

# DOE Loan Guarantee Program: Vogtle Reactors 3&4



June 2013

In February 2010, the Department of Energy (DOE) conditionally offered Southern Company and its partners a total of \$8.33 billion in taxpayer-backed loan guarantees to build two nuclear reactors in Georgia, but the award has yet to be finalized. This subsidy would be provided through the same program that awarded more than \$500 million to the now-defunct solar power company, Solyndra.

## A Project in Trouble

In 2008, Southern Co. and its utility partners<sup>1</sup> applied to receive federal loan guarantees to construct two 1,100 MW Westinghouse AP1000 reactors (reactors 3&4) at Southern Co.'s Plant Vogtle near Waynesboro, Georgia. Southern Co. experienced massive cost overruns while constructing the first two reactors at the site in the 1980s. Original estimates for Vogtle reactors 1&2 were under \$1 billion each, but final costs skyrocketed to nearly \$9 billion.<sup>vii</sup>



- Currently, reactors 3&4 are estimated to cost more than \$14 billion and come online in 2017 and 2018, respectively. However, construction delays and pending lawsuits have already pushed the project's commercial operating date back a year and could cause significant increases in project costs.<sup>1</sup>
- This type of reactor, the AP1000, has never been built in the U.S. before nor successfully completed, nor operated, anywhere in the world. Reactor design approval took 19 alterations to meet basic safety requirements set by the U.S. Nuclear Regulatory Commission (NRC).<sup>2</sup>
- In a February 2013 report to the Georgia Public Service Commission, Georgia Power (subsidiary of the Southern Company) requested approval for additional project costs totaling \$737 million, potentially raising the initial \$14 billion estimate to \$14.7 billion.<sup>3</sup>
- Westinghouse and the Shaw Group—the two contractors hired to construct Southern's two new units— have filed suit against Southern Co. and its partners seeking \$900 million for the costs of project design changes.<sup>4</sup> As of June 2013, litigation is pending. If the project's utility partners lose the lawsuit, project costs could rise to *\$15.6 billion*.
- On top of construction delays and litigation, the oversight and management of the construction of reactors 3&4 has been questionable. In April 2012, NRC inspectors reported that the rebar in the "basemat," or the foundation, for reactor three had been improperly installed.<sup>5</sup> A proposal to compensate for the faulty rebar and correct foundation unevenness was finally approved by the NRC in October,<sup>6</sup> allowing work to resume on the area after six months of costly delay.<sup>7</sup> In December 2012, while on its way to Plant Vogtle, the oversized 300-ton reactor vessel nearly fell off the transport train.<sup>8</sup> The reactor vessel was returned to the Port of Savannah where it sat for nearly a month before being transported to the site.<sup>9</sup>

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<sup>1</sup> Georgia Power Company (subsidiary of the Southern Company) (45.7%); Oglethorpe Power Corporation (30%); Municipal Electric Authority of Georgia (22.7%); The City of Dalton, Georgia (1.6%)

### **Extension after Extension – DOE Dangling Massive Subsidy**

DOE conditionally offered Southern Co. and its partners \$8.33 billion in federal loan guarantees in February 2010 – \$3.46 billion to Georgia Power Company, \$3.06 billion to Oglethorpe Power Corporation, and \$1.81 billion to the Municipal Electric Authority of Georgia.<sup>10</sup>

- In June 2010, the project partners accepted DOE's offer. Since then, the Department of Energy has extended its \$8.33 billion loan guarantee offer multiple times.<sup>11</sup> The most recent deal between DOE and project partners was reached in December 2012, when the offer was extended until June 30, 2013.<sup>12</sup>
- Documents obtained through the Freedom of Information Act after years of effort reveal wide-ranging negotiations between the Office of Budget and Management, Department of Treasury, and the Department of Energy on what the appropriate credit subsidy cost<sup>2</sup> should be.<sup>13</sup> Years of closed door negotiations have allowed loan guarantee partners to craft a deal that heavily benefits them and exposes taxpayers to even greater risk.

### **Loan Guarantee Going to Risky Partners**

As a result of the escalating construction costs of the Vogtle facility, most financial rating agencies are downgrading their assessment of the partners involved in the project:

- **Goldman Sachs and Zacks Investment Research have recently rated Southern Company as a "sell."** The Southern Company (parent company of Georgia Power) reported net income of \$2.35 billion in 2012.<sup>14</sup> The energy conglomerate currently has around \$1.3 billion in outstanding debt and a debt-to-asset ratio of 36.8 percent.<sup>15</sup> In first quarter of 2012, Southern Company earned \$0.42 per share. In the first quarter of 2013 this dropped by 79% to \$0.09 per share. Golden Sachs cited "accelerating capital spending on Vogtle nuclear project and ongoing litigation with the plant's contractors" as well as the Kemper coal gasification plant and upcoming GA Power rate case.<sup>16</sup> Zacks pointed to weak share earnings, increased expenses, and high risks associated with the construction of reactors 3 and 4 at Plant Vogtle. With the likelihood of additional delays and cost overruns, Zacks states "the project cost could easily end up around \$20 billion."<sup>17</sup>
- **Standard and Poor's downgraded the Outlook on Southern Company and Georgia Power's credit ratings from 'Stable' to 'Negative.'**<sup>18</sup> Georgia Power's 45.7 percent ownership of the proposed Vogtle expansion project, its share of project costs is nearly \$6.4 billion. Georgia Power is currently paying for financing costs associated with Vogtle reactors 3&4 in part by charging its customers in advance with a tariff referred to as a Nuclear Construction Cost Recovery Rider<sup>19</sup> with a Construction Work in Progress (CWIP) balance that now totals \$2.3 billion.<sup>20</sup>
- **Fitch Ratings recently downgraded the outlook on all of Oglethorpe Power Corporation's bonds from 'Stable' to 'Negative.'**<sup>21</sup> Oglethorpe's 2012 financial filings note that the rising costs of the Vogtle project are a risk factor for the company. Oglethorpe's share of the project (30 percent) has increased from \$4.2 billion to \$4.5 billion while the Vogtle 3&4 reactors' planned commercial operation dates have been pushed back a year to the fourth quarter of 2017 and 2018, respectively.

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<sup>2</sup> The credits subsidy cost represents that cost of the loan guarantee to the federal government. If the price is too low, taxpayers could lose big if a project defaults.

- **Moody's has downgraded the outlook on Municipal Electric Authority of Georgia bonds from 'Stable' to 'Negative.'**<sup>22</sup> MEAG Power (loan guarantee applicant), a not-for-profit public energy consortium based in Fulton County, Georgia, was created by the Georgia General Assembly in 1975<sup>23,24</sup> to provide power to small cities and towns.<sup>25</sup> MEAG estimates its share of Units 3&4 construction costs (22.7 percent) will come to \$4.2 billion.<sup>26</sup> To finance that amount, MEAG has issued three series of bonds since 2009: Project M bonds, Project J bonds, and Project P bonds.<sup>27</sup> MEAG Power had \$6.63 billion of outstanding debt at the end of 2012.<sup>28</sup>

### Southern Spends Big Lobby Dollars

- Last year, Southern Company spent far more than any other electric utility on lobbying the federal government, according to the Center for Responsive Politics. It spent \$15,580,000 in 2012,<sup>29</sup> or roughly \$42,000 a day, in order to help strong arm a deal when their financials and the project all point to a bad investment for taxpayers.

*"We don't need the loan guarantee."*

-Southern Company's CEO Tom Fanning in response to public comments on project delays, costs, and multiple extensions of DOE's offer for billions in federal subsidies. (Reuters - July 18, 2012). If Southern Company believes it can construct and operate Vogtle Units 3&4 without federal subsidies while saving taxpayers millions, then DOE should stop dangling the multi-billion dollar loan guarantee offer and protect federal taxpayers.

### Taxpayers Will Lose

- High costs, construction delays, and technical problems have plagued the nuclear industry since its inception. Under the DOE loan guarantee program, taxpayer money would continue to prop up Southern Co. and its partners adding unnecessary financial liability for taxpayers while protecting the bottom line of project partners.
- Private rating agencies are reacting to the rising costs and risk of the Vogtle project; the federal government should follow suit.
- Increasing competition from other energy sources such as natural gas has already led to many proposed reactor projects being delayed or cancelled.
- Even in the heyday of lending on Wall Street, private backers were not interested in investing in new nuclear reactors because of their massive uncertainties.

***Putting the full faith and credit of the U.S. government behind this costly, high-risk project is fiscally irresponsible.***

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<sup>1</sup> Scott DiSavino, "Southern Co's new Georgia Vogtle reactors to cost more, take longer." March 4, 2013. *Reuters*. <http://www.reuters.com/article/2013/03/04/utilities-southern-vogtle-idUSL1N0BWHQF20130304>

<sup>2</sup> *Atlanta Journal-Constitution*, "In spite of promises, nuke reactors neither on time nor on budget." July 19, 2012. <http://triblive.com/business/2223151-74/nuclear-georgia-reactors-project-projects-power-design-vogtle-delays-safety#axzz2X9rLIncq>

<sup>3</sup> *Georgia Public Service Commission*. Document Filing #146550 – Georgia Power Company. February 28, 2013. <http://www.psc.state.ga.us/factsv2/Document.aspx?documentNumber=146550>

<sup>4</sup> Kristi Swartz, "New \$900 million Vogtle lawsuit filed." *The Atlanta Journal-Constitution*. November 2, 2012. <http://www.ajc.com/news/news/new-900-million-vogtle-lawsuit-filed/nSwWx/>

<sup>5</sup> Rob Pavey. "NRC says Vogtle rebar differs from approved design." 26 April 2012. *The Augusta Chronicle*. <http://chronicle.augusta.com/news/government/2012-04-26/nrc-says-vogtle-rebar-differs-approved-design>

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- <sup>6</sup> U.S. Nuclear Regulatory Commission. "SER Supporting License Amendment 1 to Vogtle Units 2 and 3 COLs for LAR 12-007." 18 Oct. 2012. ADAMS Accession Number: ML12268A193.
- <sup>7</sup> Rob Pavey. "NRC approves plan to resolve Plant Vogtle rebar, concrete issues." 23 Oct. 2012. *The Augusta Chronicle*. <http://chronicle.augusta.com/news/business/2012-10-23/nrc-approves-plan-resolve-plant-vogtle-rebar-concrete-issues>
- <sup>8</sup> Rob Pavey, "Vogtle reactor vessel slips between Savannah, Burke County." January 10, 2013. *The Augusta Chronicle*. <http://chronicle.augusta.com/news/business/2013-01-10/vogtle-reactor-vessel-slips-between-savannah-burke-county>
- <sup>9</sup> Rob Pavey, "One of heaviest reactor parts moved to Plant Vogtle site." January 24, 2013. *The Augusta Chronicle*. <http://chronicle.augusta.com/news/metro/2013-01-24/one-heaviest-reactor-parts-moved-plant-vogtle-site>
- <sup>10</sup> U.S. Government Accountability Office, "DOE Loan Guarantees: Further Actions Are Needed to Improve Tracking and Review of Applications." March 12, 2012. <http://www.gao.gov/products/GAO-12-157>
- <sup>11</sup> David Frantz, Acting Executive Director, Loan Programs Office, U.S. Department of Energy, "Re: Conditional Commitment Letter/Termination Date Extension (Plant Vogtle Units 3& 4)." Letter to Earl Long, Georgia Power Company. May 1, 2012.
- <sup>12</sup> Georgia Power Company, "Vogtle Units 3&4: Eight Semi-Annual Construction Monitoring Report." February 2013. Docket No. 29849. <http://www.georgiapower.com/docs/about-energy/8th-VCM-Report.pdf>
- <sup>13</sup> Doug Koplow, *Earth Track*; Max Chang, *Synapse Energy Economics*, "Vogtle 3 and 4 Conditional Loan Guarantees: Review of Documents Pertaining to Department of Energy Conditional Loan Guarantees for Vogtle 3 & 4." January 30, 2013. [http://earthtrack.net/files/uploaded\\_files/FINAL\\_Vogtle\\_LG\\_Report\\_01302013.pdf](http://earthtrack.net/files/uploaded_files/FINAL_Vogtle_LG_Report_01302013.pdf)
- <sup>14</sup> Ibid. II-47
- <sup>15</sup> Morningstar Inc., "Southern Company: Bonds." Retrieved June 19, 2013. <http://quicktake.morningstar.com/StockNet/bonds.aspx?Symbol=SO&Country=USA>
- <sup>16</sup> Goldman Sachs, "The Southern Company: Still Sell rated, a complex year awaits SO." Equity Research. April 24, 2013.
- <sup>17</sup> Zacks Investment Research, "Southern Company Slips to Sell." June 21, 2013. <http://www.nasdaq.com/article/southern-company-slips-to-sell-analyst-blog-cm254953#ixzz2XQXKhkys>
- <sup>18</sup> Standard and Poor's, "Southern Co. And Subsidiaries Rating Outlook Revised To Negative; 'A' Rating Affirmed." May 24, 2013. <http://www.standardandpoors.com/prot/ratings/articles/en/us/?articleType=HTML&assetID=1245352147269>
- <sup>19</sup> See Georgia Public Service Commission's "Georgia Power Bill Calculator" at <http://www.psc.state.ga.us/calc/electric/GPcalc.asp>
- <sup>20</sup> Ibid. p. II-218
- <sup>21</sup> Fitch Ratings, "FITCH RATES GEORGIA DEV AUTH'S (OGLETHORPE POWER CORP) \$212.76MM PCRS 2013A 'A'; OUTLOOK TO NEGATIVE." April 5, 2013. [http://opc.com/oracle\\_cons/groups/public/@opc-web/documents/webcontent/ct\\_000403.pdf](http://opc.com/oracle_cons/groups/public/@opc-web/documents/webcontent/ct_000403.pdf)
- <sup>22</sup> MEAG Power. "2012 Financial Review." P. 9. <http://www.meagpower.org/NewsPublications/AnnualReports/tabid/82/Default.aspx>
- <sup>23</sup> MEAG Power. "History." <http://www.meagpower.org/AboutMEAG/History/tabid/62/Default.aspx>
- <sup>24</sup> Georgia Code. Title 46 Chapter 3 Article 3 Section 112
- <sup>25</sup> Georgia Code. Title 46 Chapter 3 Article 3 Section 110
- <sup>26</sup> MEAG Power. "2012 Annual Information Statement." P. 36. Available at <http://www.meagpower.org/NewsPublications/AnnualInformationStatement.aspx>
- <sup>27</sup> Ibid. p.32
- <sup>28</sup> As a consortium of local governments, MEAG was able to designate those bonds as "Build America Bonds" under the Recovery Act of 2009.<sup>28</sup> As such, MEAG is entitled to receive cash subsidy payments from the U.S. Treasury that will cover 35% of the interest the company will pay to bond holders.<sup>28</sup> That means that even if MEAG does not accept the DOE loan guarantees, taxpayers will still be partly subsidizing the construction of Vogtle Units 3&4.
- <sup>29</sup> Center for Responsive Politics, "Lobbying: Southern Company." 2012. <http://www.opensecrets.org/lobby/clientsum.php?id=D000000168&year=2012>