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By:  Deputy Clerk

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA

UNITED STATES OF AMERICA, )  
ex rel. Deborah W. Cook )  
 )  
Plaintiffs, )  
 )  
v. )  
 )  
Energy and Process Corporation, )  
 )  
Defendant. )

Case No. 1:13-CV-4023 (SCJ)

**UNDER SEAL**

**UNITED STATES' COMPLAINT IN INTERVENTION**

The UNITED STATES OF AMERICA, by and through its undersigned counsel, brings this civil action pursuant to the False Claims Act, 31 U.S.C. §§ 3729–3733 (2009), and under common law theories of payment by mistake and unjust enrichment.

**INTRODUCTION**

1. This is an action to recover damages, civil penalties and other relief from Defendant Energy & Process Corporation (“Defendant” or “E&P”) for having perpetrated a scheme whereby it falsely claimed and received millions of dollars from the U.S. Treasury for critical safety work – work that E&P never performed – on steel reinforcing bars (“rebar”) used in the construction of a nuclear processing facility at the Savannah River Site (“SRS”). Because it was designed to process extremely hazardous radioactive material, the nuclear facility – called the Mixed Oxide Fuel Fabrication Facility (“MOX Facility”) – was required to be built to withstand earthquakes, terrorist attacks and other threats/accidents that could cause radioactive material to be released into the environment. Therefore, the components (*e.g.*, the rebar) used to build the MOX Facility had

to meet the rigorous quality assurance standards required by the United States Nuclear Regulatory Commission (“NRC”).

2. Among the critical safety features of the MOX Facility were its thick concrete walls, which were designed to prevent radioactive material from being released into the environment. These concrete walls were to be strengthened with steel reinforcing bars (“rebar”) of very specific dimensions and tensile strength to augment the strength of the walls. Under the applicable regulations, the rebar constituted a “basic component” of the MOX Facility, and therefore had to be manufactured and/or supplied pursuant to, *inter alia*, a quality assurance program meeting the vigorous and stringent Nuclear Quality Assurance-1 (“NQA-1”) regulatory standard maintained by the American Society of Mechanical Engineers (“ASME”), and endorsed by the NRC.

3. Standard “off-the-shelf” or “commercial-grade” rebar – a basic construction component that is routinely used in commercial construction projects – was unsuitable for use in the MOX Facility because it lacks the indicia of reliability and safety that is associated with rebar that has been manufactured and/or procured under the rigorous NQA-1 quality assurance standards required by the NRC, as discussed below. To ensure its safe operation, the MOX Facility had to be constructed with rebar that met NQA-1 quality requirements (such rebar is referred to herein as “NQA-1 Rebar”).<sup>1</sup>

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<sup>1</sup> “NQA-1 Rebar” refers to rebar that was manufactured and/or procured under the stringent quality assurance requirements of 10 C.F.R. § 21 (2007); 10 C.F.R. Part 50 (2007), App. B; the ASME’s NQA-1 standards; and the company specific quality assurance programs, which must be promulgated and maintained by companies that perform nuclear quality assurance work. The aforementioned quality assurance requirements are described at length below. *See*, paragraphs 23-33, *infra*.

4. Therefore, the prime contractor building the MOX Facility hired E&P as a subcontractor to supply “NQA-1 Rebar,” which is rebar meeting the stringent NQA-1 quality assurance requirements, not commercial-grade rebar. In the subcontracts between the prime contractor and E&P, E&P explicitly agreed to take all of the necessary steps, and comply with all of the pertinent regulations, associated with supplying NQA-1 Rebar to the Government.

5. Because of the rigorous quality assurance work attendant to its procurement, NQA-1 Rebar is much more expensive than the commercial-grade rebar used in commercial buildings. During the relevant time period, the price of commercial-grade rebar was approximately \$750 per ton, but the United States paid E&P approximately \$3,400 per ton for rebar that E&P promised would be NQA-1 Rebar.

6. However, with actual knowledge, reckless disregard and/or deliberate ignorance, E&P billed the United States for rebar that was described as NQA-1 Rebar, but which was in actuality, commercial-grade rebar. Despite promising to supply NQA-1 Rebar, and billing for millions of dollars in rebar that E&P certified was NQA-1 Rebar, in truth, E&P did not perform the work to supply NQA-1 Rebar. Instead, E&P simply purchased commercial-grade rebar from a third party manufacturer and had it shipped directly from the manufacturer to the MOX Facility — without the required and vital quality assurance work ever having being performed.

7. To conceal its scheme, with each shipment of rebar, E&P sent a “Certification of Conformance/Compliance” or “Certification,” in which E&P explicitly and falsely certified that the rebar complied with the quality assurance requirements. E&P also presented approximately sixteen invoices to be paid for the rebar, which were false and/or fraudulent because the required quality assurance work had not been performed. In reliance upon E&P’s false Certifications, the

prime contractor submitted invoices to the United States for work that E&P had not performed. (See Exhibit A for a list of those invoices.)

8. E&P's scheme was particularly egregious in that, had it not been discovered, it could have subjected the public to the serious and long lasting risks associated with radiological contamination. Fortuitously, when the prime contractor began installing some of E&P's rebar in concrete, serious defects in some of the rebar were discovered, prompting the prime contractor to investigate E&P's performance and discover that E&P had not performed the required quality assurance work, despite its numerous and explicit false certifications that such work had been performed.

#### **THE PARTIES**

9. Plaintiff, the United States of America, acting through the Department of Energy ("DOE") and the National Nuclear Security Administration ("NNSA"), is responsible for the management and security of the nation's nuclear weapons, nuclear nonproliferation, and naval reactor programs.

10. Relator Deborah W. Cook ("Cook") is a procurement and subcontract specialist formerly employed by the prime contractor.

11. Defendant E&P is a Georgia corporation with its principal office and place of business located at 2146-B Flintstone Drive, Tucker, Georgia 30084-5000. At all times relevant to this Complaint, E&P was a wholly-owned subsidiary of Ferguson Enterprises, Inc.

#### **JURISDICTION AND VENUE**

12. This Court has jurisdiction over this action pursuant to 31 U.S.C. § 3732 and 28 U.S.C. §§ 1331, 1345 and 1355.

13. Venue is proper in the Northern District of Georgia pursuant to 28 U.S.C. §§ 1391(b) and 1395 and 31 U.S.C. § 3732(a) because the Defendant is headquartered in and transacts business in this district.

#### **STATUTE OF LIMITATIONS**

14. E&P and the United States executed a tolling agreement and subsequent extensions of that agreement which, together, exclude the period of time from November 1, 2012 to August 29, 2014, when determining whether any civil or administrative claims are time-barred by statute of limitations, laches, or any other time-related defenses.

15. Cook filed this action on December 4, 2013.

#### **THE FALSE CLAIMS ACT**

16. For violations occurring prior to May 20, 2009, the False Claims Act provides in pertinent part that a person is liable to the United States government for each instance in which the person “knowingly presents, or causes to be presented, to an officer or employee of the United States government . . . [a] false or fraudulent claim for payment or approval.” 31 U.S.C. § 3729(a)(1)(1986).

17. As amended in 2009, the False Claims Act extends liability, both before and after its amendments, to any person who “knowingly makes, uses, or causes to be made or used, a false record or statement material to a false or fraudulent claim.” 31 U.S.C. § 3729(a)(1)(B) (2009).

18. The False Claims Act defines the terms “knowing” and “knowingly” to mean that a person, with respect to information: (1) has actual knowledge of the information; (2) acts in deliberate ignorance of the truth or falsity of the information; or (3) acts in reckless disregard of the truth or falsity of the information. 31 U.S.C. § 3729(b) (1986); 31 U.S.C. § 3729(b)(1)(A)

(2009). The False Claims Act further provides that no proof of specific intent to defraud is required. 31 U.S.C. § 3729(b) (1986); 31 U.S.C. § 3729(b)(1)(B) (2009).

#### **THE SAVANNAH RIVER SITE AND MOX FACILITY**

19. The SRS is located on the border between South Carolina and Georgia, and houses facilities that store and/or stabilize nuclear materials, and clean up radioactive waste. The SRS was built in the 1950s to produce weapons-grade nuclear material – *e.g.*, plutonium 239 and tritium – to construct nuclear weapons. However, in the early 1990s, after the Cold War ended, and pursuant to an arms control agreement, the SRS stopped producing certain weapons-grade material, and was re-purposed to effectuate the safe disposal of surplus radioactive materials.

20. In 1999, the NNSA contracted with a firm described and defined herein as “MOX Services” or “Prime Contractor” for the design and construction of the MOX Facility, which was intended to convert surplus weapons-grade plutonium into fuel pellets for use in commercial nuclear power reactors, thereby allowing the United States to fulfill its treaty obligations and safely dispose of dangerous nuclear materials.

21. Radioactive materials such as plutonium are extremely dangerous. Indeed, plutonium presents a variety of serious and long lasting environmental and health hazards. For instance, if ingested into the body, the radiation emitted by trace amounts of plutonium can cause lethal cancers of the lungs, bones and liver. Additionally, because it has a half-life of over 24,000 years, were quantities of plutonium to be accidentally released into the environment, it would present a myriad of acute health risks, which would be present, and make the impacted area uninhabitable, for thousands of years.

22. In view of these hazards, the MOX Facility was designed to meet the design and quality assurance requirements associated with the construction of nuclear facilities, which are rigorous, robust and intended to make the facility resistant to conditions that might cause radioactive materials to be released into the environment.

### **NUCLEAR QUALITY ASSURANCE REGULATIONS AND REQUIREMENTS**

23. As referenced above, the design and construction of nuclear facilities like the MOX Facility is subject to a detailed and deliberately onerous regime of quality assurance requirements. Nuclear facilities include “structures, systems and components” that are designed to prevent or mitigate the consequences of accidents and other occurrences that could cause undue risks to the health and safety of the public. (*See*, 10 C.F.R. Part 50 (2007)). Therefore, the design and manufacture of nuclear components is subject to rigorous quality assurance requirements, which are intended to ensure, inter alia, that nuclear components are manufactured in accordance with their design requirements.

24. Pursuant to Title 10, Section 21 of the Code of Federal Regulations, any “basic component” of a nuclear facility must be manufactured in accordance with the quality assurance standards set forth in Title 10, Part 50 of the Code of Federal Regulations, Appendix B (hereinafter, “Appendix B”).<sup>2</sup> (*See*, 10 C.F.R. § 21.3(1)(ii)).

25. A “basic component” is defined as a “structure, system, or component, or part thereof that affects its safety function necessary to assure: (A) the integrity of the reactor coolant boundary; (B) the capability to shut down the reactor and maintain it in a safe shutdown condition;

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<sup>2</sup> 10 C.F.R. Pt. 50, App. B is formally titled, “Appendix B to Part 50—Quality Assurance Criteria for Nuclear Power Plants and Fuel Processing Plants.”

or (C) the capability to prevent or mitigate the consequences of accidents . . . .” (*See*, 10 C.F.R. § 21.3(1)(i)).

26. Appendix B sets forth specific quality assurance requirements – applicable to entities applying to design, fabricate, or construct basic components for use in a nuclear facility like the MOX Facility – that are intended to ensure the safe operation of a nuclear facility. In Appendix B, “quality assurance” is specifically defined as “all those planned and systemic actions necessary to provide adequate confidence that a structure, system or component will perform satisfactorily in service.”<sup>3</sup> (10 C.F.R. Pt. 50, App. B)

27. Appendix B requires, inter alia, entities to establish and/or execute: (1) a quality assurance program meeting the requirements of Appendix B; (2) measures sufficient to ensure design control with respect to structures and components intended for use in a nuclear facility; (3) measures sufficient to assure that purchased materials conform to the procurement documents; (4) a system of inspections to ensure that all design or manufacturing activity is in accordance with the applicable specifications; and (5) a system of audits to assess compliance with, and the effectiveness of, an entity’s quality assurance program. (*See*, 10 C.F.R. Pt. 50, App. B)

28. Additionally, entities seeking to design or construct nuclear facilities must also adhere to the Nuclear Quality Assurance-1 standards (“NQA-1 Standards”) promulgated and maintained by the American Society of Mechanical Engineers (hereinafter, “ASME”). The NQA-

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<sup>3</sup> Appendix B also specifies that “quality assurance” encompasses “quality control,” which is defined as “those quality assurance actions related to the physical characteristics of a material, structure, component, or system which provides a means to control the quality of the material, structure, component, or system to predetermined requirements.” (10 C.F.R. Part 50 (2007)).



1 Standards – which have been endorsed by the NRC – clarify, interpret, and provide implementation guidance regarding, Appendix B’s quality assurance requirements.

29. Collectively, these requirements form the legal basis for the NQA-1 requirements discussed in paragraphs 1-4, above, as they applied to E&P. (Hereinafter, the quality assurance standards set forth in Appendix B and the NQA-1 Standards are collectively referred to as the “NQA-1 Requirements”).

30. Finally, to be considered to construct or supply components for use in a nuclear facility like the MOX Facility, companies like E&P must create, and then comply with, a written quality assurance program of their own, which is capable of fulfilling the NQA-1 Requirements. Once awarded a contract to construct or supply a “basic component,” the company must then create a separate quality assurance plan for that specific contract.

31. To fulfill this requirement, E&P promulgated a quality assurance program, which it codified in its Quality Assurance Manual (“E&P Manual”). The E&P Manual describes how E&P would implement a quality assurance plan for supplying material in accordance with the NQA-1 Requirements. The E&P Manual is a high-level policy document that does not, itself, explain the precise steps E&P will take for any specific order or part. Rather, upon being awarded a contract, E&P committed to create – using the broad general principles set forth in the E&P Manual – a quality assurance plan tailored to the requirements of a specific order or part. Here, it did not.

32. The rebar that E&P was hired to provide constituted a “basic component” within the meaning of Title 10, Section 21 of the Code of Federal Regulations, as it was meant to support and augment the MOX Facility’s concrete walls – *e.g.*, a structure necessary to assure the safe

operation of the MOX Facility, which was designed to process hazardous nuclear material. *See*, 10 C.F.R. § 21.3. Therefore, the rebar had to be manufactured and/or procured pursuant to the quality assurance standards set forth in the NQA-1 Requirements.

33. At all relevant times, E&P knew that: (1) the subject rebar constituted a “basic component” of the MOX Facility; (2) its procurement of the rebar was subject to the quality assurance requirements described above in paragraphs 23-32, and that (3) it was E&P’s responsibility to provide rebar meeting these quality assurance requirements.

#### **THE PRIME CONTRACT FOR CONSTRUCTION OF THE MOX FACILITY**

34. On March 3, 1999, DOE entered into cost reimbursable contract number DE-AC02-99CH10888 (the “Prime Contract”) with MOX Services for the construction of the MOX Facility. At the time of contract, MOX Services operated as Duke, Cogema, Stone & Webster, LLC (“Duke”). However, on August 23, 2006, Duke changed its name to Shaw AREVA MOX Services, LLC (“Shaw”). Subsequently, on September 4, 2014, Shaw changed its corporate name to CB&I AREVA MOX Services, LLC (“CB&I”). All rights and obligations of DOE and of the prime contractor under the Prime Contract were unaffected by these name changes. As the prime contractor under the Prime Contract, Duke, Shaw, and CB&I are referred to herein as “MOX Services” as well as “Prime Contractor.” The Prime Contract required MOX Services to apply for, obtain and maintain a license from the NRC for the MOX Facility. Also, the Prime Contract explicitly required that MOX Services design, construct and operate the MOX Facility in accordance with the quality assurance criteria set forth in 10 C.F.R. Part 50, Appendix B.

35. Under the Prime Contract, MOX Services was allowed to use subcontractors, such as E&P, so long as MOX Services ensured that those subcontractors were qualified to perform the

quality of work required, meaning that the subcontractor had a compliant quality assurance program as discussed in paragraphs 29-30, above.

36. To bill the Government for work performed under the Prime Contract, MOX Services consolidated its costs, including invoiced amounts from subcontractors like E&P, and then submitted a voucher to DOE for payment. Upon receipt of payment from DOE, MOX Services then paid its subcontractors – including E&P. (*See*, Exhibit A listing the MOX Services vouchers submitted to DOE, and the corresponding payment to MOX Services by DOE, which included the E&P invoices at issue in this Complaint.)

#### **THE REBAR SUBCONTRACTS BETWEEN MOX SERVICES AND E&P**

##### ***E&P Submitted RFP Responses Indicating That It Was Qualified to Provide, and Would Provide, NQA-1 Rebar.***

37. On April 6, 2006, MOX Services issued a Request for Proposal (“RFP”), solicitation number 10888-CP20-2C, for the materials, labor, equipment, and services necessary to supply rebar to be used in the construction of the MOX Facility at SRS. Subsequently, on January 31, 2007, MOX Services issued a second RFP, solicitation number 10888-R20760, for the materials, labor, equipment, and services necessary to supply rebar to be used in the construction of the MOX Facility at SRS.

38. In response to these RFPs, E&P submitted proposals asserting it was qualified to perform NQA-1 work, and that it would – if awarded the rebar subcontracts – provide the Government with rebar manufactured and/or procured under the requisite quality assurance standards. Moreover, E&P touted its “30 years” of experience, and stated it would provide NQA-1 Rebar by following its Quality Assurance Program – which E&P described as “superior,” as well as the specific procedures set forth in the E&P Manual.

39. E&P, in its proposal in response to the first RFP, explicitly represented that, “Materials will be certified to meet the Quality Assurance Requirements as identified [in] Section 01400. Materials will be furnished in accordance with [E&P’s] Quality Assurance Manual dated 2/23/05 Rev. 6, which meets the requirements of NQA-1, 10 C.F.R. § 21, & 10 C.F.R. Part 50, App. B.” (May 15, 2006 E&P Proposal, p. 3.) (corrected punctuation.)<sup>4</sup>

40. In responding to the RFPs, E&P further represented that it would use one of two sub-tier suppliers “for the fabrication only” of the rebar, and represented that E&P, itself, would “supply material and fabrication in accordance with our approved QA Program meeting the requirements of 10 C.F.R § 21 & 10 C.F.R § 50 App. B and NQA-1.” (corrected punctuation.)  
*Id.*

41. After receiving E&P’s proposal, MOX Services verified that E&P was on the ASME list of companies that were qualified to provide NQA-1 components. Additionally, MOX Services audited the E&P Manual (*see* ¶¶ 30-31, *supra*) and determined that if – and only if – E&P performed quality assurance work in accordance with the E&P Manual, the resulting material or product could satisfy the NQA-1 Requirements.

42. In reliance upon E&P’s representations that it would provide NQA-1 Rebar and follow the procedures set forth in the E&P Manual, MOX Services awarded E&P two subcontracts to provide NQA-1 Rebar (Contract Number 10888-S1383, signed on July 17, 2006, and Contract Number 10888-S1526, signed on March 20, 2007 (“Subcontracts”)), which were cumulatively valued at \$11,477,729.18.

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<sup>4</sup> E&P’s first proposal in response to the RFP, which was formally titled “10888-CP20-2B Rebar,” or “Work Execution Plan,” became part of the Subcontracts.

***In the Subcontracts, E&P Explicitly Agreed to Comply with the Requisite Quality Assurance Standards, And the Specific Design Requirements for the Rebar.***

43. The Subcontracts explicitly required that E&P would provide the Prime Contractor with rebar that met the NQA-1 Standards. The Subcontracts also contained very specific construction specifications (collectively, “Construction Specifications”), which E&P agreed to follow.<sup>5</sup> The Construction Specifications explicitly identified that the work to be performed by E&P was pursuant to the Prime Contract with DOE and specified that the NQA-1 Requirements of the Prime Contract flowed down to E&P. (*See, e.g.*, Construction Specifications § 1.4 D.)

44. Additionally, E&P also agreed to adhere to the specific industry construction standards ACI 318-99 and ACI 349-97, which govern the correct bend radius of the rebar, and were important to ensuring that the MOX Facility could withstand an external force, such as earthquake or explosion.<sup>6</sup> These standards were vital, as rebar bent with an improper radius may not hold up to the excessive stress created by an external force, such as an explosion, without cracking or breaking.

45. As verification that E&P had actually performed the requisite quality assurance work, the Subcontracts required E&P to submit with each shipment of rebar a signed certification

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<sup>5</sup> The construction specifications sections were titled “Section 03201-Concrete Reinforcement for Quality Level 1a (IROFS), 2, 3, & 4, Quality Level 1a (IROFS) DCS01-BKA-DS-SPE-B-09328-1” (which applied to Contract 10888-S1383) and “Section 03201-Concrete Reinforcement for Quality Level 1a (IROFS), 2, 3, & 4, Quality Level 1a (IROFS) DCS01-BKA-DS-SPE-B-09328-3” (for Contract 10888-S1526). For the purposes of these allegations, the requirements of these Construction Specifications were substantially the same.

<sup>6</sup> Specifically, the Construction Specifications required compliance with specific standards of the American Concrete Institute (ACI), the American Society for Testing and Materials (ASTM), and the Concrete Reinforcing Steel Institute (CRSI). *See, e.g.*, Construction Specifications §§ 1.4 A-C and 3.2 B.

stating that the rebar complied with 10 C.F.R. § 21 (2007); 10 C.F.R. Part 50 (2007) App. B; ASME NQA-1-1994 through 1995a Addenda; and E&P's quality assurance program.

46. To secure NQA-1 Rebar – *i.e.*, rebar manufactured under the rigorous quality assurance measures required of any “basic component” of a nuclear facility – the United States paid a significant premium. Indeed, the rate for “off-the-shelf” or commercial-grade rebar was approximately \$750 per ton. However, because E&P promised to provide rebar that met the above-described rigorous NQA-1 Requirements, and accepted responsibility to ensure those standards were met, the Government paid E&P approximately \$3,400 per ton – a markup of over 400% – for what it believed to be NQA-1 Rebar.

***E&P Had Several Options to Fulfill Its Obligation  
to Provide the Government with NQA-1 Rebar.***

47. Pursuant to the applicable regulations and standards, as well as the E&P Manual, there were several options by which E&P could have discharged its contractual obligation to provide the Government with NQA-1 Rebar — *i.e.*, rebar that had been manufactured and/or procured under the NQA-1 Requirements.

48. For instance, E&P could have created and executed an NQA-1 plan to perform the rigorous quality assurance work itself, throughout the sourcing and fabricating processes (whether the rebar was fabricated by E&P or by another fabricator at its own facility).

49. Additionally, E&P also could have purchased the rebar from another vendor that was, itself, NQA-1 qualified to perform the quality assurance work – but of course, E&P would have had to pay that fabricator to perform the robust quality assurance work.

50. Moreover, E&P could have created a plan to perform (and then actually performed) the rigorous quality assurance process called “commercial-grade dedication” (hereinafter,

“CGD”), which comprises a series of technical and/or engineering procedures by which an “off-the-shelf” or commercial-grade component is subject to vigorous quality assurance work to ensure it is the equivalent of a component manufactured under the NQA-1 Requirements.<sup>7</sup>

51. In any event, whatever method E&P chose, it was legally and contractually responsible for making sure that the requisite and vital quality assurance work was actually done.

#### **E&P FAILED TO PROVIDE NQA-1 REBAR**

52. E&P wholly failed to fulfill its contractual obligation to provide the Government with NQA-1 Rebar – *i.e.*, rebar that had been manufactured and/or procured in the accordance with Appendix B and NQA-1. Indeed, E&P performed almost none of the required quality assurance work, but instead, simply provided the Government with commercial-grade rebar, which it acquired from a vendor incapable of performing NQA-1 work.

53. First of all, E&P did not perform the NQA-1 quality assurance work during the manufacturing process, *e.g.*, by complying with the E&P Manual and creating a plan to perform the rigorous quality assurance work itself, and then executing such plan throughout the sourcing and fabricating processes.

54. Additionally, E&P did not buy the rebar from a vendor that was qualified to perform – and did perform – the NQA-1 quality assurance work.

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<sup>7</sup> The requirements of CGD are provided in 10 C.F.R. § 21 (2007); 10 C.F.R. Part 50 (2007) App. B; ASME NQA-1-1994 through 1995a Addenda. The E&P Manual also contains guidance as to how to create and execute a successful CGD. The Electrical Power Research Institute (EPRI) provides the guidelines accepted in the nuclear industry for CGD. (*See*, EPRI Report NP-5652, Final Report, June 1988, “Guideline for [the] Utilization of Commercial Grade Items in Nuclear Safety Related Application[s] (NCIG 07)” (NP-5652)). The steps for CGD include: (1) identifying the critical characteristics of the component being dedicated; (2) defining the quantitative criteria for acceptance of those characteristics; and (3) determining how those quantitative criteria should be verified. (*See*, EPRI NP-5652 and 10 C.F.R. § 21.3.)

55. Finally, E&P did not procure off-the-shelf or commercial-grade rebar, and then perform the technical, engineering and other detailed work necessary to perform a viable CGD, by which commercial-grade rebar could have been deemed as the equivalent of rebar that had been manufactured under quality assurance standards articulated in the NQA-1 Requirements.

56. Had E&P availed itself of and executed any of these options, it could have fulfilled its contractual obligation to provide the United States with NQA-1 Rebar. Indeed, in early discussions regarding its performance under the E&P Subcontracts, E&P stated that it would provide NQA-1 Rebar by overlaying its quality assurance program over the manufacturing processes of a third party vendor (*i.e.*, the process referenced in ¶¶ 48, 53).

57. However, in actuality, none of the aforementioned options were undertaken by E&P. Instead, E&P simply paid a company called Commercial Metals Company (“CMC”) – which fabricates only commercial-grade rebar, and lacks the credentials and capacity to perform NQA-1 quality assurance work – to manufacture rebar for use in the MOX Facility.<sup>8</sup> E&P then directed CMC to ship the commercial grade rebar – which plainly had not been produced and/or procured under the NQA-1 Requirements – directly to the SRS for installation in the MOX Facility.

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<sup>8</sup> CMC was not an ASME-certified NQA-1 supplier and therefore could not and did not perform NQA-1 quality work. When CMC was fabricating the rebar for the Subcontracts, neither CMC nor E&P created or executed “a quality assurance program complying with appendix B to part 50 of this chapter” during the fabrication process as provided in the first prong of 10 C.F.R. § 21 (2007).



**E&P FALSELY CLAIMED AND RECEIVED MILLIONS OF DOLLARS FOR REBAR  
THAT IT FALSELY DESCRIBED AS NQA-1 REBAR**

***Concealing its Scheme, E&P Repeatedly Tendered Certifications That Falsely Stated That It  
Had Supplied NQA-1 Rebar.***

58. The first shipments of E&P's non-compliant rebar were delivered to the MOX facility in January 2007, and construction of the facility using that rebar began.

59. Even though the rebar E&P shipped to the MOX Facility was only commercial-grade, which had not been manufactured and/or procured in accordance with the NQA-1 Requirements, with each shipment, E&P – to conceal its scheme – falsely certified that the rebar had been manufactured and/or supplied in accordance with the requisite quality assurance standards.

60. Specifically, in its Certifications, E&P explicitly noted the applicability of, and certified compliance with, the requisite quality assurance and contract specifications, by placing an “X” next to each of the following explicit representations:

  X   We hereby certify that the material described above is in compliance with the applicable material specification(s) and Purchase Order requirements, and that all required tests and inspections have been performed with satisfactory results.

  X   The applicable portions of 10 CFR 50 Appendix B apply to this order.

....

  X   The provisions of 10 CFR 21 apply.

  X   Materials have been supplied in accordance with Energy & Process Corp. Quality Assurance Program Rev. 6, Dated 02/23/05 [i.e. E&P's Manual].

  X   Energy & Process has not performed welding on this material.

  X   Other: NQA1 APPLIES, BILL OF LADING: [applicable bill of lading numbers]

61. E&P's Certifications were demonstrably false, as the rebar supplied by E&P had not been manufactured and/or procured pursuant to Appendix B, the NQA-1 Standards or the E&P Manual. Instead, E&P simply purchased commercial-grade rebar from CMC, and had such rebar shipped to the MOX Facility, without the required quality assurance work ever having been performed.

62. E&P's Certifications had to be signed by a qualified authority at E&P and were signed by Tommy Benson, Ed Thornton and Doug Walker.

63. E&P intended and/or understood the Certifications would be relied upon by the Prime Contractor and/or the Government.<sup>9</sup> Additionally, E&P provided the Certifications with knowledge that the representations therein were false, or acting with reckless disregard and/or deliberate ignorance to the truth or falsity of such representations.

*E&P's Scheme Was Discovered in January 2008, In the Midst of the Construction of the MOX Facility.*

64. E&P's scheme began to unravel on January 31, 2008, when a section of rebar shattered at the construction site when hammered by a worker. The shattered rebar prompted the Prime Contractor to conduct an investigation into the quality assurance work performed by E&P.

65. This investigation revealed that: (1) E&P – contrary to the representations in its Certifications – had not performed the quality assurance work required under 10 C.F.R. § 21, NQA-1, 10 C.F.R. Part 50 Appendix B, or the E&P Manual on any of the rebar; and that (2)

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<sup>9</sup> Periodically, E&P submitted to the Prime Contractor invoices claiming payment for its shipments of rebar. Each E&P invoice often included multiple shipments and multiple corresponding Certificates of Compliance/Conformance. The Prime Contractor paid E&P for its invoices and submitted its vouchers to the DOE including the amounts it paid E&P. See Exhibit A listing the E&P Invoices and claims to the United States, and amounts E&P was paid.

approximately one third of the rebar was bent incorrectly (the radius of the bend was incorrect). This deficiency gave rise to the risk that the rebar, as well as the concrete structures that the rebar supported and/or reinforced, would fracture under the stress created by an external force, such as an explosion.

66. However, before these failings were discovered, E&P had delivered approximately 3000 tons of rebar to the MOX Facility. Of that, approximately 1,084 tons of rebar were bent to an incorrect bend radius that did not meet the established criteria. At the time of the shattered rebar incident, approximately 142 tons of the incorrectly bent rebar was embedded in concrete at the MOX Facility, and an additional 942 tons of incorrectly bent rebar had been delivered.

67. The Prime Contractor informed the NRC of E&P's conduct. The NRC investigated and issued a public report concluding that E&P failed to perform the quality assurance work required by 10 C.F.R. Part 50, Appendix B. As a result, the MOX Facility's Construction Authorization (the NRC license to build) was put in jeopardy until E&P's failures were remedied. The E&P rebar that had already been partially installed in concrete had to be modified and augmented with supporting rebar. The E&P rebar that had been delivered but not installed had to be set aside because it did not meet the nuclear quality requirements.

68. To assure that the remaining rebar being fabricated by CMC met the NQA-1 Requirements, the Prime Contractor sent its own quality assurance team to the CMC plant to take over the quality assurance function, by overlaying its quality assurance procedures over CMC's manufacturing processes. Indeed, this was the precise course of action that E&P, during early construction discussions, falsely indicated that it would follow in order to procure NQA-1 Rebar.

69. E&P has never repaid the money it was paid before its scheme was discovered.

**COUNT I: VIOLATIONS OF THE FALSE CLAIMS ACT,  
31 U.S.C. § 3729(a)(1) (1986)**

70. The United States re-asserts all previous allegations as if set forth herein.

71. Defendant knowingly presented, or caused to be presented, to officers or employees of the United States Government false or fraudulent claims for payment or approval, in violation of 31 U.S.C. § 3729(a)(1). Specifically, Defendant knowingly submitted or caused to be submitted claims for payment or approval that were rendered false because they did not comply with material requirements and specifications in the Subcontracts and the Prime Contract for acceptance criteria and quality assurance as to the rebar supplied to the United States. The claims were also rendered materially false because the rebar was defective, in that it was bent to an incorrect radius. In submitting or causing the submission of these claims, the Defendant acted with actual knowledge, reckless disregard, or deliberate ignorance of the truth or falsity of the claims. (*See*, Exhibit A listing each subject E&P Invoice and the MOX Services Voucher, submitted by MOX Services to DOE, that included each subject E&P Invoice.)

72. The Defendant made express representations in writing that the rebar it was supplying to DOE was compliant with all necessary requirements. These representations and requirements were material to DOE's decision to pay the claims associated with that rebar. When the Defendant made these representations, it knew that these representations were false, and would continue to be false. Therefore, Defendant fraudulently induced DOE to pay claims for payment that violated the False Claims Act.

73. Compliance with the terms of the Subcontracts and the Prime Contract was mandatory and material to DOE's decision to pay the Defendant's claims for payment. Thus, the Defendant knowingly submitted false claims for payment to which it was not entitled.

74. By virtue of these false or fraudulent claims, the United States suffered damages in an amount to be determined at trial.

**COUNT II: VIOLATIONS OF THE FALSE CLAIMS ACT,  
31 U.S.C. § 3729(a)(1)(B) (2009)**

75. The United States re-asserts all previous allegations as if set forth herein.

76. The Defendant made or used, or caused to be made or used, false records or statements material to false or fraudulent claims, in violation of 31 U.S.C. § 3729(a)(1)(B) (2009). Specifically, the Defendant made or used, or caused to be made or used, written statements in which it falsely represented its compliance with the material requirements and specifications in the Subcontracts and the Prime Contract for acceptance criteria and quality assurance as to the rebar supplied to the United States.

77. The Defendant knowingly made, used, and caused to be made or used, materially false certifications regarding compliance with the terms of the Subcontracts and the Prime Contract, in order to obtain payment of claims by DOE. In fact, the Defendant was not compliant with the Subcontracts and the Prime Contract. In submitting or causing to be submitted such certifications, the Defendant acted with actual knowledge, reckless disregard, or deliberate ignorance of the truth or falsity of the claims.

78. By virtue of these false or fraudulent claims, the United States suffered damages in an amount to be determined at trial.

**COUNT III: PAYMENT BY MISTAKE OF FACT**

79. The United States re-asserts all previous allegations as if set forth herein.

80. Defendant has caused the United States to make payment of certain sums of money in the mistaken belief that the Defendant had satisfied the requirements and specifications in the

Subcontracts and the Prime Contract concerning acceptance criteria and quality assurance/quality control had been met when, in fact, it had not. Defendant also caused the United States to make such payments in the mistaken belief that the Defendant had supplied rebar that was not defective when, in fact, the rebar was defective by being bent to an incorrect radius. In such circumstances, payment was by mistake and was not authorized.

81. As a result of that unauthorized payment, the United States has sustained damages in an amount to be determined at trial.

#### **COUNT IV: UNJUST ENRICHMENT**

82. This is a claim for the recovery of monies by which the Defendant has been unjustly enriched.

83. The United States re-asserts all previous allegations as if set forth herein.

84. As described above, the Defendant received, and/or has continued to maintain control over, federal monies to which it was not entitled. Defendant was not entitled to the federal monies because Defendant had not performed the required quality work, because the rebar did not meet the acceptance criteria and quality assurance/quality control requirements and because the rebar was defective in that it was bent to an incorrect radius.

85. By directly or indirectly obtaining federal funds to which it is not entitled, the Defendant has been unjustly enriched and is liable to account for and pay such amounts, which are to be determined at trial, to the United States.

#### PRAYER

WHEREFORE, the United States prays for judgment against Defendant as follows:

(1) On Counts I and II, under the False Claims Act, as amended, for treble the amount of the United States' damages plus interest and such civil penalties as are allowable by law, together with the costs of this action and such other and further relief as may be just and proper;

(2) On Count III, for payment by mistake of fact, for the damages sustained, plus pre-judgment and post-judgment interest, costs, and all such further relief as may be just and proper;

(3) On Count IV, for unjust enrichment, for the amount of unjust enrichment, plus pre-judgment and post-judgment interest, costs, and all such further relief as may be just and proper;  
and

(4) That judgment be entered in favor of the United States and against the Defendant for actual damages, pre-judgment and post-judgment interest, litigation costs, investigative costs, disgorgement of all profits, and an accounting, to the fullest extent as allowed by law, and for such further relief as may be just and proper.

JURY DEMAND

The United States requests a trial by jury with respect to all issues so triable.

Respectfully submitted,

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September 22, 2016





Exhibit A

E&P's False Claims and False Statements Caused MOX Services to Submit False Claims to DOE									
E&P's False Claims Submitted to MOX Services			MOX Services Payments to E&P				Corresponding MOX Services Voucher Submitted to DOE That Included E&P's False Claims		
E&P Invoice Date	E&P Invoice Number	E&P Invoice Amount in \$	Internal Voucher Number	Check Number	Check Date	Check Amount	MOX Services Voucher Number	MOX Services Voucher Date	Date DOE Paid MOX Services For Voucher
2/7/2007	134202	\$441,772.99	715120000	10000834	3/8/2007	\$441,772.99	100A	3/15/2007	4/17/2007
3/1/2007	134202-1	\$644,924.52	317120000	10000847	4/17/2007	\$644,924.52	101A	4/15/2007	5/24/2007
4/1/2007	134202-2	\$817,982.24	235220000	10000867	5/17/2007	\$817,982.24	102A	5/15/2007	6/19/2007
5/1/2007	134202-3	\$860,767.64	416220000	10000871	5/31/2007	\$860,767.64	102A	5/15/2007	6/19/2007
5/28/2007	134202-4	\$743,550.32	809220000	10000892	6/28/2007	\$743,550.32	103A	6/15/2007	7/16/2007
6/29/2007	134202-5	\$683,728.77	482320000	10000913	8/15/2007	\$683,728.77	104A	7/15/2007	8/13/2007
7/11/2007	134202-7	\$287,616.50	455320000	10000934	9/13/2007	\$287,616.50	105A	8/27/2007	9/11/2007
8/20/2007	134207-8	\$1,652,138.01	468320000	10000943	9/20/2007	\$1,652,138.01	106A	8/31/2007	9/17/2007
9/7/2007	134202-9	\$254,175.08	113420000	10000988	12/14/2007	\$254,175.08	108B	11/15/2007	12/10/2007
9/10/2007	134202-10	\$42,795.00	583420000	6843	11/14/2007	\$42,795.00	108A	10/31/2007	11/19/2007
10/19/2007	151822	\$158,619.88	820520000	10000988	12/14/2007	\$158,619.88	108B	11/15/2007	12/10/2007
11/29/2007	143271	\$495,194.26	828520000	10001012	1/10/2008	\$495,194.26	109B	12/20/2007	1/4/2008
1/16/2008	143271-1	\$405,703.88	667620000	10001051	3/4/2008	\$405,703.88	111B	2/15/2008	2/29/2008
4/8/2008	143271-2	\$370,995.30	701820000	10001104	6/9/2008	\$370,995.30	114B	5/15/2008	6/2/2008
4/30/2008	159322	\$146,119.40	327820000	10001151	8/11/2008	\$146,119.40	116B	7/15/2008	7/31/2008
5/9/2008	143271-3	\$134,278.57	585920000	1001151	8/11/2008	\$134,278.57	116B	7/15/2008	7/31/2008
Totals		\$8,140,362.36				\$8,140,362.36			