Memo:
To: Michael Noble, ME3
From: John Bailey, David Morris, ILSR (Tel: 612-379-3815)
Date: 11/15/98
Re: Replacing Property Taxes on Utility Generation With Revenues from a Carbon-Based Tax: A Minnesota Tax Shift Opportunity

I. Introduction

Electric utilities in Minnesota pay four types of taxes: income tax, franchise fee (or gross receipts tax), sales tax, property tax. The total amount paid in each category is shown in Table 1. In 1995, the total came to $375 million.

Table 1. Electric Utility Tax Paid in Minnesota in 1995

<table>
<thead>
<tr>
<th>Utility</th>
<th>Property Tax</th>
<th>MN Sales Tax</th>
<th>MN Income Tax</th>
<th>Franchise Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSP</td>
<td>$152,078,365</td>
<td>$65,076,000</td>
<td>$31,709,000</td>
<td>$25,505,000</td>
<td>$274,368,365</td>
</tr>
<tr>
<td>Minnesota Power</td>
<td>$34,706,493</td>
<td>$5,963,684</td>
<td>$3,843,817</td>
<td>$700,000</td>
<td>$45,213,974</td>
</tr>
<tr>
<td>Otter Tail</td>
<td>$7,152,715</td>
<td>$4,197,450</td>
<td>$1,370,067</td>
<td>$233,643</td>
<td>$12,953,875</td>
</tr>
<tr>
<td>Interstate</td>
<td>$3,670,381</td>
<td>$1,935,124</td>
<td>$573,770</td>
<td>$569,969</td>
<td>$6,749,244</td>
</tr>
<tr>
<td>Anoka Elec. Coop</td>
<td>$3,179,055</td>
<td>$4,658,862</td>
<td>$0</td>
<td>$534,379</td>
<td>$8,372,296</td>
</tr>
<tr>
<td>Dakota Elec. Assoc.</td>
<td>$4,742,500</td>
<td>$4,487,719</td>
<td>$0</td>
<td>$144,025</td>
<td>$9,374,244</td>
</tr>
<tr>
<td>Cooperative Power</td>
<td>$7,095,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$7,095,000</td>
</tr>
<tr>
<td>United Power Assoc.</td>
<td>$10,827,954</td>
<td>$0</td>
<td>$5,000</td>
<td>$0</td>
<td>$10,832,954</td>
</tr>
<tr>
<td>Total</td>
<td>$223,452,463</td>
<td>$86,318,819</td>
<td>$37,501,654</td>
<td>$27,687,016</td>
<td>$374,959,952</td>
</tr>
</tbody>
</table>


Recently, Minnesota has re-examined the utility tax structure in light of the restructuring of electricity occurring throughout the country. The rationale for this re-examination is that if Minnesota were to deregulate its electricity sector, customers would be able to buy electricity from any supplier. If taxes were imposed on in-state power plants but not on out-of-state suppliers, it would result in a competitive disadvantage to in-state generators.

Of the many taxes imposed on electricity and electric utilities, several will not play an important role in a restructured electricity future. Sales tax, for example, is imposed on the customer of electricity and would be collected whether the power is generated outside or inside the state. The income tax might represent a competitive disadvantage, but virtually all states impose a corporate income tax and thus the differential would probably be slight or non-existent.

1 Utilities also pay payroll taxes, which are ignored for purposes of this report.
2 The assumption is that the generation plant tax is high enough to offset the cost of transporting electricity across state lines. The personal property tax, or tax on utility equipment, is equivalent to $.00153 or .153 cents per kwh. Transmission rates vary substantially. A previous calculation by ILSR estimated transmission costs of sending electricity from Iowa or North Dakota into Minnesota populated areas as .03 to .19 cents per kWh. Thus it appears that the current personal property tax is nearly the same to five times the cost of transmitting electricity from out-of-state. See John Bailey and David Morris, Taxing Wind Energy in Minnesota, Institute for Local Self-Reliance, January 1995
Much of the attention has focused on the utility property tax. Taxes are imposed on utility generators, buildings, transmission and distribution lines. Table 2 breaks down the amount paid in Minnesota by IOUs, Cooperatives and municipal utilities in various categories. A restructured electricity system would continue the monopoly on transmission and distribution lines. Thus the taxes on T&D lines and related equipment and buildings would be imposed on both out-of-state and in-state suppliers. The focus has thus been on the utility personal property tax, that is, the tax on generation attached machinery.

Table 2: Distribution of Property Tax by Ownership and Use (taxes payable in 1997)

<table>
<thead>
<tr>
<th>Utility Type</th>
<th>Property Type</th>
<th>Net Tax (million $)</th>
<th>Percent of Total Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor-Owned</td>
<td>Generation of Electricity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures</td>
<td>$16.3</td>
<td>6.94%</td>
</tr>
<tr>
<td></td>
<td>Attached Machinery</td>
<td>$68.2</td>
<td>29.03%</td>
</tr>
<tr>
<td>Transmission/Distribution</td>
<td>Land and Buildings</td>
<td>$6.7</td>
<td>2.85%</td>
</tr>
<tr>
<td></td>
<td>Attached Machinery</td>
<td>$17.5</td>
<td>7.45%</td>
</tr>
<tr>
<td></td>
<td>Transmission/Distribution Lines</td>
<td>$70.7</td>
<td>30.10%</td>
</tr>
<tr>
<td>Cooperatives</td>
<td>Generation of Electricity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures</td>
<td>$3.1</td>
<td>1.32%</td>
</tr>
<tr>
<td></td>
<td>Attached Machinery</td>
<td>$7.5</td>
<td>3.19%</td>
</tr>
<tr>
<td>Transmission/Distribution</td>
<td>Land and Buildings</td>
<td>$4.6</td>
<td>1.96%</td>
</tr>
<tr>
<td></td>
<td>Attached Machinery</td>
<td>$12.9</td>
<td>5.49%</td>
</tr>
<tr>
<td></td>
<td>Transmission/Distribution Lines</td>
<td>$21.4</td>
<td>9.11%</td>
</tr>
<tr>
<td>Municipal Power Agencies*</td>
<td>Generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attached Machinery</td>
<td>$6.0</td>
<td>2.55%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$234.9</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

* This data set is adapted from Minnesota House of Representatives House Research Department report Public Utility Property Taxation, December 1997. The original table included Municipal Power Agencies in the numbers for IOU’s. We have separated out Municipals based on House Research estimates.
Total property taxes paid by utilities were $235 million in 1997, equivalent to about 0.46 cents per kWh if paid equally by all electricity customers in the state. Utility property tax revenues provide a not insubstantial percentage of money to local governments. This is especially true for those counties which are host to power plants. In 1995 Goodhue County, for example, received 48 percent of its revenue from utility property taxes. Itasca County received 33 percent, Sherburne 37 percent and Wright 27 percent. Franchise fees imposed by municipalities range from 1-8 percent of utility gross revenues and generate 5 percent of total municipal revenue in cities like Albert Lea, Moorhead, and West St. Paul.3

States that have already restructured their electric regulatory systems to allow for retail customer choice of electricity suppliers have also restructured their utility tax system (see Appendix). Most have proposed to replace property taxes with a flat kilowatt-hour charge on the distribution of electricity. Some have eliminated local franchise fees and state utility income taxes and substituted a charge on electricity to make up the difference. Such a replacement tax or fee on the distribution system allows local governments to receive the same revenue they did before restructuring. Such changes in utility taxation avoids the in-state/out-of-state differential that could occur if the current locality-based tax system had continued.

Recently, Minnesota's investor-owned utilities have been trying to change the way local governments assess property tax on electric generating equipment and transmission lines. The proposals would replace some or all of the utility property taxes with a charge on electricity use. The latest form of the legislation focused only on eliminating the personal property tax on utility generation equipment (known as attached machinery). This component represents about $82 million of the total property taxes paid by electric utilities. The legislation had provisions for replacement revenues for local taxing districts through charges on electricity usage until year 2009, when the fees would be phased-out completely.

Minnesota Senate File No. 3377 introduced during the 1998 legislative session contained the following provisions with respect to the personal property tax on utilities.

- electric utility's generation equipment is exempted from property tax assessment
- a generation equipment personal property tax replacement surcharge will be appearing as a separate item on electric bill
- the surcharge rate per kWh is determined by the ratio of the 1998 personal property tax levied on generation equipment minus any in-lieu taxes to the total kWhs of all electricity use in the service area.
- the surcharge as calculated above remains in place until the year 2005. Between April 1, 2005, and March 31, 2009, the surcharge rate will be reduced from the 1998 level by 20 percent each year.
- the utilities subject to the replacement surcharge will collect the money into a special account and distribute these revenues to the PUC within 30 days prior to when property taxes are due.

---

3 1996 Energy Policy and Conservation Report, Study of Minnesota Taxes Paid by Electric Utilities and the Implications of Utility Tax Assessments. Attachment 4, page 3-5. We should point out that in the future, these percentages should decline. While property tax revenue from non-utility firms and households will rise, personal property tax revenue from utilities will decline. The reason is that the tax is on the value of the equipment and the equipment is depreciated. The current state formula that determines the value of a utility's personal property uses the cost of the property to account for 75% of the total. The cost is affected by depreciation, but is limited to a maximum depreciation of 60% of the utility plant value. Thus the revenue from a utility plant will decline by about 30 percent as it is depreciated.
• the PUC will apportion the money to the appropriate county treasurers, who will
distribute the money to the respective local taxing districts.

Thus a tax shift regarding utility taxes is well underway. ME3 has previously aggressively
pursued a broad revenue-neutral ecological tax shift. It seems appropriate to introduce the
concept of an ecological tax shift into the utility restructuring debate. Indeed, one could
argue that such a tax shift could and should occur even without electric restructuring.

An ecological tax shift is more defensible than a sales tax on electricity based on electricity
consumption for three reasons:

1) it internalizes the true costs of power generation with tax levels that are in the range
of the externality values adopted by the PUC;
2) it is consistent with the legislature’s stated goal of maximizing the use of renewable
resources and minimizing environmental degradation;
3) it makes concrete Minnesota's commitment to reducing greenhouse gases,
consistent with the stated declaration of Presidents Bush and Clinton.

If the personal property tax on electric utilities' generation equipment were replaced by a
carbon tax, the tax would come to about $6.70 per ton of carbon emitted\(^4\) ($1.83 per ton of
carbon dioxide). If the franchise fee were also replaced, the carbon tax would rise to $9.00
per ton. In 1997 the PUC adopted a range of environmental externality values of $0.30 to
$3.10 per ton (1995 dollars) of carbon dioxide emissions.

For this proposal to work as envisioned under retail competition, fossil fuel-derived
electricity will need to be separated out from renewable energy sources. In this case only
the carbon-based electricity will be subject to the replacement fee. If a retail customer
chooses to purchase all its electricity from non carbon resources like wind power, that
customer should not be subject to the carbon tax replacement fee.

Recent Changes in the Utility Property Tax System
In the last few years, the Minnesota legislature has made two major changes in the utility
property tax system.

1. A local redistribution of taxes
The state class tax rate for real and personal property is determined by the legislature.
There are about two dozen different class rates for various types of property. In 1998 the
legislature reduced the utilities Class 5 personal property rate from 4.0% to 3.5%. Utility
personal property, also known as "attached machinery" is defined as tools, implements,
and machinery of an electric generating, transmission, or distribution system. This change
does not necessarily lower the overall revenue received by the counties since the state class
tax rates are simply applied to all property within a given local taxing district to determine
the local taxing district's "tax capacity". Once local budgets are determined and approved
the budgets are divided by the tax capacity to get a local tax rate. Around the state the rates
(which vary from year to year) range from about 80% to over 120%. The local tax rate is
multiplied by the value of each property to determine the amount of tax. Thus the locality
might raise its tax rate to make up for the revenue loss created by the state's lowering its
class rate. But since this tax rate would be applied to all property, not just utility property,
the result of the state's lowering the utility class rate is that there has occurred a
redistribution of taxes within the locality, from electricity to other types of property.

---
\(^4\) This calculation uses the State Carbon Tax Model from the University of Maryland to determine a statewide
carbon tax rate based on the statewide fuel mix for electricity production. A more sophisticated approach might be
to do a calculation for each electricity provider based on their generation mix.
2. A shift from favored to non-favored kinds of electric generators.
The legislature has enacted several exceptions to the utility property tax system.

a. Solar power plants are exempt from taxes on attached machinery. Wind power facilities have a three-tiered partial exemption based on the size of the wind farm (see Appendix A). Cogeneration plants built between 1994 and 1997 are exempt from personal property taxes. Three landfill methane burning electric plants in Minnesota are also exempt from property tax because they are considered a "pollution control device."

b. In 1996, the Minnesota legislature passed a law that provided a personal property tax exemption for power plants that met a certain level of operating efficiency (see Appendix A). Simply stated, the Department of Revenue will make a five percent reduction of the taxable market value of the personal property for each percentage point that the efficiency (ratio of energy output to energy input) of the specific facility is above 35 percent. This means that any power plant that has a 55 percent or better overall efficiency rate will pay no personal property taxes. Since this is about the efficiency rate of a new combined turbine gas fired power plant and since these constitute the majority of new power plants being built in the foreseeable future, it is likely that this law will lead to the reduction of utility tax revenue to localities hosting power plants in the future.

The proposal submitted to the legislature in 1998 was designed to avoid any shift of taxes from investor-owned utility customers to customer-owned utility customers. To accomplish this the proposed legislation would impose a replacement fee on all electricity consumed within each "service area". This would result in electric customers paying different fees depending on which service area they were located.

The tables below reveal that IOUs in Minnesota had 55 percent of statewide electricity customers, generated about two thirds of all electricity and paid about 84 percent of the personal property tax on electric generation equipment.\(^5\)

\(^5\) These figures are approximate because the municipal utility portion of property taxes is difficult to determine. The 7 percent figure (approximately $6 million) in the table is derived from House Research data.(see footnote #4) Two Municipal Power Agencies that own part of IOU run power plants paid this amount to local governments. In addition, municipal utilities make "in-lieu" payments instead of property taxes. The Department of Revenue did a survey of Minnesota's 109 Municipal utility systems and found that 79 paid $24.2 million in lieu of taxes, 30 paid no in-lieu payments, and many reported giving free or discounted service to the city totaling $6.4 million. There were also some other minor payments (e.g. 4 paid $90,216 in franchise fees, 4 made in-lieu payments to other civic groups). Thus the total in-lieu payments by municipal utilities comes to over $30 million. This would substitute for both personal and real property tax payments. In 1995, about one third of the property tax payments by electric utilities were for equipment-related taxes. If we were to allocate one third of the municipal utilities' in-lieu payments as a replacement for personal property taxes, it would bring the municipal utility total to about $16 million. This would raise municipal utilities proportional contribution to utility personal property taxes to over 17 percent and drop IOUs to 74 percent.
Table 3: Customers and Sales Revenue by Utility Ownership, 1995

<table>
<thead>
<tr>
<th></th>
<th>Generation (billion kWhs)</th>
<th>Number of Customers</th>
<th>Sales Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor-Owned Utilities</td>
<td>38.01</td>
<td>1,255,289</td>
<td>$2,023 million</td>
</tr>
<tr>
<td>Cooperative Utilities</td>
<td>8.74</td>
<td>563,311</td>
<td>$588 million</td>
</tr>
<tr>
<td>Municipal Utilities</td>
<td>7.22</td>
<td>300,612</td>
<td>$404 million</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53.96</strong></td>
<td><strong>2,119,212</strong></td>
<td><strong>$3,015 million</strong></td>
</tr>
</tbody>
</table>

Source: Minnesota House of Representative, House Research Department, Public Utility Property Taxation, December 1997

Table 4: Personal Property Taxes on Generation by Ownership-payable 1997

<table>
<thead>
<tr>
<th></th>
<th>Electric Generation (billion kWhs)</th>
<th>Personal Property Tax on Generation</th>
<th>Percent of Total Property Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor-Owned Utilities</td>
<td>38.01</td>
<td>$68.2 million</td>
<td>84%</td>
</tr>
<tr>
<td>Cooperative Utilities</td>
<td>8.74</td>
<td>$7.5 million</td>
<td>9%</td>
</tr>
<tr>
<td>Municipal Utilities</td>
<td>7.22</td>
<td>$6.0 million</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53.96</strong></td>
<td><strong>$81.7 million</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Minnesota House of Representative, House Research Department, Public Utility Property Taxation, December 1997

Table: Personal Property Tax Payments With Equalized Replacement Fee

<table>
<thead>
<tr>
<th></th>
<th>Electric Generation (billion kWhs)</th>
<th>Replacement Fee ($0.00152 per kWh)</th>
<th>Percent of Total Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor-Owned Utilities</td>
<td>38.01</td>
<td>$57.56 million</td>
<td>70.40%</td>
</tr>
<tr>
<td>Cooperative Utilities</td>
<td>8.74</td>
<td>$12.22 million</td>
<td>16.20%</td>
</tr>
<tr>
<td>Municipal Utilities</td>
<td>7.22</td>
<td>$10.92 million</td>
<td>13.40%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53.96</strong></td>
<td><strong>$81.7 million</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

6 Taxes paid by Municipal Power Agencies (MPAs) have been extrapolated from House Research data. In the original tables, the data for MPAs were included in the amounts for IOUs due to a lack of data availability. There are eight MPAs serving Minnesota. The Southern Minnesota Municipal Power Agency (SMMPA), which co-owns (with NSP) the Sherco 3 generating station in Sherburne County is the largest property owner. SMMPA estimates that its payable 1997 property taxes are almost $8 million. Of that total about $6 million is paid to Sherburne County, the city of Becker, and School District #726. It could be assumed that the majority of the $6 million is personal property tax on generation. Western Minnesota Municipal Power Agency is the second largest MPA in the state. Its payable 1997 property tax was about $300,000. It has transmission lines in four counties. The remaining six MPAs in Minnesota do not own any property in the state. Based on this ILSR used a figure of $6 million for personal property tax on generation equipment of municipal utilities.
II. An Ecological Replacement Tax

Minnesota is seeking a replacement tax for between $81.7 million and $109 million, depending on whether it is substituting only for the personal property tax or the franchise fee as well.\(^7\) To generate this revenue would require a replacement fee of of $0.00152 - $0.00203 per kWh which is equivalent to a statewide carbon tax applied only to electricity of $6.72 - $9.00 per ton (or $1.83 to $2.45 per ton of carbon dioxide emitted).

Interestingly, these figures are within the range of values adopted by the Minnesota PUC as estimates of the present value cost of climate change on Minnesotans. The PUC established a range of $0.30 to $3.10 per ton (1995 dollars) for the environmental cost of CO2.

Under current PUC regulations, utilities must take environmental externalities into account when choosing what type of new power they will generate or purchase. The PUC decided to limit the imposition of externality values for climate change-related gases to in-state power plants. Given that customers will be able to choose out-of-state electricity suppliers under a deregulated electricity system, these environmental externalities may be ignored.

By imposing a carbon tax on the use of electricity, Minnesota can accomplish several objectives:

1. Maintain the viability of the externality costs adopted by the PUC
2. Impose the same costs on imported electricity as on homegrown electricity
3. Make more visible the environmental costs of electricity as part of a green pricing strategy
4. Increase the use of renewable fuels and energy efficiency, consistent with the declared intention of the Minnesota legislature

Legal and Logistical Issues of a Carbon Tax-based Replacement Fee

1. Is a carbon tax imposed on out-of-state electricity constitutional?

The National Council on Competition and the Electric Utility Industry (NCCEI) notes, "States may face constitutional limitations on their ability to impose taxes or collection responsibilities for taxes imposed on others (e.g., sales and use or utility user taxes), such as out-of-state generators or marketers of electricity, unless those people have a sufficient presence in the taxing state. The precise extent of these limitations is not clear in many cases." The Supreme Court has twice ruled that states cannot impose taxes on mail order purchases from out-of-state. Some might liken a tax on imported electricity similar to a mail order tax. But in any case, there are two important differences between the proposed carbon tax and a mail order tax.

First, the carbon tax would be imposed on the consumer, not the producer. While the U.S. Supreme Court has ruled that states cannot impose sales taxes on out-of-state suppliers, it allows states to impose a use tax on those inside the state who purchase out-of-state goods. Most states have use taxes, which are taxes equivalent to the sales taxes that customers of mail order firms are supposed to pay. But it is virtually impossible, with a drastic violation of individual privacy, for states to monitor sales to households and businesses. Thus payment of use fees is very low and virtually voluntary. Compliance rates are less than 1 percent. However, in the case of electricity, consumption is regularly and easily

\(^7\) Although one state, Virginia has eliminated the corporate income tax for utilities as part of its restructuring package, we are not including that item, which came to about $37 million in 1995, in this analysis.
monitored. The tax would be imposed by the distributor of electricity and become part of the monthly bill. Thus it appears that a carbon tax on the customer is legal under the Supreme Court's rulings and logistically is much easier to collect than the use fee.

Second, electricity is different than any other product in that it is rarely physically delivered to the customer. The Supreme Court has ruled that taxes can be imposed on out-of-state suppliers of goods if that supplier has a nexus, that is, a physical presence in the state. In the case of electricity, the out-of-state supplier would not have a physical presence, but the electrons themselves would often come from within the state. Electricity might be sold from a supplier in Montana to a customer in Minnesota but the power plant in Montana does not actually provide the electrons for that customers electric needs. Thus one might argue that the electricity itself does not travel across state lines but is simply a paper transaction and that the electricity that does end up being consumed in Minnesota is almost always generated in Minnesota and thus is subject to the carbon tax, or any sales tax on electricity.

2. **Would a carbon tax-based fee lead to equitable distribution of revenues?**

The proposed replacement fee in Minnesota, as noted above, is designed to eliminate a shift of taxes away from customers of IOUs onto customers of publicly-owned utilities by determining the fee based on a given "service area". This seems a logical policy direction, given that Minnesota, and the nation as a whole, have developed rules that favor customer-owned utilities (e.g. exempting them from certain regulatory processes; giving them preference for low-cost power from federal facilities; exempting them from income taxes; allowing them to issue tax-exempt bonds).

A carbon tax could be fashioned so that the total tax paid by electricity customers whose electricity travels into a given distribution grid will be the same in the future as it is today. This would require a differential replacement fee depending on the carbon content of electricity provided in a service area. Therefore customers that are currently in NSP's service area may have a different replacement fee per kWh than customer's in Minnesota Power's service area.

The differential carbon tax-based fee could be determined initially based on the fuel mix of the power plants serving each of the current distribution systems. For example, in NSP’s distribution area about 40 percent of the power comes from nuclear or hydro. Thus although the revenue that must be generated by the replacement fee will be paid by all customers, if it takes the form of a carbon tax, it will be imposed only on 60 percent of NSP's power base. Thus the carbon tax rate imposed on NSP's customers, to generate an equivalent total amount of revenue, will be about twice the level of that imposed on customers of the three major Generation & Transmission cooperatives serving Minnesota, which are virtually 100 percent powered by fossil fuels.8

This differential could become important in NSP's territory because with complete deregulation, customers will be able to choose other suppliers. Some of these other suppliers may be offering customers 100 percent renewable electricity. In this case the customer would not be paying the carbon tax replacement fee and the overall fees collected in the service area would be lower. This problem might be tempered slightly since the current personal property taxes are already decreasing due to depreciation on the equipment.

---

8 Cooperative Power-100% fossil. Dairyland Power - 98% fossil. United Power Association- 100% fossil. According to the DPS, only a few of the municipal utilities have any significant non-fossil fuel power generation.
3. **Long term revenue losses**
The taxes imposed on power plants, as the Department of Public Service notes, are much higher than those imposed on manufacturing plants. Under the current system, those higher taxes are paid by customers of that utility, while the benefits of the tax revenue go to the power plant's host community. That is their reward for being willing to host power plants.

As part of the proposed legislative changes in utility property taxes, a community's reliance on utility tax revenue would decline in the future. Even without this legislation it appears that this is already occurring to some extent as other property tax revenue increases (e.g. from households and non-utility businesses) while utility tax revenues decline because of depreciation on the utility equipment (unless new power plants are built). Also, lower personal property taxes in the future will result due to the introduction of high-efficiency gas-fired turbines which, based on Minnesota law, will pay little or be completely exempted from personal property tax payments to their host communities. In addition, taxes could be lower due to the introduction of decentralized, non-utility-owned power plants. These high efficient household and business-scaled micro-turbines or fuel cells will replace boilers and furnaces and will therefore be exempt from personal property taxes.

Revenue from a carbon tax will also likely decrease as customers begin to choose renewable or low carbon sources of electricity. But this would also be the case under current Minnesota tax law if renewable and natural gas fired electricity was to become an increasing proportion of the state's power supply. Some types of renewable fueled electricity is exempt from utility personal property taxes. Other types like large wind power projects are still subject to personal property taxes. High efficiency gas-fired turbines, as noted above, are largely or totally exempt from utility personal property taxes.

III. **Financing Energy Conservation with a Carbon Tax**
Using a carbon tax replacement fee as a way to accomodate competition in the electricity sector while preserving tax revenues for local communities could also be used for maintaining investments in energy efficiency and demand-side management. As utilities "prepare" for retail electric competition in Minnesota, they have been slashing their expenditures on energy conservation. A user fee based on carbon content will allow Minnesota's utilities to maintain their competitiveness while ratepayers will continue to enjoy the benefits provided by energy conservation programs.

According to state law, regulated electric and gas utilities are required to spend a percentage of their gross revenues on conservation. The law requires regulated electric utilities to invest 1.5 percent of their state revenues in Conservation Improvement Programs, known as CIP, (except NSP, which must invest 2.0 percent). Regulated gas utilities are required to invest 0.5 percent of their state revenues into conservation programs. Municipal utilities that generate their own electricity are required to spend 1.0 percent of their revenues on energy conservation programs, cooperative electric associations must spend 1.5 percent, and municipal gas companies with revenues over $500,000 are required to spend 0.5 percent.

The December 1997 report by DPS, *Minnesota Utilities' Energy Conservation Programs*, indicates that investor-owned utilities' expenditures on conservation programs were exceeding the statutory levels in 1995 but have dropped significantly since that time. In 1995 expenditures on IOU's electric and gas CIP programs peaked at about $82 million but in 1997 expenditures were expected to drop to about $55 million. Conservation
Expenditures by cooperatives and municipally-owned utilities are a different story. Expenditures by municipal and cooperative electric and gas utilities on conservation actually increased slightly from 1995 to 1997, from about $25 million to nearly $27 million.

Most states that are looking at electric deregulation are proposing "system benefits charges" (SBCs) to finance energy efficiency and other environmental programs. However, most of these SBCs are slated to be discontinued after a period of four to five years. Since ME3 would like to see a more long-term commitment to energy conservation in Minnesota we expect that any carbon-based replacement fee for conservation should remain in place for many years.

**Electricity**

In 1995, electric sales in Minnesota totaled $3 billion.\(^9\) Since this was the peak year for conservation investments by investor-owned utilities, we can make this the benchmark for future expenditures. Expenditures on electric conservation programs in 1995 by IOU's, Munis, and Coops, totaled about $92 million, about 3 percent of total sales.

To raise $92 million from a carbon tax based fee on electricity would require a $7.50 per ton carbon tax rate based on statewide electricity data. This would raise the price of electricity by about $0.0017 per kWh, about $1.00 per month for the average residential customer. The impact of this tax shift would actually be less since conservation expenditures are already embedded in rates. If these expenditures were "unbundled" from rates we would expect that the generate rate for electricity would drop.

**Natural Gas**

In 1995, gas sales in Minnesota totaled $1.1 billion.\(^10\) Although gas utilities' investments in conservation have not fallen as dramatically as electric utilities, we can also make 1995 the benchmark for future expenditures. Expenditures on natural gas conservation programs in 1995 by IOU's and Munis totaled about $11 million, about 1 percent of total sales. To raise $11 million from a carbon tax on the use of natural gas in the state would require a price increase of about $0.033 per thousand cubic feet (Mcf), equivalent to a $2.04 carbon tax rate. In 1995, the residential sector paid about $4.80 per Mcf and used about 125 Mcf per year. This tax shift would add about $0.34 to a monthly residential natural gas bill.

**IV. Conclusion:**

Minnesota is currently exploring alternatives to its present utility tax system, given the possibility of electricity restructuring. Already the legislature has enacted laws that reduce the tax rate on utility equipment and open the door to a reduced exposure to property taxes by future power plants. More than half a dozen other states that have already begun restructuring their electricity systems have changed their utility tax structure. Most have imposed a flat or tiered tax on electricity consumption.

Under utility restructuring it appears that it makes sense to eliminate the personal property tax on generation equipment. An ecological tax on electricity in Minnesota is an appropriate

---


way to marry the desire to shift the tax burden from property taxes to a consumption tax with the desire to reduce pollution and expand the production of electricity from renewable fuels. A statewide carbon tax on electricity at the level of $6.72 - $9.00 per ton (or $1.83 to $2.45 per ton of carbon dioxide emitted) would generate the same tax revenues as the current personal property tax or, in addition, eliminating the current utility franchise fees. Such a tax rate would be within the range of environmental costs the Minnesota PUC adopted in 1997 as part of its future evaluation of utility electricity generation or purchasing decisions.

If we took the proposal even further by adding in a carbon based fee to pay for energy conservation programs, it would add an additional $7.50 per ton carbon tax to electricity ($0.0017 per kWh) and a $2.04 per ton tax to the use of natural gas ($0.033 per Mcf). This would raise just over $100 million per year to finance electric and natural gas energy efficiency programs throughout the state.
APPENDIX A

What Other States Are Doing Regarding Utility Taxes

ILLINOIS

State Tax: Previously, the state collected a utilities tax, the lesser of 0.32 cents per kilowatt-hour or 5% of gross receipts. This has been replaced with a ten tiered tax on use, which is revenue neutral.

Municipal Tax: Previously, municipalities were allowed to impose a gross receipts tax on electricity, not to exceed 5%. New state law eliminates this tax, replacing it with a ten tiered consumption tax that is designed to be revenue neutral. The tax is on users, but is collected by the deliverer. Localities must work with utilities to set the ten rate levels so that the revenue is equivalent to what the locality would have collected on gross receipts in 1997. The first 2,000 kWh used in one month are taxed at a maximum of $0.61/kWh. The rate decreases with each additional consumption level, so that any use above 20,000,000 kWh/month is taxed at $0.30/kWh.

Personal Property Tax: The Corporate Personal Property Tax in Illinois no longer applies to utilities, but is instead replaced with a ten-tiered consumption tax which is designed to be revenue neutral.

Property Tax: Property tax rates for utilities are the same as for other industries. Illinois, however, is expecting some (nuclear) plant shutdowns which will radically affect the tax base in some towns. The Illinois legislature agreed to freeze depreciation of nuclear plants over the next three years as a way to protect school and other taxing districts from reductions in the property tax assessment base. In the meantime, the legislature is to devise a way to deal with this loss in local revenue.

Franchise Fees: Are replaced with yet another ten-tiered consumption tax.

Cooperatives may opt in to the competitive market (and pay the above taxes), or they may continue to operate as they currently do. Illinois imposes the gross receipts tax (0.32 cents per kilowatt-hour or 5% of the purchase price) on cooperatives, and those that opt out of competition will continue to pay this.

Public Revenue Neutrality

In order to maintain tax revenue and competitive neutrality, HB 362 revises the municipal and state taxes on utilities such that they apply to all electricity sales, as shown below:
<table>
<thead>
<tr>
<th><strong>Existing Tax</strong></th>
<th><strong>New Tax</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Utility Revenue Tax: 0.32 cents per kilowatt-hour of electricity delivered or sold by public utilities.</td>
<td>Excise tax ranging from 0.33 cents to 0.20 cents per kwh purchased for final consumption, depending upon the total number of kwh. Customers of municipalities will pay the lesser of 0.32 cents per kwh or 5% of the purchase price.</td>
</tr>
<tr>
<td>Gross Revenue Tax: 0.1 percent of the gross revenue of electric utilities is paid into the Public Utilities Fund, which pays the expenses of the Commission.</td>
<td>The Public Utilities Fund will receive 3 percent of the revenue collected under the excise tax.</td>
</tr>
<tr>
<td>Invested Capital Tax: 0.8 percent of invested capital.</td>
<td>Tax ranging from 0.31 cents to 0.131 cents per kilowatt-hour distributed in the state, depending upon the total number of kwh distributed, to be paid by the electric cooperative, utility, or alternative supplier that distributes the electricity. Amount of tax depends upon total amount distributed.</td>
</tr>
<tr>
<td>Municipalities have the authority to impose a tax of 5 percent on the electric utility's gross revenue.</td>
<td>Municipalities will be able to impose a tax ranging from 0.61 to 0.3 cents per kwh consumed within its borders.</td>
</tr>
<tr>
<td>Franchise fee: Amount of money or free electricity that municipalities collect from utilities in exchange for providing the rights of way for the transmission and distribution lines.</td>
<td>Municipalities may waive the right to receive the franchise fee, and instead collect an amount per kilowatt-hour up to a maximum established in the bill depending upon the total number of kilowatt-hours purchased. The fee would be collected from all suppliers of electricity to customers within the municipality.</td>
</tr>
</tbody>
</table>

To address concerns about the loss of property tax revenue, the bill creates an Electric Utility Property Assessment Task Force that will advise the General Assembly on how the restructuring may affect the valuation of electric generating plant and the taxing districts in which such plants are located. The task force will issue a report by January 1, 1999 containing recommendations for legislation that can address potential tax revenue losses.

**MASSACHUSETTS**

There were two major changes in local taxes that accompanied deregulation in Massachusetts. The first had to do with divestiture. Generating facilities sold to non-utilities were eligible to seek manufacturing status, meaning that they would be exempt from the personal property tax on generation machinery normally applied to utilities. The law was amended so that generation equipment will remain subject to personal property
tax. Small cogenerators are exempt (30 megawatts or under) and manufacturers who generate their own electricity were grandfathered in.

The second issue was devaluation. If generating facilities lose value under deregulation, they will be subject to a transition tax. In a nutshell, they pay their normal property taxes as assessed, plus a transitional tax which brings the revenue up to its pre-deregulation (1997) level. This continues for three years, then the transitional tax is reduced by 10% each following year (2001-2009). The law allows for this transitional tax to be added to customers’ bills.

Local communities are allowed to enter into agreements with their local generator, and to set up some kind of alternative payment in lieu of taxes. Somerset, Salem, Charleton, and Springfield have done this. Plymouth, which has a nuclear plant that no one wants to own, is in dire straights. The state legislature may create a special deal for Plymouth.

At the state level, the legislature has created a commission to investigate the possible impacts of deregulation on state revenues. Preliminary analysis indicates little change. Currently, non-utility corporate generators pay a corporate excise tax of 9.5% on net income. Utilities pay a corporate franchise tax of 6.5% on net income. The state also collects a 5% sales tax on electricity used commercially. This is collected at the distribution point, so the in-state/out-state generation issue is not a problem.

Massachusetts has no cooperatives. Municipals are tax-exempt and will continue to operate in their jurisdictions as before until 2002, at which time they can opt-in to competition.

MONTANA
Electric utility property (IOU’s only) comprise 17.44 percent of Montana's total property tax base. Cooperatives are exempt. Under the deregulation legislation passed, cooperatives must create a for-profit affiliate that will be taxed the same as other suppliers if the cooperative wants to enter a public utility's distribution system. Cooperatives can choose not to participate in the new electricity structure, but they may not use the distribution systems of public utilities if they opt out.

In terms of the loss in state and local revenue that is expected under deregulation, Montana's law calls for a legislative committee to determine the amount of revenue that will be lost, and to make recommendations for establishing new taxes that will generate comparable revenue, and be distributed fairly among electricity companies. The committee is to report to the legislature by November 30, 1998.

NEW JERSEY
New Jersey has not actually passed any deregulation legislation, but they seem to be proceeding along with comprehensive regulatory changes. Legislation was introduced in late summer 1998.

In December 1997, the legislature repealed the state's (13%) gross receipts tax on utilities, replacing it with a (6%) sales tax on electricity, the state's regular business earnings tax and a transitional tax that will expire after five years. The transitional tax probably attempts to gradually implement the loss in local revenues.
OHIO
Ohio’s assessment rate on all (real and personal) electric generation property is 100% on for-profit utilities and 50% on cooperatives. The assessment rate on distribution and transmission equipment is 88%. The legislative committee on deregulation has recommended that the rate on all equipment be reduced to 25% across the board. This means a loss of $210 million in local revenues, with a strong impact on school funding. In some districts, property taxes account for 70% of school funding, and many districts could lose as much as half of their tax base under the proposed assessment rate.

The committee has also recommended elimination of the state gross receipts tax on electric utilities, which generates $452 million annually. They also propose elimination of fixed-dollar levies worth $5 million.

To make up for lost revenue, the committee has recommended a flat tax on electricity (per kwh) that would be charged to the distribution companies, and thereby avoiding the in-state/out-state generation taxing issue (unlike a gross receipts tax, which can only be charged to in-state utilities). This excise tax would raise $617 million, and works out to about $0.005 per kWh. Another $50 million would be raised by eliminating the current electric utility exemption from corporate franchise tax. The committee’s intention is to redistribute this money to local areas that would be losing property tax revenue.

OKLAHOMA
Legislation passed in Oklahoma mandates competition by July 2002. The plan does not include many details, but rather charges various commissions with studying different issues and reporting back to the legislature. Cooperatives can chose to opt in or out. The plan provides some incentives for municipals and the Grand River Dam Authority to opt in. The State Tax Commission is required to study the effects of restructuring on the state tax policy, and to report back to the Electric Utility Task Force by the end of 1998.

NEW HAMPSHIRE
New Hampshire did not address property tax issues in its deregulation legislation, and estimates indicate that this will result in a loss of 30% of local revenues because of the decrease in value of utility assets.

NEVADA
The State Revenue Dept. is studying the tax issue, although restructuring legislation has already been passed. Municipals and cooperatives are exempt from deregulation.

PENNSYLVANIA
Pennsylvania collects gross receipts (4.4%), property, net income (9.9%), capital stock, and sales and use taxes on utilities that raised $961 million in 1995.

The state has committed itself in its electricity deregulation legislation to collecting the same amount of tax, and distributing it to the same localities that previously benefited from utility taxes. However, they have not yet determined how to do this, and have established a group to study the issue and will return to it later.

Cooperatives and municipal providers may opt out of the new law as long as they do not attempt to serve customers outside of their franchise territories.
VIRGINIA
The Virginia General Assembly has established a State and Local Taxation Task Force with respect to electric restructuring. Below find the summary of their work as of November 10, 1998. See http://dls.state.va.us/sjr91.htm for updated information.

Staff Matrix Summary
November 4 10, 1998

The brief summary below highlights responses by stakeholders and other interested parties to a series of questions covering the topics addressed by this task force:

The purpose of this summary is to identify areas of agreement and disagreement among the respondents on key issues before this task force. The respondents include:

Allegheny Power.
American Electric Power ("AEP").
Attorney General's Division of Consumer Counsel ("Consumer Counsel").
Municipal Electric Power Association of Virginia ("MEPAV").
Virginia State Corporation Commission ("SCC").
Virginia Association of Counties ("VACO").
Virginia, Maryland & Delaware Association of Electric Cooperatives and Old Dominion Electric Cooperative ("Co-ops").
Virginia Municipal League ("VML").
Virginia Power.

Brief Summary of the Current Taxation Scheme for Public Utilities
Under current law, the investor-owned electric utilities and the electric cooperatives and electric energy customers pay a variety of taxes to the Commonwealth and localities. Taxes paid directly by the utilities are "recaptured" from customers through the utility's regulated rates. Revenue received by the Commonwealth directly from utilities is collected on a gross receipts basis. In 1996, the State Corporation Commission received approximately $90.2 million dollars in gross receipts taxes (§ 58.1-2626). Utilities currently benefit from the Virginia Coal Employment and Production Incentive Tax Credit (§ 58.1-2626.1) which provides a credit against the state gross receipts tax for the purchase of Virginia coal, a credit of approximately $18.1 million dollars in 1996. Electric utilities also paid approximately $5.4 million dollars in 1996 as a result of the special regulatory revenue tax (§ 58.1-2660). This tax is levied for the specific purpose of raising funds to be expended by the SCC in making independent appraisals and valuations of the property of the utilities.

Localities also receive a large amount of revenue from electric utilities. These sources include local gross receipts taxes, consumer utility taxes, and revenues from property taxes. Local gross receipts (§ 58.1-3731) are imposed on the utility's gross receipts and can vary from locality to locality, although most localities impose this tax at a rate of 0.5% of the gross receipts of the utility derived from within that locality. The consumer utility tax (§ 58.1-3814) is imposed on the customer's monthly gross charge and the amount may vary from locality to locality. Many counties and cities have been granted an exemption to the statutory limits currently in the Code of Virginia. The current law distinguishes between residential and other customers in establishing the rate limits.

Property taxes paid by electric utilities also represent a significant source of revenue for localities. Under current law, the State Corporation Commission assesses the property of public utilities. The assessment includes the value of both the real estate and equipment.
located at the facility. The certified assessment is forwarded to the locality in which the facility is located, and the real estate tax rate is applied to the total assessed value of the facility. Independent power producers, on the other hand, have their property and equipment assessed by the locality. The land is taxed at the real estate rate, and the equipment is taxed separately at a "machinery and tools" rate. There are also differences in the depreciation method used by the SCC and the methods utilized by the localities.

The 1997 Taxation Task Force formed pursuant to SJR 259, comprised of representative stakeholders and chaired by Senator John Watkins, formulated draft legislation designed to (i) retain the current level of revenue for the Commonwealth and localities, and (ii) maintain the current apportionment of tax burden among residential, commercial, and industrial users.

Relying extensively on the Department of Taxation for technical assistance, the task force developed such a taxation scheme. Embodied in SB 619 and SB 620 is a taxation scheme that imposes a corporate net income tax on profits derived from generation. A "declining block" consumption tax, which also serves as a collection vehicle for the special regulatory revenue tax and the local gross receipts tax, is used to make up the resulting revenue shortfall. SB 619 and SB 620 were introduced during the 1998 session of the General Assembly and, at the request of Senator Watkins, carried over for further study during the interim.

Representative Stakeholder responses to Staff Questionnaire

**Should the current taxation methodology for electric utilities remain in effect if there is restructuring resulting in retail competition?**

The SCC, Consumer Counsel, Virginia Power, AEP, Allegheny, and the co-ops all agree that retail competition will require changes in the current tax scheme.

MEPAV suggested that restructuring will require some modification of the state and local tax code, but that a modified gross receipts tax could be collected at the transmission provider level from municipal electric systems. MEPAV also suggested that urged the task force to address the tax issues associated with out-of-state gas purchases be addressed as a matter of fairness.

VML and VACO filed a joint response to the staff questionnaire. VML and VACO indicated that the current tax scheme should remain in effect, but that the local consumer utility tax and the local gross receipts tax may need to be based on a kWh consumption basis rather than on a gross receipts basis.

**Taxation of investor-owned utilities, electric cooperatives, municipal electric power suppliers in a restructured environment.**

Virtually all respondents agree that a corporate income tax is an appropriate replacement mechanism for the state gross receipts tax. There is disagreement concerning whether or not to apply this income tax to all business income or only to apply the tax to that income that is derived from generation. The SCC, Consumer Counsel, AEP, the co-ops and MEPAV would all impose a corporate income tax on the total business income. Virginia Power, AEP, and Allegheny would impose this corporate income tax only on the income derived from generation.

Electric cooperatives also currently pay the gross receipts tax and the special regulatory revenue tax. However, unlike the investor-owned utilities, the co-ops pay no federal income tax because they are non-profit entities owned by their customers. AEP and MEPAV would impose a modified gross receipts tax on the co-ops, an approach also
contained in SB 620. The co-ops stated that continuing to subject an electric coop to a minimum GRT would cause an unfair tax burden and inequitable tax treatment, since a coop's power transactions in a competitive environment may result in significant gross receipts, but may generate little or no margin ("profit"). Co-ops are now exempt from federal corporate income tax only if they meet specific requirements and have no profits. The co-ops are willing to pay a corporate net income tax on federal taxable income, which translates to taxable profits. The SCC stated that the co-ops should pay a corporate income tax if they are liable under current statutes.

Municipal electric utilities and their customers are not currently subject to any some but not all of the taxes mentioned in this report. The local consumer utility tax is collected from municipal utility customers in the same way that this tax is collected from the customers of investor-owned utilities and the cooperatives. However Moreover, municipal purchases of electricity from in-state providers does includes the embedded cost of the gross receipts and special regulatory revenue tax. VML stated that electricity purchases, either inside or outside the state, should be subject to the state's taxation at a level comparable to the current state gross receipts tax. VML also believes that municipal electric systems should continue to have the authority to set their own rates and to be governed by local governing bodies, not a state governing or a state regulatory board.

The SCC also noted that wholesale power transactions should be subject to the corporate net income tax, as well as the special regulatory revenue tax.

"Declining block" Consumption Tax; Components.
All stakeholders who responded support the concept of implementing a consumption tax based on kWh usage to make up the substantial revenue shortfall that occurs when moving from a gross receipts tax to a corporate net income tax. The SCC, Virginia Power, AEP, and Allegheny Power all endorsed the "declining block" method that serves to maintain the current tax apportionment among user categories (residential, commercial, and industrial). Consumer Counsel stated that any consumption tax should equitably allocate the tax burden among customer classes and prevent further shifting of the tax burden to smaller customers. MEPAV noted that a consumption tax will substantially increase the tax burden on the customers of a municipal electric utility, and that a state gross receipts tax levied on the wholesale purchase of the municipal utility would may be more revenue neutral. MEPAV and VML believe there should not be direct taxation of municipal electric customers. MEPAV stated that if a consumption tax is enacted, the measure should allow the municipal electric utility the option of providing the revenue through their transmission and/or purchase power contracts.

Virginia Power, AEP, Allegheny Power, the co-ops, and VML/VACO all agreed that the consumption tax should serve as a replacement method for the revenue currently received from the state gross receipts tax, local gross receipts taxes and the special revenue regulatory tax. The co-ops would allow localities the option of adjusting the minimum consumption tax rates to ensure no loss of revenue. The SCC proposes limiting any consumption tax to the state tax portion only. MEPAV agrees that it may be appropriate to collect the with including local gross receipts taxes in the consumption tax, but objects to including the special revenue regulatory tax, stating that it is inappropriate for the municipal electric systems to pay for the regulatory functions of the SCC which do not benefit them because their purchases are regulated entirely by the FERC. MEPAV and VML/VACO also suggest that any consumption tax should be "unbundled" so that the tax rate for each component included in the consumption tax can be properly identified and remitted to the locality and the Commonwealth.
Administration of Replacement Taxation Program.
Who should bear the responsibility for administering any new tax programs designed to replace the current tax scheme? MEPAV, VML, and Allegheny Power favor oversight by the Department of Taxation. VACO prefers that the SCC oversee this function. The co-ops propose delegating the corporate income tax portion to the Department of Taxation, with the SCC assigned responsibility for any consumption tax and oversight in determining the allocation between generation and nongeneration business segments. The SCC believes that if the taxation scheme is limited only to general fund taxes, the Department of Taxation should administer the program. However, if the "declining block" consumption tax as contained in SB 619 is implemented, the SCC should administer the program. Virginia Power indicated no preference as to whether the SCC or the Department of Taxation administers the program, but did encourage the planning of an effort to educate consumers.

Real Property; Assessment Methodology; Performance of Assessments.
The onset of retail competition could have significant impact on the property tax revenues localities receive from electric utilities. A decline in the price of electricity could cause a drop in property tax assessments, which would be especially painful to localities who have generation facilities physically located within their jurisdictional boundaries. The SCC would protect and preserve the current revenues received from real property taxes imposed on generation facilities by providing that the General Assembly mandate central assessment of the property by the SCC. AEP feels that any changes in facility value are speculative at this time, and that the SCC should have central assessment authority over all generating facilities within Virginia.

Virginia Power, VML/VACO and MEPAV would give localities the authority to assess and adjust the property tax rates on generation facilities. VACO/VML feels that if localities are charged with assessing generating facilities, the state should provide guidelines and assistance, and that the SCC should continue to assess distribution and transmission lines. The co-ops suggest allowing localities to make up any loss in property tax revenue by increasing the consumption tax. The co-ops also believe that all property owned by electric generators should be subject to uniform central assessment.

Virginia Power and AEP state that fair market principles in accordance with the Virginia Constitution (Article X, § 2) must be the assessment method used when determining the value of property owned by suppliers of electricity. AEP would require the SCC to continually review the depreciation factors to assure accuracy in the assessments. The co-ops proposal would be to assess at "book value", as defined by generally accepted accounting principles, while Allegheny Power would tax all generation property similarly, using a uniform and consistent assessment method. The SCC's proposed assessment method on real property would be original cost less depreciation. The SCC also notes that deregulation may require other appraisal techniques. VML/VACO proposes defining a uniform method of assessing generation facilities in the Code of Virginia, provided that a mechanism for allowing a separate rate classification of this type of property is provided also. VML/VACO also felt that localities must have the flexibility to adjust their tax rates in the event the assessment method adopted results in a reduction in revenue.

Consumer Utility Tax; Collection.
While Allegheny Power states that ideally a governmental entity imposing a tax should have the duty of collection, all respondents do agree that the local distribution company should serve as the collector of the consumer utility tax. Virginia Power, AEP, VML/VACO and MEPAV would protect the revenue from this source by basing the tax on a kWh consumption rather than price. Allegheny Power and the co-ops would incorporate the consumer utility tax into any consumption tax. The co-ops and VML/VACO also propose allowing localities to adjust the rates charged to ensure revenue neutrality.
IOWA
In 1998, the Iowa legislature passed new law regarding utility property taxes (SF 2416). The description of the bill shown below provides insight into the legislature's rationale for making changes to the existing property tax structure for utilities.

SF 2416 - UTILITY REPLACEMENT TAX

Prior Law
Entities involved in the production and distribution of electricity and natural gas were assessed for property taxation purposes by the director of revenue and finance.

New Provisions
The current central property tax assessment system is replaced with a replacement tax on the generation, transmission and delivery of electricity and natural gas.

A replacement delivery tax is imposed on every person who makes a delivery of electricity to a consumer. The tax is equal to the sum of the number of kilowatt-hours of electricity delivered to the consumers by the taxpayer multiplied by the electric replacement delivery tax rate plus the number of kilowatt-hours of electricity delivered to consumers by the taxpayer multiplied by the electric transfer replacement tax rate, where applicable. The electric replacement delivery tax rate is to be calculated by the director and the electric transfer replacement tax rate is to be calculated by the city council. The electric delivery tax rate is to be published by the director in the Iowa administrative bulletin by November 30 of the first year and during the last quarter of each subsequent year.

The following are not subject to the electric delivery tax rate:

a. Delivery of electricity generated by a low capacity factor electric power generating plant.

b. Delivery of electricity to a city from the city's municipal utility, provided the electricity is used by the city for the city's public purposes.

c. Electricity consumed by a state university or university of science and technology, provided the electricity is generated by federal or state property.

A replacement delivery tax is imposed on every person who makes a delivery of natural gas to a consumer. The tax is equal to the number of therms of natural gas delivered to consumers by the taxpayer multiplied by the natural gas delivery tax rate plus the number of therms delivered to consumers by the taxpayer multiplied by the municipal gas transfer replacement tax rate, where applicable. The natural gas delivery tax rate is to be calculated by the director and the municipal natural gas transfer replacement tax rate is to be calculated by the city council. The natural gas delivery tax rate is to be published by the director in the Iowa administrative bulletin by November 30 of the first year and during the last quarter of each subsequent year.
Delivery of natural gas to a city from the city's municipal utility is not subject to the replacement delivery tax, provided the natural gas is used by the city for the city's public purposes.

A replacement generation tax of six hundredths of a cent per kilo-watt hour of electricity is imposed on every person generating electricity except electricity generated by the following:

a. A low capacity factor electric power generating plant.

b. facilities owned by or leased to a municipal utility when devoted to public use and not held for pecuniary profit, except facilities of a municipally owned electric utility held under joint ownership or lease and facilities of an electric power facility financed under chapter 28F.

c. Wind energy conversion property.

d. methane gas conversion property.

e. facilities owned by or leased to a state university or university of science and technology to the extent the electricity is consumed by such institutions.

A replacement transmission tax is imposed on every person owning or leasing transmission lines equal to the sum of the following:

a. $550 per pole mile not exceeding 100 kilovolts.

b. $3,000 per pole mile greater than 100 kilovolts but not exceeding 150 kilovolts.

c. $700 per pole mile greater than 150 kilovolts but not exceeding 300 kilovolts.

d. $7,000 per pole mile greater than 300 kilovolts.

The following are exempt from the replacement transmission tax:

a. Transmission lines owned by or leased to a municipal utility when devoted to public use and not for pecuniary profit, except lines of a municipally owned electric utility held under joint ownership and lines of an electric power facility financed under chapter 28F.

b. Lines owned by or leased to a lessor when the lessee or sublessee of the lines is subject to the replacement transmission tax.

c. Any electric cooperative which owns, leases, or owns and leases in total more than 50 pole miles and less than 750 pole miles of lines.

d. Lines owned by or leased to a state university or university of science and technology, provided the lines are used exclusively for the transmission of electricity consumed by the universities.

e. Lines owned by or leased to a person, other than a public utility, for which a franchise is not required under chapter 478.
Taxpayers are required to file a return with the director by February 28 of each year and calculate the replacement tax due. The director shall report the to the department of management the total replacement taxes due and the department of management shall determine an allocation formula for distribution of the taxes to local taxing districts. The director and the department of management shall compute the allocation of replacement taxes among local taxing districts and report the allocations to the county treasurer by August 15 of each year. The treasurer shall notify the taxpayer of the amount of replacement tax due by August 31. The taxpayer is to remit one- half of the tax due by September 30 and the other half by March 31 of the following year. The county treasurer shall determine by August 31 a special utility property tax levy or credit for each taxpayer by comparing the taxpayer's replacement tax liability with the anticipated tax revenues from the taxpayer.

Taxpayers subject to a municipal transfer replacement tax are required to file a return with the chief financial officer of the city by February 28 of each year and calculate the tax due. The tax is to be paid to the chief financial officer at the time directed by the city council.

The director and the chief financial officer of a city have 3 years to audit returns and make necessary corrections in the amount of tax due. The period of time for performing the audit is unlimited in the case of a false or fraudulent return made with the intent to evade tax or in the case of a failure to file a return. The 3 year period of limitation is subject to extension at the request of the taxpayer. The taxpayer may receive a credit or refund of excess replacement tax paid.

A task force is established consisting of representatives from the department of management, department of revenue and finance, electric companies, natural gas companies, municipal utilities, electric cooperatives, counties, cities, school boards and consumers to study the effects of the replacement tax on local taxing districts and taxpayers. The department of management shall report to the general assembly by January 1, 2002, the results of the study.

A replacement tax study committee is established to study the effects of the replacement tax on both restructuring and the development of competition in the gas and electric industries. The committee shall consist of representatives from the utilities board, the department of revenue and finance, the department of management, investor-owned utilities, municipal utilities, cooperative utilities, local governments and major customer classes. The utilities board shall report the results of the study to the general assembly by January 1, 2002.

Within 90 days of the effective date of this Act, each electric company, electric cooperative, municipal utility and natural gas company shall report to the director the information necessary to compute the delivery tax rate.

A statewide property tax of 3¢ per $1,000 of assessed value is imposed on the operating property of a taxpayer subject to the replacement tax. Taxpayers subject to the statewide property tax shall file a return with the director by February 28, calculate the amount of tax due and remit the tax with the return. The revenues from the tax shall be deposited in the state general fund of which 50% shall be available to the department of management and the balance to the department of revenue and finance.
Records shall be kept by taxpayers of the replacement tax or statewide property tax for a period of 10 years.

Sections Amended
Senate File 2416 creates a new chapter 437A.

Effective Date
Applies to property tax assessment years beginning January 1, 1999.

WISCONSIN
Wisconsin has a unique system of taxation for electric power generators. In lieu of property taxes utilities in Wisconsin pay a license fee based on their gross sales (Wis. Stat. §76.28). An "apportionment factor" is determined based on the sum of the ratios of three other factors divided by 3: payroll factor, property factor, and sales factor. Each of the three factors are determined by dividing the in-state totals by the company-wide totals for payroll, property value, and sales volume, respectively. The apportionment factor multiplied by the gross revenue multiplied by 3.19% will give the total license fee.

The license fee is paid into the general fund. In 1997, the Bureau of Utility and Special Taxes collected $108.7 million from private utilities, $7.8 million from cooperatives, and $1.4 million from municipal utilities. The totals include payments by natural gas companies. The money is put into the state's general fund.

Some of the money collected under the license fee arrangement is redistributed back to cities and counties under Wisconsin's shared revenue system. The total shared revenue in 1997 was about $1 billion. Of that total about $23.5 million was sent back to counties and cities based on the value of power plants and transmission and distribution lines located in them (Wis. Stat. §79.04).

There is currently a task force looking into utility taxation as part of Wisconsin's electric restructuring investigations.

APPENDIX B.

Provisions Contained in 1998 Legislative proposal to change utility property taxation (Minnesota Senate File No. 3377)

| Subd. 2. | [ELECTRIC GENERATION FACILITY IN-LIEU TAX | PAYMENTS.] An amount equal to the amounts received by a district |
| 2.4 | under sections 216B.169 and 275.071 must be deducted from state |
| 2.5 | aid authorized in this chapter and chapter 124, receivable for |
| 2.6 | the same school year, and from other state payments receivable |
| 2.7 | for the same school year authorized in chapter 273. The aid in |
| 2.8 | section 124.646 must not be reduced. |
| 2.9 | Sec. 2. [216B.169] [GENERATION EQUIPMENT PROPERTY TAX |
| 2.10 | REPLACEMENT SURCHARGE.] |
| 2.11 | Subdivision 1. [DEFINITIONS.] For purposes of this act, |
| 2.12 | the following terms shall have the meanings given. |
| 2.13 | (a) "Electric utility" means an electric utility as defined |
| 2.14 | in section 216B.38, subdivision 5, that is subject to ad valorem |
| 2.15 | taxes on its electric utility generation equipment on January 1, |
(b) "Electric utility generation equipment" means the property which is part of an electric utility's generation system.

c) "Service area" means the geographic area assigned to an electric utility under section 216B.39.

d) "Service area provider" means the electric utility providing retail electric service within a service area on January 1, 1998.

Subd. 2. [IMPOSITION OF SURCHARGE.] Any electric utility providing electric power within a service area shall impose a generation equipment personal property tax replacement surcharge on each kilowatt-hour distributed to its retail customers. The surcharge shall be separately identified on each customer's bill. The rate of the surcharge shall be expressed as a fraction of a dollar per kilowatt-hour and shall be set according to the following schedule:

1. Until March 31, 2005, the rate schedule of the surcharge within each service area shall be based upon the ratio of (i) the amount of ad valorem taxes levied upon the service area provider's electric utility generation equipment payable in 1998 minus the amount of in-lieu taxes imposed upon the service area provider in the current year, to (ii) the total kilowatt-hours distributed by all utilities selling power to retail customers in the service area in the previous year. The rate schedule shall apply to all retail customers in the service area, regardless of electric utility provider.

2. Between April 1, 2005, and March 31, 2009, the rate schedule of the surcharge shall be calculated as in paragraph (1), except that each year the amount determined under paragraph (1), clause (i), shall be reduced by 20 percent of the service area provider's electric utility generation equipment tax payable in 1998.

3. If an electric generation facility ceases operation due to action of the state of Minnesota or any agency thereof, the payable 1998 property taxes attributable to the facility's generation equipment shall be subtracted in performing the calculations required in clauses (1) and (2).

Subd. 3. [COMMISSIONER OF REVENUE TO SET RATES.] By February 1 of each year, beginning in 1999, each service area provider shall submit a schedule of surcharge rates to the commissioners of the public utilities commission and the department of revenue which fairly reflects the amount and percentage of personal property tax on generation paid for by each customer class. The commissioner of revenue shall approve or amend the schedule by March 1 of each year. The electric utilities shall impose the surcharge for that year beginning April 1. Each electric utility shall provide the commissioner of revenue any information the commissioner deems necessary to evaluate the rate schedule submitted, in a format to be determined by the commissioner. In establishing the rate schedule, the provider shall adjust the rate of the surcharge to account for any surplus or deficiency produced in the previous year.
Subd. 4. [SEPARATE ACCOUNT.] An electric utility subject to this section shall keep a separate account of all revenues received from the surcharge by service area, and shall distribute these revenues to the commissioner 30 days prior to when property taxes become due. The commissioner shall apportion the money to the appropriate county treasurer, who shall distribute the money in the same way as the tax under section 275.071, at the times prescribed under sections 276.11 and 276.111. This account shall not be subject to section 216B.10, and the public utilities commission shall not consider these revenues in a proceeding under section 216B.16. The commissioner of revenue may audit the revenues derived from the surcharge.

Subd. 5. [ASSURED RATE REDUCTIONS FOR CUSTOMERS OF RATE REGULATED UTILITIES] The public utilities commission shall reduce the rates of an electric utility subject to rate regulation by the commission to reflect the net effect of the elimination of the utility's ad valorem tax obligations pursuant to sections 272.02, subdivision 1, and 273.13, subdivision 31, and the imposition of the in-lieu tax under section 275.071.

Each utility shall submit a plan implementing the rate reductions to the public utilities commission, which reflects the percentage of personal property tax on generation which had been paid by each customer class. The commission shall treat these rate reductions separately from other rate adjustments. Reductions in rates under this subdivision shall be distributed among customer classes in proportion to the contribution the customer class made to the utility's electric utility generation equipment ad valorem tax obligations.

Sec. 5. [275.071] [IN-LIEU TAX ON ELECTRIC GENERATION FACILITIES.]

Subdivision 1. [ELIGIBLE PROPERTY.] Each electric generation facility containing machinery which was subject to the property tax for assessment year 1997 shall be subject to an in-lieu tax as provided in this section.

Subd. 2. [BASE TAX AMOUNT.] The in-lieu tax amount for each electric generation facility shall be the portion of the property tax due and payable on that property for taxes payable in 1998 attributable to machinery used for electric generation.

For each electric generation facility, the base tax amount shall be considered to be apportioned among recipient local taxing jurisdictions in the same proportions as the actual payable 1998 property taxes were apportioned.

Subd. 3. [IN-LIEU TAX.] For taxes payable in 1999, the in-lieu tax on each electric generation facility shall be equal to 80 percent of the base tax amount determined under subdivision 2. In each subsequent year, the in-lieu tax of each electric generation facility shall be reduced by 20 percent of the base tax amount. The in-lieu tax on a facility shall terminate whenever the facility ceases operation due to action of the state of Minnesota or any agency thereof.

Subd. 4. [ADMINISTRATION.] The county treasurer shall annually provide a tax statement to each owner of a facility.
subject to the in-lieu tax. The in-lieu tax shall be collected,
distributed, and otherwise administered in the same manner as
property taxes under chapter 276.

Subd. 5. [TERMINATION.] The tax under this section shall
terminate the earlier of (1) January 1, 2003; or (2) when the
commissioner of public service certifies to the commissioner of
revenue that retail competition for electric supply has been
implemented.

Sec. 6. [475A.07] [LOCAL BONDS; STATE GUARANTY.]

Subdivision 1. [APPLICATION.] This section applies to the
bonds of a local unit of government, if the following conditions
are met:
(1) for taxes payable in 1998, electric utility generation
equipment net tax capacity constitutes at least 20 percent of
the total net tax capacity of the local government;
(2) the bonds are general obligations to which the full
faith and credit of the local government unit is pledged,
including an unlimited pledge to levy the amount of property
taxes needed to pay the obligations; and
(3) the bonds were outstanding on March 1, 1998, or were
issued to refund bonds that were outstanding on that date.

Subd. 2. [DEFINITIONS.] (a) For purposes of this section,
the following terms have the meanings given them.
(b) "Bond" means any obligation, as defined in section
475.51, subdivision 3, regardless of whether the obligations
were issued under the authority of chapter 475.
(c) "Local government unit" means a statutory or home rule
charter city, a county, a school district, or a special taxing
district with authority to issue general obligation bonds.

Subd. 3. [STATE GUARANTY.] (a) The state guaranties the
payment of bonds covered by the provisions of this section. If
a deficiency or a default occurs under any bond covered by this
section, the commissioner of finance shall pay any amount needed
to remedy and correct the deficiency or default. This guaranty
is permanent and irrevocable.
(b) The guaranty, pledge, and any payment by the
commissioner under paragraph (a) does not relieve the local
governmental unit of its obligation to pay the bonds.
(c) If the commissioner makes a payment under paragraph
(a), the commissioner may recover the amount, plus any
additional costs incurred including interest at the rate
specified in section 279.03, subdivision 1a, from the local
governmental unit by:
(1) deducting the amount from state aid payments made to
the local governmental unit;
(2) compelling the levying of property taxes by the local
governmental unit to be paid to the commissioner of finance;
(3) bringing legal action to collect the amounts; or
(4) any combination of the actions in clauses (1) to (3).
Subd. 4. [APPROPRIATION.] An amount sufficient to provide
any funds needed to pay and administer the guaranty under this
section is appropriated from the general fund to the
commissioner of finance.

Sec. 7. [DETERMINATION OF ADJUSTED NET TAX CAPACITY.]
The exemption of the electric generation attached machinery from the property tax base shall be considered a change in net tax capacity percentage for the purposes of Minnesota Statutes, section 124.2131.

Sec. 8. [EFFECTIVE DATE.]
Sections 1 and 7 are effective for aids payable in fiscal year 2000 and subsequent years. Sections 2 and 5 are effective January 1, 1999. Sections 3 and 4 are effective for taxes payable in 1999 and subsequent years. Section 6 is effective the day following final enactment.

Provisions that Exempt Certain Property from Taxes

Minnesota Statutes §272.02 Exempt Property

subdivision 1.
(21)(a) Small scale wind energy conversion systems installed after January 1, 1991, and used as an electric power source are exempt.

"Small scale wind energy conversion systems" are wind energy conversion systems, as defined in section 216C.06, subdivision 12, including the foundation or support pad, which are (i) used as an electric power source; (ii) located within one county and owned by the same owner; and (iii) produce two megawatts or less of electricity as measured by nameplate ratings.

(b) Medium scale wind energy conversion systems installed after January 1, 1991, are treated as follows: (i) the foundation and support pad are taxable; (ii) the associated supporting and protective structures are exempt for the first five assessment years after they have been constructed, and thereafter, 30 percent of the market value of the associated supporting and protective structures are taxable; and (iii) the turbines, blades, transformers, and its related equipment, are exempt. "Medium scale wind energy conversion systems" are wind energy conversion systems as defined in section 216C.06, subdivision 12, including the foundation or support pad, which are: (i) used as an electric power source; (ii) located within one county and owned by the same owner; and (iii) produce more than two but equal to or less than 12 megawatts of energy as measured by nameplate ratings.

(c) Large scale wind energy conversion systems installed after January 1, 1991, are treated as follows: 25 percent of the market value of all property is taxable, including (i) the foundation and support pad; (ii) the associated supporting and protective structures; and (iii) the turbines, blades, transformers, and its related equipment. "Large scale wind energy conversion systems" are wind energy conversion systems as defined in section 216C.06, subdivision 12, including the foundation or support pad, which are: (i) used as an electric
power source; and (ii) produce more than 12 megawatts of energy as measured by nameplate ratings.

(28) Notwithstanding clause (8), item (a), attached machinery and other personal property which is part of a facility containing a cogeneration system as described in section 216B.166, subdivision 2, paragraph (a), if the cogeneration system has met the following criteria: (i) the system utilizes natural gas as a primary fuel and the cogenerated steam initially replaces steam generated from existing thermal boilers utilizing coal; (ii) the facility developer is selected as a result of a procurement process ordered by the public utilities commission; and (iii) construction of the facility is commenced after July 1, 1994, and before July 1, 1997.

Subd. 9. Personal property; biomass facility. (a) Notwithstanding clause (8), item (a), of subdivision 1, attached machinery and other personal property, excluding transmission and distribution lines, that is part of a system that generates biomass electric energy that satisfies the mandate, in whole or in part, established in section 216B.2424, or a system that generates electric energy using waste wood, is exempt if it meets the requirements of this subdivision.

(b) The governing bodies of the county, city or town, and school district must each approve, by resolution, the exemption of the personal property under this subdivision. Each of the governing bodies shall file a copy of the resolution with the county auditor. The county auditor shall publish the resolutions in newspapers of general circulation within the county. The voters of the county may request a referendum on the proposed exemption by filing a petition within 30 days after the resolutions are published. The petition must be signed by voters who reside in the county. The number of signatures must equal at least ten percent of the number of persons voting in the county in the last general election. If such a petition is timely filed, the resolutions are not effective until they have been submitted to the voters residing in the county at a general or special election and a majority of votes cast on the question of approving the resolution are in the affirmative. The commissioner of revenue shall prepare a suggested form of question to be presented at the referendum.

(c) The exemption under this subdivision is limited to a maximum of five years, beginning with the assessment year immediately following the year during which the personal property is put in operation.
Minnesota Statutes §272.0211 Sliding scale market value exclusion for electric power generation efficiency.

Subdivision 1. Efficiency determination and certification. An owner or operator of a new or existing electric power generation facility, excluding wind energy conversion systems, may apply to the commissioner of revenue for a market value exclusion on the property as provided for in this section. This exclusion shall apply only to the market value of the equipment of the facility, and shall not apply to the structures and the land upon which the facility is located. The commissioner of revenue shall prescribe the forms and procedures for this application. Upon receiving the application, the commissioner of revenue shall request the commissioner of public service to make a determination of the efficiency of the applicant's electric power generation facility. In calculating the efficiency of a facility, the commissioner of public service shall use a definition of efficiency which calculates efficiency as the sum of:

(1) the useful electrical power output; plus

(2) the useful thermal energy output; plus

(3) the fuel energy of the useful chemical products,

all divided by the total energy input to the facility, expressed as a percentage. The commissioner must include in this formula the energy used in any on-site preparation of materials necessary to convert the materials into the fuel used to generate electricity, such as a process to gasify petroleum coke. The commissioner shall use the high heating value for all substances in the commissioner's efficiency calculations. The applicant shall provide the commissioner of public service with whatever information the commissioner deems necessary to make the determination. Within 30 days of the receipt of the necessary information, the commissioner of public service shall certify the findings of the efficiency determination to the commissioner of revenue and to the applicant. The commissioner of public service shall determine the efficiency of the facility and certify the findings of that determination to the commissioner of revenue every two years thereafter from the date of the original certification.

Subd. 2. Sliding scale exclusion. Based upon the efficiency determination provided by the commissioner of public service as described in subdivision 1, the commissioner of revenue shall subtract five percent of the taxable market value of the qualifying property for each percentage point that the efficiency of the specific facility, as determined by the commissioner of public service, is above 35 percent. The reduction in taxable market value shall be reflected in the taxable market value of the facility beginning with the assessment year immediately following the determination. For a
facility that is assessed by the county in which the facility is located, the commissioner of revenue shall certify to the assessor of that county the percentage of the taxable market value of the facility to be excluded.

Subd. 3. Revocation. (a) The commissioner of revenue shall revoke the market value reduction under this section, if:

(1) the applicant exercises its right under federal law to require an electric utility to purchase power generated by the facility; and

(2) the electric utility notifies the commissioner that the applicant has exercised its right to require purchase of power.

The revocation is effective beginning the first assessment year after notification of the commissioner.

(b) For purposes of this subdivision, the following terms mean:

(1) "Federal law" is the federal Public Utility Regulatory Policies Act, United States Code, title 16, section 824a-3, and regulations promulgated under that section, including Code of Federal Regulations, title 18, sections 929.303 and 929.304.

(2) "Electric utility" means an electric utility as defined in federal law described in clause (1).

Subd. 4. Eligibility. An owner or operator of a new or existing electric power generation facility who offers electric power generated by the facility for sale is eligible for an exclusion under this section only if:

(1) the owner or operator has received a certificate of need under section 216B.243, if required under that section;

(2) the public utilities commission finds that an agreement exists or a good faith offer has been made to sell the majority of the net power generated by the facility to an electric utility which has a demonstrated need for the power. A right of first refusal satisfies the good faith offer requirement. The commission shall have 90 days from the date the commission receives notice of the application under subdivision 1 to make this determination; and

(3) the electric utility has agreed in advance not to offer the electric power for resale to a retail customer located outside of the utility’s assigned service area, or, if the utility is a generation and transmission cooperative electric association, the assigned service area of its members, unless otherwise permitted by law.

For the purposes of this subdivision, "electric utility"
means an entity whose primary business function is to operate, maintain, or control equipment or facilities for providing electric service at retail or wholesale, and includes distribution cooperative electric associations, generation and transmission cooperative electric associations, municipal utilities, and public utilities as defined in section 216B.02, subdivision 4.

HIST: 1996 c 444 s 2
Appendix C.

Utility Taxes in Minnesota
The current taxation of utility property in Minnesota is complicated. The following matrix taken from the Minnesota Taxpayers Association's report, Minnesota Electric and Gas Property Tax Disparities and Competition in the Utility Industry, shows the various taxes on utilities in Minnesota.

<table>
<thead>
<tr>
<th>Table. Minnesota Taxes Applicable to Electric Utilities in Minnesota</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Utility</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Investor-Owned</td>
</tr>
<tr>
<td>Distribution</td>
</tr>
<tr>
<td>Cooperatives</td>
</tr>
<tr>
<td>G&amp;T Cooperative</td>
</tr>
<tr>
<td>Municipally-owned</td>
</tr>
<tr>
<td>Independent Power</td>
</tr>
</tbody>
</table>

NOTES:
1 Rural distribution lines serving farmers at retail are exempt. Minn. Stat. §272.02, sub 1 (18)
2 Personal property other than distribution lines in unincorporated areas is taxable
3 G&T cooperatives are exempt from corporate income tax if they sell at least 85% of their power to member cooperatives. Internal Revenue Code 501(c)(12)(A)
4 Minn. Stat. §453.54, sub 20
5 The majority of municipal utilities do transfer surpluses to their cities' general funds. Most are not required to, and not all do.
6 Independent power producers (IPPs) must pay personal property tax for any property that is used to generate power that is later sold to another distributor (Minn. Stat. §272.027). Under certain circumstances, IPPs can also exempt the value of personal property that is used to generate energy that is later sold to outside distributors. The exemption is based on operating efficiency (Minn Stat. §272.00211).
7 IPPs are not subject to local franchise fees (Minn. Stat. §216B.02). The definition of "public utility" does not include companies that provide service to less than 25 customers. However, cooperatives are subject to local franchise fees even thought they are not defined as a "public utility" (Minn. Stat. §216B.36).

Appendix D

A. Summary of Recent Studies on Utility Taxes in Minnesota

There have been three state-agency investigations on issues related to the elimination of personal property tax on utilities and one study by the Minnesota Taxpayers Association. Below are brief descriptions and a summary of the conclusions of each study. The Legislative Electric Energy Task Force (LEETF) is also examining the issue of utility tax reform but concluded before the 1998 Legislative session that the issue needed further investigation before offering the legislature any guidance on potential changes to existing law.

Minnesota Department of Public Service - January 1997
As part of the 1996 Energy Policy and Conservation Report, the DPS included a brief section entitled "Study of Minnesota Taxes Paid by Electric Utilities and the Implications of Utility Tax Assessments."

The DPS concludes that since utilities in Minnesota pay taxes that other non-utility businesses do not, the personal property tax on utilities is a "hidden tax on consumers." The DPS notes that increased competition in the electric industry will exacerbate the problems of an "uneven playing field for utilities."

**The DPS recommends the following:**
- Identify to consumers all taxes included in utility rates
- Treat utilities and non-utilities the same for tax purposes by eliminating the personal property tax on utilities' attached machinery
- Subject providers of equivalent services to the same franchise fees and terms
- Investigate whether the ability of Minnesota utilities to compete with out of state businesses is impeded due to varying tax policies among states.

**Minnesota Department of Revenue - January 1997**

The Department of Revenue's (DOR) report, *Analysis of Utility Taxation in Minnesota*, was undertaken in consultation with the Public Utilities Commission and the Department of Public Service. The report provides a detailed examination of the system of utility taxation in Minnesota and compares Minnesota's tax system with utility tax structures in neighboring states. The report attempts to provide an evaluation of the current tax system's impacts on utilities in a competitive electric industry.

The DOR examines four options for changing Minnesota's tax treatment of utilities:
- Eliminating the personal property and machinery tax on utilities
- Replacing the utility personal property and machinery tax with a line charge to consumers
- Replace the utility personal property and machinery tax with a tax on all generators in Minnesota
- Replace the utility personal property and machinery tax with a gross receipts tax

The DOR concludes that changes in utility property taxes and deregulation of the electric industry should happen in tandem.

**Minnesota Taxpayers Association - January 1997**

The Minnesota Taxpayers Association's report, *Minnesota Electric and Gas Property Tax Disparities and Competition in the Utility Industry* was prepared as a result of legislative proposals to exempt certain types of utility property from taxes. The MTA report looked at the disparities in taxes paid by different types of utilities in Minnesota (e.g. investor-owned vs. cooperative and municipal-owned) as well as utilities in other states.

The MTA report offers these conclusions:
- The full benefits of electric and gas competition will not be achieved in Minnesota without utility tax reform.
- In comparison to other states, Minnesota's four investor-owned electric companies pay higher property taxes.
- Cooperatively-owned utilities pay lower property taxes than they would if they were investor-owned utilities.
• There are favorable policies in Minnesota, like the sliding scale personal property tax exemption based on operating efficiency, that give non-utility generators a competitive advantage over investor-owned utilities.
• Unless the tax burden on all three functions (generation, transmission, and distribution) is made competitive, the interstate tax disadvantages of any one function will have to be offset by sufficient tax advantages in the others will lead to a competitive disadvantage for Minnesota-based utilities.

Minnesota House of Representative's House Research Department - December 1997
This information brief for legislators on "Public Utility Property Taxation" provides an overview of the property taxation for utilities with many tables and figures. The House Research report offered no recommendations or conclusions.

B. Tax Implications Study for the National Council on Competition and the Electric Utility Industry (NCCEI)

In October 1996 Deloitte & Touche LLP prepared *Federal, State and Local Tax Implications of Electric Utility Industry Restructuring* for the National Council on Competition and the Electric Utility Industry (NCCEI). Below are the highlights:

State and Local Utility Taxes

• In 1994, investor-owned utilities paid over $13.4 billion in various state and local taxes. • Rural electric cooperatives paid more than $650 million in various state and local taxes in 1994.
• In 1994, state and local taxes for investor-owned utilities were composed of property and ad valorem taxes of $5.4 billion, gross receipts taxes of $4.0 billion, miscellaneous taxes of $1.5 billion, state income and franchise taxes of $2.0 billion, and regulatory fees and other local utility charges of $0.6 billion.
• Public power systems support state and local governments through various payments, including "payments in lieu of taxes."
• The total payments to state and local governments by public power systems in 1994 included payments in lieu of taxes of $936 million, gross receipts taxes of $214.5 million, other taxes and fees of $64.2 million, free or reduced cost electrical service of $44.5 million, and other contributions of $15.2 million.
• The most common state and local taxes imposed on electric utilities are Gross Receipts Taxes, Corporate Franchise Taxes, and Property Taxes.
• In at least 36 states, real and personal property owned by regulated utilities is centrally assessed at the state level. In some states, however, electric utility property is assessed at the local level. In many states, property owned by a utility that is not used in the regulated utility operations of the company is assessed locally.
• In the valuation assessment process of regulated utilities, state and local assessors often use the "unit method" of valuation. First, the assessor estimates the "unit value" of the whole utility, which can be based on the cost of the utility's taxable assets, the income earned by the utility or the value that financial markets place on the utility's debt and equity securities. That value then is apportioned among the various taxing jurisdictions in which the utility owns property. Other states assess utility property based on the value of each specific item of property independent of the value of the other property that the utility owns. Some states use a combination of both the unit and the specific method to determine the value of utility property.
Independent power producers and other entities have made extensive use of payment in lieu of tax programs to achieve greater certainty regarding property tax obligations. A payment in lieu of tax program is entered into by owners of facilities that have received property tax exemptions either because they qualify for exemption under state or local laws or because they are granted special exemptions under tax incentive programs. These people make "voluntary" payments to state or local jurisdictions to compensate them for some of the tax revenues lost on account of the exemptions.

Utility User Taxes.

Apart from any applicable sales and use tax, several state and local governments impose taxes on the consumption of electricity. These utility user tax laws define a public utility as a corporation that generates, transmits and furnishes power to the consumer. In contrast, other electricity providers and power marketers may not be under an obligation to collect a utility user tax based on their nonutility status under the public utility definition or their status as an out-of-state electric provider. Utility user taxes can be based on a percentage of the cost of purchasing electricity or on a fixed amount per kilowatt-hour.

State and Local Tax Implications

Absent changes in the tax laws, competition is likely to reduce state and local tax revenue, as economic activity shifts away from the highly taxed regulated utility sector into less highly taxed sectors.

In response to the revenue loss issue, some have suggested that state and local governments simply accept the revenue decrease on the grounds that lower taxes on electricity are desirable. Others have recommended that utility tax reform neither raise nor lower revenues. Several state proposals have suggested recovering the state revenue loss by taxing all types of energy consumption. Other proposals suggest taxing all electricity use.

Legal Underpinnings of State and Local Taxation

The U.S. Constitution imposes important restrictions on state tax laws, most notably the Commerce Clause and the Due Process Clause. These clauses will become much more significant for the taxation of electricity providers as electric utility restructuring proceeds. In addition, state constitutions may impose other important restrictions on permissible tax policies.

The nexus question will be significant for utility restructuring. States may face constitutional limitations on their ability to impose taxes or collection responsibilities for taxes imposed on others (e.g., sales and use or utility user taxes), such as out-of-state generators or marketers of electricity, unless those people have a sufficient presence in the taxing state. The precise extent of these limitations is not clear in many cases.

Apportionment. An additional constitutional constraint on state taxing authority arises from the Commerce Clause. When economic activity occurs across state lines, the tax related to that activity must be fairly apportioned among the states in which the activity occurs. This, too, has been the subject of much litigation, but the uncertainties are not as great as with the nexus issue.

Nondiscrimination. The Commerce Clause requires that state and local taxes not discriminate against interstate commerce. Thus, a state tax on purchasers of electricity that applied a higher rate to electricity purchased from out-of-state suppliers than to
electricity purchased from in-state suppliers would probably be rejected as violating the Commerce Clause.

**State and Local Tax Policy Considerations**

- If a state wishes to reform taxes on the electricity sector in order to improve competitive balance, it will have to decide whether those taxes should be revenue neutral or whether they should be designed to raise or lower revenues.
- A broader range of options exists for addressing the problems of revenue loss at the state level than at the local level; the only solution may be to target state aid while they adjust to their lower tax base.