which programer did it?

19   A   Again, I would give you three or four names.

20   Q   Same people as last time?

21   A   Yes.

22   Q   Did that particular software billing

23 arrangement persist during the -- from its initiation

24 until Telus was acquired by ATC?

25   A   Yes, it did.

1   Q   And did it persist after the acquisition?

2   A   For some period of time, yes.

3   Q   Did customers ever complain to your knowledge?

4   A   Of being billed for an unanswered call?

5   Q   Or a busy signal?

6   A   Yes, they did.

7   Q   Was it a policy again of waiting for a

8   complaint before credit was given?

9   A   I believe it was.

10   Q   You identified what I would call bugs or

11   perhaps you call them modifications to the system

12   involving duplicate calls, busy signals, and -- do you

13   recall any other sorts of bugs or modifications to the

14   billing system that were designed or had the effect of

15   enhancing revenue for Telus besides what we talked

16   about today?

17   A   Can you repeat the question.

18   Q   Yes, sir.

19   Other than what we talked about today, do you

20   recall any software bugs or software modifications that

21   had the effect of increasing revenue for Telus or ATC?

22   A   Yes, for Telus.

23   Q   What was that?

24   A   We talked about billing for busy signals.

25   There would be other, quote, unbillable calls other

1   than busy signals that would be billed; again if the

2   duration was of a certain number of minutes or exactly

3   minute, such as a ring no answer, as well as a busy

4   signal.

5   Q   What is the difference between a ring no

6   answer and a busy signal?

7   A   Well, if I were to pick up the phone and let

8   it ring 12 times and nobody answers versus a busy

9   signal.

10   Q   Okay.

11   A   Then there was a situation where calls would

12 be billed for more than conversation time.

13   Q   Is that the incident that was the subject of

14 the Public Service Commission's lawsuit -- the

15 difference between connect time and --

16   A   Yes.

17   Q   Adding that to the list of what we've talked

18 about today, are you are aware of any other sorts of

19 software bugs or software modifications that was

20 intended to enhance revenue for Telus or ATC?

21   A   No.

22   Q   You mentioned a programer named Jeff Kennedy?

23   A   Yes.

24   Q   Do you know where Jeff Kennedy works today?

25   A   No.

1   Q   Do you know where he lives?

2   A   No.

3   Q   Have you heard of him at all since you left

4 EDS?

5   A   No.

6   Q   You mentioned a Mr. Prescott, as well?

7   A   Yes.

8   Q   Do you know where he is today?

9   A   No.

10   Q   Do you know where he works?

11   A   Last I knew -- and this goes back I would say

12 three or four years -- was he worked for Dell

13 Computers, I believe, in Houston. Hopefully he's

14 getting stock options.

15   Q   Do you recall an issue where there was an

16 allegation that nine seconds was being added to certain

17 calls that were passing over on a Telus or ATC switch

18 prior to billing?

19   A   Yes, I do. I believe that was part of the

20 Public Service Commission.

21   Q   The Dohan case, do you recall that name?

22   A   Dohan?

23   Q   Right.

24   A   I recall the name, yes.

25   Q   Did you give a deposition on the Dohan case?

1   A   Yes.

2   Q   Regarding the software bugs we talked about

3 today -- I use bugs in a liberal sense to also mean

4 modification that was made intentionally -- were those

5 brought to the attention of anyone within Telus on a

6 management level by you or any of the programers after

7 you learned of them?

8   A   Yes.

9   Q   Who were those bugs brought to the attention

10 of?

11   MR. GIMBEL: Object to the form of the

12   question.

13   THZ WITNESS: I recall having conversations

14   about those bugs with several people.

15 BY MR. PARSONS:

16   Q   Who are those people?

17   A   Ray Yeager, who was my immediate boss for most

18 of my time with Telus. Rudy McGlashan. Dennis Sickle,

19 who was primarily in charge of customer service and,

20 therefore, had a great deal to say about the credit

21 policies and other things that needed to be developed.

22 And that's pretty much it.

23   Q   Could you spell his last time?

24   A   Y-e-a-g-e-r.

25   Q   Do you know where Mr. Yeager works today?

1 A Yes, he works for an insurance company in Boca

2 Raton right down the street from me. The name escapes

3 me.

4 Q National company or a local company?

5 A National -- Mutual of America.

6 Q Are you friendly with Mr. Yeager?

7 A We had a friendly professional relationship.

8 We did not remain friends after. He departed before I

9 did.

10 Q Do you recall ever having any conversations

11 with any of the management people -- Mr. Yeager, Mr.

12 McGlashan, Mr. Sickle -- about the impact of the bugs

13 on the customers of Telus or ATC?

14 A The impact?

15 Q Yes, sir.

16 A Generally speaking, yes.

17 Q What were the nature of those discussions?

18 A The expected number of -- the expected call

19 volume for credits and things of that nature.

20 Q Was there any discussion that customers should

21 be told that the bugs did not exist?

22 A Not that I recall.

23 Q Was there a policy or attitude that the

24 customer had to discover the bugs and complain about

25 the bugs before anything would be done insofar as

1 crediting bills?

2   MR. GIMBEL: Object to the form of the

3 question.

4   THE WITNESS: I can't say across the board one

5 hundred percent that we were totally customer

6 unfriendly and not proactive in any sort of way.

7 But I do think it was probably more the rule than

8 the exception.

9 BY MR. PARSONS:

10   Q Was there a, to use your term, more of a rule

11 than an exception that the customer would be told that

12 if you want the credit for these bugs, you have to

13 provide proof of the overbilling in a line-by-line

14 detail format?

15   MR. GIMBEL: Object to the form of the

16 question. It hasn't beer established that this

17 witness knows anything at all about that. He's

18 giving his opinion.

19   THE WITNESS: I have no recollection of how

20 the customer needed to prove that what they thought

21 was a billing error.

22 BY MR. PARSONS:

23   Q Were you ever asked to go into the billing

24 system and determine how much a particular customer had

25 been overbilled due to the bugs?

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 1        A     Any specific customer?

 2        Q     Yes, sir.

 3        A     No, not that I recall.

 4        Q     Did you do it for all the customers,

 5   generally?

 6        A     We would do it for the entire customer base.

 7        Q     And what sort of result did you obtain from

 8   that endeavor?

 9        A     What we were looking for was pretty much a --

10   what our percentage increase in calls, minutes, and

11   revenues would be as a result of these bugs and/or

12   modifications.

13        Q     What was the percentage increase in revenue

14   from the busy signal bug?

15        A     Don't recall.

16        Q     From the call/not answer bug?

17        A     I wouldn't be able to recall any of them

18   specifically.

19        Q     Can you give me a ballpark figure for the

20   percentage increase in revenue from all the bugs taken

21   together?

22              MR. GIMBEL:  Object to the form of the

23        question.

24              THE WITNESS:  If they were all in effect at

25        the same time?
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1 BY MR. PARSONS:

2 Q Yes, sir.

3 A Which I don't really recall if they were all

4 in effect at the same time. I can only harbor an

5 educated guess.

6 Q Which is?

7 A Five to ten percent.

8 Q Did you get a sense that the bugs might have

9 affected some customers differentially more than other

10 customers because of the nature of their traffic?

11   MR. GIMBEL: Again, object to the form of the

12 question. The witness's qualifications have

13 not been established and he's rendering opinions

14 and guesses.

15   THE WITNESS: I really don't know.

16 BY MR. PARSONS:

17 Q Would the bugs have affected a reseller more

18 than an end user?

19   MR. GIMBEL: Object to the form.

20   THE WITNESS: I don't know.

21 BY MR. PARSONS:

22 Q Mr. Signorelli, I did a poor job going through

23 your qualifications at the beginning, and I just want

24 to revisit those for a minute.

25   At the time you started with TelTech, could

1   you tell me what your job title was?

2   A   Manager of computer programming.

3   Q   How many people did you supervise?

4   A   When I first started?

5   Q   Yes, sir.

6   A   Five or six.

7   Q   And did that change at all prior to the

8   acquisition by Telus?

9   A   Yes. Prior to the acquisition by Telus, I had

10 been promoted to director of systems development, and

11 my staff size was probably 12 to 14.

12   Q   What did you do generally, your job duties as

13 director of systems development?

14   A   I interacted primarily with upper management

15 -- most of the people we talked about here. As well as

16 manage and supervised all facets of software

17 development.

18   Q   Now, on the acquisition by Telus, did your job

19 title change?

20   A   No.

21   Q   Did it change at any time while you were at

22 Telus prior to the acquisition by ATC?

23   A   No.

24   Q   Did the size of your staff change?

25   A   It probably grew by a few people. Matter of

1 fact, it did grow.

2   Q   Did your job duties change?

3   A   Not really, not significantly.

4   Q   After the acquisition by ATC, did your job

5 title change?

6   A   No.

7   Q   Did your job duties change?

8   A   Somewhat, yes. Like I said, I only directed

9 activities on the TelTech and Telus billing platforms.

10 And I had a codirector who was responsible for the

11 microprocessor before the merger. So it really didn't

12 change because I did not have all the software

13 development.

14   Q   And then on the acquisition by LDDS, were you

15 actually at LDDS before moving over to EDS?

16   A   I can't recall what happened first -- which

17 one of the two took place first.

18   Q   Upon your moving to EDS, what was your job

19 title there?

20   A   Systems engineering manager at the time of the

21 transition.

22   Q   How many people did you supervise?

23   A   Basically, nothing changed. Same number of

24 people.

25   Q   How long did you stay at LDDS?

1   A   You mean EDS?

2   Q   Yes, sir.

3   A   Through September 1992.

4   Q   Do you consider yourself a qualified provider

5   in COBOL?

6   A   Today?

7   Q   Yes, sir.

8   A   No.

9   Q   Were you at some point in your career?

10   A   Very much so.

11   Q   Were you in 1992 at the time when you left

12   LDDS?

13   A   No.

14   Q   What other languages would you consider

15   yourself qualified in?

16   A   Today?

17   Q   Today or at any time during your career.

18   MR. GIMBEL: Object to the form of the

19   question.

20   THE WITNESS: COBOL, assembly language, and

21   RPG.

22   BY MR. PARSONS:

23   Q   Would you consider yourself an expert in

24   computer programming or any particular facet of

25   computer programming?

1   MR. GIMBEL: Objection to the form of the

2   question.

3   THE WITNESS: Yes, I consider myself to be

4   an expert in various programming language

5   methodologies.

6   BY MR. PARSONS:

7   Q   What does that mean?

8   A   There are several forms of what they call

9   application development tools. There's third

10   generation languages like COBOL and RPG. And fourth

11   generation programming languages like Power Billing and

12   Visual Basic. And there are what they call case tools

13   -- computer-assisted system engineering tools -- which

14   generate programming code as well. And I consider

15   myself to be an expert in the areas of which ones suit

16   what environment best. It's always been my

17   responsibility to go ahead and select one of those

18   languages.

19   Q   Is that what you do at Renaissance?

20   A   I did that at Renaissance, yes.

21   Q   Is that contract work?

22   A   It's contract that gets renewed annually.

23   Q   At the time that you worked at Telus and ATC,

24   did you consider yourself an expert in billing

25   applications?

1 A Only the Telus billing applications, not

2 billing applications in general.

3 Q Did you have a sense at that point of how all

4 those programs worked together to accomplish the

5 overall billing application?

6 A For Telus?

7 Q Yes, sir.

8 A Yes.

9 Q Is there anyone else who knew more about that

10 particular operation at Telus than you did at the time?

11 A From start to finish?

12 Q Yes, sir.

13 A No.

14 Q Did David Resposo have any particular

15 responsibilities when he was under you at Telus?

16 A Yes. David was my main -- what I call -- he

17 was the guy who primarily worked within the billing

18 arena of determining what were billable calls and

19 computing call durations and pricing calls.

20 Q Is pricing calls a matter of inputting the

21 numbers from the tariff into the correct database?

22 A Was a matter of matching the call duration

23 times the price as per the tariff, yes.

24 Q If it weren't a tariff and more of an

25 agreement, did that present any special programming

1   from an application standpoint?

2   A   No, the system requires there to be a tariff.

3   Q   You said, no, but the system requires there to

4   be a tariff, what if there were an agreement instead of

5   a tariff?

6   A   Well, the agreement was still loaded into the

7   appropriate tariff database. What I'm saying is that's

8   the only way a call can get processed.

9   Q   Were there any other programs or any

10 procedures within the billing system so that the same

11 call could be billed twice -- once to the end user and

12 once to a reseller?

13   MR. GIMBEL: Object to the form of the

14   question.

15   THE WITNESS: Like I mentioned earlier, I

16   don't recall any reseller billing on the Telus

17   platform.

18 BY MR. PARSONS:

19   Q   Were there people who worked in billing at

20 Telus but did not work under you, were not on the

21 computer side?

22   A   There was a billing entity within the finance

23 and accounting group, who were basically the revenue

24 and accounting people.

25   Q   Do you know if any of them would take the

1   reports, the invoices, generated by your software and

2   reconstruct those into reseller bills?

3   A   I don't recall.

4   Q   Do you know if Digital Switch Corp. is still

5   in existence?

6   A   Yes, they are.

7   Q   Where are they headquartered?

8   A   I believe they're in Richardson, Texas.

9   Q   Do they have some relationship with EDS?

10   A   Not that I'm aware of.

11   Q   Are they owned by a conglomerate of some kind?

12   A   There's been a series of mergers and

13   acquisitions in that arena, so for all I know, they

14   could have been merged or acquired.

15   Q   Do they still make switches?

16   A   To the best of my knowledge.

17   Q   Did you have any interaction with anyone at

18   Digital Switch in Richardson regarding switches?

19   A   No.

20   Q   Did you ever produce any sort of written

21   report, a written evaluation, about the bugs or the

22   modifications to the software or Telus or ATC?

23   A   In terms of summarizing them, exposing them --

24   I'm not sure I follow you.

25   Q   Yeah, those two would do it.

1   A   Not that I recall. It was primarily through

2 conversations.

3   Q   You say primarily, was it completely through

4 conversations?

5   A   I think the existence of bugs or modifications

6 were completely through conversations.

7   Q   Do you know if you contributed any information

8 orally to somebody else who was producing written

9 reports on the bugs?

10   A   Not that I know of.

11   Q   Were you ever interviewed by a gentleman named

12 Floyd Self about the bugs?

13   A   Yes.

14   Q   Did he identify himself as a lawyer to

15 you?

16   A   Yes.

17   Q   What did Mr. Self say to you?

18   MR. GIMBEL: I'm going to object to the form

19   of the question. You don't like me making speaking

20   objections so --

21   MR. PARSONS: You're claiming a privilege?

22   MR. GIMBEL: I don't know. I don't know where

23   you're going. I don't know what your time frame

24   is. I don't know if he was an employee of the

25   company. I don't know.

1   BY MR. PARSONS:

2   Q   Let me make some foundation. About what time

3   did you have your conversation or conversations with

4   Mr. Self?

5   A   He was part of the deposition that I gave.

6   Q   So at that time were you working for EDS or

7   someone else?

8   A   No, I was working for Renaissance.

9   Q   Did Mr. Self identify himself as a counselor

10   for World Com?

11   A   Actually, I do recall another conversation

12   with Mr. Self outside of the deposition.

13   Q   Was it the same time frame?

14   A   No, it was earlier. I was still working for

15   Renaissance.

16   Q   Was anyone else a party to either of those two

17   conversations?

18   A   Yes.

19   Q   Start with the first conversation.

20   A   The first conversation took place in Dan

21   Merritt's office in Boca Raton.

22   Q   Was anyone else besides Mr. Merritt and

23   yourself and Floyd Self present?

24   A   Were you there Elliott? Elliott was there.

25   And Bill Anderson joined us in progress.

1   Q   What about the second conversation?

2   A   The second conversation was part of the

3 deposition in Dohan case.

4   Q   Who was present in the conversation itself?

5   A   Floyd, Laurie Ross, and that's all I recall.

6   Q   In the first conversation in Dan Merritt's

7 office, what did you discuss?

8   A   The TelTech and Telus billing situations.

9   Q   Did you discuss what we have been calling the

10 "bugs" in this deposition today?

11   A   Yes.

12   Q   Were there any bugs discussed that you and I

13 haven't talked about?

14   A   No. Billing for unanswered calls and billing

15 for more conversation time were the bugs that I recall

16 being discussed. I'm not even quite sure we discussed

17 duplicate calls.

18   Q   What, if anything, did the lawyers for World

19 Com want to know about those bugs?

20   MR. MESSER: We're going to start interposing

21   an objection because you are directly invading the

22   province of the work product when you start a

23   question in the nature of what did the lawyers

24   want to know.

25   If you want to try your case, you ask him what

1   you want to know, not what opposing counsel wanted

2   to know.

3   I think you're definitely in the middle of

4   work product.

5   MR. GIMBEL: And possibly even

6   attorney-client.

7   MR. PARSONS: I hear you, Elliott, and it

8   doesn't give me any pleasure to have to ask

9   questions about what another lawyer has done or

10   said.

11   BY MR. PARSONS:

12   Q   Let me try again with this question, sir.

13   What words did the two lawyers say to you in regard

14   to the two bugs that you just mentioned?

15   A   They basically wanted to know the history of

16   how they got there.

17   Q   Did you mention to them anything that you

18   haven't talked about already in this deposition today?

19   A   No. I probably was a little bit more specific

20   about time frames since it was about three years ago

21   and probably was more aware.

22   Q   Did you keep notes from this meeting?

23   A   No.

24   Q   Do you recall anymore about the time frames

25   than you've already mentioned today?

1   A   No.

2   Q   Did you identify any possible witnesses with

3   knowledge of the bugs other than the ones you mentioned

4   today?

5   MR. GIMBEL: Object to the form of the

6   question. You keep using the word "bugs."

7   BY MR. PARSONS:

8   Q   Was there a word that --

9   A   In that meeting, I don't know.

10   Q   I am using the word bugs, which I know

11   probably --

12   A   I understand.

13   Q   Okay. Is there a better word to use?

14   A   There are bugs and there are enhancements, so

15   we'll just use the phrase -- either one of the two

16   phrases would be fine.

17   Q   What phrase did you use when you spoke with

18   World Com's lawyers?

19   A   I don't recall.

20   Q   Did Dan Merritt contribute anything to this

21   discussion in his office?

22   A   In terms of shedding any light on --

23   Q   On the bugs or enhancements?

24   A   No, he was -- he didn't know the history of

25   it.

1   Q   Didn't he do some sort of -- I'm sorry?

2   A   He was in the same predicament as the

3   attorneys.

4   Q   Didn't Dan Merritt do some sort of an

5   investigation on one of the bugs or enhancements?

6   MR. GIMBEL: I'm going to object again. The

7   more you use the term "bug" implies like something

8   is illegal as it if may or may not have been

9   disclosed or tariffed or whatever. And you just

10   keep using that word and --

11   MR. PARSONS: It is a legitimately computer

12   programing term.

13   BY MR. PARSONS:

14   Q   Did Dan Merritt do an investigation of some

15   kind, sir?

16   A   I didn't get to know Dan until we transitioned

17   to EDS. Dan was part of MicroTel in San Antonio or

18   Dallas beta center, and it was not until the transition

19   to EDS that Dan came over to Boca and became LDDS vice

20   president of information technology. And by that time,

21   I had gone become an EDS employee. And I didn't do any

22   of that investigation with Dan, so I'm not aware of any

23   investigation.

24   Q   You mentioned a second conversation, which was

25   actually the deposition in the Dohan case?

1   Q   Didn't he do some sort of -- I'm sorry?

2   A   He was in the same predicament as the

3 attorneys.

4   Q   Didn't Dan Merritt do some sort of an

5 investigation on one of the bugs or enhancements?

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17 to EDS. Dan was part of MicroTel in San Antonio or

18 Dallas beta center, and it was not until the transition

19 to EDS that Dan came over to Boca and became LDDS vice

20 president of information technology. And by that time,

21 I had gone become an EDS employee. And I didn't do any

22 of that investigation with Dan, so I'm not aware of any

23 investigation.

24   Q   You mentioned a second conversation, which was

25 actually the deposition in the Dohan case?

1   A   Yes, Floyd asked me some questions.

2   Q   Were there any conversations outside the

3   deposition room on the bugs or enhancements?

4   A   Not that I recall.

5   Q   Have you been in touch with World Com's

6   lawyers since that deposition?

7   A   No.

8   MR. PARSONS: We've been going about an hour

9   and a half, and I'd like to take a break, if I

10   could.

11   (Thereupon, a break was taken.)

12   BY MR. PARSONS:

13   Q   Mr. Signorelli, are you aware of bugs or

14   enhancements in regard to the billing of 800 charges at

15   Telus or ATC?

16   A   As a matter of fact, everything we've talked

17   about so far implies to inbound as well as outbound

18   calls.

19   Q   How would that impact differentially on 800

20   calls?

21   A   It would have the same impact.

22   Q   Were there any bugs or enhancements that

23   applied exclusively to 800 calls?

24   A   Not that I recall, no.

25   Q   Other than the discussions about the

1   possibility of the bugs or enhancements enhancing

2   revenue that you mentioned, did you ever hear or you

3   yourself place any dollar numbers on the impact of the

4   bugs or enhancements, either in terms of revenue or

5   terms of bills or costs to the end user?

6   MR. GIMBEL: I'm going to object to the form

7   that he's not qualified to render that kind of an

8   answer.

9   THE WITNESS: Can you repeat the question?

10   BY MR. PARSONS:

11   Q   Sure.   In the discussions, did you ever hear

12   any dollar numbers placed on the impact of the bug?

13   MR. GIMBEL: Objection, again.   And also it's

14   hearsay.

15   THE WITNESS: No.

16   BY MR. PARSONS:

17   Q   At the time of the acquisition of Telus by

18   ATC, was there any discussion about the bugs or

19   enhancements in terms of the acquisition?

20   MR. GIMBEL: Same objection.

21   THE WITNESS: Not that I recall, no.

22   BY MR. PARSONS:

23   Q   At the time that you went over to EDS, to the

24   best of your knowledge, were the bugs and enhancements

25   still in place on the billing platform?

1   A   I believe so, because I don't believe that

2 they were fully corrected until after the PSC

3 settlement, which I believe took place after my

4 transition.

5   Q   So I understand correctly, when you went to

6 EDS, you kept your staff and got a new title, did you

7 still work on the same billing platform?

8   A   Yes. For a period of time and then we -- at

9 that point in time, there were five or six different

10 billing platforms based on all the merger and

11 acquisitions. One of the things we did under EDS was

12 consolidated to a single billing platform. So, yes, we

13 were working on the existing one, and one by one they

14 started to fall by the wayside.

15   Q   Who did you report to initially at EDS?

16   A   The original EDS account manager's name was

17 Roy Fredricks.

18   Q   When you went over to EDS, did you advise Mr.

19 Fredricks of the bugs and enhancements on the Telus

20 billing system platform?

21   A   I don't recall any specific conversations, no.

22   Q   Do you think he already knew about them?

23   A   I could only venture to say that my guess

24 would be he didn't know about them.

25   Q   Why didn't you advise him about them?

1   A   I was never asked.

2   Q   At some point, did you advise someone at EDS

3 about the bugs and enhancements?

4   A   Following Roy's account, as account manager,

5 and he lasted about four to six months, he was followed

6 up by Joe Hollop, who I mentioned earlier was the

7 account manager, and Joe was familiar with the bugs.

8   Q   How did Joe Hollop become familiar with the

9 bugs and enhancements?

10   A   Well, I mentioned that Joe and I were cohorts

11 reporting to Ray Yeager, and Ray Yeager was aware of

12 them, so I can only assume it was through Ray. What I

13 can't assume is that he knew it in totality. He

14 probably knew bits and pieces.

15   MR. PARSONS: Those are all the questions I

16   have for you today, Mr. Signorelli. I appreciate

17   your being here.

18   Counsel for the PSC over the telephone and

19   also Mr. Gimbel may have some questions for you.

20   And I'll hand it over to the counsel for the PSC

21   first.

22   CROSS-EXAMINATION

23 BY MR. COX:

24   Q   We just have one question. This is Will Cox

25 on behalf of the Public Service Commission.

1   You were discussing briefly the billing

2   increments, and I realize you indicated that you

3   weren't really too familiar with the relationship

4   there, but I want to know the programs that you used

5   were capable of billing in six second increments?

6   A   Yes, capable of billing in any multiple of

7   three-second increments.

8   Q   So three seconds?

9   A   Uh-huh. .

10   MR. COX: That's all we have.

11   MR. GIMBEL: I think Elliott will have some

12   questions.

13   MR. PARSONS: Let the record reflect I have no

14   objection to Mr. Gimbel and Mr. Messer

15   participating in the deposition on behalf of their

16   client.

17   CROSS-EXAMINATION

18   BY MR. MESSER:

19   Q   Mr. Signorelli, I believe you testified that

20   you began your employment in terms of the

21   telecommunications industry in 1984 with a company

22   called TelTech; is that correct?

23   A   Correct.

24   Q   And I believe you stated at the time that you

25   were manager of computer programming?

1   A   Correct.

2   Q   And I believe you also testified that at that

3   time TelTech was using a switch which was manufactured

4   by the Digital Switch Corporation; is that correct?

5   A   Yes, it is.

6   Q   Now, sir, are you familiar with the digital

7   switch in general?

8   A   I am familiar with the part of the digital

9   switch records that are required to come into the

10   billing system. I am not familiar with any part of the

11   switch from an engineering perspective.

12   Q   Are there any other switches manufactured by

13   other companies in which you are aware?

14   A   Yes, quite a few.

15   Q   Would you give me some of the names of the

16   different switches that you have familiarity with?

17   A   Nortel and Northern TeleComm, Siemens

18   Incorporated, AT&T, Lucent Technologies, and Rolm.

19   Q   Now, sir, during the period of time from 1984

20   through the end of 1989, did any of the switches employ

21   what is known as software answer supervision?

22   A   Yes.

23   Q   Now, can you describe for me what software

24   answer supervision is?

25   A   No, I can't.

1   Q   Are you familiar with the term hardware answer

2   supervision?

3   A   Yes, I am.

4   Q   Can you describe for me what hardware answer

5   supervision is?

6   A   No. I only know that the difference between

7   of the two happens to be the switch that it's

8   connecting to is of a model or make or whatever such

9   that it provides either what they call a hardware

10   answer or software answer connection.

11   Q   Are you aware of any difficulties which were

12   recognized during that period of time with determining

13   whether or not an answer actually occurred when the

14   process of software answer supervision was employed?

15   A   I can only answer that by saying I know

16   software answer was a less reliable answer qualifier

17   than hardware answer.

18   Q   Would you agree with me that the use of

19   software answer supervision was fairly common in the

20   telecommunications industry with companies such as

21   TelTech and others of similar size and function during

22   that period of time, the 1980s?

23   A   I can only give an opinion and say that I

24   believe it would be.

25   Q   Now, I followed your earlier deposition and

1 participated in them, and this is the first occasion in

2 which I ever heard you use the term either bug or

3 revenue enhancer. Is it fair to state that in your

4 prior depositions you spoke of answer qualifiers -- do

5 you recall using the term "bug" or "revenue enhancer"

6 in other depositions?

7 A   Not bug. Revenue enhancement, whether it's

8 been that specific term, I don't know. But in the

9 deposition I certainly spoke about the impact that some

10 of these situations, enhancements, bugs or whatever,

11 would have on revenue enhancement.

12 Q   Let's talk about a minute about the answer

13 qualifiers. Did Digital Switch Corp. when it furnished

14 the switch to TelTech include the software program that

15 accompanied that switch?

16 A   I can only assume so. When I started there,

17 the switch was already in place, and the software was

18 in place.

19 Q   Is it not true, sir, that software answer

20 supervision and answer qualifiers are furnished by the

21 manufacturer of the switch?

22 A   Yes.

23 Q   So it's not necessarily TelTech that's

24 furnishing the answer qualifier, they are utilizing

25 those furnished by the switch maker?

1   A   That's correct.

2   Q   Now, isn't it also true, sir, that there are

3 many occasions in which an answer qualifier is actually

4 employed to determine that a call has been completed

5 and in truth and in fact that call was completed?

6   A   It is a predominant variable in determining

7 that it is a completed call.

8   Q   So with in the absence of an answer qualifier

9 and relying on answer software supervision --

10   A   But that is an answer qualifier.

11   Q   I understand. I'm not the smartest at this

12 and that's why I'm going so slowly. But my question to

13 you this. If you didn't have answer qualifiers --

14   A   If you didn't have them at all?

15   Q   If you didn't have them at all, and you were

16 relying upon software answer supervision, that is for

17 the software to determine, the switch to determine

18 whether or not a call has been completed or not, is it

19 not entirely possible that a number of completed calls

20 would go unbilled if you did not have the answer

21 qualifiers in place?

22   A   I can only answer that by saying that it would

23 be a whole different world of determining whether a

24 call is billable. And I would have to sit here and

25 design it in my mind and then try and solve it. I

1   can't answer that question.

2   Q   But would you agree that the manufacturers of

3   Digital Switch Corp. in supplying answer qualifiers as

4   part of their switch and its relevant programs did not

5   do so in order to enable people to simply bill for

6   unanswered calls -- it was designed to determine if

7   calls were actually completed; is that correct?

8   MR. PARSONS: Objection. Form.

9   THE WITNESS: I can't speak for the

10   manufacturer, but I think the answer qualifiers are

11   specific enough that an answer qualifier by itself

12   should be enough to determine whether or not a call

13   is billable.

14   BY MR. MESSER:

15   Q   And you don't refer to an answer qualifier per

16   se as a bug?

17   A   Not at all.

18   Q   Now, let's go to what you did describe as a

19   bug and that was the propensity of the digital switch,

20   and I think its software system. Certainly, you said

21   at the time that TelTech was up and running to bill

22   duplicate calls, and I believe you testified that you

23   designed a dedup system?

24   A   That's correct.

25   Q   Did you employ that dedup system during the

1 time you were at TelTech?

2   A   I don't recall if it was either TelTech or

3 Telus. If I had to take a guess, I would say TelTech.

4   Q   Now, the date of the your employment with

5 TelTech was 1984 commencement, and I believe you

6 testified that the TelTech/LDA merger which resulted in

7 Telus occurred approximately 1987; is that fair?

8   A   Yeah, that's fair.

9   Q   So using the best of your recollection then,

10 dedup program to eliminate duplicate calls had been

11 employed at least by 1987 or '88?

12   MR. PARSONS: Objection.

13   MR. MESSER: To the best of your knowledge.

14   MR. PARSONS: Same objection.

15   THE WITNESS: I would say, yes. But, again, I

16   educated -- to the best of my knowledge.

17 BY MR. MESSER:

18   Q   So if the company such as TSI first became

19 involved with Telus in mid 1989, is it your belief that

20 the dedup program had already been implemented before

21 that day?

22   A   May of '89?

23   Q   I said mid 1989.

24   A   My belief would have been, yes, it would have

25 been implemented by that time -- prior to that time.

1   Q   I believe you testified that it was your

2   understanding that before credits or refunds were given

3   at Telus that the customer first must complain or raise

4   a question about his or her or its individual bill?

5   A   Yeah, I testified that that was the general

6   rule, but I think probably there were incidents with --

7   Q   There were exceptions to that?

8   A   There were exceptions to that rule, yes.

9   Q   Are you at all aware of the Telus tariff or

10   the ATC tariff that was in effect at that time?

11   A   No.

12   Q   Do you find that situations in which customers

13   are urged to contact the company if they believe that

14   they received a duplicate billing or an overbilling or

15   something of that nature to be at all unique to Telus

16   so far as the industry went?

17   MR. PARSONS: Objection. Foundation.

18   THE WITNESS: You mean the policy of the end

19   customer having to contact the --

20   BY MR. MESSER:

21   Q   Yes. I mean is that something that's terribly

22   unusual in the industry?

23   MR. PARSONS: Same objection.

24   BY MR. MESSER:

25   Q   If you know?

1   A   I don't know.

2   Q   Do you have any idea whether or not that very

3   provision is contained in the ATC's tariff?

4   A   I don't know.

5   Q   You don't?

6   A   No.

7   Q   Now, I think we've agreed that answer

8   qualifiers when implemented do not necessarily result

9   in an unanswered call being billed. They could be used

10   to determine the time of answer of completed call; is

11   that correct?

12   MR. PARSONS: Objection.

13   THE WITNESS: Not time of answer.

14   BY MR. MESSER:

15   Q   The fact of answer?

16   A   That's right.

17   Q   Which leads to the time of answer?

18   A   Correct.

19   Q   For billing purposes?

20   A   Uh-huh.

21   Q   So when you state that there was substantial

22   dollar impact on answer qualifiers, are you doing so

23   based on individual research on your behalf?

24   A   I don't recall testifying about some

25   substantial financial gain.

1   Q   I believe you said that ten percent of the

2 billing --

3   A   I said five to ten, okay.

4   Q   Did you mean when you said that, that five to

5 ten percent of the calls were determined to have been

6 answered by the use of answer qualifiers, or are you

7 saying that five to ten percent of the calls were

8 overbilled because of answer qualifiers?

9   MR. PARSONS: Let me interpose an objection.

10   Objection to the form of the question particularly

11   to the disjunctive form. You can answer, sir.

12 BY MR. MESSER:

13   Q   Let me slow down.

14   A   My comment was that if all of the enhancements

15 were in place at the same time, that the billing for

16 more than just conversation time, and the billing for

17 certain unanswered calls would represent a five to ten

18 percent revenue enhancement.

19   Q   All right.

20   A   Which really has nothing to do with answer

21 qualifiers.

22   Q   Thank you. Let's take that statement. Do you

23 know what the tariff call duration of Telus was?

24   A   No, I don't.

25   Q   At the time?

1   A   No.

2   Q   If the tariff call duration was TP1 and TP7,

3 does that have any meaning to you?

4   A   Yes, very much so.

5   Q   That would be a tariffed call duration --

6 substantially and excessive conversation time, would it

7 not?

8   A   Very much so.

9   Q   And if it were lawful and if it were approved,

10 then there wouldn't be any illegality from using TP1 to

11 TP7 if it was within your tariff?

12   MR. PARSONS: Objection.

13   THE WITNESS: If that's what is stated in

14   your tariff, to my knowledge, there wouldn't be any

15   problem.

16 BY MR. MESSER:

17   Q   So as part of your five to ten percent, if a

18 company were billing TP1 to TP7, you included that, I

19 believe, in your statement as part --

20   A   That's part of -- one of the things.

21   Q   And that would be a lawful element of the five

22 to ten percent, correct?

23   A   Yes.

24   Q   And answer qualifiers that was supplied by the

25 switch, which enabled your company to determine when a

1   call had been answered, were lawful means of

2   determining answers too, were they not, sir?

3   A   Not in all cases, no.

4   Q   I don't say in all cases, if a mistake is

5   made. But the switch company did put them there for a

6   purpose, did they not?

7   A   Yes. That's a possibility that that could be

8   part of it if they -- the answer qualifier is -- they

9   supplied an answer qualified and it truly was a

10   billable answer qualifier, yet the call was not

11   completed.

12   Q   I mean answer qualifiers had been used to

13   determine completed calls?

14   A   Yes.

15   Q   And there's nothing illegal about that?

16   A   No, that's their purpose.

17   Q   That's their purpose. So that if a company

18   employed answer qualifiers, there's nothing illegal per

19   se about it?

20   A   No, not at all.

21   MR. MESSER: Can we take thirty seconds and

22   wrap up?

23   MR. PARSONS: Sure.

24   (Thereupon, a short break was

25   taken.)

BY MR. MESSER:

1

2   Q   Let's see if I can take you one step further
3 in point of time.

4   At some point in your career, you left the
5 employment of Telus or ATC and went to EDS; is that
6 correct?

7   A   Not on my own, but that's a correct statement.

8   Q   Well, you were asked by the company then to
9 transfer to EDS?

10   A   The entire information services organization
11 was not asked -- was not given a choice.

12   Q   In other words, specifically, was it -- were
13 you at Telus or ATC at the time?

14   A   ATC.

15   Q   So the ATC/Telus merger had occurred?

16   A   Yes.

17   Q   You got to ATC because you were an employee at
18 Telus; is that correct?

19   A   That's correct.

20   Q   So when ATC acquired Telus, then you became an
21 employee of ATC ultimately?

22   A   Yes.

23   Q   You were at ATC when the information systems
24 group were transferred or that process was out sourced
25 to EDS?

1   A   December of 1990.

2   Q   Now, can you recall whether or not you were

3   concerned when you were at EDS with the consolidation

4   of the Telus/ATC systems?

5   A   Was I concerned about it?

6   Q   Were you, in the nature of your employment,

7   were you concerned with it, were you involved with the

8   consolidation process?

9   A   No.

10   Q   Well, can you tell me what happened to the

11   Telus billing platform and the ATC billing platform?

12   A   Yes, I can, even though I wasn't involved at

13   the time, because later on in 1981 -- actually, that's

14   not true. Let me back up.

15   Q   It was 1990, was it not?

16   A   December 1990. And ᴸometime in 1991, the PSC

17   whatever thing came through.

18   Q   I want you to be very careful about your

19   dates. If you know, testify. Don't guess.

20   A   Okay. I'll use just years then.

21   I moved on in 1991 to a different position

22   with EDS. I was promoted to a regional account

23   manager's position, where I had responsibility over

24   various accounts -- one in Kansas City, one in Dallas,

25   and one Van Nuys, California -- and had very little to

1   do with the Boca account with LDS at the time.

2   But I do know also that in 1991 that the Miami

3   slash Telus billing system was converted to a new

4   billing platform known as IX Plus. And either at that

5   point in time or sometime before that, again, now I had

6   moved on, that a lot of these situations that we talked

7   about were eliminated.

8   Q   You had new enhancements that you were

9   employing; is that correct?

10   A   I don't follow you.

11   Q   The consolidation of the Telus billing system

12   and the ATC billing into essentially a new computer

13   system, was it not?

14   A   Yes, it was.

15   Q   It was the abandonment of the tandem, was it

16   not?

17   A   Yes.

18   Q   And you described it as the ISIS?

19   A   No. AS400 IX Plus. ISIS was the original

20   MicroTel billing system.

21   Q   So you went to a new type of billing?

22   A   Uh-huh.

23   Q   But you weren't involved in that?

24   A   No.

25   Q   What do you do presently for Renaissance

1   Cruises as a computer consultant?

2   A   I advise them on -- or I consult on three or

3   four large software development projects.

4   Q   You recently have been on a leave of absence?

5   A   Yes, from mid-February through end of March.

6   Q   Was that leave absence in any sense -- is it

7   an economic leave of absence or medical leave of

8   absence or both?

9   A   Officially, it's an FMLE, which is a family

10 medial leave of absence, but it was not medically

11 related, unless you consider that -- I was stressed out

12 and had enough to be a medical leave of absence.

13   Q   Was it classified as a medical leave of

14 absence?

15   A   Yes, it was.

16   Q   And stress related?

17   A   Yes.

18   MR. MESSER: I don't have any further

19   questions.

20   REDIRECT EXAMINATION

21 BY MR. PARSONS:

22   Q   Was dedup implemented at TelTech, at Telus or

23 ATC?

24   A   Certainly before ATC. Most likely at the tail

25 end of TelTech.

1   Q   Our contract is dated July 7, 1989. Can you

2 know for sure whether dedup was implemented before or

3 after that date?

4   A   A hundred percent certainty?

5   Q   Yes, sir.

6   A   I can't answer anything with a hundred percent

7 certainty.

8   MR. PARSONS: That's all I have. I think we

9 are finished for today.

10   Mr. Signorelli, the court reporter is going to

11 transcribe your deposition into a written form, and

12 you have the right to read that and make sure that

13 it's accurate.

14   Or you can waive that right. It's completely

15 up to you.

16   THE WITNESS: I'll read it.

17   (Thereupon, the deposition was concluded

18   at 4:30 p.m.)

19   _____

20   Deponent

21   Sworn to and subscribed before me this

22   ____ day of _____ 1998.

23   _____

24   Notary Public

25

CERTIFICATE OF OATH

STATE OF FLORIDA
COUNTY OF BROWARD

I, the undersigned authority, certify that
JOSEPH SIGNORELLI personally appeared before me and was
duly sworn.

WITNESS my hand and official seal this 30th
day of May, 1998.

Leslie Hanawalt
Notary Public-State of Florida

REPORTER'S DEPOSITION CERTIFICATE

STATE OF FLORIDA
COUNTY OF BROWARD

I, LESLIE HANAWALT, a Shorthand Reporter,
certify that I was authorized to and did
stenographically report the deposition of JOSEPH
SIGNORELLI; that a review of the transcript was
requested; and that the transcript is a true record of
the testimony given by the witness.

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 the action.

Dated this 30th day of May, 1998

Leslie Hanawalt
Shorthand Reporter

1   CORRECTIONS TO THE DEPOSITION OF

2   JOSEPH SIGNORELLI

3

4   PAGE NO.   LINE NO.   CORRECTION OR CHANGES

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17   Sworn to and subscribed before me this

     _____day of_____, 1998.

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19   _____

                         Notary Public-State of Florida

                         My Commission No:

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