

GAO

Report to the Honorable  
Robert T. Matsui, House of  
Representatives

September 1991

# PUBLIC UTILITIES

## Disposition of Excess Deferred Taxes







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General Government Division

B-242931

September 27, 1991

The Honorable Robert T. Matsui  
House of Representatives

Dear Mr. Matsui:

In response to your request, this report presents information about the treatment of privately owned<sup>1</sup> public utilities' excess deferred tax reserves created by the Tax Reform Act of 1986. Excess deferred taxes were created when this act reduced the maximum corporate income tax rate from 46 percent to 34 percent and thereby cancelled some future expected income tax payments of privately owned utilities. Section 203(e) of the Tax Reform Act of 1986 requires that the return of excess deferred taxes to ratepayers be normalized. Under normalization accounting rules,<sup>2</sup> utilities transfer excess deferred taxes to ratepayers through reductions in utility service rates over a period at least as long as the remaining life of the capital assets that gave rise to them. Congress chose normalization rather than flow-through treatment, which permits a more rapid return of the excess deferred taxes to ratepayers. Under flow-through accounting for the return of excess deferred taxes, public utility commissions would determine how rapidly the taxes would be returned, which could range from an immediate, one-time flow-through to flow-through over several years.

As agreed, the report (1) describes the origin of excess deferred taxes and how utilities may and may not use them, including any restrictions on utilities' use of excess deferred taxes to diversify into nonutility activities; (2) provides data on excess deferred tax balances and estimates how fast they can be passed on to utility customers under normalization; (3) discusses policy issues involving normalization treatment for deferred and excess deferred taxes; (4) describes the benefits and costs of the normalization requirement for utilities and utility customers; and (5) describes the likely reaction of state public utility commissions if section 203(e) was repealed. These matters are addressed in this letter. The appendixes provide additional detail on certain topics. In performing our work, we reviewed published and unpublished data and interviewed

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<sup>1</sup>Privately owned public utility companies, like other privately owned enterprises, are owned by investors and pay corporate income taxes. In contrast, publicly owned public utility companies, including federal, state, and municipally owned utilities and some mutual or cooperative companies producing utility services, do not pay income taxes.

<sup>2</sup>In setting its rates, a utility is required to follow certain normalization rules for deferred and excess deferred taxes in order to be eligible to use accelerated depreciation for its utility-related property.

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utility tax and regulatory policy experts, federal regulatory commission staff, and state public utility commission staff in several states.

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## Background

Excess deferred taxes for privately owned public utilities were created when corporate tax rate reductions were implemented in 1987. Excess deferred taxes are the portion of previously deferred taxes that, according to the Tax Reform Act of 1986, no longer need to be paid. Because excess deferred taxes are derived from deferred taxes, deferred taxes must be understood before issues related to excess deferred taxes can be properly considered. Utilities' deferred taxes arise from differences in how their capital assets are depreciated for utility ratemaking purposes versus how they are depreciated for federal income tax purposes.<sup>3</sup>

Privately owned public utilities, including electric, telephone, gas pipeline, local gas distribution, and water, are regulated by state and federal regulatory commissions. To obtain reasonable rates for consumers as well as a stable supply of services, regulators allow utilities to recover their operating expenses and earn a fair rate of return on their investment. To earn a fair rate of return on their investment, utilities are allowed to charge ratepayers an approved rate of return on their rate base.<sup>4</sup>

Depreciation charges and taxes are operating expenses. Utilities almost always use straight-line depreciation to determine the depreciation charges that are included in operating expenses.<sup>5</sup> In contrast, accelerated depreciation deductions are permitted by the Internal Revenue Code for determining taxes payable.<sup>6</sup> This means that, depending on ratemaking treatment, a utility's income taxes payable in a period may differ from its income tax expense for the period that it records for ratemaking purposes.

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<sup>3</sup>Deferred and excess deferred taxes arise from sources other than accelerated depreciation as well. However, this report is concerned only with the deferred taxes that result from a utility's use of accelerated depreciation.

<sup>4</sup>A utility's rate base is the plant facilities, working capital, and other assets required to provide utility services to customers. These assets have been supplied by investors.

<sup>5</sup>The straight-line method distributes depreciation charges over the expected service life of a unit of property in equal annual amounts.

<sup>6</sup>In comparison with the straight-line method of depreciation, under accelerated methods larger charges are made in the earlier years of an asset's life and smaller charges are made later.

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Due to accelerated depreciation's larger depreciation deductions early in an asset's life, using accelerated depreciation when computing taxable income is more favorable to a company than using straight-line depreciation. The large early deductions result in reduced taxes payable during the early years of an asset's life followed by corresponding increases in taxes payable during the later years of the asset's life. The same amount of taxes eventually must be paid using either accelerated or straight-line depreciation as long as the tax rate is unchanged. However, the early-period tax reductions provide companies that use accelerated depreciation with what amounts in effect to an interest-free loan equal to the amount of their deferred taxes. Because money has a positive time value, using accelerated depreciation for tax purposes has the effect of reducing the after-tax cost of capital for utilities using accelerated depreciation. Absent regulatory action, utilities would receive the benefit of the lower cost of capital and the benefit would equal the interest that could be earned (i.e., the imputed interest) on the interest-free loan from the federal government.<sup>7</sup>

Due to restrictions imposed upon public utilities, however, their benefit from accelerated depreciation differs from that afforded to other firms. Because they do not believe ratepayers should pay a rate of return on an interest-free loan, regulators generally require utilities to pass on benefits from deferring tax payments to their ratepayers in the form of reduced utility charges. The method regulators generally use to pass on benefits to ratepayers is to deny a utility an approved rate of return on its deferred taxes. This is generally done by reducing the utility's rate base each year by an amount equal to the utility's aggregate deferred taxes. Although their policies have varied in the past, as of 1989 all state utility regulatory commissions required utilities to pass through the benefits from tax deferral to their ratepayers through this method.

Although there is widespread agreement that benefits from accelerated depreciation should be passed on to ratepayers, views differ on the appropriate speed. In principle, regulators could require that all current-period tax reductions utilities receive from accelerated depreciation be passed on immediately to ratepayers in the form of lower rates. This practice is referred to as the "immediate flow-through" of deferred taxes. Less rapid flow-through options, such as flow-through over a 3- or 5-year period, also can be devised.

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<sup>7</sup>Alternatively, the utility's benefit can be described as the interest cost it would have had to pay to borrow the funds at market rates of interest.

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Alternatively, regulators could permit the utility to pass through the benefits of accelerated depreciation to ratepayers over a period at least as long as the life of the asset being depreciated. This approach is referred to as the “normalization” of deferred taxes. Depending on the service life of the asset, the period over which the benefits of accelerated depreciation could be passed through to ratepayers could extend up to 30 or more years.

Under normalization, a utility collects more from ratepayers to cover its tax obligation early in the life of an asset than the utility currently must pay in taxes. The difference is accounted for in a deferred tax account, or reserve.<sup>8</sup> If tax rates are constant, deferred taxes for this asset are built up in the account and then drawn down to zero over the asset’s life as lower tax charges during the asset’s early years are followed by higher taxes during its later years. The tax benefit attributable to taking accelerated depreciation on this asset may be thought of as a “loan” from the government to the corporate taxpayer. The deferred tax reserve is built up as the utility “borrows” from the government and then the deferred tax reserve is drawn down as the utility pays off the loan.<sup>9</sup> Figure 1 illustrates how a deferred tax reserve is built up and then drawn down over the life of a capital asset—in this case, a hypothetical 10-year lived \$100 million utility investment—when straight-line depreciation (over the life of the asset) is used in determining tax expense for ratemaking purposes, and an accelerated cost recovery system (ACRS) is used in determining taxes payable.<sup>10</sup>

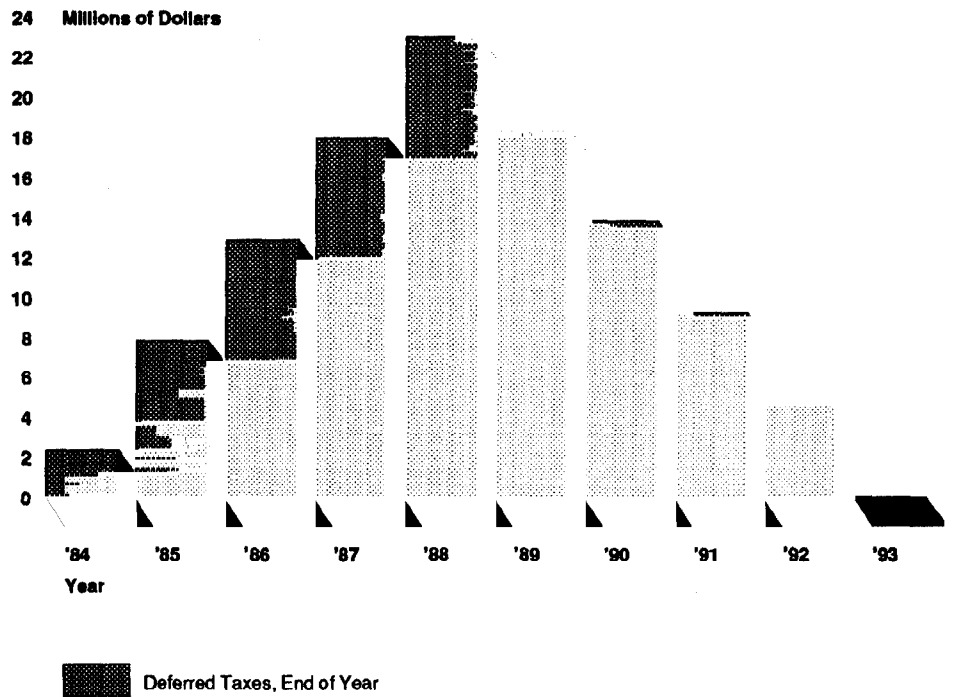
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<sup>8</sup>The money received from ratepayers under normalization is not escrowed or accumulated in a savings account. A deferred tax account represents the claim on assets needed to satisfy the normalization utility’s liability to pay taxes in the future. In contrast, flow-through utilities do not have deferred tax accounts. Instead, they disclose in notes on their balance sheet the net cumulative amount of their income tax timing differences.

<sup>9</sup>Another perspective is that, under normalization regulatory treatment, the deferred taxes from accelerated depreciation should be thought of as a loan from current-period ratepayers to the utility. This is because ratepayers are charged for taxes early in the life of the investment to build up a deferred tax reserve to be used to pay taxes that may become due later in the life of the investment.

<sup>10</sup>As a result of the tax legislation passed in 1981, companies generally are required to use ACRS depreciation for tax purposes. For investments made before 1981, other forms of accelerated depreciation—such as the double-declining balance method or the sum of the years’ digits method—could have been used to determine taxes payable. ACRS depreciation is more rapid than previously authorized forms of depreciation.

Figure 1: Deferred Tax Account



Note: The illustration is for a hypothetical \$100 million utility investment that would be fully depreciated after 10 years, but under ACRS it is fully depreciated for tax purposes after 5 years. However, most utility assets have longer lives.

Source: GAO calculation. The calculation assumes an income tax rate of .46 in each year of the life of the investment.

Because the utility's aggregate deferred tax account has a positive balance throughout the life of an asset, its subtraction from the utility's rate base reduces customer charges, thereby passing the benefits from accelerated depreciation on to ratepayers throughout the asset's life. For the hypothetical utility investment whose deferred taxes are shown in figure 1, figure 2 compares ratepayers' annual benefits, i.e., reductions in utility bills, from accelerated depreciation under normalization

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versus flow-through of deferred taxes.<sup>11</sup> Figure 2 compares the reduction in ratepayer charges under each policy relative to the charges ratepayers would have faced had the utility made the same investment but not used the version of accelerated depreciation illustrated here.

Figure 2 illustrates that, under either normalization or flow-through, utility rates are reduced and ratepayers benefit from the lower cost of capital that accelerated depreciation affords. However, the timing of the rate reductions differs. Normalization provides tax benefits to ratepayers smoothly over the life of the investment (assuming deferred taxes are subtracted from the rate base). In contrast, flow-through provides large benefits to ratepayers during the first half of the investment's life. Later, however, charges to ratepayers will be much higher than under normalization because they will be charged to pay the utility's deferred taxes. Under certain conditions,<sup>12</sup> the discounted benefits—for those who are ratepayers over the entire 10-year life of the investment—will be the same under either flow-through or normalization.

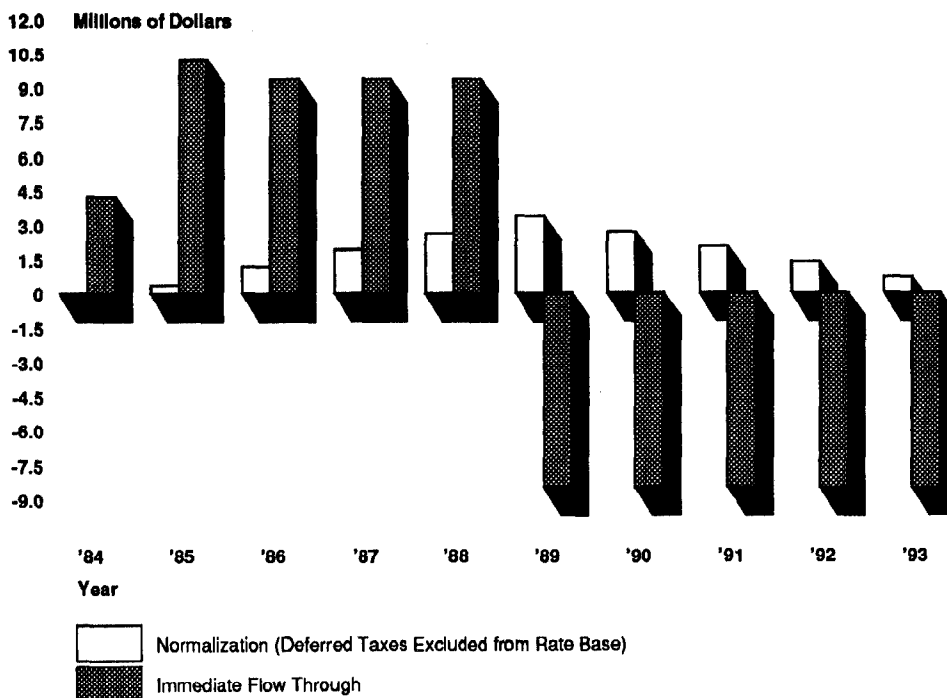
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<sup>11</sup>A comparison of 1984 data in figures 1 and 2 indicates that a \$2.3 million deferred tax account balance ultimately will give rise to ratepayer savings in that year of \$4.2 million under flow-through regulatory treatment. As figure 1 shows, in the first year of the hypothetical investment, there are \$2.3 million in deferred taxes. The ultimate reduction in ratepayer charges, however, is larger than the initial tax savings resulting from accelerated depreciation: a \$1 reduction in taxes leads to a \$1 reduction in utility rates, which, in turn, leads to a further reduction in taxes, and so on.

<sup>12</sup>A sufficient condition is one in which the ratepayers' discount rate, or the rate of return they could earn on their best possible investment of funds, is identical to the utility's tax-adjusted rate of return on rate base and thus equal to the return the ratepayer "earns" through the normalization of deferred taxes (assuming they are subtracted from the utility's rate base).



**Figure 2: Ratepayers' Benefits From Accelerated Depreciation Under Alternative Treatments of Deferred Taxes**



Source: GAO calculation for a hypothetical 10-year lived, \$100 million utility investment made in 1984, assuming an income tax rate of .46 in each year.

From the utility's perspective, its cash flow is higher under normalization than it would have been had it flowed through deferred taxes. This results because it is permitted to include a charge for income taxes in its rates that exceeds the actual amount of income taxes it pays during the same accounting period. Because of this difference in cash flow, some in the financial community consider the future earnings of utilities that normalize deferred taxes as less risky than those of flow-through utilities.<sup>13</sup> Normalization utilities have made a greater provision for future expected tax payments.

In contrast, because flow-through utilities do not accumulate deferred taxes, they may be viewed as more likely than normalization utilities to require future rate increases. Investors may be unsure whether regulators will permit flow-through utilities the rate increases necessary to pay future taxes or, if they provide them, whether they will be provided

<sup>13</sup>This argument does not apply to the normalization of excess deferred taxes because these taxes no longer must be paid.

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only with a lag. Therefore, to attract debt and equity capital, flow-through utilities would have to offer a higher rate of return than normalization utilities. Thus, normalization utilities can raise capital at a lower cost than flow-through utilities.

However, experts have been unable to estimate the cash-flow benefit to utilities of normalization treatment chiefly because data are lacking for two ratemaking practices. These practices are (1) the degree to which regulatory commissions adjust utilities' allowed rates of return on equity to compensate for any perceived differences in risk or financial strength attributable to the alternative regulatory treatments and (2), in cases in which rates are adjusted, the lag in doing so.

Since 1946 when accelerated depreciation for tax purposes first became available, utility regulators and others have disputed whether this tax alternative should have been made available to utilities and, if so, how the benefits should be transferred to utility ratepayers. Congress has continued to offer utilities the accelerated depreciation option for tax purposes. However, beginning in 1969 and particularly since 1981, Congress has required that the benefits from accelerated depreciation be passed on to ratepayers using normalization. In effect, the Tax Reform Act of 1969 restricted the use of flow-through treatment for accelerated depreciation to utilities that already were using it. These restrictions were extended under a 1981 law that denied all utilities the right to use accelerated depreciation for tax purposes if they did not normalize their current-period tax reductions.<sup>14</sup> (See app. I.)

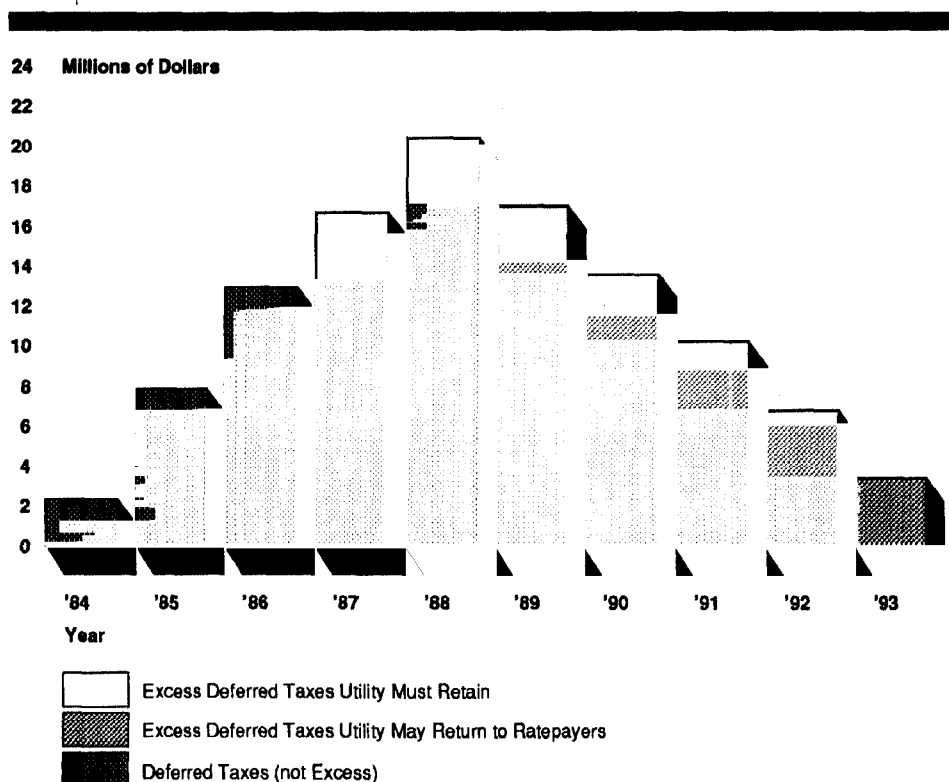
In 1986, when the Tax Reform Act reduced the maximum corporate tax rate from 46 percent to 34 percent, some of the taxes that utilities had deferred in accord with accelerated depreciation became excess—i.e., would never have to be paid. When the tax rate change was implemented in mid-1987, an estimated 26 percent of each utility's aggregate deferred tax account attributable to accelerated depreciation became excess. For the hypothetical investment whose deferred tax reserve is shown in figure 3, the light gray plus white areas represent the portion of deferred taxes that became excess with the July 1, 1987, tax rate reduction. The light gray area alone represents the portion of excess

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<sup>14</sup>The Economic Recovery Tax Act of 1981, sections 201(a) and 209(d), states that public utility property put in service after 1980 will not qualify as recovery property (i.e., eligible for accelerated depreciation for tax purposes) unless the tax benefits of the ACRS are normalized in setting the utility's rates.

deferred taxes that may be returned to ratepayers in each period under the normalization requirements of section 203(e).<sup>15</sup>

**Figure 3: Deferred Tax Account With Excess Deferred Taxes**



Source: GAO calculation for a hypothetical 10-year lived, \$100 million utility investment made in 1984, assuming an income tax rate of .46 between 1984 and 1986 and a rate of .34 thereafter.

As with deferred taxes, both Congress and regulators agree that the benefits from excess deferred taxes should be distributed to ratepayers, but they disagree on how quickly. In section 203(e), Congress specified limits on the amount of the excess deferred taxes created by the 1986 act that can be returned to ratepayers each year if utilities wish to continue using accelerated depreciation for tax purposes. In effect, section 203(e) requires that excess deferred taxes attributable to accelerated depreciation be normalized. It specifies that these excess deferred taxes

<sup>15</sup>Even though the excess in the reserve for this investment was created when the tax rate changed in 1987, under normalization treatment the utility is not allowed to begin returning the excess to ratepayers until after the asset's "switching point" has been reached in 1988. An asset's switching point is reached when the amount of tax depreciation becomes less than the amount of depreciation determined by using regulatory depreciation methods.

can be paid to ratepayers at similar times and in amounts similar to what the utility would have paid in deferred taxes to the Department of the Treasury if the tax rate reduction had not made them excess. Thus, section 203(e) prohibits flowing through excess deferred taxes and establishes the minimum period before the taxes can be returned to ratepayers. It does not prohibit regulators from allowing utilities to retain excess deferred taxes for a period longer than this minimum, or even to carry them forward indefinitely. Section 203(e) has been controversial, and bills have been introduced in Congress to remove this restriction.

## Results in Brief

We calculated public utilities' excess deferred taxes to be approximately \$17.9 billion at the end of 1987. This total represented about 6 percent of these utilities' 1987 aggregate gross revenues from their utility-related businesses. The period over which these excess deferred taxes can be passed on to ratepayers under the normalization requirement of section 203(e) varies by utility industry and for companies within industries. By the end of the year 2000, about 69 percent of all electric, telephone, and gas pipeline excess deferred taxes can be returned to ratepayers if regulators order the fastest return possible under current law (i.e., under normalization).

Congress must consider several policy issues when determining the disposition of excess deferred taxes. Some advocates of normalization treatment argue that it, rather than flow-through for excess deferred taxes, preserves the distribution pattern of capital cost reductions among ratepayers that Congress intended when it extended accelerated depreciation to public utilities and required that deferred taxes be normalized. Flowing through excess deferred taxes would change the distribution pattern of capital cost reductions. Some normalization advocates also note that normalizing the return of excess deferred taxes is consistent with the view that the federal government's right to determine the effects of its tax policies takes precedence over state regulatory commissions' authority to determine ratemaking treatment for utilities. In addition, because flowing through excess deferred taxes is done by reducing ratepayers' bills, utilities may have to borrow or otherwise raise funds to offset the lost cash flow from their ratepayers. If funds are raised at a higher cost, utilities may lose money if regulators do not fully compensate them.

On the other hand, some state utility regulators maintain that their ability to balance ratepayers' and utilities' interests is diminished by the uniform requirement that all utilities normalize the return of excess deferred taxes. If allowed to set the speed with which these taxes would

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be returned, some regulatory commissions would likely flow them back more quickly than current law permits. The period established by regulatory commissions to flow back the taxes would likely vary among states. States could tailor their decisions to the financial circumstances of particular utility industries and individual companies within industries. Advocates of flow-through also argue that, unlike deferred taxes, the excess deferred taxes do not have to be paid to the federal government, thereby eliminating any federal policy interest in their disposition.

Equity issues arise as well. Normalization advocates see the gradual return of excess deferred taxes to ratepayers over the life of capital equipment as an equitable sharing of the depreciation benefits over time. Normalization spreads the benefit to ratepayers in proportion to the services they are provided from the capital assets being depreciated. However, flow-through advocates note that normalizing the return of excess deferred taxes does not necessarily return them to those ratepayers who originally overpaid them. Flowing them through would be more likely to achieve that goal. Flow-through advocates also argue that once the tax rate is reduced, thus creating excesses in utilities' deferred tax accounts, it is unfair that consumers should continue to be charged to further increase these deferred tax accounts, as sometimes occurs.

Although the policy issues have prompted a robust debate, this debate cannot be resolved objectively because differing criteria can be applied to judge the desirability of the results. The practical significance of a federal policy change, however, may not be great. First, the impact on individual ratepayers may be relatively slight. Except for a few commercial and industrial ratepayers, the amounts are not large on an individual ratepayer basis (see table V.2 in app. V). For example, if the major electric companies' entire excess deferred tax balance had been returned to their ratepayers over a 3-year period beginning in 1988, residential, commercial, and industrial electric utility bills would have been reduced, on average, 1.9 percent for these 3 years.

Utilities could suffer reductions in cash flow from a change to flowing through excess deferred taxes. Whether they would in fact suffer a loss, and its extent, would depend on regulators' decisions. In general, however, adverse effects of such a rapid return of excess deferred taxes would be reduced by normal state regulatory practices. For example, a utility's cash flow would increase because its rate base would expand in proportion to the flow-through of its excess deferred taxes, thereby permitting higher ratepayer charges and utility revenues. According to public utility commission staff we interviewed, if utilities with very

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large excess deferred tax amounts would be substantially harmed by a more rapid return of excess deferred taxes, regulators would likely permit them to stretch out the return period.

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## Size of Excess Deferred Tax Balances

Excess deferred taxes for investor-owned utilities as a whole were approximately \$17.9 billion at the end of 1987 according to our analysis of data from government agencies and utility associations. Under the normalization rule specified in section 203(e), utilities' holdings of excess deferred taxes could have been reduced to no less than about \$16.6 billion at the end of 1988. We did not survey individual utility companies to determine whether they have passed on to their customers the maximum allowable amount of excess deferred taxes since 1987 because this was beyond the scope of our study. At the end of 1987, electric utilities held about 48 percent of all excess deferred taxes, and telephone utilities held another 40 percent. Gas and water utilities held the remaining 12 percent. (See app. II.)

Regardless of whether normalization treatment or an immediate return of excess deferred taxes to ratepayers is used, for the average individual ratepayer the amount of excess deferred taxes that can be returned is not large. For example, if all major electric utilities had flowed back their excess deferred taxes to ratepayers over 3 years beginning in 1988, ratepayers' bills would have been reduced, on average, by only about 1.9 percent.

Our estimate of aggregate excess deferred taxes differs slightly from the National Association of Regulatory Utility Commissioners' (NARUC) 1988 estimate of \$19 billion. NARUC relied on published data that included a small amount of deferred taxes from sources other than accelerated depreciation. Overall, the data NARUC used had four minor limitations that tended to offset one another. Consequently, NARUC's estimate was reasonably accurate even though its methodology had limitations. (See app. III.)

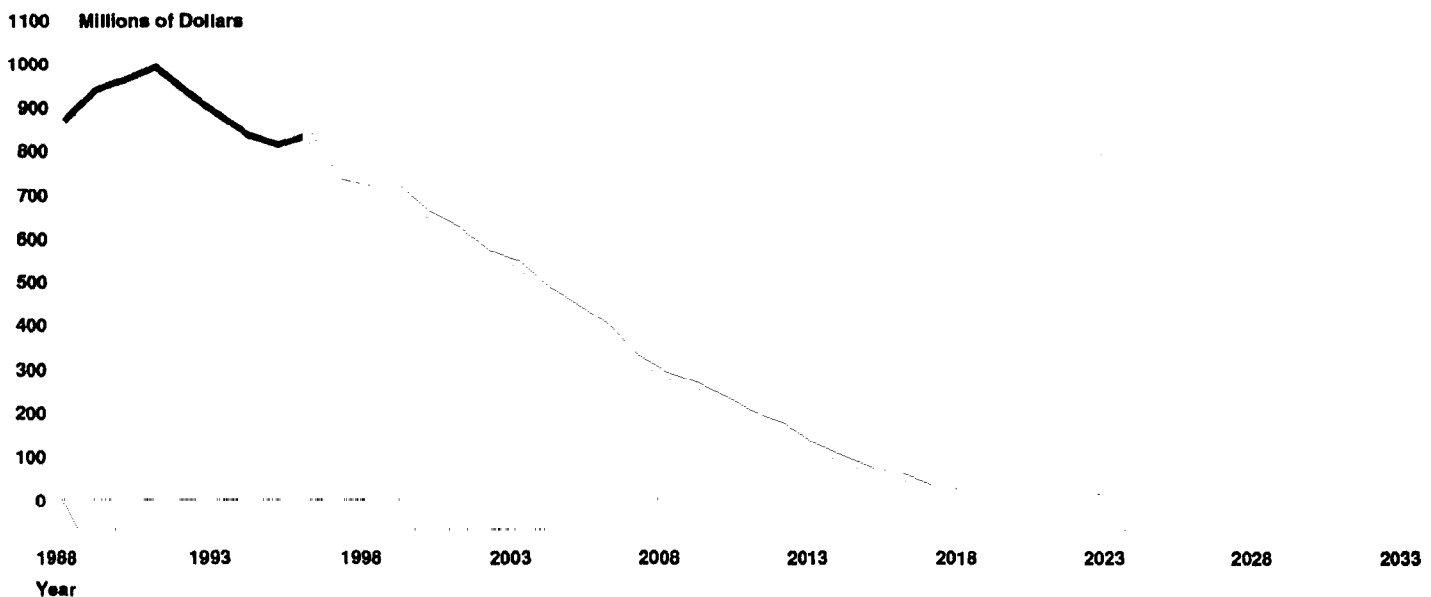
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## Return Period for Excess Deferred Taxes Under Normalization

The period over which excess deferred taxes will be returned to ratepayers under the normalization requirement of section 203(e) varies by utility industry and for companies within industries. The length of the period depends on the regulatory lives of the capital and the historical pattern of investment of individual firms in the industry. However, under section 203(e) requirements, the fastest return of excess deferred taxes for all electric, telephone, and gas pipeline utilities combined

would return about 69 percent over the period from mid-1987 to the end of the year 2000. Figure 4 shows the fastest allowed return pattern permitted under section 203(e) for the excess deferred taxes of the electric, telephone, and gas pipeline industries combined.<sup>16</sup>

**Figure 4: The Fastest Allowed Return Pattern for Excess Deferred Taxes: Electric, Telephone, and Gas Pipelines Combined**



Note: American Telephone and Telegraph (AT&T) excess deferred taxes not included.

Sources: Energy Information Administration (EIA), United States Telephone Association (USTA), Federal Energy Regulatory Commission (FERC).

For the electric utility industry alone, the year in which the maximum amount of excess deferred taxes can be returned to customers is 2000. Over the period from mid-1987 to the end of 2000, about 48 percent of electric utility excess deferred taxes can be returned to ratepayers under normalization. By the end of 2010, about 91 percent of excess deferred taxes could be returned. The earliest that all electric utility excess deferred taxes can be returned is 2033, when the last equipment that gave rise to the excess deferred taxes will be fully depreciated.

<sup>16</sup>Section 203(e) in effect sets the fastest pattern that excess taxes may be returned to ratepayers but does not restrict regulators from spreading the return over longer periods, or allowing utilities to retain them permanently.

For telephone companies, the peak years for the allowed return of excess deferred taxes occur earlier, in 1990 and 1991, and all excess deferred taxes legally can be paid back to ratepayers by the end of 2007. By the end of 1992, about 54 percent of telephone utility excess deferred taxes can be returned to ratepayers, and by 1999 about 90 percent can be paid back. The earlier peak and final pay back dates for telephone companies result, at least in part, from the shorter expected regulatory life of telephone equipment versus electric utility plant and equipment. At the time of the 1986 act, the average life of new telephone equipment was about 15 years. New electric utility plant and equipment last on average 30 years, although some last as long as 51 years.

Interstate gas pipeline companies' peak year for pay back of excess deferred taxes is 1992, and all pipeline excess deferred taxes legally could be paid back by the end of 2023. About 48 percent of pipeline excess deferred taxes could be paid back by 1994 and 90 percent by the end of 2003. (See app. IV.)

## Issues Concerning Payback of Deferred and Excess Deferred Taxes

Over the years since accelerated depreciation was made available to public utilities for tax purposes, many policy arguments have been raised concerning how the deferred taxes associated with accelerated depreciation should be treated by regulators.<sup>17</sup> Most of these arguments also apply when considering how excess deferred taxes should be treated.

## Capital Cost Reductions for Privately Owned Public Utilities

The early-period tax reduction that accelerated depreciation affords companies making capital investments has the effect of reducing their after-tax cost of capital. When Congress extended accelerated depreciation for tax purposes to public utilities, it judged that these companies should experience a reduction in their cost of capital similar to the reduction other companies received from accelerated depreciation. Extending the benefits of accelerated depreciation to public utilities avoids putting them at a disadvantage in competing for funds in the capital markets.

<sup>17</sup>For a summary of arguments supporting normalization and flow-through see the following: Donald W. Kiefer, *Taxes in Public Utility Rates: Phantom Taxes or Real Tax Benefits?*, U.S. Library of Congress, Congressional Research Service, Report No. 84-211E (Nov. 30, 1984) and *Accelerated Depreciation and the Investment Tax Credit in the Public Utility Industry: A Background Analysis*, The National Regulatory Research Institute (Apr. 1979), pp. 4-10 and 84-89.



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Because utilities are a capital-intensive sector of the economy, reducing their cost of capital could have a significant effect on their overall costs. Because utilities' capital costs are borne by ratepayers, under normalization treatment accompanied by normal regulatory practices, accelerated depreciation results in lower capital costs for those who are ratepayers during the lives of the assets being depreciated.

Some utility regulators, however, did not believe accelerated depreciation should be extended to public utilities. They maintained that through their oversight of utility capital investments, commissions already provided utilities adequate incentives to invest as necessary to meet their customers' needs. And when utilities did use accelerated depreciation for tax purposes, commissions often required utilities to immediately flow through the tax benefits to current-period ratepayers. Under immediate flow-through, utilities did receive a reduction in their cost of capital. But they were required to immediately pass this reduced cost through to their ratepayers via current-period rate reductions. Beginning with the Tax Reform Act of 1969 and culminating in the Economic Recovery Tax Act of 1981, Congress, in effect, gradually ended flow-through regulatory treatment for deferred taxes.

Some advocates of normalization treatment of excess deferred taxes argue that normalizing the return of excess deferred taxes preserves the distribution pattern among ratepayers of rate reductions that are due to utility capital cost reductions. These advocates believe that this distribution pattern is what Congress intended when it extended accelerated depreciation to public utilities and required that deferred taxes be normalized. When the tax rate was reduced in 1987, a portion of the deferred tax reserve, the white area in 1987 in figure 3, no longer was owed to the government. Under a policy of normalization for the return of excess deferred taxes, the utility would be required to pay the money no longer owed the government to its ratepayers instead, but in approximately the same time pattern as the utility originally had expected to pay it to the government. That is, under section 203(e), the utility would be allowed to return only the light gray portion of the excess shown in figure 3 to ratepayers. In contrast, under a flow-through policy for excess deferred taxes, the utility might have to pay the excess deferred taxes to ratepayers much faster.<sup>18</sup> A flow-through policy would change the distribution pattern of the capital cost reduction among ratepayers.

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<sup>18</sup>Regulators would decide the exact speed of the flow-through.

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Having to relinquish excess deferred taxes earlier than it might have anticipated could be considered a retroactive reduction in benefits to the utility. A retroactive reduction in benefits would not affect utilities' past decisions to invest in capital equipment. However, if excess deferred taxes are flowed through, utilities' confidence in the future benefits from using accelerated depreciation might be eroded.

Requiring utilities that have already used or invested the deferred taxes that became excess to now flow them through would reduce their cash flow from ratepayers. Whether regulatory commissions would permit them to fully and timely offset this cash-flow reduction is unknown. Some utility representatives do not believe that utilities would be fully indemnified for their lost cash flow, in particular, if replacement funds could only be acquired at a higher cost. On the other hand, regulators maintain that they would respond to the reasonable cash-flow needs of the utilities.

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## State Utility Regulation and Federal Tax Policy

Normalization supporters argue that because the federal government extended accelerated depreciation to public utilities, it is appropriate for the government to determine the manner in which this benefit will pass through to ratepayers. Because excess deferred tax reserves also result from Congress's decisions regarding accelerated depreciation and corporate tax rates, normalization supporters argue that it is appropriate for Congress to determine the effects of the tax rate reduction on utilities and ratepayers. Congress could have left the issue for regulators to determine. Instead, it required normalizing the return of excess deferred taxes.

Flow-through supporters contend that it is inappropriate for federal tax policy to attempt to influence the ratemaking practices of state public utility commissions. Regulatory commissions do not believe that Congress should infringe on their historical role of determining ratemaking policy for public utilities. They maintain that when Congress reduced the corporate tax rate it cancelled some of the future expected tax payments of utilities and therefore eliminated the federal interest in the excess deferred taxes.

Regulatory commissions said they are in the best position to balance the desire for low current rates with the need to maintain the long-term financial health of utilities. Regulators authorized the utility rates that collected the now excess deferred taxes from ratepayers and believe that decisions about their disposition should be within their purview.

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They regulate all aspects of utility ratemaking and some believe that their effectiveness may be hindered if this factor in utility cost of service is not also under their control.

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## Equitable Treatment of Ratepayers Over Time

Advocates of normalization and flow-through policies disagree about how utilities' excess deferred taxes should be treated for ratemaking purposes. They agree that a reduction in the corporate rate makes a portion of utilities' accumulated deferred taxes excess because a portion of prior tax deferrals would no longer have to be paid. And they agree that, in keeping with the logic of public utility ratemaking, which exists to prevent natural monopolies from earning "excess profits," this windfall should be used to reduce utility rates. However, just as they disagree on the proper regulatory treatment of deferred taxes, advocates of normalization and flow-through disagree on the time pattern for the distribution to ratepayers of the windfall created when some deferred taxes become excess.

Flow-through advocates believe that excess deferred taxes should be returned as closely as possible to those ratepayers who, in light of the subsequent rate reduction, overpaid their taxes. A policy of immediately flowing through excess deferred taxes to current-period ratepayers would achieve this. Normalization advocates reject this criterion for distributing excess deferred taxes among ratepayers. They view flowing through excess deferred taxes as calling in the loan that accelerated depreciation affords utilities before its due date. Normalization advocates believe that the benefits of the capital cost reduction should be spread to ratepayers over the life of the asset that gave rise to the excess deferred taxes. They believe this represents the proper allocation of charges to those who benefit from the capital asset.

Some advocates of flowing through excess deferred taxes argue that it is inappropriate for a utility to continue accumulating deferred taxes while it still retains excess deferred taxes following a tax rate reduction. Under current regulatory policy for the normalization of deferred taxes, even after the tax rate has been reduced, a utility asset's deferred taxes continue to grow (albeit at a lower rate) during the entire first half of the asset's life. Those advocating flow-through regulatory treatment for excess deferred taxes argue that continued growth in a utility's deferred taxes after some have been made excess is unfair to current ratepayers. They believe that if there is already enough in a utility's deferred tax account to cover its expected future taxes payable, ratepayers should not continue to be charged to increase the account. Yet under section

203(e), the continued accumulation of deferred taxes is required for utility assets that have not yet reached their "switching point." Advocates of normalizing excess deferred taxes do not favor suspending further collection of deferred taxes from ratepayers. They note that suspending further collection would be tantamount to flowing through excess deferred taxes.<sup>19</sup>

In addition, some normalization advocates note that currently some utilities' deferred tax accounts are not large enough to cover their expected future payables. Over the years, some utilities have been required to flow through deferred taxes, in particular those attributable to accelerated depreciation taken before 1981 in states that required flow-through. These deferrals result in expected future taxes payable. No provision has been made for these future payables that therefore must be collected from future customers.

## Benefits and Costs of the Tax Treatment of Excess Deferred Taxes

On average, utilities benefit from deferred taxes because the increased cash flow from being permitted to charge ratepayers an amount for income taxes that exceeds their taxes payable enables them to raise capital less expensively than flow-through utilities. Because all excess deferred taxes were formerly deferred taxes, retaining excess deferred taxes continues the cash-flow benefits deferred taxes afford. As noted on page 8, data are unavailable to estimate the size of the cash-flow benefits of deferred taxes. This limitation applies to excess deferred taxes as well.

Some observers conclude that excess deferred taxes provide utilities another benefit—a source of funds for diversification. We did not find any legal restrictions on the investments utilities can make with excess deferred tax balances per se, including investments in nonutility activities. However, under normalization ratemaking procedures the net effect of the excess deferred taxes for the utility, its shareholders, and its ratepayers is the same as if the excess deferred taxes were invested in the utility's assets. Normalization procedures, which include subtracting the excess deferred taxes from the utility's rate base, in essence treat the excess deferred taxes as if they are invested in the utility's plant and equipment. Because of this regulatory practice of public utility commissions, if an additional investment in nonutility activities is to be made,

<sup>19</sup>For a summary of arguments supporting normalization and flow-through policies for utilities' excess deferred taxes, see Donald W. Kiefer, *The Tax Reform Act of 1986: The Effects on Public Utilities*, U.S. Library of Congress, Congressional Research Service, Report No. 87-224E (Mar. 18, 1987), pp. 1-6.

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the utility must find a source of funds other than the excess deferred taxes. (See app. VI.)

Whether ratepayers benefit under normalization treatment or flow-through of excess deferred taxes depends principally on two factors: when they will be ratepayers and their investment and consumption alternatives. Because excess deferred taxes usually are small on an individual ratepayer basis, ratepayers' benefits from either treatment of the taxes would be modest. Under normalization with excess deferred taxes treated as a rate base deduction, a utility's ratepayers, in effect, earn the utility's allowed rate of return times the excess deferred tax portion of the utility's rate base. These earnings are realized through the lower utility rates they enjoy as a result of regulators denying utilities a rate of return on their excess deferred tax balances.

Those who would be ratepayers only during the early period during which funds would be flowed through would most likely be better off under flow-through. Those who would be ratepayers only after a flow-through is completed would not receive any of the benefits and would pay higher rates due to the increase in the rate base after the excess deferred tax balance is depleted. For those who would be ratepayers throughout the remaining life of the capital assets that gave rise to the excess deferred taxes (full-period ratepayers), their preference between flow-through and normalization would depend on their benefits from alternative uses of these funds in comparison with their benefit from lower utility rates during the period utilities retained the excess deferred taxes. For example, if full-period ratepayers have consumer debt that they pay high rates of interest on, they would be better off receiving excess deferred taxes under flow-through and paying down their debt. On the other hand, if full-period ratepayers have a net return on their savings that falls short of their earnings by leaving their money in the utility, they would prefer normalization.

To the extent that market conditions require business ratepayers to pass on cost savings to their customers, they should be indifferent between normalization treatment and flow-through of excess deferred taxes, regardless of the time pattern of the cost savings. However, if business ratepayers do not pass on cost savings or do so only with a lag, their preference between normalization and flow-through policy would depend on the same considerations as for residential ratepayers. However, unlike residential ratepayers, business ratepayers do not experience reduced utility rates as tax-free earnings. Reductions in their utility

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rates cause them to lose an equivalent business expense tax deduction. (See app. V.)

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## State Public Utility Commissions' Likely Responses to Repeal of Section 203(E)

If section 203(e) of the 1986 Tax Reform Act was repealed, state public utility commissions could order the return of utilities' excess deferred tax balances to ratepayers at a faster rate than under normalization. Such a situation existed in 1979. Excess deferred taxes were created by the Revenue Act of 1978, but the act did not require that their return to ratepayers be normalized, or limit state utility commissions in disposing of them.<sup>20</sup> The most frequent reaction of utility commissions was to return the excess deferred taxes more rapidly than normalization would permit, but some commissions required that the return of the excess be normalized.

If the normalization requirement created by the 1986 act was repealed, state public utility commissions in general would choose a faster rate for refunding them to ratepayers. We asked staff members of nine state public utility commissions how the commissions would likely respond if section 203(e) was repealed or modified. According to the staff, seven of the nine commissions would likely require a more rapid return of excess deferred taxes, in at least some circumstances, than section 203(e) permits.

The staff we interviewed were unable to estimate precisely how rapidly utilities would be required to return excess deferred taxes to ratepayers, in part because commissions would consider various factors when determining the refund period. All staff members said their commissions would consider the financial circumstances of the public utility industries or individual utility companies. Further, the diversity among utilities in their financial circumstances means that commissions would likely adopt refund policies that vary to some degree among utilities.

Commission staff noted that although utilities would lose the use of excess deferred tax balances faster if they flowed through the balances, these losses would be partially offset because most utility commissions subtract excess deferred taxes from a utility's rate base. As excess deferred taxes were paid out to ratepayers, the commissions would increase the rate base by the same amount, which would result in some

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<sup>20</sup>The 1978 act's rate reduction was only two percentage points, so the excess deferred tax issue was of much smaller consequence than it was for the 1986 act.

increases in the revenues collected from ratepayers. In addition, if utilities had to raise funds to replace excess deferred taxes returned to ratepayers, utility commissions would likely permit them to recover from ratepayers the reasonable costs associated with replacing this source of cash flow. Nevertheless, flowing through excess deferred taxes would still result in net reductions in consumers' utility bills during the flow-through period.

For electric utilities, at least, it is unlikely that commissions already have compensated for the retention of excess deferred taxes via their control over the rates of return these utilities are allowed to earn on their invested capital. Given the magnitude of electric utilities' excess deferred taxes, a 1-percent reduction in the allowed rate of return on the equity portion of the rate base over a 3-year period would, in effect, flow through the excess deferred taxes of only about 10 percent of all electric utilities. But, a one percentage point change in a utility's allowed rate of return on the equity portion of its rate base is substantial. The 1989 mean deviation among states in allowed rates of return on rate base for electric utilities was .87 percent.

## Objectives, Scope, and Methodology

The objectives of our work were to (1) describe the origin of excess deferred taxes and how utilities may and may not use them, including any legal restrictions on utilities' use of excess deferred taxes to diversify into nonutility activities; (2) estimate excess deferred tax balances at the time they were created, estimate the amount that can be returned to utility customers over time, and describe the appropriate methodology for making these estimates; (3) describe the policy reasons for requiring normalization treatment for deferred taxes and whether these reasons apply or do not apply to the requirement to normalize the return of excess deferred taxes, including a consideration of whether the latitude utility commissions possess in setting allowed rates of return permits them to nullify section 203(e); (4) describe the benefits and costs to utilities and ratepayers of the required normalization treatment for excess deferred taxes; and (5) identify the practices state public utility commissions are likely to follow if the normalization requirement for excess deferred taxes is repealed or eased.

In our analysis, we examined all the major privately owned, publicly regulated utilities. Our analysis included 181 electric utility companies, 59 telephone companies, 42 interstate gas pipeline companies, 114 gas distribution companies, and 105 investor-owned water companies.

We based our estimates of excess deferred tax magnitudes and fastest allowed payback patterns for public utility industries on data from several sources, including EIA, the Federal Communications Commission (FCC), FERC, the Edison Electric Institute (EEI), the American Gas Association (AGA), the National Association of Water Companies (NAWC), USTA, and NARUC. (See bibliography.) Except in a few cases, we did not test the accuracy or adequacy of the data supplied by these agencies.

Under our direction, EIA calculated the excess deferred taxes of major electric utilities as of end of year 1987 and 1988. It used data from FERC Form 1, account 282, which contains electric utility deferred taxes due to "other property" (i.e., accelerated depreciation).<sup>21</sup> Under our direction, a contractor for EIA calculated the maximum allowed speed for the return of electric companies' excess deferred taxes to ratepayers under section 203(e). For this estimate, the contractor used data from the National Utility Financial Statement model, which contains capacity additions to the investor-owned electric utility industry capital stock by plant type and year.

FCC estimated end-of-year 1987 and 1988 telephone utility excess deferred taxes for us. It used data from FCC Form M, account 176.1, deferred taxes due to accelerated depreciation (1987 data), and FCC Form M, schedule B-11, accounts 4100 and 4340, net deferred operating income taxes, property related (1988 data), to determine the deferred tax account balances of AT&T and the 58 local exchange carriers.<sup>22</sup> We used a USTA study for our data on the maximum allowed speed for the return of telephone companies' excess deferred taxes.<sup>23</sup>

FERC provided data and assisted in determining the methodology for our calculation of end-of-year 1987 and 1988 excess deferred taxes for the 42 interstate gas pipeline companies. Deferred tax balances for interstate pipelines cannot be determined directly from FERC Form 2, account 282 data.<sup>24</sup> However, we used this data to calculate each company's excess deferred tax balance as of the end of 1987 and 1988 by making the appropriate adjustments. Using this same data, we also calculated

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<sup>21</sup>FERC Form No. 1: Annual Report of Major Electric Utilities, Licensees and Others, FERC (revised Dec. 1988).

<sup>22</sup>FCC Annual Report Form M, FCC (Dec. 1990).

<sup>23</sup>James Vander Weide, An Economic Assessment of H.R. 1049, USTA (Feb. 1988).

<sup>24</sup>FERC Form No. 2: Annual Report of Major Natural Gas Companies, FERC (Dec. 1989).



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the maximum allowed payback speed for pipelines' excess deferred taxes.

We could identify no federal agency that regularly collects financial account data on local gas distribution companies or investor-owned water companies. The best available estimates of these companies' excess deferred tax balances are from data collected by AGA and the NAWC, respectively. AGA supplied us with estimates of local gas distribution company excess deferred taxes as of end of year 1987. Their estimates are based on data from one of a series of surveys they conduct with a specially selected sample of their member companies, their "tax subcommittee." To estimate end-of-year 1988 gas distribution companies' excess deferred taxes, we subtracted from the AGA's end-of-year 1987 estimate the maximum amount that could have been returned to ratepayers during 1987. NAWC supplied us with water companies' deferred tax balances from their annual survey of member water companies (the investor-owned water companies serving in excess of 25,000 customers).<sup>25</sup> We calculated water companies' excess deferred taxes at the end of 1987 by assuming that, because the corporate income tax rate declined by 26 percent, from 46 percent to 34 percent, on July 1, 1987, 26 percent of their deferred taxes became excess.<sup>26</sup> We estimated end-of-year 1988 excess deferred taxes for water companies by subtracting from our 1987 estimate the maximum amount that could have been returned to ratepayers during 1987. We could find no centralized source of data from which to calculate the legally allowed payback patterns of local gas distribution and water companies' excess deferred taxes.

We analyzed the economic value of excess deferred taxes to utilities, to businesses, and to residential ratepayers by reviewing literature on the cost of capital to various sectors of the economy.

In evaluating the likely response of state public utility commissions in returning excess deferred taxes to ratepayers if section 203(e) was revised or repealed, we interviewed the staffs of public utility commissions in nine states,<sup>27</sup> which we selected principally to achieve balanced

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<sup>25</sup>Financial & Operating Data 1987: Investor-Owned Water Utilities; Financial & Operating Data 1988: Investor-Owned Water Utilities, NAWC.

<sup>26</sup>The data required to permit us to remove the portion of water companies' aggregate deferred tax accounts that are not attributable to accelerated depreciation were not available. However, a water utilities' expert indicated that for her company this portion is no more than 10 percent.

<sup>27</sup>Calif., Fla., Ill., Kans., N.Y., N.C., Ohio, Tex., and Va.

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geographic coverage. We also interviewed utility industry representatives and specialists in the field of public utility taxation. In arriving at our conclusions, we also reviewed the written testimonies of public utility commissioners, public utility officials, and public interest group representatives. Finally, we considered how state public utility commissions responded to an earlier reduction in the corporate tax rate following the passage of the Tax Reform Act of 1979.

To determine the rationale for normalizing the return of excess deferred taxes to ratepayers and its relation to the rationale for normalizing deferred taxes, we consulted tax policy literature and interviewed utility industry representatives and specialists in the field of public utility taxation. We reviewed the legal and regulatory restrictions on public utility use of excess deferred taxes by researching the relevant federal and state law and the issue of public utility diversification and questioning those whom we interviewed about the existence of any such restrictions.

To ensure the integrity of our analysis, we obtained informal comments on our work from selected government, consumer regulatory, and utility industry organizations, including the Congressional Research Service, the Internal Revenue Service, NARUC, and the Edison Electric Institute. In general, they agreed with the analysis and results in our report. However, some technical corrections were made based on their comments. In particular, we revised our discussion of differences between normalization and flow-through ratemaking treatments for public utilities' deferred taxes to better describe benefits to utility companies and to ratepayers in different time periods. We did our review from October 1989 to May 1991 in accordance with generally accepted government auditing standards.

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As arranged with you, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of issuance. At that time, we will provide copies of this report to appropriate congressional committees, Members of Congress, and other interested parties.

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The major contributors to this report are listed in appendix VII. If you have any questions, please contact me on (202) 272-7904.

Sincerely yours,

A handwritten signature in black ink that reads "Paul L. Posner". The signature is written in a cursive style with a large, prominent initial "P".

Paul L. Posner  
Associate Director, Tax Policy  
and Administration Issues

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**Abbreviations**

ACRS	Accelerated Cost Recovery System
AGA	American Gas Association
AT&T	American Telephone and Telegraph
EEL	Edison Electric Institute
EIA	Energy Information Administration
ERTA	Economic Recovery Tax Act of 1981
FCC	Federal Communications Commission
FERC	Federal Energy Regulatory Commission
NARUC	National Association of Regulatory Utility Commissioners
NAWC	National Association of Water Companies
USTA	United States Telephone Association



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# Legislative History of Normalization Requirements for Deferred and Excess Deferred Taxes

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This appendix summarizes the legislative history of normalization requirements for privately owned public utilities' deferred and excess deferred taxes.

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## Deferred Taxes

Legislative provisions enacted after the adoption of accelerated depreciation are consistent with congressional approval of normalization treatment when public utilities use accelerated depreciation. The legislative history of these provisions indicates that Congress intended accelerated depreciation to provide a reduction in the cost of capital for public utilities so that, in the capital markets, the utilities would not be at a relative disadvantage compared with unregulated companies. Normalization treatment of deferred taxes has been characterized as a temporary tax reduction, which is retained by the utilities as a source of financing for capital investment. Because utilities do not pay interest on this source of financing, the tax reduction lowers the cost of their investment.

In the Tax Reform Act of 1969, Congress sought to discourage public utility commissions from ordering the flow-through of the benefits of accelerated depreciation to current consumers. The legislative history of the 1969 act indicates that Congress decided to require utilities to normalize deferred taxes on new investments if the utilities used accelerated depreciation, in part because requiring all utilities to shift to straight-line depreciation for tax purposes would make their cost of capital greater than the cost of capital for unregulated industries. Thus, public utilities would be at a cost disadvantage, relative to unregulated firms, when making capital investments. The act allowed utility companies that had been flowing through deferred taxes before 1969 to continue to do so. Had regulators sought to move utilities from normalization treatment to flow-through treatment for new investment after 1969, the utilities' use of accelerated depreciation would have been disallowed.

The Economic Recovery Tax Act of 1981 (ERTA) further encouraged normalization treatment for deferred taxes. In general, ERTA sought to encourage investment by further accelerating depreciation rates through the Accelerated Cost Recovery System (ACRS). ERTA also required that utility plant and equipment placed in service after 1980 that used accelerated depreciation under ACRS be normalized, regardless of whether utilities had used flow-through accounting previously. Utility commissions were allowed to pass through benefits from accelerated depreciation to ratepayers by denying utilities an approved rate of return on the portion of their rate base that deferred taxes represent.



The benefits that ratepayers receive result from their not having to pay the allowed rate of return on the utilities' deferred taxes. However, even when not allowed to earn a rate of return on deferred taxes, utilities may receive cash flow benefits from accelerated depreciation.

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## Excess Deferred Taxes

The Revenue Act of 1978 reduced the highest corporate income tax rate from 48 percent to 46 percent. As a result, a portion of the income taxes that companies had deferred paying by adopting accelerated depreciation now would never have to be paid; they became excess deferred taxes. The Revenue Act did not require that excess deferred taxes be normalized or limit state utility commissions in how they might return the excess to ratepayers. The public utility commissions responded to the excess in utilities' deferred tax accounts in a variety of ways; some required that the excess be returned to consumers quickly—via a 1- or 2-year reduction in rates—and others normalized the excess. The Internal Revenue Service issued private letter rulings stating that the flow-through of excess deferred taxes would not constitute a violation of normalization for deferred taxes.

The Tax Reform Act of 1986 again reduced the highest corporate tax rate, this time from 46 percent to 34 percent. This time, however, Congress sought to discourage the flow-through of excess deferred taxes to current utility ratepayers. Congress did not stop utility regulators from returning taxes no longer owed the government to utility ratepayers. Rather, it required regulators to return these taxes to ratepayers using a normalization rule if regulators wanted utilities to receive the benefits of accelerated depreciation.

Section 203(e) of the Tax Reform Act of 1986 provided a new rule for public utilities' excess deferred tax balances. According to section 203(e), for a utility to obtain the benefits of accelerated depreciation, excess balances in its deferred tax reserve account that were created by the 1987 tax rate reduction must be normalized. An excess deferred tax reserve is normalized under the 1986 act only if in setting utility rates the reserve is not reduced more rapidly than it would be reduced under the "average rate assumption method." The average rate assumption method reduces the excess deferred tax reserve over the remaining regulatory lives of the assets that gave rise to the reserve for deferred taxes. Under this method, the excess deferred tax reserve is reduced with respect to each item of property over the remaining life of the property beginning in the year in which regulatory depreciation exceeds

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**Appendix I  
Legislative History of Normalization  
Requirements for Deferred and Excess  
Deferred Taxes**

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tax depreciation.<sup>1</sup> This method results in excess deferred taxes being returned to ratepayers in a manner similar to how they would have been paid to the federal government had the tax rate not been reduced.

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<sup>1</sup>Description of H.R. 1150 (The Utility Ratepayer Refund Act of 1987) and H.R. 2493 (The Utility Customer Refund Act of 1989), Joint Committee on Taxation, JCX-55-89 (Sept. 29, 1989).

# The Magnitude of Utilities' Excess Deferred Taxes

For investor-owned utilities as a whole, excess deferred taxes due to accelerated depreciation were approximately \$17.9 billion as of the end of 1987, 6 months after the implementation of the Tax Reform Act of 1986. Under current law, a maximum of approximately \$1.2 billion could have been returned to ratepayers during 1988. Current law establishes the minimum period before these excess deferred taxes can be returned to ratepayers but does not prohibit states from permitting utilities to retain them longer. Determining the actual amounts that have been returned to ratepayers since 1987 for each privately owned public utility company in each industry was beyond the scope of our work.

Table II.1 provides data on utility industries' excess deferred taxes as of December 31, 1987, and legally allowable minimum excess deferred tax magnitudes by industry 1 year later. As of December 31, 1987, electric utilities held approximately 48 percent of all excess deferred taxes, and telephone utilities held another 40 percent. Gas and water utilities held the remaining 12 percent.

**Table II.1: Utility Industries' Excess  
Deferred Taxes at End of Year 1987 and  
Minimum Allowed Account Balances 1  
Year Later**

Dollars in billions		
Industry	12/31/87	12/31/88
Electric companies	\$8.64	\$8.29
Telephone companies	7.09	6.30
Gas pipeline companies	1.22	1.17
Local gas distribution companies	.86	.81
Water companies	.08	.07
<b>Total</b>	<b>\$17.89</b>	<b>\$16.64</b>

Note: Excess deferred taxes were not estimated for investor-owned sewer companies because we could not locate appropriate data. However, this industry's excess deferred taxes are expected to be even smaller than those of investor-owned water companies.

Sources: The 1987 data for electric, telephone, and interstate gas pipeline utilities were supplied by the Energy Information Administration (EIA), Federal Communications Commission (FCC), and Federal Energy Regulatory Commission (FERC), respectively. The 1987 data for local gas distribution and investor-owned water utilities were supplied by the American Gas Association (AGA) and National Association of Water Companies (NAWC), respectively. The 1988 data for electric and telephone utilities were supplied by EIA and FCC, respectively. The remaining 1988 data were derived by GAO.

# Estimation Methods for Utilities' Excess Deferred Taxes

As requested, we estimated the magnitude of privately owned public utilities' excess deferred tax balances resulting from accelerated depreciation. According to our estimate, excess deferred taxes were approximately \$17.9 billion as of the end of 1987. We also investigated the methodology the National Association of Regulatory Utility Commissioners (NARUC) used in developing its estimate that excess deferred taxes were \$19 billion at the end of 1986. Our estimate does not differ substantially from NARUC's, in part because the unpublished data we used did not differ very much from the published data NARUC used, and in part because limitations in the data NARUC used tended to offset each other.

The basic methodology for estimating the excess deferred tax balances of utilities is straightforward. The deferred tax balances of the utilities must be identified and then multiplied by appropriate factors to estimate the portion of the balances that became "excess" when tax rates were reduced in 1987. The methodology is made somewhat more complex because, although tax rates changed on July 1, 1987, most utility financial statistics, including utilities' revenues and deferred taxes, are reported on a calendar-year basis. Because of this, an end-of-year estimate of excess deferred taxes made our analysis easier and more accurate than a mid-year estimate.

We calculated electric utilities' end-of-year 1987 excess deferred taxes as follows. We multiplied the utilities' deferred tax balances at the end of 1986 by 26 percent to estimate the portion that would become excess with the tax rate reduction. We determined how much electric utilities' deferred tax balances would grow during 1987 and, because the tax rate changed in mid-year, multiplied that amount by 13 percent to estimate the portion that would become "excess" with the rate change. We added this amount to our balance. Then we estimated what portion of the excess deferred taxes could be flowed back to ratepayers during 1987 by assuming that 26 percent of all 1987 flowbacks of deferred taxes were excess. Then we subtracted this amount from our balance to obtain an end-of-year 1987 estimate of electric utilities' excess deferred taxes. Because a small amount of the excess deferred taxes from the balance at the end of 1986 could have been returned to ratepayers during the second half of 1987, our end-of-year estimate may be slightly less than the maximum that excess deferred balances would have been on July 1, 1987, when the tax rate change went into effect. Our method for computing telephone and water utilities' excess deferred taxes was similar.

Our method for estimating the excess deferred taxes of major gas pipelines differs from that for electric, telephone, and water companies, primarily because pipelines' excess deferred taxes are determined when a hearing is held to establish a pipeline's excess deferred tax balance. In contrast, electric, telephone, and water companies' excess deferred taxes were determined when corporate tax rates were reduced on July 1, 1987. Excess deferred taxes for local gas distribution companies are from an AGA survey of these companies.

In developing its \$19 billion estimate of excess deferred tax balances as of December 31, 1986, NARUC relied on published data available from EIA and FCC at the time its estimate was made.<sup>1</sup> However, the deferred tax data available to NARUC had four limitations.

- NARUC's excess deferred tax estimates were based on data that included a small amount of deferred taxes from sources other than accelerated depreciation. Because other sources of deferred taxes do not give rise to excess deferred taxes that are subject to section 203(e), this led NARUC's estimate of excess deferred taxes to be slightly too high.
- NARUC's estimate of electric utility industry excess deferred taxes excluded some of the smallest of the major electric companies.
- NARUC's estimate excluded the excess deferred taxes of some local natural gas distribution companies and all investor-owned water companies. These utility industries account for a very small proportion of all excess deferred taxes (about 5 percent in 1987).
- NARUC's estimate excluded the excess deferred taxes that were created by deferred taxes collected during the first half of 1987. These three exclusions made NARUC's excess deferred tax estimate slightly too low.

We do not know the precise effect of these limitations on NARUC's estimate. However, because we expect each limitation to have only a small effect on the overall total and because they are partially offsetting, we believe NARUC's estimate of excess deferred taxes is reasonably accurate. Because we obtained more detailed, unpublished data, our estimate of aggregate utility industry excess deferred taxes is somewhat more accurate than NARUC's, especially for individual industries. Our estimate does not reflect maximum excess deferred taxes because it is reduced by excess deferred taxes returned to ratepayers during the second half of 1987.

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<sup>1</sup>Financial Statistics of Selected Electric Utilities 1986, Statistics of Communications Common Carriers, EIA (Dec. 31, 1986) and Statistics of Interstate Natural Gas Pipeline Companies 1986, EIA (Oct. 29, 1987).

# The Return of Excess Deferred Taxes to Ratepayers Under Normalization

Under section 203(e), the maximum speed for returning a utility's excess deferred taxes to its ratepayers is determined according to the average rate assumption method. Under the average rate assumption method, the maximum speed of payback will vary by utility company and industry. The minimum length for the payback period and maximum that can be paid back in any given year depend on the length of life of each utility company's capital assets. The length of life of a company's capital assets in turn depends on the type of capital investment and when the investment was made. Under normalization policy, between 1987 and the year 2000, the electric, telephone, and gas pipeline industries taken together will be allowed to return a maximum of 69 percent of their excess deferred taxes to ratepayers (see fig. 4).<sup>1</sup>

## Electric Utilities' Return Pattern

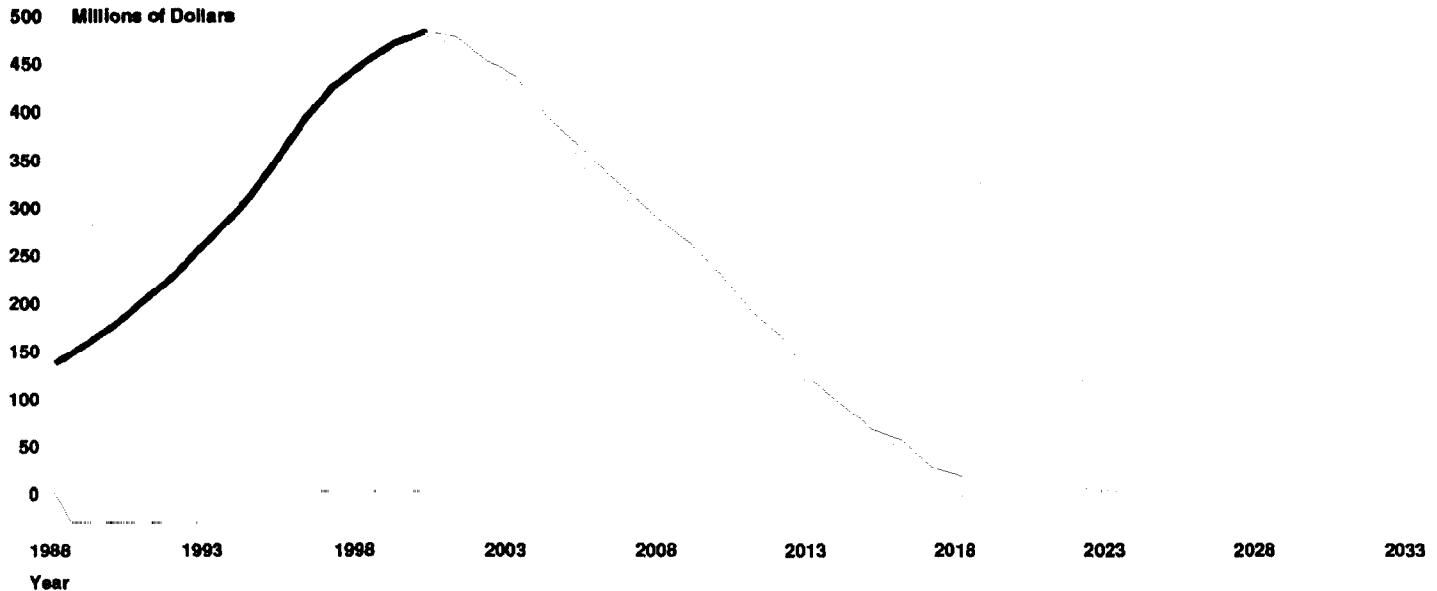
The maximum-speed payback pattern for the electric utility industry as a whole is illustrated in figure IV.1. Figure IV.1 represents, in aggregate, the maximum annual allowed drawdowns of the excess deferred tax reserve for electric utility capital investments for which utilities use accelerated depreciation. Although electric utilities' excess deferred taxes themselves were at a maximum at the time of the tax rate change, the peak year for their legally allowed return to ratepayers is 2000. Up until 2000, the amount of excess deferred taxes that can be returned in each year increases. This is because more and more electric utility assets reach their switching point—the point at which the return of excess deferred taxes can begin.<sup>2</sup> After the year 2000, fewer assets will be reaching their switching point and more will be becoming fully depreciated. Therefore, the aggregate annual flowback of excess deferred taxes will steadily decrease.

<sup>1</sup>We could find no data to compute the excess deferred tax return pattern for local gas distribution companies and investor-owned water companies.

<sup>2</sup>See figure V.1 and p. 43 for an illustration and a discussion of a utility investment's switching point.

Appendix IV  
The Return of Excess Deferred Taxes to  
Ratepayers Under Normalization

Figure IV.1: The Electric Utility Industry's Fastest Allowed Return Pattern for Excess Deferred Taxes



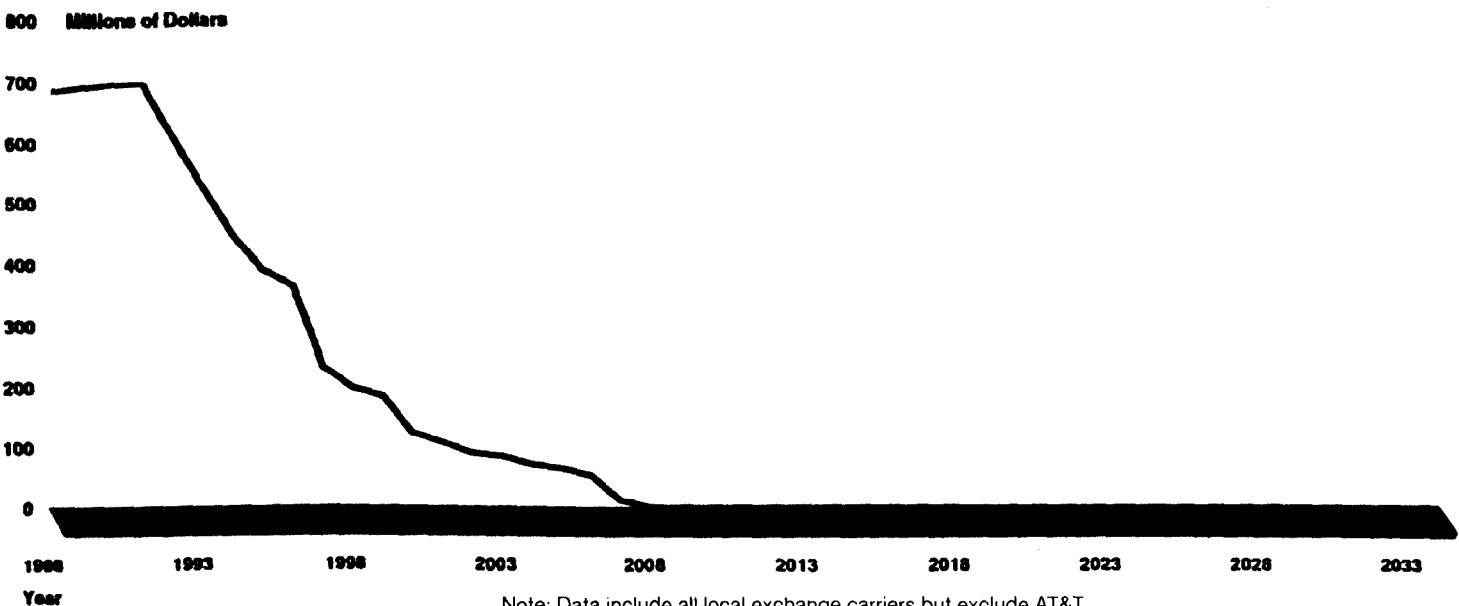
Source: EIA.

The average life of new capital that gave rise to the electric industry's aggregate excess deferred tax balance is about 30 years. However, new capital in the longest-lived class of electric utility property can have a life as long as 51 years, for purposes of depreciation accounting in some regulatory jurisdictions. So, even though the bulk of electric industry excess deferred taxes can be returned to ratepayers much earlier, under current law some cannot be returned until the year 2033. By the year 2000, 48 percent of all electric utility excess deferred taxes can be returned to ratepayers; by the year 2005, the maximum allowed will be 74 percent; and by 2010, 91 percent can be returned. However, the industry's entire excess deferred tax balance cannot be returned to ratepayers until the end of 2033, when all the capital investments that gave rise to the electric industry's total excess deferred tax balance have been fully depreciated. During this period, utilities retain the cash-flow benefit from the excess deferred tax balances. However, ratepayers also benefit as they avoid having to pay the utilities' allowed rates of return on these excess deferred tax balances.

## Telephone Utilities' Return Pattern

Figure IV.2 illustrates the fastest allowed payback pattern for telephone industry excess deferred taxes. As in the case of the electric utility industry, maximum annual drawdowns of telephone companies' excess deferred taxes are determined according to the average rate assumption method. The peak years for the maximum allowed return of telephone excess deferred taxes are 1990 and 1991. The peak years for telephone industry returns occur earlier than in the electric industry because of the shorter expected life of telephone capital investments compared with those of electric companies. The timing of the telephone capital investments that gave rise to the industry's excess deferred tax balances also plays a role in determining the peak years and the ending date of the payback.

Figure IV.2: The Telephone Utility Industry's Fastest Allowed Return Pattern for Excess Deferred Taxes



Note: Data include all local exchange carriers but exclude AT&T.  
 Source: USTA.

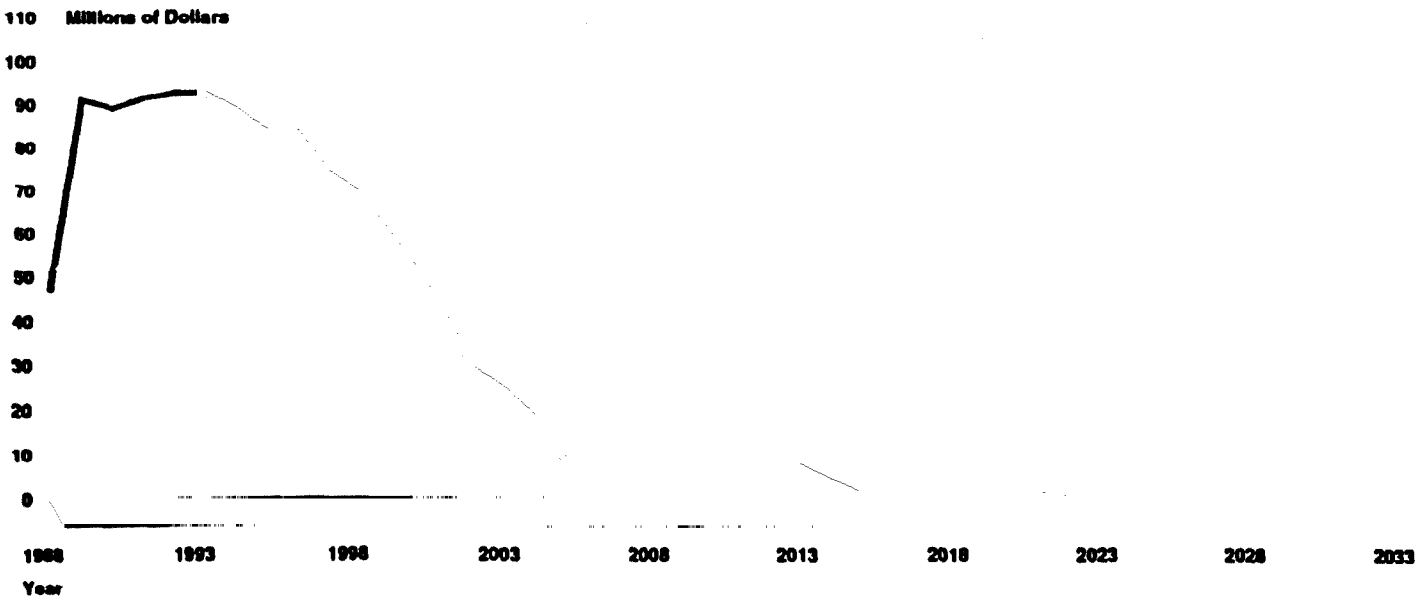
In the telephone industry, under the fastest allowed return, all excess deferred taxes would be returned to ratepayers by the end of 2007. The speed of this return compared with that of electric utilities reflects the relatively short life of telephone industry capital—about 15 years for new capital as of 1987—compared with that of electric utility capital. For telephone utilities as a whole, 92 percent of all excess deferred taxes may be returned to ratepayers by the year 2000 and 99 percent by 2005.



Interstate Gas Pipeline  
Utilities' Return Pattern

Figure IV.3 illustrates the fastest allowed return pattern for interstate gas pipeline excess deferred taxes.

Figure IV.3: The Interstate Gas Pipeline Utility Industry's Fastest Allowed Return Pattern for Excess Deferred Taxes



Source: FERC.

Maximum annual drawdowns of interstate pipeline excess deferred taxes generally are determined according to the "reverse South Georgia" variant of the average rate assumption method.<sup>3</sup> For pipelines that use the reverse South Georgia method, the flowback of excess deferred taxes on all of a pipeline's investments was to begin as soon after the implementation of the 1986 Tax Reform Act as a hearing could be held to establish that pipeline's excess deferred tax balance. Under this method, the peak year for the maximum allowed drawdown of pipeline excess deferred taxes is 1992. All pipeline companies had scheduled

<sup>3</sup>Some utilities compute depreciation on a composite basis for classes of property rather than separately for each individual item of property. These utilities lack records allowing them to identify, for each item of property, the time at which accelerated depreciation first exceeds straight-line depreciation. They may use a simplified version of the average rate assumption method called the "reverse South Georgia method." Under this method, equal amounts of excess deferred taxes can be paid to ratepayers each year for the remaining regulatory life of the capital, beginning as soon as a rate hearing is held to establish a utility's excess deferred tax balance, rather than at the time accelerated depreciation first exceeds straight-line depreciation.

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**Appendix IV**  
**The Return of Excess Deferred Taxes to**  
**Ratepayers Under Normalization**

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hearings by the end of 1990. Therefore, all could begin to flowback excess deferred taxes by this date. By the end of 1991, only two pipeline companies can have completed flowing back all their excess deferred taxes. Interstate gas pipeline companies, like electric companies, have an average expected life of new capital assets of about 30 years. The minimum overall flowback period for pipeline industry excess deferred taxes as a whole ends in 2023. By the year 2000, 83 percent of all pipeline excess deferred taxes can be returned to ratepayers; by 2005, 93 percent; and by 2010, 96 percent.

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# Ratepayers' Benefits From Alternative Regulatory Treatments of Excess Deferred Taxes

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Ratepayers' benefits from normalizing or flowing through excess deferred taxes depend on when they are ratepayers during the life of the asset, what they can earn on their own investments, and what their borrowing costs are. When considered on a per ratepayer basis, the benefits of a rapid flow-through of excess deferred taxes may not be large.

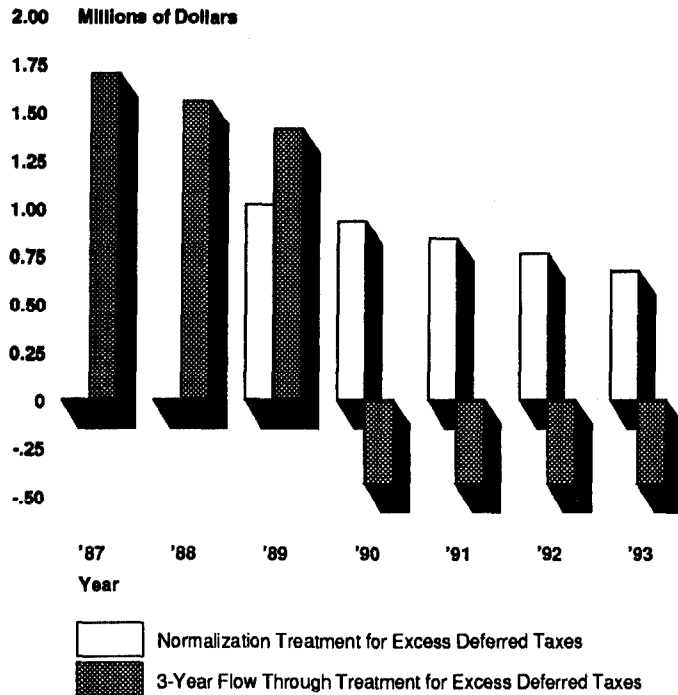
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## A Hypothetical Utility Investment Under Alternative Regulatory Treatments

For the hypothetical utility investment whose deferred taxes are illustrated in figure 1, figure V.1 compares ratepayers' annual benefits from the fastest return of excess deferred taxes permitted under normalization with ratepayers' annual benefits from a 3-year flow-through of excess deferred taxes. Benefits represent ratepayers' savings on their utility bills. In figure V.1, the benefits from normalization are measured as total ratepayer charges under a permanent retention of excess deferred taxes by utilities minus total charges under normalization of excess deferred taxes (white columns). Likewise, the benefits from a 3-year flow-through are measured as total ratepayer charges under utility retention of excess deferred taxes minus total changes under flow-through (gray columns).

Appendix V  
 Ratepayers' Benefits From Alternative  
 Regulatory Treatments of Excess  
 Deferred Taxes

Figure V.1: Comparison of Ratepayers' Benefits Under Alternative Treatments of Excess Deferred Taxes



Source: GAO calculation for a hypothetical 10-year lived, \$100 million utility investment made in 1984, assuming an income tax rate of .46 between 1984 and 1986 and a .34 rate thereafter.

Figure V.1 contrasts the benefits ratepayers can receive under the normalization requirement of current law to the benefits they would receive if section 203(e) were repealed and state and federal utility regulators chose to return excess deferred taxes to ratepayers over a 3-year period. As described previously, ratepayers also realize benefits from excess deferred taxes even if all excess deferred taxes are retained permanently by the utility because excess deferred taxes are subtracted from the rate base. (See p. 19.)

Regulators almost always deny utilities an allowed rate of return on their total deferred and excess deferred taxes by subtracting them from the utilities' rate bases (or requiring them to be treated as zero-cost capital). As a utility's excess deferred taxes are returned to ratepayers, the utility's rate base increases. This increase in the rate base means that ratepayers' bills do not decrease by the full amount of the excess deferred taxes being returned to them. Figure V.1 incorporates this offsetting effect to illustrate ratepayers' net benefits under the two alternative policies.

As figure V.1 indicates, in contrast to normalization, under a flow-through policy for excess deferred taxes, ratepayers receive relatively large benefits during the 3 years in which excess deferred taxes are being flowed through. However, as excess deferred taxes are flowed through, and the utility's rate base rises, ratepayers incur higher costs (represented in figure V.1 as negative benefits) than they would have incurred if utilities had been permitted to retain excess deferred taxes permanently. After the 3-year flow-through is complete, utility rates are higher than they would have been under normalization (or if the utility had retained the excess deferred taxes). Rates continue to be higher until the end of the life of the asset.

Normalizing the return to ratepayers of excess balances in a utility's deferred tax reserve requires that excess balances be returned to ratepayers in such a way that the deferred tax reserve is not reduced more than it would be reduced under the average rate assumption method. Under the average rate assumption method, utilities may begin to return excess deferred taxes to ratepayers at the time in the useful life of the property when accelerated depreciation expense becomes less than straight-line depreciation expense. This "switching point," which signals the beginning of the return of excess deferred taxes under normalization, is illustrated in figure V.1, where it occurs in 1989.

With respect to a given asset, once the return of excess deferred taxes begins, an equal amount of the excess deferred taxes will be paid to ratepayers through reductions in their utility bills each year for the remaining useful life of the capital.<sup>1</sup> Utility plant and equipment nearing the end of its useful life in 1986 when tax rates were lowered is past the point where accelerated depreciation expense is greater than straight-line depreciation. The return of excess deferred taxes associated with this capital could begin immediately following the tax rate change. In contrast, utility plant and equipment put in service just before corporate tax rates were reduced may not reach the point in their useful lives where accelerated depreciation expense is less than straight-line depreciation for many years. Under normalization, excess deferred taxes associated with this capital could not begin to be returned to ratepayers until that time.

With respect to a given asset, whether ratepayers benefit more from flowing through or normalizing excess deferred taxes depends on (1)

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<sup>1</sup>See app. IV, footnote 3 for a definition of the reverse South Georgia variant of the average rate assumption method.

when they are ratepayers during the life of the asset and (2) their investment and consumption alternatives. For instance, those who would be ratepayers only during the period when a flow-through occurs would benefit more from flow-through than from normalization. On the other hand, those who would not be utility customers until after a flow-through period was ended would be better off if excess deferred taxes were normalized.

Whether those who are ratepayers over the entire life of the asset (full-period ratepayers) benefit more from flow-through or normalization depends on their discount rate, which is determined by the rate of return they would achieve by investing elsewhere than in the utility, and by their borrowing costs. The ratepayer "earns" a return on excess deferred taxes retained in the utility in the form of the lower utility rates that result when the excess deferred taxes are excluded from the utility's rate base. Full-period ratepayers with a discount rate equal to the rate of return they can earn by letting the utility retain the excess deferred taxes are indifferent to whether excess deferred taxes are normalized or flowed through.<sup>2</sup> Alternatively, if a ratepayer's discount rate exceeds the rate he or she can earn by "investing in the utility" he or she would likely benefit from flow-through. And a ratepayer with discount rates below the rate he or she can earn through "investing in the utility" would likely benefit from normalization.

The data in table V.1 enable readers to compare typical interest rates and returns on investments that a ratepayer might face with the return he or she might "earn" by not having to pay the utility's rate of return on his or her share of the utility's excess deferred taxes. Table V.1 shows recent interest rates for various forms of consumer debt and after-tax rates of return on alternative investments a residential ratepayer might make. The ratepayer will receive tax-free returns on the ratepayer's share of the utility's excess deferred taxes that are "invested" in the utility. The return to the ratepayer is tax-free because it is in the form of reduced utility charges. However, in general the ratepayers' earnings on other investments are taxed. In table V.1, returns on investments are adjusted downward to reflect after-tax yields so that comparisons of investment options are on an equal footing.

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<sup>2</sup>Full-period ratepayers would be indifferent concerning normalization and flow-through treatment for excess deferred taxes if their discount rate equals the utility's allowed rate of return on rate base minus the utility's forgone tax deduction on interest expense (forgone because deferred taxes substitute for funds that otherwise would have to be borrowed but, if borrowed, would reduce the utility's taxable income). This discount rate equals the effective rate of return ratepayers can earn by letting the utility retain the excess deferred taxes.

**Appendix V  
Ratepayers' Benefits From Alternative  
Regulatory Treatments of Excess  
Deferred Taxes**

As table V.1 shows, if ratepayers have certain forms of short-term debt—credit cards or personal loans—they probably would be better off if section 203(e) were repealed because they are paying higher interest rates than they are earning on their “investment” in the utility. Ratepayers who are not paying higher interest rates on their debt—for example, those who only have car loans and mortgages—probably would be better off under normalization of excess deferred taxes. If ratepayers have the investments shown in the table, they probably would be better off under normalization of excess deferred taxes because their utility “investment” would earn a higher return.

**Table V.1: After-Tax Average Cost of Debt and Returns on Alternative Investments** (May 1990)

<b>Form of debt or investment</b>	<b>Average cost</b>
Credit card	18.14%
48-month new car loan	11.82
24-month rate on new home	15.41
Mortgage rate on new home	7.11 <sup>a</sup>
	<b>Average return</b>
6-month certificates of deposit	6.11% <sup>b</sup>
U. S. Treasury bonds (30-year maturity)	6.29 <sup>b</sup>
A-rated corporate bonds	7.12 <sup>b</sup>
A-rated recently offered utility bonds	7.23 <sup>b</sup>
Return on common stock of electric utilities (1988 average)	8.06 <sup>b</sup>
Rate of return on rate base <sup>c</sup> for electric utilities (1988 average)	14.00

Note: It is assumed that the ratepayer faces a marginal personal income tax rate of 28 percent.

<sup>a</sup>Mortgage rate after adjustment for personal income tax savings on mortgage interest payments.

<sup>b</sup>After-tax rate of return. Tax adjustment factor = (1-.28).

<sup>c</sup>The approved rate of return on the rate base equals the ratepayer's return on the excess deferred taxes the ratepayer has “invested” in the utility as a consequence of excess deferred tax normalization. The ratepayer does not pay personal income tax on this return because the ratepayer receives it in the form of a reduced price.

Sources: 1989 Annual Report on Utility and Carrier Regulation, NARUC (Dec. 31, 1989); Federal Reserve Bulletin, Board of Governors of the Federal Reserve System (Oct. 1990 and Jan. 1991); Financial Statistics of Selected Electric Utilities 1988, EIA (Feb. 1990); and EEI officials.

**Electric Utility Industry  
Excess Deferred Taxes  
Under Alternative  
Regulatory Treatments**

Even if the aggregate amount of excess deferred taxes is large, flowing through excess deferred taxes might not reduce the utility charges of an individual ratepayer by very much. To see this, suppose that section 203(e) were repealed and state and federal utility regulators adopted a 3-year return policy for excess deferred taxes. We calculated that, on average, electric utility customers would experience about a 2-percent reduction in their utility bills during the period of the flow-through.

**Appendix V  
Ratepayers' Benefits From Alternative  
Regulatory Treatments of Excess  
Deferred Taxes**

Suppose that the approximately \$8.6 billion of electric utility excess deferred taxes at the end of 1987 had been flowed through to ratepayers over a 3-year period starting in 1988. Table V.2 describes the effect, during the first year, of adopting a 3-year flow-through of excess deferred taxes on the average annual electric bills of residential, commercial, and industrial customers. Adjustments to reflect the utilities' increases in their rate base (charged to ratepayers) during these 3 years have been made. As noted previously, the reductions in utility charges during the first 3 years of a flow-through of electric utility excess deferred taxes would be followed by a number of years in which ratepayers would experience higher rates because (1) the rate base would have increased and (2) all excess deferred taxes would already have been flowed through.

As shown in table V.2, for the electric utility industry, the average rate reduction per utility, averaged over all utilities, is \$15, or 2.2 percent, in the first year of the flowback. Only 2 of the 141 major electric utilities included in table V.2 would have had residential customer annual bill reductions greater than \$45. The company with the highest average residential customer refund would have refunded an average of \$108 in the first year of the 3-year flow-through. The company (with excess deferred taxes) with the lowest average residential customer refund would have refunded, on average, 20 cents.

**Table V.2: Utility Consumers' Electric Bill Reductions During the First Year of a 3-Year Flow-Through of Excess Deferred Taxes**

	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>
Average annual electric bill before flow-through (1987)	\$672.00	\$3,994.00	\$237,475
First-year net reduction in electric bill <sup>a</sup>			
Maximum	108.00	551.00	52,812
Average	15.00	85.00	4,804
Minimum	0.20	0.81	55

Note: Number of companies = 141. Forty major electric companies have been excluded, including 8 companies with no excess deferred tax balances, 24 companies with no final consumers, 7 companies with neither, and 1 other.

<sup>a</sup>These calculations are based on company averages per customer rather than individual customer data. Therefore, \$108 is not the maximum reduction for an individual residential ratepayer. Rather, it is the average rate reduction of the utility with the largest average rate reduction. The other figures in the table are calculated in the same way.

Source: GAO calculations from EIA data.

Because the rate base charged to consumers increases during the period in which excess deferred taxes are returned to ratepayers, and because excess deferred taxes have been completely flowed back, in the years



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**Appendix V**  
**Ratepayers' Benefits From Alternative**  
**Regulatory Treatments of Excess**  
**Deferred Taxes**

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following a 3-year flowback, utility rates (absent any other changes) would be higher than they would have been under normalization. The average residential electric bill would be about 2 percent higher after the flowback than it would have been under normalization. Rates would continue to be higher, compared with normalization, until the normalization procedure was completed—at the end of the asset's useful life. Following this period, rates would be the same.

The Congressional Research Service has estimated that a 3-year flowback of excess deferred taxes would have a similarly small effect on ratepayers' bills in the telephone and gas utilities industries.<sup>3</sup> The rate reductions in these industries were estimated to be 2.7 percent and 0.9 percent, respectively.

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<sup>3</sup>Donald W. Kiefer, *The Tax Reform Act of 1986: The Effects on Public Utilities*, U.S. Library of Congress, Congressional Research Service, Report No. 87-224E (Mar. 18, 1987), p. 2.

# Utility Diversification and Deferred and Excess Deferred Taxes

Because money is fungible, it cannot be determined what the cash flow created by accelerated depreciation, including excess deferred taxes, is spent on—just as it cannot be determined what any particular dollar of an individual's income is used for. One way of viewing deferred or excess deferred taxes is as a cost-free source of capital that finances the utility investment that created the deferred taxes. This interpretation suggests that the deferred tax reserve or excess deferred tax amount replaces debt and equity costs that the utility would have incurred for the same investment in utility plant and equipment. Alternatively, another view of deferred and excess deferred taxes is that they are a source of funding for additional investment, in particular, as a source of funds permitting utilities to diversify into nonutility-related activities.

Although utilities are prohibited from engaging in some nonutility-related businesses,<sup>1</sup> no specific legal restrictions apply to using the cash flow from deferred or excess deferred taxes for investments in non-utility assets or other lines of business. The added cash flow from deferred or excess deferred taxes may be used for any purpose the utility chooses, including investing in utility assets, diversifying by purchasing nonutility assets, or investing in financial securities.

However, under normal regulatory practices, deferred (or excess deferred) taxes from utility-related investments do not subsidize utilities' outside investments. This can be illustrated by an example that compares the financial situation of a utility that does not make an outside (nonutility-related) investment to a utility that does.<sup>2</sup>

Assume the following: A utility puts in place a new utility-related asset that costs \$1 million and simultaneously generates \$100,000 of tax deferrals, and the utility maintains a capital structure that is 50 percent debt and 50 percent equity.<sup>3</sup> Usual regulatory practices require that the \$100,000 of deferred taxes be subtracted from the utility's rate base. Doing so denies the utility an approved rate of return on the \$100,000.

<sup>1</sup>The Securities and Exchange Commission regulates utilities' reporting of financial information. It also restricts their ability to form holding companies under the Public Utility Holding Company Act of 1935. Under the Public Utility Regulatory Policies Act of 1978, when utilities and state utility regulators design rate structures, they must consider rate structures' effects on efficiency, equity, and energy conservation. Certain federal standards—for example, those relating to the provision of information for consumers and those relating to charging ratepayers for advertising expenses—must be adopted if appropriate.

<sup>2</sup>Donald W. Kiefer, Senior Specialist in Economic Policy, Congressional Research Service, suggested this example.

<sup>3</sup>Historically, this ratio has been the average debt/equity ratio for public utilities.

Thus, in effect, the \$1 million asset is financed with \$450,000 new debt; \$450,000 new equity; and the \$100,000 tax deferral. The new asset is added to the utility's rate base and customers are charged so that shareholders earn a rate of return on the utility's rate base minus aggregate deferred taxes. That is, for the \$1 million investment, ratepayers are charged the utility's average cost of debt plus equity times \$900,000.

The fact that at the same time the utility may make a nonutility-related investment does not imply that its deferred taxes are financing this nonutility-related investment. In the situation described above, in which the utility makes the \$1 million utility-related investment, suppose it also invests \$100,000 more in a nonutility-related asset. The utility's combined investments then total \$1.1 million. Assuming the utility's debt-equity ratio remains 50-50, the utility's combined investment is financed with \$500,000 new debt; \$500,000 new equity; and the \$100,000 tax deferral.

However, under usual regulatory practices, the regulatory treatment of the utility's investment is exactly the same as in the first case. That is, utility commissions only approve utility-related investments for inclusion in the utility's rate base, and deferred taxes given rise to by utility-related investments are subtracted from the rate base. Consequently, for the utility-related investment, utility ratepayers are charged the utility's average cost of capital times \$900,000 (the \$1 million asset minus the \$100,000 tax deferral). Regulatory practices of including only utility-related investments in the rate base and subtracting deferred taxes from the rate base cause charges to ratepayers and payments to shareholders to be the same as if the cash flow from deferred taxes could be "earmarked" for utility-related investments.

Because the \$100,000 outside investment is excluded, in effect, from any financing by the utility's ratepayers, in comparison with the first case, the utility must earn a market rate of return on \$100,000 of additional debt and equity. Prudent creditors and shareholders do not invest unless a reasonable probability exists that they will receive a satisfactory return on their investment. A utility's nonutility investments must be sound in the sense that they must be expected to earn a market rate of return that will satisfy creditors and shareholders. Assuming that customary regulatory practices work properly, deferred (or excess deferred) taxes from utility-related investments do not subsidize utilities' outside investments or enable utilities to earn less than a market rate of return on their outside investments.

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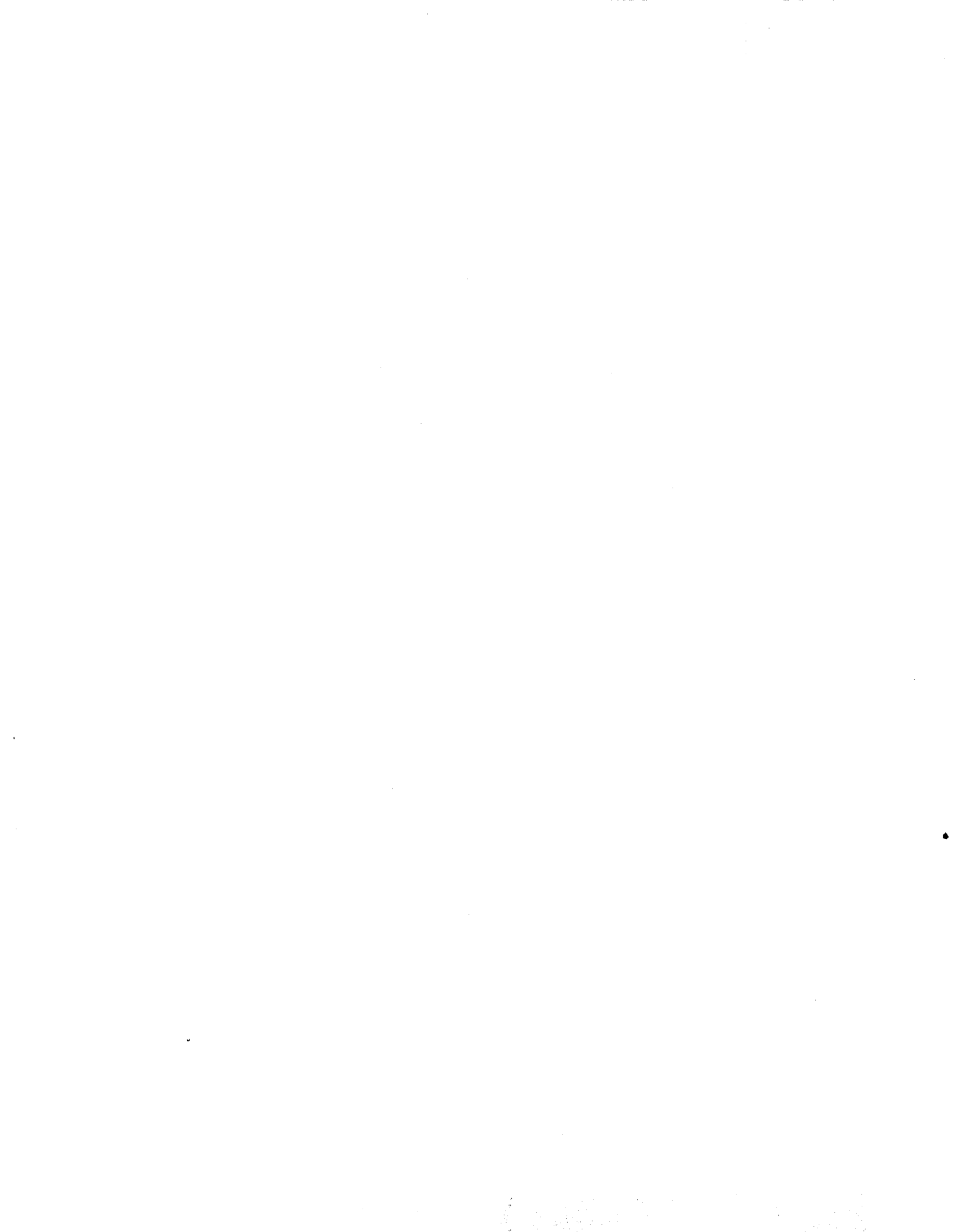
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