

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ALABAMA  
SOUTHERN DIVISION

FILED

2010 MAY 25 P 4: 21

U.S. DISTRICT COURT  
N.D. OF ALABAMA

UNITED STATES OF AMERICA )  
*ex rel.* DON BAKER, )

Plaintiff, )

v. )

Case No:                      CV-10-CO-1337-S

SENSUS USA, INC., SENSUS )  
METERING SYSTEMS, INC., )  
THE SOUTHERN COMPANY, and )  
ALABAMA POWER )  
COMPANY, )

**FILED UNDER SEAL**

**DO NOT PLACE IN PRESS BOX**

**DO NOT ENTER ON PACER**

Defendants. )

**DEMAND FOR JURY**

**QUI TAM COMPLAINT**

Plaintiff-Relator Don Baker, on behalf of himself and the United States of America, alleges and claims against Defendants Sensus USA, Inc. and Sensus Metering Systems, Inc., doing business as Sensus (“Sensus”); The Southern Company (“Southern Company”); and Alabama Power Company (“Alabama Power”); as follows:

## **JURISDICTION AND VENUE**

1. This action arises under the False Claims Act, 31 U.S.C. §§ 3729-33 (the “False Claims Act”). Accordingly, this Court has jurisdiction pursuant to 28 U.S.C. § 1331. Jurisdiction is also authorized under 31 U.S.C. § 3732(a).

2. Venue lies in this judicial district pursuant to 31 U.S.C. § 3732(a), because Defendants qualify to do business in the State of Alabama, transact substantial business in the State of Alabama, transact substantial business in this judicial district, and can be found here. Furthermore, Defendants committed within this judicial district acts proscribed by 31 U.S.C. § 3729, to-wit: Defendants submitted, caused to be submitted, and conspired to submit to the United States false claims for payment of funds under the American Reinvestment and Recovery Act of 2009 (“ARRA”) for a project that Defendants new was hopelessly flawed and did not qualify for stimulus funding, and submitted false records to get such claims paid.

## **PARTIES**

3. The Southern Company is an Atlanta, Georgia-based conglomerate of electricity providers. Through its subsidiaries, including Alabama Power, Southern Company provides electricity to 4.4 million customers across the southeastern United States. In 2007, Southern Company launched an initiative to upgrade its distribution system to include “smart meters” capable of recording and

transmitting information via radio signal, eliminating the necessity for manual meter reading. In or around May, 2009, Southern Company submitted an Application for Financial Assistance through the Department of Energy Smart Grid Investment Grant Program (SGIG). In October, 2009, Southern Company was awarded \$165 million in matching funds for its smart grid project. On April 28, 2010, Southern Company signed an agreement with the Department of Energy with regard to the funds.

4. Sensus is a North Carolina-based concern specializing in utility metering technology. A self-described “global leader in utility management,” Sensus designs and markets water, gas, and electric metering systems and develops and markets “Automatic Meter Reading” (“AMR”) and “Advanced Metering Infrastructure” (“AMI”) technologies designed to function in a “smart grid.” In December, 2007, Sensus signed a contract with Southern Company to supply “smart meters” for the company’s grid upgrade. Sensus had never before supplied the type of meter required by the Southern Company and Alabama Power and – based on their specifications – designed a new meter dubbed the “iConA.”

5. Plaintiff-Relator Baker is an engineer with over fifteen years experience in project management, programming, and scheduling. In 2008, Mr. Baker was hired by Sensus as Alabama Project Manager for Southern Company’s AMI Smart Grid project. Along with coordinating the project logistics, Mr. Baker

helped Sensus supply certain information for inclusion in Southern Company's SGIG grant application. In the course of his duties, and as more fully described herein, Mr. Baker became aware that the Sensus iConA meter was not properly tested and was seriously flawed. Among other issues, Mr. Baker discovered that the iConA had a tendency to drastically overheat and melt or burn. When Mr. Baker raised these issues with Sensus management and Alabama Power project managers, he was told to keep quiet. He was eventually terminated for refusing to do so. Mr. Baker has direct personal knowledge that Sensus and Southern Company have installed approximately one million iConA meters in Alabama homes with knowledge that the meters are seriously defective and pose a substantial fire hazard and that at least two Alabama homes have burned as a result. Mr. Baker also has personal knowledge that at the time Southern Company submitted its grant application to the United States, Sensus and Southern Company were well aware that the iConA was defective and that the entire project was seriously flawed and ineligible for an SGIG grant. On or about February 2, 2010, Mr. Baker disclosed the information underlying this complaint to the Office of the United States Attorney for the Northern District of Alabama and an agent of the Federal Bureau of Investigation. Mr. Baker now files this action as original-source Relator under the *qui tam* provisions of the False Claims Act. Plaintiff-Relator is

-serving upon the United States contemporaneously herewith a statement of the material evidence upon which his claims are based.

### **DEFENDANTS' FRAUDULENT CONSPIRACY**

6. Defendants have perpetrated a fraudulent conspiracy to obtain \$165 million of federal stimulus funding for a project Defendants knew was hopelessly flawed and ineligible for a stimulus grant. Defendants' scheme has deceived the United States, thwarted the purpose of the American Reinvestment and Recovery Act of 2009, and endangered millions of Americans.

7. Mr. Baker was employed by Sensus in January, 2008. At that time, Sensus was already under contract with Southern Company to supply millions of smart meters for Southern Company's metering infrastructure upgrade. Sensus had never before manufactured a meter of the type called for by its Southern Company contract. Accordingly, Sensus' engineers designed the iConA. Sensus then subcontracted the manufacturing of the iConA to a Mexican concern.

8. Sensus began supplying iConA meters to Alabama Power on or about January 31, 2008. Despite contractual requirements, Sensus never tested the meters to evaluate their safety or performance as they arrived from the Mexican facility. Instead, it simply turned them over to Alabama Power for installation. Furthermore, over the course of its contract with Southern Company Sensus

continually changed and substituted meter components, firmware, and manufacturing processes without adequately testing their products.

9. Once the meters reached Alabama Power, approximately 1% were tested – only for their accuracy. They were never tested “on the system,” to determine how they would react when actually connected to the power grid on the side of a home. Hundreds of thousands of iConA meters were installed on Alabama and Georgia homes without ever undergoing “performance” testing. Sensus’ practices resulted in deployment of millions of highly unreliable, dangerous electricity meters.

10. It quickly became apparent that the meters were fundamentally unsound. Failures, defects, and flaws surfaced from the initial delivery until Mr. Baker was terminated in August, 2009. Sensus’ contract with Southern Company carried an acceptable failure rate for the iConA of .5% per year. As of August, 2009, the iConA was failing at a rate of approximately 9% per year. Approximately 150 meters per day failed. By August, 2009, approximately 25,000 meters installed that year required replacement. In an attempt to perform what he understood to be his job, Plaintiff-Relator made numerous reports to Sensus management regarding iConA quality and safety issues. He was completely ignored and eventually fired. At one point, Sensus Director of AMI Projects Joel Denney sent an email to all Sensus AMI project managers and other management

proclaiming that “[t]here are no other systemic issues on [the iConA meter] . . . .

Stop the rumors where they start . . . . Do not send me or others emails about this.”

In reality, the litany of defects is long:

**a. Electrical Fast Transient Failures**

11. Both Alabama Power and Sensus were aware and are aware that iConA meters installed on thousands of Alabama homes are materially deficient and unsafe in that they do not meet industry standards and may fail dangerously when subjected to a sudden surge of electricity (a relatively common occurrence). In May, 2008, Alabama Power became aware that Sensus had not performed certain tests required by the iConA supply contract. One critical test that had not been performed is designated the Electrical Fast Transient (EFT) test. Required by American National Standards Institute (ANSI), the EFT test measures the ability of a meter to handle a sudden surge of electricity. Alabama Power demanded that Sensus perform EFT tests on a sample of iConA meters. They all failed.

12. At that time, some 86,000 meters were already furnished for installation on Alabama homes. Thus, at least 86,000 meters incapable of handling electrical surges are part of Southern Company’s Alabama “smart grid.”

**b. Flux Contamination and Inaccuracy Issues**

13. Exacerbating Sensus’ failure to perform adequate testing on its new meter, iConA production and manufacturing processes have proved to be

completely unreliable. In December of 2008, Alabama Power began rejecting thousands of meters for failing simple accuracy testing. Sensus performed an investigation and found two serious issues with iConA production. First, approximately 130,000 meters were found to contain “flux” or loose solder residue that affected the proper functioning of the meter. Second, after approximately 400,000 meters had been delivered to Alabama Power, it was determined that the equipment used by the manufacturer to calibrate the meters was itself not properly designed, resulting in meters that produced incorrect readings. As the 400,000 meters already installed were never retested, their accuracy is doubtful. At least another 130,000 meters were rejected by Southern Company or recalled.

14. As a result of flux contamination and other factors, iConA meters have proven inaccurate. Plaintiff-Relator personally investigated several instances of over-reporting meters and found individual meters misreporting up to 700%.

**c. Faulty Components**

15. Along with Sensus’ deficient processes, Defendants had reason to gravely doubt the integrity of component parts incorporated into the iConA meter. At least two key component parts of the iConA have been determined to be faulty, on a large scale, with extremely high failure rates. In April, 2009, it was discovered that the “U9” component, an electrical resistor, was defective on at least 85,000 meters delivered by Sensus to Southern Company. Around the same



time, at least 170,393 meters delivered by Sensus to Alabama Power were discovered to contain faulty Epson “TCXO” components.

**d. “Hot” Meters**

16. Defendants were or should have been aware that the iConA meters they were installing in millions of Alabama homes were not only technically deficient but posed a risk of serious injury or death. On or about January, 2009, Sensus learned that 19,000 installed iConA meters were reporting a “hot socket alarm” – that is, the meters’ internal thermometers were registering and reporting temperatures in excess of 200° Fahrenheit. Plaintiff-Relator informed Alabama Power Project Manager Derl Rhodes of the hot sockets via email. Sensus and Alabama Power treated the situation as false alarm. In or around April, 2009, Plaintiff-Relator began receiving reports that Sensus iConA meters were drastically overheating to the point of catastrophic failure, melting, and burning. Plaintiff-Relator investigated and personally photographed numerous iConA meters reduced to little more than piles of misshapen, blackened plastic - though Sensus engineer Bill Mazza told Plaintiff-Relator that the iConA’s plastic cover should not melt at a temperature lower than 500° Fahrenheit. On July 14, 2009, Plaintiff-Relator reported his findings via email to Denney and Sensus AMI Regional Manager Chris Testa (Testa). Plaintiff-Relator attached a photograph of a burned meter and informed Testa and Denney that the iConA was suspected of causing at least one

Alabama house fire. Instead of seeking to mitigate this potential hazard, Sensus reprimanded Plaintiff-Relator for conducting the investigation. Plaintiff-Relator was terminated shortly thereafter.

17. At all times relevant to this Complaint and their false claims to the United States, Defendants actual knowledge that the iConA meter was deficient, faulty, and dangerous. Alabama Power and the Southern Company well knew that Sensus had failed to perform adequate testing on the iConA or to verify that the processes used in its manufacture were reliable. Subsequently, Defendants were confronted with irrefutable evidence that the iConA was completely unreliable and in fact posed a grave hazard to the Alabama residents. In short, the iConA was completely unsuited to form the basis for a “smart grid.” Yet, Defendants proposed that the United States supply hundreds of millions of dollars to fund a smart grid project entirely dependent upon the iConA and accepted United States funding for that project. Defendants’ conduct violated the False Claims Act and endangered the lives of millions of Americans.

**COUNT ONE**  
**FALSE CLAIMS UNDER 31 U.S.C. § 3729<sup>1</sup>**

18. Plaintiff-Relator adopts and incorporates the previous paragraphs as though fully set forth herein.

19. By and through the fraudulent schemes described herein, Defendants knowingly – by actual knowledge or in deliberate ignorance or with reckless disregard of the truth or falsity of the information – presented or caused to be presented false or fraudulent claims to the United States for payment or approval and knowingly made, used, or caused to be made or used, false records or statements material to a false or fraudulent claim or to get a false or fraudulent claim paid or approved by the United States, to wit: the Southern Company and Alabama Power submitted a fraudulent grant proposal to the United States Department of Energy through the Smart Grid Investment Grant Program and falsely certified that their smart grid project was eligible for ARRA funds, when in fact they knew it was not. Subsequently, the Southern Company and Alabama Power fraudulently requested and accepted disbursement of funds from the Department of Energy to pay for a project completely tainted by defective equipment and unfit for ARRA funding. Sensus caused these false claims and

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<sup>1</sup> On May 20, 2009, the President of the United States signed the Fraud Enforcement and Recovery Act of 2009, amending the False Claims Act as set forth in 31 U.S.C. §§ 3729-3733. Defendants' fraudulent actions described herein implicate both the prior and amended statutory provisions and subject it to treble damages and penalties as set forth in the respective versions of the False Claims Act.

false records to be submitted by supplying defective electricity meters that it knew were to be employed in a project paid for in part out of United States funds.

20. The United States paid the false claims described herein and summarized in Paragraph 19.

21. Defendants' fraudulent actions described herein have resulted in damage to the United States equal to the amount paid or disbursed to Defendants by the United States through the Department of Energy, together with the cost of time and resources diverted as a result of Defendants' fraud.

WHEREFORE, Plaintiff-Relator demands judgment in his favor on behalf of the United States and himself and against Defendants in an amount equal to treble the damages sustained by reason of Defendants' conduct, together with civil penalties as permitted by 31 U.S.C. § 3729, attorneys' fees, costs, interest, and such other, further, or different relief to which Plaintiff-Relator may be entitled.

**COUNT TWO**  
**CONSPIRACY UNDER 31 U.S.C. § 3729**

22. Plaintiff-Relator incorporates all previous paragraphs as though fully set forth herein.

23. Defendants, in concert with their principals, agents, employees, and other institutions did agree to submit the false claims described herein to the United States, and the United States in fact paid those false claims.

24. Defendants and their principals, agents, and employees acted, by and through the conduct described *supra*, with the intent to defraud the United States by submitting false claims to the United States and by submitting false records to get such claims paid.

25. Defendants' fraudulent actions, together with the fraudulent actions of their principals, agents and employees, have resulted in damage to the United States equal to the amount paid by the United States to Defendants and the cost of time and resources diverted as a result of Defendants' fraud.

WHEREFORE, Plaintiff-Relator demands judgment in his favor on behalf of the United States and himself and against Defendants in an amount equal to treble the damages sustained by reason of Defendants' conduct and the conduct of their principals, agents, employees, and other institutions, together with civil penalties as permitted by 31 U.S.C. § 3729, attorneys' fees, costs, interest, and such other, different, or further relief to which Plaintiff-Relator may be entitled.

**COUNT THREE**  
**SUPPRESSION, FRAUD, AND DECEIT**

26. Plaintiff-Relator adopts and incorporates the previous paragraphs as though fully set forth herein.

27. Defendants misrepresented or suppressed the material fact that the iConA electricity meter forming the basis for Defendants' smart grid infrastructure is dangerously defective and unfit.

28. Defendants were legally obligated to communicate these material facts to the United States.

29. Such misrepresentations were made willfully to deceive or recklessly without knowledge.

30. The United States acted on Defendants' material misrepresentations described herein to its detriment.

31. Defendants' fraudulent actions described herein have resulted in damage to the United States equal to the amount paid by the United States to Defendants a result of Defendants' fraudulent claims, together with the cost of resources diverted as a result of Defendants' conduct.

WHEREFORE, Plaintiff-Relator demands judgment in his favor on behalf of the United States and himself and against Defendants pursuant to 31 U.S.C. § 3732 and Ala. Code §§ 6-5-101, 6-5-102, and 6-5-103 in an amount sufficient to compensate the United States for Defendants' fraud, suppression, and deceit, together with punitive damages in an amount calculated to deter Defendants from engaging in such conduct in the future, along with attorneys' fees, costs, interest, and any other, further, or different relief to which Plaintiff-Relator may be entitled.

Date: May 25, 2010.



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**RELATOR DEMANDS A TRIAL BY STRUCK JURY**

**Certificate of Service**


On this the 25<sup>th</sup> day of May, 2010, Plaintiff-Relator hereby certifies that in compliance with Rule 4 of the Federal Rules of Civil Procedure, service of the *Qui Tam* Complaint has been executed as follows:

**By Hand-Delivery to:**

United States Attorney Joyce White Vance  
Attn: AUSA Lloyd C. Peebles  
1801 Fourth Avenue North  
Birmingham, AL 35203

**By Certified Mail to:**

Attorney General of the United States of America  
Department of Justice  
950 Pennsylvania Avenue, NW  
Washington, DC 20530-0001

  
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OF COUNSEL