Re-Assessing Ohio's Public Utility Property Tax in an Era of Public Utility Restructuring

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Beginning with the telecommunication industry in 1984, the regulation and structure of the public utility industry has undergone a dramatic reorganization. This paper documents the impact of federal and state regulatory changes to the three main utility industries: telecommunications, natural gas, and electric power. The resulting alteration in the structure of state and local tax revenues, particularly property tax revenues, is reviewed with a forward look at the options available to the state legislature as the final deregulation programs are enacted.

Historically, the tax treatment of public utilities was not a big issue. Public utilities in Ohio were essentially the old-fashioned regulated monopolies that were allowed to earn consistent rates of return, but were taxed heavily. Utilities did not have to compete for customers (i.e., rate payers) and could easily pass all taxes through to their rate payers in the form of higher rates. This is no longer the case.

Public utilities are undergoing a period of dynamic change and restructuring - brought about by changes in both technology and regulation. Advances in technology are providing ever more opportunities for competition in industries that were once thought to be irretrievably monopolistic. Traditional distinctions between the industries are becoming blurred. In this context, the rationale for the separate tax treatment of utilities and other businesses is vanishing. Continuing to pursue such policies will result in larger and larger distortions in economic decision-making. As the experience with MCI, detailed later in this paper, points out tax-treatment with competitors in the same industry suggests that such differential treatment cannot be maintained in the long run.

With or without a policy change, the impact of public-utility restructuring on local revenues is expected to be particularly problematic, since public utility specific taxes account for 8 percent of all local revenues and 14 percent of local revenues to school districts. They account for only 5.3 percent of state GRF revenue.

For the purpose of the property tax, Ohio assesses general business tangible property at 25 percent. As Table 1 (on the following page) shows, many industries classified as public utilities are assessed greatly in excess of that. A natural gas company, for example,

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Table 1
Assessment Rates on Public Utility Personal Property in Tax Year 1995

Type of Industry and Property	Assessment Rate
Electric companies – production equipment	100%
Electric companies – all other property	88%
Heating companies – all property	88%
Interexchange companies (including long distance, cellular and other wireless) – all property	25%
Local exchange companies – property added for TY 1995 and thereafter	25%
Local exchange companies – all other property	88%
Natural gas companies – all property	88%
Pipelines – all property	88%
Railroads – all property	25%
Rural electric companies – all property	50%
Water transportation companies – all property	25%
Waterworks – all property	88%

would pay over 3 times as much tax as a non-public utility — such as an energy broker — would pay on the exact same property — a computer or a storage tank, for example — in the same taxing district. This treatment is jeopardizing the ability of Ohio's utilities to compete and may prevent Ohio from reaping many of the benefits of the new competitive environment.

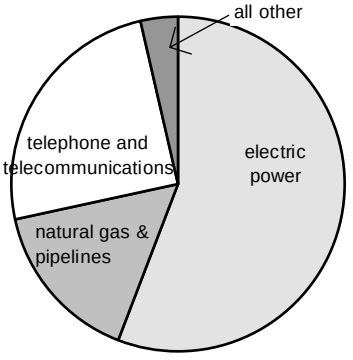
In 1995, public utilities paid $1,026.6 million in property taxes to local goverment — of which $718.7 million went to schools.

The public utility property tax is, however, an important source of revenue for local governments, particularly schools. In 1995, public utilities paid $1,026.6 million in property taxes to local government — of which $718.7 million went to schools. This was the equivalent of 32 percent of the state basic aid (GRF plus lottery) paid to school districts over the same time period. As Chart 1 demonstrates, electric utilities contributed the largest share with electric utility property accounting for 55.8 percent of total assessed value. The property of telephone and telecommunication companies accounted for the next largest share (24.7 percent) followed by the property of natural gas companies (10.9 percent) and pipelines (4.9 percent). The remainder (the property of railroad companies, rural electric co-ops, waterworks, etc.) accounted for 3.7 percent.

Local dependence on public utility property tax revenue varies greatly throughout the state. Although the property of utilities is apportioned among all the taxing districts in which the utility operates (by wire miles in the case of telephone companies, for example), inevitably certain districts — such as those with a large electric generating plant, a substation, or a concentration of heavy electrical users — receive a much larger share of the utility's valuation along with a much larger share of its property taxes.

This paper looks at some of the problems arising from Ohio's tax treatment of public utility property. In Part I it examines the state's experience to date with public utility restructuring and its implications for public utility taxes, focusing in particular on the problems confronting the electric power industry. In Part II (Policy Options), it calculates the cost of decreasing the assessment percentage

Chart 1: Portion of Total Public Utility Assessed Value by Industry - TY 1995

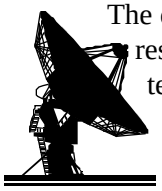


on public utility property and considers alternative ways to deal with the projected revenue loss.

Part I – Restructuring of the telecommunications, natural gas, and electric power industries

Restructuring in all three utility markets has both a federal and a state component. The federal government has jurisdiction over interstate services (e.g., interexchange telecommunication services (IXCs), interstate pipelines and interstate electric transmission) and the state has authority over local services - such as local exchange companies (LECs), local distribution companies (LDCs), and retail electric service. However, changes at the federal level have consequences at the state level for both regulatory and tax matters. Although the consequences vary somewhat by industry, many of the issues recur. Therefore, lessons learned from the restructuring of the telecommunications industry may be useful in anticipating the issues, problems, and solutions likely to result in the restructuring of the natural gas and electric utilities. This point may be illustrated by looking at the restructuring experience of each of the three industries.

The Telecommunications Industry



The deregulation — or rather restructuring — of the telecommunications industry began in 1984 at the federal level with the consent decree ending the antitrust suit that the Department of Justice had filed against AT&T in 1974. The consent decree required that AT&T divest itself of its local services operations. The long distance or interexchange services market was opened up to competition. The Regional Bell Operating Companies (RBOCs), which took on the local operations, remained monopolies regulated by state public utility commissions.

At the state level in 1989, Ohio passed Am. Sub. H.B. 563 (effective date March 17, 1989), which allowed for the alternative regulation of local telephone service. The impact of this bill is still being played out, but it appears that (with a little help from the Federal Telecommunications Act of 1996) it will ultimately lead to competition in local service throughout the state. The different competitors in this market will likely include — in addition to IXCs and LECs — cable, cellular, and electric companies. The different tax treatment facing each of these types of firms will pose new problems for tax policy.

With the advent of local competition in telecommunication services, the different tax treatment facing the various competitors will pose new problems for tax policy.

Before AT&T's break-up, all telephone company services and property were subject to the public utility excise tax (also known as the gross receipts tax) and the public utility property tax in Ohio. The passage of H.B. 171 (effective July 1, 1987) subjected IXCs to the state corporate franchise tax and the state sales and use tax rather than the public utility excise tax. The local exchange companies remained subject to the excise tax. Also, the property of both IXCs and LECs continued to be assessed at the higher public utility assessment rate.

Table 2
Ohio Legislative Reaction to Changes in the Telecommunications Industry

Year	Bill	Action
1987	H.B. 171	Switched IXCs from the public utility excise tax to the corporate franchise tax and sales tax
1989	H.B. 563	Established alternative regulation of local telephone service; began movement toward competition in local service provision
1995	H.B. 117	Reduced property tax assessment rates from 88% to 25% for IXCs; rate reduction for LECs is gradual, as old equipment is replaced

In 1994 the Ohio Supreme Court ruled in MCI's favor and ordered that it be reimbursed for its overpayment of 1987 property taxes.

H.B. 117 included $5 million in supplemental assistance to reimburse school districts which were required to reimburse MCI.

That all began to change when MCI filed a suit against the Tax Department, MCI Telecommunications Corp. *vs.* Limbach (1994), challenging the department's treatment of it for property tax purposes for tax years 1987 through 1993. The courts focused on tax year 1987. MCI alleged that it was denied equal protection since in tax year 1987 its property was assessed at 100 percent of "true value," while many of its competitors were taxed as general businesses with their property assessed at 31 percent of true value. In 1994 the Ohio Supreme Court ruled in favor of MCI, and ordered that it be reimbursed for its overpayment of 1987 property taxes.

Other telecommunications companies also filed suits against the Tax Department on the same grounds. The Department calculated that if the state were to lose all those cases (filed for tax years 1987 through 1994), school districts and other local governments could owe $200 to $210 million in property tax refunds. To avoid this situation, H.B. 117, the budget bill for the 1995 to 1997 biennium, reduced the assessment rate on all property of telecommunications companies and all new property of LECs to that on general business property. The bill also included $5 million in supplemental assistance to reimburse school districts which were required to reimburse MCI.

LBO calculated that the assessment percentage reductions would cost local governments $37.5 million in lost property tax revenue in FY 1996 and $90.9 million in FY 1997. The substantial difference between the two years is due, first, to the fact that FY 1996 contained only a half-year tax loss; whereas FY 1997 contained a full-year tax loss. Secondly, due to a period of rapid capital equipment updating, a larger proportion of LEC property was to be assessed at 25 percent in FY 1997 than in FY 1996.

The tax loss to school districts was calculated to be $25.3 million in FY 1996 and $60.9 million in FY 1997. This was compensated for, in part, by additional supplemental payments to school districts in FY 1996 and 1997 and increased state basic aid payments in FY 1997.

The increase in state aid in FY 1997 was essentially automatic, since the state funding formula for school districts is tied to the taxable value of property in the districts. A decrease in the assessment percentage in a given school district decreases the taxable value of property in that district and this increases the amount of state basic aid that the district should receive based on the foundation formula.

The supplemental aid was provided for two reasons. First, although losses in property tax revenues would be incurred in FY 1996, the increase in state aid payments would not begin until FY 1997. Consequently, "bridge money" in the amount of $20 million was provided to help the school districts until the funding increase kicked in. Secondly, not all school districts received funding based on the formula. Additional assistance in the amount of $7 million was provided to these districts for FY 1997 to assist in the transition to lower local revenues.

The Natural Gas Industry

H.B. 117 also provided $2.6 million in "supplemental assistance" to school districts which "lost" tax revenue due to the federal restructuring of the natural gas industry.

The federal restructuring of the natural gas industry began in 1978 with the passage of the Natural Gas Policy Act, which began to remove the price ceilings of natural gas at the wellhead. In 1985 the Federal Energy

Table 3
Highlights of Federal Law and Rule Changes to the Natural Gas Industry

Year	Act or Rule	Action
1978	Natural Gas Policy Act	Deregulation of natural gas prices at the wellhead
1985	FERC 436	Open access transportation required of pipelines. End user can buy gas from producers or brokers. Ohio public utility excise tax base reduced.
1992	FERC 636	Completes unbundling of gas services. Open access of gas storage to non-utilities reduces Ohio utility property tax base.

Regulatory Commission (FERC) issued Order 436 to continue the deregulation.

FERC 436 required "open access transportation" by interstate pipelines. The idea here was to allow local distribution companies (LDCs) and end-users — mostly large industrial firms — to buy gas directly from gas producers in the production area (e.g., Oklahoma, Texas, Louisiana, New Mexico and the Gulf of Mexico or Canada) or from brokers who bought gas from those producers, and to use the interstate pipeline service only for transportation of the gas. This was the first major step in the "unbundling" of interstate pipeline services. FERC Order 636 (issued in 1992) essentially completed the unbundling process. It required the separation of storage services from commodity gas sales and transportation services of pipelines. It ultimately required LDCs to take responsibility for assembling portfolios of natural gas services to meet the needs of their customers rather than purchasing fully bundled natural gas services from the pipelines.

As a result of FERC 436, industrial users, as well as certain large commercial users, switched to buying gas from producers or brokers and using pipelines only for transportation. This occurred nationwide. According to data from the Energy Information Administration by 1991, about 80 percent of total interstate pipeline throughput was for gas that was being transported, but not sold by the pipelines. This change, however, had major consequences for Ohio gross receipts tax collections. Between 1985 and 1992, public utility excise tax receipts from LDCs decreased by 5.4 percent per year. Part of this decline was due to the decrease in the price of natural gas which was caused in part, and permitted in part, by the restructuring; but the losses in natural gas sales by utilities accounted for much of the decline. (Some of the lost revenue was recovered by imposing the sales and use tax on the commodity gas sales which were no longer subject to the gross receipts tax, but a significant portion of the gas sold was exempt from the sales tax due to the "used in manufacturing" exemption.)

It was, however, the interaction of FERC 636 with Ohio tax laws that produced the windfall losses to the school districts which resulted in the supplemental assistance to school districts in H.B. 117. Ohio possesses many natural gas storage fields, which Columbia Gas Transmission Company (CGTC) has owned for many years and has used to store gas to supply to many of its LDC affiliates. Like other public utility property, gas held in storage in these fields was typically assessed at 88 percent of true value. FERC rule 636 required that Columbia make this storage space available to other utilities and brokers. Consequently, by November 1993, CGTC had made the storage available to LDCs and no longer owned any of the gas in storage. Columbia Gas of Ohio (an LDC)

The interaction of FERC 636 with Ohio tax laws produced windfall losses to school districts which resulted in supplemental assistance to school districts in the 1995-1997 biennium.

owned 36 percent of the gas; but over half (54 percent) was owned by non-Ohio utilities.[1]

Since non-Ohio utilities were not in the business of supplying gas to customers in the state, they were not taxed as utilities but as general businesses and so were not subject to the 88 percent assessment.

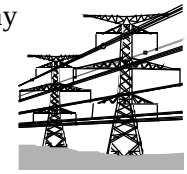
According to Ohio law, these new owners were not utilities. For the purposes of public utility property taxation, any person "Is a natural gas company when engaged in the business of *supplying* natural gas for lighting, power, or heating purposes to customers within the state" (emphasis added). Since these non-Ohio utilities were not in the business of supplying gas to customers in the state, they were not taxed as utilities but as general businesses, which meant that they were not subject to the 88 percent assessment.

In fact, much of the gas that they stored in these fields was not subject to assessment at all because it qualified for the "for storage only" exemption of the business tangible tax. The "for storage only" exemption applies to general business inventory which is shipped in from out-of-state, held in Ohio for storage only, and ultimately sold to out-of-state consumers. Much of the natural gas stored in Ohio by non-Ohio utilities easily fits this description. To the extent that such gas is subject to taxation in Ohio (say purchased in Ohio), it would be assessed at 25 percent rather than 88 percent.

Recently, Ohio enacted H.B. 476 (effective date, September 17, 1996) which — much like H.B. 563 of the 117th G.A. with respect to the telecommunications industry — provided for the deregulation and alternative regulation of certain natural gas services. According to the Department of Taxation, this bill did not have significant tax consequences. LBO concurs with this assessment. It does not mean that the erosion of revenues from both the property tax and the gross receipts tax on natural gas companies and pipelines will subside. Rather, it reflects the opinion that everything that is needed for the continued erosion of these two tax bases was already in place.

The Electric Power Industry

Restructuring is just beginning in the electric utility industry, and it is difficult to divine exactly how it is likely to play out.



On April 24, 1996, FERC issued Order No. 888, the "open access" rule, which required owners of transmission systems to offer their transmission lines for wholesale wheeling[2] under the same terms and conditions that they provide for themselves. FERC also issued Order No. 889, the "open access same-time information system" or OASIS rule, which established standards of conduct to ensure a level playing field. In other words, the restructuring of the electric industry does not — at least, thus far — require divestiture, as it did initially in the telecommunications industry. However, the firms in the market for transmission services are to act as if it did.

Meanwhile, four states — California, Rhode Island, New Hampshire, and just recently, Pennsylvania — have passed legislation providing for some form of electric competition at the retail level.[3] Ohio, along with many other states, is currently considering legislation.

Wheeling Power

"Wheeling" refers to the transmission or movement of power over transmission lines. Wholesale wheeling refers to the transmission of power from a generating facility to a distributor. Retail wheeling is the ability of end-use customers of any size to purchase electrical capacity from anyone other than the local electrical utility by moving such power over the local utility's transmission and/or distribution lines.

[1] Columbia Gas of Ohio, "Ohio Public Utility Personal Property Taxes," Testimony to Conference Committee for H.B. 117, June 1995.

[2] From Glossary of Energy Terms, Independent Power Producers of New York, November 6, 1996. http://www.ippny.org/glossary.htm

[3] Heidorn, Rich Jr., "Pa. Senate Oks electric competition," *Philadelphia Inquirer*, Nov. 26, 1996, p.1.

Federal Regulatory Actions and the Structure of the Electric Power Industry in the U.S.

For most of this century the production, transmission, and distribution of electric power in the U.S. has been carried out by large vertically-integrated monopolies, known as investor-owned utilities (IOUs). Currently, IOUs provide over 75 percent of electric power in the U.S. and over 90 percent in Ohio. The remainder is provided by government entities (such as municipals), nonprofits (such as rural electric cooperatives), and small independents.

Table 4
Highlights of Federal Law and Rule Changes to the Electric Power Industry

Year	Act or Rule	Action
1935	Federal Power Act	Established regime of regulating electric utilities that gave specific and separate powers to state and federal regulators
1935	Public Utilities Holding Company Act (PUHCA)	Regulates corporate structure of utilities operating in interstate market to prevent abusive practices such as cross-subsidization and self-dealing
1978	Public Utilities Regulatory Policies Act (PURPA)	Sanctioned development of alternative generating facilities; led to emergence of market for bulk power supply
1992	Energy Policy Act (EPAct)	Encouraged development of bulk power market by exempting independent power produces from PUHCA; increased availability of wholesale transmission services
1996	FERC 888 "open access" rule	Provides for open access of transmission lines; full recovery of stranded costs at wholesale level
1996	FERC 889 "OASIS" rule	Establishes standards of conduct to ensure level playing field in market for transmission services

The municipals and the cooperatives are mainly concerned with distribution — purchasing power from IOUs and independents and selling to residences and business establishments within their territory. The independents are chiefly involved in the production or generation of electricity. Their importance has doubled since 1987, growing from 3.6 percent of the U.S. market in 1987 to 7.2 percent in 1995[4].

The IOUs are regulated by state commissions. They receive monopoly rights to supply electricity in certain territories at regulated rates. In exchange a utility is required to serve all electric users in the franchise area. The regulated rates allow a utility to recover its operating costs (including taxes) plus a "guaranteed" rate of return on the capital invested.

The impetus for electric utility restructuring goes back to the late 1970s when a combination of events shook the electric utility industry. First, two Arab oil embargoes led to high energy prices. Assuming that high prices and energy shortages were here to stay, utilities began to construct ever larger and more expensive generating facilities. Construction delays and high inflation led to cost overruns and increased the rates that utilities would need to charge to recover their costs.

Meanwhile, recession, conservation efforts, and improvements in economic efficiency led to a decrease in the demand for electric power. Subsequently, an oil glut accompanied by the deregulation of natural gas prices contributed to falling energy prices overall. At the same time, technological advances in electric generation allowed the construction of smaller and more efficient generating facilities. With electricity rates skyrocketing, many large industrial energy users took advantage of these technological advances along with lower prices of competing fuels and began to construct their own generating facilities; thus by-passing the local electric utility and leaving residential and commercial customers to pay for the largely unneeded new plant.

Consumer outrage over higher energy prices led to increased scrutiny of utilities' investment decisions by public utility commissions and the newly formed consumers' counsels. More and more expenses were disallowed in rate case hearings. These disallowances led to a reluctance on the part of utilities to invest in new facilities. At the same time, non utilities and utility affiliates continued to invest in the newer technologies, increasing the portion of electric generating capacity produced by non utilities.

The federal government was also active over this time period. Alarmed at the growing inefficiencies in the electric power industry, Congress passed the Public Utilities Regulatory Policy Act (PURPA) in 1978 to encourage utilities to conserve fossil fuels and to encourage the development of alternative generating sources known as qualifying facilities (QFs). PURPA required utilities to purchase power from QFs at the utilities' avoided costs.[5] QFs were limited to co-generation and small power producers. Their success in the electric power generation market led to the emergence of independent power producers (IPPs). IPPs were generally single asset generating companies without transmission or distribution facilities.

The IPPs faced two major problems: first, the Public Utility Holding Company Act (PUHCA) limited their ability to provide power in more than one state. Secondly, they did not have the ready access to transmission lines they needed in order to compete in the market for electric power. The Energy Policy Act of 1992 was passed to resolve these issues. It created the category of exempt wholesale generator (EWG) which exempted many of the independents from the restrictions of the PUHCA. It also began to open up the transmission grid. The goal of the act was to facilitate the development of competitively priced generation facilities and to ensure that wholesale purchasers of electric power can reach alternative power suppliers and vice versa. The purpose of FERC Orders 888 and 889 was essentially to complete the work begun by the Energy Policy Act.

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[4] U.S. Council of Economic Advisors, "Promoting Competition in Electricity," The Economic Report of the President, Washington, D.C.: Government Printing Office, February, 1996, pp. 181-189.

[5] "Avoided costs" are the costs that a utility avoids by purchasing power from an independent producer rather than generating its own power, purchasing power from another source, or constructing a new power plant. FERC left it up to each state commission to define avoided cost; and each state approached it differently. In some states such as California and New York, the state set the definition quite high; thereby encouraging the growth of QFs. In other states, such as Ohio, the definition was generally set too low to admit much competition.

Power Plant Size Decreasing

The optimum size of power plant has decreased greatly over the past 15 years - from plants in excess of 500 megawatt capacity to plants in the 50 to 150 megawatt range. The smaller plants can be put into operation within a year of initial investment compared to the 10 years on average it takes to bring the larger plants on line.

The cost of operating these new plants is much smaller —so that the cost of bringing on additional plants at the new technology is less than the cost of operating most plants constructed in previous decades. For example, it costs 3 to 5 cents per kilowatt hour (kWh) to operate the smaller gas-fired combined-cycle generating facility compared to the 4 to 7 cents per kWh for coal-fired plants and the 9 to 15 cents per kWh for nuclear power plants.

A major problem with electric power restructuring is that there is significant "over capacity" in the industry — much of which is in the larger overvalued coal-fired and nuclear generating plants. Newer plants are typically smaller, often operated by non-utilities, with operating costs much lower than the nuclear plants.[6] As competition unfolds in the industry, many of the larger plants may turn out to be uneconomical to operate in the new environment, leading to the existence of a lot of "stranded investment" in the industry. The stranded investment problem is one of the major stumbling blocks in the movement toward competition in the electric industry in the U.S.

Estimates of potentially stranded assets the electric industry in the U.S. range from $100 billion to $135 billion. Stranded nuclear assets alone account for approximately 70 percent of the total. Ohio ranks 6th among all states with the highest dollar amount of stranded assets.[7] All of the states in the top ten have stranded nuclear assets in excess of $3 billion.[8]

While FERC rule 888 called for full recovery of stranded assets incurred before June 11, 1994 (the date the original notice of proposed rulemaking — NOPR — was issued), its jurisdiction is limited to interstate matters — i.e., the wholesale market and the transmission system. Well over 90 percent of strandable assets are located at the generation level, which falls under state jurisdiction. It is not yet clear how the states will deal with this problem.

The Electric Power Industry In Ohio

In Ohio electricity is supplied by 8 IOUs, 80 municipal utilities, and 30 rural electric cooperatives. The investor-owned utilities have guaranteed territories (in accordance with Revised Code sections 4933.81 through 4933.90) and so face little competition except from the municipal utilities.

Ohio Power (part of the AEP system), which serves the southeastern region of the state, relies heavily on coal-fired generators and has among the lowest rates in the nation; while Cleveland Electric and Toledo Edison (which comprise Centerior) rely heavily on nuclear power and have rates which are among the most expensive. The high rates stem from the high cost of the nuclear power plants and the rate-of-return-based rates which are set to recover their cost over a period of 40 years. In fact, Toledo Edison ranks 6th among all IOUs in the country in terms of the companies with the highest percentage of plant-in-service that is tied up in stranded nuclear assets.[9]

Stranded Assets

"Stranded Assets" are defined here as assets in which the present value of future revenues flowing from the asset are less than the present value of the unamortized fixed costs plus the variable cost of operating that asset. The definition assumes a competitive electric power industry by the year 1999.

Table 5 shows the average cost of electricity to consumers of each of the 8 IOUs operating in the state.[10]

[6] U.S. Federal Energy Regulatory Commission, Notice of Proposed Rulemaking, (Docket no.'s RM95-8-000 and RM94-7-001) March 25, 1995.

[7] The top ten list includes (in descending order) Texas, Pennsylvania, California, Illinois, New York, Ohio, Massachusetts, New Jersey, North Carolina, and Louisiana, *Ibid*.

[8] RCG/Hagler Bailly, "Stranded Nuclear Assets and What to Do About Them," Presentation at the DOE/NARUC Electricity Forum, April 21, 1995, Providence, Rhode Island.

[9] RCG/Hagler Bailly, *op. cit.*

Table 5
Residential Electric Bill Comparison

Annual Electric Bill @ 1000 kWh Per Month Usage	
Monongahela Power	$726
Ohio Power	$758
Cincinnati Gas & Electric	$948
Columbus Southern	$1070
Dayton Power & Light	$1104
Ohio Edison	$1458
Toledo Edison	$1482
Cleveland Electric Illuminating	$1565
Average of all municipals	$784

Municipal electric bills range from $538 to $1074, with the average at $784. Only Monongahela Power and Ohio Power have lower rates than most municipals. Needless to say, the more expensive utilities are the ones which face the greatest competition from the municipals. Since the municipals buy electric power in the wholesale market, they can purchase power from lower cost utilities or generators, which may be located in a different service territory, a different state, or even a different country. The municipals are also exempt from the property tax.

Competition occurs as either municipalities annex territories and extend their services that way or as new municipal utilities are formed to provide large industrial users in their jurisdiction with lower-priced energy.[11] As industrial users leave (or threaten to leave) the IOU's service for the cheaper power, IOUs may in turn offer them lower rates (authorized under certain conditions by section 4905.31 of the Revised Code). These rates are known as "economic development" rates. The shareholders and other customers of the utility are left to make up the difference. The advent of competition and retail wheeling is expected to expand this type of pressure to reduce rates and shift burdens statewide — among utilities in general, not just between municipal utilities and IOUs.

Although taxes are not the cause of the differences in rates among IOUs, they do contribute to the problem. Both rates and property taxes increase as the value of a utility's property increases. As tax rates increase, then, utility rates must be increased further to cover the higher property taxes.

The Taxation of Electric Utility Property in Ohio

While the high cost of the nuclear power plants have been a major aggravation to utility consumers in northern Ohio, they have been a boon to schools in the area which receive a large share of their funds from property taxes on the plants. Most notable are Benton Carroll Salem Local School District (LSD) in Ottawa County (site of the Davis Besse nuclear power plant) and Perry LSD in Lake County (site of the Perry nuclear power plant). In 1995 both received 62 percent of their total property tax revenue from taxes on electric utility tangible property.[12]

For the purposes of public utility property taxation, the production or generating equipment of electric power plants is assessed at 100 percent of true value, and the non-generating equipment is assessed at 88 percent of true value. True value is defined as 50 percent of original cost, where original cost equals book value minus the allowance for funds used during construction or AFUDC. While not included in the property tax base, AFUDC is included in a firm's rate base, where it is considered a "regulatory asset." In some cases it may become a stranded regulatory asset.

For the most part, 70 percent of the tax revenues derived from generating plant are allocated to the taxing district where the plant is "sitused;" while the

... the high cost of the nuclear power plants have been a major aggravation to utility consumers in northern Ohio ...

[10] Table provided by the Industrial Energy Users-Ohio from PUCO Electric Utilities Service Facts for 1995.

[11] "Changes on the Grid," *Fiscal Stress Monitor,* December, 1995, pp. 1-7.

[12] Rich Levin and Bill Driscoll, "Electric Utility Deregulation and its Potential Tax Impact on Ohio School Districts with Electric Generating Plants," Report prepared for the Ohio School Boards Association, August 9, 1996.

School districts which host a nuclear power plant receive a disproportionate share of the public utility property tax.

remainder, along with the non-generating plant, is apportioned throughout the utility's territory in accordance with the value of the firm's transmission and distribution system. However, in the case of a utility valued in excess of one billion dollars, any valuation in excess of $420 million is apportioned like the nongeneration property. This provision affects the apportionment of property associated with the Perry nuclear power plant and the Zimmer coal-fired power plant in Clermont County. Nevertheless, school districts which host an electric power plant receive a disproportionate share of the public utility property tax. Levin and Driscoll[13] note that forty percent of the electric utility tangible property value is located in the 35 school districts (out of a total 611) which have power plants. The districts containing the largest amount of utility property valuation are Perry LSD and New Richmond Exempted Village School District (EVSD), site of Zimmer.

The Erosion of Ohio Tax Revenues

The erosion of electric utility property tax revenues in Ohio is likely to come from two main sources:

- existing utilities writing down their overvalued assets, and
- the disincentives for non-utilities (and ultimately utilities) to locate new plant in Ohio.

Financial Accounting Statement 121

While the prospect of competition raises the issue of stranded assets in the electric industry, an accounting rule issued by the Financial Accounting Standards Board (FASB) in March of 1995 is likely to bring the problem to a head. Financial Accounting Statement (FAS) 121, effective December 15, 1995, requires IOUs to write down certain overvalued assets carried on their books. These over-valued assets include generating equipment and AFUDC.

The most likely firms to be affected by this rule are those with large nuclear capacity, such as Centerior or Ohio Edison,[14] which share ownership of Perry. Ohio Edison has already written down some of its assets, although Centerior has not.[15] The writedowns will largely affect the firms' retained earnings and may affect their ability to pay dividends. It is more than likely that the writedowns will also affect their property tax liability.

Firms will probably make some adjustments in the 1996 books — which close December 31, 1996 and which could therefore affect 1997 tax revenues. To the extent that the firm writes down the generating equipment, the adjustment should have a major impact on the property tax base of the school district where the plant is sitused, as well as on the other districts in the utility's territory to which the excess production value is apportioned. To the extent that a firm writes down the regulatory assets (i.e., AFUDC), there will be no impact on the property tax base. There are likely to be federal as well as state tax consequences for whatever action the utility takes; so it is not possible to judge which assets will be written off in the near future simply by considering the state tax consequences.

Disincentives for Investment

Table 6 compares the property tax per kilowatt hour incurred by Ohio electric utilities with that incurred by utilities in the surrounding states for the year 1992.[16] Only in Michigan does the property tax burden on electric utilities appear to be comparable to that on Ohio utilities. However, this observation would now be somewhat misleading. Unlike Ohio, utility property in Michigan was (and is) treated like

[13] *Ibid*.

[14] Or FirstEnergy Corp., if the proposed merger between Ohio Edison and Centerior is approved.

[15] Ohio Edison currently has commitments to write off $2 billion in assets over a 10 year period. See Ohio Consumers' Counsel, *Ohio Consumers' Corner on Utilities, Vol. 1, Issue 4*., p. 1.

[16] From Table 13-2 of Gary Cornia, "Public Utility Taxation," in Roy Bahl, ed., *Taxation and Economic Development: A Blueprint for Tax Reform in Ohio* (Columbus, Ohio: Battelle Press, 1996), pp. 627-698.

industrial property for taxation purposes. The high tax burden in Michigan simply reflects a relatively high property tax burden on business property, in general. Moreover, since 1995, taxes on business property in Michigan have been reduced by about 20 percent.

The tax disincentives can be readily demonstrated by noting the virtual nonexistence of investment in non-utility generation in Ohio (which is where the growth is now). For the purposes of property taxation, non-utility generators are treated like utilities. In other words, the "exempt" in *exempt wholesale generators* just means that the firm is exempt from the Public Utility Holding Company Act (PUHCA); it is not exempt from Ohio's public utility property tax.

Section 5727.01 of the Ohio Revised Code defines for the purposes of public utility property taxation an electric company as "Any person... when engaged in the business of generating, transmitting, or distributing electricity within this state for use by others...."[17] This provision results in a significant tax disadvantage for non-utility generators in Ohio compared to their situation in other states. Such entities would typically be assessed for taxation at 100 percent of true value. However, since they are not regulated public utilities, they can not be assured of recovering the higher tax assessments in rates. Consequently, it makes little sense for them to locate such facilities in Ohio — particularly when the property tax burden is generally much lower in the surrounding states. (Moreover, if competition means that generators belonging to IOUs can no longer be assured of recovering the higher taxes in their rates, then IOUs will not locate future investment here, either.)

Table 6
Property Tax Burden Comparison

	Property Tax per Retail kWh (Cents)
Ohio	
Cleveland Electric	.66
Toledo Edison	.59
Ohio Edison	.50
Cincinnati Gas & Electric	.47
Columbus Southern Power	.40
Dayton Power & Light	.37
Ohio Power	.24
Michigan	
Detroit Edison	.44
Consumers Power	.33
Indiana	
Indiana Power	.14
Pennsylvania	
Pennsylvania Electric	.19
Pennsylvania Power	.17
West Virginia	
Appalachian Power	.10
Wheeling Power	.03
Kentucky	
Kentucky Power	.09
Kentucky Utilities	.05

Given the unfavorable climate, it is not surprising that in 1991 non-utility generators in Ohio provided less than 2 percent of the state's total electricity generation. In comparison, non-utility generators account for over 10 percent of electricity generation in Pennsylvania and Michigan.[18] Ohio is not only losing property tax revenues as utilities write down the assets of the older electric power plants; it is also not gaining revenues from the newer facilities that are being built.

In summary, the electric power industry is currently characterized by excess capacity in electric power generation. At the same time, improvements in the transmission system make it easier to rely on more distant energy sources. Assets valued in excess of the market price will not survive in a competitive environment. Either the facilities will be retired from service or their values will have to be written down.

Assets valued in excess of the market price will not survive in a competitive environment. Either the facilities will be retired from service or their values will have to be written down.

[17] This language is much more comprehensive than that defining natural gas companies for the purposes of levying the public utility property tax. Consequently, restructuring of the electric power industry is not likely to result in a hemorrhaging of property tax revenues as in the case of natural gas. The drawback is that the law is likely to hamper growth and could ultimately increase the likelihood of bankruptcy for Ohio utilities.

[18] U.S. Department of Energy, *The Changing Structure of the Electric Power Industry, 1970-1991*, Energy Information Administration (Washington, D.C.: Government Printing Office, March, 1993), p. 12.

In either case, local governments in Ohio stand to lose a lot of revenue. This has already begun to happen in certain Ohio school districts which depend heavily on the revenues from nuclear power plants. Public utility property values fell by 2.7 percent in Perry LSD in 1992-93 and by 0.6 percent in 1993-94. This erosion can only be expected to continue — and spread to districts dependent on large electric generating facilities however powered — as the process of electric utility restructuring continues apace and utilities position themselves to survive.

Doing nothing about the public utility property tax is not a long-term option for Ohio.

Part II – Policy Options

Doing nothing about the public utility property tax is not a long-term option for Ohio. In one scenario such a policy would result in a continuing erosion of the tax base as assets are taken out of service or written down and their generating capacity replaced by facilities located in other states. Adjacent states would generally benefit from investments in generating capacity that would otherwise have taken place in Ohio.

Alternatively, a disgruntled utility might launch another legal challenge in either state or federal court arguing that it was denied equal protection due to differential tax treatment. (At present, this would be more likely in the natural gas industry where in-state utilities are treated differently from brokers and out-of-state utilities.) Losing such a challenge could prove quite costly to both local governments and the state.

Assuming that decreasing the assessment percentage on public utility property is in many senses "inevitable," this paper calculates the cost of reducing the assessment rates on natural gas, electric, and other public utility property. It compares the cost *vis-à-vis* 1995 revenues rather than projected future revenues, since the dynamics of the electric and natural gas industries are unusually difficult to capture at this time. After calculating the cost of reducing the assessment percentage, the paper then considers three alternative ways of dealing with the foregone public utility tax revenue.

Table 7
Cost of Reducing Assessment Rate on Public Utility Property by Class

Natural Gas	$77.3
Pipeline	$34.7
Electric Power	$402.6
Other public utility property	$11.6
Total	$526.3

Values are in millions of dollars.

Reducing the Assessment Percentage on Public Utility Property

Table 7 shows the annual costs to all local governments of decreasing the assessment percentage on various classifications of public utility tangible property to 25 percent.

LBO's calculations are based on Tax Department data, detailing the assessed value of public utility personal property by type of utility. LBO also used the Tax Department's estimate that 47 percent of electric utility property in 1995 was generating plant (i.e., valued at 100 percent of true value). An effective tax rate on all public utility property of 67.83 mills was calculated based on the assessed values and total public utility property tax revenue for 1995.

The costs presented in Table 7 equal the revenue lost from valuing the property at 25 percent rather than the current level. True value estimates for each class of utilities were found by dividing the assessed value by the appropriate assessment rate (which was 93 percent for electric utilities). The true value multiplied by an assessment rate of 25 percent times the 67.83

Table 8
Impact of Decreasing Amounts of Per-pupil Property Values on State Aid to School Districts: Three alternative scenarios

Valuation Per Pupil	$100,000	$75,000	$50,000
Local Contribution per pupil	($100,000 x 23 mills) = $2,300	($75,000 x 23 mills) = $1,725	($50,000 x 23 mills) = $1,150
State Standard	$3,500	$3,500	$3,500
State Aid per pupil	($3,500 - $2,300) = $1,200	($3,500 - $1,725) = $1,775	($3,500 - $1,150) = $2,350
Total Foundation aid for 2,000 students	$2,400,000	$3,550,000	$4,700,000

millage rate was then compared with the current assessed value times $.06783. The difference by major utility class is presented in the table. "Other" here does not include telephone company property.

Impact of Assessment Rate Reductions on State Aid to Schools

Reducing the assessment percentage on any type of property directly affects local government and school district revenues. However, reductions in the value of taxable property, also result in higher state aid to local school districts. Essentially, schools receive some State GRF money known as "Basic Aid" via the foundation formula. Basic Aid provides funding to school districts based, in part, on the value of taxable property in each district to the extent that this value falls short of the amount required to provide an adequate level of per-pupil funding in the district.

In its simplest form, the foundation formula calculates how much property tax revenue a district can raise given a tax rate of 23 mills. State Basic Aid then augments that amount with state funds if it is below the state minimum standard.[19] The state standard is currently set at expenditures of $3,500 per pupil (for FY 1997 per H.B. 117 of the 121st General Assembly).

Table 8 summarizes the impact of changes in the valuation per pupil amount on the foundation formula aid for three simple scenarios.

The three scenarios demonstrate the inverse relationship between school district property values and state foundation aid to the districts: as valuation decreases, state aid will increase. A district of 2,000 students whose per-pupil valuation fell from $100,000 to $50,000 would receive an increase in state aid of $2.3 million or $1,150 per pupil.

About 73 percent of districts receive formula amounts of Basic Aid. Since reducing the assessment percentage reduces the value of taxable property, lower taxable values will enter into the formula for these school districts, necessitating higher levels of state aid.

Table 9 shows — on a calendar year basis — how the total cost of the assessment percentage reductions would be divided among three main groups: school districts, other local government units, and the State General Revenue Fund (GRF). Since school districts typically receive approximately 70 percent of public utility property tax revenues, approximately 70 percent of this lost revenue was attributable to them. This figure, $54.1 million for natural gas companies, is given in the first column. The remaining 30 percent, given in the

[19] In full complexity, the foundation formula is further adjusted for differences in the cost of doing business and the local wealth of the district as measured by an income factor. For the purpose of this paper, it is assumed the cost of business and income factors are equal to one and will have no impact on aid to the districts.

If valuation falls substantially in a given district, the district may fall off the guarantee, and would subsequently receive the formula amount. Given the large changes in valuation ... this may happen.

Table 9
Cost of Assessment Rate Reductions by Major Fund Group

Industry	Revenue Loss to Schools	Additional GRF Expenditures	Net Cost to Schools	Revenue Loss to Other Taxing Districts
Natural gas	$54.1	17.0	37.1	23.2
Pipelines	24.3	7.7	16.7	10.4
Electric power	281.8	88.7	193.1	120.8
Other utilities	8.1	2.6	5.6	3.5
Total	368.4	116.0	252.4	157.9

Values are in millions of dollars.
Numbers may not add to totals due to rounding.

final column ($23.2 million for natural gas companies), is a cost to other local taxing districts (counties, municipalities, townships, and special districts).

The third column gives the net cost to school districts after adjusting for the added GRF expenditures given in column two. The added GRF expenditures equal the additional Basic Aid payments the state would be required to make based on the foundation formula.

The legislature could reduce the formula amount, so that no additional funding was required. This option was discussed by Howard Fleeter in a recent paper which considered the impact of assessment percentage reductions on electric utility property on school funding in Ohio.[20] LBO assumes that the current foundation amount would be retained.

Basic Aid only provides funding for the first 23 mills of reduced valuation (accounting for approximately half of the average millage on tangible property in school districts). To the extent that school districts have tax rates in excess of 23 mills, they would have to make up the additional revenue, if they wished to retain the previous level of expenditures. This accounts for part of the "net cost to schools" given in the third column in Table 9.

The balance of the net cost to schools figure arises because not all school districts receive state aid based on the foundation formula. School districts are currently "guaranteed" their FY 1991 basic aid payment. To the extent that its guaranteed amount exceeds what it would receive under the formula, a school district would be "on the guarantee." In such cases, changes in valuation will not affect the school district's basic aid.

Therefore, our calculations about the increased state aid to school districts, which are based on aggregate reductions in assessed valuation, need to be adjusted for the valuation located in those districts which are on the guarantee. According to LBO's calculations, approximately 34.6 percent of total valuation is currently in such districts.

If valuation falls substantially in a given district, the district may fall off the guarantee, and would subsequently receive the formula amount. Given the large changes in valuations that some districts would experience with reductions in the assessment rate on public utility property, this may happen. (For example, it is very likely to happen in the case of the New Richmond school district in Clermont County, site of the Zimmer power plant.) However, LBO assumes that this will not generally occur.

Therefore state aid to schools ("Additional GRF Expenditures" in Table 9) is calculated as 23 mills times

[20] Howard Fleeter, "Analysis of the Impact of Reducing the Assessment Rate of Electric Utility Tangible Personal Property on Education Funding," Research report submitted to the Ohio School Boards Association, August 15, 1996.

65 percent of the change in public utility valuation resulting from the assessment rate reduction. Schools will bear the remaining cost (i.e., "Net Cost to Schools" in Table 9).

Other Studies

Two papers of note have recently been issued which examine the effects on school financing of reducing the assessment percentage on electric utility property. Levin and Driscoll[21] look at the impact on the 35 school districts which include an electric generator in their jurisdiction. They estimate the cost or property tax loss to these 35 districts to be $102 million dollars and the cost to all school districts to be $257 million. They do not calculate the effect of a reduction in property tax values on state aid to education. They do consider a consumption tax on electricity as a way of recouping lost revenues.

Dr. Howard Fleeter[22] looks at 37 school districts (the 35 with generating plant plus two large city school districts) which together contain over half of the value of electric utility property in the state. He calculates the impact of a reduction in the assessment percentage on these districts using data collected from county auditors. Fleeter finds the cost to schools to be $240 million. He then looks at several different scenarios for state aid, the most generous of which would imply an increase in state aid of $139 million. The scenario which most closely resembles the one considered here estimates the cost to the state to be an additional $84.5 million.

For methodological reasons, Fleeter assumed that all electric utility property was valued at 88 percent. He notes therefore, that his calculations represent a lower boundary.[23] Information received from the Tax Department indicates that the average assessment percentage on electric utility tangible property in 1995 was around 93 percent.

On the other hand Fleeter's calculations use the actual current operating millage rates for individual school districts; whereas LBO uses the statewide average for public utility

A Word About Inventories

In addition to recommending that the assessment rate on public utility property be reduced, the final report of the Commission to Study the Ohio Economy and Tax Structure also called for the immediate elimination of the inventory tax in the state.[24] According to the Commission this would cost $500 million in FY 1995.[25]

In decreasing the assessment percentage on telephone and telecommunications property, H.B. 117 tied the assessments of such property to that of business property, so that if inventories were exempt from the tangible property tax base for general businesses, telephone and telecommunication inventories would likewise be exempt.

It is likely that any change to natural gas and electricity property taxation would also be tied to business tangible property. Consequently, LBO calculated the costs of eliminating the inventory tax on electricity, natural gas, telephone and telecommunications property. These calculations, are presented in Table 10.

The first column shows the total amount of revenue estimated from inventories at the current assessment rate; the second column shows the additional cost of eliminating the tax on inventories after the assessment rate is reduced to 25 percent. Based on these calculations, it appears that the estimated costs of exempting inventories from the tangible tax would not have to be adjusted greatly to take into account public utility inventories.

Table 10
Cost of Eliminating Tax on Public Utility Inventories

Industry	Revenue Foregone	
	TOTAL	ADDITIONAL
Electric power	$29.3	$8.3
Natural gas	7.5	2.1
Telephone	1.8	1.8
Telecommunications	1.0	1.0

Values are in million dollars.

[21] Levin and Driscoll, *op. cit.*

[22] Fleeter, *op. cit.*

[23] *Ibid.*, p.11

[24] Gary Cornia, "Tangible Business Personal Property Taxation," in Roy Bahl, ed., *Taxation and Economic Development: A Blueprint for Tax Reform in Ohio* (Columbus, Ohio: Battelle Press, 1996), pp. 699-750.

[25] *Ibid.*, p. 746

LBO's calculations of the revenue losses due to lower assessment rates on public utility property may be viewed as an upper boundary.

property. This method over estimates the revenue loss for two reasons:

- It includes all levies on public utility property — even emergency and bond levies, which are designed to raise a certain amount of revenue. If the valuation of some property subject to the levy falls, the effective rate on the remaining property rises, so that there is no revenue loss from the assessment percentage reduction to such levies.

- Taxing districts which rely heavily on public utility property tend to have lower millage rates than the statewide average. However, since electric utility property does constitute a large portion of total utility property, this caveat is to some extent implicitly taken into consideration by our calculation of the effective rate. Nevertheless, it is likely that that effective rate as applied to electric utility property is over estimated.

Consequently, LBO's calculations of the revenue losses due to lower assessment rates on electric utility property, specifically, and public utility property in general may be viewed as an upper boundary.

Paying for the Assessment Rate Reductions

This paper considers three alternative ways of dealing with the costs of reducing the assessment percentage on public utility property:

- Phasing in the assessment percentage reductions

- Finding an alternative funding source, and

- Increasing the assessment rate on other tangible property.

Phasing in the Assessment Percentage Reductions

Historically, this approach has been used a number of times to reduce assessment percentages on various types of property. Two recent actions which demonstrate alternative ways of doing this are H.B 117 of the 121st General Assembly and H.B. 630 of the 120th General Assembly.

H.B. 117 phased in lower assessment percentages on telephone company property by assessing new property at 25 percent while retaining the old assessment percentage (i.e., 88 percent) on property placed in service before tax year 1995. (However, the rate on long distance and cellular was immediately lowered to 25 percent.) This strategy attempted to minimize costs to local governments while reducing the major disincentives to investment. Due to high technological change and rapid equipment replacement, it was projected that roughly 13 percent of LEC property would be replaced each year, so that the lower assessment percentage would be virtually phased in by the year 2002.

The cost in the first year of the phase-in (calendar year 1995) was estimated to be $15 million, as opposed to the $115.7 million in lost property tax revenues that would have been incurred had the assessment rate on all LEC property been reduced to 25 percent in the first year.

H.B. 630 reduced the assessment percentage on certain merchandise inventories by 5 percentage points per year beginning in 1996; thereby eliminating the tax on these inventories by the year 1999. Reducing the assessment percent by 5 percent per year was expected to cost local governments $1.8 million in the first year, rather than the $9.0 million that the local governments would have lost

had the tax on these inventories simply been eliminated in the first year.

In H.B. 630 the annual assessment percentage reductions were subject to a "trigger," so that the assessment percentages would only be reduced if total statewide real and tangible property tax collections increased in the previous year by the greater of 4 percent or the rate of increase of the consumer price index for the same time period. Since the rate of inflation has been low, and since real property, which provides roughly 70 percent of property tax revenues and whose value has tended to increase by 6 to 7 percent per year in the state, was included in the trigger, it is unlikely that the trigger conditions would prevent the tax from being phased out by 1999.

The virtue of these two approaches is that they give the state and local governments time to prepare for the loss of property tax revenue and to come up with replacements. If for no other reason, the state would at least need revenue to fund the additional foundation requirements due to decreased taxable values in school districts. The additional revenues would, hopefully, come from the natural growth of tax revenues as the economy continues to expand.

One problem with applying this approach to public utility property is the great disparity in tax bases, as discussed above. Some local governments would have a lot more "preparation" to do than others. For example, Avon Lake City School District (CSD) in Lorain County, Gallia County LSD, and Fort Frye LSD in Washington County are three districts which depend on revenue from electric utility property to a great extent. The reductions with respect to electric utility property alone would cost them $2.8 million, $3.8 million, and $1.8 million, in property tax revenues, respectively. [26]

Avon Lake is on the guarantee (and would likely remain so under current law), so it would get no additional revenue from the state to replace what it lost under the assessment reductions. It would have to raise taxes, cut back on programs, or both. On the other hand, Gallia and Fort Frye are both on the formula; but due to the interaction of local millage rates with the foundation formula, Gallia county would have its lost revenue almost totally made up for by the state; whereas, due to its higher millage rate, only part of Fort Frye's would be made up.[27] Fleeter calculates that even at the current Foundation level, Fort Frye would have to levy an additional 10.18 mills to replace the lost revenue. Avon Lake would have to levy 6.7 mills.

In addition, given the current situation in the electric power industry (and to a lesser extent in the natural gas industry), it is not clear that the method used in H.B. 117 — which depended on a high rate of investment to phase out the higher assessment rate — would work well with regard to other public utilities. Such a change would certainly permit increased investment in the state by non utility generators; but it would not resolve the problems created by overcapacity and overvalued assets on the part of the regulated utilities. In fact, it could very well aggravate the stranded investment problem faced by the electric utilities as they try to reposition themselves for increased competition.

Finding an Alternative Funding Source

The second possible strategy for dealing with the assessment rate reduction involves devising an alternative source of funds not based on the property tax. Raising the state sales tax is one suggestion. Imposing a consumption tax on utilities is another, discussed at length by Levin and

Two recent actions of the General Assembly demonstrate alternative ways of phasing in assessment rate reductions.

[26] Fleeter, *op. cit.* p. 23.

[27] *Ibid.*

[28] Levin and Driscoll, *op. cit.*

Replacing lost local property tax revenue with state revenue could help resolve controversy over wealth-based disparities in the state's school funding program.

Driscoll.[28] The consumption tax was not considered here because of *nexus* issues and because of the practical difficulty of determining how to deal with the municipal utilities.

LBO estimates that an increase of 0.5 percent in the state sales tax rate in 1995 would have increased state revenues by $474 million — approximately the same revenue as that lost by decreasing the assessment rate on electric and natural gas property to 25 percent.

A major problem with this strategy is that the sales tax is a state tax (although it has local piggyback components) while the revenue to be replaced is from a local tax. How would the increased revenue be redirected toward the local governments?

One suggestion is that it be placed in a separate fund and distributed to local governments through a hold-harmless clause. In addition to creating significant administrative costs for the Tax Department, this method would tend to freeze existing public utility property wealth-based disparities among school districts and other local governments. Such an action would be questionable at best, in the light of the Perry County court case (DeRolph *vs.* State of Ohio, 1994) and the continuing controversy over wealth-based disparities in the state's school funding program.

While reducing the assessment percentage on public utility property seems daunting because of the amount of money involved, in fact, such a move could help school finance by reducing inter-district inequality in revenue capacity, since public utility property is so unevenly distributed between districts. If the $252.4 million (net cost to schools; see Table 9) were replaced with state dollars that were distributed through an "enhanced" foundation formula, the improvement in inter-district equity could be considerable.

Enhanced means here that the formula amount would have to be raised by a per-pupil amount that would make up for the lost local revenue source. For example, Fleeter calculates that if the assessment rate on electric property were reduced to 25 percent, but no additional GRF aid were forthcoming, the per-pupil guarantee would have to be reduced from $3,500 to $3,431. Alternatively, the guarantee could be increased by the per-pupil revenue loss[29] if revenues from statewide sales tax collections could be raised to make up the difference.

Such a proposal might work fine for school districts, but what about other local governments? Possibly some of the additional revenue raised by the tax increase could be distributed through the local government fund (LGF). Of the increased revenues received by the 0.5 percent increase in the sales tax, 70 percent could be "earmarked" for schools and 30 percent deposited in the LGF.

Again, certain local governments and school districts will be net losers — some by a great deal. To the extent that the losers are generally wealthy districts like Perry LSD, such a change could improve overall funding equity. On the other hand, the losers will also include some otherwise poor districts like Fort Frye, in which case additional compensation measures might be considered.

Increasing the Assessment Percentage on Other Property

A third approach would be to reduce the assessment rate on public utility property not to 25 percent but to some higher rate which would be set on business tangible property, such that the increased revenue from raising the rate

[29] By LBO's calculations, this would be approximately $140 per pupil, based on the net cost to schools, taking all public utility property into consideration.

on business tangible property would offset the loss in revenue from lowering the rate on public utility property.

According to LBO's calculations, an 8-percentage point increase in the assessment rate on business tangible property to 33 percent would roughly offset the loss in revenue from lowering the rate on public utility property to 33 percent. If inventories were eliminated from the tangible property tax base, the assessment rate would have to be increased by 13 percentage points (to 38 percent) to offset the loss from reducing the assessment rate on public utility property to 38 percent.

The virtue of this approach is that the lost revenue would be entirely made up from local sources. It would, in fact, require no net increase in foundation spending, although some school districts would receive more and some would receive less in basic aid.

There would, again, be winners and losers — although the losers, like Avon Lake CSD and Fort Frye LSD, would not lose as much as under the other scenarios, since the assessment rate on public utility property would not be reduced as much. Winners would include districts that had a great deal of business tangible property and little public utility property. Especially those on the guarantee which would not lose any state funds due to the increased valuation of the business tangible property. Ideally, the complementary assessment rate reductions and increases would be phased in to allow both local governments and businesses time to adjust to them.

Overall, school district disparities would most likely decrease under this scheme because public utility property is generally distributed more unevenly than business tangible property.[30] That is not strictly true, however, especially for very low wealth districts. (Due to the apportionment method of valuation, public utility property is more evenly distributed than business tangible property in low wealth districts.) In any case, since the reliance on local funding would remain the same in the aggregate, any improvements here would not be as great as under the second scenario.

Increasing the assessment rate on all business tangible property to 33 percent would roughly offset the revenue lost from reducing the assessment rate on public utility property to the same rate.

[30] For example, according to Tax Department data for 1995, the average public utility property value per pupil was $8,045, or 9.3 percent of the average valuation per pupil. The maximum, however, was $219,433 for Perry Local School District (LSD) in Lake County, which was 27 times the average. In the same time period, the per pupil taxable value of business tangible property in the school district with the highest valuation was only 15 times the average for the state.

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