

## Light Bulbs and Liberty

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### Key Points

- In 2007, the U.S. Congress passed the Energy and Security Act which will begin phasing out traditional light bulbs Jan. 1, 2012.
- Texas responded by passing HB 2150, excluding Texas from the federal light bulb ban.
- Texans paid \$114.8 million in the state's energy efficiency program in 2010, with costs expected to increase substantially.
- HB 2150 faces some hurdles, but it is an example of the steps Texas can take to reduce the cost of government-mandated energy efficiency programs.

Starting New Year's Day, the light bulb as we know it will be a relic of the past. Except perhaps in Texas.

In 2007, the U.S. Congress passed the Energy and Security Act.<sup>1</sup> The Act created energy efficiency standards for lighting, including household lighting, effectively ending the ability for American consumers to purchase the incandescent light bulbs that have been in use for the last 100 years. In fact, it will become a federal crime to sell traditional light bulbs.<sup>2</sup>

The popular light bulbs are scheduled to be phased out, starting with the 100 watt bulb in 2012 and working down to the 40 watt bulbs by 2014—unless the law is repealed or changed.<sup>3</sup> And that's exactly what some lawmakers are trying to do.

U.S. Congressman Joe Barton introduced the BULB Act this past legislative session. The Act aimed to repeal the 2007 Energy and Security Act. However, after much debate on the House floor, the measure did not garner enough votes to get through Congress.<sup>4</sup> The phasing out of the Thomas Edison-invented light bulbs continues on schedule.

The Texas Legislature, however, decided to take matters into their own hands. It passed House Bill 2510 (HB 2510), which was recently signed by Governor Perry and will go into effect January 1, 2012.<sup>5</sup> This is the same day the Federal Energy and Security Act is slated to phase out the 100 watt light bulb.

HB 2510 states, "An incandescent light bulb that is manufactured in this state and remains

in this state is not subject to federal law or federal regulation under the authority of the United States Congress to regulate interstate commerce."<sup>6</sup> In other words, if an incandescent light bulb is created in Texas and used in Texas, the Texas Legislature says that the Energy and Security Act of 2007 does not apply, and Texans can continue using the light bulbs they have always used.

### Why Do We Need HB 2510?

So why is HB 2510 needed? What is wrong with eliminating the incandescent light bulb?

Simply put, HB 2510 prevents the government from interfering with the marketplace, overriding consumer choice, and increasing consumer cost. Which is what both the state and federal governments are generally doing in forcing energy efficiency measures on the public. The light bulb ban represents a microcosm of the larger problem with energy efficiency measures, which are promulgated with ever increasing upfront costs to consumers yet with only speculative long-run returns. Texas is no stranger to these problems.

Since 2002, Texans have paid over \$591 million to support the state's energy efficiency program. The estimated 2010 cost of the program was \$114.8 million. This annual cost will substantially increase in future years due to the Texas Public Utility Commission's (PUC) recent expansion of the program and recent legislation by the Texas Legislature that codifies and expands the PUC's recent actions. These costs are added to consumers' electricity bills each month.

## Texas' energy efficiency program seems designed to make electricity more expensive so that we will use less of it. This is exactly the same problem with the attempt to outlaw incandescent light bulbs.

According to the Foundation's research by Robert J. Michaels, Ph.D., "The existing record does not justify the additional costs an expansion would impose on ratepayers." This is because the "PUC's evaluation methods virtually guarantee that program benefits will be overstated and costs will be understated."

Dr. Michael's study, *Energy Efficiency: Is Texas Getting Its Money Worth*, found that "when reasonable assumptions are applied to the Public Utility Commission's data, the potential investment returns of Texas' energy efficiency program range from 86.3 percent to 11.3 percent. There is simply no way, given the existing data and the methodology employed by the PUC, to properly determine the efficiency—or inefficiency—of the state's energy efficiency program."

Market-based energy efficiency has been a key part of America's and Texas' economic growth because it has made electricity less expensive so that we can use more of it to increase public health and safety and economic growth. To the contrary, Texas' energy efficiency program seems designed to make electricity more expensive so that we will use less of it. This is exactly the same problem with the attempt to outlaw incandescent light bulbs.

However, the light bulb debate is not just about consumer choice and increased cost. Another concern—generally being ignored by environmentalists—is the toxic mercury and clean up requirements of the new energy efficient bulbs. Compact Fluorescent Lights (CFLs) contain enough mercury to pollute 528 gallons of water.<sup>7</sup> Each CFL contains 4 milligrams of toxic mercury, and breaking a CFL triggers a significant health hazard that requires a 10-step clean-up. Included in those steps are "opening a window or door to the outdoor environment" and "shut off the central forced air heating/air conditioning system ... for several hours."<sup>8</sup> Non-practical steps during

many months of the year, particularly Texas summers. Even these toxins are not the major concern.

Jobs are an additional problem. General Electric [GE]—a company founded by Thomas Edison—closed its last U.S. incandescent-bulb factory last September. The company cited "a variety of energy regulations [that] will soon make the familiar lighting products produced at the plant obsolete."<sup>9</sup> Two hundred Americans lost their jobs when the plant closed. A year prior, GE shut down six other light bulb plants, which cost another 425 jobs. At a time when America's job market is reeling, we are increasing regulation and hindering job growth and job creation.

While HB 2510 is a good idea, there are two hurdles that must be cleared before Texas will see any benefit from it.

First, a plant would have to be built in Texas. The statute specifically states that in order for Texas to be excluded from the Federal Energy and Security Act the bulbs must be manufactured and used in Texas.<sup>10</sup> Whether the market demand for cheap, effective bulbs, as well as the benefit gained from job creation in a business friendly state, will be enough to tempt a manufacturer to build a plant in Texas is unknown.

The other potential hurdle is the commerce clause in the U.S. Constitution. Back in 1942, wheat farmer Roscoe Filburn was growing excess wheat on his property for his own personal consumption. The Federal Government passed a law regulating the amount of wheat a farmer could produce in an attempt to raise wheat prices during the depression. Mr. Filburn surpassed the amount allotted and was told he violated the law based on his negative effect on interstate commerce.<sup>11</sup> Roscoe Filburn challenged the statute, conceding that Congress could regulate the production of wheat sold or transported in interstate commerce, but that Congress lacked the constitutional authority to limit the amount of wheat produced on his farm for his own personal consumption.

The Court found that Mr. Filburn's "contribution to the demand for wheat may be trivial by itself," but upheld the statute because "the farmer's wheat production substantially affected the demand and supply of wheat when aggregated with other similarly situated wheat farmers."<sup>12</sup> In other words, the Supreme Court decided that the economic effect of a person's actions may violate the federal government's authority, even if the actions themselves do not.

HB 2510 attempts to circumvent this broad interpretation of the commerce clause. The Texas statute specifically states, “An incandescent light bulb that is manufactured in this state and remains in this state is not subject to federal law or federal regulation under the authority of the United States Congress to regulate interstate commerce.”<sup>13</sup> Even with this disclaimer, if a court determines that by having their own cheaper, more efficient light bulbs, Texans are decreasing the consumption of CFLs in America, the statute possibly violates the U.S. Supreme Court’s current interpretation of the Constitution’s interstate commerce clause and could therefore be void. How-

ever, the Supreme Court has found some exceptions to the *Filburn* case, so there is a chance HB 2510 could survive a constitutional attack, depending on the court’s interpretation of the Federal law and how it interacts with the state’s activity.

The fact is, the incandescent light bulb should be allowed to compete with CFLs, LEDs, halogens, candles, and other current and future technologies. If the incandescent survives, then the market will have made its decision for the betterment of the American consumer and the better bulb would have won. ★

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## Endnotes

<sup>1</sup> H.R. 6, Energy Independence and Security Act, 2007. 110th Congress. First Session.

<sup>2</sup> Ibid.

<sup>3</sup> Derooy Murdock, “Stop the War on Edison’s Bulb!” *National Review Online* (8 July 2011).

<sup>4</sup> Andrew Restuccia, “House Turns Out the Light on Barton’s BULB Bill,” *The Hill* (12 July 2011).

<sup>5</sup> H.B. 2510. 82nd Session. Texas Legislature.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Environmental Protection Agency, “Cleaning Up A Broken CFL” (6 June 2011).

<sup>9</sup> Murdock, 5.

<sup>10</sup> H.B. 2510.

<sup>11</sup> *Wickard v. Filburn*, 317 U.S. 111 (S.C. 1942).

<sup>12</sup> Ibid.

<sup>13</sup> H.B. 2510.

## About the Author

**Ryan Brannan** joined the Texas Public Policy Foundation's Center for Economic Freedom in 2009. Since joining the Foundation, he has written and worked on numerous regulatory issues, such as telecom, electricity, insurance, tort reform and property rights. Specifically Ryan has done work on net neutrality, broadband deployment, windstorm insurance, homeowner's insurance, eminent domain, regulatory takings, tort reform, renewable energy, smart meters, franchise fees, etc.

In addition, Ryan has several years of legal experience, working on corporate litigation matters including patents, copyright infringement and contract disputes. He has also worked in a Dallas medical-malpractice defense firm working on med-mal issues, hospital regulatory disputes, health care law and other forms of insurance defense.

Ryan established and served as Director of The Dallas Philanthropic Society, a 501(c)(3) non-profit. He also returned to school in the evenings to earn his M.B.A. from the Cox School of Business at Southern Methodist University, concentrating in Strategy and Entrepreneurship. At SMU, Ryan was a member of the Cox Leadership Forum and contributed to the SMU business plan competition.

He received his Juris Doctorate at the University of Oklahoma where he was a member of the American Indian Law Review, Dean's List, Dean's Counsel, and several trial teams including the National Trial Team. He received special recognition in advocacy and public service by receiving the Dean's Award for Advocacy and the Dean's award for Service, respectively. Ryan graduated with honors from Southern Methodist University with a Bachelor's in Political Science and minor in History.

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