



Department Of Budget & Management
and the
Public Service Commission

POWER GENERATION AND
MARYLAND'S TAX STRUCTURE

December 15, 2004

Submitted to:
Senate Budget and Taxation Committee,
Senate Finance Committee,
House Committee on Ways and Means,
House Economic Matters Committee,
and House Appropriations Committee

Executive Summary

Chapter 403 (section 25) of the Laws of 2004 directed the Department of Budget and Management (DBM) and the Public Service Commission (PSC) to investigate and report on whether the General Assembly's goal of providing for an equitable and rational restructuring of state and local taxes on electric and gas utilities in light of competition and restructuring of the electric and gas utility industries has been met. The report is intended to respond to the following questions:

1. An assessment of the competitive structure of power generation in Maryland as impacted by the state's current tax structure; and
2. An assessment of the impact of Maryland's current tax structure on local jurisdictions where power-generating facilities are located.

Part 1 of the report begins with a detailed description of the taxes affecting electric generating plants (EGPs) in Maryland and the region, identifying the similarities and differences in tax treatment. The next section assesses how competitive Maryland is with regard to each of the taxes it imposes. Because of the many tax differences among the states and interactions among taxes, an approach that takes into account all the taxes paid, including the federal corporate income tax, and how that affects profitability of the EGPs must be used to assess whether Maryland's EGPs are tax-competitive. This approach is beyond the scope of this report.

It should be noted that taxes are one of many important components under consideration in the determination to construct an EGP. A business must consider a variety of financial, economic and regulatory factors including, but not limited to, the type of plant, location, fuel mix, infrastructure costs and access to the marketplace, labor, siting and permitting, and incentives.

Occasionally, incentives are used to spur or foster the development of specific EGPs. There has been a federal 1.8-cent per kilowatt-hour production credit for electricity produced from wind turbines since 1992. This credit helps to make wind a more attractive energy source; however, generating capacity from wind is small compared to natural gas generation that has come on line.

In Part 2 the various ways in which local assessable bases were affected by deregulation are described. Next, the impact of the 50% exemption of operating property and the offsetting state grant is assessed. The report then estimates the assessable base and tax revenues under alternative scenarios assuming there had been no deregulation and compares the results to the actual situation in fiscal years 2001 through 2004. This end result is an estimate of how each county was affected fiscally from deregulation. Charles County and to a much lesser extent Washington County were the direct beneficiaries. Several counties were barely affected, while Anne Arundel, Calvert and Prince George's saw revenue losses totaling more than \$10 million each over the four years. Deregulation and increased competition undoubtedly produced economic benefits and additional tax

revenues for Maryland and the individual jurisdictions, offsetting at least some of this lost revenue. However, these effects could not be measured.

Part 1: The Competitive Structure of Power Generation in Maryland as Impacted by the Tax System

Scope

In addition to Maryland, the States included in this analysis are Delaware, New Jersey, Pennsylvania, Virginia and West Virginia and the District of Columbia. New Jersey was included in this analysis because it was included in studies done for the Constellation Energy Group.¹

In some states, utilities carry out power generation, transmission and distribution functions while in others the three functions are separated. This report concentrates on taxes that would affect companies that are involved only with electric generation. As in Maryland prior to deregulation, the utilities involved with the three functions still pay gross receipts taxes and can deduct this liability from the state corporate income tax base. The gross receipts tax was ignored because it is imposed solely on sales to the final consumer.

Taxes on EGPs

Corporate Income Tax - All six states and D.C. impose a corporate income tax. The rates are: VA-6%; MD-7%; DE-8.7%; NJ, WV-9%, DC-9.975% and PA-9.99%. To the extent all other taxes combined are higher in some jurisdictions, the differential is reduced because taxes are a deductible expense in determining net taxable income under the corporate income tax.

Maryland and Virginia provide a \$3 per ton tax credit for state-mined coal. In Maryland, the credit may be claimed against the corporate income or other state taxes. Virginia's credit requires purchase and use of the coal, while Maryland's only requires purchase. This credit may lead to cost (and profit) differentials in plants fueled by coal versus natural gas. Utilities in Maryland can claim a tax credit of 60% of real property taxes paid. West Virginia provides a 10% investment tax credit for "industrial expansion" by EGPs; other manufacturers are eligible for a 5% ITC.

Property Taxes - property used to generate power is centrally assessed except in Pennsylvania. Three methods are utilized to determine assessed value: an income approach, a cost approach and a market, or recent sales information, approach. In comparing the states, there is no way to determine whether taxes differ depending on which assessment method is used in a particular state.

Except for Maryland's relatively small state property tax, all property tax revenue is local. The property tax burden on EGPs will vary by state because local tax rates differ and/or because in some states less than 100% of assessed value is taxable. Maryland

¹ 2002 Property Taxes - if CEG Maryland Electric Generating Plants Were Located in Neighboring States. Constellation Energy Group (Undated).

exempts 50% of “operating property” -- personal property such as machinery and equipment used directly to generate electricity for resale. In addition, Allegany, Cecil and Charles counties offer property tax relief for EGPs. West Virginia taxes property at 60% of assessed value. Some West Virginia counties may provide payment in lieu of taxes (PILOT) agreements that can further reduce the tax.

In Maryland, real property of non-regulated entities is taxed at the same rate as all other real property, while that of utilities is taxed at the utility tax rate. The deregulation legislation also reclassified poles, lines, towers and cables owned by electric utilities from real property to personal property. Personal property of both utilities and non-utilities, aside from “operating property,” is also taxed at the utility tax rate. This rate is 2 ½ times the counties’ tax rates for real property. In the District of Columbia, EGPs pay both the real and personal property tax with the first \$50,000 of taxable value exempt from the personal property tax. Current rates are: real property-\$1.85 and personal property-\$3.40, each per \$100 of assessed (market) value.

Other differences in the property tax treatment of EGPs may be more important than rate differentials. For example, Delaware, Pennsylvania and New Jersey do not tax personal property, which makes up the bulk of EGP property. Utility property was taxed centrally in Pennsylvania prior to deregulation, with the tax revenue distributed among all counties in the state. With deregulation, the power to tax EGPs was shifted to the counties where the facilities are located. At present, this property is self-assessed and the issue of how the localities are to tax the property is to be resolved by the courts. In Virginia, all EGP property is taxed as real property. Since business personalty, assessed locally, is taxed at a higher rate than real property, in effect EGPs are taxed at a lower rate than other businesses.

The Constellation Energy Group (CEG) estimated property tax liability in 2002 on all five of its EGPs in Maryland combined and on EGPs located in selected counties in the other six jurisdictions.² To abstract from differences in the size of the plants, the results are expressed in terms of the effective rate of tax (ETR): property taxes as a percent of book value. The ETR for Maryland is after the 50% exemption for operating property and the 60% income tax credit for real property.

State	County	Effective Tax Rate
Maryland	Anne Arundel, Baltimore City, Baltimore County, Calvert, Harford	1.12%
Delaware	New Castle	0.16%
New Jersey	Middlesex	0.18%
Pennsylvania	Venango	0.08%
Virginia	Washington	0.48%
Washington, D.C.		0.20%
West Virginia	Wayne	0.38%

² Ibid.

Baltimore City's tax rate is much higher than any of the counties. Since the facility is small, however, eliminating that plant from the calculations only reduces the ETR to 1.1%.

Sales Taxes – EGPs also pay sales tax on their purchases of tangible items, except in Delaware which does not levy a sales tax. Tax rates (including local rates) are: MD, VA – 5%; DC-5.75%; NJ, WV-6%; PA-6% (plus 1% additional in Philadelphia and Pittsburgh). Delaware levies a low rate gross receipts tax. The tax cost is embedded in the selling price rather than being separately stated on the bill, as is the case with the sales tax. If goods are purchased from an out-of-state firm with no nexus in the state, there is no tax; if purchased from an out-of-state firm affiliated with a Delaware company, the purchaser pays the tax.

In all states but Virginia, EGPs are entitled to a manufacturers exemption for purchases of goods or materials used in the production of electricity. In most states, EGPs pay sales tax on purchases of items not used directly in electricity production: for example, pipes, poles and wires. These items are exempt from tax in New Jersey and West Virginia.

Virginia eliminated the manufacturers exemption for utilities several years ago, but allows it for independent EGPs. Utilities pay sales tax on every tangible item they buy except fuel used in production. The utilities are permitted to add a surcharge on customer bills to reflect their sales tax costs; however, doing so may place them at a competitive disadvantage.

Other Taxes – West Virginia imposes a Business and Occupation Tax that, for EGPs, had been based on kilowatt hours sold. For existing EGPs, tax liability is fixed at the average amount paid during 1991-4; in other words, the tax amount never changes. There is a separate rate for new EGPs. Virginia's property tax applies to the value of the EGPs' vehicles. The "car tax" rate is higher than for other property.

Corporations in Pennsylvania are subject to a capital stock tax (domestic corporations) or franchise tax (out-of-state corporations). If a new EDP were established as a limited liability partnership, it would not be liable for the tax. The tax base is a combination of net worth and average income over a five-year period. The capital stock/franchise tax is scheduled to sunset after 2010, with rates decreasing from the present 6.99 mill rate to zero in 2011. Delaware imposes a franchise tax based on authorized shares, but it applies only if a corporation's charter locates it in the state. A new EGP probably could avoid the tax.

Analysis

Maryland's corporate income tax rate is competitive. Another positive for the state is the coal tax credit, although environmental concerns may negate cost advantages created by the credit. The state's sales tax rate is also competitive. A drawback for the state's competitive position is that Maryland taxes items important to EGPs that are not taxed in other jurisdictions.

The CEG study shows that the local property tax burden on EGPs in Maryland is higher than anywhere else. Accentuating this problem is the fact that the property tax is by far the largest tax paid by all businesses nationwide. (The sales tax on purchases ranks second in importance.)³ This result undoubtedly holds true for businesses in Maryland in general and for EGPs in particular. However, it is important to recognize that while the property tax burden is high, it is not uniformly high throughout the state. In considering where to place a new generating plant, investors may consider that Allegany County does not tax machinery and equipment used in the generation of electricity and the statutory authority for tax relief in Cecil and Charles counties.

Assessing the Competitiveness of the Tax System as a Whole

This analysis has examined each tax in isolation. Competitiveness is a question of how all taxes combined affect a firm's rate of return on investment. The federal corporate income tax must also be considered because the allowable deduction of all state taxes significantly levels off state tax differentials.⁴ As noted above, this approach is beyond the scope of this report.

Part 2: The Impact of Maryland's Current Tax Structure on Local Jurisdictions Where Power Generating Facilities are Located

County property tax revenues were affected by deregulation of the electric power industry in several ways. Legislation exempted from the tax 50% of the value of machinery and equipment used to generate electricity for sale. A state grant was put in place to offset approximately two-thirds of this revenue loss. The entry of non-utility enterprises into the industry increased competition which led to lower assessed values of real and personal property used to generate power, thereby cutting into tax revenues. Additionally, non-utility power generators' real property is taxed at the same rate as all other business property, but less than utility property; this also decreases tax collections.

Other factors also came into play in the early years of deregulation. Several plants were sold to non-utility corporations at much higher values than they had been carried on the assessment rolls, increasing the assessable bases in some counties. Subsequently, some unregulated entities declared bankruptcy, which undoubtedly lowers valuations. The 2000 national recession and slow growth afterwards cut into earnings of power generators, also lowering taxable values.

Impact of the 50% Exemption

The Department of Assessments and Taxation (DAT) provided data by jurisdiction on the state grant and the share of the exemption revenue loss that the grant offsets for tax years 2000-1 through 2003-4 (Table 1). Data for Charles, Dorchester, Garrett and Montgomery

³ Cline, Robert, William Fox, Tom Neubig and Andrew Phillips, "Total State and Local Business Taxes: A 50-State Study of the Taxes Paid by Business in Fiscal 2003," State Tax Notes, Vol. 31, No. 9 (March 1, 2004) p.739.

⁴ Papke, James A., "Interjurisdictional Business Tax-Cost Differentials: Convergence, Divergence, and Significance," State Tax Notes, Vol. 9, No. 24 (December 11, 1995), p.1705.

counties were not available due to confidentiality issues. However, state totals and composite data for the four counties not shown separately were also provided.

For the state as a whole, in each year the grant covered more than the necessary two-thirds of the loss. The percentage covered has declined over time, from 88.6% in 2000-1 and 2001-2 to 76-77% the last two years. For the composite counties, the offset decreased from 100% in 2000-1, to 88% in 2001-2 and to just over 67% since. Only in Harford County in three of the four years and in Baltimore City in 2000-1 has the grant been below the two-thirds threshold.

Impact of Deregulation on the Assessable Base

The top half of Table 2 displays the assessable base for electric utility and non-utility electric power companies for 1996–2003. Total assessed values for the jurisdictions with generation plants increased annually through 1999 with minor exceptions: Baltimore City in 1997 and 1999, and Montgomery County in 1999. Statewide, assessed values fell a sharp 10.6% in 2000 and marginally in 2002 and 2003.

Assuming that in the absence of deregulation in 2000 utility assets would have continued to increase, the loss in assessable base due to deregulation can be estimated. The bottom half of the table shows what the assessable base would have been in the last four years had each county's base risen by its average annual rate of growth from 1996-99. The statewide growth rate, 3.5%, is higher than the 2.6% rate used for all counties in the fiscal note accompanying the 1999 deregulation legislation. Using these rates as a benchmark, two alternative scenarios that take account of the 2000 recession are also examined: growth rates at half the actual rates for 1996-9 and zero growth.

In all three cases, the data were adjusted to avoid double counting the effects of the 50% exemption in the eight jurisdictions for which data are available. The adjustments were small, however, and do not materially affect the result (see Table 3). The revenue loss from the exemption/offset should be added to these estimated revenue changes to arrive at the total loss or gain from deregulation.

The impact of deregulation on property tax revenues for the three alternatives is presented in Table 4. DAT calculated property tax revenues under current law and we calculated revenues from the estimated bases. Results under the three scenarios are not very different from one another, so only the middle alternative – growth at half the 1996-9 rates—will be highlighted.

If this scenario realistically accounts for the effects of the recession and deregulation, only Charles County and to a much lesser extent Washington County were direct winners from deregulation. Charles County gained \$15.5 million in property tax receipts over the first four years, while Washington County gained \$2.1 million. Anne Arundel, Calvert and Prince George's each experienced cumulative revenue losses totaling more than \$10 million over four years. Allegany and Harford counties had losses averaging just over \$1 million annually, while five jurisdictions, Baltimore, Baltimore City, Dorchester, Garrett and Somerset were barely affected.

There is no doubt that deregulation and increased competition produced economic benefits and additional tax revenues for Maryland and the individual jurisdictions, offsetting at least some of the lost revenue. However, these effects could not be measured.

Table 1. Percentage of 50% Exemption Covered by The State Grant: FY2001-04 (\$000)

County	State Grant 2000-01	Grant as % of Exemption	State Grant 2001-02	Grant as % of Exemption	State Grant 2002-03	Grant as % of Exemption	State Grant 2003-04	Grant as % of Exemption
Allegany	0.0	---	0.0	---	0.0	---	0.0	---
Anne Arundel	3,910.0	80.9%	7,820.0	80.9%	7,820.0	80.9%	7,820.0	80.9%
Baltimore	897.4	87.7%	1,794.8	87.7%	1,794.8	87.7%	1,794.8	87.7%
Baltimore City	226.7	63.4%	453.4	63.4%	453.4	63.4%	453.4	63.4%
Calvert	3,048.3	78.3%	6,096.6	78.3%	6,096.6	78.3%	6,096.6	78.3%
Charles	1,261.3	*	2,522.6	*	2,522.6	*	2,522.6	*
Dorchester	93.7	*	187.4	*	187.4	*	187.4	*
Garrett	6.0	*	11.9	*	11.9	*	11.9	*
Harford	430.4	58.1%	860.8	58.1%	860.8	58.1%	860.8	58.1%
Montgomery	1,382.8	*	2,765.6	*	2,765.6	*	2,765.6	*
Prince George's	3,872.4	105.0%	7,744.8	105.0%	7,744.8	105.0%	7,744.8	105.0%
Somerset	0.0	---	0.0	---	0.0	---	0.0	---
Washington	178.5	102.0%	357.1	102.0%	357.1	102.0%	357.1	102.0%
State Total	15,307.5	88.6%	30,615.0	88.6%	30,615.0	88.6%	30,615.0	88.6%

Source: DAT (10/18/04)

* - Confidential

Table 2. Electric Utility and Non-Utility Property Assessable Base: 1996-2003 (Million\$)

County	Assessable Base										Avg Ann Growth Rate 1996-99
	1/1/96	1/1/97	1/1/98	1/1/99	1/1/00	1/1/01	1/1/02	1/1/03	1996-99	1996-99 *	
Allegany	47.4	49	52.6	265.4	297.8	223.6	221.2	203.4	5.3%	5.3% *	
Anne Arundel	1319.8	1308.1	1354.3	1384.6	1165.4	977.1	972.9	991.6	1.6%	1.6%	
Baltimore	752.2	769	852	871.4	841.9	824.5	808.6	833.2	5.0%	5.0%	
Baltimore City	592.8	555.5	596.3	584.9	577.9	572.8	552	565.8	-0.4%	-0.4%	
Calvert	927.8	977.1	987.4	1001.2	810.5	614	616.9	662.3	2.6%	2.6%	
Charles	386.6	395.8	412.9	424	327	757.6	747.2	728	3.1%	3.1%	
Dorchester	60.7	65.4	66.9	66.7	62.9	56.5	77.1	72.8	3.2%	3.2%	
Garrett	30.4	31.9	33.9	33.7	38	41.3	39.2	35.2	3.5%	3.5%	
Harford	288.4	326.8	331	357.9	335.2	316.5	317.7	333.9	7.5%	7.5%	
Montgomery	996	1027.1	1035.8	1034.3	962.3	1111.7	1059.3	988.2	1.3%	1.3%	
Prince George's	1102.8	1103.2	1100.1	1179.5	1010	1208.9	1181.9	1119.7	2.3%	2.3%	
Somerset	19,858	21.5	21.5	21.6	21.7	22.1	20.8	20.9	2.8%	2.8%	
Washington	110.9	114.2	118.8	123.2	116.1	111.2	102.7	91.5	3.6%	3.6%	
Total	6635.658	6744.6	6963.5	7348.4	6566.7	6837.8	6717.5	6646.5	3.5%	3.5%	

Assessable Base 2000-2003 if Growth Was:

County	Same as 1996-99			Half of 1996-99			Zero Growth			
	1/1/00	1/1/01	1/1/02	1/1/00	1/1/01	1/1/02	1/1/00	1/1/01	1/1/02	1/1/03
Allegany	279.6	294.5	310.3	272.5	279.8	287.2	265.4	265.4	265.4	265.4
Anne Arundel	1,402.1	1,420.4	1,443.1	1,390.9	1,397.8	1,408.8	1,379.8	1,375.5	1,375.1	1,376.4
Baltimore	914.2	959.2	1,007.7	914.7	936.8	960.5	870.4	869.4	869.6	869.6
Baltimore City	581.9	579.0	576.5	581.9	580.3	579.1	584.5	584.2	584.3	584.3
Calvert	1,023.0	1,046.0	1,071.7	1,010.2	1,019.8	1,031.6	997.3	993.9	992.5	993.8
Charles	437.3	450.9	465.0	430.6	437.4	444.2	424.0	424.0	424.0	424.0
Dorchester	68.8	71.0	73.3	67.8	68.8	69.9	66.7	66.7	66.7	66.7
Garrett	34.9	36.1	37.4	34.3	34.9	35.5	33.7	33.7	33.7	33.7
Harford	383.9	411.9	442.9	370.5	383.7	398.2	357.2	356.5	356.7	356.5
Montgomery	1,047.4	1,060.6	1,074.1	1,040.8	1,047.4	1,054.1	1,034.3	1,034.3	1,034.3	1,034.3
Prince George's	1,202.5	1,223.5	1,251.5	1,189.2	1,196.3	1,210.0	1,175.8	1,169.4	1,169.5	1,170.7
Somerset	22.2	22.8	23.5	21.9	22.2	22.5	21.6	21.6	21.6	21.6
Washington	127.4	131.9	136.3	125.2	127.4	129.4	123.0	123.0	122.7	122.7
Total	7,525.2	7,707.9	7,913.2	7,450.6	7,532.6	7,631.2	7,333.7	7,317.5	7,316.0	7,319.7

Source: DAT (10/19/04)

Notes: *- Allegany 1996-98

Table 3. Estimated Reduction in the Assessable Base Due to the 50% Exemption
(Million\$)

	1/1/00	1/1/01	1/1/02	1/1/03
Allegany	0.0	0.0	0.0	0.0
Anne Arundel	4.8	9.1	9.5	8.2
Baltimore	1.0	2.0	1.8	1.8
Baltimore City	0.4	0.7	0.6	0.6
Calvert	3.9	7.3	8.7	7.4
Charles	n/a	n/a	n/a	n/a
Dorchester	n/a	n/a	n/a	n/a
Garrett	n/a	n/a	n/a	n/a
Harford	0.7	1.4	1.2	1.4
Montgomery	0.0	0.0	0.0	0.0
Prince George's	3.7	10.1	10.0	8.8
Somerset	0.0	0.0	0.0	0.0
Washington	0.2	0.2	0.5	0.5
Total	14.7	30.9	32.4	28.7

Table 4. Estimated Change in Property Tax Revenues Due to Deregulation
(Million\$)

	Growth Rate Same as 1996-9				4 Year
	1/1/00	1/1/01	1/1/02	1/1/03	Total
Allegany	0.4	-2.0	-2.4	-3.3	-7.3
Anne Arundel	-5.7	-10.6	-11.2	-11.4	-38.9
Baltimore	-2.1	-3.7	-5.5	-6.3	-17.6
Baltimore City	-0.2	-0.4	-1.4	-0.5	-2.5
Calvert	-4.7	-9.6	-10.1	-9.8	-34.3
Charles	-2.7	6.2	5.6	4.7	13.8
Dorchester	-0.1	-0.4	0.0	-0.1	-0.7
Garrett	0.1	0.0	0.0	-0.2	-0.2
Harford	-1.3	-2.6	-3.4	-3.9	-11.2
Montgomery	-1.6	0.1	-1.1	-2.7	-5.3
Prince George's	-4.6	-2.9	-4.2	-6.4	-18.1
Somerset	0.0	0.0	-0.1	-0.1	-0.2
Washington	0.9	0.6	0.3	-0.3	1.6
Growth Rate Half of 1996-99					
Allegany	0.6	-1.6	-1.9	-2.5	-5.4
Anne Arundel	-5.4	-10.1	-10.4	-10.3	-36.1
Baltimore	-2.1	-3.1	-4.2	-1.0	-10.4
Baltimore City	-0.2	-0.4	-1.6	-1.1	-3.3
Calvert	-4.5	-9.0	-9.2	-8.6	-31.3
Charles	-2.6	6.6	6.1	5.4	15.5
Dorchester	-0.1	-0.4	0.1	0.0	-0.4
Garrett	0.1	0.0	0.0	-0.1	0.0
Harford	-1.0	-1.8	-2.2	-2.2	-7.2
Montgomery	-1.5	0.4	-0.7	-2.2	-4.1
Prince George's	-4.3	-2.2	-3.2	-5.1	-14.8
Somerset	0.0	0.0	0.0	0.0	-0.1
Washington	0.9	0.7	0.5	0.0	2.1
Zero Growth					
Allegany	0.8	-1.3	-1.3	-1.8	-3.6
Anne Arundel	-5.1	-9.6	-9.6	-9.2	-33.4
Baltimore	-0.8	-1.2	-1.7	-1.0	-4.8
Baltimore City	-0.4	-0.7	-1.9	-1.1	-4.0
Calvert	-4.2	-8.5	-8.4	-7.4	-28.4
Charles	-2.4	6.9	6.6	6.1	17.3
Dorchester	-0.1	-0.3	0.2	0.1	-0.2
Garrett	0.1	0.1	0.0	-0.1	0.2
Harford	-0.6	-1.1	-1.1	-0.6	-3.4
Montgomery	-1.3	0.6	-0.4	-1.7	-2.8
Prince George's	-4.0	-1.6	-2.2	-3.8	-11.5
Somerset	0.0	0.0	0.0	0.0	0.0
Washington	1.0	0.8	0.7	0.2	2.7