OCC EXHIBIT 22

OHIO BELL TELEPHONE COMPANY

Case Nos. 93-487-TP-ALT

and

93-576-TP-CSS

PREPARED TESTIMONY

OF

TREVOR R. ROYCROFT, Ph.D.

STATE OF OHIO
OFFICE OF THE CONSUMERS' COUNSEL
77 South High Street
15th Floor
Columbus, Ohio 43266-0573
(614) 466-8574

SEPTEMBER 7, 1994

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of the Ohio Bell Telephone Company for Approval of an Alternative Form of Regulation.	)	Case No. 93-487-TP-ALT
Office of the Consumer's Counsel, Complainant, vs. Ohio Bell Telephone Company, Respondent.	)	Case No. 93-576-TP-ALT

PREPARED TESTIMONY OF TREVOR R. ROYCROFT, Ph.D.

SEPTEMBER 7, 1994

Q: **PLEASE STATE YOUR NAME AND ADDRESS.**

A: My name is Trevor R. Roycroft and my address is 9065 Echo Lane, Pine Grove Heights, Athens, Ohio, 45701.

Q: **WHAT IS YOUR OCCUPATION?**

A: I am an Assistant Professor in the J. Warren McClure School of Communication Systems Management at Ohio University in Athens, Ohio. My primary area of responsibility is regulatory policy.

Q: **PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

A: In June 1984 I received the Bachelor of Arts degree in Economics with a minor in Statistics from California State University, Sacramento. The degree was awarded with honors. In September of 1986 I received the Master of Arts degree in Economics from the University of California, Davis. In December of 1989 I received the Doctor of Philosophy in Economics from the University of California, Davis. My Ph.D. fields of specialization are Economic Theory, Industrial Organization, Public Sector Economics, and Economic History. I have attended the Annual Regulatory Studies Program jointly sponsored by the NARUC and Michigan State University.

Q: **PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.**

A: I was an Instructor of Economics at California State University, Sacramento in the Fall of 1987 and during the 1988 academic year. I was a Visiting Assistant Professor of Economics at Kenyon College, Gambier, Ohio, during the 1989 and 1990 academic years. Courses that I have conducted include: Principles of Economics, Intermediate Microeconomics, Industrial Organization, Economics of the Public Sector, and Economics of Developing Countries. I have attended numerous professional meetings and have made professional presentations. I was employed by the Indiana Office of Utility Consumer Counselor (OUCC) in May of 1991. I worked at the OUCC until July of 1994. For most of my tenure at the OUCC I was Chief Economist. In that capacity my responsibilities included: research and analysis in support of testimony, cross examination, and legal briefs to be presented before the Indiana Utility Regulatory

Commission in major cases involving gas, water, electric, and telecommunications utilities; preparation of analysis and comments to be presented before the Federal Communications Commission; advising the Director of Utility Analysis and the Utility Consumer Counselor on policy issues; assisting these individuals in formulation of policy; coordination of technical analysis in major cases; presentation of agency policy positions to outside groups; supervision of the Economics and Finance Staff of eight professionals; review and extensive analysis of Economics and Finance Staff testimony.

Q: HAVE YOU PREVIOUSLY PRESENTED TESTIMONY BEFORE THIS COMMISSION?

A: No, I have not.

Q: WHAT EXPERIENCE DO YOU HAVE RELATING TO TELECOMMUNICATIONS ISSUES?

A: During my tenure at the Indiana OUCC I participated in numerous telecommunications proceedings. I have participated in Indiana Utility Regulatory Commission sponsored workshops relating to intraLATA toll settlements, access charge parity, and regulatory flexibility. I have participated in meetings of the Ameritech Regional Regulatory Committee (ARRC). I have drafted comments to be filed at the FCC concerning Ameritech's "Customers' First" proposal. I have filed testimony in various telecommunications cases in Indiana including Cause No.

38269-S4, relating to intraLATA toll competition and settlements and toll rate averaging; Cause No. 39221, relating to Alternative Operator Services; Cause No. 39369, relating to access charge parity with FCC-established rates; Cause No. 39385, relating to Indiana Bell's request for CSO pricing for Dedicated Communications Services; Cause No. 39474, relating to competitive issues in the pay telephone market; Cause No. 39475, relating to "dial-around compensation" for independent pay telephone providers; Cause No. 39618, relating to Special Access Collocation; Cause No. 39705, relating to Ameritech Indiana's request for alternative regulation; Cause No. 39718, relating to Indiana Bell affiliate relationships; and Cause No. 39755, relating to the sale of GTE North rate-based assets.

I have advised the Indiana Utility Consumer Counselor on telecommunications policy issues. I have attended seminars on various aspects of the telecommunications industry and marketplace.

I am also conducting classes at Ohio University relating to telecommunications regulatory policy and courses introducing students to the telecommunications industry.

Q: **WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

A: I have been retained by the Ohio Office of Consumer's Counsel (OCC) to review and respond to testimony filed by the Staff of the Public Utilities Commission of Ohio in support of the Staff Report of Investigation (hereafter, Staff Report). I will be responding to the testimony filed by Staff witnesses Roger G. Montgomery (Staff Exhibit 30), Nadia L. Soliman (Staff Exhibit 27), Scott Potter (Staff Exhibit 11A), and Allen R. Francis (Staff Exhibit 26).

Q: WHAT INVESTIGATIONS AND PREPARATIONS HAVE YOU MADE IN PREPARATION FOR YOUR TESTIMONY?

A: I have reviewed the Staff report and the Addendum to the Staff report prepared by the National Regulatory Research Institute (NRRI). I have reviewed the testimony and relevant work papers of the Staff witnesses and various other witnesses who have filed testimony in this case. I have visited Ohio Bell headquarters and viewed documents that were provided in response to discovery. I have reviewed the confidential results of costs studies prepared by Ohio Bell for various services including the 1993 Loop Cost Study and Central Office Line Termination Cost Study. I have attended portions of the hearings in this case.

STAFF WITNESS MONTGOMERY

Q: PLEASE SUMMARIZE THE ISSUES THAT YOU REBUT IN STAFF WITNESS ROGER G. MONTGOMERY'S TESTIMONY.

A: Mr. Montgomery's testimony goes beyond the Staff Report in a number of areas. First, Mr. Montgomery discusses the details of the Staff's rate design proposals and the exclusion of Cell 1 residence services from the rate reductions proposed by the Staff. Mr. Montgomery sponsors testimony on LRSIC methodology, offers an alternative definition of LRSIC and provides further details of the newly formulated "LRSIC plus" price floor.

Q: STAFF WITNESS MONTGOMERY RECOMMENDS THAT RATE REDUCTIONS BE MADE FOR CUSTOM CALLING SERVICES IN CELL 3, AND RECOMMENDS AGAINST RATE REDUCTIONS FOR RESIDENCE CELL 1 SERVICES. DO YOU AGREE?

A: No, I do not. Mr. Montgomery's recommendations are based on the Staff's interpretation of the FDC study and LRSIC studies. Despite repeated statements by Ms. Soliman to the contrary (see, e.g., Staff Ex. 27 at 9-11), Mr. Montgomery indicates that FDC is the standard to use in determining the appropriateness of rate reductions for residence Cell 1 services (Staff Ex. 30 at 9, ll. 22-25). Mr. Montgomery admitted during cross examination that FDC was part of the basis for the recommendation that residential Cell 1 services not be given rate reductions:

> A: On Page 9 of my testimony, in question and answer to 15, I'm asking myself why is it appropriate to decrease residence services in Cell 3 rather than the residence services in Cell 1.
>
> I think that's getting to the question that you're asking me, why shouldn't we reduce the residential Cell 1 services, and that is exactly what I have tried to address there in my testimony; and you are correct, we have used the fully distributed cost study results as part of our recommendation, but we think the other part is also the LRSIC studies that we've reviewed and supported or agreed with the Company's analysis that some of the residential services are below their LRSIC, which I've indicated to you before we think is a subsidy.

(Tr. XXXXI at 210, ll. 4-18.)

Staff's simultaneous use of both the FDC and LRSIC subsidy standard for Cell 1 services while using LRSIC alone to test for subsidies in Cells 2 through 4 results in confusion over where subsidies, if any, actually flow, and therefore results in inappropriate recommendations regarding rate reductions for residential Cell 1 services.

I will illustrate by examining statements made by Mr. Montgomery during his cross examination:

> A: The LRSIC studies are only on the access portion, which is the network access line, and the Central Office termination. They are not, however, on the usage.
>
> The fully distributed cost study results, however, include all the access and all the usage and all the other residential services in Cell 1. It, too, is an indicator that overall the entire cell classification is receiving subsidies. It is an indicator to me that the usage for residence service is not contributing enough, if it is a positive number, to wipe out the figures of the residential services that in the LRSIC studies are indicating they're below their cost. . . .

(Tr. XXXX at 212-213.)

First, consider the statement made by Mr. Montgomery that "the entire cell classification is receiving subsidies." This statement is based on the FDC definition of subsidy and ignores the LRSIC definition of subsidy. Even Ohio Bell witness Dr. Currie does not make the claim that all of Cell 1 is receiving subsidy.

Q: WHAT IS YOUR CONCLUSION REGARDING THE PRICE OF NETWORK ACCESS LINES FOR RESIDENCE INDIVIDUAL CUSTOMERS IN ACCESS AREA D?

A: Since the proposed prices of Residence Network Access

> Lines in both Access Area C and Access Area D do not exceed their relevant costs, residence network access lines in each area is being subsidized by other services. . . .

(Ohio Bell Exhibit 28.0 at 9, emphasis added.)

Because of the disaggregation of the exchange access line and the application of LRSIC, Dr. Currie can only claim that other services (not other Cells) are allegedly subsidizing the NAL in exchange area C and D. Under this application of LRSIC, it is entirely possible that the purchaser of the Network Access Line is being "subsidized" by him- or herself through the purchase of bundled local exchange service.

In order to answer questions that might be relevant for rate making purposes (such as whether a marketed service is being subsidized) one needs to examine how a service is sold to determine the level of aggregation appropriate to perform the test. One could consider, for example, residence Local Exchange Service (which, as witness Montgomery admits, currently requires that the customer purchase both an access line and usage; see Tr. XXXX at 10). After doing the appropriate analysis, one could determine whether residence customers are receiving a subsidy based on a LRSIC test. Relevant costs to examine in this analysis would include the associated usage package necessary for a customer to procure local exchange service, and some allocation of the joint costs of the loop.[1] Furthermore, if certain vertical services such as touchtone service were widely subscribed to, the costs of these services could be considered as well. After determining the relevant costs, the sources of revenue that could reasonably be attributed to residence local exchange services would then be calculated.

Next, consider Mr. Montgomery's statement (cited above) that:

> The fully distributed cost study results, however, include all the access and all the usage and all the other residential services in Cell 1. . . . It is an indicator to me that the usage for residence service is not contributing enough, if it is a positive number, to wipe out the figures of the residential services that in the LRSIC studies are indicating they're below their cost. . . .

This discussion indicates a serious misunderstanding on the part of Mr. Montgomery and Staff regarding the comparability of LRSIC and FDC results. Despite his acknowledgment that FDC and LRSIC are not comparable (Tr. XXXXI at 39, ll. 8-9), Mr. Montgomery simultaneously accepts an FDC and LRSIC standard as a test for subsidies. These two standards are not comparable and cannot be simultaneously used to define subsidy. It is entirely possible that a group of services can be priced well in excess of LRSIC (thus not receiving any subsidy in the

---

[1] This discussion should not be construed as an endorsement of the recovery of loop costs solely from the subscribers of local exchange service.

economic sense), while at the same time recovering revenues below Fully Distributed Costs. Fully Distributed Costs, as discussed by Ms. Soliman, include allocations of fixed common costs and costs shared by groups of services allocated to a service category plus the costs directly caused by providing the service. It is incorrect to argue that because the rates of residence Cell 1 services are not recovering their FDC, exchange usage is not contributing enough to offset alleged shortfalls in the NAL or COT that are defined on a LRSIC basis. As I stated above, the correct test to determine whether residence local exchange customers are receiving a subsidy is to analyze the LRSIC of local exchange service. Local exchange service consists of (at a minimum) an exchange access and a usage component.

Mr. Montgomery's misuse of the LRSIC and FDC standards results in improper denial of rate reductions to Cell 1 residence services. As I will discuss further, revenue reductions to every category are entirely consistent with the cost studies performed by Staff and Ohio Bell.

Q: DOES STAFF WITNESS MONTGOMERY ACKNOWLEDGE THAT THE LOCAL LOOP IS A JOINT INPUT IN THE PROVISION OF MOST SERVICES OFFERED BY OHIO BELL?

A: Yes, he does. Consider the following exchange between Mr. Montgomery and Mr. Taft:

Q: Are you aware that no loop costs were assigned to the

LRSIC costs for DS-1 or DS-3 service?

A: I would believe that would be the case, yes, as the addition of that service really would not cause an incremental addition to the loop.

Now, if the provision of that service did require that some of the hardware equipment to provide that type of service was added, sure, that was included, but not additional loop.

Q: Even though DS-1 and DS-3 cannot be conducted without the loop, can it?

A: <u>End-to-end service cannot be conducted with -- without the loop, and that is virtually true of any service that the Company offers, really.</u>

Q: But in the development of the LRSIC cost for the NAL disaggregation of service, all of the costs were assigned to the NAL LRSIC study, were they not?

A: All of the loop costs were assigned, yes.

Q: Even though the loop is used jointly not only by that service, but also by DS-1 and DS-3 and all end-to-end service, as you've testified?

A: It was not considered to be a joint cost and to be spread to those other services; I believe that is the point you are making, and you are correct.

(Tr. XXXX at 47-48; emphasis added.)[2]

Q: WHAT ARE THE CONSEQUENCES OF ASSIGNING ALL OF THE LOOP COSTS TO THE NAL?

A: This assignment can have two immediate consequences. First, it can create the perception that residence exchange services are not recovering sufficient revenues to recover their cost of service. Second, it can cause artificially low LRSIC estimates for other services that rely on the

---

[2] <u>See</u>, <u>also</u>, Mr. Montgomery's acknowledgement that an independent provider of the "video jukebox" services that Mr. Taft hypothesizes would have to pay access charges to the Company's network (Tr. XXXX at 74-75).

loop as a joint input.

Q: STAFF WITNESS MONTGOMERY OFFERS AN ALTERNATIVE DEFINITION OF LRSIC IN HIS ATTACHMENT 4. HE WAS ASKED DURING CROSS EXAMINATION TO INTERPRET THIS DEFINITION. GIVEN HIS INTERPRETATION, IS HIS LRSIC "LONG RUN"?

A: No, I don't believe it is. When asked, given his definition of LRSIC, whether the cost of the loop is avoidable if local exchange service were no longer offered by Ohio Bell, Mr. Montgomery had the following exchange with Ms. Kelsey:

> Q: You have alternatives in your definition. The cost that would be avoided if the telecommunications provider had never offered the service, given that the Company already produces all of its other services.
>
> A: And to answer your question with the avoidable, I just had to get into your assumption as to whether or not they had made the investment or not.
> So I've answered your question given the situation if they have or if they have not.
>
> Q: So in other words, the answer is no, they can't avoid the cost if they offer toll, if they offer ISDN, and so forth?
>
> A: I -- I think I've answered your question, you know. I've given you two answers. If they have not made the investment, then to offer these services, it would be an additional investment, incremental investment, that they have to make; <u>however, if they've already made the investment and are provisioning such services, there would be no additional cost to the Company in providing those services.</u>

(Tr. XXXI at 16-17.)

By indicating that the avoidable cost depends on whether or not the investment has been made, Mr. Montgomery posits a <u>short run</u> definition of incremental costs. Long run costs do not contain fixed components. If this short-run standard is what the Staff will rely on, then Ohio Bell will likely be able to offer certain services at prices based on a short run incremental cost (SRIC) standard. This standard invites cross subsidization and potential anti-competitive behavior.

Q: **STAFF WITNESS MONTGOMERY ARGUES THAT IN THE FUTURE, RESIDENCE CUSTOMERS MAY FACE A LOCAL EXCHANGE ENVIRONMENT THAT WOULD LEAD THEM TO PURCHASE PIECE-PARTS OF THE NETWORK FROM A VARIETY OF ALTERNATIVE PROVIDERS.[3] ISN'T THIS A SUFFICIENT REASON TO ACCEPT THE STAFF'S DISAGGREGATION PROPOSAL?**

A: No, I don't believe it is. Local exchange competition involving competitors buying Ohio Bell "piece parts" is certainly one vision of the future. However, if and when competition does arise in the local exchange, there is absolutely no guarantee that customers will be required to purchase unbundled piece parts of their service from alternative providers. It is entirely possible that bundled services will be offered by alternative providers with wire-line or wireless networks of their own.[4] One might argue that Ohio Bell's and the Staff's proposed disaggregation of the Exchange Access Line will somehow pave the way for the transition to local exchange competition. As accepted by the Staff, however, the

---

[3] Tr. XXXXI at 9, ll. 17-19.

[4] Given the complexity of educating customers on unbundled network components, "piece parts", and rebundling these into usable services, one would expect marketing to favor bundled service for some time, especially for residential customers.

disaggregation of the exchange access line does not further that goal.

Furthermore, moving recovery of the <u>entire</u> cost of the local loop to the local exchange customer, as the Staff suggests should be pursued under the price cap plan, is illogical given that local competition could result from providers with networks of their own (who would not need piece parts from the LEC). Under this scenario the competitors would very likely only need to purchase access from the LEC to terminate calls on the LEC network. The allocation of local loop costs would raise the important question of how access charges for local exchange competitors would be developed. For example, would access charges levied on alternative local exchange providers include any recovery of loop costs? If 100% of loop costs are recovered from LEC local exchange customers, then any recovery of loop costs from local access charges could lead to a double recovery of loop costs. Additionally, setting local access charges that did not contribute to the recovery of LEC loop costs could lead to inefficient entry by local exchange competitors who could gain access to an input in the provision of their local exchange service (<u>i.e.</u>, the termination on LEC loops) at prices that did not reflect cost. This discussion of local exchange competition clearly illustrates the "input" nature of the local loop. Alternative providers may demand terminating access on LEC loops as an input in the service they provide their customers. If an input is artificially priced below its cost to competitive entrants in the local exchange market, LEC customers could be subsidizing inefficient entry into the local exchange market. Thus, achieving an economically efficient outcome in a local exchange market characterized by alternative providers suggests that LEC local exchange service customers should not be charged for the cost of the entire loop.

Q: STAFF WITNESSES MONTGOMERY RECOMMENDS THAT A PRICE FLOOR OF LRSIC PLUS 10% BE ESTABLISHED FOR SERVICES IN CELLS 2 THROUGH 4. IS THIS APPROPRIATE?

A: LRSIC plus 10% could be step in the right direction. However, this floor may not be sufficient for services that rely on the local loop as an input. As I have mentioned above, loop costs have not been allocated to services that use the loop as an input. The likely result of the assignment and recovery of loop costs in this fashion is low LRSIC estimates for services that use the loop as an input.

<u>STAFF WITNESS NADIA SOLIMAN</u>

Q: WOULD YOU PLEASE TURN NOW TO THE TESTIMONY OF STAFF WITNESS NADIA SOLIMAN?

A: Staff witness Soliman's testimony goes beyond the Staff Report by offering detailed support for the Staff's newly proposed FDC revenue cap on Cell 1 services.

Ms. Soliman also discusses Staff's FDC methodology and the modifications Staff made to the FDC study performed by Ohio Bell at the request of the Staff.

Q: STAFF WITNESS SOLIMAN DESCRIBES A FULLY DISTRIBUTED COST STUDY PERFORMED BY THE STAFF. DO YOU AGREE WITH THE STAFF METHODOLOGY?

A: No. In addition to other problems, the Staff's FDC study also suffers from some of the same problems as the LRSIC study accepted by Staff. Most importantly, the Staff has followed Ohio Bell's lead and again assigned all loop costs to exchange service, and has not recovered loop costs from other services such as toll and vertical services that also use the loop (<u>see</u> Hollinger deposition at 18, ll. 4-5).

Ms. Soliman does not assign any loop costs to services in Cells 2, 3, and 4. Considering the services in these categories, this results in a violation of the basic principle of "cost causer cost payer". Services such as Advanced Custom Calling, Custom Calling, and ISDN all require the loop as an input.

Q: ARE THERE OTHER PROBLEMS WITH THE FDC METHODOLOGY EMPLOYED BY MS. SOLIMAN?

A: Yes, there are. Because Ms. Soliman's study incorporated many of the results of the Company's cost study, she also incorporated many weaknesses contained in that study. During his deposition, Mr. Hollinger described the methodology used to extract investment categories from Cell

1, such as CENTREX and Custom Calling:

Q: Can you point out the allocator to me?

A: Well, the study here describes how we actually did the allocation. There are some investments within the local switching equipment category that we needed to basically pull out of the Cell 1 group, things like Centrex, which is not a Cell 1 service, we needed to identify the investment that is within this local switching equipment investment associated with Centrex and pull it out to get it out of Cell 1.

Q: How did you do that?

A: That was based on some incremental studies for Centrex service that identified the incremental investment. That investment was aggregated, turned into embedded investment, and that's how we identified the investment, and then basically run it through this process to pull it out of Cell 2--pull it out of Cell 1 and put it in the Cell 2 through 4 Category.

(Hollinger deposition at 20-21.)

The use of incremental costs, rather than embedded costs, may by itself introduce bias into the FDC study. To the extent that the incremental costs resulted in estimates of investment that are below the embedded costs, this would result in a larger portion of Cell 1 costs being left as a residual. Mr. Hollinger describes a similar process, relying on incremental costs, for Custom Calling services. Hollinger deposition at 23, ll. 7-9.

Q: WAS THE ANALYSIS CONDUCTED BY MS. SOLIMAN ON BEHALF OF THE STAFF BASED ON A TEST YEAR ANALYSIS?

A: No, Ms. Soliman relied on data for her analysis from the first four months of 1992. This data was averaged and then multiplied by twelve to arrive at annual numbers (Tr. XXX at 190-191). To the extent that variations in expenses occur during a year, the Staff's use of data from only the first four months of 1992 may not provide a representative sample. Ms. Soliman also admitted that the results of her study had not incorporated the Staff's own revisions to the cost of common equity capital (Tr. XXX at 194).

Q: MS. SOLIMAN PROPOSES THAT FULLY DISTRIBUTED COST STUDIES BE USED TO ESTABLISH WHETHER OR NOT CELL 1 SERVICES ARE SUBSIDIZING OTHER SERVICES. DOES A FDC STANDARD ESTABLISH USEFUL MEASURES OF CROSS-SUBSIDY?

A: No, a FDC test will not safeguard against cross subsidization as Ms. Soliman suggests. Ms. Soliman states specifically that "as long as Cell 1 services revenues in a specific year do not exceed their respective FDC for the same period, there will be no cross-subsidy between Cell 1 and other cells." (Staff Ex. 27 at 9, ll. 18-20.) This statement is false.

This proceeding has addressed the use of Long Run Service Incremental Cost as an appropriate floor to determine whether a service is receiving subsidy. To rely on an FDC standard to determine whether Cell 1 service customers are supplying subsidy is a fundamental mistake.

An appropriate economic test to determine <u>with certainty</u> whether a service or group of services is supplying subsidy is not a FDC test, but rather a <u>Stand Alone</u> cost test. Stand Alone cost is the total cost of providing a service or group of services that would result if no other services were produced by the firm.[5] The Stand Alone costs of Cell 1 services, for example, would be the total cost of producing a specific level of Cell 1 services, without producing any services in Cells 2, 3, 4, or any other services.

The Stand Alone cost test is a <u>sufficient</u> condition to show that a service or group of services is providing subsidy to other services. It is not, however, a <u>necessary</u> condition. Thus it is entirely possible that a service priced below the Stand Alone cost (or at or below FDC) will provide a potential source of subsidy for other services--either those priced below LRSIC (if this should occur) or even those priced at or close to LRSIC.

The reason for this seeming paradox is the nature of economic tests for cross-subsidy. Measures of incremental cost, such as LRSIC, must be used with caution because LRSIC includes only some joint costs, and no common costs. Thus if all of Ohio Bell's prices were set at LRSIC, it would be likely that Ohio Bell would not stay in business. If certain prices are set at LRSIC (competitive services), while other prices are set above their respective LRSIC's

---

[5] See, for example, William J. Baumol, <u>Superfairness,</u> MIT Press, 1986, p. 120-121.

(non-competitive services) so that Ohio Bell can remain a viable firm, then the prices set above LRSIC for the non-competitive services provide a subsidy to allow continued operation of the firm. While not being priced below LRSIC, those competitive services priced at or near LRSIC can only be offered due to the larger margins recovered from the non-competitive services.

Finally, depending on the present relationship between the revenues from Cell 1 services and the Stand Alone cost of Cell 1 services, it is entirely possible that Cell 1 services may be providing a subsidy under the Stand Alone criteria. In other words, if revenues from Cell 1 services are above Stand Alone cost of Cell 1 services, a subsidy is flowing from Cell 1 Services. As Staff did not conduct a Stand Alone cost test, whether this explicit subsidy exists is unknown at this time. (Tr. XXXXI at 42, l. 6.)

Q: WHEN MS. SOLIMAN'S PROPOSED FDC REVENUE CAP ON CELL 1 SERVICES IS COMBINED WITH THE LRSIC FLOOR FOR OTHER SERVICES, WHAT IS THE OUTCOME?

A: The outcome of this combination is a forward-looking rate design framework, controlled primarily by Ohio Bell, which resembles a modified Ramsey pricing scheme.

Q: WHAT IS RAMSEY PRICING?

A: Ramsey pricing, also known as "inverse elasticity pricing," sets prices for services offered by a multiproduct monopolist based on demand elasticity. Services that have elastic demand are priced at marginal cost. Those services with inelastic demand are marked-up well in excess of marginal cost. Given the constrained optimization problem faced by a regulatory agency, Ramsey pricing will (under highly restrictive conditions) generate a "second best" solution to the pricing decisions necessary to recover the costs of a multiproduct monopolist facing common costs. Under a Ramsey rule, inelastic services are charged "what the market will bear," but overall the prescribed revenue requirement of the firm is not exceeded. Allowing the most elastic services to be priced at marginal cost, in theory, minimizes distortions to economic efficiency.

Under the Staff proposal, services that are more likely demand elastic (due either to their discretionary or competitive nature) will be more likely to face downward pricing pressure, limited to LRSIC (or LRSIC plus 10 percent). For services in Cell 1, especially local exchange service, Staff's plan will lead to upward pressure through its proposed price cap plan.

Ramsey pricing, while a popular notion among some economists, has had very limited applicability in the regulatory arena. Even if the numerous assumptions necessary for Ramsey pricing to improve theoretical economic welfare were satisfied,[6] equity considerations have made the Ramsey "inverse elasticity" rule unpalatable to regulators.

I used the term "modified" Ramsey pricing scheme because the theoretical Ramsey pricing framework assumes that the resulting rate design is constrained by a revenue requirement. However, Staff's proposal does not constrain profits and thus breaks this necessary condition for Ramsey pricing to be a theoretical "second best" outcome. I believe that the Staff's framework will likely lead to abuse of Ohio Bell's monopoly position, especially with respect to residential local exchange customers.

Ms. Soliman admitted the likely outcome of the combination of the Staff's FDC/LRSIC philosophy under cross examination by Mr. Royer:

Q: Do you believe competition serves to reduce prices a firm would otherwise charge?

A: Yes.

Q: And so the pressure then, is to--is, in the--making the pricing decision, is to maximize revenues for competitive services by the--that the Company offers?

A: Yes, to maximize revenues.

---

[6] For a complete list of the necessary assumptions, which include: zero cross price elasticities, no production or consumption externalities, no income effects, and no entry threat, see, Principles of Public Utility Rates, Bonbright, et al., 1988, p. 537-538.

Q: Okay, and that would--And the more the competition, the more pressure there would be to--to reduce--to reduce the rates for competitive services?

A: That's correct.

Q: And--But that same thing isn't true for Cell 1 service, is it?

A: The competition in Cell 1, or the--

Q: There's no pressure to reduce the rates for Cell 1 services, is there?

A: That's correct.

Q: And so if the pressure--if there's pressure to reduce the competitive rates, where are the revenues going to come from for the Company to generate the rate of return that the shareholder require?

A: The Company would have--or for its own interest will try to maximize its revenues from the less-competitive services.

(Tr. XXXI at 82-83.)

The Staff's price cap plan, combined with the FDC revenue cap on Cell 1 services, and the LRSIC floor for more competitive services will go far in aiding Ohio Bell to "maximize its revenues from the less-competitive services." Given the assignment of all loop costs to Cell 1 services, the FDC cap on Cell 1 services provides a very weak check on Ohio Bell's ability to maximize revenues from less competitive services.

STAFF WITNESS POTTER

Q: WOULD YOU PLEASE TURN NOW TO THE TESTIMONY OF STAFF WITNESS SCOTT POTTER?

A: Witness Potter describes the Staff's amended position regarding the competitive issues of unbundling, numbering/number portability, usage presubscription, compensation for termination, and entry into the interLATA market.

Witness Potter introduces three milestones that the Staff believes the Company should reach by certain dates. Mr. Potter also proposes that the achievement of the Staff-recommended milestones should result in certain rewards or penalties imposed on the Company through modifications to the new price cap formula proposed by the Staff through the testimony of witness Shields. The milestones are:

Milestone 1: Within twelve months from the implementation of the plan, the Company will have transferred number assignment and administration to a neutral third party and commenced a local number portability trial.

Milestone 2: Within twenty-four months from the implementation of the plan, the Company will have Commission approved tariffs for loop unbundling, mutual compensation for terminating traffic, and pay station charges.

Milestone 3: Within eighteen months from the implementation of the plan, the Company will have a limited introduction of 1+intraLATA. And, within thirty-six months or ninety days prior to Ameritech obtaining relief from interLATA restrictions, whichever comes first, the Company will have implemented presubscription throughout the Company's service territory.

In exchange for reaching these milestones, the Staff proposes to punish or reward the Company by either <u>increasing</u> the consumer dividend portion of the price cap by up to 1.75% or <u>decreasing</u> the consumer dividend by up to .75%.

Q: STAFF WITNESS POTTER RECOMMENDS THAT THE CONSUMER DIVIDEND BE INCREASED OR DECREASED DEPENDING ON WHETHER CERTAIN MILESTONES ARE ACHIEVED BY THE COMPANY. DO YOU AGREE WITH HIS RECOMMENDATIONS?

A: No, I do not. While I see some merit in the actual milestones, I find his recommendations troubling for several reasons. First, Mr. Potter ties the achievement of milestones to adjustments to the price cap formula. This will likely grant the Company rewards at the expense of the customers who have the fewest competitive choices. Furthermore, the Staff provides no evidence that the milestones, if achieved, will provide any tangible benefits to either those who will pay (purchasers of price-capped non-competitive services), or to anyone else. It is not clear how, for example, the transfer of number assignment to a third party, implementation of unbundling tariffs, or a limited introduction of a 1+ intraLATA toll would translate into benefits that would offset the potential 0.75% price differential allowed in the price cap formula.

Second, the milestones are closely related to proposals advanced by Ameritech in its "Customers' First" filing at the FCC. I can see no reason to grant Ohio Bell additional rewards for actions it alleges it will take if granted the relief it requests at the federal level.

Finally, if these are desirable policy objectives, I see no reason for any customer to be required to pay for them.

These actions can simply be ordered by the Commission and no payments from ratepayers are necessary.

STAFF WITNESS FRANCIS

Q: PLEASE SUMMARIZE THE ISSUES THAT YOU REBUT IN STAFF WITNESS ALLEN R. FRANCIS' TESTIMONY.

A: Witness Francis' testimony goes beyond the Staff Report in explaining the rationale and analysis the Staff has relied on in reaching the conclusions that (1) disaggregation of the Exchange Access Line into the Network Access Line and Central Office Termination is necessary and appropriate; (2) deaveraging of the newly created NAL component is appropriate; and (3) that subsidies are flowing to residence customers with their purchase of the Exchange Access Line under present tariff arrangements. The Staff Report, as it relates to the Staff's acceptance of the Company's proposed disaggregation of exchange access rates, states:

> After a thorough review of the Applicant's proposal to disaggregate the exchange access rate element into a Network Access Line rate and Central Office termination rate, the Staff finds the proposal to be reasonable, and recommends its approval.

(Staff Report at 62.)

Mr. Francis states in his testimony that the Staff expects that rate increases will be made "appropriately" by Ohio Bell for these newly diaggregated services (Staff Ex. 27 at 6, ll. 5-6). This conclusion is not contained in the Staff Report.

The Staff Report, as it relates to the Staff's acceptance of the Company's proposed deaveraging of Network Access Line rates, states:

> After a thorough review of OBT's proposal to deaverage the non-residence Network Access Line rate as it relates to Access Areas B, C, and D, the Staff finds the proposal to be reasonable and recommends its approval, subject to the Staff's recommendations regarding Touch-Tone presented below in this chapter.

(Staff Report at 63.)

Witness Francis discusses for the first time the analysis conducted by the Staff to arrive at these recommendations contained in the Staff Report. For example, Mr. Francis states in his testimony that "deaveraging access rates based on density will allow Ohio Bell to gain the appropriate revenue contribution when providing access to the end-user that is causing the cost." (Staff Ex. 26 at 8, ll. 14-16.) This analysis is not contained in the Staff Report.

Witness Francis also provides the support for statements made in the Staff Report regarding the reasonableness of the LRSIC studies performed by the Company for the NAL, COT, and Service and Establishment charges. Mr. Francis discusses the analysis of the Company's LRSIC studies he performed on behalf of the Staff and the calculations he made in reaching his conclusions. This analysis and discussion is absent from the Staff Report. The analysis included in Mr. Francis' testimony provides the foundation for previously unsubstantiated claims made in the Staff Report that residence customers currently are receiving subsidy in their purchase of an exchange access line.

Witness Francis also discusses the Staff's rationale for its rate design program, which it alleges will further universal service goals by reducing rates for vertical services while forgoing rate reductions in the exchange access line or usage.

Q: STAFF WITNESS FRANCIS STATES THAT "DEAVERAGING ACCESS RATES BASED ON DENSITY WILL ALLOW OHIO BELL TO GAIN THE APPROPRIATE REVENUE CONTRIBUTION WHEN PROVIDING ACCESS TO THE END-USER THAT IS CAUSING THE COST." DO YOU AGREE?

A: No. The proposed deaveraging only confuses issues, especially those issues relating to cost analysis and cross-subsidy that are before the Commission. Mr. Francis' statement is based, in part, on the assumption that the NAL is a service in and of itself, rather than a joint input. Mr. Francis' presumption that the NAL is underpriced results from his acceptance of LRSIC tests for the disaggregated Exchange Access Line. By artificially disaggregating local telephone service into "piece parts" that cannot be sold separately and that cannot be purchased by either customers or competitors, it is easy to draw erroneous conclusions regarding the issue of cross-subsidy.

Q: DO YOU BELIEVE THAT MR. FRANCIS' PROPOSAL TO DISAGGREGATE THE EXCHANGE ACCESS LINE AND DEAVERAGE THE RESULTING NAL COMPONENT SERVES A USEFUL RATE DESIGN FUNCTION?

A: No, I do not. The Company and the Staff, while ostensibly "unbundling" the exchange access line, will not allow the unbundled pieces of residence exchange service to be purchased by either residence customers or by alternative providers (Tr. XXIX at 145, ll. 121-122; Staff Report at 75; Ohio Bell Exhibit 24.0 at 43). If sale of unbundled components is not permitted, then the disaggregation serves no purpose.

The deaveraging of the NAL is an arbitrary classification of customers and potentially allows these customers to be charged different prices for the NAL component. Evaluating the LRSIC of the NAL in the newly-created density classifications is problematic given the arbitrary nature of the density classifications.

Furthermore, the "deaveraging" does not eliminate averaged rates for the NAL. (Staff Ex. 26 at 8; Tr. XXIX at 154, ll. 13-14.) Customers within a specific NAL category will pay averaged rates within that category.

Q: **STAFF WITNESS FRANCIS ARGUES THAT DEAVERAGING THE EXCHANGE ACCESS LINE WILL IMPROVE UNIVERSAL SERVICE. DO YOU AGREE?**

A: No, I do not. Witness Francis argues that if deaveraging of basic service occurs, then it will be more likely that Ohio Bell will offer vertical services at rates that are not inflated, but reflect cost (Staff Ex. 26 at 9, ll. 7-

10). First, I know of no theory that would allow Mr. Francis to predict such behavior on the part of Ohio Bell. Second, the concept of universal service typically includes only basic service. Getting the marginal subscriber hooked up to the network with some sort of basic package is the typical path taken to address universal service concerns. Even if Mr. Francis' scenario were to unfold and vertical service prices were to drop, this would likely not affect the marginal customer's decision to subscribe. If, however, due to deaveraging, there is an increase in the price of the exchange access line or its components, there will be a clear negative impact on basic service and network access. While Staff may believe that "affordable rates for all services is still the key element in any universal service concept" (Staff Ex. 26 at 9), the price of basic service will continue to have the largest impact on the decision to subscribe to the network.

Q: STAFF WITNESS FRANCIS ARGUES THAT OHIO BELL'S NAL LRSIC STUDY IS REASONABLE. DO YOU AGREE?

A: No, I do not. Interpreting Ohio Bell's study is problematic as applied to the NAL. The NAL and COT approximate the local loop. The local loop is a joint input in the provision of numerous services offered by Ohio Bell. These loop costs are not caused solely by the end-user customer's decision to subscribe to local telephone service. The assignment of all loop costs to the exchange customer violates the basic principle of "cost causer cost payer."

Q: STAFF WITNESS FRANCIS AGREES WITH THE APPLICATION OF THE LRSIC TEST TO INDIVIDUAL SERVICE ELEMENTS SUCH AS THE NAL AND THE COT. CAN ONE DRAW SOUND CONCLUSIONS FROM SUCH AN APPLICATION?

A: No. In order to determine whether a LRSIC test should be applied to a service element or to a bundled service one should analyze the market, market demand, and how the service is offered. For example, it may be necessary in some cases to analyze both service elements and bundled services if market demand exists for both. However, just because a service element is tariffed does not mean that the element should be required to pass a LRSIC test. If that tariffed element can only be purchased as part of a bundled service, then the <u>bundled</u> service should be analyzed in the context of the LRSIC test.

Q: ARE THE "NETWORK ACCESS LINE" AND "CENTRAL OFFICE TERMINATION" COMPONENTS PROPOSED BY THE STAFF <u>SERVICES</u>?

A: No, they are not. The Network Access Line and the Central Office Termination represent the disaggregation of the Exchange Access Line. The Exchange Access Line is a joint input in the provision of multiple services offered by Ohio Bell, or by other firms such as interexchange carriers. Some of the services that require the exchange access line as an input include local calling, toll calling, vertical services, and ISDN services.

Q: BUT ISN'T THE COST OF ACCESS INCREMENTAL TO THE COST OF LOCAL EXCHANGE SERVICE AND, THEREFORE, PROPERLY RECOVERABLE SOLELY FROM THE PURCHASERS OF LOCAL EXCHANGE SERVICE?

A: Absolutely not. The outlay for the loop must be made if the LEC supplies <u>any</u> of the following services: local exchange service, toll service, access service, or vertical services--either singly or in combination. If any of these individual services were discontinued, the company could not avoid the cost of the loop. As a result, the cost of the loop is not incremental to local exchange service, toll service, access service, or vertical services. Rather, the cost of the loop is a joint input to these services and thus should be recovered from all services that use the loop as a joint input. It is also pointless to argue that the loop cost is the responsibility of the service that happened to be provided first. The fact that local exchange service predated toll service is a trivial bit of history. Neither service can be provided without the loop, and once the LEC has decided to continue any one of the services, provision of the other does not add to the loop costs. Thus the loop is not part of the incremental cost of either local exchange, toll, or other services. Thus to recover loop costs solely from the local service customer violates the principle of "cost causer cost payer."

Q: STAFF WITNESS FRANCIS ARGUES THAT IT IS INAPPROPRIATE TO CONSIDER INTERSTATE AND INTRASTATE CARRIER COMMON LINE REVENUES WHEN COMPARING EXCHANGE ACCESS SERVICE COSTS AND REVENUES. DO YOU AGREE?

A: No, I do not. The Carrier Common Line Charge (CCLC) is a charge levied on interexchange carriers to recover a portion of the non-traffic-sensitive (NTS) loop costs that have been allocated to the interstate jurisdiction. A portion of these costs are recovered through the flat-rate End User Common Line Charge (EUCL), which Mr. Francis includes in his analysis as an appropriate revenue source to consider. The remainder of the costs are recovered through the CCLC. If the loop did not exist, neither would the CCLC revenues. Because a portion of the loop has been allocated to the interstate jurisdiction, it is entirely appropriate to take account of the revenue sources designed to recover NTS loop costs when analyzing the cost/revenue relationship of the exchange access line.

Q: STAFF WITNESS FRANCIS CLAIMS THAT EVEN IF THE CCLC REVENUES ARE INCLUDED, A SHORTFALL STILL OCCURS. IS HIS CALCULATION CORRECT?

A: No, his calculation is in error. I have included an appendix that briefly explains the origins and the details of the recovery of NTS costs through EUCL and CCLC. The Appendix shows that Mr. Francis' understanding of the purpose and calculation of the CCLC is flawed (<u>see</u>, <u>e.g.</u>, Tr. XXX at 92). However, most importantly, Mr. Francis does not use the correct level of Carrier Common Line Charge revenue in his calculations. Mr. Francis' work papers show that he assumed Ohio Bell's CCLC revenues to be $28,981,430 (OCC Ex. 18; <u>see</u> <u>also</u> Staff Ex. 30A, rev. RGM-

1). However, the correct level of CCLC revenues is shown in AARP Exhibit 2 at $99,229,037. This difference of over $70 million will increase average CCLC revenue per access line by $1.66 per month to a total of $2.34 per month, using Mr. Francis' count of access lines.

Q: PLEASE EXPLAIN HOW YOU HAVE REACHED THE CONCLUSION THAT THE SOURCES OF REVENUE REASONABLY ATTRIBUTABLE TO RESIDENTIAL EXCHANGE ACCESS LINES ARE IN EXCESS OF LRSIC.

A: I reached this conclusion by examining the LRSIC calculations Dr. Currie made during his cross examination (Tr. XVII at 32-34) and the revenues associated with the Exchange Access Line (or NAL and COT), given the prices proposed by both Mr. McKenzie or the Staff. Beginning with Mr. McKenzie's proposed rates, Table 1 (below) shows the resulting monthly LRSIC and average monthly revenue (price) for each of the proposed service areas. (Tables 1 through 4 have been redacted to remove proprietary information. The unredacted versions, designated TRR-1 through TRR-4, have been filed under seal.)

TABLE 1	NETWORK ACCESS LINE		CENTRAL OFFICE TERMINATION	
ACCESS AREA	**AVG. MONTHLY REV. (WITH EUCL AND CCLC)**	**LRSIC (WITH JOINT COSTS)**	**LRSIC**	**AVERAGE PRICE (ASSUMING 75% TT USERS)**
B	$9.60	**PROP.**	**PROP.**	$4.35
C	$9.60	**PROP.**	**PROP.**	$4.35
D	$9.60	**PROP.**	**PROP.**	$4.35

Note that the average CCLC revenue per access line has been calculated by dividing total CCLC revenues (from AARP Exhibit 2, $99,229,037) by the estimated number of access lines shown in OBT exhibit WP 93C-1.1b.1.e.1, page 4 of 4 (3,417,471) yielding about $2.40 per line.

Using the information contained in Table 1, I have constructed Table 2 (below), which shows the estimated monthly and annual revenues in excess of LRSIC (i.e., contribution) from the residential Exchange Access Line (or the combined NAL and COT) from Ohio Bell. Table 2 shows that the estimated contribution from the Exchange Access Line provided to residential customers is a significant amount, over $35 million on an annual basis.

TABLE 2		**ESTIMATED CONTRIBUTION FROM RESIDENTIAL EXCHANGE ACCESS LINE**			
ACCESS AREA	**ACCESS LINES[1]**	**PRICE*[2]**	**LRSIC*[3]**	**P* MINUS LRSIC***	**(P* - LRSIC*) X ACCESS LINES**
B	238,624	$13.95	**PROP.**	**PROP.**	**PROP.**
C	1,056,139	$13.95	**PROP.**	**PROP.**	**PROP.**
D	1,072,625	$13.95	**PROP.**	**PROP.**	**PROP.**
		ESTIMATED MONTHLY CONTRIBUTION FROM EXCHANGE ACCESS LINE (RESIDENCE CLASS)			$3,003,935
		ESTIMATED ANNUAL CONTRIBUTION FROM EXCHANGE ACCESS LINE (RESIDENCE CLASS)			$36,047,220

[1] OBT Exhibit 3.1/4.1, page 3.

[2] P* includes the average price of the Central Office Termination plus the average revenue from the Network Access Line including EUCL and average CCLC.

[3] LRSIC* includes the LRSIC with joint costs of the NAL and the LRSIC of the COT with touchtone.

The discussion above has used Ohio Bell's proposed rates. The Staff's proposed rates do not significantly change the situation. Table 3 (below) shows the realized prices for the NAL and COT given the Staff's proposed prices for residence customers.

TABLE 3	NETWORK ACCESS LINE		CENTRAL OFFICE TERMINATION	
ACCESS AREA	AVG. REV. (WITH EUCL AND CCLC)	LRSIC (WITH JOINT COSTS)	LRSIC	PRICE
B	$10.85	PROP.	PROP.	$3.00
C	$10.85	PROP.	PROP.	$3.00
D	$10.85	PROP.	PROP.	$3.00

Table 4 (below) shows that given Staff's rates, the estimated contribution from the Exchange Access Line provided to residential customers is also a significant amount, over $33 million on an annual basis.

TABLE 4		ESTIMATED CONTRIBUTION FROM RESIDENTIAL EXCHANGE ACCESS LINE (USING STAFF'S PROPOSED RATES)			
ACCESS AREA	ACCESS LINES[1]	PRICE*[2]	LRSIC*[3]	P* MINUS LRSIC*	(P* - LRSIC*) X ACCESS LINES
B	238,624	$13.85	PROP.	PROP.	PROP.
C	1,056,139	$13.85	PROP.	PROP.	PROP.
D	1,072,625	$13.85	PROP.	PROP.	PROP.
		ESTIMATED MONTHLY CONTRIBUTION FROM EXCHANGE ACCESS LINE (RESIDENCE CLASS)			$2,767,196
		ESTIMATED ANNUAL CONTRIBUTION FROM EXCHANGE ACCESS LINE (RESIDENCE CLASS)			$33,206,352

[1] OBT Exhibit 3.1/4.1, page 3.

[2] P* includes the proposed price of the Central Office Termination plus the average revenue from the Network Access Line including EUCL and average CCLC.

[3] LRSIC* includes the LRSIC with joint costs of the NAL and the LRSIC of the COT with touchtone.

Q: WITNESS FRANCIS STATES THAT AFTER THE THREE-YEAR CAP ON THE NAL AND COT EXPIRES, OHIO BELL SHOULD BE EXPECTED TO CHANGE PRICES IN AN APPROPRIATE MANNER. DO YOU AGREE?

A: "Appropriate" is in the eye of the beholder. I expect that Ohio Bell will react based on the market conditions it faces at the time. I also expect, however, that market conditions will still grant Ohio Bell a good deal of residual monopoly power, especially with respect to the exchange access line. I expect that this monopoly power could be used to increase rates to the extent allowed if a price cap plan were in place.

Q: WHAT IS THE ULTIMATE IMPACT OF THE STAFF'S ACCEPTANCE OF OHIO BELL'S METHODOLOGY AS IT RELATES TO LRSIC AND THE DISAGGREGATION AND DEAVERAGING OF THE EXCHANGE ACCESS LINE?

A: The methodology adopted by the Staff violates the fundamental principle of "cost causer cost payer." By allocating all loop costs to the NAL, the cost of service to exchange customers will be overstated. Furthermore, the LRSICs for those other services that rely on the loop as a joint input will be understated. The ultimate result of the Staff's acceptance of Ohio Bell's LRSIC methodology will be unwarranted upward pressure on the bills of residence local exchange customers, and unwarranted downward flexibility for other, possibly competitive, services that rely on the loop as a joint input.

Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A: Yes, it does.

APPENDIX: RECOVERY OF NON-TRAFFIC-SENSITIVE COSTS

Q: PLEASE PROVIDE SOME BACKGROUND ON THE RECOVERY OF NTS COSTS.

A: The End User Common Line Charge (EUCL) and the Carrier Common Line Charge (CCLC) were developed to recover NTS costs that are allocated to the interstate jurisdiction. These costs are attributed to items of telephone plant that do not vary with usage, most notably the local loop. The local loop is a joint input in the provision of numerous services offered by the LEC. The local loop provides, in addition to local voice-grade telephone service, a number of other services: e.g., interstate long-distance service, intrastate interLATA long distance service, intraLATA long distance service, vertical services (such as call waiting), and enhanced services such as ISDN. Thus the costs of the local loop represent costs that are joint to these and other services. A portion of these costs (approximately 25%) are assigned to the interstate jurisdiction, and these are recovered through a combination of Federal End User Common Line charges and Carrier Common Line charges. The EUCL is a flat-rate-per-month charge levied directly on end-users, the CCLC is a minute-of-use (MOU) based charge levied on interexchange carriers (IXCs).

Once the NTS costs are allocated by jurisdiction, then the question becomes how these costs will be recovered. The CCLC, as it is imposed on IXCs, addresses concerns that these carriers should have to pay something for the use of the network. Before the introduction of the End User Common Line Charges, all allocated NTS costs were recovered on a MOU basis.

The Federal Communications Commission has attempted to pursue a policy of shifting most NTS costs to end-users through subscriber line or end-user charges. The FCC's first and most controversial proposal was to collect a flat-rate, federally prescribed, $6 per month charge directly from each subscriber. In the process of attempting to shift the bulk of these costs, the FCC was confronted by intense political pressure that led it to back down from its original goal. In Ohio, the current environment includes some recovery of NTS costs through end-user charges, and some recovery through the usage based CCLC. Currently, residential users pay a $3.50 per month EUCL, which is a capped rate. Non-residence customers typically pay higher EUCL rates. The CCLC is designed to recover the residual of the allocated NTS costs that are not recovered through the EUCL. Usage stimulation from declining toll rates has allowed the residual to be recovered from an increasing number of minutes--generally leading to declining CCLC rates.

UNREDACTED TABLES 1 THROUGH 4 ARE PROPRIETARY TO OHIO BELL AND ARE FILED UNDER SEAL PURSUANT TO PROTECTIVE AGREEMENT

CERTIFICATE OF SERVICE

I hereby certify that copies of this Prepared Testimony of Trevor R. Roycroft, Ph.D. have been served by first class mail, postage prepaid, or hand delivered to the following parties of record this 7th day of September, 1994.

Andrea M. Kelsey

Andrea M. Kelsey
Associate Consumers' Counsel

PARTIES OF RECORD

JAMES B. GAINER, ESQ.
Assistant Attorney General
Chief, Public Utilities Section
180 East Broad Street
Columbus, Ohio 43266-0573

JOSEPH P. MEISSNER, ESQ.
Legal Aid Society of Cleveland
1223 West Sixth Street
Cleveland, Ohio 44113

WILLIAM ONDREY GRUBER, ESQ.
Assistant Director of Law
City of Cleveland
601 Lakeside Avenue, N.W.
Cleveland, Ohio 44114

RANDY J. HART, ESQ.
Hahn, Loeser & Parks
3300 BP America Building
200 Public Square
Cleveland, Ohio 44114

SALLY BLOOMFIELD, ESQ.
Bricker & Eckler
100 South Third Street
Columbus, Ohio 43215-4291

MICHAEL MULCAHY, ESQ.
Ohio Bell Telephone Company
45 Erieview Plaza
Room 1400
Cleveland, Ohio 44114

DOUG TRABARIS, ESQ.
MCI Telecommunications
205 North Michigan Avenue
Suite 3200
Chicago, Illinois 60601

JUDITH B. SANDERS, ESQ.
Bell, Royer & Sanders
33 South Grant Avenue
Columbus, Ohio 43215-3927

ROBIN P. CHARLESTON, ESQ.
AT&T Communications of Ohio
227 West Monroe Street
6th Floor
Chicago, Illinois 60606

KERRY BRUCE, ESQ.
Department of Public Utilities
City of Toledo
Suite 1520
1 Government Center
Toledo, Ohio 43604

JANINE MIGDEN
Hahn, Loeser & Parks
431 East Broad Street
Columbus, OH 43215

WILLIAM S. NEWCOMB, ESQ.
STEPHEN M. HOWARD, ESQ.
Vorys, Sater, Seymour & Pease
52 East Gay Street
P.O. Box 1008
Columbus, Ohio 43216-1008

SAMUEL C. RANDAZZO, ESQ.
Emens, Kegler, Brown, Hill & Ritter
65 East State Street
Columbus, Ohio 43215

DENNIS K. MUNCY, ESQ.
Meyer, Capel, Hirschfeld, Muncy, Jahn & Aldeen
Athenaeum Building
306 West Church Street
P.O. Box 6750
Champaign, IL 61826-6750

WILLIAM ADAMS, ESQ.
Arter & Hadden
One Columbus Building
10 West Broad Street
Columbus, Ohio 43215

ELLIS JACOBS, ESQ.
Legal Aid Society
333 West 1st Street
Suite 500
Dayton, Ohio 45402

SUSAN WEINSTOCK
State Legislation
American Association of Retired Persons
601 E Street, N.W.
Washington, D.C. 20049

GENA M. DOYSCHER, ESQ.
Enhanced TeleManagement, Inc.
730 2nd Avenue, South
Suite 1200
Minneapolis, MN 55402-2467

CECIL O. SIMPSON, JR., ESQ.
General Attorney
Office of the Judge Advocate
Department of the Navy
901 North Stuart Street
Arlington, VA 22203-1837

MARY HULL, ESQ.
Sprint Communications Company, L.P.
8140 Ward Parkway, 5E
Kansas City, MO 64114

JONATHAN E. CANIS, ESQ.
Swidler & Berlin, Chartered
3000 K St., N.W.
Suite 300
Washington, D.C. 20007

KARIN W. RILLEY, ESQ.
Assistant Attorney General
Office of the Attorney General
Education Section
30 East Broad Street, 15th Floor
Columbus, Ohio 43266-0410

BRUCE J. WESTON, ESQ.
Attorney and Counselor at Law
169 West Hubbard Avenue
Columbus, Ohio 43215-1439

SHELDON A. TAFT, ESQ.
Vorys, Sater, Seymour and Pease
52 East Gay Street
P.O. Box 1008
Columbus, Ohio 43216-1008

GREGORY J. DUNN, ESQ.
Crabbe, Brown, Jones,
Potts & Schmidt
500 South Front Street
Suite 1200
P.O. Box 15039
Columbus, Ohio 43215

MADELON KURCHERA
TCG America, Inc.
c/o TC Systems - Illinois, Inc.
233 South Wacker, Suite #2100
Chicago, IL 60606

DANIEL A. MALKOFF, ESQ.
Assistant Attorney General
30 East Broad Street
Columbus, Ohio 43215-3428

CLYDE KURLANDER
Law Offices
Three First National Plaza
Suite #4000
Chicago, IL 60602

JODIE DONOVAN
TCG America, Inc.
c/o Teleport Communications
Group, Inc.
One Teleport Drive
Staten Island, NY 10311