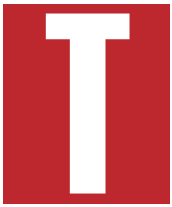


Tax Burdens and Barriers

Where tax rates are too high,
grid investments suffer.

By JAMES M. SEIBERT



he U.S. transmission and distribution (T&D) system is undergoing a once-in-a-generation revitalization that has generally been welcomed by electric utilities and consumers alike. These significant investments will certainly place upward pressure on rates, and this pressure is increasing the scrutiny stakeholders are giving to every element of a utility's cost-of-service (COS).

This renewed scrutiny is appropriate because every dollar of a utility's COS represents an economic resource that can potentially fund investments. For example, some electric utilities are rethinking and challenging their depreciation policies to ensure an adequate cash flow to support modernization investment.¹ Similarly, the taxes and fees that utilities pay—which industry-wide average about 55 percent of the typical utility's depreciation expense, but in some high-tax jurisdictions are larger than their depreciation expense—are also topics of increasing interest because they represent real costs consumers pay in rates and thus are a formidable competitor for consumer funds that could otherwise support a utility's investment program.

Consequently, the analysis and management of a utility's non-income taxes and fees are essential elements of any comprehensive T&D modernization strategy and plan. This is especially true for those utilities that operate in jurisdictions that have hostile, high-tax jurisdictions that present a genuine barrier to significant T&D modernization investment.

Utility Tax Burden

The non-income-related tax and fee burden that utilities (and ultimately consumers, through rates) pay can be measured in a variety of ways. These costs are reported systematically under FERC accounting in the "Taxes—Other than Income" account. This account includes various fees, but it's predominantly composed of *ad valorem* taxes (*i.e.*, "according to value" or property taxes), gross receipts taxes, or in some states both.

Tax-related topics sometimes seem arcane to all but dedicated tax professionals; however, it's often useful begin to understand them by assessing their total impact on customers. The industry-wide level of non-income tax payments, expressed as a percentage of average residential rates, for U.S. electric utilities has been declining over the past 20 years (*see Figure 1*). Consumers nationwide spend approximately 30 percent less in relative terms in utility taxes than they did 20 years ago. Today, the typical customer sees about 4 percent of their average per-kilowatt-hour rates go to property taxes and other fees, down from about 6 percent in the early 1990s. This easing of the relative tax burden has been an industry-wide and long-run phenomena.

A logical question falls naturally from Figure 1—is this decline in the tax burden relative to average per-kWh rates due to increased electricity rates, or have absolute tax rates

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genuinely changed and, thus, the industry's real tax burden been reduced? The industry's absolute level of tax payments on a per-kWh basis has risen slightly for this same 20-year period (*see Figure 2*). Viewed on a per-kWh basis, taxes have been relatively stable industry-wide across the U.S., averaging about 0.4 cents per kWh over the past two decades.

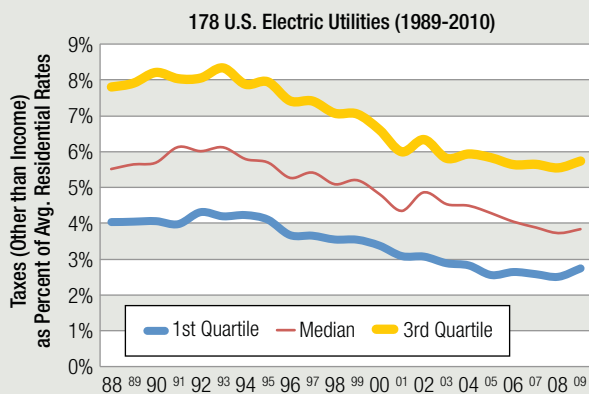
More importantly, Figure 2 also highlights that the lowest-taxed half of the industry (*i.e.*, first and second quartile) has seen substantially flat tax levels on a per-kWh basis, but that the highest-taxed half of the industry has seen taxes rise on a per-kWh basis over the past 20 years. This suggests that the industry's utilities are operating in two types of jurisdictions—those that are making significant efforts to control utility taxes, and those that continue to see utilities as targets for raising taxes and fees.

Although understanding the taxes that utilities and ultimately consumers pay in the context of average rates is an important foundation, the reality is that the substantial portion of utility taxes and fees are paid in the form of *ad valorem* or property taxes. These property taxes are derived in various ways depending on the jurisdiction from asset values; these asset values are, in turn, derived in a variety of methods based on original cost, replacement cost, income potential, or market value.

Like the railroads before them, utilities are composed of complex, geographically dispersed asset networks that typically span dozens, if not hundreds, of taxing jurisdictions. Many of the industry's accounting and tax practices are originally derived from railroad regulation—and are increasingly obsolete. The computations of taxable value and the allocation of

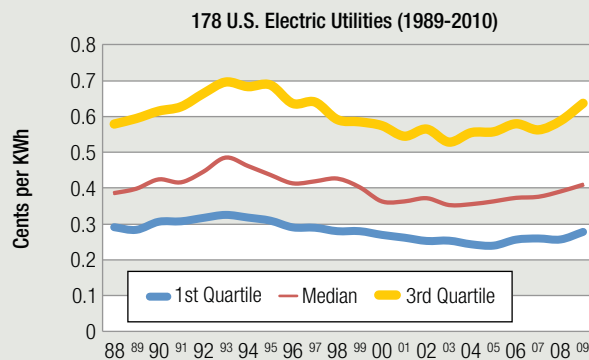
James M. Seibert is the managing partner of Chicago Energy Associates LLC, a management consulting firm serving clients in the global energy and utilities industries. Email him at: jseibert@chicagoenergyassociates.com

FIG. 1 TAXES AND RESIDENTIAL RATES



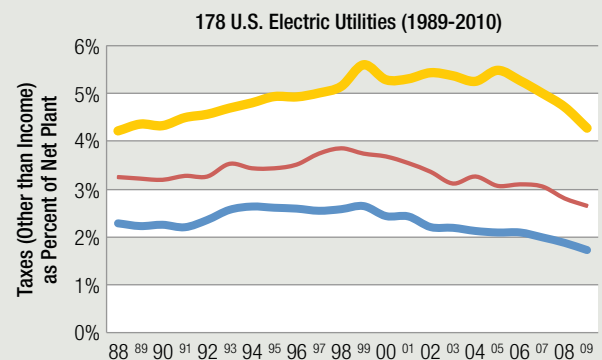
Taxes, other than income taxes, as a percentage of average residential rates. Includes data from 178 electric utilities between 1989 and 2010.

FIG. 2 TAXES PER KWH



Taxes, other than income taxes, per kilowatt-hour of electricity. Includes data from 178 electric utilities between 1989 and 2010.

FIG. 3 TAXES AND NET PLANT



Taxes, other than income taxes, as a percentage of net plant. Includes data from 178 electric utilities between 1989 and 2010.

Utility 2007-2009 Average

Cleveland Electric Illuminating	10.2%
Columbus Southern Power	5.9%
Dayton Power and Light	3.7%
Duke Energy Ohio	3.7%
Ohio Edison	10.6%
Ohio Power	3.5%
Toledo Edison	10.3%
<i>Ohio Average</i>	<i>6.8%</i>
Consolidated Edison	8.4%
Long Island Lighting Co.	N/A
New York State Electric & Gas	6.3%
Niagara Mohawk Power	4.3%
Orange and Rockland Utilities	4.6%
Rochester Gas and Electric	5.5%
<i>New York Average</i>	<i>5.9%</i>

taxable values among jurisdictions are of keen interest to numerous stakeholders.

The industry's overall tax burden from 1989 through 2009, when expressed as a percentage of net plant assets, is perhaps the most illuminating measure of the industry's total tax burden (*see Figure 3*). At all levels of the industry, tax burdens peaked in the late 1990s and have steadily fallen since. On average, it's now approximately 2.7 percent of net plant per year.

Utilities are historically among the largest local property-tax payers in most jurisdictions. Moreover, in many states they pay a disproportionate share of property taxes. For example, in Minnesota utility property composes 1.6 percent of the total taxable market value of property, and yet utility property tax comprises 3.5 percent of the total taxes paid on all property.²

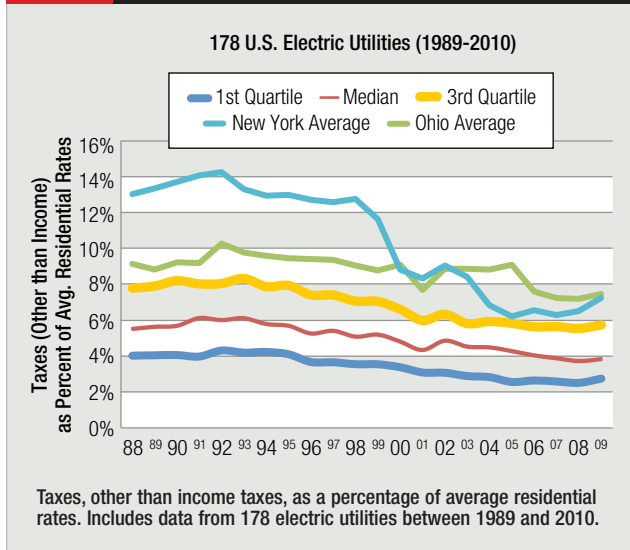
The overall declining trend has been partially the result of numerous utilities' efforts to lower their overall tax burden, predominately through the reduced valuation of assets, exclusion or special tax treatment of certain assets, or reduced tax rates. Figure 3 also illustrates a wider issue: the large variation of relative tax

burdens among utilities. For example, a utility at the third-quartile level has a tax burden more than 60 percent higher (2.6 percent vs. 4.3 percent) than the industry average. Not surprisingly, many of these third- and fourth-quartile utilities are in notoriously high-tax jurisdictions in the Northeast and West Coast.

Regional and Local Variation

Although the overall industry trend toward declining relative property tax burden has been favorable, tax rates in a number of local and state jurisdictions have remained stubbornly high, and quite extraordinary in the context of national trends. For example, states such as New York and Ohio are conspicuous for their historic and consistently high tax burdens (*see Figure 4*). Even within many states there are notable variations in relative tax burdens among specific utilities, due to local tax rates and practices. For example, a deeper review of the Ohio and New York jurisdictions illustrates that the tax burdens of specific operating utilities vary significantly when expressed as a percentage of net plant (*See Figure 5*).

FIG. 4 TAXES AND RESIDENTIAL RATES



Source: Chicago Energy Associates, LLC analysis of FERC Form 1 data.

Interestingly, Ohio’s very high tax challenge is notably a northern-Ohio problem, although all of its utilities face a generally higher-than-average tax burden. Similarly, the generally high levels of taxation in New York state are most extreme in the metropolitan New York City area. These urban consumers pay an inordinate level of taxes for their utility systems in part as a result of a four-classification system of asset taxation that has special rules for utility property applicable only for New York City and Nassau County; the balance of the state has a two-classification (homestead or non-homestead) system.³

Many of these variations in taxes also result inadvertently from the varying valuation methodologies used by different jurisdictions. In 40 U.S. states the practical method for asset valuation is a historic cost-based approach, using the original cost, less depreciation; a small number of jurisdictions—including New York—use a “replacement cost new less depreciation” (RCNLD) approach, which generally results in much higher assessments.

Local Taxation and Smart Grid

The tax and fee burden that customers pay in their utility’s cost of service is a significant expenditure that for many IOUs is similar in size and occasionally even greater than their depreciation expense. In an era of rising energy costs and utility rates generally, there’s a practical upper limit to customer’s willingness and

ability to tolerate rate increases. Rather than being seen as a pass-through cost to customers, these taxes and fees quite literally and appropriately are increasingly seen to compete with the utility’s spending on T&D revitalization in consumer rates.

Like the industry restructuring initiatives of several years ago, today’s smart grid and T&D vitalization plans offer a unique window of opportunity for utilities in high-tax juris-

Utilities are historically among the largest local property-tax payers in most jurisdictions. In many states they pay a disproportionate share.

dictions to constructively challenge the tax and fee methodologies that govern their systems. Methodologies matter: for example, utilities that operate in jurisdictions that rely predominantly on gross receipts taxes face little inherent tax penalty for increased reinvestment in their system; alternatively, jurisdictions that rely predominantly on *ad valorem* taxes—and especially those that focus on RCNLD methods—face significant tax increases that will come with constructive reinvestment. Moreover,

the total tax and fee burden also matters. Overall tax and fee levels represent a real barrier to significant smart grid investment in high tax jurisdictions.

Thus, smart grid and T&D system revitalization initiatives might prove more successful with companion efforts to assess and manage the overall tax and fee burden that customers face. Especially in high-tax jurisdictions, utility leaders have the challenge and the opportunity to educate their stakeholders on the practical implications of these taxing matters as part of their efforts to implement a 21st century electric system. ■

Endnotes:

1. Seibert, James M., “Paradox of Thrift: Economic Barriers Complicate T&D Modernization,” *Public Utilities Fortnightly*, July 2009, pp. 10-15.
2. Minnesota House of Representatives Research Department, “Primer on Minnesota’s Property Taxation of Electric Utilities,” October 2006, p. 7.
3. New York Office of Real Property Services, “Survey of Railroad and Utility Taxation Practices Among the States,” 2005 Update, <http://www.orps.state.ny.us/ref/pubs/railroadutility/index.htm>