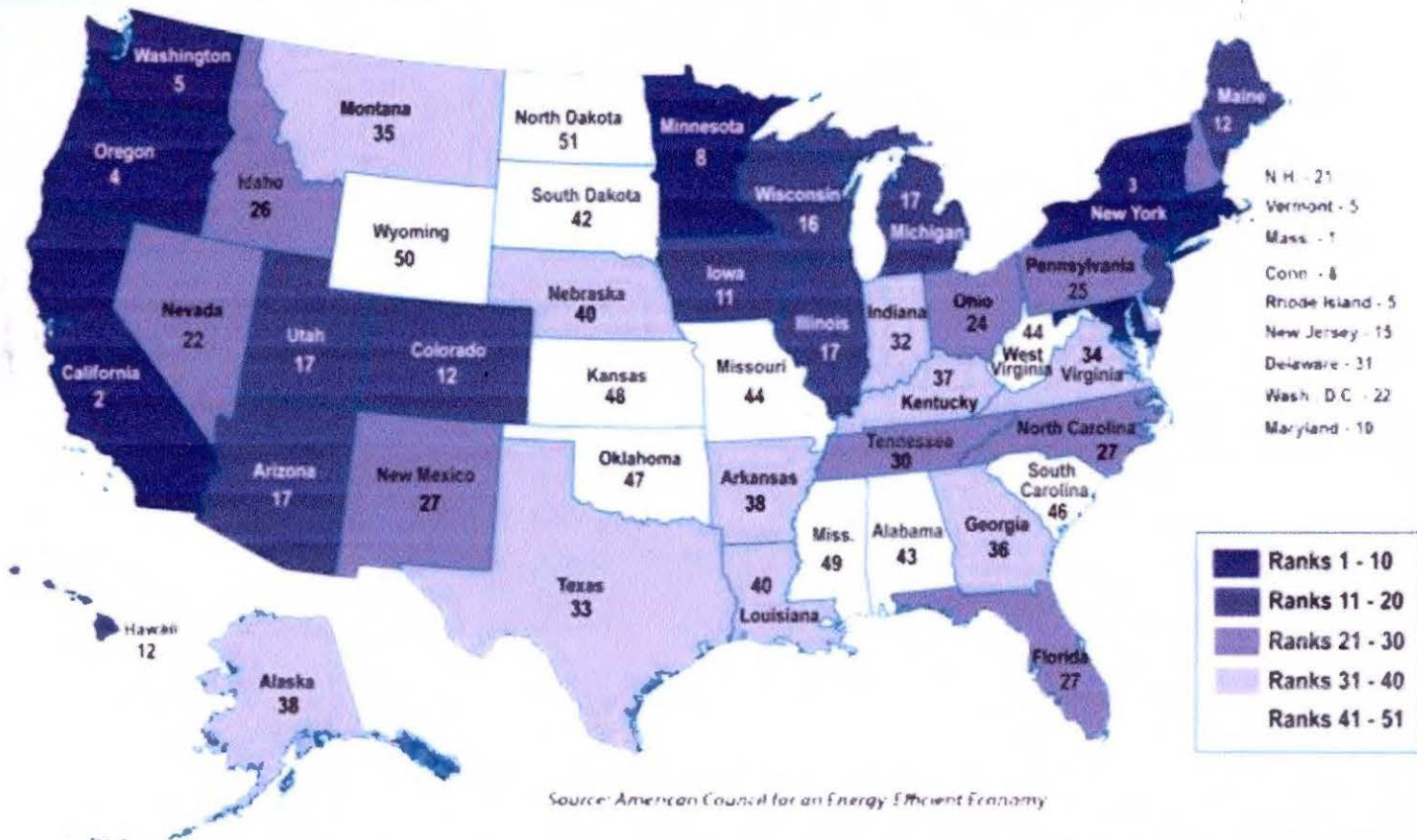


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SEP 12 2012

Missouri Public  
Service Commission

## The 2011 Scorecard Rankings



**ACEEE**  
American Council for an Energy Efficient Economy

Available for free download: <http://aceee.org/research-report/e115>

Witness Exhibit No. 1  
Date 7.22.12 Reporter SB  
File No. ER-2012-0166

## **Low Rates, Energy Costs Are Not a Convincing Deterrent for Customer EE**

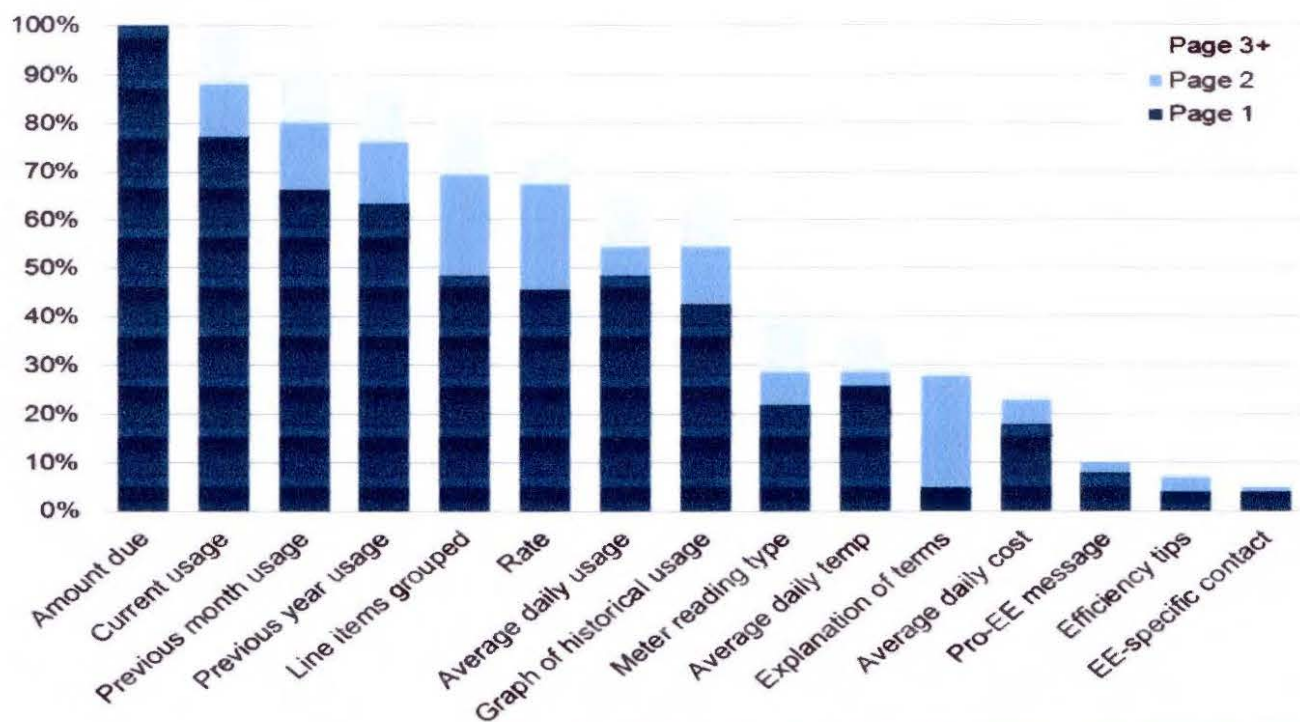
- The average bill for residents in the bottom ten states (\$109.71) of the *Scorecard* is higher than the avg bill for residents in the top ten states (\$103.62).
- Electricity costs account for roughly 3.5-4.5% of household income in MS, AL, SC, and WV.



## **Numerous Utilities Across the Country are Reaching Low/Middle-Income and Rural Customers**

- Arkansas, North Carolina, and New Mexico – all ranked in the bottom ten of state household median income – all offer solid energy efficiency programs.
- Rural states w low pop. density also succeeding w EE: Iowa, Idaho, Vermont, Oregon, New Mexico

# Using utility bills for EE education



## Customers Support EE

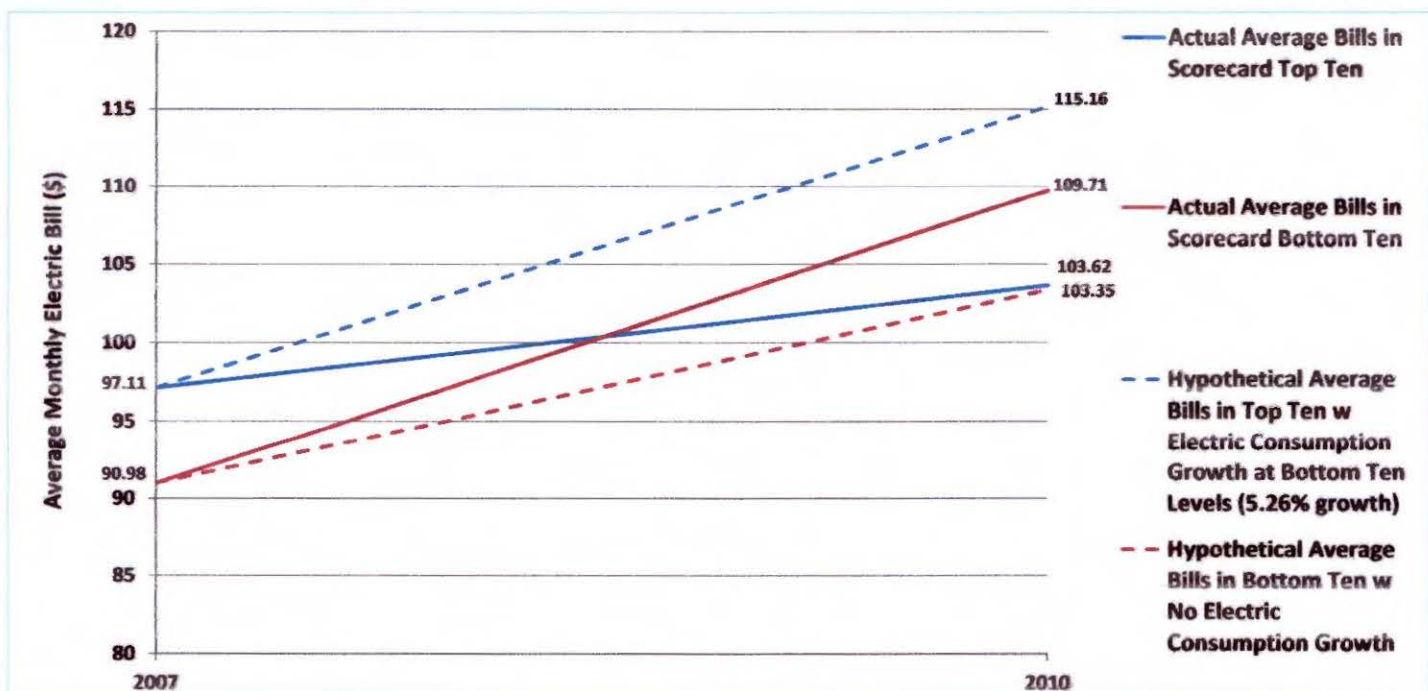
- North Dakota Survey found that 97% of residents consider energy efficiency “very” (65%) or “somewhat” (32%) important.
- In general, surveys show support for EE across political ideologies, education backgrounds, economic standing, and urban and rural locations (72% believe gov’t should provide EE subsidies; 62% believe gov’t should establish EE building fund – Maibach et al 2009)



## **“But it’s our job to keep rates low”**

- A regulator’s job in a “least cost” planning regime is to weigh all resources equally and choose those that result in ***the lowest revenue requirement for consumers.***
- The regulator’s goal is to allocate this revenue requirement across customer classes so that rates are just and reasonable.

# We Pay Bills, Not Rates



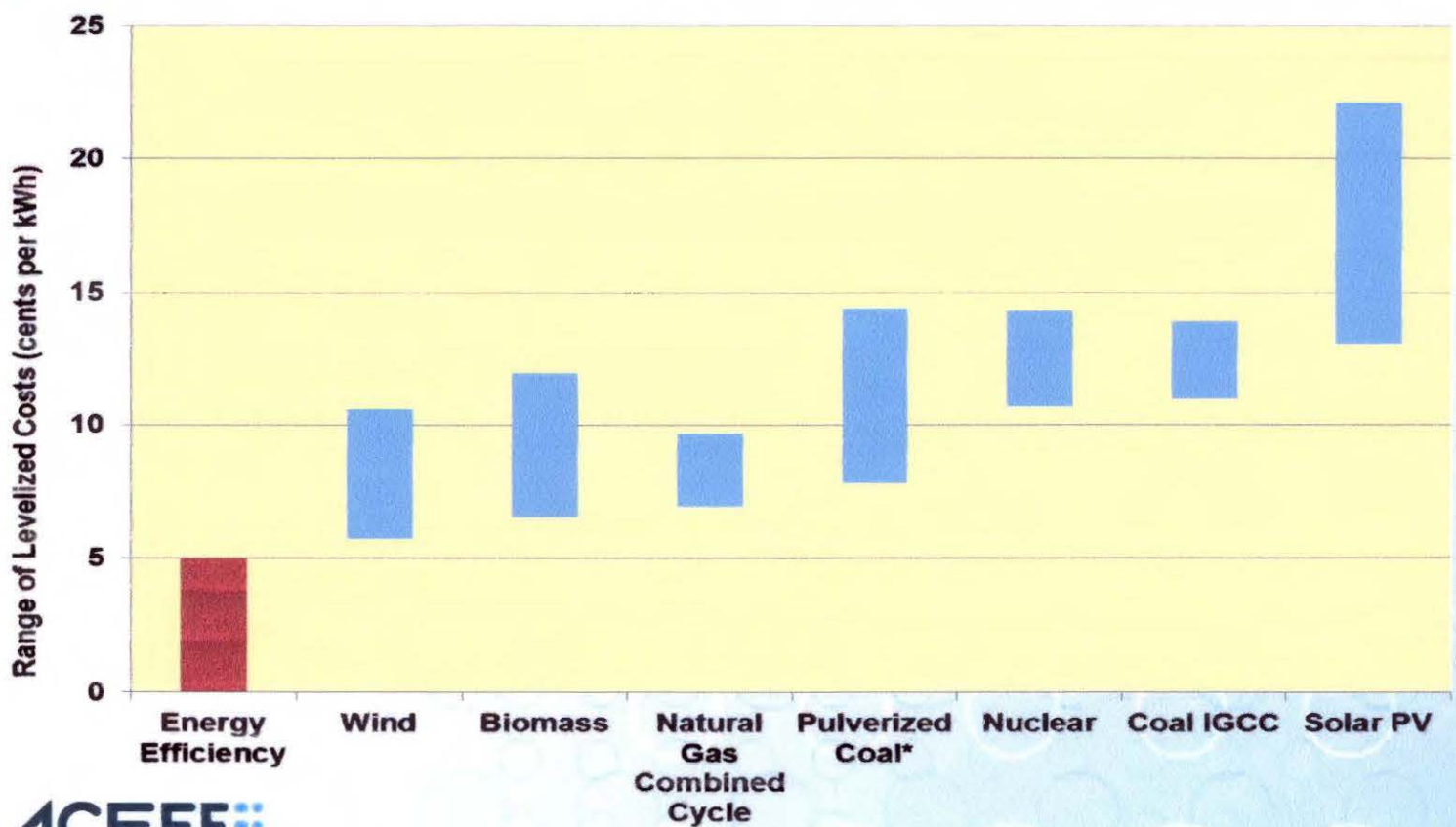
**Bills are dependent on rates AND consumption. Energy efficiency provides a hedge against rates that are rising irrespective of any EE investment.**

## Utilities: “EE Doesn’t Fit Our Business Model”

- With the adoption of proper regulatory levers, numerous states have adjusted the utility business model to make EE a source of profit that also improves customer satisfaction.
- Utilities must embrace a shift from delivering energy ***sales*** to energy ***services***.
- Three-legged stool: cost recovery, eliminate the throughput incentive (decoupling), provide a performance incentive



# Energy Efficiency is a Low-Cost Utility System Resource



# Energy Efficiency is a job-creator

Figure 1. Jobs per Million Dollars of Revenue by Key Sectors of the US Economy

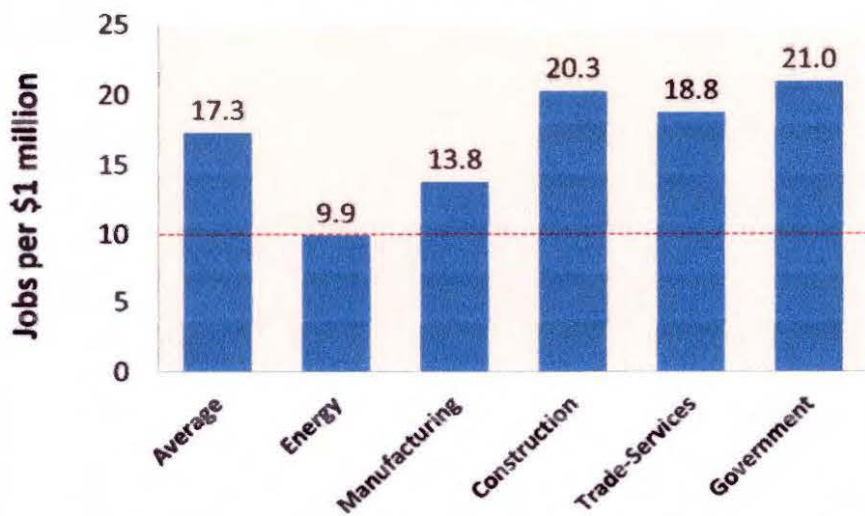


Figure 2: \$15 Million for Energy Efficiency Improvements

## 1st Year Investment: \$15 Million

### Option 1 Energy Efficiency Improvements

**20** Jobs per \$Million  
**x**  
**15** \$Million

**=305** Gross Direct, Indirect,  
and Induced Jobs

**RESULT: 305 - 260 =**

**45** Net Jobs

### Option 2 Business as Usual

**17** Jobs per \$Million  
**x**  
**15** \$Million

**=260** Gross Direct, Indirect,  
and Induced Jobs

## Long-Term Effects of the Investment

**20** Years  
**x**  
**3** \$Million in Savings,  
Spent in Other Areas  
**x**  
**17** Jobs per \$Million

**=1038** Gross Direct, Indirect,  
and Induced Jobs over 20 years

**RESULT: 1038 - 600 = 438**

**22** Net Jobs  
Jobs per Year for 20 Years

**20** Years  
**x**  
**3** \$Million/yr on Utilities  
**x**  
**10** Jobs per \$Million

**=600** Gross Direct, Indirect,  
and Induced Jobs over 20 years



# Who Said Energy Was Cheap?

State	Average Monthly Consumption (kWh)	Average Retail Price (Cents per kWh)	Average Monthly Bill (\$)	State	Average Monthly Consumption (kWh)	Average Retail Price (Cents per kWh)	Average Monthly Bill (\$)
Hawaii	601	28.10	\$168.86	West Virginia	1,195	8.79	\$105.05
Maryland	1,096	14.32	\$156.94	Missouri	1,153	9.08	\$104.66
Alabama	1,384	10.67	\$147.69	Alaska	641	16.26	\$104.29
Connecticut	750	19.25	\$144.40	New Hampshire	626	16.32	\$102.11
Texas	1,199	11.60	\$138.99	Indiana	1,065	9.56	\$101.79
Delaware	1,001	13.80	\$138.24	Kansas	985	10.03	\$98.73
South Carolina	1,310	10.50	\$137.59	Massachusetts	667	14.59	\$97.34
Florida	1,194	11.44	\$136.61	Rhode Island	603	15.92	\$96.08
Mississippi	1,345	9.87	\$132.76	Iowa	913	10.42	\$95.19
Virginia	1,239	10.45	\$129.43	Nebraska	1,051	8.94	\$93.97
Tennessee	1,393	9.23	\$128.58	South Dakota	1,041	8.97	\$93.40
Georgia	1,265	10.07	\$127.41	Illinois	799	11.52	\$92.03
North Carolina	1,238	10.12	\$125.20	North Dakota	1,121	8.13	\$91.16
Louisiana	1,380	8.98	\$123.96	Wisconsin	716	12.65	\$90.59
New Jersey	731	16.57	\$121.13	Vermont	576	15.57	\$89.71
Arizona	1,059	10.97	\$116.09	Minnesota	814	10.59	\$86.19
New York	610	18.74	\$114.39	Oregon	964	8.87	\$85.52
Nevada	914	12.36	\$113.03	Michigan	681	12.46	\$84.82
Pennsylvania	878	12.70	\$111.50	California	562	14.75	\$82.85
District of Columbia	778	14.01	\$108.93	Washington	1,030	8.04	\$82.75
Oklahoma	1,189	9.14	\$108.61	Maine	521	15.71	\$81.83
Kentucky	1,258	8.57	\$107.77	Idaho	1,020	7.99	\$81.46
Arkansas	1,211	8.86	\$107.28	Colorado	709	11.04	\$78.22
Ohio	931	11.32	\$105.33	Wyoming	883	8.77	\$77.43
				Montana	845	9.16	\$77.37
				New Mexico	659	10.52	\$69.35
				Utah	786	8.71	\$68.43



# Labadie Power Plant Second Worst Polluter in the U.S., Study Says

**By Evin Fritschle, Missourian Staff Writer | Posted: Saturday, November 26, 2011 4:30 pm**

The Ameren Missouri coal-fired power plant in Labadie is the second worst mercury polluter in the nation, according to a recently study released by Environment Missouri, a nonprofit advocacy organization.

Researchers with the environmental group analyzed new U.S. Environmental Protection Agency data in the study, "America's Biggest Mercury Polluters — How Cleaning Up the Dirtiest Power Plants Will Protect Public Health," released this week.

The EPA accounts for the emissions in its annual toxics release inventory. That inventory utilizes self-reported data from power plants.

The Labadie power plant produced 1,527 pounds of airborne mercury emissions in 2010, according to the study, second only to the Big Brown Steam Electric Station and Lignite Mine in Fairfield, Texas. That site produced 1,610 pounds last year.

As a whole, Missouri power plants emitted 3,835 pounds of airborne mercury in 2010.

Ameren was responsible for 3,699 pounds as a company.

The company operates in Missouri and Illinois.

The company's other plants in Missouri, including the Rush Island plant in Festus, the Meramec plant in St. Louis and the Portage Des Sioux plant in West Alton, ranked second through fourth for mercury pollution in the state in 2010 respectively.

Those facilities ranked 36th, 45th and 61st nationally.

Mercury from power plants is generally emitted through smokestacks. The mercury then falls to the ground in rain or snow and contaminates waterways.

It can then accumulate in fish.

Eating contaminated fish is the main source of human exposure to mercury.

The heavy metal can cause neurological damage to people, especially during early childhood development.

"Parents in Missouri shouldn't have to worry that their children's bodies are toxic dumping grounds," said Ted Mathys, state advocate for Environment Missouri.

"The EPA is moving forward to protect our children's health from toxic mercury pollution and we can't let big polluters stand in the way," Mathys said in a release announcing the report.

Mathys said a single drop of mercury is enough to make fish in a 25-acre lake unsafe to eat.

He said Sens. Claire McCaskill and Roy Blunt both should support pending EPA regulations which would change air toxins standards, including limiting mercury for the first time.

"Once fully implemented, the new standard as proposed would reduce overall power plant emissions of mercury by more than 90 percent," Mathys said.

That is, if Congress doesn't block the EPA from introducing the new standards, he said.

"Congress and industry lobbyists are working to keep the EPA from doing its job," Mathys said.

The federal agency estimates that if the proposed standard is implemented, the reduced emissions could prevent 17,000 premature deaths, 11,000 heart attacks, 12,000 emergency room visits, 120,000 cases of childhood asthma and 850,000 sick days a year.