BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

SPECIAL PROJECT
NO. 980000A-SP

In re: Undocketed Special Project No. 980000A-SP, Fair and Reasonable Residential Basic Local Telecommunications Rates.

DAY 1
AFTERNOON SESSION

IN RE:	Staff Workshop
CONDUCTED BY:	Anne Marsh
DATE:	Thursday, October 8, 1998
TIME:	Commenced at 1:30 p.m. Adjourned at 4:35 p.m.
PLACE:	Betty Easley Conference Center 4075 Esplanade Way Room 148 Tallahassee, Florida
REPORTED BY:	RAY D. CONVERY, Court Reporter

P R E S E N T

COMMISSIONERS PARTICIPATING:

JULIA L. JOHNSON, Commissioner
J. TERRY DEASON, Commissioner
SUSAN F. CLARK, Commissioner
JOE GARCIA, Commissioner
E. LEON JACOBS, JR., Commissioner

STAFF PARTICIPATING:

MELINDA BUTLER, Aide to Commissioner Jacobs
BETH KEATING, PSC Staff, Legal
WILLIAM B. McNULTY, PSC Staff, AFAD
DAVID DOWDS, PSC Staff, CMU
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OTHERS PARTICIPATING:

WILLIAM DUNKEL, Office of the Attorney General
TOM REGAN, Office of the Attorney General
CHARLES BECK, Office of Public Counsel
MARVIN H. KAHN, Office of Public Counsel
MARK COOPER, AARP
JOSEPH GILLAN, FCCA
BEN OCHSHORN, Florida Legal Services
KENT DICKERSON, Sprint
CHARLES REHWINKEL, Sprint
F. BEN POAG, Sprint
DAONNE CALDWELL, BellSouth
NANCY WHITE, BellSouth
BERT STEELE, GTE
KIM CASWELL, GTE

P R O C E E D I N G S

MS. MARSH: The next speaker is Dr. Mark Cooper for AARP, and there is a handout up front.

DR. COOPER: Good afternoon. Anyone who's read the original -- the preliminary comments filed, or most of the folks I've run into, certainly the industry folks in other states, know that we tend to do fairly long documents, especially in the regulatory proceedings, and they told me to get it on one page, and so I did. I stretched the page a little bit and squeezed it in, but I put it all on one page. And the benefit of trying to get it on one page is you go straight at it. I mean, we're not going to fool around, not that I think I need to sharpen the issues for the Commission. Having sat here this morning and had reports about what has gone on, I think it's pretty clear where the parties stand and what the differences are.

One of the ironic things is that as I read some of the opposing testimony and you go through the definitions of all these technical economic concepts, what you discover is everybody is using exactly the same definitions. They may measure things a little bit differently, but they're using exactly the same definitions.

There is one fundamental point of difference, one simple point of difference: Is the loop a shared cost or is it not? That is the fundamental issue in this case.

AARP believes that its testimony shows that there is no economic, legal, technological, competitive, social or public policy reason to increase basic rates. The reason there is no reason to increase basic rates is that the loop is a shared cost, shared by many services that have always contributed to the recovery of those shared costs. We see no reason to stop recovering costs from services that use a facility from those services. There should be no free rides.

Furthermore, we believe that ensuring that each of the growing array of services that will likely be provided over the telecommunications network, ensuring that they pay a fair share of those common costs, those shared costs will result in rates for basic service becoming more and more affordable.

Now, in our reply comments, what we will do is we will take a series of statements that have been presented by the telephone companies and flip those statements around, switch the words local and long distance, and you will discover that the sentence makes perfect sense when you switch the services around.

That is simply because they are shared services. They share the same facilities. And I will give you a couple of examples of that as I go through my testimony today.

For instance, the telephone companies say that access to the network is a separate product whose costs must be recovered separately and should be recovered as local measured service. Now, that premise, that's the essence of it, and it turns on a very, very simple and fundamental assumption, and that's -- in my opinion, it's a metaphysical assumption. That is, that assertion is based on the belief that people are willing to pay to meet a need for access regardless of the use to which the loop is put. Access is a separate service for which people are willing to pay. I don't actually think that's very true. I think it's more correct to say that use determines the value of access. Consumers want actual services, such as local and long distance, not just access. Think about selling an access-only service, a receive-only service. Most people would not buy such a service. They want the use, and those few people who would buy access-only would not pay a great deal for it, it doesn't have a lot of value. It is fundamentally incorrect to separate use from value when it comes to

something like the telecommunications network.

One example is local measured service. That's not very popular where it is actually sold, even when many people could be shown to have a lower bill, because it severs that natural link between use and value.

Vertical services we observe are very strong complements of basic service. That is, if someone sells me basic service, there's almost no chance that a different person is going to sell me call waiting. Actually, technologically, that may be impossible. Speed calling, any of those vertical services, these services come together, they go together naturally. Not everyone buys both, but if you sell basic service, there's almost no chance that a competitor will sell that customer any of the vertical services. That's the economic discussion on the demand side of the equation.

Now let's turn to the economic issue on the supply side. The telephone companies say people should pay for the right to place long distance calls over the loop. The way they've said it, and it's really interesting and I'll quote here, "It so happens that setting a consumer up to have basic service offers a variety of capabilities right away." That's a direct quote. That is true. It is just as true to say, "It so happens that setting a consumer up to have long

distance service offers a variety of capabilities right away." That's the flip. Both statements are equally true. It actually turns out that it just didn't so happen that local and long distance are sold together. If you go back to the turn of the century when the telecommunications telephone network was being deployed, local and long distance were separate. You had to go downtown to a central office to make a long distance call, and the telephone company at the time looked at it and said, we need to integrate those two services. So it was a conscious decision as a marketing idea, as an economic idea, to bring local and long distance onto the one network and sell them together. This wasn't just an accident. And in fact, at that time, to make loops support long distance, you had to enhance them. You caused costs by actually bringing long distance and local together.

So we don't think historically or contemporaneously it makes sense to make this distinction saying the loop is caused by local, and long distance ought to get a free ride, or other services such as data services.

We are now in the throes of deploying XDSL high-speed data services. They have a remarkable characteristic. They put a little module on the switch

called a D slam, they put a splitter at the house and they use the network in exactly the same way. They want a free ride. So we're going to be selling all these services over that loop, but they don't want to pay for those services.

We think the loop is not an output, but the loop is an input to the sale of other services. Vertical services are supported by the loop. The loop is a necessary condition of the supply of these other services, and therefore we think that has a necessary condition on the supply side. They ought to be treated as a shared service.

The telecommunications companies say that the Telecommunications Act of 1996 requires subsidies to be explicit and therefore basic rates should rise. We read the 1996 act and we see that the shared nature of the network is repeatedly recognized in the act. Section 254(k) says that basic service should bear no more than a reasonable share of joint and common costs for facilities used by competitive services. The conference report actually says it could bear less than a reasonable share of those joint and common costs that facilities used. That's a public policy reason, that we don't or shouldn't be raising basic service rates. Throughout the act, the fact that the network will

deliver advanced and basic service is repeatedly recognized. They're mixed together continually through the act. So the act understood that there would be an array of services. Rate rebalancing, the word does not appear in the act any place.

We believe that competition is not sufficiently strong to compel any of these changes. The extent of competition is meager, at best, as was mentioned this morning.

So that's our qualitative argument. I think I've hit economic, public policy, technological and competitive reasons. I'm going to get around to the social reasons in a bit, but I've prepared a couple of quantitative slides to try and make some of these points, and these are preliminary. As we learn more about the nature of the data, we will provide final estimates in the final comments.

One of the important characteristics of reasonable rates is that once you treat the loop as a shared cost, which we believe you should, even using the company's estimates of costs, which we frequently think are overstated, basic service rates are reasonable by any measure of what is reasonable once you treat the loop as a shared cost. For instance, it's clear from the discussion this morning, and I will tell you these

numbers are BellSouth numbers which were made publicly available, and I assumed in this analysis that the loop and the port which we consider to be shared facilities are 65 percent of the cost of basic service. You saw this morning that Sprint's estimate suggests it was 85 percent, so these are very conservative estimates. Once you treat the loop as a shared cost, it is clear that basic service covers its total service long-run incremental cost. Sprint's number this morning was 3.21, I believe, or approximately that. Clearly, basic service rates cover the 3.21. They are clearly below stand-alone costs.

But then the question becomes, well, but if we've got these shared costs, how might we allocate them? And I know that question was asked last week. I've been testifying on this issue for almost 20 years, and way back when, right after divestiture, we actually used to talk about those allocation rules, and maybe we're coming around to it, and there were a couple of rules that we used to talk about for allocating these joint and common costs.

One was an equal benefit rule, and you heard Dr. Kahn this morning talk about the benefit of economies of scale and scope. That is, by selling more than one thing and selling larger quantities, it was less

expensive. And how do you share those benefits? Well, one rule says you mark each service down proportionately. You give them an equal benefit marked down from the stand-alone cost of the individual service. Another rule would be an equal burden rule. That is, you identify the total service long-run incremental cost of each service and you mark it up sufficiently to cover the total cost of the operation. And, again, conceptually, definitionally, we agree on each of those concepts. What we've disagreed about is the sharing of joint and common costs, defining the loop as a common cost. So that when you take these other sharing rules, equal burden rule, equal benefit rule, you establish a narrower range of rates that are reasonable.

You all know that people complain that TSLRIC and stand-alone cost is a ridiculously wide range, tremendous flexibility in that range. You do this second set of rules, equal burden, equal benefit, and lo and behold, basic service falls within that range. We believe that it is clear, on that basis, once you treat the loop as a shared cost, that rates are reasonable.

Now, is basic service a low mark-up service? Absolutely. That's the point of public policy. That's

why the act said no more than a reasonable share, and the conference report said, and perhaps less than a reasonable share. That's public policy. And AARP, who I represent, believes that is a reasonable and sound policy. So on that basis, we believe that rates are reasonable.

Now let's talk about whether rates are fair. And in order to get at that -- now, this is new territory for this Commission. I understand that. I have testified in perhaps 200 proceedings and I have not seen quite as much comparison to other commodities as in this -- almost never see it, occasionally it comes up, but here the Commission has been squarely focused on what's fair. And what we have gotten as a result of that is the suggestion that because the telephone service has become so valuable over the last 15 years, we can raise rates and it would still be fair to raise rates. It turns out that the performance of telephone rates in the last 15 years is only a little bit -- when you look at the household budgets, a little bit better than other things in the household budget.

And I prepared an exhibit which compares today's prices for telephone service, which is based on the Florida-specific example, and that Florida-specific example is a little bit misleading. That's the example

which showed that rates for -- went from about $13-plus to a little bit over $14. I believe that exhibit includes the subscriber line charge projected backwards to the $13, and so that is a concern to me because the subscriber line charge is paid by consumers. At any rate, we take the $13 to the $14 and we're told that it's basically about 60 percent in real terms of what it used to cost.

Well, of course, PCs -- everyone knows that if you bought a PC in 1983, you didn't get much and you paid a lot, and today, boy, that PC has come down on quality adjusted terms dramatically. But other things it applies to, TVs, radios, and those are interesting because they're electronics. They've been influenced by the computer and electronic revolution of the last 15 years, as has telephone service.

Of course, gasoline has come way down in price as well. That has to do with the -- perhaps the ending of a monopoly. So has furniture, shoes, apparel. That's progress. Things have gotten better in the United States. So that this comparison between, well, telephone has gotten cheaper, more valuable, and therefore it should go up, I'm not convinced of that. And actually, it's interesting when you consider the prospect of increasing telephone rates to their quality

COMMISSIONER GARCIA: What did you mean by local tel plus?

DR. COOPER: That's just the basic service. These are the numbers that come from the demonstration that showed us we had $13.86 rates --

COMMISSIONER GARCIA: Is that what you mean by local telephone?

DR. COOPER: That's what I mean by local telephone.

COMMISSIONER GARCIA: Local telephone plus is the ancillary services?

DR. COOPER: No, with the increase that is proposed back to the 1983 level.

COMMISSIONER GARCIA: Got you.

DR. COOPER: Okay. So that's basically -- essentially what that says is, take back the progress. That's exactly what this is -- that's what that fair proposal is about.

The other thing we've had is comparisons with other states, and essentially what I believe is that Florida ought not import the anticonsumer policies of other states, except I can't find my slide for that one.

At any rate, the answer is, and I'll provide the slide, if you look at Florida's policies on

unemployment, on school spending, on one that's actually regulated by this Commission, the ratio of residential electricity rates to industrial electricity rates, it turns out Florida is consumer friendly. They spend more on their students per capita, per pupil, they spend more on unemployment compensation per person, and they charge their industrials more relative to their residentials for electricity, which is obviously something that this Commission sets. We think those are consumer friendly policies, and there's no reason to import the anticonsumer policies from other states. So much for fair.

Now we get to affordable. And the telephone companies have made the point that even with dramatic increases in basic service prices, service would remain affordable because most people would continue to subscribe.

AARP believes that affordability involves the burden that the cost of necessities imposes on people, not simply whether or not they will keep paying for that. And we have always held that definition and I can go back to my 1984 testimony and assure you we didn't make that definition up last year. It is the relative burden that matters, not the absolute burden that matters. So we know people won't give their

phones up and we know particularly that older people won't give their phones up. They have a lower elasticity of demand because that is their Lifeline. And public policy has suggested we not impose a burden on them for that necessity, and obviously we think that's good public policy.

We also hear a lot of statements about some people, many people would be better off with rate rebalancing. And let me read a quote again, this is another one that I'm going to flip, and I'll quote, "While many customers' bills will be cut and others little affected, some customers will probably pay more." The adjectives are all scrambled in that sentence. The correct sentence is, especially with the radical rate rebalancing on the table in Florida, the correct sentence is, "While some customers' bills probably will be cut and others little affected, many customers will pay more." We just move all the adjectives around and you get a rather different sentence.

Here's how we arrive at that with radical rate rebalancing. Roughly for every $1 of basic service rate increases, if you do it exactly the way they have shown in the contribution analysis, 42-plus cents approximately goes to business. 42 cents goes to

business, so you don't have a lot of money left to lower the prices for other stuff to do -- to keep the somes and the manys in the favor of most people. Of the $1 of increase in basic service rates --

COMMISSIONER GARCIA: Could you go back to that number, what was it that you said? Repeat it.

DR. COOPER: Approximately 42 cents. That is, you raise basic service rates by -- to cover their, quote, costs, as the companies see them. You lower other people's rates to get rid of that, quote, contribution. That's 42 cents for business. You can't see the benefit of that in your phone bill. Businesses may or may not pass that through in the cost of their goods and services, but if you're going to do the phone bill analysis, that 42 cents is lost to you on the simple contribution analysis.

MS. WHITE: I have a question. My name is Nancy White with BellSouth.

A couple of times a few minutes ago you mentioned radical rate increases, and I want to know exactly what you're talking about.

DR. COOPER: Well, by radical rate rebalancing I mean the -- essentially the suggestion that we simply take all of the contribution analysis, the pluses and minuses, and implement them. And that works out in the

BellSouth analysis to, you know, about a ten or so dollar increase in the basic service bill. And of course that was -- those are the numbers in the range that were presented by Mr. Harris this morning, between $20 and $30, and that is complete. Of a one -- of every $1 increase in basic service rates, 30-plus cents goes to vertical services if you follow those numbers the way the contributions are. And I'll explain in a moment why that -- so that goes to those -- that class of customers who uses vertical services. You're left with approximately 25 cents out of every dollar to flow through to toll.

And you will -- when you look at the testimony, you will see that we are constantly given discussions that said, we raised basic and we lowered toll, but what happened here was basic went up a buck and toll came down 25 cents, so they weren't balanced. And it's important to understand the dynamics of these numbers when you do it in this fashion. Historical examples might have actually been -- involved only basic and toll, but this example is targeted fundamentally at business, we've now discovered, and secondarily at vertical services, so the old rate rebalancing we saw in the '80s of raising basic a little bit and lowering toll a little bit or even a moderate amount, that

balancing is not what we're talking about here.

Most of the money goes out to business and vertical services, and I'm not certain that the claimed effects of this rate rebalancing will be the same as that rate rebalancing.

MR. DOWDS: Dr. Cooper, Dave Dowds with the staff.

Would you be able to provide us with the derivation of the figures you're referencing here --

DR. COOPER: Yes. As I said --

MR. DOWDS: -- the 42 cents and the 30 and the 25 cents?

DR. COOPER: Yes, we will, and those are straight from the BellSouth numbers.

Now, I will say that the BellSouth numbers --

MR. DOWDS: Could you tell us what BellSouth numbers you're referring to?

DR. COOPER: The most recent round of testimony -- the contribution analysis.

MR. DOWDS: The ones they filed on August -- on the 1st of August?

DR. COOPER: Yes, the ones I got as -- those contribution analyses.

MR. DOWDS: So you're assuming that the offsets would be limited to the services that were in those contribution analyses?

DR. COOPER: Yes, that's what I've done. Now, there's 175 million -- I will say, I think the subscriber line charge or the federal share is not in it, but I have to figure out exactly where it goes, and we will have a chance to do that on discovery and ask some questions. But basically this looks at the pluses and minuses in that analysis.

Now -- so I think that's the flow of dollars. There's a lot of leakage, if you will, not into toll. It goes into other kinds of things.

Now, let me turn -- and that's -- so that when you're done and, you know, we can ask this question, show me the bill, the specific bill analysis, I want to see every residential ratepayer's bills arrayed by what they pay for which services, and we can do the arithmetic to figure out what rate increases and what rate decreases have to be made in order so that the majority end up better off. We can do that -- you can do that test as a Commission. And so when you make a recommendation you can say the majority of people will not end up with an increase in their bill.

COMMISSIONER DEASON: Dr. Cooper, right over here.

How do you respond to the argument that with that dollar increase in basic residential and the reduction

in business and the reduction in ancillary services, that that reduction also benefits basic residential in that it has a moderating effect of -- or a possibility of those customers leaving, going with a competitor and taking that high contribution away from the company that has a responsibility to be the provider of last resort for that basic residential customer?

DR. COOPER: Well, the fundamental question is, or the first answer is that there's not an awful lot of that competition yet.

The second response is, competitors -- and I have participated in almost every 271 proceeding that's gotten to the federal level and at the state level -- when competitors do their analysis of which markets to enter, they don't only analyze basic service rates. You look at the contribution analysis they do, and no one in his right mind deploys a telephone network with the intention of selling only basic service. You can't get into that business. So when they look at that market, they look across the whole range of services, and they figure out, you know, which customers are doing which.

COMMISSIONER GARCIA: If that's the case, if that's the case that they only look at a specific part of the market, then how are we to promote competition?

We leave the subsidies in, we let the incumbent carrier lose the parts of the market that are profitable, and thereby we're left with the unprofitable parts of the market?

DR. COOPER: Well, let's be clear that the part -- the market segmentation that -- it's not -- people are trying to market segments.

COMMISSIONER GARCIA: I'm sorry if I interrupted your answer, it's just -- and I know you were answering Commissioner Deason's question, but you just alluded to the same problem that the LECs are pointing out.

DR. COOPER: Yes.

COMMISSIONER GARCIA: You know, you're saying, when someone looks at a market, they don't look at residential service. We agree. I think everybody would agree. So they're not looking at residential service, and I think part of what the Legislature was trying to do in the bill that failed was point out that there must be some subsidy in there and thereby we're not having a market as efficient as it should be. And you just stated that you're right, nobody goes into that market to do that business. So what do we do?

DR. COOPER: Well, the question was, how does that affect the competitive prospects? And insofar as people enter markets, I don't think it changes that

competitive prospect all that much, for a variety of reasons, one of which is that when people enter a telephone market, they market in an area. They try and market segment by their pricing strategy. I flew down here last night, had something doing in Washington, I'm a business traveler, I paid a pretty penny for that flight. They segmented me because I wouldn't stay over Saturday night. If I had come on Friday and stayed until today, they would have charged me -- so -- but, on the other hand, they advertise to everybody. So that the problem will come and may come when people gain substantial market share and there is a segment in the market that they have managed to segment out of.

We may get that problem. We don't believe that problem is here today. We don't believe it's nearly as large as we're told, and we don't think the solution is to simply shift those margins, because when you calculate the margins for individual customers and you drop it way down on call waiting and you run it way up on -- for certain segments of customers, you haven't changed it, and for a certain segment of customers, the residential customer who has one line and doesn't use the phone much, I don't know how much competition they're ever going to get. And so that is a problem that remains.

COMMISSIONER GARCIA: So if the concept is that we're never going to get competition, should we move at all? Should we just keep the system we've got in place? Should we suggest to the Legislature we should go back to rate of return regulation?

DR. COOPER: Well, I mean, you're mixing rate of return regulation with competition, and in part, price cap regulation was suggested because the market would become competitive. But clearly, we have, as was suggested this morning, a significant failure of competition, certainly in the residential sector and in much of the business sector. And so we are struggling with the notion that we might have been wrong, maybe the loop is a bottleneck. Of course, Congress foresaw that and required a certain type of pricing and we still haven't finished with that. There will be oral arguments at the Supreme Court next week.

So one of the things I would say to the Legislature is, "Don't double my basic rates," until you know what your model looks like. I've shown you that there's no reason to, particularly if the loop is a shared cost.

There's another way, as we can recover the costs for the share of the loop we want to allocate to other parties in a more economically rational fashion. This

is one of the important things, is that, for instance, you hear the complaint mixed in with the complaint about the loop is a shared cost, that you shouldn't recover fixed costs with variable charges. That's a separate issue. I'm perfectly willing to recover those -- that share of the cost in a fixed charge. The FCC has tried that. That's called the PICCs. The industry didn't like it and they've resisted it.

But you can solve different problems, you will not solve the competitive problem for most people because the total margin is what matters. And in fact, many people are entering the local market not so much on the basis of telephone margins, but on the basis of what they think they're going to sell on Internet. And they intend to run their high speed data over that line and recapture those margins, and what are they doing? They're spreading the costs of their common facilities across more and more services.

COMMISSIONER GARCIA: So if they're willing to enter at this level, you're saying, don't you think then that they'd enter even in a more aggressive manner if the price were -- what's the line, if they had an incentive, in other words, if there was more there for them to get?

DR. COOPER: Oh, you could set basic services up

high enough and get entry. That doesn't make me better off. That was not our idea of what competition was about. So it's obvious that you could set the price up high enough and then you would have people entering. That is not what we had in mind. We thought competition was going to drive prices down.

And so starting from the rebalance, the $10 increase, and telling me my bill is not going to go up when you can't show -- when you've got the leakage, is not good public policy, not good social policy in my opinion.

There is a competitive problem. It resides in a class of customers who are not going to be very attractive almost regardless of what you do. You could make their rates high enough, you would make them attractive. You would not make them very happy. And actually that sort of leads me to where we're going, because we've been talking about the general body of ratepayers. When we start to look at specific social categories of ratepayers, we start to see some very much more heightened impacts. And of course I appear today on behalf of older Americans here in Florida, and the staff has done a survey that is, I think, a terrific survey, and I'll discuss some of the complaints about it, but this is the one -- remember

now, 40 cents of every dollar plus went to business, 30 cents of every dollar goes to vertical services, and approximately, you know, we will do some discovery and pin down what's in and what's out.

Well, if you look at older households -- and by older households I mean either single person or older couples, and I say couples, we don't know the gender, but it's essentially two older folks living together, or a single older person. I haven't included mixed households. What we discover is half of those folks don't have any of those vertical services. So the constituents that I represent, we lost 40 cents --

COMMISSIONER GARCIA: Give me an idea of what -- half your constituents, what does that represent population-wise for Florida?

DR. COOPER: Oh.

COMMISSIONER GARCIA: Ballpark, you don't --

DR. COOPER: Olders, elder -- there must be somebody in the room that knows the percentage of older households. I will provide that. I mean, I can derive that, assuming it's representative. I'm not sure. It might be 14 or something for the total older population, but then I'm going to have to ferret out who are in household. But it's probably seven or eight, maybe ten percent of the population. That's a

ballpark figure, and there may be someone who knows those numbers better than I.

COMMISSIONER GARCIA: Could you explain what that charge says again?

DR. COOPER: This is -- and I've included -- I've included in here any bells and whistles, so that includes an unlisted number. And I may go back and -- so basically this is spending on any local bell or whistle, anything above basic service. And I may go back and pull out unlisted numbers, but obviously, I would suspect that the contribution on unlisted numbers is substantial as well. But basically half the people don't get any of the -- don't buy any of those bells and whistles, according to the Public Service Commission -- the survey. Another 27 percent or so get one, and so they will be on the short side of that redistribution. It's the people who get two or more who will probably be on the positive side of that redistribution. And these are just -- this is the arithmetic of rate rebalancing from my constituent's, client's point of view.

Low income households are a little different. They're more likely than the average household to not take any, but less likely than the elderly household, and that works out around along the line.

COMMISSIONER JACOBS: We've heard a lot and I'm wondering to what extent you may have considered the influence of Lifeline. There was an inference that Lifeline was -- turned out to be a substitution and the people used that income that they would have had to have paid to go on and subscribe to the verticals.

DR. COOPER: We started from the premise that burden is what counts, and so when someone says, as some company witnesses have said, I will get the exact quote, "Lifeline has no value because it doesn't increase the percentage of households on the network," they've missed the point. Lifeline increases the income of poor households to whom income is very dear. So Lifeline may not get more people on the network, although it's a certain number, and they concede it's a certain number, but everyone who gets Lifeline going forward has $10.50 more a month to spend.

COMMISSIONER DEASON: Let me ask a quick question. Would that mean, then, that we should promote a policy of taxing telephone customers to promote a social policy of putting more net income or disposable income in poor people's pockets?

DR. COOPER: I participated in a Lifeline proceeding that created the program in Florida and I will tell you that we gave sound and good reason why

ratepayers should be the ones who promote universal service. The primary benefit of the ubiquitous network is, you can call more people, and the answer is that you get the value if you're a telephone subscriber and therefore it is reasonable for you to make that contribution.

One justification for doing -- again, I'm not saying that you should tax telephone ratepayers for food stamps, but this is a benefit delivered through the network, and I will give another answer. One of the reasons --

COMMISSIONER DEASON: Let me interrupt you a second. I thought that you had indicated that Lifeline does not increase the --

DR. COOPER: A little bit.

COMMISSIONER DEASON: Just very marginally. That the main benefit is to put more income in the pockets of people who don't have much income, and that's kind of a social goal, and I'm not arguing whether that is meritorious or not. My question is, if that is meritorious, why are we taxing telephone customers? Why doesn't that just come out of general revenue some way, in income taxes or whatever Congress sees fit? Why is it that telephone customers should bear that burden?

DR. COOPER: I have -- well, again, there is some externality benefit, so that, as I said, there is a benefit and we will argue about how big it is. So that is one good reason for telephone subscribers to contribute.

COMMISSIONER GARCIA: Doctor, could you give me -- since I asked you for part of it, could you give me -- when you file that or you said you'd get it, what those percentages represent in Florida? I mean all people, not just the elderly, but just to get an idea of what -- because obviously those are some of the people we are considering when we ask the word fair, I mean, and obviously the ones that sort of can't take care of themselves or want some help is this group. So if you could define that universe that you've got there, I'd appreciate that.

DR. COOPER: Yes, we will -- assuming it's a random sample, and I have assumed that, then I can give you the percentage and then we can try and translate that as best we can to the number of households.

COMMISSIONER GARCIA: Okay. Because you're right, that's the statistics our staff -- you're just raking it out that way. That's what our poll showed?

DR. COOPER: That's what your polls show, and I will do a substantial amount of analysis of that

survey.

COMMISSIONER GARCIA: Is there some way we could ask the company to give us a concept of -- I guess that's based on our demographics, not theirs, right?

MR. McNULTY: Yes, Bill McNulty with PSC staff.

What we have with the survey is a representative sample, it's not exactly random. We had, as you may recall from last week, an oversampling that was done in order to make it representative of the state of Florida in terms of income, and that was -- that became the turning point on which we established our sample.

DR. COOPER: Yeah, so, I mean, I can tell you this represents such and such a percentage of the households in your survey. If your survey is representative of the households in the state, that is the number. But again, you can see the problem in the way the numbers have been presented is that 40 percent went to business, plus percent, 30 percent went to vertical, and half of my folks don't get any of that. So it's tough to tell my folks that their bill is not going to go up. Of course, the remaining 25 percent goes to intraLATA toll, some of which may or may not get passed through. We've had this debate and I am not current with the ability of the state of Florida to look people in the eye and say, "If I lower your access charges,

where is it going?" The first inclination is not to send it down to the low use residential customer.

Second of all, of course, and this is also from the survey --

MR. DOWDS: Dr. Cooper, could I ask a question before you go on? I have one real quick question about the prior slide.

DR. COOPER: Okay. Was it technical or --

MR. DOWDS: I don't think so. You show, for example, the number of vertical services and you show one. Is that exactly one or at least one?

DR. COOPER: Exactly one.

MR. DOWDS: So basically you're understating because -- if it's exactly one, then, right?

DR. COOPER: Yes. This is the frequency distribution. This is six or more, okay. No, this is the frequency distribution. So I've listed there the percentage of people that have none, the percentage of people that have one, and my point is that all those vertical services revenues can't be captured by half of my constituents, a simple point. And then the second number, those folks are not likely to get the full benefit of the 30 because that's going to be spread -- the people that have two or more are going to make out just fine. That's three-quarters of my

folks who won't be held harmless, if you will, and that is sort of the suggestion.

MS. WHITE: This is Nancy White again, right over here. Sorry. Right here.

DR. COOPER: Oh, sorry.

MS. WHITE: With BellSouth. And I have a question. I mean, my mother, who is elderly, a widow, but not low income, would she fall in --

DR. COOPER: She's an elderly single, absolutely.

MS. WHITE: Single. So your elderly single and elderly couple include both affluent elderly and low income elderly?

DR. COOPER: Yes, yes, I have done -- and I would love to do low income elderly, but the numbers get small in the sample, even in the sample. And so you start to -- you know, you can do it, and if you'd like, I can run it.

COMMISSIONER GARCIA: They're comprehending each other, because it just strikes me as --

DR. COOPER: Low income is comprehending -- well, "all" comprehends everybody. Low income comprehends low income people, some of whom will be the elderly, and elderly are all separate. I have -- I could run the numbers for low income elderly. The problem is that if I put them up and you start -- they'll say the

sample size is too small because you're down to 35 or 40 respondents. And so I would be remiss -- I would hesitate to suggest to you percentages on the basis of that small of a sample size, but you can run those. These are elderly, and I don't only represent low income elderly here. The organization represents all elderly.

COMMISSIONER DEASON: Excuse me, given --

DR. COOPER: I'm sorry.

COMMISSIONER DEASON: That's okay. Given the relative subscription rates to vertical services of low income versus elderly and that it appears low income has a higher subscription rate than the elderly --

DR. COOPER: Yes.

COMMISSIONER DEASON: -- do you conclude from that that the elderly do not subscribe not because they cannot afford but because they do not need these service?

DR. COOPER: Well, they don't -- they may not value. Subscription is an estimation of price and value. Well, and the other thing is, let's be clear, most of these subscription rates have to do with use. If you use the phone a lot -- and we could break these down by each service, and I have a suspicion that call

waiting, which is sort of the poor person's second line, may be a lot of the ones in there, but at any rate, older couples don't use the phone as much, and you can look at your numbers in the survey and you will discover that they're socially less connected, et cetera. You can do a lot of sociological discussion of why, but this is -- I was here doing the economics of the rebalancing, and the manys and the mosts and the somes, and the folks I represent are not in -- you know, they don't come out that way. Of course, they don't use -- they don't spend as much, and these are the self-reported telephone bills from the survey, again, and low income and elderly couples spend less. The low income, you will make the observation that they spend about the same on local service as the entire population. We saw that the vertical services were only somewhat less, et cetera. It's the long distance portion, certainly for the single elderly, that is lower.

And again, the survey did not distinguish between intraLATA and interLATA long distance. It asked about long distance bills, and probably rightly so, because most respondents would not be able to make that distinction.

But again, this is the bill impact analysis which

you can have the companies make. They pull their billing samples and they have presented some snippets from other states and so forth. Let's get a billing sample, random sample, in the state of Florida and make that data file available so that folks like me can analyze it, and let's see what the billing impact is. That's something that this Commission can ask for. With actual bills, people tend to overstate their bills when they're asked them a little bit, although it's not that bad in this survey, given the numbers I've seen. People have actually done decently in estimating their bills, a little bit high, but not that bad. But doing bill analysis on the base of survey results is problematic.

I did the survey, the Michigan Divestiture Research Fund survey, back in the early '80s where we actually did both. We asked people and then we got the phone company to show us their bills and we made that comparison. That's the more difficult survey, but it can be done.

So if I do the arithmetic, if I do the arithmetic, I discover that I think my folks are not going to come out better off. That's pretty clear if you do the arithmetic. I think it's true of all consumers because of where the money goes, particularly true of my

constituency.

So then, let's ask them what they -- what would happen to them if you raised their bills. A very brave thing the Commission did was having a survey, ask people what's going to happen to their bills, and there's been a bit of a flap about starting point bias, and as far as I can tell, the -- and the discussion of starting point bias was completely undermined by a miscoding of the variables. That is the -- there is a little starting point bias, but nowhere near what was discussed, as far as I can tell. That is, there's a slight difference between the people who started at two and that started at 20, but the survey, as far as I can tell, flipped the coding around and the analysis that was presented last week did not. That's as far as I can tell, because I've looked -- I've split it between the twos and the 20s, and it doesn't come out that way.

MS. CASWELL: Mr. Cooper, Kim Caswell with GTE.

Were you here for the analysis last week discussed by Mr. Perry?

DR. COOPER: I was not here. I had a report of it and I read the testimony and took the testimony and tried to square it with my copy of the survey results. It does not jibe with what I have, so I think the second set of variables were miscoded. But --

MS. CASWELL: When you say the second set of variables, what does that --

DR. COOPER: The questions that started from 20. There were two sets. Some people started at two, some people started at 20. I think the 20 -- of course, the coder -- the coding, if you look at the questions, they flipped the order around. You just have to -- the rules for coding are fairly complex, and so I think that that was -- now, that doesn't mean to say there is not a little starting point bias in the survey. There is a little starting point bias. However, in order to prevent against that, and obviously that will be sorted out before we're done, what I did here was I took the responses to a clean question. This is an absolutely clean question. That is, I only took the first people, the first question, and I only looked at $2.

So there's no bias here. You ask people straight up, what would happen if I raised your bill $2? We could have looked at the $20 question as well, because that's a clean question. That person didn't hear two, didn't hear anything else, so at least that first question in the sequence does not suffer from the bias.

There were other complaints about the structure of the questions, but this is the $2 question, and the

answer is that a lot of people said it would have an impact on them even at $2. That's what they said.

Do these numbers jibe with the econometric estimates of price elasticities? These are bigger impacts. These are bigger impacts. So people say stuff, but, of course, the price elasticities, you know, have other things going on, but this is what they said, and, of course, interesting -- older single, let's take the widowed mother who is living alone. Older singles are not going to give up their phone, an observation we have made frequently. Why? It's their Lifeline. They will say they're going to have to cut back on other stuff. That's what they say. That's the way they perceive these impacts.

DR. TAYLOR: Dr. Cooper, Bill Taylor from NERA. Just a quick question --

MS. MARSH: Turn your mike on, please.

DR. TAYLOR: Sorry. Bill Taylor from NERA. A quick question to understand the graph.

Does that mean that roughly 70 percent of Floridians feel that a $2 increase would not cause them to cut back elsewhere?

DR. COOPER: It means that a -- no, it would be a -- well, not cut back elsewhere, plus seven percent who said they would give up the phone. So it's -- you

could say that 63 percent said $2 won't hurt us, absolutely. On the other hand, when you get to my constituents, it's -- I believe it's about 50-50. Half said it would either cause them to give up service or cut back, and you can see those percentages, absolutely.

DR. TAYLOR: Thank you.

DR. COOPER: Those are the responses. And again, the seven percent statewide said they'd give up. That's more than the econometric estimates, but that's what they perceived. And those are again -- I think you can use the other numbers. You can adjust them for the question of starting point by averaging. You can certainly look at the 20 as a clean number You can look at the ten, which is in the middle of either, either path, which is roughly the numbers on the table, but that -- you know, you do the economic analysis first. My folks end up with a higher bill. That's what they -- I think they do, looking at the dynamics, and they seem to recognize that they will end up with a higher bill. If they believe their bill wouldn't be any higher -- and of course, they could have been presented options in different ways, but that is the simple observation of those folks.

So at the end -- and it's interesting, you have

heard a tremendous amount about this cost question. There are almost no questions about the cost issue because that is an issue that has been finely, highly refined. We agree on the fundamental definitions. We may disagree on how many -- what the fill rate should be and what the percentage of inground and above ground should be, but the concepts are there, simple issues, straightforward issue, is the loop shared?

We get to the social questions, the fair, affordable kinds of questions, and it's not nearly as much analysis as we have done on the other side. The survey is absolutely important to start to look at that. A bill impact analysis is important to look at that. And fill that in and you will understand obviously why people, you know, sort of react when you talk about revenue neutral rate rebalancing, because it ain't neutral for most.

Thank you.

MR. McNULTY: Yes, Bill McNulty with staff.

There was some discussion last week regarding weaknesses of the survey. You may recall that the items were listed as strategic behavior, an emphasis on price, and a lack of realistic options in the price increase and price decreasing and increasing questions. Do you have any comments, input in those

areas?

DR. COOPER: Well, I will -- we will thoroughly analyze that survey and we're going to try and get the other survey. I guess that was presented at -- the data, underlying data.

Obviously, the most thorough presentation was starting point bias, and I think that was simply wrong, and so to the extent that that cast doubt about the survey, I think you need to put that aside. Strategic behavior, you know, it is hard to imagine people gaming that process by saying, hey, maybe if I say this, they won't raise my rates. I'd be interested -- I have to reread the introduction. I'm not sure how many people know what the PSC is and whether or not they actually set their rates, and -- I mean, certain AARP members are very much attuned to it and at moments they know where to send their cards and letters, but, you know, you get calls and say I'm conducting it for the PSC, and it -- I'm not sure it's strategic behavior.

But the other one was what?

MR. McNULTY: Lack of realistic options. For instance, we had the -- we had the options of disconnect, pay the increase but modify --

DR. COOPER: Or cut back someplace else?

MR. McNULTY: And in that one specific option

where we said pay the increase but modify other behavior, I think the comments were basically directed to giving realistic options where people would actually do more concrete examples, and I'm just wondering what level of difficulty you think that presents.

DR. COOPER: Well, obviously it would be possible to -- look, it would have been possible to say, for anyone who said give up something else, you could have jumped into a sequence and said, what would you do? I would have hesitated to give them options because then the complaint is, well, they might not have thought of that. So you could have gone into an open-ended question and said, well, if you were going to cut back, what would you cut back on, and see what they said. See, but the idea of then turning around and saying, well, maybe you'll cut your long distance bill, I don't know if they would have thought of that, and once you give them the option, then you've -- you know, so survey research is that kind of research. We like to say it's not an art, but then again, cost and cost allocations sometimes starts -- stops looking like an art as well because you've got to decide who caused the cost.

But, yeah, so you could have asked an open-ended

question and then seen what people said and that would have told you something qualitative about the kind of impacts they would have said. And what you would have found was, my folks would not have said give up caller ID because half of them don't have it. So I suspect they would have said, well, I'll have to -- you know, they might have said make fewer long distance calls. They might have said I'll have to have one less egg a week. Who knows? So it would have been possible to respond.

MR. DUNKEL: Hi, this is Bill Dunkel.

Mr. Regan in my office has gone through the survey data and he'll have more information, he's actually counted how many people answered what, but just to summarize, the GTE statement that more people said they'd disconnect at $2 than at $20 simply is not in the data. It's simply some sort of GTE miscalculation.

DR. COOPER: It's the coding. The coding was very complex, and so they missed that point. I mean -- but, on the other hand, there is a starting point bias. The people who were given the $20 question first gave higher answers. I believe it's almost across the board. I have the matrix in it, and -- so the answer is maybe you average it, I mean, to get an estimate, or maybe you, you know -- I chose to just do two bucks and

say people care at $2, and we're talking about ten. In our comments we will analyze all the responses.

MR. McNULTY: I would just like to make a comment that we're interested in receiving any type of input you have in the way of work papers and data output that you've done in this area, and likewise for other parties who may be present, because obviously there is -- there has been some question in regards to the coding of this information and how we aggregate this data correctly, and of course, staff has done that. We've done that ourselves, but we want to remain open to the possibility that mistakes may have been made on our part as well, so we're anxious to receive that from all parties who have -- excuse me, not parties, but interested persons who have looked at this question.

DR. COOPER: Well, I will say that the way the results -- the way the coding book was delivered to me, when most people deliver coding books, they give you the marginal totals. That is, they run one time through and they simply give you the count of every response. That would have been very helpful because if you -- I do survey research all the time and so the first cut they'll always do is they show you the marginal totals, so you would have been able to figure out, match up -- if they had given the marginal totals,

they would have looked down and said, wait a minute, my marginal total's different than their marginal totals. So as a matter -- that is particularly helpful, and it would be helpful if you -- well, maybe you should publish your coding scheme or maybe you should just put out your marginal totals so people can match up and figure out what went on. But that would have been helpful. It was not easy to figure out the coding scheme at any rate.

COMMISSIONER DEASON: I have a question. How good of a predictor do you think this type survey is for predicting actual behavior after a fact occurs? For example, do you really believe that there will be eight or nine percent reduction in penetration if there is a $2 increase?

DR. COOPER: No. As I said, these are much higher than the econometric estimates. So people say that stuff. On the other hand, the people who -- there's a lot of people who say I will feel it. That doesn't mean they won't feel it, but when push comes to shove, are they going to pull their telephone out of the wall for two bucks a month? No. We know, especially for older Americans, you can raise their price and they're not going to give it up. B again, we started from a premise that affordability is not about who stays on

the network only. It is about that, but -- and so, you know, I think this is a high number for sure, and you've been shown econometric estimates, I mean, and there are higher estimates and different ways of deriving that.

Will some people give up their phones? Yes. Will it be a small number at $2? Fairly small. But as I said, we never established this data on the fact that who's on and off the network.

MS. CASWELL: Mr. Cooper, Kim Caswell. I just want to follow up some questions Commissioner Garcia had earlier, and I'm not sure I understood your answers.

The question I have for you is, what is your recommendation that this Commission should tell the Legislature, that it change nothing, especially in the way of pricing, that everything should stay just the way it is today?

DR. COOPER: Well, I think this Commission should tell the Legislature that if you treat the loop as a shared cost, which we do, then the claims about subsidy are not substantiated, that basic service rates fall in a reasonable range defined by technical subsidy questions, equal burden/equal benefit rule, and therefore, there is no compelling need to change rates.

Certainly the radical rate rebalancing -- they should also tell them that when we do the bill analysis, done in this way with those orders of magnitude of $10 or more, the majority of residential customers are going to end up with a higher bill. I think that's what they will find when they look at it.

MS. CASWELL: So the answer to my question would be yes?

DR. COOPER: Well, the question then becomes a more differentiated and subtle question: Are there pressing problems that must be addressed in terms of market share loss? I don't see it. So maybe the Legislature should be told, let's see how competition develops. We're told that competition will undermine the ability to do this, that and the other thing. It ain't here yet.

MS. CASWELL: So there's no need to do anything right now?

DR. COOPER: I do not see an immediate need to --

MS. CASWELL: Okay.

DR. COOPER: -- change rates.

MS. CASWELL: Just one more question.

From your discussion earlier, I understand that you think that competition in this area means more entities in the marketplace and it should mean lower

basic service rates. How would you go about having that happen? How would you recommend to the Commission that they achieve those things?

DR. COOPER: Well, I think the first rule is to implement the '96 Telecom Act vigorously and effectively. If you're a regional Bell operating company, Section 271 is the correct way to go about it. Once we -- I mean, the assertion has been made that low basic service rates are preventing competition from occurring. After we have Section 271 implemented, after we have the technical, legal, administrative obstacles out of the way, after we get the 14 points and people have time to figure out a business strategy, if after we have actually opened the market we don't have competition, then you'll have a case. But right now it is my belief that the barrier to competition is opening the bottle, and I have -- as I said, I have participated in the proceedings in Georgia, Texas, California, New York. I cited the Florida staff report at great length. So to me, we start there. Doubling the cost of a commodity like telephone service is a dramatic step. It demands a lot more proof, particularly in terms of opening markets, I think, than we have on the table.

MS. CASWELL: If you're telling the Commission to

implement the Telecom Act, what exactly do you mean? What should they do?

DR. COOPER: Well, they certainly shouldn't approve entry until we get the 14 points right. Of course, there are some companies who don't have that incentive. I think we wait, we see what happens with the Supreme Court. We -- if we have findings that people are not doing 251, 252 properly, we take aggressive action against them.

COMMISSIONER GARCIA: Should we look at it as a process, though? Let's say we don't opt for radical reform, but let's say we opt for reform of some type and let's say we decide that the price of that service -- we don't go with your theory, but we go with the price of -- maybe your caveat is good for another issue. Let's say we decide that the price of basic service is around, and I'm making these numbers up, $18.

DR. COOPER: The cost or price?

COMMISSIONER GARCIA: The cost is $18. So that's what people should be paying for the system, as an example. If we don't opt for a radical reform, should we perhaps say to the Legislature, there is some subsidy there, and start down the road of rebalancing so that when the court issues are resolved, when 271 is

solved, we are at least closer to there so that competition will begin on its way, or should we just wait and say to the Legislature, let's wait and see, there's too many things out there, and when all that is said and done, then we'll start down the road of rebalancing?

DR. COOPER: Obviously, I prefer your -- I prefer the latter. I want to get the technical administrative -- I mean, we're told that people -- or suggested that, you know, competitors will only compete at the high end of the residential market. Well, when we get the rules implemented, we will see whether or not that happens. I don't believe market share will tip so radically that phone companies will go broke when that happens. So I don't see the urgency.

The second thing that will happen -- and let's be clear about it, clearly has happened with the companies that have been allowed in -- the Telecom Act envisioned a swap of market shares, if you will. The Telecom Act expected the local companies to lose some local business, and when they get into long distance, to gain some long distance business. There was nothing wrong with that. Margins get replaced and people may end up in the same place because they've now captured the other guy's margins, and you can go to Pennsylvania and

listen to the Bell companies and they will sit and testify, have a tremendous debate, and the phone company executive said, "He wants my margins, my margins are bigger than his, and I want his margins." And so the notion that something untoward is going to happen here if you don't do this, I don't accept.

Now, if you force me to take your hypothetical, then my second answer would be do it slowly. Obviously, that gives people time to adjust. It gives the 271, 251, 252 process time to alter, but I'm not -- again, I don't see the marketplace reason, I don't see the social reason, I don't see the legal reason to do it, because the industry has not changed that much here in Florida. The market shares lost are very small.

MR. REHWINKEL: Dr. Cooper, Charles Rehwinkel with Sprint-Florida.

Could you do me a favor and turn back tc the slide you had up before this one? There was a -- I may have been confused about something that was said.

DR. COOPER: This is the local and long distance bills?

MR. REHWINKEL: Yes. The phrase where it says house -- low income and elderly households have already cut back on their telephone bills, what do you mean by that?

DR. COOPER: Well, they spend less. I may have -- that may be a more aggressive -- they spend less.

MR. REHWINKEL: Okay. So that was not a -- there was not a time series --

DR. COOPER: No, the -- "cut back" is -- they spend less.

MR. REHWINKEL: Okay. And one thing you don't know from -- and this is again from the PSC survey?

DR. COOPER: Yes.

MR. REHWINKEL: You don't know where those customers are located or if they're in rural exchanges and might have lower rates already?

DR. COOPER: I don't know. There may be geographic coding in there that would have enabled me to identify where they are, I'm not sure. I mean, and I did not try and do -- the cells, the samples sizes are what make it -- you might be able to do it by company, but I'm not sure -- I doubt that they have a large enough sample so that you would be confident analyzing rural, although with 1,500 respondents you could split it rural/urban, and probably you'd have enough.

MR. McNULTY: I believe that the coding also included county codes so that you could look at it by county, and in addition, I believe area codes.

DR. COOPER: How many counties in the state?

MR. McNULTY: 67 counties.

DR. COOPER: So the cell sizes are going to get very small, but I bet if rural/urban -- if you know which counties are rural and which counties are urban by definition, you could -- or you could do the extremes and do something like that.

MR. McNULTY: We have some data that was collected as well as to the different densities. I believe, for the respondents, the different population densities from which the respondents live. That again is based strictly upon county information. So we have county information, densities of those counties, and you can tier those into any type of groupings that you would like, and, you know, that's one way of getting at that question.

DR. COOPER: Yeah, you can -- I mean, if the geographic identifiers are in there.

MS. WHITE: Nancy White with BellSouth. I just want to follow up on a couple of your comments.

If all it takes to have competition in the state of Florida is 271 and the 14 points, then why isn't there more competition in the GTE and Sprint business markets?

DR. COOPER: Well, I don't -- I'm not convinced

that GTE and Sprint have implemented 251, 252 with the rigor that the 271 process is imposing on the Bells. But I haven't looked at those -- I mean, that's my answer. I have participated in the proceedings in 271, and the commissions, the FCC, the DOJ, have in my opinion done a very good job of opening markets. They have not -- and so I have -- and I have urged some commissioners to move on and say, let's take this model and see if they're doing 251 over here in GTE and Sprint. I think GTE and Sprint are getting a free ride because the process -- and the Bells have said they've been punished. I understand that. So -- but I think there's a difference in the way the process is being implemented.

MS. WHITE: I have one other question, too. You -- I believe you said that you didn't believe that when competitors come in, they will just go after the high end residential market?

DR. COOPER: No, I said they will try and segment the market.

MS. WHITE: Okay. I mean, because my question would be, why would a competitor want one of your people as a customer? They don't buy vertical services, they don't make that many long distance calls. I believe what you're saying --

DR. COOPER: It depends on -- obviously they go after the higher margin customers. It depends on what the entry strategy is.

MS. WHITE: Well, I mean, would there ever be an entry strategy that a competitor would want to go after a customer who doesn't spend any money on --

DR. COOPER: But again -- well, historically, if you go down that street and you want to reach out and get the Commissioner, and you're doing it with a loop that's been deployed and facilities that have been deployed, well, you get the Commissioner first, and then you discover this person over here, and having deployed that, you start to look around and say, hey, I'm going to cover some margin over here. And so as you fill out your network, what do you do? You go for more and more customers and you spread the costs around.

So obviously people enter markets for higher margin customers, but we've always believed that they spread, and sometimes we try and force them to enter markets and then they discover that, hey, they can make money over here.

COMMISSIONER GARCIA: So AARP, there's no chance AARP will file for a CLEC status to go after its members or anything in Florida?

DR. COOPER: I haven't talked to AARP about that. Now, when it comes to electricity, they may try and be an aggregator. They do sell a lot of services. So it may or may not be -- if the discounts were larger on resale, they might.

COMMISSIONER JACOBS: Is it -- can we look at -- let's say we set the right price signals here, and kind of borrowing off of Commissioner Garcia's question, if we set the right price signals, can we really rely on that to encourage the right entry, market entry, or are there going to be other factors that --

DR. COOPER: I think there are many. I think the idea of the right price in an industry with the magnitude of joint and common costs you have in telecom is extremely difficult, because in competitive markets people will allocate around, so the simple idea that there's a right price is misleading. If you put it up high enough, you can get some folks to enter. But that -- to us, that wasn't the point. And so we start from where we are today. We think the rates are just, fair, reasonable and affordable, and we say you need really certainly the magnitude that people have talked about. We don't see the reasons, the justifications for going there.

Thank you.

MR. DOWDS: Dr. Cooper, another question.

Did I understand you to say that you thought that staff should request that the LECs perform a bill analysis?

DR. COOPER: Well, it's clear that the LECs have command of their bills, they harvest their bills, we've seen some of that in these -- in other states. We've seen evidence from Indiana and so forth. What I would like to do is not only have them harvest the bills and give us a breakdown -- they may not have the demographics, although, in Indiana, they said -- but also make it available to the other folks to analyze, much as the PSC staff survey was done. I mean, that's -- you have -- reading through this testimony, you have a broad range of assertions about who is going to win and who is going to lose and who is going to be better off and who is not, and all of that is entirely dependent on what you assume about the nature of rate rebalancing and what the structure of people's bills are, and you ought to answer that question.

COMMISSIONER GARCIA: So what you're saying -- well, then, maybe you're going to clarify the question, because I'm just curious --

MR. DOWDS: My question was, if you think we should have a bill analysis done by the LECs, do you

have any specific pricing proposals that they should evaluate?

DR. COOPER: No, because they need to show me the structure of the bills and then I can figure out whatever -- then you can ask yourself, if we do $2 over here and we don't let any go to business, see, which was in significant measure the historical, quote, rate rebalancing that went on, you get a different outcome, because then you can say every dollar of increase in basic service was passed through a dollar of decrease in intraLATA toll. That's a different analysis than if you send some off to vertical and send some -- but what you need to know is the structure of people's bills, and then anyone can ask the question, what happens if. See, so what they need to produce is a clean set of bills and say, here is whatever the number of bills broken down by these groups as best we can get the characteristics, and of course the question is how do they -- their internal data doesn't tell me whether it's a single elderly or a -- you have to -- it's not an immediately easy process, although the pure description of the bills can tell you what percentage of the people spend $5 on vertical services, and then if you add a $10 increase here and you draw vertical services to zero contribution, complete rate

rebalancing, what does their bill look like at the end? That's a simple arithmetic question.

MR. DOWDS: Do you have any suggestions as to the kinds of questions we should pose of the LECs? For example, I assume you're not asking us to submit a data request to each Florida LEC that they provide a price out of each and every service they offer. Do you have any specific guidance as to what we should pursue?

DR. COOPER: No, no, I'm proposing a harvest of the bills, which has been referred to in the data, and say, you know, GTE or BellSouth, pull a random sample of 2,000 bills and show me the breakdown to the extent you have demographics -- they will not have demographics so it won't get to the subtle questions we've asked, but it will tell you exactly -- and then you may or may not want this, but then you can match it up against the survey responses, if it's a representative basis, and see where, you know, did people know they have call waiting or caller ID, at least in the aggregate percentages.

MR. DUNKEL: If I could point out, in order to get the total picture, you'd also have to know what bills they're paying to the IXC. So the LECs are billing for IXCs, you would also want that as well.

DR. COOPER: The data I have seen says that they

know that, too, and in most cases they bill for the IXCs.

MS. WHITE: But -- this is Nancy White again with BellSouth.

But how is that harvesting of bills going to tell you who is elderly, who is --

DR. COOPER: No, it's not. That will not answer the what I said is the subtle questions we have here. It will just tell you in the aggregates, although obviously I have seen testimony that says elderly do this, and so obviously you can in fact match it up. But then you have to do a survey and ask -- and again, I'm not sure the data that you've seen -- sometimes phone companies affix characteristics to telephone numbers on the basis of census data because those are high probability samples. We haven't cross-examined the data from Indiana, for instance, but the simple bill harvest gives you this aggregate, many, some, a few, et cetera.

Thank you.

MS. MARSH: Thank you, Dr. Cooper.

We'll take a 15 minute break.

(Whereupon, a recess was had in the proceedings.)

MS. MARSH: Our next speaker is Bert Steele. Bert, anytime you're ready.

MR. STEELE: Good afternoon. My name's Bert Steele, and I'm the manager of pricing and tariff support for GTE, and I've worked in the telecommunications area for about 25 years, 15 years being in costing and pricing, and the remaining time in business planning, market planning, and some evaluation work in engineering.

Over the next hour I'll address our cost study submittal made in response to the special project, and at any particular point you want to ask questions, feel free to do so.

The Legislature requires the Commission to respond by February of 1999 on fair and reasonable residential rates and the relationship between a cost and charges of service. In June of this year we received the data request from staff, and Mark Calnon in his comments and his presentation last week addressed the contribution analysis, and this afternoon I'll provide a summary of the comments that were prepared under my name and also identified in response to the data request.

Now, the services that we addressed are residence service, business service, GTE Centrex service, which is called Centranet, toll services, switched access services and vertical services. The agenda or format that I'll follow is shown on this overhead. I'll start

out with the model that we networked to identify the costs in response to the data request. I'll then spend some time on a model that we used to identify the costs called ICM, or the integrated cost model, followed by economic concepts that surround our total service long-run incremental costs, or TSLRIC.

I then follow with the assumptions that are incorporated in our cost study so you have a clear understanding of those, and then finally I'll conclude with our cost studies themselves.

Now, the cost studies I have in the presentation are not proprietary. This schematic shows the network that was modeled in response to the cost study submission at the end of July of this year. Across the top you'll notice that there are residence and business units, and on the side of those residence or business units are a device called a network interface device, or NID, and from this network interface device down to the office that serves that customer within our cost study submittal, that's identified as the loop cost, pretty common language.

Now, you'll notice from the left-hand side of this schematic that we have distribution facilities and feeder facilities, and in our cost study submittal, we've used copper technology for shorter loops, copper

technology including copper distribution cable and copper feeder cable, and that's when the loops are less than 12 kilofeet. And we've used a pair gain technology which consists of copper distribution cables, a pair gain device, and then fiber facilities from the pair gain device to the central office for longer loops.

Everything from the network interface device into the central office, but not including the central office equipment itself, that is a digital switch, is identified in our cost study submittal as a loop cost. We also identify the cost for our own switches in the state of Florida, all of which are digital.

Not only do we identify the costs for a basic base unit, if you will, a host office, but the remote offices for that base unit, as well as our tandem switch, which provides the gateway to provide interconnection. The model identifies the costs for interoffice transport that connects each of our switches in the state of Florida.

And finally, we're using out of band signaling with the SS-7 network to handle call setup. And you'll see on the schematic, about six o'clock, an STP -- a local STP which allows us to set up calls such as originating access and terminating access in the

switched access area, or even a local call, an extended calling service call that we have in this state.

GTE's preferred cost model is its own ICM, or integrated cost model. Now, we had an opportunity in July of this year, colleagues of mine, Dave Tucek, Mike Matthews and Dave Burley, to visit with staff and other parties here in Tallahassee to review the ICM model. The ICM model produces long-run incremental costs, and there are six modules that are shown in this overhead that are provided with ICM.

The first four modules, a loop, switch, transport, SS-7, these are investment modules designed to determine the investment for these types of plant. The expense module determines the expenses required to support infrastructure as well as expenses required in the name of depreciation or cost of money, and finally, the model has a mapping or report module which allows the user at a keyboard to define services and prepare output reports, much like we prepared in response to the data request.

Now, the ICM model is quite different than what GTE has had in the past. It very much streamlines the cost development process. In the past, an analyst would incorporate the cost components and incorporate the modules to address the question largely manually.

In ICM, the integration of cost components or the integration of modules, and by modules, I mean loop facilities with switching facilities and transport facilities, is done by a PC computer, so when you're sitting down at the keyboard, you can define a toll service as being within a particular distance band, and the model, through the use of a mouse and point and click, will allow the user to specify, to pick up switching costs, SS-7 costs, transport costs, et cetera, to support that service.

This is the first model that we have had that allows us to deal with both retail and wholesale services in the same tool. When we use ICM, we can identify costs for switched access, which is a wholesale service, and we can also identify the costs for R-1, B-1 and toll type services, which are retail type services.

We provided a very extensive package in response to the data request, and we believe ICM allows any interested party to peel back the basic cost components that are incorporated in the model, determine how those cost components tie to our vendor contracts for both labor and material, and validate, if you will, the costs that are used by the model.

And finally, the model allows a significant amount

of sensitivity analysis. You can sit at the keyboard and change the cost of money or change the depreciation rate, change an item such as the labor cost to install a pole, and within a short time period, determine what the impact is on all of our infrastructure.

Now, this schematic I'll cover in detail, but it provides, from left to right, the ICM process flow. Starting on the left-hand side, we have commercially available data that's provided to us by Stopwatch Maps and PNR, which I'll get into in some detail, as well as data provided by GTE, such as material prices and tariff boundaries and the like.

Now, this basic core data feeds into the ICM engine and allows us to produce cost components for the various modules of loop, switching, transport, SS-7 and, of course, expenses. Once the cost components are identified, a user at the keyboard defines what cost components are required to support what basic network functions.

In the ICM language, a basic network function is a loop, for example, from the network interface device to the central office. A line termination and a switch is a basic network function. A minute of use that's outgoing or incoming is a basic network function. And all that is defined by the user at the keyboard.

Now, finally, the user is able to map those basic network functions to services, R-1 service, PBX service, toll service, et cetera, for both retail and wholesale services.

Now, Stopwatch Maps provides us information that something that's identified in our documentation is a basic building block, a grid cell. A grid cell is 1/100th of a degree of longitude by 1/100th degree of latitude, or approximately two-fifths of a square mile. There's about 14,000 of these in our GTE territory in Florida, served by 90 offices. This data is assembled based on information provided by GTE, which I'll get into in a few minutes, information that's provided by PNR, and also other information such as Tiger files, which are map info information telling you how roads are laid out in our territory in Tampa -- excuse me, in Tampa and the surrounding area.

Next, please. This is the information that's provided to us by Stopwatch Map at the grid level. We provide road feet, also provide soil type, bedrock depth and water table depth, the latter three of which are determined -- or, excuse me, used by the model to determine the additional labor costs that may be required, such as cutting rock, or at a manhole site, hitting water and having to have well points to drain

the manhole.

Next, please. Now, PNR provides us information on residence and business lines. This is all provided to us by Stopwatch Map at the grid level.

Now, the basic coordinator that comes from GTE is covered on this slide. The material prices from our vendor contracts or vendor quotes, all the information on their labor activity rates, we have a process in Florida, a single source provider contract for handling outside plant facility installation. All that information is directly input into the model as core data from GTE. The longitude and latitude for each of our offices is identified not only as input to the model but also provided to Stopwatch Maps so they can identify what grids, what geographic area is served by what tariff boundary.

The model incorporates GTE's engineering design criteria for loop, switching, transport and SS-7, and finally, the expense module has as input ARMIS data. So you can see how we tie to what we file with the FCC and other regulatory commissions.

The loop module again handles everything from the network interface device all the way to the customer location. Distribution cables are analyzed at the grid level and feeder cables are analyzed at the wire

center level. And, again, copper facilities are used for shorter loops for both feeder and distribution, and fiber facilities for feeder cable, and copper facilities for distribution cable are used for longer loops.

Now, this particular schematic is contained in the user manual and shows you how we model, as an example, feeder cable serving pair gain devices. And what you see here is something that looks a lot like a checkerboard. Central office is located at the center of this checkerboard, and you'll notice the checkerboard is broken into four quadrants, and for convenience purposes, we've just laid out the network in one of those quadrants.

Now, this whole checkerboard are areas about 900 square miles, so this is overlaid on each one of our offices, allowing us to model a tree and branch architecture for customers that live beyond the core area of the central office and therefore are served by pair gain devices.

Now, the switching module analyzes costs for our host and remote offices. The model is vendor- and technology-specific in terms of its inputs, and can be expanded to handle additional technologies as well as additional inputs in terms of size of switch.

The size of the switch that we lock at for the host office ranges from 700 lines to 60,000 lines, and the remote offices range from 1,300 lines to 3,750 lines. And all the information contained in the model ties to our vendor contracts or vendor quotes for the Lucent Technology switch, the Nortel product line, as well as the AG Communications Systems product line. The transport module identifies the investment for all the interoffice transport connecting switches together.

We use the SONET ring topology in the model to connect base units for a maximum of eight nodes fit on a ring. You'll see this in the example. You'll see end offices that are on a ring, and the gateway to leave the ring or enter the ring is via our tandem office in Tampa.

We also have a number of remote offices in the state, and the way those are modeled in ICM is point-to-point SONET facilities, just as indicated in the schematic.

And, finally, from an investment module perspective, we analyzed the SS-7 network for out-of-band signaling. Our costs for toll, a switched access, local service calls for ECS service all require out-of-band signaling, and the out-of-band signaling is

analyzed with our local STPs to handle call setup.

The expense module provides all the expense information to support our infrastructure. The expense module also includes costs of capital, including depreciation, return and income taxes.

Now, there are four basic methods that are used in the expense module. The first one is the functional cost pool approach where we identify what the costs are that support a particular category of plant, such as switching or such as electronics on the end of fiber facilities, and from that information we derive the relationships that exist between the expenses and the investments that are identified in the model. There's also activity-based analysis that's performed by our expense team in conjunction with Arthur Andersen, and this activity-based information is provided for marketing, sales and advertising, and it's also provided for certain portions of our network where costs can be identified, such as for switching, termination requirements on switches, et cetera, all of which is documented in our filing package.

We identify the capital costs and tax factors, the actual formulas of which are contained in the user manual, which I think is the second manual we filed in our July submittal, and the cost of capital includes

both depreciation and return on capital.

And finally, we have several external studies in the billing collection and directory area which are developed by GTE and Arthur Andersen and are input to the model.

MR. OCHSHORN: Mr. Ochshorn, I'm Ben Ochshorn, Florida Legal Service. I have had the good fortune of receiving several boxes of your stuff, and I have a few questions and I think they relate to the part of the presentation you just made.

What's the period of time that GTE looks at to figure out if costs -- you mentioned long run. What period of time?

MR. STEELE: That's a good question. Really, there's no time period that's used, as a matter of fact. That's really one of the misconceptions that happened in much of my younger years at school.

MR. OCHSHORN: Okay.

MR. STEELE: What we mean by long run is that there really are very little, if any, constraints. Only those that are practical, which I'll cover in a minute. And that -- by that I mean, and we'll cover this in a few minutes, we're not ignoring investment capital. We've identified in the model not only the expenses associated with the infrastructure, but the

capital as well.

MR. OCHSHORN: So does this mean that all the costs are captured in the first year of operation and that after you've paid for those costs, then you can use the network an indefinite period of time, or does it mean something else?

MR. STEELE: It means something else. It means that all the costs are captured both in terms of capital and labor, but that through depreciation rates of cost of money, we've annualized those so that those costs can be expressed over a time period.

MR. OCHSHORN: And do the time periods vary or are they related to the length of time that you use to depreciate different parts?

MR. STEELE: They relate to the length of time that's indicated in our depreciation life. It's the same as what we used in the USF docket and covered in Mr. Al Sovereign's testimony.

MR. OCHSHORN: Okay. Thank you.

MR. STEELE: You're welcome.

MR. DUNKEL: I have one question. You're showing billing and collection costs there at the bottom line. Is it a correct statement that if there was a bill sent that was a bill for local service, that billed for call forwarding, billed for toll calls, billed for

an IXC, that in that cost you would take all of the cost of the envelopes and the first unit of postage and put that on basic exchange service?

MR. STEELE: Well, let's break that down a piece at a time.

Billing for IXC service is a separate billing system, and the bills are provided to interexchange carriers. So if you're talking about --

MR. DUNKEL: The bill you send to the customer, you send to the customer a bill and it's got several services they're being billed for, and there's a -- one stamp. You don't use stamps, but the first unit of postage, you put all of that cost on basic exchange services, is that correct or not correct?

MR. STEELE: That portion of the cost to establish the initial bill, yes, is on the local exchange service. Any additional postage requirements to handle toll or other services --

COMMISSIONER GARCIA: I think he's trying to be more specific. The question is, do you bill for vertical services, the vertical service issues, if I'm not mistaken, are they attributed to any other cost of that bill or is that bill paid by the basic service only? In other words, when you have vertical services, say caller waiting -- what do they call it?

The poor man's second line -- in that case do you say, well, that percentage of the bill that we are charging, you know, we're making a huge profit on, do we attribute some of that to the bill that it rides on? I know that you -- to some degree you have to cost allocate for long distance, if I'm not mistaken, when you're billing for it, but for the vertical services that you provide your clients, do you in some shape, way or form allocate to those other services which are not regulated?

MR. STEELE: There were no allocation of billing and collection to the vertical services -- excuse me, regulated services that we have. Those costs for billing and collection are only identified for toll services based on call setup. Each call that's set up, there's a bill processing that takes place, and also we have billing and collection for the basic residential and business and PBX and Centrex services, but no additional billing and collection costs were identified for vertical services such as three-way calling and other custom calling services.

MR. DUNKEL: Okay. So going back to my question, let's assume a residential customer gets a bill and there's only the first unit of postage, I don't know what you pay for that, but let's say it's 30 cents, and

that's all you paid for postage, and they open up the bill, there's a local bill, a vertical service, some toll calls in there, all of that 30 cents would be called a cost of basic exchange service in your study. Is that a true statement?

MR. STEELE: A significant portion of it is. There is some cost allocation that takes place for toll, as I said.

MR. DUNKEL: Only if you go over 30 cents, isn't that correct?

MR. STEELE: Only if you go over the 30 cents, that is correct.

MR. DUNKEL: So if there's one stamp on there, you call that entirely the cost of basic, even if it's billing for toll and others, correct?

MR. STEELE: That's the way it's been submitted in the filing, that's correct.

MR. DUNKEL: And the same with the cost of the envelope?

MR. STEELE: Yes, that is correct.

MR. DUNKEL: Thank you.

MR. STEELE: In the mapping and report module, this is the area where we as users get the opportunity of identifying what cost components should be mapped to what particular services, and the first step that we

have in the process for identifying the total service long-run incremental cost is first to map cost components to basic network functions and then to map those basic network functions to services, such as residential service, business service, PBX service, Centranet service, et cetera.

Now, the components that are identified in the output report are what you see here. First we start out and identify the investments, we identify the depreciation return, the income tax, maintenance and support marketing, and then billing and collection and directory.

I said earlier that our preferred cost model is GTE's own ICM model. This particular model is attractive to GTE for a number of reasons which I'll get into in a few minutes.

First is that all the input to the model in terms of material prices and labor prices are input to the model with little averaging or manipulation, if you will. Let me give you some examples.

Our vendor contract prices for materials, outside plant materials, specifically identify the cost for strand, for anchors, guys, et cetera, all of which are input to ICM as separate costs that GTE incurs to buy these from our vendors. We have less than a half a

dozen single source provider labor contractors in the state of Florida that provide installation of outside plant facilities. Those contracts have codes in them that identify the cost to install telephone poles, to install fiber cable, the cost to cut bedrock, et cetera. All those cost components without averaging have been input into ICM, allowing the process of mathematics to take place in ICM and not through averaging external to the model. That is particularly attractive to GTE.

In addition, we've incorporated in the model our own engineering standards and practices that apply in the state of Florida.

And finally, the model is an integrated model. By this I mean it allows us as a user to recognize that the costs for a telephone pole, as an example, are the same whether they're used for loop facilities or interoffice transport facilities. In addition, it provides external integrity, if you will, allowing any user to go into the ICM model and support material and analyze the data and validate the reasonableness of that data as well as the engineering practices that are used by the model.

Let me spend a few minutes on what we mean by total service long-run incremental costs, and then I'll

follow up that with the assumptions that underlie our cost studies themselves.

When we talk about total service long-run incremental costs, we first break that down into what do we mean by total service. And what we mean by total service is we capture both the volume-sensitive and volume-insensitive costs, all the costs that are associated with that service.

From a long-run perspective, as I said earlier, we're addressing not only the expenses, but the capital costs, so there are no costs that we would assume that are sunk in this analysis.

And finally, from an incremental cost perspective, we analyze all the costs that are incremental with the particular unit of service that we're analyzing.

Now, these are -- this particular slide outlines the major assumptions that are used in the model. We believe that these assumptions are realistic and consistent with the proper measurement of our total service long-run incremental costs for GTE in the state of Florida.

First is that the material and labor prices that are included in the model are based on vendor contract prices that exist today. This is true for both labor and material.

Second is the technologies that are selected, the actual equipment is based on those technologies, those products that we're buying today from vendors. We have not made any speculation concerning technology change down the road, any speculation about technologies that do not exist today and are not used by GTE, nor have we speculated on prices with our vendors for labor and material. It's the current price information that we're using, current price information that's in existence today.

The cost studies that we submitted here have some inputs for both depreciation and cost of money.

Yes, question?

MS. BUTLER: I'm hoping that this question makes sense, but you said that you're assuming that there were no sunk costs. Are you saying that there are no -- that you're not measuring the incremental cost of sunk costs, or that there are no sunk costs that are incremental?

MR. STEELE: I'm saying that I've captured all the costs that are incremental with the service offering. To the extent that there are sunk costs from an economic perspective, they would be the difference between the historical cost that the company has realized and the cost that I'm identifying here as a

TSLRIC.

For example, let's take the can of Coke that you have sitting in front of you. I did not ignore all the production costs that's necessary to put the metal together to form that can, I picked all that up, and I picked up all the costs up for printing that can, and I also picked up all the costs to fill that can with the Coke fluid. All that cost information is identified as both capital and labor in our cost study submittal.

MR. OCHSHORN: Mr. Steele, so your model estimates what it would cost to build and run a network from scratch?

MR. STEELE: I don't typically use that terminology, but I think that's a fair characterization.

This morning Dr. Harris gave an example with an airplane, I believe. We said we're not measuring the cost for an additional seat on the plane. Rather, we're measuring the cost of the entire airplane. And I think he had a hundred seats on one of his examples?

MR. OCHSHORN: Right.

MR. STEELE: And that would be the case here as well.

MR. OCHSHORN: Right. So you're taking all these inputs and -- based on your actual costs and then

are different between remote and host offices.

And finally, these cost studies do exclude our common costs. The issue of common cost was addressed in the contribution analysis by Dr. Calnon in his comments and in his presentation last week.

Now, GTE is very concerned about a notion of least cost or efficient firm, what that really means, and wants to make it clear really what GTE advocates and accepts as sound economic principles.

Now, we do not believe that it's appropriate to pick and choose your input prices for material and labor. We believe it's appropriate to use the company's actual costs, that is, GTE's costs in the state of Florida for material and labor. The costs that we have incorporated in the ICM as input are based on our actual contracts we have today. We do not believe that the notion of least cost or efficient firm means that we should go to the operation that GTE or another LEC has in another state and pick up that cost, and then go to another state and pick up the labor cost.

Go to the next slide, please.

This is the analogy that I cover in my comments. We have a provider A where provider A has a low per minute rate and also has a $5 per month recurring

charge, and we have provider B that has a high per minute rate with no monthly recurring charge. And this type of packaging, if you will, is very commonplace with GTE's contracts with vendors for both material and labor, and the question we asked ourselves and is shown at the bottom of this slide, is, is it realistic to believe that the company can obtain the lower per minute charge from provider B, or that provider A will drop the monthly charge? And in the corner, upside down, and the answer is obviously no, and one of the problems we face with using costs from other companies or using costs that's not based on sound empirical data.

Next, please. I'll spend some time summarizing the cost studies that we submitted.

The format that's shown in this slide of our costs is the same as that prepared by GTE in the July comments supporting our contribution analysis. That is, the contribution analysis began with residential flat rate service, business service and PBX service. Now, the business and PBX services, consistent with the contribution analysis, provides significant contribution to residential services.

Next, please.

We also identified the costs for Centranet

service, or Centrex service. This includes both digital and analog service, digital being ISDN, BRI, and we provided the intrastate switched access services as well, which are listed at the bottom of this slide.

The intrastate switched access services provide, again, a significant contribution.

MR. DUNKEL: I have a few questions here. For switched access, is it a fair statement you did not include any portion of the port or loop costs in that -- those costs you show for switched access?

MR. STEELE: That is correct, there is no port or loop costs there.

MR. DUNKEL: And going back to your prior slide where you show the TSLRIC cost for residential basic, is it a correct statement you did include the full port and loop cost in those numbers?

MR. STEELE: That is a correct statement.

MR. DUNKEL: Okay. And is it a correct statement that if we looked at TSLRIC costs of residential, excluding port and loop, that most of the costs you show there would be gone?

MR. STEELE: A substantial portion of the cost to establish this --

MR. DUNKEL: At least $20, $25 would be gone, somewhere in that area?

MR. STEELE: Over 50 percent of those costs are for the loop.

MR. DUNKEL: At least $20 of the $29 would be gone?

MR. STEELE: At least $20.

MR. DUNKEL: Thank you.

MR. STEELE: You're welcome.

Next, please.

We identified the costs for features in response to the data request. These are vertical services or switch features which also provide significant contribution.

And finally, for GTE's toll service, this toll service as well provides significant contribution.

MR. OCHSHORN: In your model, what costs went into providing these features?

MR. STEELE: These costs include all of the basic resource costs required for memory to support the feature, any processing time to handle the feature based on the usage that we're actually experiencing today. Some of these features require special hardware, such as in the case of call waiting, and depending on the vendor that supports the product.

MR. OCHSHORN: By minutes of use you made some measure of what percentage of time or whatever a

particular service uses, a particular cost item?

MR. STEELE: Yes, based on busy hour traffic studies which measure a measurement of minute of use. It's actually called busy hour CCS and busy hour call attempts.

MR. OCHSHORN: Thank you.

MR. STEELE: Exactly.

MR. DUNKEL: And on the features costs, that includes no part of the port or loop costs, correct?

MR. STEELE: There are no allocations of loop costs. All the loop costs are directly assigned to residential service.

MR. DUNKEL: Okay. And the toll cost you show includes no cost of port or loop, correct?

MR. STEELE: No, there is no cost for the port or loop in the toll cost. All the port costs and all the loop costs in our complete cost submittal are included with basic service.

MR. DUNKEL: But the TSLRIC of basic does include the loop and port costs?

MR. STEELE: Yes, that's correct.

MR. DUNKEL: Thank you.

COMMISSIONER DEASON: Excuse me, the cost for the features, are those monthly costs, or that's cost per utilization of that feature?

MR. STEELE: Those are monthly costs per line. If you subscribe to three-way calling, the TSLRIC for that is $1.39.

COMMISSIONER GARCIA: That cost of caller ID, for example, would you be able to break that out for me, or no? That cost of 55 cents --

MR. STEELE: If I looked it up, I could give you the precise numbers, but I can tell you what's in it.

COMMISSIONER GARCIA: Okay.

MR. STEELE: Caller ID requires a certain amount of memory. We have to on the record identify for your number, for example, how many words of memory are required to support that feature. We have to allocate a space, if you will, on the switch to support that feature. And that's true of almost every feature we use.

Now, when you have a caller ID activated, there's a certain amount of processing. The switch has to extend instructions to the switch on how to handle the call, so there's a certain amount of processing time that's required, usually measured in half calls or milliseconds, but processing costs much like your PC computer, or for billing in a billing system. There are no special hardware costs that I can think of for the three vendors that we use for this product, so 90

percent of the cost is going to be processing cost and memory cost required to support the feature.

MR. OCHSHORN: Mr. Steele, I have one more allocation question having to do with figuring out the cost of business versus residential service. Mr. Dickerson in his testimony gave an example of a number of different grids with different estimated prices based on the model and then a certain number of business and residential lines within each grid, and then based on where the different lines landed and which, you know, how expensive a grid, that would determine how you'd calculate the cost of business and residential service.

Did you use the same approach?

MR. STEELE: Well, let me explain the approach that we used and we'll see if it's different.

MR. OCHSHORN: Okay.

MR. STEELE: The model identifies distribution cable for each of the 14,000 grids that we have and aggregates that information up to each of the 90 -- approximately 90 wire centers that we have in the state, as well as feeder cable. So we're able to identify in the model the cost for residence and business loops and features, if you will, that are supported by each of our 90 or so CLLI codes that we

have, or wire centers in the state.

Now, we aggregated that information in response to the data request into our rate groups that we have in the state to perform the contribution analysis undertaken by Dr. Calnon. But we have wire center specific costs nonetheless, for both residence and business.

MR. OCHSHORN: Are these costs that are produced by your model or are these like your -- in some way, your actual costs?

MR. STEELE: These are costs produced by the model, aggregated up from the bottoms up, if you will, based on analysis of distribution and feeder facilities by CLLI code or wire center.

MR. OCHSHORN: Okay. So would it necessarily be the same wire centers that you actually have, or would it be the wire center system that the model determines would be the way you would build it if you were building it anew?

MR. STEELE: From a demand perspective is what we have. If the office says 22,000 lines that it serves, that's what we model. If the remote device off of that office says 1,000 lines exactly, that's what we model.

MR. OCHSHORN: All right. So it's based on what

the model says would best meet the demand?

MR. STEELE: What the model says is required in terms of investments and expenses to support that level of demand, the current level of demand.

MR. OCHSHORN: Thank you. I think I understand.

MR. STEELE: Any other questions?

MR. DOWDS: Could you go back up to page 25 where you've shown the LRIC costs for the loops? Do you by any chance know what accounts for the little blip on rate group 3 for the residence cost? That --

MR. STEELE: Yes, I'd have to look at that -- there's two of the rate groups that have extended calling service, and our interpretation of the statute is that extended calling service should be included in the analysis. And when you go back to the support material, it actually peels that back to tell you what portion of that is extended calling service and what is not.

MR. DOWDS: By extending calling service, do you mean the trunk groups or actual ECS usage?

MR. STEELE: The actual ECS usage.

MR. DOWDS: Okay. So an apples-to-apples comparison for the cost, say, of rate group 3, in all likelihood, you'd have to compare the access line charge plus the average ECS usage charges that a

customer incurs?

MR. STEELE: Exactly.

MR. DOWDS: Okay.

COMMISSIONER DEASON: So you're saying it would be cheaper from a cost -- purely cost analysis perspective to not have ECS but just have a greater calling area EAS, is that correct?

MR. STEELE: No, I'm not saying that.

COMMISSIONER DEASON: Well, it appears that the greater the -- ignoring -- you said that the aberration was due to ECS, and then it looks -- it appears like the greater the rate group, which means the greater the number of lines that can be called, the cheaper it is. So you can't conclude then that the greater the calling scope, the cheaper the services?

MR. STEELE: Are you talking about the business flat rate and the business multi-line?

COMMISSIONER DEASON: I'm looking at residence flat rate, rate group 5, or is that a function of the relative length of the loops for those rate groups?

MR. STEELE: Well, it's going to be a function -- if you're talking within a rate group, it's going to be a function of those wire centers that are supported by that rate group as well as the loop length.

COMMISSIONER DEASON: We've had testimony from a number of customers in our public hearings, and they look at the analysis that we've presented to them, that being average basic rates in Florida for various cities compared to other cities in the southeast, and some of those customers indicate, well, that has no relation whatsoever to their local bill because they have 50 ECS calls and they really consider that part of their local service, and if you did that comparison, their rate's not ten or twelve dollars a month, it's $27, $30 or $35 a month.

Do you have any reaction to that?

MR. STEELE: Well, I know that the contribution analysis that was undertaken by Dr. Calnon did include revenues for ECS, and those revenues are not targeted to a particular customer since -- that have a lot of ECS usage versus not any ECS usage. What it is is it recommends -- excuse me, what it shows for that particular customer class, the average number of usage minutes and calls required for ECS.

Any other questions?

Thank you.

MS. MARSH: Thank you.

We have one more speaker today and as soon as we can get her set up, we will continue.

(Whereupon, a pause was had in the proceedings.)

MR. POAG: Excuse me, Mr. Steele, just one more question. The rates that were talked about by the other states, they would not include any extended calling that they had in those rates either, would they?

MR. STEELE: I wouldn't think so. That was our interpretation of what was required in response to the data request from reading the statute.

MR. POAG: Okay, thank you. Ben Poag with Sprint.

(Whereupon, a pause was had in the proceedings.)

MS. CALDWELL: Okay. I guess we're ready.

First of all, my name is Daonne Caldwell, I work for BellSouth. I'm a director in the finance department and I'm responsible for the cost studies that have been filed in this particular proceeding, all of the TSLRIC studies.

We've studied everything from 1-FRs to 1-FBs, switched access within the state, intraLATA and then -- let me move this down for a second -- and we've also studied the intraLATA toll. I think those are the biggest ones. BellSouth also provided an ESSX and a multi-serves arm study that's associated with our Centrex, and I'll talk just a little bit about how we did that because we did that one a little bit

differently from our other studies.

I am the third cost person you've heard today, so I'm going to try to speed through some of the same things you've heard and point out where we're the same and then maybe where we're different so you can get those areas laid down, and particularly for the staff, for some of the things you'll look for in this data that may be a little different.

Excuse us. This is the first time we've used this. It's slow. Page up. Can you page it up?

Okay. These are --

A VOICE: I'm sorry.

MS. CALDWELL: That's okay. Just take your time. It will be fine, because I'm going to talk about the TSLRIC because that's the type studies that we've done. Our cost methodology, that's where I'm going to start.

Basically what we've looked at in terms of our cost methodology is the studies of forward-looking. I've used forward-looking technology. For instance, in the loop, if a loop was greater than 12 kilofeet in length, we have converted that, even though it's on copper today, we have converted that to be served by a digital carrier to make it a more economical, more forward-looking design. We only used digital switches

in our study. We used no analog switches, even though we may have some in service. So those are the type changes we've made to make the study forward-looking.

In terms of long-run, basically I think Mr. Steele explained that fairly well in terms of the long-run in that we have considered that every piece of equipment in the network is going to exhaust, so we have no sunk costs. We have considered that we need to increase the capacity of those particular facilities, so we have included that cost on a per-unit basis in our study.

Now, also in terms of long-run, BellSouth does one additional thing, in that we look at a future three-year time frame. Our time frame is 1998 through 2000. We have looked at that for labor rates. We have looked at the change in the amount that would be paid for benefits as well as salaries for individuals in terms of the labor rate. In terms of the equipment, we have looked at both increases and decreases in equipment.

For instance, you have telephone plant indices that show that your copper facilities are going to increase in price over time. We have included that for a three-year time frame. And then we show that fiber is going to go down, and so is digital loop carrier, so we have included those decreases. So you have them kind of offsetting each other, but both are included in

the study.

In terms of both the fixed and the volume-sensitive, what you really have here is we have looked at all the costs associated with providing the service. That's what TSLRIC means. If it has volume-insensitive costs, we have included those, and of course we have the volume-sensitive costs.

Based on cost causation, in other words, the fact that we provide this service, we incur these costs, I like to think of it in the fact that if we did not provide the service, what would we not have to incur in terms of costs, in other words, what costs could be avoided, and that's how we've looked at our studies.

And then as with everyone else, we excluded all shared and common costs. There's no executive, no legal, no accounting type costs in our studies.

This is to -- let me see if we can get back one more, because I -- okay.

In terms of volume-sensitive, the true definition means that the costs are going to vary with the next units that join the cell. In other words, it is strictly dependent upon volume. That is our long-run incremental cost.

When you look at the volume-sensitive plus the volume-insensitive, we then move to something called

TSLRIC. You use mainly your LRIC sometimes if you are just testing prices to set your price floor when you're looking at whether or not you're going to change prices of your service. Your TSLRIC is more or less the cost you're going to look at if you're looking at whether or not you're going to be providing that particular service. The best way in the economic theory is going to tell you that TSLRIC is always the test for cross-subsidization, that over and above that, to get to any company's total cost, you're going to have to look at the shared and common costs. I just put that on there to emphasize that when you're looking at costs, stopping at TSLRIC for all your services would never make your company whole. You've got to pick up those shared and common somewhere in your recovery mechanism. Okay?

Just to emphasize here where the common costs fall in, one of the things I wanted to point out is how we have used or excluded the shared costs in some of our studies. I have two products, A and B. They're volume-sensitive, volume-insensitive, I think we've pretty well covered that. Then I have, I have shared costs for that family. An example of this would be a right-to-use fee in the switch. Vertical features I could consider to be my family of services, and if I

had a right-to-use fee that was to be used for vertical features -- and what is significant here is that we did not study every vertical feature. We studied, I believe it's the 11 major vertical features offered, major I mean by the highest penetration that the staff asked for, so if there was a right-to-use fee that was shared by other vertical features rather than just those 11, we excluded that. So that's the type costs we excluded on the shared. The common, the executive I think is probably the best example of that.

Okay, now I want to get into a little bit about how the costs are calculated. If you look in particular at my comments, I go through the steps in calculating recurring and nonrecurring costs. I'm going to hit them at a high level here to tell you what we've actually done to -- in our studies, and I'm going to concentrate on the flat rate residence, and this also would be applying to the flat rate business, but I think that's where most of my emphasis has been, so I'm going to stay with that. And then you can -- all the other services would fall very similarly.

First of all, for the local loop, what we have done is we have used the BCPM 3.1 model. Now, the methodology that we use is similar to the methodology that we have used in every tariff filing before this

Commission for the last several years, the TSLRIC or the long-run incremental cost study, and we've used some of the very similar models. You'll see some of them repeated here, such as SCIS. This will be the first time we have used BCPM to study a retail service. In the past we have always used our loop cost model in a statistically valid sample of the loops in the state of Florida. We wanted to provide the costs this time on a disaggregated by rate group level. That sample does not provide the data. It is not statistically valid below the statewide level.

So in order to provide the cost in that much detail, we moved to the BCPM, and that's the same model, same version that we're filing in the USF, same basic inputs in the USF. Now I'll go through a couple of the changes that we have made for that.

The actual calculations from the BCPM gives us the investment by rate group. It is weighted, just as Mr. Dickerson explained to you this morning. It's the same type weighting that we're using. One of the things, though, that we did recognize is that in the universal service fund, it's a cost proxy model, and it clearly states you need to be looking at an environment in which it is pure scorched earth or scorched node because the switch stays where it is.

So in looking at that, we wanted to use not all of BCPM, but our TELRIC calculator that I'm going to talk about in a minute. So to make the two lay down, we made the following adjustments: We did not use any land and buildings. We did not use any pole and conduit calculated by BCPM. We used our normal loading factors in this study. So that would be a difference between the numbers you see in USF, when and if you try to compare them. It's not a big -- I don't think a real significant difference in that we just calculate them differently; however, our pole and conduit loadings have a tendency, I think, to recognize a little bit more economy of scale and scope from the fact that you are already an incumbent LEC, which I feel would be very appropriate here.

And basically, as we've discussed, that investment comes from the facilities that go all the way from the NID to the main distributing frame, just -- it actually stops just before you hit the MDFM switch. Okay.

Moving on to local switching, local switching, we used the SCIS model, which is the Bellcore model which has been filed here before. We made a capacity run on that model, and that assumes then that all your switches will exhaust. And in addition to that, we included any right-to-use fees that would be

appropriate. I believe it's in the five ESS office we have a right-to-use fee that is a per line right-to-use fee, so we included that one right-to-use fee in the 1-FR.

In terms of we discussed the costs associated with the features earlier, the features would have not only the costs that were explained in terms of the usage off the switch itself, the processor, and any capacity change, if there was a right-to-use fee that was specific to that feature, we would have included that. I believe you'll see that mainly on caller ID Deluxe and some of those features.

MR. OCHSHORN: Ms. Caldwell, Ben Ochshorn for Florida Legal Services.

You probably said this very clearly, but what costs are you not including based upon your status as an incumbent LEC?

MS. CALDWELL: All I'm saying is we did not use the pole and conduit and land and building loadings that's in BCPM.

MR. OCHSHORN: So does that mean you're not including the cost of the poles?

MS. CALDWELL: No, sir. We do include them; we calculate them differently. What we do to calculate those is we look at a relationship between the embedded

investment that we have and how much -- say, for instance, to make it a clear example, how much pole investment we have as it relates to area plant, and then we make an adjustment for a three-year planning period. Because you don't want to just look at embedded, that's going to change over time. So we adjust it for what we have budgeted for the three future years. Okay?

MR. OCHSHORN: Okay. I think.

MS. CALDWELL: Okay. All right. And then the last item we're going to talk about is the local usage. We have used our switching network calculator, which is the same model we introduced in the unbundled network element studies here a few months ago, and that includes the cost of all of the -- we assume a 100 percent fiber network on SONET equipment, which is the most currently available forward-looking technology, and we pick up all the costs from the end office to end office.

Let's go to the next slide. I believe --

MR. DOWDS: Ms. Caldwell, a real quick question. You indicated with respect to the 5-E switches that there's a per line right-to-use fee and you include it in the 1-FR cost analysis. Did you also include it in the cost analysis for 1-FB and the other access lines?

MS. CALDWELL: Yes, I did. Anything that used the line, it's included.

COMMISSIONER GARCIA: Explain to me what you mean by the right -- make it a little bit clearer, the right-to-use fee.

MS. CALDWELL: For instance, it is a fee that is paid to a vendor for the use of the software.

COMMISSIONER GARCIA: Got you. Okay, I've got you.

MS. CALDWELL: Okay. This is a drawing that just indicates the components of the network and it kind of helps me get a little bit better to the local usage.

To begin with, you pick up on the far left with the NID, and in our loop study we have the NID, the distribution facilities, if it is on digital loop carrier, we have digital loop carrier, then we have our feeder facilities and we bring it into the central office. That is the termed loop. Once in the central office, it's got to connect to something, so it connects to a port, or the old term is the non-traffic sensitive portion of the switch. It picks up a termination on the main distributing frame with the protection that's involved there, and then it also picks up a termination into the switch. In the DMS-100, this is a line card. It's not quite that

simple in the 5-E, but it's still a physical jumper connection to the switch to tie down the copper wires. All right. That's what we consider to be our port.

Then we have to consider our local switching. You have local switching associated with the cost to get the call from the line side of the switch through the switch to wherever it's going. I'm looking at a local call. So I'm going to leave the back side of that switch. Where it says trunk side, the call leaves that switch, it actually leaves it on a DS-1, it goes to facilities that terminate that electrical DS-1 that converts it to, in our case, optical. We send it out on an optical network a certain percent of the time, not on every call, so we only put it in there a percent of time. It's going to go through a local tandem, not an access, a local tandem, so at the local tandem it would come in, it would have to be converted at those facilities' terminations from an optical back to an electrical, enters the tandem switch, the DS-1, out the tandem switch again, once it's switched, again, you do the same conversion, electrical to optical. It rides fiber to the final termination, same thing repeated again, and it terminates in the end office.

So what we do is calculate the cost of that at

network, and then based on the calling characteristics, the holding time, the percent of times it's going to pass through a tandem, the number of times that you have -- that that particular call's going to hit in the busy hour, that information is included, and then that's what we calculate in terms of our minute of use.

All right. Isn't that the next one? All right.

That is the physical makeup of what we've looked at, and I think I've pretty well covered how we get the investment. Now I'm going to talk just a little bit about the TELRIC calculator.

The TELRIC calculator was introduced by BellSouth in their -- in Florida in the unbundled network element arbitration that we just recently completed here, so it will be familiar to you as to how it actually works, so I'm just going to go briefly through what we've done here.

The TELRIC calculator takes those investments and, in simplistic terms, converts them to a monthly cost, and it looks at the 1998 through 2000 level cost on the factors that I've just talked about. So what I have going into that model is investment that is based upon material prices, current material prices that BellSouth is paying vendors. They come directly from our vendor contracts. The BCPM includes placing costs associated

with buried cable, et cetera, again, from our vendor contracts in the state of Florida. The actual placing contracts for Florida are unique to Florida. Most of the material prices are going to be regional-wide, because BellSouth buys large scale regional-wide to get a better pricing, but they would be appropriate for Florida. They would just be generated from a regional material price list.

Those material prices, how much of each one of the items, the models I have just talked about, pull those material prices together, look at the cost of installing the material and then converts it to a per-unit basis, and then that per-unit investment is fed into the TELRIC calculator.

The TELRIC calculator is a model, is a computer model, it's actually an Excel spreadsheet, so you can follow all the calculations through exactly what it does. So I'm down here in this bottom left-hand corner. I'm looking at the BCPM, the switched network calculator and SCIS. It has developed costs for me. I will add that, I didn't mention it, but we did also include signaling system 7 for our signaling overlay. It doesn't add a lot of cost, but it is one of the components. That investment is fed into the TELRIC calculator, and let's look at the top line, what it's

going to do.

The material prices in this particular case are your 1997 material prices. We're going to adjust those for three years of inflation. They are adjusted, as I said earlier, using TPIs, and we average the TPIs to get a mid-year time frame. We take the '98, '99 and 2000 TPI, add it together and divide it by three. We feel that will give us a good representation of mid-year, which would really be 1999. We apply that to the material price. As I've said earlier, copper goes up, fiber goes down.

Then we have such things as loading, and this gets to the question of the pole and conduit, land and buildings. This is where I pick that up. That investment for pole and conduit is applied on a per dollar of investment. For instance, aerial cable, buried. The land and buildings that is calculated is only for central office equipment. So it's only applied to the 377-C, which is your digital switching account, and your 357-C, which is your circuit account, because they're both located in the switch. Okay.

Then now I have investment dollars. I want to convert it to a monthly cost. So I apply annual cost factors. The annual cost factors are calculated in the capital cost calculator shown down there, and it's

based upon a forward-looking cost of capital and forward-looking economic depreciation lives. The depreciation lives were developed by our capital recovery organization, and in the USF hearing, Mr. Cunningham has filed testimony on those depreciation lives. They are economic lives, not prescribed.

And the cost of money is 11.25. Again, Dr. Billingsly has filed testimony in USF to support that as a risk adjusted cost of capital for BellSouth.

And then you have the income tax rate, and the income tax rate is what it is. There's no real question about that.

All right, then we move forward. We've got to pick up operating expenses. This is predominantly maintenance. This is the maintenance associated with the switch, the cable, all the pieces of equipment that is calculated on a per dollar of investment, so that's how we apply it, and it is forward-looking. That particular factor is based upon three years of budgeted data. So, in other words, BellSouth has budgeted so many hundreds of thousands of dollars for aerial cable, it's budgeted so many thousands of dollars for maintenance. It's that relationship, the next three years we look at. And we feel that gives it a more forward-looking view. It also takes into

consideration any productivity changes during that time frame as well as the significant head count reductions we've had in the last few years.

MR. DOWDS: Ms. Caldwell, just by way of clarification, okay, you're using BCPM to get your feeder and distribution plant, excluding conduit and supporting structures, and you've also zeroed out all the land and building calculations and all the operating expense calculations with BCPM?

MS. CALDWELL: Yes, we do not use the expense calculator at all.

MR. DOWDS: All the switching?

MS. CALDWELL: All the switching.

MR. DOWDS: Everything's zeroed out except for the feeder and distribution plant module?

MS. CALDWELL: Right. Okay. The ad valorem taxes and other taxes, franchise taxes, things of that type, which are pretty straightforward on the dollar of investment.

Then we have -- this is where we're going to pick up our general support. We have a calculation to pick up here the -- such things as some additional land and buildings. We also pick up some accounts here for the vans. I believe this morning Mr. Dickerson had a slide that showed the account that had the motor vehicles

that the technicians ride in. We picked those up here. This is also adjusted for three years' worth of budgeted data going forward, so we tried to look at what we anticipate in the future. That is only those dollars associated with the core investment, the core network. That's like the switching, the outside plant, the digital loop carrier. It is not associated with any of the other investments, such as computers and things of that type. It is the basic physical network that we have constructed.

Then we apply a gross receipts tax, which is simply a tax on revenues, and then we apply something called a customer operations factor. This morning we were talking about in terms of such things as billing and collections. Well, if I have a customer, I'm going to have associated with it some service order activity, I'm going to have the costs associated with their billing and collections. We expressed this on a per dollar of cost. We look at the accounts and develop a relationship. So every service gets a certain portion of billing and collections.

Another account that you think about, and I think is a very important one, is general purpose computers, computers associated with the fact that you have representatives taking orders and processing those

orders. Now, the time for that service representative is in the nonrecurring costs, so I'm not double-dipping, I'm only looking at those general purpose computers associated with that activity. So that's what we're picking up there. And there is, you know, a simple spreadsheet that goes through those calculations.

With that now I have the costs associated with my -- whatever facility I'm studying. In this case it's the 1-FR, so I would have costs associated with the loop, port and usage.

The bottom just simply talks about the labor associated with service order, which would be the one representative here. We look at the work time associated with taking the service request, processing it, and apply that by that time, multiply it times the labor rate of the individual performing the activity. And that becomes our nonrecurring cost. We do have disconnect cost in there because at some point in time they are going to disconnect. There's a small amount of labor associated with that, and what we've done here is assume it happens in the future. So we discount it back to present dollars, a process that we've used in the past. Okay.

And that brings us down to where I want to get,

really, with the fact that I have now calculated all of my costs, and I think I've gone quickly through it, but I hope I've laid enough groundwork and outline for you to follow. I have my costs associated with the top two boxes. We still need to remember that in the end all of the shared and common must be recovered, so at some point you've got to have revenues to cover that. So let's move to the next one.

These are from the results of the study. We studied the 1-FR and 1-FB associated with our rate groups. Rate group 1 had a cost of $47.79, and if you follow all the way down until you see the 7.30 in the bottom corner, that represents the average rate from our contribution analysis that you will obtain on a per 1-FR basis for -- in rate group 1. So definitely in rate group 1 we are significantly under cost. If you look at rate group 12, you're a little bit closer, because now you've moved to your dense urban area. Cost is a little lower for all the reasons we talked about earlier, and it's $21.40; however, you still have a rate of 10.65, so you are under water again in rate group 12.

If you look at business, the picture changes a little. You're much closer in rate group 1. It's 27.12, and it's 19.80 is your rate. So in this

particular one you're not covering costs, but again, that's because you're in your very, very rural area. If you move over to rate group 12, though, you see the scenario changes. Now your cost is at 20.39, and your rate is at 29.10. So for business in rate group 12, you are definitely covering your costs.

And in our contribution analysis I think there were five rate groups, 6 through 12, that had a positive contribution for your business based on the costs that we've calculated and the rates that we're charging today.

MR. OCHSHORN: Ms. Caldwell, to save some time, did BellSouth make the same allocation decisions that Mr. Steele described in his testimony, the same cost allocation decisions as far as what costs go to basic service versus vertical services?

MS. CALDWELL: In terms of that we looked -- let me answer it this way and see if this answers your question.

We looked at the costs that would be incurred in providing basic service, and that was for loop, the port and the local usage. The vertical features is the costs associated with just vertical features, and that would be your switch costs.

MR. OCHSHORN: And it would be a percentage of the

switch costs based upon minutes of use?

MS. CALDWELL: I don't really do it in terms of minutes of use. The features is you look at the milliseconds that's actually used in the switch, and you determine how many milliseconds that particular feature uses. So I don't want to really -- I'm sorry. I just don't want to really equate that with minutes of use, because people think that's how long you use it, and that's not really the same thing.

MR. OCHSHORN: Okay. And on the revenue side, the only charge that you -- that your company allocated towards the basic services was the tariff charge for a single line? I mean, it doesn't seem to include even the single -- the 3.50 charge or the second line charges --

MS. CALDWELL: Correct.

MR. OCHSHORN: -- or --

MS. CALDWELL: Correct. It is the tariff rates for 1-FR.

MR. OCHSHORN: -- extended service charges or anything, okay, other than that?

MS. CALDWELL: Yes.

MR. OCHSHORN: Okay. Thank you.

MS. CALDWELL: Okay. And this gives a summary of the contribution. I'm not going to go through each one

of them because this has already been provided. I think what's significant, though, is if you look over in the far right column, residence is definitely not covering its costs, and if you look at the nonrecurring, the nonrecurring is not covering its costs either. One of the things you have to remember about nonrecurring, when you're looking at the analysis, nonrecurring, we are not able to divide nonrecurring between 1-FR and vertical features, it's just nonrecurring. In other words, if I call in for a change on my line and add a feature, I'm charged a nonrecurring change charge, and it doesn't show up as being associated with a feature, it's just a change charge. And if you look in my detailed analysis that we filed, you will show for change charges that is a positive contribution, but this is just nonrecurring as a total. And if you move on to the next one, which is the business --

MR. DUNKEL: Can I stay here for a second, please?

MS. CALDWELL: Yes.

MR. DUNKEL: Back to residential.

MS. CALDWELL: Uh-huh.

MR. DUNKEL: First of all, you also did toll and access contribution analysis, correct?

MS. CALDWELL: IntraLATA toll and switched

intrastate.

MR. DUNKEL: And the cost you showed for toll included no part of the loop or port, correct?

MS. CALDWELL: Correct. It included only costs associated with the usage of the network associated with toll.

MR. DUNKEL: And for switched access, the cost you showed for switched access included neither the port or loop cost, no portion of those?

MS. CALDWELL: That is correct.

MR. DUNKEL: Okay. And the residential costs you're showing here for residential basic does include the full loop and port costs, correct?

MS. CALDWELL: Yes, as it should.

MR. DUNKEL: Okay. On the 25.25 figure that's the statewide average for R-1, could you give us a breakdown of what amount of that is loop and what is port and what is local usage?

MS. CALDWELL: I'm afraid I can't give you a percentage because we consider every cost below the combined 25.25 to be proprietary. It is available, but it is a large portion. I can say that.

MR. DUNKEL: Okay. There was a -- previously for Sprint I think they gave a cost of 3.21 as being the cost excluding port and loop. Is your cost of R-1

excluding port and loop in that same ballpark?

MS. CALDWELL: It's a similar relationship.

MR. DUNKEL: Thank you.

MR. OCHSHORN: I had one last question --

MS. CALDWELL: Sure.

MR. OCHSHORN: -- relating to the graphs you have up now, and this may very well be a question for Mr. Taylor to think about for tomorrow morning, it might be in his subject area. But just one aspect of your contribution analysis that strikes me is that your company's basing costs based on this model of forward-looking costs, and just one part of that, for example, you mentioned was all digital switches. Currently, according to the statistics that BellSouth reports to the FCC, 95 percent of your switches are analog switches, and I guess you could make similar comparisons with other parts of your costs. My question is, as a consumer, would be why should costs of the system that I don't even use be attributed to my basic service? If my basic service doesn't include digital switching and whatever else is in there, why should that be attributed to my service?

MS. CALDWELL: Well, in terms of what you have to think about is, when you use an analog switch today, what does that really mean, and we're talking about the

forward-looking. So as you put usage onto that switch, that switch is going to exhaust. So what am I going to replace it with? I'm going to replace it with a digital switch. So the actual value of that analog switch in a cost study is the technology you will replace it with, so that's why you use digital switches, and it is a more efficient, cost-effective forward-looking network.

MR. OCHSHORN: Okay. The fellow -- I realize that BellSouth has estimates of the useful lives of these different switches for depreciation and I'm guessing that, like GTE, you used those useful lives in this cost analysis?

MS. CALDWELL: Yes, I used the economic life that was used in my annual cost factor, so that switch has -- the cost is spread over -- in the switch I think it's ten years -- you'll have to give me -- it's either ten or twelve. It's spread over the full life of the switch, so it's not all in the first year.

MR. OCHSHORN: All right. A question that I would have, and it may be more for staff than for you, is, in the real world, how long do analog switches last, and I have a similar question for the other technology. So --

MS. CALDWELL: I'm not going to have the detailed

data for that.

MR. OCHSHORN: I understand. Thank you.

MR. DUNKEL: Okay. I have one more question. If -- in the case where you've got a residential customer receives a bill that has a billing for local service, a vertical service, some toll calls and some IXC billing, and there is only one stamp on there, 30 cents, whatever it is you pay for the one stamp, is it correct you would put the full cost of that first stamp in the cost you're showing for basic exchange?

MS. CALDWELL: No, because what I have done here is I have calculated it on an per dollar of cost, so every service gets a share of billing and collections.

MR. DUNKEL: What do you mean on a per dollar -- based on revenues?

MS. CALDWELL: No, based on costs. I develop a relationship between the expenses we have associated with billing and collections and then the total cost of the corporation, and I exclude any particular billing study that I have. Say for instance I have a cost for billing to interexchange carriers, so that is excluded from my expenses because I don't want to double dip, so I have expenses for billing and collections, and then that is spread over a per dollar of cost. So every service gets a share of billing and collections.

MR. DUNKEL: You lost me when you say per dollar of cost. Take the example where we just gave, where you have a bill sent to residential customer. There are several services billed for, there's only one stamp. How did you split that 30 cents among the services?

MS. CALDWELL: All right. I did not do a detailed study of the bill that included the stamp, et cetera, all right? What I did was look at the books of the corporation with three years' projected dollars going forward, so in the billing and collection account -- I can't remember what it is right now, but that account, there is a dollar amount that is going to be incurred going forward, and then if you take all of the investment -- or, excuse me, all of the costs of the corporation associated with the network, anything that would have a service associated with it. No, common and all that stuff is excluded. Executive is out of there, accounting, all of that.

MR. DUNKEL: So you did it in proportion to the incremental costs of each service, is that it?

MS. CALDWELL: Yes.

MR. DUNKEL: Thank you.

MS. CALDWELL: Okay.

MS. SIMMONS: Ms. Caldwell, over here in staff,

Sally Simmons.

I'm still a little confused about the nonrecurring, the information down at the bottom. You spoke as though the cost was fairly all-encompassing in terms of -- I kind of got the impression it was both like primary and secondary service order changes. I guess I'm just trying to be clear on what's in the cost and what's in the revenue that you're showing down at the bottom.

MS. CALDWELL: If you give me one second, let me -- what I'm referring to is simply my comments that I filed, and it's in the contribution analysis. You have -- I just want to be sure I cover them all. You have a line connection, which is first and additional, you have a line change, which is first and additional, and then you have a service order charge, okay, and then you have a premises work, first and additional.

Now, what that is is the line connection is the physical work to connect the facility or to do what actual physical work has to be done, like traveling to the prem, things of that type. A change is normally just -- adding a feature is a good example of a change, or a residence customer calling in and maybe changing a number for some reason, where they issue a change order.

Service order is the cost associated with a service representative actually taking that order, and then the premises work, that's where you ask us to do something specifically and we bill you on time and materials in many cases, so that's not as big a deal.

What I was saying is, based on those activities, this is filed actually in the A-4 tariff, and a lot of services refer to that. The 1-FR is ordered out of the A-4, the 1-FB, your vertical features, some of your ESSX features, things of that type is all ordered out of there, so when I calculated my revenues, I couldn't divide them by service, so what I had to do was just lump all the revenues together. The cost is the same regardless of the service.

MS. SIMMONS: All right. So are you saying that the cost is all-encompassing, covered all those items you just mentioned, and the revenue covers all of those items as well?

MS. CALDWELL: Yes.

MS. SIMMONS: Okay. Regardless of service, all we know is it's residential.

MS. CALDWELL: Yes, it is -- I had to stop and think. It's residence and business split. So it is -- there's no toll, no access, anything of that type. It's residential, business, and then those others are

handled somewhere else.

MS. SIMMONS: Okay. Thank you.

MS. CALDWELL: Okay.

MR. OCHSHORN: And Ms. Caldwell, one very last question, and I empathize with you having to keep turning around.

MS. CALDWELL: Oh, that's fine.

MR. OCHSHORN: But did BellSouth do a grid analysis to determine the cost of residential versus business basic rate service similar to GTE's and Sprint's?

MS. CALDWELL: GTE's is similar. We used the exact same process that Mr. Dickerson explained, because we both used BCPM 3.1.

MR. OCHSHORN: Right. I understand your inputs might be different --

MS. CALDWELL: Yes.

MR. OCHSHORN: -- but -- okay, thank you.

MS. CALDWELL: Any other questions?

All right. Just to quickly summarize, then, I think we're probably down to -- I think that was my last slide. All I really wanted to summarize with is that the methodology we've used here is what we've used in tariff filings for the last few years. I don't think we've introduced anything new except BCPM 3.1,

C E R T I F I C A T E

STATE OF FLORIDA)

COUNTY OF LEON)

I, RAY D. CONVERY, Court Reporter at Tallahassee, Florida, do hereby certify as follows:

THAT I correctly reported in shorthand the foregoing proceedings at the time and place stated in the caption hereof;

THAT I later reduced the shorthand notes to typewriting, or under my supervision, and that the foregoing pages 136 through 261 represent a true, correct, and complete transcript of said proceedings;

And I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.

Dated this 23rd day of October, 1998.

Ray D. Convery

RAY D. CONVERY

Court Reporter