



# LEADERSHIP WE CAN LIVE WITHOUT:

**THE REAL CORPORATE SOCIAL RESPONSIBILITY REPORT FOR SOUTHERN COMPANY**



  
**Green  
America**  
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# Leadership We Can Live Without: The Real Corporate Social Responsibility Report for Southern Company

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## EXECUTIVE SUMMARY

**SOUTHERN COMPANY** is one of the nation's largest utilities, with 4.4 million customers in the American Southeast. Southern Company prides itself on its relatively low rates and its consistent payment of dividends to shareholders. But while some ratepayers and shareholders may appreciate these limited economic benefits, they come at a high price: the extraordinary pollution produced by Southern Company, which harms the communities in which it operates and fuels global warming. In addition, Southern Company creates enormous environmental and health risks through its increasing use of nuclear power and growing coal ash ponds.

The real price of Southern Company's strategy include: asthma, heart disease, lung disease, air and water pollution, global warming, and the potential for catastrophic accidents. Clean Air Task Force data indicates that the cost of death and disease caused by Southern Company's non-climate-change pollution alone is over \$9 billion.<sup>1</sup> While the electricity costs for Southern Company's ratepayers may appear to be low, they are paying the price in health care costs (see Clean Air Task Force Data cited on p. 16). While Southern Company's shareholders may be getting dividends today, they risk the future value of their shares if Southern Company's policies continue.

Southern Company has some stiff competition for the title of Worst Utility, from coal-fired giant American Electric Power (AEP) to nuclear leader Exelon. The seven large utilities in Table 1 (p. 5) have all distinguished themselves through their air and water pollution, reliance on nuclear power, and/or anti-environmental lobbying. Each can act as a clear example of what is currently wrong with US electric generation in terms of human health, the environment, and catastrophic risks.

Table 1: **Southern Company and The Dirty Seven**

Rank	Company	Reliance on Coal	Air & Water Pollution (CO <sub>2</sub> , NO <sub>x</sub> , SO <sub>x</sub> , Mercury)	Reliance on and Expansion of Nuclear Power	Anti-Environment Lobbying
1	Exelon	C	C	F	D
2	Entergy	C	C	F	D
3	Dominion	D	C	F	C
4	TVA	D	D	F	C
5	Duke	F	D	F	C
6	AEP	F	F	C	D-
7	<b>Southern Company</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>

The *Dirty Seven* were chosen based on ownership of and construction of coal-fired power plants; levels of CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>, and mercury emitted; existing and planned ownership of currently existing nuclear power plants; construction and/or planned construction of new nuclear plants; and lobbying expenditures.

Within this competitive race to the bottom, Southern Company stands out as a leader overall — a leader we can live without. A partial list of the company’s most irresponsible practices includes the following:

- According to CARMA (Carbon Monitoring for Action), Southern Company is **one of the top five utility emitters** of carbon in the world.<sup>2</sup>
- Southern Company’s Scherer plant emits an astonishing 26 million tons of carbon dioxide every year, making it **the biggest power plant emitter of CO<sub>2</sub> in the country**.<sup>3</sup>
- Three of Southern Company’s coal plants made Environmental Integrity Project’s **top**





**ten list of most polluting plants in the country** for their emissions of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), mercury, and CO<sub>2</sub>.<sup>4</sup>

- Southern Company creates enormous demand for coal, which endangers the lives of miners and **puts entire communities at risk** from mountain top removal mining.
- All those **coal plants produce vast quantities of toxic waste**. Southern Company currently has at least 22 plants that utilize “wet” storage facilities for coal combustion waste — including at least one site that the US Environmental Protection Agency (EPA) found has polluted ground and surface waters.<sup>5</sup>
- Southern Company **is taking the lead in building new nuclear power plants** in the United States, and the nuclear plants it is planning to use have raised serious safety concerns from an expert at the Nuclear Regulatory Commission.<sup>6</sup>
- Southern Company is the leader among highly polluting utilities in spending **millions of dollars every year on anti-environment lobbyists** to maintain the status quo.<sup>7</sup>

For all of the above reasons, which are described in greater detail throughout this report, Southern Company has earned the title of the United States’ most irresponsible utility.

Southern Company has issued its own corporate social responsibility report, available on its website at: [www.southerncompany.com/corporateresponsibility/](http://www.southerncompany.com/corporateresponsibility/). The information provided by Southern Company, of course, presents its responsibility efforts in a much more favorable light, but much of the language is aspirational and vague. Green America’s report acts as a counterbalance to the company’s own report, and presents the facts regarding Southern Company’s overwhelming environmental impacts, which directly and negatively impact people’s health and the environment every day.

## INTRODUCTION

**THE UNITED STATES** obtains approximately half of its electricity from coal.<sup>8</sup> As a result of our reliance on coal, as well as our extensive use of fossil fuels overall, the US is the second largest carbon emitter in the world, following China, which only superseded the US in 2007.<sup>9</sup> In addition to causing climate change, US coal-burning utilities are a major cause of health issues ranging from asthma to lung cancer to heart disease. A recent Harvard University study found that coal costs the US up to \$500 billion per year in health, environmental, and economic impacts.<sup>10</sup> Mercury from coal-fired power plants is a dangerous neurotoxin, and children are particularly vulnerable to its effects. Mercury also has a devastating impact on waterways and wildlife. As the effects of climate change mount, overall costs will only grow.

The only practical solution to addressing these enormous costs, and slowing the ensuing destruction that imperils future generations, is to phase out our use of coal in the US, while not trading coal for new and dangerous fuel sources. Within the US, some utilities are taking steps to reduce their reliance on coal and are increasing their use of renewables and energy efficiency measures. Others are digging in their heels and using lobbying to maintain a status quo of burning the most polluting fuels and/or encouraging a greater reliance on nuclear power, the dangers of which were most recently demonstrated in Fukushima, Japan.

Southern Company is a company that both maintains its reliance on fossil fuels while gambling with new nuclear power plants. It continues to run several of the most polluting power plants in the country, including the number-one polluter: Plant Scherer.<sup>11</sup> According to Clean Air Task Force data, pollution from these plants has a very real cost on human health: two states where Southern Company runs coal-fired power plants rank amongst the top fifteen for per capita deaths from power-plant pollution.<sup>12</sup> At the same time, Southern Company is not only planning to continue running its existing, aging nuclear reactors, one of which unexpectedly shut itself down in April 2011 (Southern Company attributed the shutdown to a failed breaker), but is pursuing new reactors, using Westinghouse AP1000 technology, that employ a controversial





new design that has been criticized by one of the Nuclear Regulatory Commission's own experts (see p. 19).<sup>13</sup> While forging ahead with these risky reactors and failing to close its polluting plants, Southern is simultaneously failing to develop wind capacity (which is abundantly available off the Georgia Coast) and is only making limited investment in solar energy. All the while, Southern Company spends exorbitant amounts of money on lobbying, with expenditures of over \$13 million per year, to protect the status quo.<sup>14</sup>

The failure to invest in clean technologies is evidenced by the fact that, as of 2009 (the most current data available), Southern Company generates electricity from the following sources: coal (57%), hydro (4%), natural gas (23%), nuclear (16%).<sup>15</sup> Southern Company's heavy reliance on coal and natural gas explains its enormous climate-change and other pollution emissions.





# SOUTHERN COMPANY IN COMPARISON TO OTHER US UTILITIES

## DIRTIEST POWER PLANTS IN THE US

While the rush to build new coal plants in the US has been turned back through the efforts of local opponents and national nonprofit groups, the US still has approximately 600 coal-fired power plants in operation. Many of these coal-fired plants are 40 to 50 years old and highly polluting. Table 2 contains data regarding the top 10 worst polluting plants in the United States in terms of carbon dioxide emissions.

Table 2: *Top 10 Dirtiest Plants in the United States Based on CO<sub>2</sub> Emissions*

Rank	Parent Company	Facility	CO <sub>2</sub> Emissions (tons)
1	Southern Company	Scherer	25,298,499
2	Southern Company	James H Miller Jr	23,466,022
3	Southern Company	Bowen	22,756,191
4	PSI Energy, Inc	Gibson	21,447,980
5	TXU	Martin Lake	21,301,393
6	NRG Energy	W A Parish	21,076,082
7	American Electric Power	Rockport	20,181,545
8	Salt River Proj Ag I & P Dist	Navajo Generating Station	20,071,581
9	Tennessee Valley Authority	Cumberland	19,049,067
10	Appalachian Power Co	John E Amos	18,798,261

Source: Environmental Integrity Project "Dirty Kilowatts" 2007 Report Database

Three of the top energy-producing utilities — Southern Company, American Electric Power,





and the Tennessee Valley Authority — are represented on this list. Southern Company operates the top three most polluting plants in the US, topping the list with Plant Scherer, which produces over 25 million tons of carbon dioxide per year. These plants, in addition to Southern Company's other coal-fired facilities, help explain why Southern Company is one of the top emitters of carbon dioxide in the US, and even one of the top five utility emitters of carbon in the world,<sup>16</sup> as well as a top emitter of numerous other pollutants.

## GREENHOUSE GASES AND POLLUTION

The scientific consensus is that global warming is occurring rapidly, human activity is the primary cause, and that we need to substantially reduce our carbon dioxide and other greenhouse gas (GHG) emissions rapidly.<sup>17</sup> While the need to reduce GHG emissions has been known for years, many energy companies, which are major producers of GHG emissions, have been slow to act, with some companies actually increasing their emissions. In order to compare power generation to carbon dioxide pollution in the US utility sector, Green America looked at data from the top 12 utilities in the US based on generation, including such companies as Southern Company, American Electric Power (AEP), Duke Energy, Dominion, and Exelon, in 2004 and 2008.

Table 3 (p. 11) contains data compiled by the Natural Resources Defense Council for 2004 demonstrating power generation, both total and fossil fuel generation, as well as carbon dioxide emissions. The table contains data from the top 12 largest energy producers in the United States. The table shows that in 2004, American Electric Power (AEP) was the highest producer of electricity as well as the largest producer of carbon dioxide emissions. The table shows that AEP also produced the largest amount of electricity from fossil fuels, with a significant portion of that generation coming from coal-fired plants. Southern Company was a very close second in terms of total generation, and also second in fossil fuel use and carbon dioxide emissions. The Tennessee Valley Authority was the



highest carbon dioxide emitter amongst government-owned utilities. Exelon was fourth in total power generation; however, it had the lowest carbon dioxide emissions of any of the top 12 companies (although this is owing to its high reliance on nuclear power, which carries other significant risks).

**Table 3: 2004 Generation and CO<sub>2</sub> Emissions for Top 12 Electric Producers**

Company Name	Total Generation (MWhs)	Fossil Fuel (Coal) Generation (MWhs)	CO <sub>2</sub> Emissions (tons)
AEP	190,358,346	166,758,395 (158,760,228)	163,934,554
<b>Southern Company</b>	<b>186,294,694</b>	151,312,859 (130,822,620)	148,647,755
Tennessee Valley Auth.	157,556,843	96,266,655 (95,778,379)	103,602,929
Exelon	150,934,074	12,077,633 (8,292,026)	11,942,981
FPL (Now NextEra En.)	124,859,593	85,348,720 (8,324,848)	54,186,212
Entergy	117,946,999	43,155,287 (15,820,954)	36,222,715
Dominion	105,971,331	62,774,403 (51,093,496)	62,071,888
Duke	102,249,100	61,586,837 (44,558,864)	49,793,724
Progress Energy	93,252,779	61,402,477 (43,584,588)	58,930,512
Calpine	85,229,495	78,728,091 (0)	37,119,368
Xcel	81,283,493	66,604,435 (54,673,970)	69,809,043
First Energy	78,228,085	48,502,225 (47,214,113)	49,714,694

Source: Natural Resources Defense Council *Benchmarking Air Emissions of the 100 Largest Electricity Producers in the US, 2004 Emissions Data*.  
<http://www.nrdc.org/air/pollution/benchmarking/default.asp>

The second comparison (see Table 4, p. 12) examines a similar set of data four years later (and at a time prior to the full impact of the recession’s reduction in electric demand taking effect).





The data show that by 2008, Southern Company had eclipsed AEP as the largest electric energy producer in the United States. Both AEP and Southern Company increased total energy production, utilizing more fossil fuel production, as well as increasing their carbon dioxide emissions above 2004 levels. While TVA is third in energy production and fourth in carbon dioxide emissions, this position will likely improve in light of a recent settlement agreement TVA reached with the Environmental Protection Agency, four states, and several environmental groups, whereby it will be closing 18 of its most-polluting coal plants.<sup>18</sup>

**Table 4: 2008 Generation and CO<sub>2</sub> Emissions for Top 12 Electric Producers**

Company Name	Total Generation (MWhs)	Fossil Fuel (Coal) Generation (MWhs)	CO <sub>2</sub> Emissions (tons)
<b>Southern Company</b>	<b>200,145,044</b>	<b>167,701,125 (134,153,248)</b>	<b>155,107,239</b>
AEP	192,128,241	175,021,763 (164,179,849)	171,253,191
Tennessee Valley Auth.	158,866,850	98,318,649 (97,597,845)	104,775,169
NextEra Energy (FPL)	153,399,071	92,318,283 (6,666,142)	49,545,564
Exelon	150,557,232	9,007,627 (7,787,398)	9,239,010
Duke	149,023,541	107,798,695 (102,755,813)	105,512,223
Entergy	123,913,830	43,888,167 (16,069,899)	35,642,520
Dominion	107,343,219	60,849,788 (48,972,868)	58,468,229
MidAmerican	93,345,114	81,027,818 (68,371,058)	81,784,623
Progress Energy	93,272,525	62,281,137 (42,486,560)	55,513,274
Calpine	87,644,660	81,019,547 (0)	33,986,372
Edison International	85,104,385	63,478,490 (47,651,514)	59,256,143

Source: Natural Resources Defense Council *Benchmarking Air Emissions of the 100 Largest Electricity Producers in the US, 2008 Emissions Data* (2008 is the latest year for which this data is available). <http://www.nrdc.org/air/pollution/benchmarking/db/rank.asp?t=e&s=2&d=0>

Table 5 shows the percent change in CO<sub>2</sub> emissions amongst the top 12 companies from 2004 to 2008. In total, five companies increased the amount of CO<sub>2</sub> they produced, while seven companies were able to decrease their emissions. The most striking percentage increases, those of Duke Energy (111.90%) and MidAmerican Energy (288.71%), largely result from their significant increases in energy production due to acquisitions of and mergers with other companies. The top energy producers, Southern Company and AEP, had similar percentage increases in their carbon dioxide emissions, both around 4.5 percent. The largest percent decrease was Exelon, which was able to cut its carbon emissions by more than a fifth (again, owing in part to its reliance on nuclear power). NextEra Energy and Calpine were also able to cut emissions significantly, each seeing decreases around 8.5 percent. NextEra has a significant portfolio of wind, hydro, solar (as well as some nuclear) in its energy mix, and no coal. Calpine has a significant reliance on natural gas and geothermal. NextEra and Calpine both represent the group of utilities that are starting to move towards cleaner sources of electricity in a meaningful way, as opposed to Southern Company and AEP.

**Table 5: Percent Change in CO<sub>2</sub> Emissions from 2004 to 2008**

Company Name	Percent Change in CO <sub>2</sub> Emissions
<b>Southern Company</b>	<b>+4.35</b>
AEP	+4.46
Tennessee Valley Auth.	+1.12
NextEra Energy (FPL)	-8.56
Exelon	-22.64
Duke	+111.90
Energy	-1.60
Dominion	-5.81
MidAmerican	+288.71
Progress Energy	-5.80
Calpine	-8.44
Edison International	-4.13

Note: The large percentage increases of CO<sub>2</sub> from Duke and MidAmerican can largely be explained by their acquisitions of, and mergers with, other companies.

## TOXIC EMISSIONS

In addition to producing extensive GHG emissions, concerns have been raised for decades regarding the emissions of other pollutants from energy derived from fossil fuels, particularly coal. These pollutants, SO<sub>2</sub>, NO<sub>x</sub>, and mercury, have a devastating impact on human health and





the environment. The next two tables compare the emissions of toxic pollutants from the same 12 major utility companies. The comparisons include SO<sub>2</sub>, NO<sub>x</sub>, and mercury emissions for each of the utilities from 2004 and 2008.

**Table 6: SO<sub>2</sub>, NO<sub>x</sub>, and Mercury Emissions (in tons) for 2004**

Company Name	Emissions in tons		
	SO <sub>2</sub>	NO <sub>x</sub>	Mercury
AEP	963,838	318,783	3.75
<b>Southern Company</b>	<b>886,735</b>	<b>216,824</b>	<b>3.91</b>
Tennessee Valley Auth.	492,605	199,801	1.68
Exelon	53,018	15,006	0.29
FPL (Now NextEra En.)	129,461	66,700	0.24
Entergy	80,695	60,564	0.47
Dominion	225,452	107,670	1.03
Duke	286,048	68,995	0.76
Progress Energy	351,276	105,052	0.95
Calpine	200	7,125	0.00
Xcel	157,324	124,237	1.09
FirstEnergy	297,858	82,634	1.12

Source: Natural Resources Defense Council *Benchmarking Air Emissions of the 100 Largest Electricity Producers in the US, 2004 Emissions Data.*

<http://www.nrdc.org/air/pollution/benchmarking/default.asp>  
 (Mercury emissions only include those from coal-fired plants).

Table 6 contains data compiled by the National Resources Defense Council on toxic air pollutant emissions from the top twelve energy producers for 2004. At that time, AEP was the largest emitter of both SO<sub>2</sub> and NO<sub>x</sub> gases, while

Southern Company was the largest emitter of mercury. The smallest emitter by far in each category is Calpine, with very small emissions of SO<sub>2</sub> and no mercury emissions (due to having no coal-fired energy production).

**Table 7: SO<sub>2</sub>, NO<sub>x</sub>, and Mercury Emissions (in tons) for 2008**

Company Name	Emissions in tons		
	SO <sub>2</sub>	NO <sub>x</sub>	Mercury
<b>Southern Company</b>	<b>827,413</b>	<b>197,801</b>	<b>3.45</b>
AEP	715,691	261,973	4.05
Tennessee Valley Auth.	335,758	168,112	1.49
NextEra Energy (FPL)	48,974	34,845	0.2
Exelon	50,072	13,212	0.23
Duke	403,504	125,180	1.32
Entergy	51,928	40,231	0.56
Dominion	155,401	64,965	0.82
MidAmerican	134,678	108,027	1.11
Progress Energy	210,496	67,455	0.66
Calpine	196	5,892	0
Edison International	184,583	83,120	1.06

Source: Natural Resources Defense Council *Benchmarking Air Emissions of the 100 Largest Electricity Producers in the US, 2008 Emissions Data*.

<http://www.nrdc.org/air/pollution/benchmarking/db/rank.asp?t=e&s=2&d=0>  
(Mercury emissions only include those from coal-fired plants).

The 2008 data from the Natural Resources Defense Council shows that the top four producers of SO<sub>2</sub>, NO<sub>x</sub>, and mercury are again Southern Company, AEP, the Tennessee Valley





Authority, and Duke Energy. Southern Company emerged in 2008 as the largest producer of SO<sub>2</sub>, while AEP is again first in NO<sub>x</sub> and moved to first in mercury emissions. Southern Company and AEP both showed decreases in SO<sub>2</sub> and NO<sub>x</sub> emissions. With the exception of Duke and MidAmerican Energy, every energy company in the top 12 for 2008 decreased both SO<sub>2</sub> and NO<sub>x</sub> emissions over 2004. All companies excluding Duke Energy, MidAmerican Energy, AEP, and Entergy demonstrated decreases in mercury emissions. However, these decreases are not the result of the utilities' own initiatives; rather, they are due to the control of each of these pollutants under the National Ambient Air Quality Standards (NAAQS). The utilities were responding to increased standards and enforcement.

**Southern Company's coal-fired power plants cause 1,224 deaths, 1,710 heart attacks, 20,770 asthma attacks, and 752 cases of chronic bronchitis per year. The total annual cost of all of this damage is over \$9 billion.**



As one of the leading producers of NO<sub>x</sub>, SO<sub>2</sub>, and mercury, the resulting health impacts of Southern Company's reliance on coal are extensive and costly. According to Clean Air Task Force Data (as compiled by SourceWatch), Southern Company's coal-fired power plants cause 1,224 deaths, 1,710 heart attacks, 20,770 asthma attacks, and 752 cases of chronic bronchitis per year. The total annual cost of all of this damage is over \$9 billion.<sup>19</sup>

Southern Company also generates over 12 billion pounds of coal combustion waste, or coal ash, per year, which can contain arsenic, mercury, and other potent toxins.<sup>20</sup> The coal ash is often contained in ponds, and there is a risk of the ponds leaking, which can contaminate groundwater. Contaminated groundwater can lead to a significant increase in the risk of cancer; for example, it can increase the risk of cancer in children to 9 out of 1,000, which is 900 times higher than the US EPA's goal.<sup>21</sup> The TVA's catastrophic 2009 coal ash impoundment disaster, the



worst environmental spill on land in US history, highlighted the fact that in addition to toxins leaking into groundwater, there is the possibility of catastrophic failure. Southern Company has already experienced one such significant accident: In 2002, a sinkhole opened up at a Southern Company impoundment in Bartow County, GA, releasing 2.25 million gallons of coal ash mixed with water into a local creek and river that provides drinking water to the community.<sup>22</sup>

In 2010 and 2011, shareholders, led by Green Century Funds, filed resolutions calling on the company to fully disclose its risks related to coal ash. In response to the 2010 resolution, which received 21 percent of the vote (high for a first-time resolution) Southern Company issued a report on coal ash that failed to fully address the risks it faces and how it will address them, which led shareholders to file a new resolution on coal ash in 2011. In response to the 2011 resolution, rather than address investor concerns, Southern Company sought to have the resolution removed from the ballot, and failed, which means that the resolution will be voted on by Southern Company's shareholders.

## NUCLEAR POWER

The United States currently has 104 active nuclear power plants, generating approximately 20 percent of the nation's energy.<sup>23</sup> Numerous concerns have been raised regarding the safety of nuclear power resulting from accidents, terrorist attacks, and natural disasters (as most recently illustrated by the catastrophic failure at Fukushima).<sup>24</sup> In addition, concerns have been raised by the Union of Concerned Scientists (UCS) regarding the ability of the Nuclear Regulatory Commission to oversee the nation's aging fleet of nuclear reactors, a number of which each year experience "near misses" — safety — or security-related events that risk damage to the reactor core.<sup>25</sup> UCS included Southern Nuclear's Farley plant in Dothan, Alabama, as one of 13 near misses in 2010, due to a failed pump. Despite the risks, and the inability of utilities to construct new reactors without significant government loan guarantees and insurance coverage, the industry is pushing forward with a "nuclear renaissance," and Southern Company is leading the way (see *Table 8, p. 18*).





Southern Company has broken ground on two new nuclear plants at its Vogtle site, which it hopes will go online mid-decade (although most nuclear power plants experience significant delays and cost overruns). To build the reactors, Southern Company is relying on \$8.3 billion in loan guarantees from the Department of Energy, and the fact that Georgia lawmakers, in response to Southern Company lobbying, passed legislation allowing the company to charge ratepayers for construction costs prior to construction, in order to finance the enormous costs of the new plants.<sup>26</sup>

**Table 8: Nuclear Power Plants—Existing and Under Construction**

Company Name	Number of Existing Sites	Number of Existing Reactors	New Plants Under Construction/Planned/Proposed
<b>Southern Company</b>	<b>3</b>	<b>6</b>	<b>2 under construction</b>
AEP	1	2	
Tennessee Valley Authority	3	6	1 under construction, 2 proposed
NextEra	5	8	2 proposed
Exelon	11	19	2 suspended
Duke	3	6	3 proposed
Entergy	9	11	2 proposed
Dominion	4	7	1 proposed
Midamerican	1	2	1 under consideration
Progress	4	5	2 planned
Calpine	0	0	
Edison International	2	5	

Sources: Nuclear Energy Institute, <http://www.nei.org/resourcesandstats/documentlibrary/reliableandaffordableenergy/graphicsandcharts/usnuclearpowerplantownersoperatorsandholdingcompanies/>  
[http://www.world-nuclear.org/info/inf41.html#New\\_build](http://www.world-nuclear.org/info/inf41.html#New_build)

Southern Company's newest plants use Westinghouse AP1000 reactors, which are controversial. For example, in a March 7, 2011 letter to the Nuclear Regulatory Commission, Congressman Edward Markey (D-MA) notes that a natural disaster or terrorist attack on the AP1000 "could result in catastrophic core meltdown."

The Congressman also notes that the material comprising 60 percent of the shield building has not passed important physical safety tests and is therefore too brittle. It is unconscionable that any design certification plans would proceed in light of such very real danger. One of the NRC's own experts, Dr. John S. Ma, has noted that the AP 1000's containment building could shatter "like a glass cup" if struck by a natural or manmade impact. Dr. Ma also found that the AP1000 design underestimates the force of earthquakes on the reactor, stating that "the design will be grossly inadequate if the correct and actual earthquake analyses were used."<sup>27</sup> Even the nuclear disaster in Fukushima, which has led the Japanese government to scrap its plans to build new nuclear plants and instead expand renewable energy, has not caused Southern Company to rethink, or even slow down its plans to construct new nuclear reactors.<sup>28</sup>

While Southern Company is taking the lead in new construction of nuclear power plants, Exelon owns the most nuclear power plants overall, with 11 plants and 19 reactors active, and intends to increase its existing nuclear plants through a planned merger with Constellation Energy.<sup>29</sup> Exelon will be the leader, by far, in running the nation's aging fleet of existing reactors.

## LOBBYING EXPENDITURES

In the wake of the climate change bills that have been proposed in Congress, and which failed to pass in the Senate, the next comparison table will look at how much each of the top energy producers in the US spent on lobbying. Lobbying by a number of energy companies and their trade associations is considered to be a major reason that comprehensive climate legislation has failed to pass in the US Congress, (although there were also forward-looking energy companies that supported climate legislation).<sup>30</sup> In addition, utilities use their lobbying power to secure favorable regulations at the state level. The following chart tracks lobbying expenditures by top utility





polluters (the utilities that are the top generators of CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>, and mercury).

Of the largest emitters of carbon dioxide and other pollutants, Southern Company spent the most on lobbying (see *Table 9, p. 20*). In 2009, when climate legislation was moving forward in the House, the company spent over six million dollars more than the nearest competitor, nearly doubling the money spent by AEP, and far out-distancing the expenditures of the rest of the major companies. In that year, the top four polluting utilities all spent over five million dollars on lobbying. According to a report from the Center for Public Integrity, Southern Company had the highest number of climate lobbyists working for them in the first quarter of 2009, with 63. This is in addition to the 34 reported to be working for the Edison Electric Institute, an association of investor-owned energy companies. The report also stated that AEP, the second-highest spender on lobbying, had only nine climate lobbyists during the first quarter of 2009.<sup>31</sup>

**Table 9: Lobbying Expenditures by Top Polluting and Top Nuclear Utilities 2009-2010**

Company Name	Lobbying Expenditures 2009	Lobbying Expenditures 2010
<b>Southern Company</b>	<b>\$13,450,000</b>	<b>\$13,220,000</b>
AEP	\$7,297,245	\$10,313,196
Duke	\$5,880,516	\$6,500,000
Entergy	\$5,035,000	\$4,640,000
Exelon	\$4,573,000	\$3,711,797
Dominion	\$2,030,000	\$1,670,000
TVA	\$192,000	\$175,000

Source: OpenSecrets.org's *Lobbying Spending Database*.  
<http://www.opensecrets.org/lobby/>

In 2010, Southern Company once again spent the most on lobbying of the major polluters, although AEP came closer, spending over \$10 million. PG&E, a utility that is not on the list of top polluters nationwide, increased its spending on lobbying from \$6,280,000 to an incredible \$45,460,000.<sup>32</sup>

Industry spending on lobbying as a whole increased from \$146,006,753 in 2009 to \$191,644,085 in 2010. Data from Open Secrets demonstrates that for the utility industry as a whole, spending on lobbying for the three years 2008-2010 averaged \$166,000,000 per year, up from the prior three year average (2005-2007) of \$107,000,000 per year.<sup>33</sup>

To accompany its lobbying expenditures, Southern Company is also a leader in contributions to elected officials. At the national level, Southern Company is second only to AEP in total donations for the 111th Congress. Southern Company contributed \$252,700 to both Republicans and Democrats in the 111th Congress, while AEP contributed \$302,650. The top recipients of Southern Company's money were current House Speaker John Boehner (R-VA) and former House Energy Subcommittee Chair Frederick Boucher (D-VA), both of whom received \$10,000 from the company.<sup>34</sup>

**Southern Company clearly used its lobbying and contributions to play a leadership role in opposing true climate reform in the US Congress.**

When the legislation was working its way through Congress, Southern Company spokeswoman Terri Cohilas said Southern Company supports “significant portions” of the legislation that passed the House. But she added: “We do believe it will have a profound impact on the US economy, and the bill does not do enough to reduce the cost to customers or to provide regional fairness.”<sup>35</sup> The phrases “cost to consumers” and “regional fairness” can be read as code for saying that Southern Company does not want to move away from generating 80 percent of its electricity from fossil fuels, and does not want to make significant investment in renewable energy anytime soon.

Southern Company's lobbying has been broadly effective. In addition to its extensive lobbying during the consideration of comprehensive climate legislation in 2009-10, the company is





credited with helping defeat legislation that would have established a national energy market in 2004, as well as leading the attack on proposed Renewable Portfolio Standards, which would have required Southern to go from zero megawatts to 6,000 megawatts power generated from renewable sources.<sup>36</sup> Southern Company is currently supporting efforts to strip the EPA of its authority to regulate climate-change emissions<sup>37</sup> and through the Electric Reliability Coordinating Council (of which Southern Company is a prominent member), it is currently opposing the EPA's proposed rules to reduce mercury emissions from power plants.<sup>38</sup>

Southern Company's lobbying has also paid off at the state level. Most recently, as mentioned previously, Georgia's legislature is allowing Southern Company to bill ratepayers for the construction of two new nuclear reactors even before they are up and running.<sup>39</sup> Southern Company also successfully lobbied for a number of laws in Georgia that limit the ability of customers to install and use solar energy. The largest impediment is the Territorial Electric Service Act which gives Southern Company "a monopoly of over 'the purchase of energy.'" This law restricts consumers from using power purchase agreements to buy solar energy produced on their own roofs.<sup>40</sup> In many states, homeowners can purchase the solar power produced on their roof from the solar company that installed them, which makes the installation economically viable. The Territorial Electric Service Act in Georgia, passed at Southern's behest, prohibits this arrangement.

## CONCLUSION

# HOW SOUTHERN COMPANY COULD DEMONSTRATE REAL LEADERSHIP

**THROUGH** its continued reliance on fossil fuels, its lobbying to maintain the status quo, and its plans to increase nuclear power, Southern Company is cementing its position as a climate-change and pollution laggard. However, with annual profits hitting nearly \$2 billion in 2010, Southern Company could easily move towards true leadership in the industry by producing electricity from safer and cleaner sources.

Southern Company could take a leadership position in developing solar power, but currently the company only has one joint facility with Turner Renewable Energy in Cimarron, New Mexico, that provides 30 MW of electricity.<sup>41</sup> While 30 MW is significant for a single solar facility, compared to Southern Company's overall electric generating capacity of 43,000 MW, it is a drop in the bucket. As discussed previously, Southern Company has also successfully lobbied regulators to inhibit its customers from installing solar panels on their own homes or businesses.

Southern Company could also take a leadership role in developing offshore wind. A report, commissioned by Southern Company and produced by Georgia Tech found wind speeds of 16-17 miles per hour off the coast of Georgia, which are ideal for offshore wind development.<sup>42</sup> Yet, Southern Company is moving slowly to develop this resource, and instead, is currently planning to conduct further research into offshore wind.<sup>43</sup>

Southern Company could also do more to increase energy efficiency in the regions it serves.





## STEPS SOUTHERN COMPANY MUST TAKE TO BE A TRUE LEADER

Southern Company needs to take dramatic steps to improve its corporate responsibility:

- Increase the proportion of energy from truly renewable sources, such as wind and solar, from current levels (near zero) to 20 percent in the next decade and at least 80 percent by 2050.
- Phase out its existing coal plants, with a 50-percent reduction over the next decade and a 100-percent reduction by 2050.
- End the construction of new nuclear power plants, and retire existing plants within the next decade.
- Increase its outreach to its customers to improve energy efficiency, so that the states in which Southern Company operates are all in the top ten in energy efficiency in the country within the next ten years. With sufficient investments in energy efficiency, ratepayers' total electric bills can remain low in costs.
- Take steps to radically reduce the release of CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>, and mercury to reduce environmental and health impacts locally and globally. Southern Company should seek to reduce its carbon emissions by at least 20 percent, and other pollutants by 80 percent, in the next decade. Carbon emissions should be reduced by at least 80 percent by 2050.
- End any lobbying efforts that oppose federal EPA regulations of pollutants, climate change emissions, and coal ash deposits, and should support the transition to a clean energy economy.



It has created programs for promoting new technologies such as smart meters, energy-efficient lighting, and energy-efficient construction. As the company notes on its website, it has even won a number of awards from ENERGY STAR. Southern Company also has a number of programs it is developing under its EarthCents moniker. These include programs that: promote energy-efficient home improvements, weatherization for low-income homes, solar water heating, direct load controls, and promoting smart-grid and smart-meter upgrades.<sup>44</sup>

However, while it appears as though Southern Company has several energy-efficiency programs consumers can take advantage of, the states in which the company operates do not score well in energy efficiency based on measures produced by the American Council for an Energy-Efficient Economy (ACEEE). The states in which Southern Company operates (Georgia, Alabama, Mississippi, and Florida) all rank in the bottom 40 percent of states based on the Utility and Public Benefits Programs and Policy Score from the ACEEE. In this measure, Georgia was tied for 36th, Alabama and Mississippi were tied for 47th (last place in this measure), and Florida (a state where Southern Company has a smaller share of power generation) was tied for 30th.<sup>45</sup> While this score also measures the impact of state government programs, it shows that energy-efficiency programs are not performing at a high level in the areas that Southern Company serves, and that Southern Company could do far more to increase energy efficiency in the states where it operates. Increasing energy efficiency could save ratepayers money as the company moves to reduce its reliance on fossil fuels and nuclear power while increasing its investment in renewable energy.

Another measure of Southern Company's weak record on the environment and steps to reduce its impacts, is the company's low score on the *Newsweek* 2010 Green Rankings list, which ranks the Fortune 500 based on environmental performance. Southern Company ranks 494 out of 500 on the Green Rankings list. Out of the 32 utility companies included in the rankings, Southern Company ranked 30th in overall Green Rankings. It was also ranked 30th in the Environmental Impact Score (496th overall).<sup>46</sup> It is 32nd amongst utilities on the survey reputation score (486 overall).

Compare Southern Company to PG&E, the utility that gets the highest ranking on *Newsweek's* Green Score list. Of the 500 companies ranked, PG&E is ranked 20th.<sup>47</sup> While PG&E is far from





a perfect company, it obtained its much higher ranking in part due to the fact that its power mix consists of only one percent coal and over 14 percent renewables.<sup>48</sup> PG&E is also developing a 500 MW solar photovoltaic facility,<sup>49</sup> as well as entering into an agreement with BrightSource for a 1,300 MW solar thermal facility.<sup>50</sup> It is also developing a 246 MW wind facility.<sup>51</sup> All of this dwarfs Southern Company's efforts.

At a time when Americans are increasingly interested in creating green jobs, there is rising concern about our nation falling behind China and Germany in the race to produce clean-energy technologies. As we are already feeling the impacts of climate change, Southern Company should be pursuing renewable energy and energy efficiency aggressively. However, Tom Fanning, Southern Company's latest CEO, is making it clear that he is not breaking with tradition. At a recent address to the US Chamber of Commerce, Fanning paid lip service to renewables, while promoting "21st Century Coal" and nuclear, and opposing the EPA's efforts to create cleaner air and curb climate change.<sup>52</sup>

**With its terrible record on pollution, health impacts, reliance on fossil fuels and nuclear power, it is time for Southern Company to give up its position as the nation's most irresponsible utility and start down a path of true leadership.**





## ENDNOTES



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