Energy and Technology Committee
Connecticut General Assembly

Testimony of Susan F. Tierney

On Behalf of Dominion Resources

On Bill #5505: An Act Concerning Electric Rate Relief

March 16, 2010
Hartford, Connecticut

INTRODUCTION:

- Senate Chair Fonfara, House Chair Nardello, Ranking Members Witkos and Williams, and other members of the Energy and Technology Committee. Thank you for the opportunity to present my testimony today.
- My name is Susan Tierney. I am a Managing Principal at Analysis Group in Boston. I am here today to speak with you about Bill #5505 – a bill with the important goal of addressing high electricity rates in Connecticut.
- The issue of how Connecticut policy makers support their constituents' interests in having economical, reliable and clean electricity resources is important to your state's economy and quality of life. The General Assembly has taken many constructive steps in recent years to address this issue, and I commend your efforts to try to do it with effective public policies. I want to talk about Bill #5505 in that context.
- By way of introduction, I have worked for nearly three decades on energy policy issues similar to those you are attempting to address. I served in the executive branch of Massachusetts state government, and held the positions of Secretary of Environmental Affairs, Commissioner of the Department of Public Utilities, and

executive director of the state's Energy Facilities Siting Council. I was appointed to positions by governors of both parties. I know what it is like to head a public authority, and served as chairman of the board of the Massachusetts Water Resources Authority. Under the Clinton Administration, I served as Assistant Secretary of Policy for the U.S. Department of Energy in Washington, D.C. More recently, I co-chaired the Obama/Biden transition team at the U.S. Department of Energy for five months. I co-chair the bipartisan National Commission on Energy Policy, and serve on the board of directors many non-profit organizations and public companies involved in clean energy issues and products. I taught for several years at the University of California, and now teach a course on policy analysis at the Massachusetts Institute of Technology.

- As an energy consultant, I have worked over the past decade on a wide range of issues for a wide range of clients, including state and local government agencies, a state legislature, large consumers of electricity, grid operators, utility regulators, publicly owned and investor-owned electric transmission and distribution companies, gas companies, universities, Indian tribes, environmental organizations, renewable energy companies, investment companies, and power generators, among others. Before I was contacted by Dominion to assess the proposed legislation, I have never worked for Dominion in the past.
- I have gone on at length to describe my background because it has shaped my views about the complexities of electric energy markets. I have been a student and practitioner of public policy, regulation, markets, investments, and consumer issues in the electricity industry in various parts of the country for many decades. I am very familiar with the issues with which your committee is struggling today. In my personal life, I know what it is like to live in a state with high electricity rates, and I have known what it is like to struggle with high

utility bills at different times in my life.

- As I thought about preparing for this hearing, I looked at Bill #5505 from the following point of view: If I were in the shoes of a policy maker in Connecticut, would I think that consumers would benefit from Bill #5505? With that in mind, I want to make three main points.

FIRST: HOW THINGS LOOK DEPENDS UPON WHERE YOU SIT – AND WHAT YOU LOOK AT. CONNECTICUT'S ELECTRICITY PRICES ARE HIGH, BUT ITS ELECTRICITY EXPENDITURES ARE BELOW THE NATIONAL AVERAGE.

- Bill #5505 is clearly focused on trying to help the state address its high electricity prices. The Bill uses many approaches to address an apparent crisis. In examining the Bill, which would introduce extraordinary policy measures, it is important not to lose sight of the fact that while Connecticut's electricity rates are high, its citizens pay less of their personal income on electricity bills than the national average.
- How is that possible? It is because Connecticut uses electricity so efficiently, and the state's citizens enjoy relatively high incomes compared to others in states with much lower electricity prices. Connecticut has one of the highest levels of personal income per capita.[1] Also, Connecticut's electricity supply is relatively clean and contains only a small percentage of coal-fired generation, as compared to the states with relatively low electricity prices, relatively high

[1] Using 2008 personal income and 2007 population for the states, Connecticut ranks 3rd. Source: Bureau of Economic Analysis, data on personal income (4th quarter of 2008), compared with state population from Energy Information Administration (State Energy Data System, using population data as of 2007).

electricity use per capita and relatively low personal incomes per capita.

- It is normal in our discussions of energy costs to focus on the price per unit. We tend to do this for electricity prices, just like gasoline prices. On this measure alone, Connecticut consumers pay a lot for electricity. (See Figure 1, which ranks the states in terms of the average retail price of electricity (cent-per-kilowatt-hour basis).[2]) But when you look at how much Connecticut consumers pay for their overall electric bill, however – either as a percent of their personal income or in terms of the economic payoff to the overall state's economy – then electricity costs in Connecticut are lower than the national average. (Figure 2 ranks the states according to electricity expenditures as a percentage of gross state product; Figure 3 ranks the states according to the percentage of personal income spent on electricity.) As shown, Connecticut spends close to the national average on its electricity bill; and consumers spend less of their personal income on electricity than the national average.
- Connecticut's consumers and economy as a whole use electricity and energy much more efficiently than the rest of the nation. That outcome – efficient use of energy – results from, among other things, the combination of smart public policy and the effects of high prices on consumer behavior.

[2] I have used data for 2008 in this figure, since I compare this information to other economic metrics using readily available information across the states. For such other information (described further here), 2007/2008 is the most recent information to compare the state-level data. I looked at price (cent/KWh) data for 2008 and 2009, and the information is quite similar to the relative rankings of the states as shown for 2007 and 2008.

MY SECOND POINT: AS A STUDENT OF PUBLIC POLICY LOOKING AT BILL #5505, I SEE VERY MIXED MESSAGES ABOUT WHAT THE STATE IS TRYING TO ACHIEVE FOR ITS ELECTRICITY CONSUMERS AND HOW THE STATE HOPES TO ACCOMPLISH THOSE GOALS.

- Bill #5505 has many features that presumably have been included to help lower costs for consumers. These features range from providing discounted-rate assistance to low-income consumers; authorizing use of bonds and other means to finance public and private investment in generating facilities; promoting energy independence through energy efficiency and diversity of supplies; promoting economic development and environmental sustainability through encouraging use of new electric technologies; introducing consumer protections in the delivery of electric marketing services; ensuring electric reliability and minimizing costs of electric service; and others.
- I note in particular that in several places,[3] the bill explicitly seeks to encourage competition as a way to accomplish consumer benefits.
- In some respects, however, the bill includes a number of provisions that would serve to decrease the interest of a company in participating in Connecticut's electric industry. The bill could therefore undermine the state's reliance on private investment and competitive markets as means to serve customers'

[3] For example, Section 2 would establish a rate mechanism to support programs for the improvement consumer education, with a direction that "Such expansion of programs shall emphasize how in-state businesses can operate successfully as consumers in the competitive market." Among the several purposes of the new Connecticut Electric Authority that would be established under Section 7 is to encourage competition, when in the interests of state consumers." Section 17 calls for the state's electric distribution companies to contract for power supplies in a way that invites competition. Section 35 defines the circumstances under which a public benefit exists for a new electric facility to include (among other things) a situation in which the facility is necessary "for the development of a competitive market for electricity."

interests. The bill may inadvertently raise the cost of doing business in Connecticut's energy market, which seems counter to the stated goals of the bill.

- For example, the bill would establish a public electricity authority with various purposes. As designed, the authority's board may be subject to political pressure and appears to lack the legal compulsion to set its own rates so as to fully recover its cost of providing service. In other settings, public authorities with such characteristics often fail in their ability to carry out politically unpopular activities (such as assuring that rates cover the cost of providing service, even as the cost of service rises as a result of increases in underlying cost components, such as taxes, pension and labor costs, pressure on commodity prices from global market forces, and so forth).
- Another problematic provision that could raise the cost of doing business in Connecticut is the one under which the bill would authorize the public electric authority to solicit power supply bids, identify winning suppliers, subject them to regulatory review, and then force an investor-owned utility to become the counterparty to the approved contract (whether or not that utility's management supports signing the contract). In my experience, this provision (if it is even legal) would by its very presence in statute (let alone implementation in practice) raise the risk premium for electric distribution companies in Connecticut, and in turn raise their cost of capital (another cost to consumers).

- Further, the bill could adversely affect the business climate in the state through the adoption of the windfall profits tax (which I discuss below).
- At best, these mixed messages of Bill #5505 will introduce enormous inefficiencies into the provision of electric service in the state. At worst, they will introduce negative unintended consequences and undermine the very goals of the bill to benefit consumers.

MY THIRD POINT: THE "WINDFALL PROFITS TAX" PROVISION OF BILL #5505 IS OVERREACHING. IT WOULD HARM CONNECTICUT'S CONSUMERS IN THE LONG-RUN BY UNDERMINING THE ORDERLY CONDUCT OF BUSINESS ENTERPRISE, COMPETITIVE MARKETS IN ELECTRICITY AND OTHER SECTORS, AND A FAVORABLE INVESTMENT CLIMATE IN THE STATE.

- Section 36 of Bill #5505 would introduce a new state tax, set at 50 percent, tied to the "windfall profits" of a company owning an electric generating plant located in the state. In determining the level of profits earned by an owner of a generating plant, the bill would impute to the company the expenses and revenues of affiliated companies located inside or out of the state. It would impute the profit levels using a set of accounts and concepts of quarterly returns on equity and "reasonable operating expenses" that apply to regulated utility assets – and do so without regard to whether the company owning the generating facilities has obtained market-based rate authority from the federal regulators with regulatory authority over wholesale sales from power plants or that generator sells power under cost-based rates.

- The proposed windfall profits tax is overreaching in many ways, due to: definitional issues; "lessons learned" from prior windfall tax experience; implementation issues; economic concerns; and fairness considerations. In my opinion, all of these aspects of the proposal have negative implications for Connecticut's consumers and business climate.
- First, on definitional issues. Typically, one thinks of a windfall as something undeserved that comes completely out of the blue. The bill would define a "windfall profit" as including "all earnings in excess of twenty per cent return on equity…for operations within the taxable quarter."[4] Defining a "windfall" as a return on equity over a 20 percent may have the intuitive appeal of sounding like a high profit margin, until one thinks of the practical realities of business. A company's return may ebb and flow from quarter to quarter, and from year to year, for a lot of reasons. Sometimes there is seasonality in costs and revenues. Business cycle issues also affect these returns over time. There are some well-known companies in America that have periodic returns well above a 20 percent level, and yet we do not think of their earnings as windfalls. For example, in

[4] Section 36. "(b) Windfall profits of a company from the generation, manufacture, sale or other disposition of electricity or rights to electricity shall include all earnings in excess of twenty per cent return on equity, as classified by the Federal Energy Regulatory Commission according to the uniform systems of accounts prescribed in 18 CFR Part 101, accounted for as if the company owning an electric generating plant located in the state and any of its affiliates or subsidiaries maintained their books and records according to such uniform system of accounts, for operations within the taxable quarter…."

January 2009, Apple posted a gross quarterly margin of 34.7 percent.[5] In 2009, General Electric's monthly earnings ranged between -25 percent to 25 percent.[6] In the past year, after experiencing terrible losses in the prior year, many of the Vanguard mutual funds earned returns well above 20 percent and some as high as 40 to 60 percent in the prior year; but even so, their long-term (multi-year) returns have been as low as 1 to 5 percent (or negative returns).[7] My point is that the bill's definition of a windfall as a 20-percent quarterly return is neither reasonable nor consistent with conditions in American business.

- Another definitional problem associated with the bill's language on windfall profits is that it attempts to create and then tax a fictitious corporate entity. It seems to take concepts familiar to the world of traditional utility regulation and apply them to unregulated companies, without addressing the quid-pro-quos involved in regulation. For example, for the purposes of taxation, the bill defines a company (which, in practice, might be a limited liability corporation) as enjoying profits based on revenues and expenses of other affiliated but still separate corporate entities. Although I am not a lawyer, my experience in business tells me that this will create a field day for lawsuits and introduce near-impossible administrative burdens. (I will come back to this later.) The bill's

[5] "Apple Reports First Quarter Results, Best Quarterly Revenue and Earnings in Apple History, iPod Sales Set New Record," January 30, 2009, http://www.apple.com/pr/library/2009/01/21results.htm

[6] http://www.dailyfinance.com/quotes/general-electric-company/ge/nys/average-monthly-returns

[7] Fund performance has varied significantly from month to month, and from year to year, with long-term averages being lower than 20 percent, but with individual periods showing returns above 20%. https://personal.vanguard.com/us/FundsByName?View=PP&Sc=99

definitions reach beyond concepts of commercial reasonableness.

- Second, on lessons learned from prior policy experience with a windfall profit tax: A tax called the "crude oil windfall profits tax" was introduced in 1980 by the U.S. Congress,[8] as a mechanism to move through a temporary transition in which (a) price controls were lifted in U.S. oil markets (after several severe price shocks occurred as a result of OPEC controls over world oil markets), and (b) oil companies were expected to be able to raise prices to world market levels, thus reaping the benefits of selling oil at the higher prices. The 1980 windfall profits tax was actually not a tax on profits, but was a tax on domestic oil production, requiring U.S. oil producers to pay a tax on the difference between a benchmark price (set at price-controlled levels in the U.S.) and world oil prices. Several things happened after the law was passed, including extraordinarily complicated administrative implementation of the tax, and unstable revenue streams as world oil prices went up and down and as domestic supply declined over time. It was controversial throughout its life, and was repealed in 1988. While there have been other discussions in Washington about adopting a windfall profits tax on oil companies from time to time, the only other time(s) that one has been adopted is during times of severe crisis (such as war).
- Third, on implementation considerations. The bill requires that quarterly tax

[8] See, for example, Salvatore Lazzari (Specialist in Public Finance, Resources, Science, and Industry Division, Congressional Research Service), "The Crude Oil Windfall Profit Tax of the 1980s: Implications for Current Energy Policy," March 9, 2006, Order Code RL33305.

returns be filed by, with taxes imposed as relevant upon, the owners of generating units in Connecticut. Profits would be determined based not only on the revenues and expenses of those plants but also based on revenues and expenses associated with affiliates and subsidiaries of the company. The information would have to conform to the books and accounts of federal regulatory practice, even for affiliates and subsidiaries of the company (let alone the company itself) that are not rate-regulated entities. So, the tax would apply to owners of generating units located in Connecticut, whether owned by a regulated utility or not, whether existing or new investment, and regardless of size, technology, fuel type, or other features. By my count, there are at least 15 companies that own electric generating facilities in Connecticut as of 2009.[9] I am familiar with most of these companies and am aware that together they have subsidiaries or affiliates that own literally hundreds (if not thousands) of generating assets located inside and outside of the U.S. Some of these companies have affiliates with power plants operating under cost-of-service regulation; and most have affiliates with facilities selling power at market-based rates. Some of these owners are stand-alone generating companies; some are utility holding

[9] Energy Information Administration, 923 database on generating units in the U.S. These companies include: NRG (with at least three different subsidiary companies that own Devon Station, Montville Station, and Norwalk Harbor; Middletown Power LLC (Middletown); Dominion (Millstone Station); PSEG Power Connecticut (Bridgeport Station and New Haven Harbor); AES (AES Thames); CMS Energy (Exeter Energy); PPL Wallingford Energy (Wallingford plant); Wheelabrator Environmental Systems (Bridgeport facility); Covanta Mid-Connecticut Inv (Covanta Mid-Connecticut Energy); Bridgeport Energy LLC; Milford Power Company LLC; Lake Road Generating Co LP; Energy Investors Fund (Watertown Renewable Power, LLC); First Light Power Resources Services (Rocky River).

companies; others are banks; others are investment funds. Few, if any, of these companies are required to publish financial information at the subsidiary company level – either on an annual basis or a quarterly basis.

- Even determining what is an affiliate for the purposes of Connecticut's tax would be challenging. Would a bank that owned a generating facility in Connecticut include as affiliates all power plants owned by any subsidiary of the bank? Would a company that owned a waste-to-energy generating facility in Connecticut includes the revenues and costs of other waste-to-generating facilities owned in other places? Would a holding company with a power plant located in Connecticut and with bright line corporate boundaries between its regulated and competitive subsidiaries include all such entities when computing the profits of the generating asset owned in Connecticut?
- Clearly, the administration of a quarterly windfall profits tax that imputes financial information on an accounting basis using federal regulators' rules for so many hundreds of companies, affiliates and subsidiaries would be an undertaking of heroic if not impossible proportion by the State of Connecticut.
- Fourth, on economic considerations: For the owners of power plants in the state, a new windfall profit taxes would likely be counted as an operating expense. Therefore, the cost of owning and operating assets in Connecticut will go up. This could be true for existing plants and new ones too, including new power

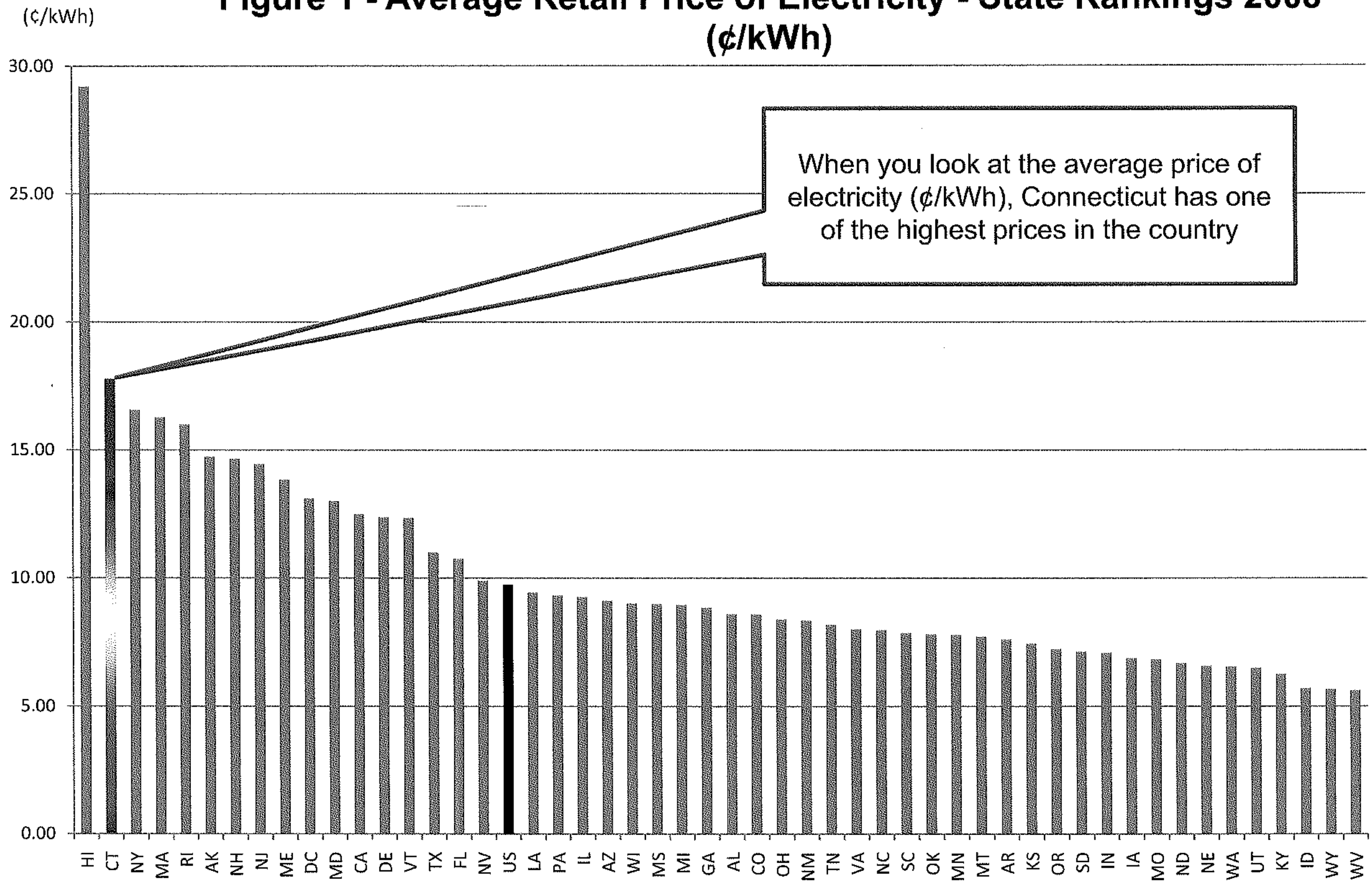
plants that use renewable resources. This could chill investment (and potentially job growth) in clean power infrastructure that the state might otherwise be hoping to attract. (Recall that US oil production declined during the period of the windfall profits tax, no doubt for many reasons, but one of which was the tax's effective increase in the cost of doing business in the oil sector in the U.S., relative to oil production in other places.) Even though this bill would apply to owners of power plants, it could have relatively far-reaching and unintended impacts in other sectors, too. When businesses look for signals of government policy and see that in one particular industry, Connecticut legislators have declared a "windfall " to arise when a quarterly profit is above 20 percent (and do so in such a sweeping way), it would be reasonable for companies in other fields to view Connecticut as a riskier place to do business, all else equal. Companies may see this policy as suggesting that if they worked hard and achieved earnings that were to go above (or were even perceived to exceed) a particular threshold, the state might eventually introduce legislation that would prevent them from keeping half of those profits. This might chill investment in some sectors of Connecticut's economy.

- Fifth – and finally – on fairness considerations. Presumably, Bill #5505's windfall profits tax provisions are aimed at providing a way to shift dollars from generating companies to consumers in Connecticut, out of a desire to mitigate (unfairly) high electricity prices. But Bill #5505 is a blunt instrument and should not be construed as providing for a fair or just outcome. For one thing, the shareholders of the company owning generating units in Connecticut may well be people who live in Connecticut. The shares of energy companies (such as utility holding companies and other large energy firms) tend to be owned by institutional investors such as pension funds, large mutual funds (that manage 401K plans), and other funds on behalf of regular people. To assume that these regular people (who may well include citizens of Connecticut) should have their profits taxed so heavily when a quarterly profit goes above 20 percent seems unfair, since it is so inconsistent with other underpinnings of normal commerce. Additionally, and more directly, when the owners of generating units in Connecticut purchased these power plants from Connecticut's utilities a decade or so ago, they did so under policies and procedures that were authorized by the state. The new owners of the generating assets offered a price for those generating units that reflected their taking on the risks of a competitive market. Those risks meant that they would neither be assured a return as high or as low as those achieved by regulated utility companies. Such returns in any year (or quarter) could be much lower or higher than what investors hoped, with no downside protections for low returns or with no upside limits for high returns. By imposing a 50-percent tax on the upside returns in any quarter, without providing any downside protection on low returns, seems inherently unfair. And it seems inconsistent with the terms of the marketplace in which these generating assets were purchased. Without the kinds of assurance of "reasonable allowed rate of return" afforded to regulated utilities that permit them to ask for a rate increase when actual returns fall below a particular level, a windfall profits tax defined is unfair to investors – whether their company operates in a regulated or competitive pricing arrangement.

CONCLUSION:

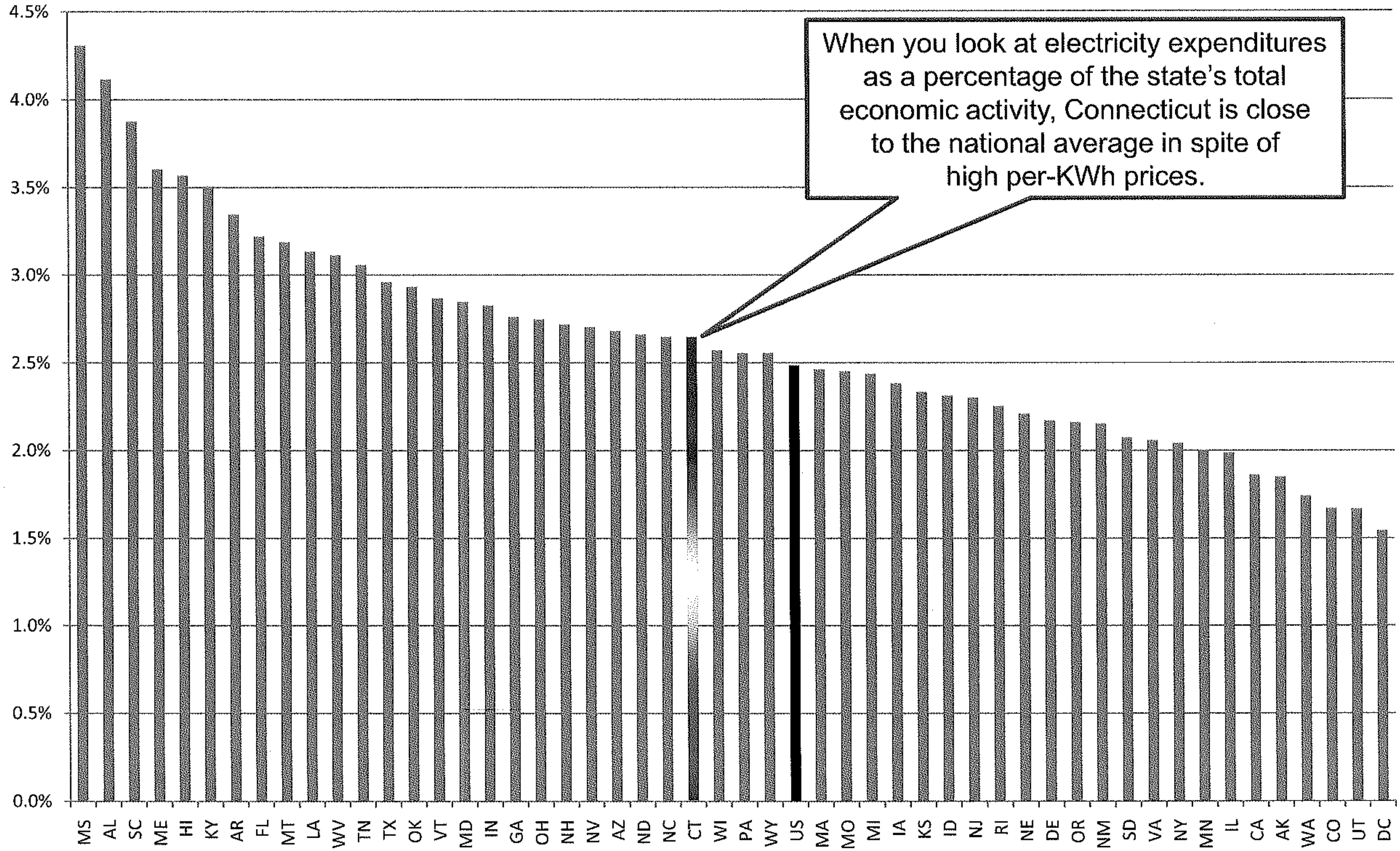
- In conclusion, I think that Bill #5505 is penny wise and pound foolish, contains too many inconsistent provisions to accomplish its ends, and would send powerfully negative signals to the investment community at a time when no state can afford to do that. I encourage the legislature and other policy makers to do all they can to encourage sound investment in energy efficiency measures as a way to help consumers continue to reduce their energy bills. I encourage you to find ways to advance technology and investment in the state. Connecticut has been a leader in this area, and there is still much more work to be done there. I encourage you not to adopt a bill that in so many ways will add to the cost of doing business in the state – precisely the outcome you are trying to address.

Figure 1 - Average Retail Price of Electricity - State Rankings 2008 (¢/kWh)



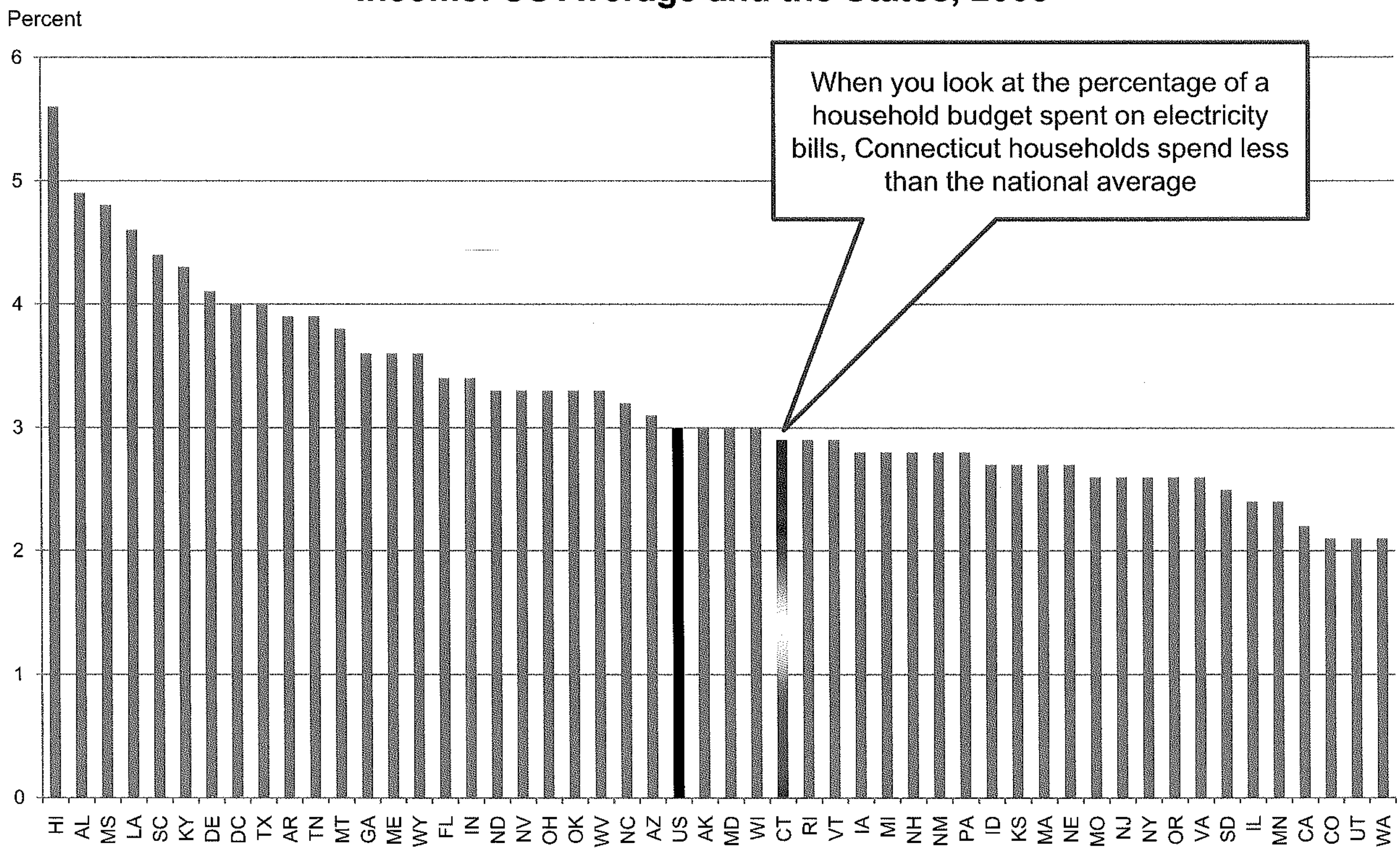
Data: Energy Information Administration, 826 Data series (electricity expenditures by state)

Figure 2 – Electricity Expenditures as a Percentage of Gross Domestic Product - 2007



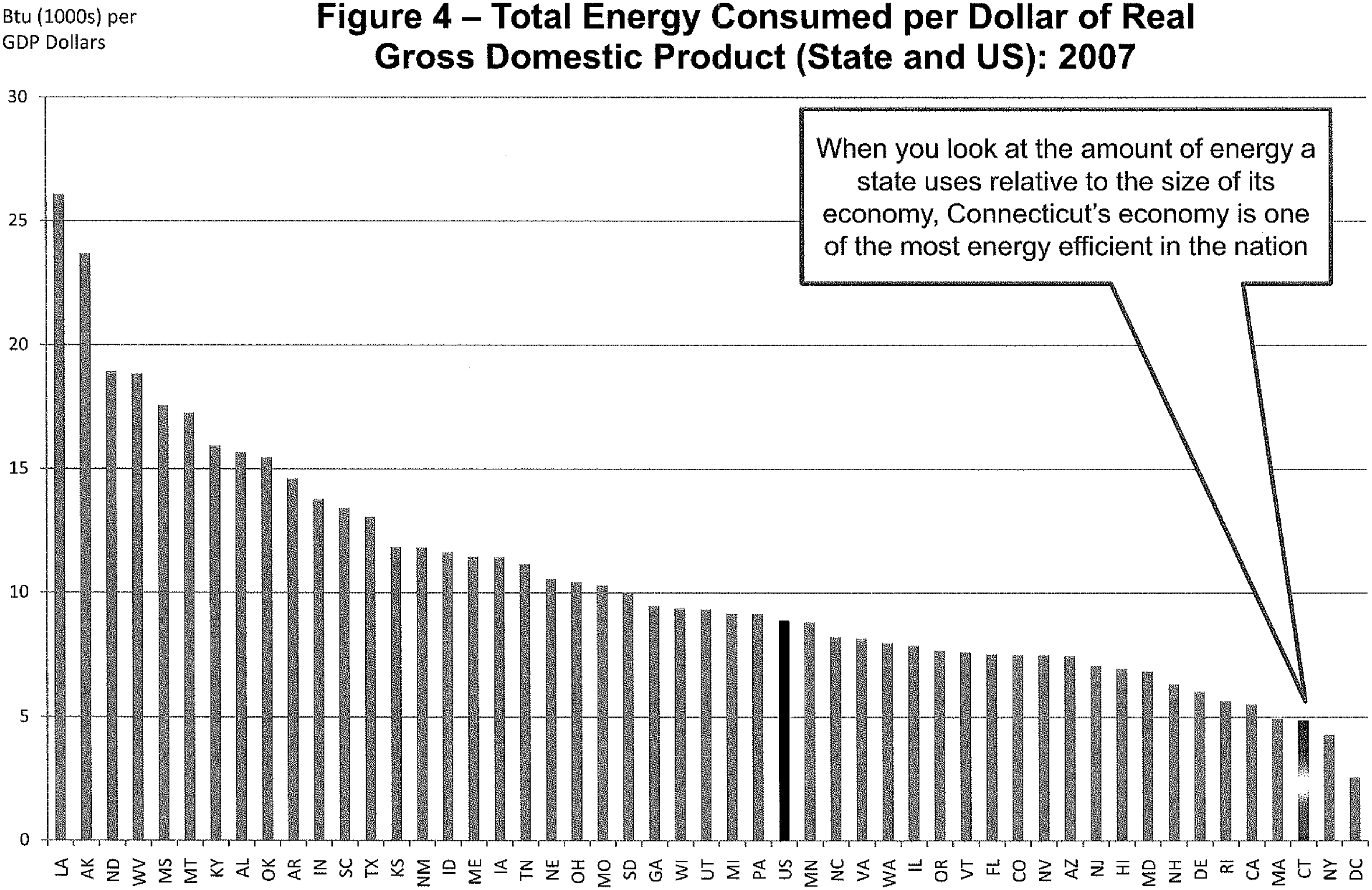
Data: Energy Information Administration, 826 Data series (electricity expenditures by state)

Figure 3 – Electricity Expenditures as Percentage of Personal Income: US Average and the States, 2008



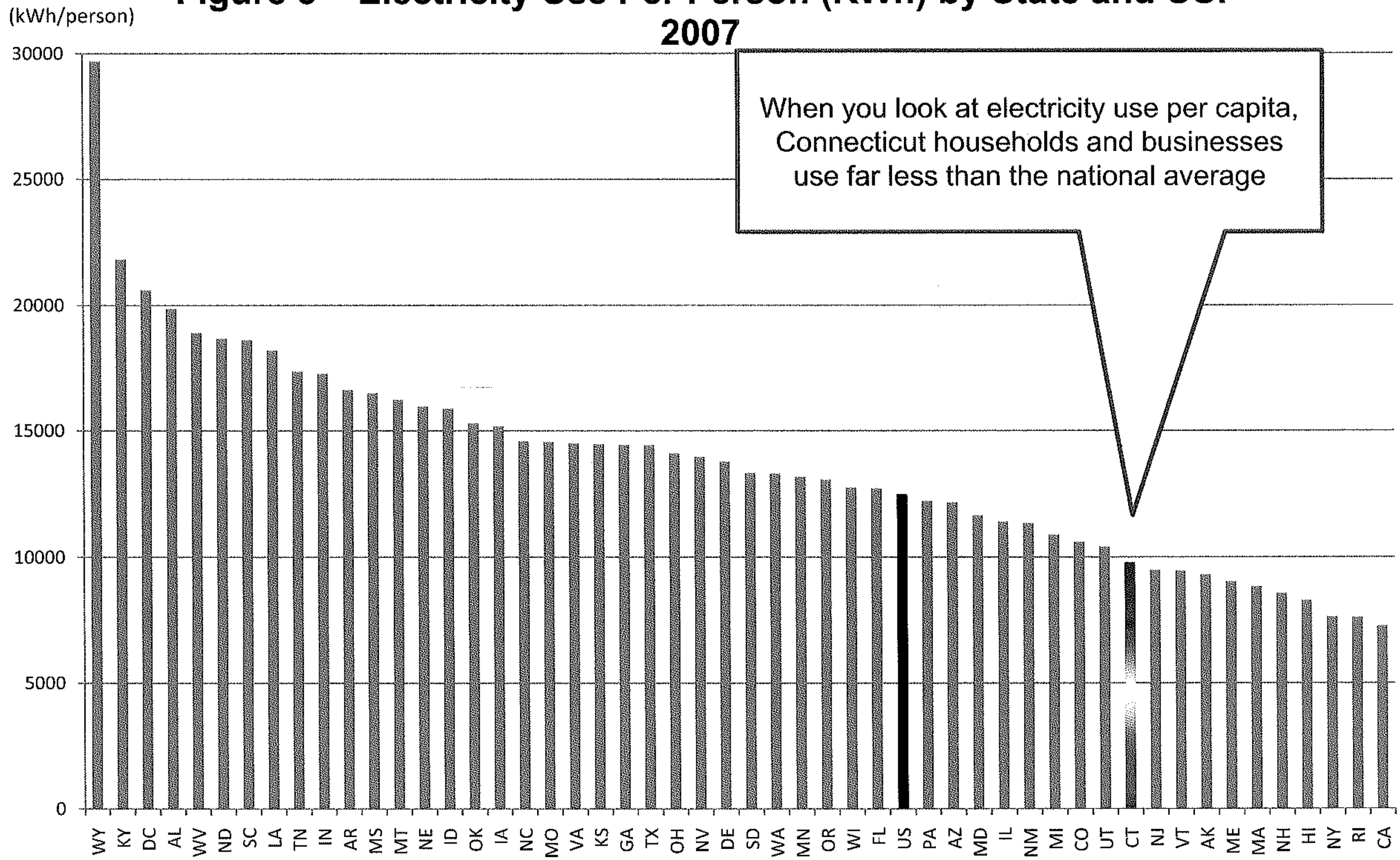
Data: Energy Information Administration, 826 data for monthly retail electricity expenditures by state (2008);US Bureau of Economic Analysis, Personal Income, by State and Region (2008).

Figure 4 – Total Energy Consumed per Dollar of Real Gross Domestic Product (State and US): 2007



Data: Energy Information Administration, State Energy Data System (most recent annual data available as of 3-12-10)

Figure 5 – Electricity Use Per Person (KWh) by State and US: 2007



Data: Energy Information Administration, State Energy Data System (most recent annual data available as of 3-12-10)