



BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of :  
The Ohio Bell Telephone Company : Case No. 93-487-TP-ALT  
for Approval of an Alternative Form :  
of Regulation.

DIRECT TESTIMONY  
OF  
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Q: PLEASE STATE YOUR NAME AND CURRENT POSITION.

A: My name is Vivian Witkind Davis. I am a telecommunications policy analyst in the Division of Telecommunications and Water at the National Regulatory Research Institute (NRRI). I have held that position since July 1992.

Q: WHAT IS YOUR BACKGROUND IN TELECOMMUNICATIONS POLICY?

A: I am lead author of a research report published this year entitled *Competition and Interconnection: The Case of Personal Communications Services*. I have conducted research on alternative regulation in telecommunications, including surveys of all the states to determine the status of alternative regulation plans, such as price cap plans. I have made presentations on alternative telecommunications regulation before several regulatory bodies, including the Staff Subcommittee on Communications of the National Association of Regulatory Utility Commissioners (NARUC). I am the co-author of research reports on shared tenant services and evaluation of the competitiveness of regulated telecommunications markets. I am a member of the NARUC Staff Subcommittee on Telephone Service Quality.

Q: DO YOU HAVE EXPERIENCE IN OTHER ASPECTS OF UTILITY REGULATION?

A: Yes. From 1982 to 1988 I was editor of the *NRRI Quarterly Bulletin*, which provides articles and information on state commission rate cases and other activities. During that time period I was the author or co-author of reports on water utility regulation and utility management audits.

Q: WHAT OTHER EXPERIENCE DO YOU HAVE THAT IS RELEVANT TO ANALYZING PUBLIC POLICY?

A: I have worked as a policy analyst for the State of Ohio's Environmental Protection Agency and as a staff writer for *Congressional Quarterly* in Washington, D.C. I have taught courses on policy analysis, policy making and administration to undergraduates and masters' students at Florida Atlantic University.

Q: WHAT IS YOUR EDUCATIONAL BACKGROUND?

A: I hold a B.A. from Wellesley College, with honors in political science, an M.A. from the Fletcher School of Law and Diplomacy at Tufts University and a Ph.D. from the Ohio State University School of Public Policy and Management. The subject of my doctoral

dissertation was innovations in electric utility regulation.

Q: WHAT RESEARCH HAVE YOU CONDUCTED ON THE OHIO BELL TELEPHONE COMPANY/AMERITECH OF OHIO PROPOSAL FOR ALTERNATIVE REGULATION?

A: I am a member of the NRRI study team that reviewed the proposed plan as a consultant to the Staff of the Public Utilities Commission of Ohio. My responsibility was to analyze the proposed infrastructure commitments and to be the overall project manager. I wrote the section of the report on infrastructure commitments (chapter 9).

Q: WHY DO YOU BELIEVE THAT THE COMPANY'S PROPOSED INFRASTRUCTURE COMMITMENTS CONSTITUTE BUSINESS AS USUAL OR THE CONTINUED EVOLUTION OF THE NETWORK (AM-O OBJECTION 18, P. 36; N-ST 9.1)?

A: As detailed in the NRRI Study Team's *Addendum to the Staff Report on Investigation*, I came to the conclusion that the Company's proposed infrastructure commitments largely constitute business as usual based on information provided by the Company. The level of capital spending proposed as "commitments" is consistent with the Company's expenditures in the recent past (N-ST, p. 182). In real terms, the spending may actually represent a decrease. Approximately \$1.1 billion of the \$1.6 billion commitment is not dedicated to advanced infrastructure (N-ST, p. 182).

In considering the \$476.2 million the Company has identified as project costs for investments in digital switching, fiber optic cable, SS7, and ISDN, I looked at the shape of the curve showing diffusion of those technologies through Ameritech-Ohio's network. A typical pattern of diffusion of a new technology will show a slow start, then an inflection point in the curve as the spread of the technology "takes off," then a rapid increase in the diffusion, with the curve rising at a sharp angle, and finally a leveling off as diffusion is completed. Exhibit 14 of Linda Klais' testimony for Ameritech-Ohio shows just such a diffusion curve for digital switching. The take-off point appears to have been in about 1985. In 1994 most digital switches in Ameritech-Ohio's service territory already are digital. Similarly, looking at Attachment 23.13 of Ms. Klais' testimony, deployment of SS7 (which is a replacement for SS6), began in 1989 and will be almost completed in 1994.

Ms. Klais has said that fiber optic cable is replacing copper for interoffice connectivity right now, without alternative regulation. Finally, ISDN deployment appears to have taken off in 1993. Thus, I believe that in large part the commitments to advanced infrastructure in Ameritech-Ohio's plan for alternative regulation represent the normal evolution of the network.

Q: IF SO MUCH OF THE PROPOSAL IS BUSINESS AS USUAL, WHY DID THE NRRI STUDY TEAM RECOMMEND ACCEPTING THE PORTION OF THE COMPANY'S PROPOSAL THAT REPRESENTS DEPLOYMENT OF ADVANCED TECHNOLOGIES?

A: Some portions of the Company's service territory might be neglected without the commitment to infrastructure deployment. So we did recommend that the Staff accept the Company's proposed commitment for advanced infrastructure.

Q: SHOULD THERE BE A SPECIAL EFFORT TO INFORM THE PUBLIC THAT THE \$1.6 BILLION COMMITMENT OFFERED BY THE COMPANY IS LARGELY BUSINESS AS USUAL?

A: These hearings probably provide enough of a forum for providing that information to Ameritech-Ohio's ratepayers.

Q: WHAT IS THE BASIS FOR THE RECOMMENDATION THAT THE COMPANY PROVIDE A COMPARISON OF OHIO WITH INFRASTRUCTURE MODERNIZATION IN OTHER STATES THAT ARE SUBJECT TO RATE OF RETURN REGULATION (AM-O OBJECTION 19, P. 36; N-ST 9-4)?

A: The reason for recommending that the Company compare infrastructure modernization in its service territory with that in other states still subject to rate of return regulation is to look at possible reasons that companies have been deploying advanced infrastructure. There does not appear at this time to be a strong link between the type of regulation in a state and the extent of deployment of advanced infrastructure.

Q: ARE THE NECESSARY DATA AVAILABLE TO CONDUCT AN ANALYSIS OF INFRASTRUCTURE MODERNIZATION IN OHIO COMPARED TO OTHER STATES?

A: Not all the necessary data might be available to conduct a valid study of infrastructure modernization in Ohio compared to other states.

Q: IS AN ANALYSIS OF THE COMPANY'S PROGRESS RELATIVE TO OTHER STATES NECESSARY TO APPROVE THE INFRASTRUCTURE COMMITMENTS IN AMERITECH-OHIO'S PROPOSED PLAN?

A: A rigorous analysis of the Company's progress relative to other states is not necessary for consideration of the infrastructure commitments in Ameritech-Ohio's proposed plan. It behooves the Commission, however, to consider the degree to which the form of regulation is likely to influence the rate of deployment of advanced technologies and the degree to which other factors such as the wealth, population density, presence of high-tech industry, and geography of a state influence that deployment. My view is that the form of regulation explains very little of the variance in deployment of digital switching, fiber optic cable, SS7 and ISDN for the Bell operating companies.

Q: WHY IS THIS IMPORTANT?

The Company has presented its infrastructure commitments as an integral part of the alternative regulation plan. To the extent that the infrastructure commitments represent business as usual and the form of regulation does not make much difference in how fast deployment of advanced technologies will occur, the Company's proposed infrastructure commitments should not strongly influence disposition of the alternative regulation plan.

Q: WHAT REPORTING IS BEING PROPOSED BY THE COMPANY ON INFRASTRUCTURE EXPENDITURES?

A: The Company proposes a one-page "infrastructure commitment report" to be submitted annually to PUCO (Testimony of Linda S. Klais, Ohio Bell Exhibit 23.0, Attachment 23.14). The report would give the percentages of digital access lines equipped with digital switches, central offices equipped with SS7, interoffice circuits with fiber connectivity, and access lines with ISDN availability. The report would also give the number of locations with fiber availability for schools, libraries, court houses, jails and hospitals. An attachment would list specific locations for the schools and public facilities.

Q: WHAT IS THE BASIS FOR ASKING FOR INFRASTRUCTURE EXPENDITURE REPORTING BEYOND THAT PROPOSED BY THE COMPANY (AM-O OBJECTION I.15, 35; N-ST 9.3)?

A: The proposed form does not provide sufficient information to be able to judge progress towards achievement of Ameritech-Ohio's infrastructure commitments. Information needs

to be supplied that shows changes in infrastructure deployment over time for appropriate infrastructure measures.

Q: WOULD THIS REPORTING REQUIREMENT BE AN ONEROUS ONE?

A: No. Working with Staff, the Company should be able to design a simple report that informs the people of Ohio how it is doing on deploying advanced infrastructure promised under the alternative regulation plan.

Q: WHAT IS THE RATIONALE FOR ASKING THE COMPANY TO FILE INFRASTRUCTURE GOALS AND EX POST FACTO EXPLANATIONS OF ANY FAILURE TO MEET THOSE GOALS (AM-O OBJECTION I.16 P. 35; N-ST 3-5)?

A: The yearly numbers and percentages of deployment of digital switches, SS7, fiber connectivity, ISDN availability, and fiber availability to schools and other institutions serving the public represent infrastructure goals for the Company. If the Commission chooses to accept the Company's commitments and these goals are not met, there should be some assurance that Ameritech-Ohio will explain what happened. Missing the goal might be justified, but the Company's ratepayers have a right to know that a commitment to them has not been met.

Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes.

## CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing Prepared Testimony of Vivian Witkind Davis, submitted on behalf of the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, or hand delivered to the parties of record on this 3rd day of August, 1994.



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