



Munich Personal RePEc Archive

Corporate Walkover in Progress: The Case of the Southern Company’s “Clean Coal” Plant in Mississippi

Klinedinst, Mark

14 November 2014

Online at <https://mpra.ub.uni-muenchen.de/62214/>

MPRA Paper No. 62214, posted 20 Feb 2015 14:07 UTC

Corporate Walkover in Progress: The Case of the Southern Company’s “Clean Coal” Plant in Mississippi

by Mark Klinedinst, Ph.D.

I. Introduction

The project to create an experimental “clean coal” plant in Mississippi is funded by electric utility customers in the poorest state in the United States. The incentives for the project come from the industry capturing the Public Service Commission of Mississippi. The controversial incentives stipulate that the Southern Company can earn a return on money spent to create electrical infrastructure, even if the experimental plant never produces any electricity. The Southern Company’s Kemper County Mississippi “Radcliffe” Plant, originally estimated to cost about \$1.2 billion, is approaching \$6 billion dollars, is still not operational, and may never be a profitable facility. Despite this, over 180,000 of America’s poorest citizens are expected to foot the bill. Although this is one of the most intense examples of corporate welfare, the “Radcliffe” Plant is hardly the only current case in the utility industry. The “Public Service Commission” of Mississippi facilitated this large transfer of income from ratepayers to investors in this monopoly.

Section II: Regulatory Oversight, PSC and MS Power

Regulatory oversight began in earnest in many industries around the turn of the last century. Progressive inroads against monopolies and oligopolies resulted in government oversight boards that were theoretically created as a check against the firms’ monopoly power.¹ In many instances, the problem that tended to develop was that the agency overseeing an industry—to promote efficiency and keep the general public’s interests in mind—became a tool

¹ Wisconsin had a railroad commission that in 1907 became the first state oversight board for utilities. Today almost every state has some form of “public service commission” (PSCW, 2014).

of the industry it was designed to regulate (Stigler, 1971). Hence, this “captured” regulatory institution gives the veneer of public accountability to monopolistic behavior.

Because many of the industries that the commissions oversee are either natural monopolies or have just a few companies, people normally assume that the commissioners’ job is to protect industries and consumers from monopoly or oligopolistic over-pricing. Similar to a competitive market, the commissioners will let a utility earn a normal rate of return for services offered. This rate of return can be pushed higher by having little public oversight of the regulatory body, allowing the industries involved to set their own terms. The lobbying power of utilities across a number of states grew to such an extent that they were able to have representatives of their choice on the oversight boards and also to pass laws that circumvented the regulatory practice of only charging consumers for services rendered. In a competitive marketplace, customers do not normally pay for products that are not sold to them, as may be the case with “Construction Work in Progress” (CWIP) pricing (or, as this article contends, as a corporate walkover on the ratepayers and the PSC).

Mississippi (MS) Power, a subsidiary of the Southern Company, gained kudos in the state for its efforts in reinstating electric power after Hurricane Katrina struck in 2005. Hurricane Katrina stands as the single most destructive natural disaster in U.S. history (Insurance Information Institute, 2007 and 2010). A number of MS Power employees deserve our thanks for their hard work on an ongoing basis and especially during the post-Katrina period. A few years later, skilled lobbyists translated this gratefulness into an attack on the basic premises of utility regulation. “Advanced Cost Recovery,” or “Baseload” bills, end up having people pay for services that they may never receive (Cooper, 2013). Often these bills are passed when it is clear that the costs going forward are not well known or that investors may be unlikely to foot the bill

(e.g., North Carolina, South Carolina, and Florida's experience). The Kemper Plant is clearly a type of plant where the costs are not well known.² A survey conducted at the end of 2013 reported that out of 75 projects worldwide of large scale carbon capture, five were canceled, one reduced in size, and seven postponed (Global CCS Institute, 2013). Mississippi's 2008 Baseload Act allows for this unproven technology, canceled in a number of places, to be paid for by current MS Power customers even before they receive any power from this plant. This would be analogous to going to the grocery store and paying for a full cart, and yet the store preventing you from taking the items home. Thomas Blanton, a businessman from South Mississippi in the MS Power serviced area, has argued against the Baseload Act's confiscatory rate increase and the resulting costs from CWIP. In the argument to the Mississippi Supreme Court, Mr. Blanton argues:

At a fundamental level, Mr. Blanton has challenged the 'Baseload Act' because it allows Mississippi Power Company to assess customers such as Mr. Blanton for the construction of a plant that to date has failed to provide Mississippi Power Company customers with any return whatsoever: no electrons per se, no services or activities 'necessary' for the continuous reliable and economic delivery of electrons, no connection to resource planning, customer service, safety, fuel procurement or environmental protection. As of March 5, 2013, and beginning April 1, 2013, customers of Mississippi Power Company are required to pay additional fifteen percent (15%) in 2013 and an additional three percent (3%) in

² Even the name for this type of plant is not quite fixed. It is sometimes called the Kemper County "integrated gasification combined-cycle" project (IGCC) and at others "carbon capture and storage" (CCS) or "carbon capture and sequestration."

2014 for the construction of the Kemper County Lignite Gasification Project which remains untested and non-operational.

This example of paying for services that current customers (in the appendix) may never receive is a radical departure from the regulatory oversight norms. Historically, power companies received permission to raise rates in order to cover their costs of delivering electricity and to make a standard rate of return. The rate of return would be set to allow a “fair” rate that encouraged investors in the company to continue investing but not so high that customers (residential and commercial) were forced to pay exorbitant prices. Although not without problems (e.g., need for on-going prudent review, influence peddling, Averch-Johnson effect, etc.), the rate of return method, inflation adjusted and other methods have set standards that help rein in arbitrary regulatory burdens and, at the same time, attempt to bring some of the discipline of a competitive market to monopolistic industries.

III. Flattening Demand

A number of factors have converged to make the demand for centralized electricity grow at a relatively slow pace, especially in the MS Power service area of Mississippi. Hurricane Katrina and the Great Recession are only partly to blame. Clearly, the trend for real production in the state surpasses that for power supplied by MS Power, as seen in Figure 1. From 2000 to 2013, Mississippi’s overall state product increased by 13.8% while MS Power’s electric production only increased by 6% during the same period.³

³ Figures for real total gross domestic product for Mississippi in chained 2005 dollars are from the U.S. Department of Commerce: Bureau of Economic Analysis. The KWH figures come from Mississippi Power’s Financial Annual Reports 2000-2013. The actual figures for Mississippi GDP are $(96979-83563)/96979=0.138$ and for KWH are $(14592-13714)/14592=0.060$.

Figure 1

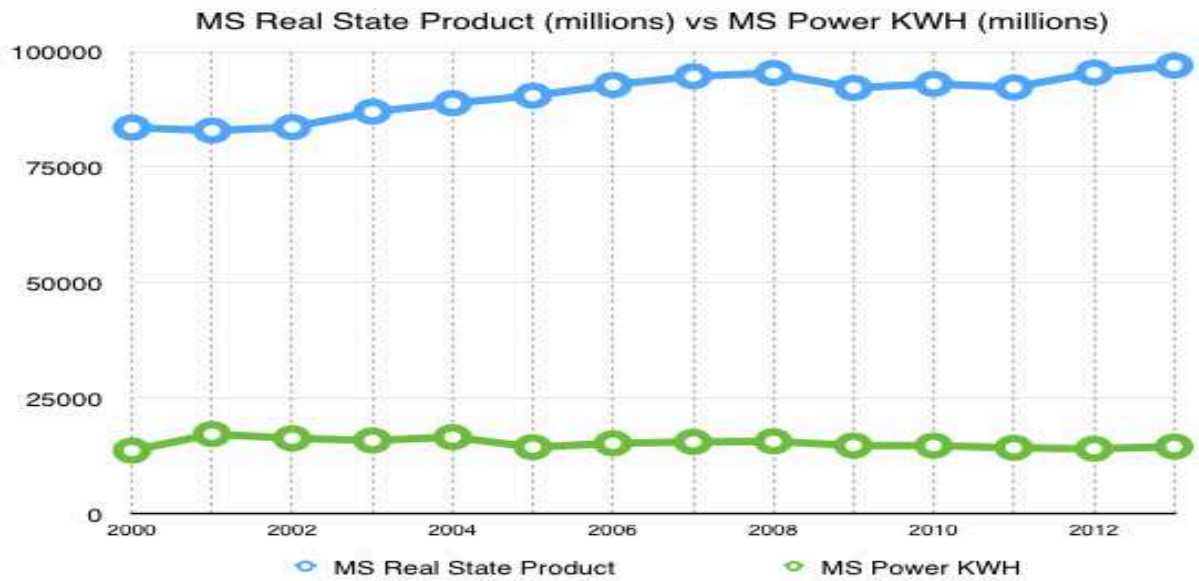
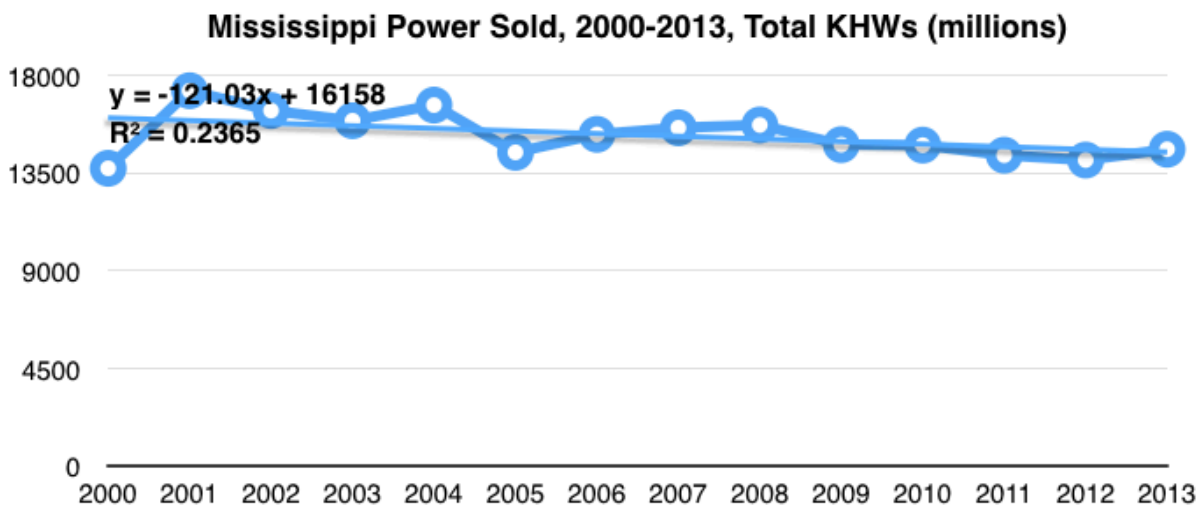


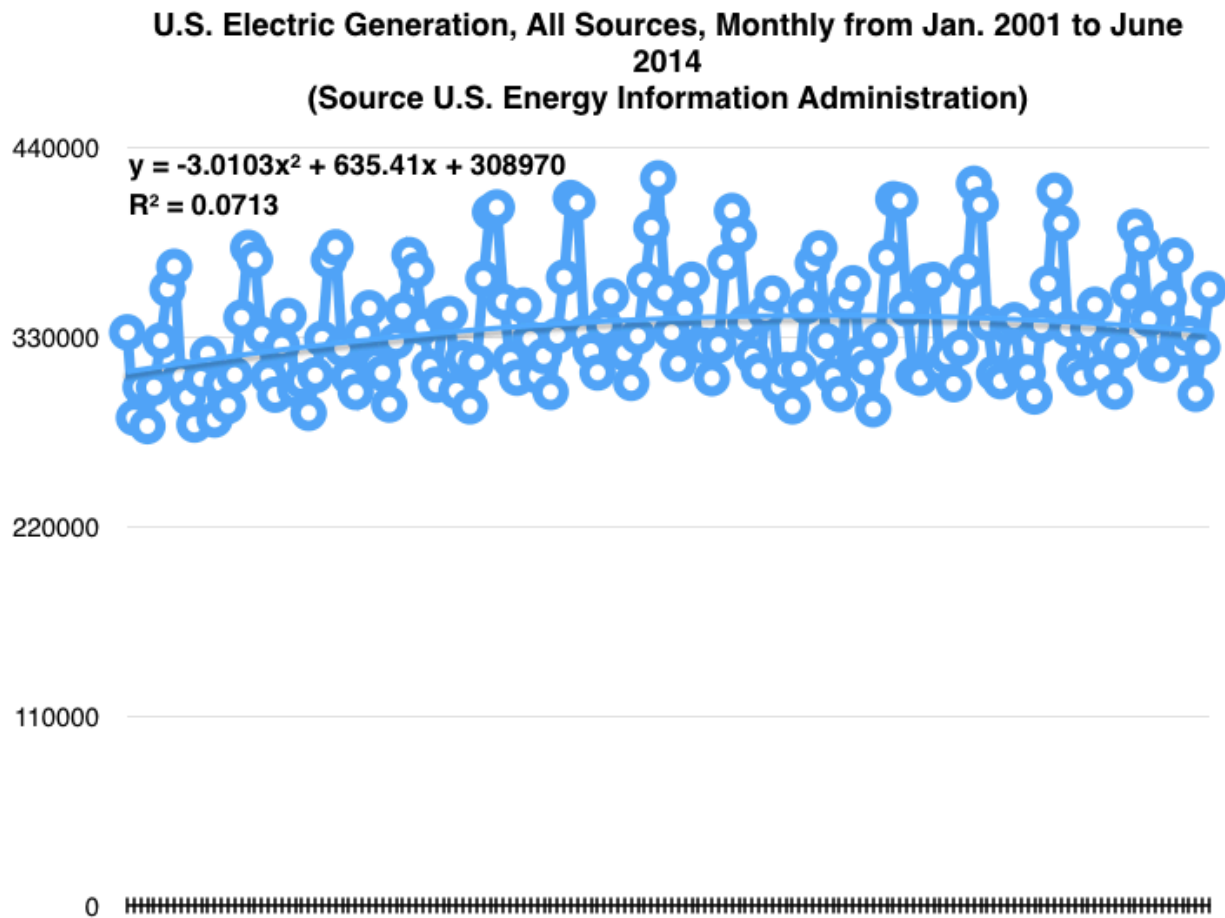
Figure 2, which separates out the power demanded on a larger scale, shows signs of an even negative trend.⁴

Figure 2



⁴ The fitted line on the year coefficient (x in the equation) has a t-value of -1.93.

Figure 3



This trend in Mississippi is similar to the demand pattern seen for the country as a whole, as Figure 3 shows a negative trend in later years. As other technologies become more cost effective, the elasticity in demand for centrally produced electricity may grow over time. This tendency for slower growth in electric demand will only be strengthened by the rate increases from the Kemper plant that MS Power is trying to levy on ratepayers.

IV. Rate Hike Impacts

The Kemper County plant's rate increases have created a substantial impact on Mississippi citizens, especially considering Mississippians' lack of means. To gauge the effect the rate increases would have on the region, we will explore the commonly accepted parameter

ranges for expenditure multipliers and the number of jobs lost in the 23 county service area of MS Power predicted by these ratios as well as the actual number. The impact is not likely to affect everyone equally across income levels and demographic groups. Commercial entities are also negatively impacted by the rate increases because of the consequent loss of income and reduced employment opportunities.

In March 2013, the total employment in the 23 counties of the MS Power service area was 399,232.⁵ By August 2014, after the rate hikes began in April 2013, the total employment was only 394,392, a drop of 4,840 jobs (see Figure 4). Over this same period, our state increased its non-farm payroll by 7,000. If we add back in the 4,840 jobs lost in the MS Power area to get the employment growth for the 59 remaining counties we get 11,840 (7,000 plus 4,840). This is an average of about 200 added jobs in those 59 counties (11,840 divided by 59). If the MS Power service area had the average job growth of the rest of the state, we should have added 4,600 jobs instead of losing 4,840. That is a difference of 9,440 jobs and a huge loss to this area.

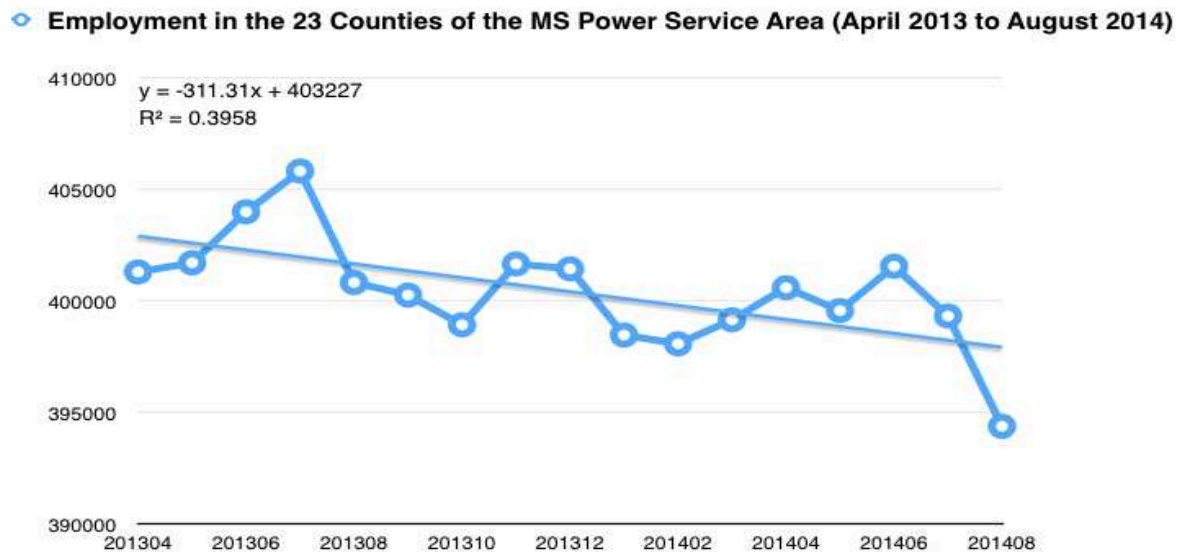
The Congressional Budget Office (CBO), often thought to be “middle of the road” in its economic analysis, estimates that the impact of government spending on goods and services ranges from 0.5 to 2.5 (CBO, 2012)⁶. Given that other factors are held constant (e.g., Federal Reserve policies, natural disasters, etc.), if we take the mean estimate from the CBO of 1.5, we can see that the cost of a rate increase could have a crippling impact on Mississippi consumers and businesses. What the bond markets and rating agencies such as Moody’s and Fitch

⁵ U.S. Bureau of Labor Statistics.

⁶ Other studies estimate that the impact is over one, especially during periods of high unemployment; some studies have estimated that the impact is as high as 3.42 (Auerbach and Gorodnichenko, 2012, Moretti, 2010, Neal, 2007 and Swenson, 2010). Further, Mississippi has a higher unemployment rate than the rest of the country. In fact, as of August 2014, Mississippi had the highest state unemployment rate in the nation (WDAM, 2014).

(Williams, 2012 and MS Business Journal, 2014) see as too risky, Mississippi customers will have to pay (Liu, 2013).

Figure 4



Taking a \$100 million rate increase as a simple metric and applying the middle of the road estimate from the CBO of 1.5, we can expect that a \$100 million rate increase will have approximately a \$150 million long term negative impact on the MS Power service area. What this means for jobs in the area can be roughly extrapolated from a number of different angles. Taking the 2013 median wage in Mississippi for all occupations of \$13.57 and multiplying that as if the person worked full time (2000 hours a year, or 40 hours a week for 50 weeks) amounts to \$27,140 for a yearly income. Taking \$150 million out of the area with a rate hike means a yearly income for 5,526 people. Since some of the rate hikes could be multiplied to recover Kemper's costs—possibly \$500 million a year with the use of the multiplier—the equivalent loss in each year of income can potentially amount to 27,630 individuals (5,526 times 5). The impact of this job loss on communities large and small in South Mississippi could be devastating.

Another way to consider an estimate of the number of jobs that could be lost is to take the number of jobs in the MS Power service area and compare that with the total income in that area. The ratio of dollars per job in the area would give an alternative idea of how many jobs may be lost with the higher fees that MS Power will charge. Running these numbers, as outlined in Table 1, shows 5,930 jobs potentially lost a year; over a seven-year period, this would total about 41,510 jobs in just the 23 counties MS Power services.

Table 1

1	2	3	4
Total income in 23 counties of MS Power in 2012 ⁷	Total employment in 23 counties of MS Power	Income per employed person in 23 counties of MS Power (column 1 divided by column 2)	Possible \$500 million rate increase per year/Income= jobs lost per year
\$33,800,000,000	400,937	\$84,303	5,930

Conclusion

These rate hikes are hitting homeowners and businesses hard. Even with extra efforts at conservation, an 18% increase in electricity costs will typically mean cut backs. The University of Southern Mississippi is budgeting an extra million dollars for utilities for the 2015 fiscal year (Kemp, 2014). Businesses that would have cut prices or hired more workers may now have to scale back. The loss of 4,840 jobs already in the area (over 9,000 if the area had the rate of

⁷ In 2013 dollars. Sources BEA and BLS.

increase of the rest of the state) is hard on companies and residents. Individuals faced with these increased electric rates have tough choices to make as well. For those already on the edge, and as a state we have quite a few, the choice may come down to buying food or being warm. How many increased fatalities will this area suffer due to illnesses being exacerbated from inadequate heating or cooling (Breitner et al, 2014)? Our elderly will probably endure some of the greatest problems from these causes.

The increase in rates charged by MS Power are especially curious given the growth of energy supplies and recent technological advances (U.S. Energy Information Administration, 2014). With low demand growth and lower costs for fuels, the decision to embark on an experimental lignite plant (that has seen delays and cost overruns) seems to be quite risky, unless you have the support of the MS Public Service Commission. This is not an article meant to disparage the hard working professionals at MS Power that we saw in action after Hurricane Katrina. We should focus our attention on individuals and corporations in higher levels of power and ask them to be more accountable to Mississippians. South Mississippi businesses and individuals should not have to pay for an expensive and experimental plant that costs billions more than alternative power sources and has yet to even operate. The MS PSC needs to make sure that electric rates are "just and reasonable" for South Mississippians and not just cover poor decisions designed to enrich a few.

References

- Auerbach, A. J., & Gorodnichenko, Y. (2012). Measuring the output responses to fiscal policy. *American Economic Journal: Economic Policy*, 4(2), 1-27. doi: <http://dx.doi.org/lynx.lib.usm.edu/10.1257/pol.4.2.1>
- Breitner, S., Wolf, K., Peters, A. & Schneider, A. (2014). Short-term effects of air temperature on cause-specific cardiovascular mortality in Bavaria, Germany. *Heart*, 100 (16): 1272.
- Chodorow-Reich, G., Feiveson, L., Liscow, Z., & Woolston, G. (2012). Does state fiscal relief during recessions increase employment? Evidence from the American Recovery and Reinvestment Act. *American Economic Journal: Economic Policy*, 4(3), 118-145. doi: <http://dx.doi/10.1257/pol.4.3.118>
- Clemens, J. & Miran, S. (2012). Fiscal policy multipliers on subnational government spending. *American Economic Journal: Economic Policy*, 4(2), 46-48. doi: <http://dx.doi.org/10.1257/pol.4.2.46>.
- Congressional Budget Office (CBO). (2012). Estimated impact of the American recovery and Reinvestment Act on employment and economic output from January 2012 through March 2012. Retrieved from <http://www.cbo.gov/publication/43274>
- Cooper, Mark. (2013). Public risk, private profit, ratepayer cost, utility imprudence. Retrieved from http://vls.vermontlaw.edu/News_and_Events/News_Releases/Public_Risk_Private_Profit_Ratepayer_Cost_Utility_Imprudence.htm.
- Federal Emergency Management Agency. (2011). Six years after Hurricane Katrina, Mississippi continues to recover and rebuild. Retrieved from <http://>

www.fema.gov/news-release/2011/08/29/six-years-after-hurricane-katrina-mississippi-continues-recover-and-rebuild

Federal Emergency Management Agency. (2013). Louisiana recovery: Eight years after hurricanes Katrina and Rita. Retrieved from <http://www.fema.gov/news-release/2013/08/28/louisiana-recovery-eight-years-after-hurricanes-katrina-and-rita>

Global CCS Institute. (2013). The global status of CCS. Retrieved from <http://www.globalccsinstitute.com/>.

Groen, J. A. & Polivka, A. E. (2010). Going home after Hurricane Katrina: Determinants of return migration and changes in affected areas. *Demography*, 47(4), 821-844.

Hodge, Megan. (2014). Mississippi unemployment highest in nation. *WDAM*. Retrieved from [in-nation-but-lamar-county-below-national-average](http://www.wdam.com/story/27844417/mississippi-unemployment-highest-in-nation-but-lamar-county-below-national-average).

Insurance Information Institute. (2006). The ten most costly world insurance losses, 1970–2006. Retrieved from www.iii.org/media/facts/statsbyissue/catastrophes.

Insurance Information Institute. (2010). “Hurricane Katrina: The five year anniversary.” Retrieved from www.iii.org/media/facts/statsbyissue/catastrophes.

Kemp, E. (2014). "USM, PRCC confront utility rate hikes." *Hattiesburg American*.

Knabb, R. D., Rhome, J. R., Brown, D. P. (2011). Tropical cyclone report: Hurricane Katrina, 23-30 August 2005. National Hurricane Center. Retrieved from http://www.nhc.noaa.gov/pdf/TCR-AL122005_Katrina.pdf.

Liu, B. (2013). Southern’s fanning explains added Kemper costs. Retrieved from <http://www.bloomberg.com/video/southern-s-fanning-explains-added-kemper-costs-rZayK05sTlunn8hFv3tEXw.html>.

- Mississippi Business Journal. (2014). Fitch gives Mississippi Power a negative outlook due to Kemper plant. Retrieved from <http://msbusiness.com/blog/2014/09/19/fitch-gives-mississippi-power-negative-outlook-due-kemper-plant/>
- Moretti, E. (2010). Local multipliers. *American Economic Review: Papers & Proceedings*, 100, 373-377. Retrieved from <http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.2.373>
- MIT. (2014). Carbon capture and sequestration technologies. Retrieved from sequestration.mit.edu/tools/projects/index_capture.html
- Mississippi Power. (2014). Financial annual reports 2000-2013. Retrieved from http://www.mississippipower.com/financial/financial_annualreports.asp
- Neal, B. (2007). The economic impact multiplier is not seven. *Mississippi Economic Review and Outlook*, 21(1), 44-46.
- Public Service Commission of Wisconsin (PSCW). (2014). Shaping utility regulation in Wisconsin. Retrieved from <http://www.psc.wi.gov/aboutUs/anniversary/timeline.htm>
- Ramey, V. A. (2011). Can government purchases stimulate the economy? *Journal of Economic Literature*, 49(3), 673-685.
- Smith, R. (2014). Southern co. to take \$380 million charge for Kemper coal plant. Retrieved from <http://online.wsj.com/news/articles/SB1000142405270230416360457953235144666122>
- Stigler, George. (1971). The theory of economic regulation *The Bell Journal of Economics and Management Science*, (2), 3-21.
- Swenson, D. (2010). Statewide economic impacts of disaster-related payments to support household and private and public sector recovery in Iowa. *The RIO Iowa Project*.

Retrieved from https://rio.urban.uiowa.edu/sites/rio/files/Statewide_Economic_Impacts_of_Disaster_Payments.pdf

U. S. Bureau of Labor Statistics. (2014). May 2013 state occupational employment and wage estimates for Mississippi. Retrieved from http://www.bls.gov/oes/current/oes_ms.htm#00-0000.

U. S. Bureau of Economic Analysis. (2014a). Total gross domestic product by state for Louisiana. *Federal Reserve Economic Data*. Retrieved from <https://research.stlouisfed.org/fred2/series/LANGSP#>.

U. S. Bureau of Economic Analysis. (2014b). Per capita personal income in Mississippi (c). *Federal Reserve Economic Data*. Retrieved from <https://research.stlouisfed.org/fred2/series/MSOPCI#>.

U.S. Energy Information Administration. (2014). Electric power monthly.” Retrieved from <http://www.eia.gov/electricity/monthly/>

Williams, A. (2012). Lignite coal plant latest. Retrieved from <http://www.wtok.com/home/headlines/Lignite-Coal-Plant-Latest-166264616.html>.

Wilson, D. J. (2012). Fiscal spending jobs and multipliers: Evidence from the 2009 American Recovery and Reinvestment Act. *American Economic Journal: Economic Policy*, 4(3), 251-282. DOI: <http://dx.doi.org/10.1257/pol.4.3.251>

Yang, W., Fidrmuc, Jan, & Ghosh, S. (2012). Government spending shocks and the multiplier: New evidence from the U. S. based on natural disasters. *Economics and Finance Working Papers, Working Paper*, 12-24. Retrieved from http://www.brunel.ac.uk/_data/assets/pdf_file/0005/247577/1224.pdf.

Zissimopoulos, J. & Karoly, L. A. (2010). Employment and self-employment in the wake of Hurricane Katrina. *Demography*, 47(2), 345-367.

Appendix

