

**Senate Democratic Policy Committee Hearing
“Rewarding Failure:
Contractor Bonuses for Faulty Work in Iraq”**

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Master Electrician, former Subject Matter Expert for Task Force SAFE**

My name is Jim Childs. Thank you for the opportunity to testify before you today. I am an International Brotherhood of Electrical Workers (IBEW) educated and trained electrician. Through further education and training, I tested for and received a Master Electrician License in the states of Kansas, Colorado and West Virginia. I have worked as a licensed electrician for more than 30 years. Most city and state jurisdictions require a Master License to operate a company and all journeyman and apprentice electricians must work under the supervision of a Master Electrician.

I am also qualified to serve as an International Code Council Certified Commercial Building Inspector, Commercial Electrical Inspector, Commercial Plumbing Inspector and Commercial Mechanical Inspector. I have worked as an Electrical Inspector for the State of Kansas, the Federal Bureau of Prisons, and the Metropolitan Washington Airport Authority.

In October 2007, I took a job with Stanley Baker Hill (SBH) to work for the United States Army Corps of Engineers (USACE) in Iraq. I worked as a Project Manager and as the Electrical Subject Matter Expert (SME) for the USACE Gulf Region Central District (GRC). I worked in Iraq on electrical matters for 15 months until February 2009. In my testimony today, I do not represent the Army, USACE, or SBH in any way. I am providing my own personal observations based on my work in Iraq. I returned from Iraq in February, but I maintain communication with those with whom I served while in Iraq.

KBR is responsible for about 4,000 to 6,000 hardstand buildings that existed before the war. The other roughly 90,000 buildings that KBR is responsible for under LOGCAP were built after the War in Iraq started and most were built by KBR and/or its subcontractors and the military. Many of these buildings are containerized living units, shower units, and latrines for soldiers to use on a daily basis. KBR did not do this work to any electrical code. KBR now claims to have used the British code BS7671 as its code, not the NEC. If you were to use the BS 7671 standards, there would be even more KBR code violations. Army inspectors interviewed KBR workers at the time of inspections. Almost all stated they were working to meet the NEC. They did not even know the British code and had never received any training related to the British code. This is just the tip of the iceberg.

In late July 2008, I was tasked to a USACE team inspecting KBR's new electrical work and the Quality Assurance and Quality Control (QA/QC) program at the Radwaniyah Palace Complex (RPC) for the Defense Contract Management Agency (DCMA). When we began our work, our team was told by KBR and DCMA that KBR's electrical work would meet the requirements of the National Electrical Code (NEC).

In reality, the electrical work performed by KBR in Iraq was some of the most hazardous, worst quality work I have ever inspected. During my theater-wide inspections, I concluded that roughly 90 percent of the new construction buildings worked on by KBR were not properly wired. This means that over 70,000 buildings in Iraq were not up to code.

Roughly 60 percent of KBR's electrical workers were Third Country Nationals (TCNs), many of whom had no electrical training. These KBR employees did not have drawings or prints of the work being done. We were forced to stop our inspections because KBR claimed that work

had not been completed. Several weeks later, even though KBR claimed the work had been completed, the buildings still did not pass inspection.

General Petraeus tasked General McHale to begin Task Force SAFE in July 2008. SAFE stands for Safety Actions for Fire and Electricity. The purpose of Task Force SAFE is to review, detect and identify electrical hazards in Iraq. I was detailed to Task Force SAFE through the U.S. Army Corps of Engineers (USACE) to be the Electrical Subject Matter Expert for the Task Force.

When I began inspecting the electrical work performed by KBR, my co-workers and I found improper electrical work in every building we inspected. Even all of DCMA's own buildings were incorrectly wired. In fact, the building used by the DCMA Commander (COL Gabbert) was very dangerous because it was not bonded and the over-protection currents could not work. Unfortunately, the building was still not properly wired when I left Iraq in February 2009. Even though KBR had sent its contractor to work on this building at least eight times, the electrical work was never finished to any applicable code and was unsafe. Several times KBR's work created dangerous conditions in buildings that had been safe until the company began working. This type of rework happened with the DCMA commander's building. What had been a safe, properly wired building became a danger to those inside because the re-wiring performed by KBR was not done properly.

I eventually trained over 70 Master Electricians and others brought to Iraq to perform work for Task Force SAFE. In this position I also travelled to Afghanistan to help start a Task Force SAFE in Afghanistan. While doing inspections in Afghanistan, I found the exact same code violations. At that time there were plans to hire Task Force SAFE inspectors from the pool

of KBR employees working in Afghanistan, even though these workers were responsible for the problems in the first place and would be inspecting KBR's own work. I believe this was a huge mistake.

By the time I left Iraq, Task Force SAFE inspections had started at many locations throughout in Iraq. These inspections reviewed work performed by several contractors, including KBR. These inspections found a very high failure rate by all contractors. I would not be surprised if 50 percent of the buildings still need to be reviewed.

The basic grounding and bonding required to provide the correct operation of circuit protection was not evident in many buildings, creating unsafe conditions for those inside the buildings. Most buildings required a simple bonding screw or the installation of a wire bonding jumper to correct this problem. Unfortunately, KBR was not cooperative and would refuse to perform what was necessary to ensure that this simple bonding technique was properly performed.

Instead of just bonding the panels that were fed with these bad cables, KBR wants to repair or install the cables. The proper method of bonding would require less than one hour per panel to make the system safe, allowing KBR to move quickly to the next building.

KBR still wants to use a five wire system instead of bonding to ensure safe electrical wiring. However, the five wire systems have been done incorrectly and KBR electrical workers must redo the wiring just to meet the very minimum NEC requirements. This is a direct result of KBR's poor workmanship when installing cables.

KBR's method would add huge additional costs to their cost-plus contract and, more importantly, would add significant work time which would, in turn, delay the date by which their facilities are made safe for our soldiers.

Our government had to force KBR to use the fastest and most cost efficient bonding method and KBR continues to fight these requirements to this day. In my opinion, this is because KBR does not want to admit that it is easy to properly install the cables, which they had not done, and correct the non-code compliant installations.

I want to be clear that this type of bonding is done in every building in the United States. Thankfully, Task Force SAFE had very little, if any, push-back from any of the other contractors working in Iraq. Other contractors performing electrical work completed their work in a timely manner and are more cooperative with the government.

One very important example of KBR's inability to meet the standards required by the NEC is the LSF1 building at the Radwanayah Palace Complex (RPC). This is the building where SSG Ryan Maseth was electrocuted in January 2008 while showering on his base. KBR was given an emergency work order to re-wire this building just after SSG Maseth was killed.

In July 2008, after a re-wiring effort by KBR was complete, the building was still very dangerous. In fact the very code violations that led to SSG Maseth's electrocution still existed in this building. The building still did not have proper bonding and grounding. The metal water piping in the showers still was not bonded as required by all codes. This means that a soldier could have been shocked or electrocuted.

I am sorry to tell you that it was not until October 2008 that KBR finally wired the building properly so that it no longer posed a threat to our soldiers. This means that for 10 months the soldiers using SSG Maseth's building were at risk of being shocked or electrocuted, even after KBR knew that there were significant and serious problems with his building.

When I attended a meeting with KBR electricians and DCMA leaders at the RPC compound, the KBR supervisor did not know the NEC. Only one KBR electrician appeared to understand the NEC for bonding and grounding. I would have to explain to KBR how to do the proper work, and then KBR would change the wiring. I believe KBR changed the wiring at least nine times before it was code compliant.

In October 2008, DCMA and Army Sustainment Command sent two representatives to Iraq to gather additional information about KBR's electrical work. DCMA sent CAPT Graff and Army Sustainment Command (ASC) sent SES Mr. Howell. They spent the next few days with me getting a tour of the problems all over the Camp Victory compound. They saw firsthand the extent of the code deficiencies in KBR's work.

In October 2008, we had a meeting with KBR at the RPC. Please keep in mind this was 10 months after the January electrocution of SSG Maseth. The building still did not meet the NEC or BS 7671 code, despite the many hours of labor and material costs. KBR was given a list of three items that had to be completed for the building to meet code. We stated that KBR needed to complete this work the next day so that the building would be safe before CAPT Graft and SES Howell left. This may be hard to believe, but KBR could not complete these three items correctly.

Although KBR properly re-labeled the panel and installed a proper-sized water line bonding jumper, they did so by using more labor and material than was required. However, KBR did not install the over-current protection of the building properly (which was the third item). They had also installed the line and load conductors backwards on the new circuit breaker. The leadership team stayed on-site for several more hours while KBR corrected these code violations. Ten months after SSG Maseth was electrocuted at RPC, the building finally had proper code compliant grounding, bonding and feeder over-current protection.

KBR needs to stop taking a “lawyerly” approach toward these inspections and requirements. The company needs to do what is right, cost effective, meets the code, and protects our soldiers’ lives. We still haven’t been able to get them to do the bonding work, even though it is easy. I think they are avoiding this work because bonding was one of the electrical defects that led to the electrocution of Ryan Maseth.