

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of -)
)
Environmental Chemical Corporation) ASBCA Nos. 59280, 60760
)
Under Contract No. FA8903-06-D-8511)

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OPINION BY ADMINISTRATIVE JUDGE THRASHER

These appeals arise from the installation, removal, and replacement of internal wiring while performing a contract to construct two headquarters buildings in Afghanistan. Environmental Chemical Company (ECC) asserted two claims: a claim for the removal and replacement of the internal wiring in the two buildings (ASBCA No. 59280) and a related compensable delay claim (ASBCA No. 60607). Both claims were appealed, having been denied in their entirety by final decisions of Air Force Contract Officers (CO). The Board heard these appeals on the record per Board Rule 11. Both entitlement and quantum are before us.

Background: The Record

The record consists of 566 exhibits or Rule 4 documents¹, filings in response to an Order on Proof of Costs, the government’s testimony from four witnesses by sworn

¹ The government filed several different R4 files, with various titles, during these appeals. All references to the government R4 file will refer to the last R4 file submitted to the Board on January 5, 2018 and is cited as R4, tab __. Additionally, any reference to the R4 supplement filed on March 15, 2021 by ECC will be cited as app. supp. R4, tab __.

affidavits filed with appellants brief², and an expert report on ECC's delay claim. The record does not include a government brief, testimony from government witnesses or testimony from a government expert witness. The government did not file its initial brief and supporting affidavits within the time specified in the Board's June 28, 2021 Order, which were due no later than July 2, 2021. This due date was the result of two previously unopposed time extensions granted by the Board. The government did not file its brief. Instead, on July 3, 2021, the government filed seven supporting declarations/affidavits and a Defense Contract Audit Agency (DCAA) Audit Report, but not its brief, and requested a one-day extension to file its brief on July 4, 2021 (Bd. corr. ltr. dtd. July 3, 2021). The government did not file its brief on July 4th and on July 6, 2021 again requested another time extension till July 8, 2021 (Bd. corr. ltr. dtd. July 6, 2021).

On July 6, 2021, appellant responded opposing the government's requests arguing it had been prejudiced by the delay in that the government had gained an advantage by the additional time to work on its brief and requesting that we deny another extension of time to file its brief and that the government's filed sworn statements/affidavits be rejected (Bd. corr. ltr. dtd. July 6, 2021).

On July 7, 2021, we denied the government's request for a time extension and ordered the government to show cause why we should not grant appellant's request that we reject the government's already filed sworn statements/affidavits (Bd. corr. Show Cause-Board Order dtd. July 7, 2021). Instead of responding to our order, on July 9, 2021 the government withdrew its already filed statements/affidavits and waived submittal of briefs stating in its response,

the government respectfully withdraws its request that the statements/affidavits submitted on July 3 be accepted by the Board as part of the record. The government's defense to the subject appeals will rely upon the Rule 11 record presently before the Board establishing that Appellant has failed to satisfy its burden to prove the certified claims (Gov't R4, tabs 37 [ECC's Removal and Replacement claim] and 116 [ECC's Delay claim]) in the subject appeals, including the threshold question of law whether there was a constructive change to the contract requirements.

(Bd. corr. ltr. dtd. July 9, 2021)

² These attached witnesses' sworn statements are entered into evidence and designated as: Exhibit 1, Mr. Scott A. Hayward; Exhibit 2, Mr. Dan Turek; Exhibit 3, Mr. Ivan Leung; and, Exhibit 4, Mr. Mark Serabian.

FINDINGS OF FACT

ASBCA No. 59280

Project Background

1. The U.S. Air Force awarded Contract No. FA8903-06-D-8511 (the Contract), to ECC on April 12, 2006. The Contract was a Multiple Award Task Order Contract for Heavy Engineering Repair and Construction. (R4, tab 41) The contract delegated contract administration responsibility for providing management control over the contract to the Center for Engineering and the Environment (AFCEE)³ (*id.*). On February 26, 2010, AFCEE awarded Task Order No. 0056 (TO 56) to ECC in the amount of \$13,900,466, for the design and construction of two Headquarters Buildings: Camp Bastion and Brigade HQ Phase I COB Tombstone II (R4, tab 21 at 2). The project was accepted for beneficial occupancy as of October 12, 2011, and \$429,906 in liquidated damages were assessed (R4, tabs 486, 39 at 3-4, 487).

3. Most AFCEE employees were not located in Afghanistan, including the COs responsible for administration of TO 56. However, AFCEE did have TO 56 Contracting Officer Representative (COR) positions in Afghanistan that were frequently occupied by U.S. Air Force active duty engineering officers. AFCEE contracted out many of its contract administration activities performed on the ground in Afghanistan and AECOM Technology Company (AECOM)⁴, a construction management firm, performed contract oversight responsibilities on TO 56. AECOM employees were referred to as Title II employees. (App. br. at ex. 4, aff. of M. Serabian ¶ 3-4, 8)

Relevant Contract Provisions: Electrical Requirements

4. These appeals involve the question of whether there was a constructive change related to installation of and subsequent removal and replacement of the internal electrical wiring (cable)⁵ in the two buildings under construction. The dispute arises out of the parties' disagreement over whether the wire met the contract requirements of the 2008 National Electric Code (NEC), specifically NEC § 110.3.⁶

³ AFCEE has since been renamed the Air Force Center for Engineering and Environment (AFCEC).

⁴ AECOM as of 2015 is now AECOM Engineering Company.

⁵ The terms wiring and cable are often used interchangeably in this context.

⁶ The NEC is a set of standards published by the National Fire Protection Association (NFPA) for the safe installation of electrical wiring and equipment. The NEC is approved by the American National Standards Institute (ANSI) as ANSI NFPA

Contract Provisions Requiring Compliance with the NEC

5. Various contract provisions addressed the applicability of NEC standards to the electrical cable to be installed. Relevant here, TO 56, Modification 01 contained provisions related to electrical requirements in Appendix A1 (04 January 2010), ¶ 3.1.7, Electrical, ¶ 1. This provision requires design and construction of the power distribution system consistent with National Electric Code (NEC) and Unified Facilities Criteria (UFC) standards (R4, tab 10 at 48). Also, the Statement of Requirements, subpart 3.1.7, Distribution, stated that “[a]ll electrical installation shall be in accordance with the latest version of NEC and UFC standards.” (R4, tab 15 at 40) We find that the 2008 version of the NEC was the latest version at time of award.

6. The contract also included specialized clauses for the Joint Contracting Command Iraq/Afghanistan (JCC-I/A), some of which also addressed the standards for electrical cable. In particular, JCC-I/A clause 952.225-0013, Contractor Health and Safety (FEB 2010), directed contractors to “comply with all National Electrical Code (NEC 2008), Specifications as outlined, and MIL Standards and Regulations” (R4, tab 10 at 207). Although not mandatory, the contract also included JCC-I/A clause 952.236-0001, Electrical and Structural Building Standards for Construction Projects, which required compliance with the NEC and other standards “when it is reasonable to do so with available materials,” stating, “[A]s dictated by the Unified Facilities Criteria (UFC) the contract shall meet: . . . (2) 2008 National Electrical Code (NEC)” (R4, tab 10 at 208-09).

Application of NEC 110.3; ‘Listed’ and ‘Labeled’

7. This dispute arises from the discrete requirements set out in NEC § 110.3, Examination, Identification, Installation, and Use of Equipment, (2008) that provides:

(A) Examination. In judging equipment, considerations such as the following shall be evaluated:

(1) Suitability for installation and use in conformity with the provisions of this *Code*

FPN: Suitability of equipment use may be *identified by a description marked on or provided with a product* to identify the suitability of the product for a specific purpose, environment, or

70. While the NEC is not itself a U.S. law, its use is commonly mandated by state and local law.

application. *Suitability of equipment may be evidenced by listing or labeling.*

(R4, tab 60 at 36) (emphasis added in last paragraph) We find that the basic NEC 110.3 requirements for labeling or marking are not restricted to a label or mark on the wire itself but may also be provided with the product.

Laboratory Listing

8. NEC 110.3 creates a system by which a contractor may rely upon electrical testing laboratories to determine if equipment is suitable for certain purposes. Such laboratories “list” equipment that they have tested and determined to be suitable. The NEC provides that “if the equipment has been listed by a qualified electrical testing laboratory,” then “factory-installed internal wiring . . . need not be inspected at the time of installation.” (R4, tab 47 at 1) In other words, one may rely upon that listing to conclude that the internal wiring and construction of the equipment is suitable for certain purposes and need not be additionally inspected at the time of installation (other than to verify that the equipment was not damaged or altered).

9. The NEC defines “Listed” as a material included on a list published by an organization concerned with the evaluation of products that maintain periodic inspection of production of listed materials and that the listed product meets appropriate designated standards, or has been tested and found suitable for a specified purpose (R4, tab 60 at 32). An example is Underwriters Laboratories (UL) that is the United States organization that typically lists products it has evaluated (app. br. at ex. 2, aff. of D. Turek⁷ ¶ 20).

Product Labeled

10. Equipment manufacturers may choose to “Label” their products to indicate that a component has been listed by a testing laboratory. A label “indicates compliance with appropriate standards or performance in a specified manner.” (R4, tab 46 at 1) The NEC defines “Labeled” as material “to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having

⁷ Mr. Turek testified he has over thirty years of experience working for both government and the construction industry. From 2003-2008, Mr. Turek was an AFCEE senior division chief in San Antonio, Texas where he led the AFCEE Iraq and Afghanistan reconstruction programs from 2005-2007 and was intimately familiar with the technical content of the TOs and what AFCEE required of its contractors. He left AFCEE in 2008 to again work in the private sector. Since 2013 he has held various positions within ECC related to oversight of construction projects. (App. br. at ex. 2, aff. of D. Turek ¶ 2)

jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials.” (R4, tab 60 at 32) We find that Labeling is not restricted to a stamp on the wire itself. Labeling for United States products is done by Underwriters laboratory (UL)⁸; a marking of “CE” denotes labeling by a European Union laboratory⁹; and a “TSE” label denotes products tested by the Turkish Standards Institute¹⁰. (App. br. at ex. 2, aff. of D. Turek ¶¶ 18, 20)

Implementation of NEC Requirements in the Field

11. The NEC did not designate the testing laboratories that were qualified to perform tests for every project. Rather, it stated that the “authority having jurisdiction” (AHJ) would determine the testing laboratories from which it would accept listings (R4, tab 46 at 1). An AHJ is “[a]n organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.” The NEC cautions that the AHJ is defined “in a broad manner,” and that an AHJ may be a “federal, state, local or other regional department or individual,” or it may be “the property owner . . . commanding officer or departmental official” (R4, tab 60 at 28).

Task Force Power - AHJ in Afghanistan

12. During the 2003-2009 time frame 18 military personnel died as a result of electrical mishaps in Iraq. These tragic deaths necessarily raised concerns by the

⁸ Underwriters Laboratories (UL) listing involves a process where an independent laboratory in the United States, UL tests and then “lists” products that pass the UL testing process. UL listed products typically have a marking or labelling on the product designating the UL listing. (R4, tab 60 at 32; app. br. at ex. 2, aff. of D. Turek ¶ 20)

⁹ Under a process established by the European Union, products are tested and then certified with a *Conformité Européenne* (CE) marking indicating that the product has been assessed by the manufacturer and deemed to meet EU safety, health, and environmental protection requirements. The product’s manufacturer bears sole responsibility for declaring conformity with all requirements before affixing the CE mark to its product. (App. br. at ex. 1, aff. of S. Hayward ¶ 28)

¹⁰ In Turkey, third-party certification is done by a nationally established institute, e.g., the Turkish Standards Institute (“TSE”), which provides certification of Turkish products. When products meet the requirements of the TSE, the TSE label is provided on that product, either through a label on the packaging, or in other instances, TSE is stamped on the actual product. (R4, tab 76 at 7, 9, 11; app. br. at ex. 2, aff. of D. Turek ¶¶ 18, 20, 21; app. br. at ex. 1, aff. of S. Hayward, ¶¶ 11-14) TSE is also member of the International Electro Technical Commission (IEC) (app. supp. R4, tab 30).

relatives of the deceased and eventually Congress called for an investigation and answers for why these tragic deaths occurred and what fixes were necessary. The DoD Inspector General conducted an investigation from August 2008 –March 2009 on the deaths in Iraq (R4, tab 162 at 8), as well as another Report which was issued July 24, 2009 regarding an Assessment of Electrical Safety in Afghanistan. The Afghanistan report identified numerous problems with electrical safety in the Afghanistan theatre and made recommendations to address those problems (R4 tab 161 at 5, Report No. SPO-2009-005).

13. In October of 2008 Task Force Protecting Our Warfighters and Electrical Resources (T F Power) was established by Combined Joint Task Force – 101 (CJTF-101) to “prevent the loss of life and government property through immediate and long-term measures that will significantly reduce the number of electrical and fire incidents throughout the combined/joint operations area.” (R4, tab 161 at 18) Thereafter, on August 3, 2010, T F Power was appointed the Authority Having Jurisdiction (AHJ) over electrical codes for all US Military Bases in the Islamic Republic of Afghanistan. Relevant to this appeal, T F Power became the authority to promulgate rules for implementing NEC 110.3 in Afghanistan. (App. supp. R4, tab 4 at 4, 14) By August 3, 2010 its policy for electrical components in Afghanistan, required:

Marking, Listing, Labeling

All electrical components shall have either credentials:

1. The CE marking certifies that a product has met EU consumer safety, health or environmental requirements.
2. Listed / labeled and display the marking of a Nationally Recognized Testing Laboratory (NRTL) such as Underwriters Laboratory (UL).
3. Items or electrical equipment without marking / listing / labeling shall not be used.
4. Testing Laboratories within IRoA that are without National Recognition may submit credentials to the AHJ for review and consideration.
5. Electrical equipment may be field tested to a recognized and commonly applicable performance and safety standard. Testing methods as well as the credentials of the

testing service must be submitted to the AHJ for review and consideration.¹¹

(App. br. at ex. 1, aff. of S. Hayward¹² ¶ 27; app. supp. R4, tab 4 at 6) T F Power recognized two types of credentials: the CE marking (European Union marking) or Listed / labeled and displaying the marking of a Nationally Recognized Testing Laboratory (NRTL) such as Underwriters Laboratory (UL). Of note, this policy still did not restrict listing to a particular laboratory but instead retained the term “Nationally Recognized Testing Laboratory”. (*Id.*) However, on September 16, 2010, United States Armed Forces – Afghanistan (USFOR-A) issued an Electrical Policy: Laboratory Symbol Guide that restricted the definition of a qualifying NRTL to certain specified laboratories:

USFOR-A ELECTRICAL POLICY: LABORATORY SYMBOL GUIDE

The accepted laboratories as of 16 Sep 10 with the following limitations:

1. All electrical products shall be In(sic) accordance with USFOR-A Electrical Policy.
2. Items or electrical equipment without marking / listing / labeling or not meeting the product standard shall not be used.
3. The symbol on the device is not enough. It is the purchaser’s responsibility to make certain:
 - a. The laboratory is fully accredited for the location of test, product tested and test applied. Refer to the following for additional information:

¹¹ TO 56 also references UFC 3-501-01, Electrical Engineering, providing that “Underwriters Laboratories (UL) or third-party certification is required for all basic equipment.” (R4, tab 164 at 65, ¶ 2-1)

¹² Between September 2009 and December 2012, Mr. Hayward was ECC Senior Program manager for Northern Afghanistan, headquartered in Kabul. He managed the AFCEE and USACE projects, which were primarily located in Northern Afghanistan but also managed some projects in Southern Afghanistan and often conferred with ECC program managers for Southern projects regarding common issues. (App. br. at ex. 1, aff. of S. Hayward ¶ 5)

i. The Laboratory website as listed below.

ii. For United States[sic] the Nationally Recognized Testing Labs (NRTL) as listed by the US Department of Labor OSHA www.osha.gov

iii. For the European Union as listed by website below.

(R4, tab 166 at 1) The record includes a copy of the specified CE mark qualified NRTLs but does not include the United States list on the OSHA website during this time period.¹³

14. TO 56 restricts mandatory regulatory updates to the date the TO was awarded, February 26, 2010. The contract statement of work at Attachment 1 (January 2010) at § 2.0 provides:

The Contractor shall identify, comply with and ensure that its personnel and its subcontractors and subcontractor personnel at all tiers obey all applicable federal, state, and local statutes; DoD/Air Force/host nation instructions, manuals, handbooks, regulations, guidance, and policy letters, International Building Code (IBC), Unified Facility Criteria (UFC), National Fire Protection Association (NFPA), *National Electrical Code (NEC)*; Afghanistan federal, provincial, and local Statutes; ARCENT and Air Force/Army/Afghanistan Instructions, Manuals, Handbooks, *Regulations, Guidance, and Policy Letters; Executive Orders (EOs), Afghanistan Construction Standards, Central Command orders and directives applicable to personnel in Afghanistan, including but not limited to USCENTCOM, North Atlantic Treaty Organization (NATO), International Security Assistance Force (ISAF) fragmentary orders, instructions and directives; and include all changes and amendments in effect on the date of issuance of this TO* unless specific

¹³ We attempted to independently search for the specific 2010 U.S. laboratories but were unable to find the list.

relief is sought by the Contractor in writing and granted by the Contracting Officer (CO).

(R4, tab 10 at 19-20 § 2.0) (emphasis added) T F Power's promulgations of regulatory implementation of NEC 110.3 were never incorporated contractually into TO 56's requirements. There were only three modifications to TO 56, none of which changed the implementation of NEC 110.3 at time of award. The first modification, effective June 7, 2010, incorporated some changes to the statement of work but there was no change to the above language at § 2.0. (R4, tab 15 at 11) Modification 2 did not involve the statement of work and was effective on November 30, 2010 (R4, tab 21 at 1). Modification 3 was effective on November 28, 2011 but also did not make any changes to the above language at § 2.0. (R4, tab 27 at 1)

Inspection and Approval Requirements

15. TO Attachment 3 (Statement of Work Appendix A1, Statement of Requirements), Paragraph 4.0 Submittals, required submission of all materials and equipment to the Title II inspector (inspector) and COR for review and acceptance (R4, tab 10 at 51-52). Additionally, this section directs that, "[T]he Contractor shall submit the following to COR and Title II for review and approval: . . . Equipment, Fixture, Finishing, and Hardware Submittals: The Contractor shall submit equipment, fixture, finishing, and hardware submittals to the COR and Title II to review and approve or disapprove within seven business days." (*Id.* at 52).

16. Requests for approval of equipment and materials were usually accomplished by submittal of a Material Approval Submittal form that identified the relevant specification reference in the TO, a description of the material, and any supporting documents such as photos, etc. to the submittal register (*see, e.g.*, R4, tab 39 at 32-33). The submittal register list is 40 pages long, includes many items such as electrical equipment, and is very detailed. Although TO 56, Attachment 23 (Appendix C4, Submittal Register), indicates that all material construction submittals are to be submitted for government approval, it does not specifically list electrical wiring (*app. br. at ex. 1, aff. of S. Hayward ¶ 20; R4, tab 10 at 149-50 § 26 20 00*).

17. TO 56 also included Paragraph 5, Section E, Inspection and Acceptance, which provided that inspections and acceptance (including the pre-final) would be performed by the COR in accordance with: FEDERAL ACQUISITION REGULATION (FAR) 52.246-01, CONTRACTOR INSPECTION REQUIREMENTS (APR 1984), FAR 52.246-12, INSPECTION OF CONSTRUCTION (AUG 1996) and PKV-E001, ISPECTION OF CONTSTRUCTION (AUG1996) (Deviation) (MAR2003) (R4, tab 10 at 3-4).

18. TO 56 SORS paragraph 8.0 states that “[t]he quality of all materials used on site will be verified by the Title II inspector and a recommendation to accept or reject the materials will be transmitted to the CO or COR. The CO or COR will be the final decision authority. Recommended criteria for the Contractor to follow include any recognized and current UFC standards.” (R4, Tab 10 ¶ 8 at 60) (*emphasis added*).

ECC Use of Vatan Electrical Wire - COR Approval

19. ECC decided to use a wire manufactured by a Turkish company, Vatan. Mr. Hayward testified that the use of Vatan wire was prevalent on projects in Afghanistan and that ECC previously submitted Vatan wire on both AFCEE and United States Army Corps of Engineers (USACE) task orders and contracts, including task orders under this contract. (App. br. at ex. 1, aff. of S Hayward ¶ 44) Mr. Turek also testified that “Vatan wire and cable was widely used and approved at Camp Bastion/Leatherneck on other AFCEE task order/contracts and was listed on an AFCEE ‘pre-approval’ list of materials for this contract” (app. br. at ex. 2, aff. of D. Turek ¶ 20).

20. AFCEE published a Recommended Materials List Afghanistan, in 2008 and an updated list in February 2010. Both these lists recommended Vatan wires, among others, as pre-approved for AFCEE projects. Although there were Vatan electrical cables listed on these pre-approved lists, the specific cable ECC proposed, TS 9758, was not one of the pre-approved cables. (R4, tab 76 at 35; app. supp. R4, tab 13 at 1)

ECC Seeks Guidance from the CO

21. Before ECC submitted its interior wiring for approval in early September 2010, some of their other electrical submittals were rejected by the Title II inspectors and CORs for not being listed/labeled. ECC argued that such rejections were contrary to the requirement of the contract; specifically that not all electrical materials were required to be listed/labeled. This issue continued back and forth until ECC forwarded a letter to the CO (Toscano) on September 22, 2010, requesting interpretation of the contract requirements regarding the listing and labeling of electrical equipment (R4, tab 343 at 3-6). On September 29, 2010, CO (Toscano) responded that the contract required ECC to:

provide electrical materials that are listed /labeled by either Underwriters Laboratory (where specified) or other third party testing certification laboratories for all basic electrical equipment. . . . After reviewing ECC’s request for interpretation I believe this to be a material procurement issue and believe it is within the scope of the

contract for ECC to provide electrical materials that are listed/labeled.

(R4, tab 374 at 2)

22. AECOM's daily Title II report of November 11, 2010 notes an ECC deficiency stating under significant events, "[m]aterials being used for installation of interior wiring which do not meet project specifications." And references specification "Division 26 Section 26 20 00 Part 2 Product." (App. supp. R4, tab 12) Although electrical wiring is not listed on the Contract Submittal Register, the specification cited refers to the Contract Submittal Register for electrical items (R4, tab 10 at 149-50). That same day, the new COR (Cpt. Jorge Lopez) sent an email to ECC (Greg Ross and Roger Stokes) and copied ECOM personnel (Mark Serabian and Ray Gillette) stating he understood that ECC was already pulling¹⁴ electric cable that was not UL or third party listed. Additionally, he stated:

I believe we have gone through this path before. My understanding is that electrical material requirements calls [sic] for materials to be listed by third party certification agency (or UL). This has been communicated several times including from the CO. Materials not meeting these requirement [sic] will be deemed deficient and should be requested to be removed from site.

(R4, tab 350 at 2)

23. An on-site meeting was held the next day, November 12, 2010, between ECC management, QC representatives, and the COR (Cpt. Lopez). (App. br. at ex. 4, aff. of M. Serabian ¶ 11)¹⁵ Although Mr. Serabian now works for ECC, in November 2010, he was employed in Southern Afghanistan by AECOM, an AFCEE support contractor responsible for performing Title II inspections (*id.* at ¶ 4). Mr. Serabian testified that Ray Gillette was the AECOM employee assigned full-time as the Title II QA manager for TO 56 but on or about November 12, 2010, Ray Gillette was out of the country of Afghanistan on R & R, and he was assigned to fill in for Mr. Gillette on the date of the meeting (*id.* at ¶¶ 9-10). Mr. Serabian also testified that one of the

¹⁴ The term "pulling wire" is an industry term for installing the wire.

¹⁵ Mr. Serabian is currently an ECC employee. In 2010, he was an AECOM employee responsible for oversight of AFCEE contracts in Southern Afghanistan. Part of his duties during November 2010, included performing Title II duties services for AFCEE's various construction projects being performed in the region, including TO 56 located at Camp Bastion. (App. br. at ex. 4, aff. of M. Serabian ¶¶ 1, 3-5)

topics discussed was approval of ECC's intended interior electrical wire cable for the TO 56 project (*id.* ¶ 12; app supp. R4, tab 12).

24. ECC did not submit their proposed internal wire through the formal submittal process but instead presented a sample of the wire to the COR during the meeting. The cable proposed for approval was manufactured by a Turkish company, Vatan. (App. br. at ex. 4, aff. of M. Serabian ¶ 13; app. supp. R4, tab 27). During the meeting, ECC asserted that Vatan was listed on the AFCEE pre-approve list. COR Lopez examined the Vatan electrical cable and informed ECC that the Vatan electrical cable was acceptable for them to use on the project (app. supp. R4, tabs 12, 27; app. br. at ex. 4, aff. of M. Serabian ¶ 14).¹⁶

25. Later that evening, the COR sent an email to Mr. Albert Kellner (AFCEE) concerning their previous discussion about ECC's wire deficiency informing him that the issue had been fixed and the "subject electrical wire is third party listed." Additionally, in that same email, the COR also addressed the issue of ECC not submitting the wire through the contract submittal process. COR Lopez in discussing approval of the wire stated "the issue was not having the proper data sheet on site when our QA asked for it For some reason wiring was not required to be a submittal according to specifications for this project. I believe that this was an oversight in our documentation." (R4, tab 350 at 1) We find that ECC was required to submit their proposed wire to the Title II inspector and COR for approval but was not required to submit a formal submittal request.

26. COR Lopez's acceptance of the Vatan electrical wire was also documented in the daily Title II report that same day prepared by AECOM's representative Sanjay Kumar. The entry on that date noted, "Meeting between AFCEE, Title II and ECC QCM held to discuss materials being used for installation of interior wiring which do not meet project specifications. Materials were accepted by COR." (App. supp. R4, tab 12; app. br. ex.4, aff. of M. Serabian ¶ 15)

27. Likewise, later on December 16, 2010, the COR again confirmed his decision to approve the Vatan electric cable via email. COR Lopez stated to the ECC's Project Manager at the time, Greg Ross, "So these are the same cables we discussed on site that other time... If so I already closed that chapter. On site it was shown it was third party listed." (App. supp. R4, tab 27) Further, the government confirmed the Vatan electrical cable was CE marked. In response to a question from AECOM, Wayne McDermott, contacted Vatan directly asking if the wire ECC was installing met the requirements to receive the CE mark. A Vatan representative confirmed

¹⁶ Although Mr. Serabian was the acting Title II inspector during this meeting due to Mr. Gillette's absence, there is no record or testimony from Mr. Serabian as to his advice to the COR, if any, during this meeting.

on December 22, 2010 that, in addition to the TSE marking on its wire, its wire also qualified for a CE marking. (App. br. at ex. 1, aff. of S. Hayward ¶ 40; R4, tab 22.)

28. Thereafter, via email on December 23, 2010, ECC Project Manager Greg Ross confirmed to COR Lopez that the Vatan electrical cable was also CE compliant. The email provided catalogue data on Vatan wire and cables, including the interior wire being installed inside buildings. That wire was PVC insulated non-sheathed single core cables with copper conductor HO7V-U, 450/750 V, TS 9758, HD 21.3, S3/VDE 0281. The data sheet for that wire included ISO, <HAR>, TSE, and CE marks. (App. br. at ex. 1, aff. of S. Hayward ¶¶ 28, 39; R4, tab 361) In response to the December 23rd Ross email, AECOM Wayne McDermott stated on December 23, 2010 “Got your message. I sent an e-mail to Vatan yesterday evening. See attached. Concur that the wiring should meet spec, but notice in the reply that it says ‘with CE Marking.’” (App. br. at ex. 1, aff. of S. Hayward ¶ 41; R4, tabs 360; 361 at 4)

29. We find that COR Lopez and AECOM representative Mr. McDermott conducted their due diligence and found that ECC’s proposed Vatan cable was listed by a Nationally Recognized Testing Laboratory (NRTL) TSE (i.e. “third party listed”) and CE compliant. We also find that COR Lopez had authority under the contract to approve ECC’s proposed Vatan wiring and did so.

ECC Orders Wire and Proceeds to Install

30. After the COR’s approval on November 12, 2010, ECC proceeded to order the electrical cable from Vatan, and obtained delivery to the project site at Camp Bastion, in southern Afghanistan. Upon receiving delivery of the Vatan electrical cable, ECC commenced installation of the electrical cable on the project. (App. br. at ex. 2, aff. of D. Turek ¶ 7) Mr. Turek testified that according to project records, installation started on December 3, 2010 and continued through April of 2011 (app. supp. R4, tab 26 at 970; app. br. at ex. 1, aff. D. Turek ¶ 7).

AECOM Continues to Question the Use of Vatan Wire

Task Force Power Report

31. After the November 12, 2010 approval by the COR, ECC continued to install the wiring on the project but had to respond to various inquiries from AECOM representatives and AFCEE contracting officials about the Vatan electrical cable being installed (app. br. at ex. 2, aff. of D. Turek ¶ 8). Perhaps one of the most important events was when T F Power inspected the electrical aspect of the project and issued a report on January 29, 2011 (R4, tab 365 at 1). Among the nine other cited deficiencies, it found that the Vatan interior wire ECC had installed, (4 mm², HO7V-U, TS 9758) was “not recognizable as labeled and listed per NEC 110.3.” (*Id.* at 1, item 6).

Each finding (deficiency) was accompanied by a photo. Although difficult to discern some details, the initial photo shows Vatan wire cable packaging captioned with “*Wire type is not recognizable as labelled and listed per NEC 110.3*” (*id.*). There is also an enlarged version of the same photo included in the report that clearly shows the packaging is Vatan manufactured, it is the cable (wire) installed by ECC, TS 9758, dated 01/29/2011, and displays TSE markings on the packaging (R4, tab 365 at 3). Although the wire packaging clearly displays the TSE symbol, it does not display the CE mark. Additionally, there is an attached copy of a page from the Vatan’s catalogue that references 450/750 V TS 9758 wire and at the bottom of that same page displays the TSE and CE marks (R4, tab 365 at 4). However, T F Power report did not address these facts.

32. ECC received a copy of the report on January 29, 2011. ECC’s project manager responded to the COR on February 16, 2011, addressing the Task Force’s findings related to the wire, “NEC 110.3 covers examination, identification, installation, and use of equipment. It is unclear how this section is applicable to wire installed in the building” (R4, tab 84 at 2-3).

Questioning Continues

33. The government ignored the COR’s approval of the wire and the questioning continued into March 2011. The Title II inspector Gillette emailed ECC’s project manager on March 30, 2011, that he had inspected some power cables staged onsite for intended use and did not observe any marking or listing as required by NEC 110.3. Furthermore, he stated Title II would not recommend the materials for usage on the project. (R4, tab 65 at 1) It is uncertain whether the cables referenced are the interior wires at issue. ECC responded to Gillette by asking him to identify the specific cables referenced stating, “[we] have some that we are using and others that are scrap. We have a new shipment of cables on the way for the distribution system” (R4, tab 381 at 1).

34. ECC continued to install the wiring but AFCEE representatives continued to pursue the Vatan electrical cable issue despite the COR’s approval. The minutes from the April 18, 2011 on-site meeting between ECC and AFCEE representatives, including then COR Cpt. Melvin, reflect that ECC was now seeking tests of the Vatan cable to demonstrate compliance with applicable standards. The state the electrical distribution cable may be replaced: “Electrical cables were minutes sent to a CE certified lab for testing. Because of the critical nature of this item, if ECC does not hear back from the lab in 1-2 days then the cable will be reordered and replaced.” The results of any lab results, if there were any, are not in the record. Additionally, no explicit order for removal is mentioned in the minutes. (R4, tab 94 at 2)

35. Additionally, the record is devoid of any evidence of government contracting officials, either COs or CORs, explicitly revoking the earlier November 12, 2010 approval of the Vatan electrical cable, or any direction to ECC to stop installing the approved Vatan electrical cable. Mr. Turek testified that the government did not provided such direction, “until on or about May 9, 2011 or May 11, 2011”. He further testified that during the May 9th meeting the project COR “made clear that the Vatan electrical cable was a deficiency that would have to be corrected through removal and replacement”, which was then followed by a Contracting Officer Performance Deficiency Letter on May 11, 2011 (app. br. ex. 2, aff. of D. Turek, ¶¶ 9 - 11). The May 9, 2011 meeting minutes are ambiguous at best on this point. The meeting minutes do not indicate Mr. Turek was an attendee nor do they indicate a direct order to replace the cable; they only state, “Electrical Distribution Cable – will be replaced. Order placed. Delivery date pending based on shipping company ETA – approximately 2 weeks, - May 18th.” (R4, tab 87 at 3)

36. On May 11, 2011, the CO (Rendon) issued a Performance Deficiency Letter (PDL), requesting ECC submit a Corrective Action Plan (CAP) by May 18, 2011 (R4, tab 394 at 2 ¶ 8). Included among the alleged performance deficiencies, was use of “unlisted wires.” The PDL asserts that electrical deficiencies were noted by Title II and Task Force Power since November 2010, and have yet to be addressed. The PDL further states that “Contracting Officer, Mr. Santiago Toscano . . . determined that all electrical material is to be listed.” (*Id.* at 1 ¶ 2).

ECC Removes Vatan Wiring and Orders UL Listed Materials

37. As soon as possible after receiving the PDL on May 11, 2011, ECC moved to implement the corrective actions, including removal of all Vatan electrical cables that had been installed and ECC’s Quality Control Report shows removal was completed on May 20, 2011 (app. supp. R4, tab 26 at 1771). Additionally, ECC immediately ordered the UL listed materials necessary to replace the Vatan wire. These materials were not readily available in Afghanistan and had to be air shipped into Camp Bastion from the United States. This ordering and delivery of UL listed electrical cable took time to execute. ECC also immediately negotiated a lump sum subcontract modification with METAG, a Turkish subcontractor, who performed the removal of the Vatan electrical cable and the installation of the UL listed electrical cable. (App. br. at ex. 2, aff. of D. Turek, ¶¶ 23-27) By the time AFCEE sent its May 11, 2011 PDL, over 80% of the electrical cable work had been completed using the Vatan product (*id.* at ¶ 22; app. supp. R4 tab 26 at 970, 1540).

Liquidated Damages

38. On August 5, 2011, CO Renden issued a notice of forbearance to ECC, stating the government intended to assess liquidated damages (LDs) at a rate of \$6,369

each day of unexcused delay after August 7, 2011 until the work was completed or accepted pursuant to the contract (R4, tab 101 at 2). By October 24, 2011, AFCEE calculated the LDs for 69 days at \$429,906 (R4, tab 103). ECC's REA and subsequent Claim challenged the ultimate assessment of \$436,276.50 (R4, tab 30 at 3; R4, tab 37 at 1).

ECC's Request for Equitable Adjustment (REA), Claim and the Government's Contracting Officer's Final Decision (COFD)

39. On June 12, 2012, ECC filed an REA in the amount of \$1,138,669 for the removal and replacement of Vatan electrical cables that were previously approved by the COR. The REA also challenged the government's position on accessing \$436,276.50 in liquidated damages given the delays alleged to have resulted from the government's order. (R4, tab 30 at 3) The government denied ECC's REA on July 17, 2013 and thereafter, on September 6, 2013, ECC converted its REA to a certified claim (R4, tabs 35, 37).

40. A COFD was issued on February 19, 2014 denying ECC's claim in its entirety (R4, tab 39). Additionally, the CO found that the contract required liquidated damages be assessed for each day ECC failed to complete the work by the construction/field completion date. The CO also went on to conclude that because ECC did not meet the specifications of the contract it did not meet the construction completion date and therefore liquidated damages should be assessed until the date of acceptance (*id.* at 3-4). Thereafter, ECC timely filed a notice of appeal to the Board on April 28, 2014, that was docketed as ASBCA No. 59280.

ADDITIONAL FINDINGS OF FACT

DELAY CLAIM, ASBCA No. 60760

41. ECC submitted a certified delay claim on April 19, 2016 seeking \$916,840.82 for a compensable contract extension of 114 days of delay for the period between July 31, 2011 and November 21, 2011 (R4, tab 520). The government issued a COFD denying ECC's claim in its entirety on August 1, 2016 (R4, tab 533 at 6). Thereafter, ECC timely appealed the COFD and their claim was docketed as ASBCA No. 60760.

ECC's Expert Delay Report

42. ECC submitted an expert report on ECC's delay claim dated January 8, 2021 (app. supp. R4, tab 8).¹⁷ The ECC Expert Delay Report (ECC Delay Report) was authored by Ms. Trudie Ward, an ECC employee (*id*). We reviewed Ms. Ward's qualifications and find her qualified to be an expert in construction contract delay analysis.¹⁸ Ms. Ward employed the Time Impact Analysis (TIA) method and concluded that ECC was delayed 168 calendar days between May 30, 2011 and November 14, 2011, as a result of direction from the government to remove the Vatan wire and that ECC is entitled to a compensable time extension of 114 calendar days for the delay period between July 31, 2011 and November 21, 2011 (app. supp. R4, tab 8 at 5, 9, 22).

43. Her review was based upon review of five time periods during the project:

(1) The approved baseline: This is the original government schedule approved by the government on May 13, 2010. This schedule projected a project completion date of November 29, 2010 with zero calendar days of float. (App. supp. R4, tab 8 at 13 at ¶¶ 6.1.1.)

(2) April 2011 Progress – Original schedule: This schedule is the last approved contemporaneous schedule immediately prior to the impact period being analyzed. The schedule forecasted a project completion date of July 11, 2011 with 81 calendar days of float. Validation of contract dates and actual start and finish dates was conducted between the schedule, Daily Quality Control Reports, Title II Reports and the contract period of performance. This validation identified needed revisions to this schedule in order to provide an accurate calculation of project impacts.¹⁹ After review, the original 81 calendar days of float reported was found to be incorrect because it was projected from utilizing an incorrect contract completion constraint date of September 30, 2011. (App. supp. R4, tab 8 at 14, ¶¶ 6.2.2)

¹⁷ This report replaced a Time Impact Analysis, dated April 2016, submitted with ECC's claim on April 19, 2016 (R4, tab 520 at 3).

¹⁸ Ms. Ward's qualifications summary can be found at app. supp. R4, tab 8 at 23 and her curriculum vitae at app. supp. R4, tab 9 at 1-8.

¹⁹ These corrections are defined in section 6.3.2 of the report at 15.

(3) April 2011 Progress – Corrected: This schedule represents the corrected version of the last approved contemporaneous schedule prior to the impacts analyzed in the Report. The corrected²⁰ schedule projected a completion date of June 26, 2011 with 34 calendar days of float. (R4, tab 8 at 15 ¶¶ 6.3.1)

(4) Vatan Wire-Fragnet Schedule: the purpose of this schedule was to model the impact of removing and replacing the Vatan wire in the two buildings. Ms. Ward took identified impact activities and added them into the Fragnet -1 schedule (see, table at app. supp. R4, tab 8 at 18 ¶¶ 6.4.2). After the addition of the identified impact activities, “the original electric activities were progressed using the actual completion dates reported within the Title II Daily Reports.” (App. supp. R4, tab 8 at 19)²¹

(5) The As-built Schedule November 21, 2011: The As-Built Schedule shows a final project completion date of November 21, 2011, this is 114 calendar days beyond the Construction/Field Date (FPoP) of July 30, 2011. Additionally, the As-Built schedule identified a 20-day performance gain to the project completion date. (App. supp. R4, tab 8 at 20)

The Critical Path of FRAGNET-1

44. Below are Ms. Ward’s conclusions regarding the critical path:²²

The critical path of Schedule FRAG-1 started with AFCEC’s issuance of a Performance Deficiency Letter directing ECC to replace the existing Vatan wire with UL

²⁰ The specific corrections are identified/discussed in section 6.3.2. at 15-16.

²¹ The actual four progressed activities are displayed in the table at app. supp. R4, tab 8 at 19 ¶¶ 6.4.2.).

²² This specifically addresses the critical path (longest path) at the relevant time of the contract change till contract completion. The critical path for each to the previous time periods are found at: – Approved Baseline, (app. supp. R4, tab 8 at 13, ¶¶ 6.1.2); April 2011 Progress- Original, (app. supp. R4, tab 8 at 14, ¶¶ 6.2.2); and, April 2011 Progress – Corrected (app. supp. R4, tab 8 at 17, ¶¶ 6.3.3).

listed material (Exhibit 7) [May 11, 2011] took over the critical path. [sic]

On 05/12/2011 the critical path became ECC procuring the UL Approved wire and remained critical thru the forecasted delivery date of 05/27/2011.

On 05/30/2011 the critical path becomes the installation of the UL Approved wire and remained critical until complete on 11/14/2011.

Punch out and inspections for both buildings follows leading into commissioning of both buildings. On 11/29/2011 the correction of punch list deficiencies was planned to complete initiating the pre-final inspection of both buildings on 11/30/2011. Government acceptance with final cleanup to be performed concurrently with demobilization completing the project on 12/11/2011.

(App. sup. R4, tab 8 at 19, ¶¶ 6.4.3). In summary, Ms. Ward’s analysis found the government’s actions affected the activities on the critical path of the contractor’s performance of the contract.

Overall Conclusions

45. Ms. Ward’s overall conclusions are:

The TIA [Time Impact Analysis] shows an impact of 168 calendar days due to the Government directing the removal and replacement of the Vatan wire. The as-built schedule shows a net delay of 114 calendar days of delay. ECC’s efficiencies and mitigation efforts resulted in a 54 calendar day gain to the project completion date.

Schedule Description	Data Date	Construction Completion Date	Project Completion Date	Contract Completion Date	Delay/ Gain (CD’s)	Project Impact (CD’s)
Approved Baseline	26-Feb-10	28-Nov-10	29-Nov-10	29-Nov-11	-	
April 2011 Progress – Original	30-Apr-11	11-Jul-11	11-Jul-11	30-Sep-11	81	81
April 2011 Progress – Corrected	30-Apr-11	25-Jun-11	26-Jun-11	30-Jul-11	(47)	34

Vatan Wire – Fragnet Schedule	30-Apr-11	10-Dec-11	11-Dec-11	30-Jul-11	(168)	(134)
As-Built Schedule 11-21-2011	21-Nov-11	14-Nov-11	21-Nov-11	30-Jul-11	20	(114)

(R4, tab 8 at 21 ¶ 7.0)

46. Ms. Ward’s finding of 114 calendar days of project delay was based upon the difference between the contractual required completion date July 30, 2011, and the project completion identified on the As-built schedule, November 21, 2011. (App. supp. R4, tab 8 at 22 ¶¶ 7.1)

The Government’s Non-Response

47. The government chose not to submit any testimony in response to Ms. Ward’s expert report. Likewise, the government chose not submit a brief to advocate its position. The only response in the record consists of two internal government emails submitted in response to ECC’s response to the Board’s Order on Proof of Costs. The two emails addressed the government’s response for an analysis of ECC’s June of 2015 REA. (Bd. corr. ltr. dtd. November 19, 2020, Respondent’s Response to ECC’s July 15, 2020 Statement of Costs at exs. 3-4) (hereinafter “Respondent’s Response”) The first is an email review of Mr. Andrew Barboza dated June 18, 2015 and the second, another email response authored by Mr. Mathew Fitch dated June 24, 2015 (*id.*).

48. We do not ascribe any weight to either of these documents. The government does not provide any foundation identifying who these individual are or their credentials. Furthermore, their analysis provides little, if any, relevant information. Their analysis is of ECC’s REA some six years before ECC’s evidence, including Ms. Ward’s Report. (Respondent’s Response exs. 3-4)

Summary

49. We find that ECC is entitled to 114 days of compensable delay

ADDITIONAL FINDINGS OF FACT

QUANTUM ASBCA Nos. 59280, 60760

BACKGROUND

Order on Proof of Costs

50. We issued an Order on Proof of Costs on May 22, 2020. ECC filed their response to our Order on July 15, 2020 (Bd. corr. Appellant's Response to Order on Proof of Costs dtd. July 15, 2020). The response was a short narrative explaining the materials submitted with reference to two Excel spreadsheets – one for the *Remove and Replacement* claim (ASBCA No. 59280) and the *Compensable Delay* claim (ASBCA No. 60760). The government's response to ECC's Response to the Order, on the removal and replacement claim, includes a DCAA audit conducted on the costs claimed (Respondent's Response at ex. 2). No such audit was conducted on ECC's Compensable Delay claim. Instead, the government responded with two internal government analyses dated June 18, 2015 of ECC's REA and a May 2011 Impact Analysis Schedule. (Respondent's Response at exs. 3-4: *see also*, finding 48)

Testimony of Mr. Ivan Leung

51. Mr. Ivan Leung testified he was ECC's Director of Project Controls and supervised the project staff conducting the project controls for the project. He served in this role for the entire period of performance of TO 56. (App. br. at ex. 3, aff. of I. Leung ¶ 1) As Director of Project Controls, Mr. Leung was in charge of overseeing the establishment of the Project cost tracking systems, including development of the Work Breakdown Structure (WBS) for the Project. Mr. Leung was also the key ECC Manager involved with setting up, maintaining, and administering ECC's Corporate Accounting, Project Controls, and Cost Tracking systems that were approved by DCMA in 2011. (App. br. at ex. 3, aff. of I. Leung ¶ 2) He explained in detail how ECC's accumulated project costs were tracked on the TO 56 project and given a unique project number. Additionally, he testified that the Statements of Costs for the two TO 56 claims (app. supp. R4, tabs 18, 20.) were taken from ECC's accounting system and the direct costs in the Statements of Costs in support of the two claims are the actual labor, materials, and subcontract costs are from ECC's accounting system and are supported by documents included in ECC's Supplemental R4 filings. (App. supp. R4, tabs 17, 32; app. br. at ex 3, aff. of I. Leung ¶ 5).

52. Mr. Leung also testified in detail regarding the specific areas of the two costs claims. That testimony is addressed in those specific areas of the two quantum claims below.

ADDITIONAL FINDINGS OF FACT

QUANTUM, ASBCA No. 59280

ECC's Equitable Adjustment, Removal & Replacement Claim

53. On September 6, 2013, ECC filed a claim for reimbursement for removing and replacing the Vatan cable with UL listed cable in the amount of \$1,168,553 (R4, tab 37). The CO denied ECC's Claim in its entirety (R4, tab 39). ECC appealed the denial which was docketed as ASBCA No. 59280 (R4, tab 40).

Replacement Claim: Defense Contract Audit Agency (DCAA) Audit Report

54. On September 18, 2015, DCAA issued Audit Report No. 4141-2015E17200002 Independent Audit Report on Environmental Chemical Corporation's (ECC) Contract Claim, dated September 6, 2013, Under Contract No. FA8903-06-D-8511, Task Order 0056.²³ (hereinafter "Audit"). The Report's findings questioned \$657,656 of the claimed \$1,168,553. The auditors verified that all claimed costs were incurred, but questioned some costs due to finding of noncompliance with FAR 31.201-2, Allowability and FAR 31.201-4, *Determining Allocability*. (Audit at 2)

55. The audit was divided into six elements: (1) Direct labor; (2) Applied Indirect Labor Rates; (3) Subcontract Costs; (4) General and Administrative (G&A); (5) Profit, and (6) REA Preparation Costs.

1. Direct Labor

56. Mr. Guy Simmons was responsible for the supervision of all the field work associated with replacing all the cable. ECC's claim includes \$32,939 in direct labor costs for Mr. Simmons.²⁴ Although the auditors took no exceptions to the labor rates, and validated all the claimed costs were incurred, they questioned the \$32,939 in direct labor costs claimed. The auditors' rationale was that they were unable to determine if the labor costs were associated with the removal and reinstallation of cable, therefore, they were not able to confirm whether or not the claimed labor amounts were allocable to the subject claim. (Audit at 10 ¶ 2 a.)

²³ This government audit was conducted in response to ECC's July 15, 2020 Statement of Costs and is found at Exhibit 2 of Respondent's Response. In the interest of brevity, this audit will be referenced as "Audit".

²⁴ ECC initially claimed \$34,989 in direct labor costs but the auditors discovered mathematical mistakes in the labor rates applied by ECC. ECC concurred in their corrections (Audit at 11).

57. The auditor's conclusions were based upon their review of a sample of 82 daily job site reports provided by ECC for the months of June, July and August of 2011 (Audit at 12). They noted the review disclosed that Mr. Simmons attended at least five meetings²⁵ during July and August that appeared to be unrelated to the removal and reinstallation of the cable. The auditors interpreted this to indicate that he was managing other projects than the removal and reinstallation of cable. (*Id.*).

58. ECC disagreed with the auditor's findings, stating:

The second labor cost element in ECCI's claim was for the supervision of all the field work associated with replacing all the wiring. A single supervisory individual's time (Guy Simmons) was included in the claim for the duration of the field work. In spite of the fully supported actual cost evidence associated with Mr. Simmons time, and in spite of the fact that our contract requires all Subcontractor field work be supervised by an ECC representative, DCAA has questioned all of those costs as well.

All questioned direct costs described above also had indirect markups applied and so the associated indirects for the questioned direct costs were also questioned by DCAA.

(Audit at 26)

59. We find the auditors' conclusions, questioning all direct labor costs because of attending five meetings, to be speculative. Given the titles of these meetings, Mr. Simmons' attendance could have been to discuss the progress on his portion of the project, i.e. when the replacement of wire would be completed so they would have power to test and complete their part of the project or probably various other possibilities. We just do not know: to guess at this would be mere speculation. What we do know is that the auditors confirmed that all these costs were incurred and that Mr. Simmons was responsible for overseeing the replacement of the wire (Audit at 26 ¶ 3). Additionally, Mr. Leung testified to collecting these costs and that they were directly incurred in furtherance of this claim (app. br. at ex 3, aff. of I. Leung ¶ 5). This evidence was not opposed by the government. In the nature of a jury verdict we find ECC is entitled to \$32,939 in direct labor costs.

2. Indirect Labor Costs

²⁵ July 2, 2011, Telecommunications Cabling; July 15, 2011, Security Systems Installation; July 20, 2011, Fire stopping; August 06, 2011, DDC for HVAC Installation; August 17, 2011, Testing, Adjusting & Balancing (Audit at 12).

60. ECC claimed indirect costs totaling \$32,939 were based on applying the 2011 provisional billing rates (Fringe, Overhead, and G&A) to the claimed labor amounts for the Senior Project Manager, Guy Simmons. The claimed indirect rates were based upon ECC’s interim billing letter “Revised Provisional Billing Rates and Cost of Money Factors for Calendar Year 2011.” (Audit at 13 ¶¶3 b, c). Mr. Leung testified that from his review of ECC’s Rule 4 Supplement Tabs 24, 18, and 20, it is clear that ECC used the appropriate DCAA approved fringe rates. (App. br. at ex 3, aff. of I. Leung ¶ 6.) However, the auditors questioned the indirect costs in their entirety as a result of being directly associated with their findings that questioned all direct labor claimed (Audit at 3, 13 ¶ c.). Based upon our findings on ECC’s direct labor claim, we reject the auditor’s findings.

61. Indirect costs include fringe benefits that are charged on direct labor costs and those fringe costs are included in the Statement of Costs (app. supp. R4, tabs 18, 20). All fringe costs were prepared using the DCAA audit letter that established ECC’s indirect cost rates for 2011 (app. supp. R4, tab 24; app. br. at ex. 3, aff. of I. Leung ¶ 6). Our calculations, based upon our previous direct labor finding of entitlement, are:

DIRECT LABOR (Mr. Simmons) & FRINGE, OVERHEAD, & G&A FINDINGS	
DIRECT LABOR	\$32,939
2011 ECC Fringe - Non DBA Field (35.69%)	\$11,756
2011 Overhead-Engineering and Construction (E&C) (43.30%)	\$14,262
2011 G&A (8.70%)	\$2,865
TOTAL:	\$61,822

3. *Subcontract Claims*

62. The claimed subcontract costs of \$899,920 represents the largest segment of the overall claimed costs. Although the audit confirmed ECC’s claimed costs were incurred it was unable to determine whether \$538,955 of the total costs claimed were allocable to the removal and reinstallation of cable claim (Audit at 14). The audit’s findings were based upon review of invoices covering the period between May and August 2011 from the four subcontractors that were contracted by ECC to complete the work. The subcontractors listed in the claim are: (1) Metag; (2) Vega Services, Inc.; (3) Kelly & Hayes Electrical Supply; and (4) DHL Express USA (*id.*).

(1) *Metag*

63. Mr. Leung testified that ECC negotiated modifications with its existing subcontractor Metag for the removal and replacement of the Vatan cable and that those

modifications are reflected in the Rule 4 Record (app. br. at ex. 3, aff. of I. Leung ¶¶ 9-10; app. supp. R4, tabs 22-23). There were two modifications to the existing subcontract, one for each building. The Camp Bastion modification was executed on June 26, 2011 and Camp Leatherneck on August 22, 2011. (*Id.*)

64. ECC submitted five Metag invoices for the costs claimed (app. supp. R4, tab 32 at 49-56). The auditors traced the amounts billed on the five Metag invoices to the amounts on ECC's work authorizations and purchase orders for Metag, and did not find any discrepancies. They also reviewed ECC's work authorizations and purchase orders to determine the scope of work to be performed by Metag. The auditor's review revealed that Purchase Order 344675, dated June 14, 2011, awarded the installation of electrical, fire alarm, security access control, and non-secure communications for building 2 to Metag. Therefore, ECC contracted with Metag to perform work in addition to removal and reinstallation of wiring/cable. (Audit 16-17) The auditors questioned all the claimed Metag costs on the basis they could not verify their allocability, stating:

During our review of the Metag invoices, we noted the description of the services billed was "TO 56 Electrical Works." This description is very general and does not allow us to determine if the work billed is solely related to the removal and reinstallation of wiring/cable. Hence, we were unable to confirm ECC's assertions, and we questioned the \$356,931 claimed cost for Metag.

(Audit at 17)

65. Mr. Leung testified that all of ECC's subcontract invoices in support of this claim were included in ECC's Supplemental Rule 4 record at tab 32 (app. br. at ex. 3, aff. of I. Leung ¶ 5). Our review of the five invoices included as evidence at that location does include the invoice noted in the audit as the rationale for questioning all of Metag costs, i.e. we are unable to locate a "Purchase Order 344675, dated June 14, 2011". Additionally, it is obvious that the auditors did not have access to Mr. Leung's testimony or the fact that the agreement for Metag to perform the work to remove and replace the electrical cable for both buildings was a modification to already existing subcontracts for other work on the project (app. supp. R4, tabs 22-23). Given our review of the evidence we find that ECC has proven its entitlement to the entire claimed amount of \$356,931.

(2) Vega Services Inc.

66. The auditors traced the Vega Service Inc. invoices to ECC's work authorizations and purchase orders for Vega, and did not find any discrepancies. They

also reviewed ECC's work authorizations and purchase orders to determine the scope of work to be performed by Vega Services Inc. Below are details of their specific findings about the Vega Services scope of work:

ECC's work authorizations for Vega named VEGA.CSA.HERC.4502.056.WA01 awarded the installation of electrical, fire alarm, security access control, and non-secure communications for the Marine Brigade Headquarters buildings at Camp Bastion and Camp Leatherneck.

Work authorization VEGA.CSA.HERC.4502.056.WA01.MOD1 dated June 14, 2011, modified ECC's contract with Vega Services Inc. to de-scope its work. The modification de-scoped the work from two buildings to one building.

(Audit at 17)

67. The auditors also reviewed the description of the work billed on Vega Service's invoices, and questioned \$116,265 of the \$133,567 claimed cost. The descriptions on the Vega invoice related to the questioned costs are as follows:

Provide all labor and equipment required to complete the required remaining installation for all Electrical Works (interior and distribution) for the LCE and ACE Marine Headquarters facilities...

Provide all labor and equipment required to complete all testing, commissioning, and integration as required per plans, specifications, and manufacturer's instructions for the Electrical Works (interior and distribution) remaining for the LCE and ACE marine headquarters facilities.

Provide all labor and equipment required to complete all required Power Generation Plant Cabling, controls, terminations, etc. for the LCE and ACE Marine Headquarters power generation facility (one facility) as detailed in the design drawings... This includes all other works that need to be completed to provide a fully functional, code compliant power generation plant.

(Audit at 17-18)

68. Based upon these descriptions, the auditors were unable to confirm ECC's assertions. The auditors accepted the difference of \$17,302 because the description of the invoice was the following:

Provide all labor and equipment required to re-pull all required Electrical Wiring for the LCE and ACE Marine Headquarters facilities that was removed as part of Option I and reinstall in accordance with the design drawing...

(Audit at 18). We agree and find ECC is entitled to \$17,302.

(3) Kelly & Hayes Electrical Supply (K & H)

69. ECC claims \$365,957 on behalf of K & H (Audit at 18). The auditors traced the amounts billed on the ten Kelly & Hayes Electrical Supply invoices to the amounts of ECC's purchase orders for K & H, and did not find any discrepancies. All invoices are found in the record (app. supp. R4, tab 32). Based on their review of ECC's Claim and the K & H invoices, they determined ECC purchased compliant wire from Kelly & Hayes Electrical Supply for the TO 56 project in Afghanistan. As they noted, ECC's claim states "*Our claim includes all subcontractor and material costs for removing and replacing cable.*" Thus, they reviewed the descriptions on the K & H invoices to verify ECC's claimed cost for electrical materials related only to the purchase of compliant wire. (Audit at 18) Below are details of their review of the invoices and specific findings:

- The description of items procured on invoice R00260 and R00267 is for plastic tape, a hammer drive anchor, conduit of different types, gloves, struts, adapters, connectors, temporary lighting, and various other electrical materials.
- The description of items procured on invoice R00399 is for aluminum service poles.
- The description of items procured on invoice R00352 is for switch boxes.
- The description of items procured on invoice R00675 is for circuit breakers, marking tape, outlet box brackets, switches, couplings, adapters, and various other electrical materials.
- The description of items procured on invoice R00772 is for struts and open lighting.

- The description of items procured on invoice R00782 is for NEMA 3 pole range, mounting panel for pole range, and power distribution block.

(Audit at 19).

70. The auditors were unable to confirm ECC's assertions based upon the invoice descriptions. They accepted the difference of \$316,008 because the descriptions on invoices R11573, R99788, R99876, and for some items on invoice R00675 (D-03c-4) were for electrical wire/cable (Audit at 19; app. supp. R4, tab 32 at 37-47). They also noted ECC purchased 399,700 feet of wire (Audit at 19).

71. We have reviewed the K & H invoices and concur with the auditors' findings. Although the invoices questioned appear to possibly relate to electrical installation of the cable, we have no direct proof that is the case. Therefore, we find that ECC has met its burden of proof on entitlement to \$316,008 of the \$365,957 claimed in reimbursement for the purchase of cable from K & H.

(4) DHL Express USA

72. Mr. Leung and Mr. Turek testified it was necessary to air freight the replacement UL listed materials to Afghanistan, and this was done using the available air shipping company, DHL. Their air freight invoices for the UL listed electrical cable are included in ECC's claim. (App. supp. R4, tab 32 at 1-22; app. br. at ex 3, aff. of I. Leung ¶ 10; app. br. at ex 2, aff. of D Turek ¶ 27) The auditors compared three of the five DHL invoices to ECC's purchase orders for DHL, and did not find any discrepancies. ECC could not provide the auditors with purchase orders related to two of the DHL invoices. (Audit at 19).

73. The auditors reviewed the descriptions on the DHL invoices and matched the DHL invoices to the K & H invoices to verify ECC claimed shipping cost related only to transporting compliant wire. They accepted the difference of \$27,655 because invoice RNH0000085114 states "ECC Cable to Bastion" and the shipment date correlates to dates wire was purchased from Kelly & Hayes Electrical Supply. However, they did question \$15,810 of \$43,465 claimed for DHL Express because they could not find similar shipping references that correlate to the wire purchased in May 2011. (Audit at 19-20)

74. ECC disagreed with their audit findings (audit at 20 ¶ d; 26) Mr. Leung testified that the R4 record contains the invoices for materials purchased to replace the Vatan electrical cable and the invoices for ECC's subcontractor, Metag, who removed

and replaced the Vatan electrical cable (app. br. at ex. 3, aff. of I. Leung ¶ 5). We accept the auditor’s findings. ECC is entitled to \$27,655.

(5) 2011 G&A (Applied to Subcontractors – 8.74 Percent)

75. Mr. Leung testified that the (G&A) rates are uniform across work performed by ECC and that the G&A rates included in the Statement of Costs for ECC on the TO 56 claims are those determined by the DCAA in their 2011 audit letter (app. br. at ex 3, aff. of I. Leung ¶ 8; app. supp. R4, tab 1). ECC applied an 8.74% 2011 G&A Rate to the total amount of subcontract costs, as presented on ECC’s claim submission. The auditors accepted the 8.74% number and applied it in their calculations to the questioned subcontract costs. (Audit Ex. A, at 9, 22)

(6) Profit 11 Percent

76. The Statement of Costs for the two TO 56 claims contains a profit rate that was calculated at 11% (app. supp. R4, tabs 18, 20). The 11% profit was calculated using the Weighted Guidelines Application and the various risk factors are shown in those calculations. The Weighted Guidelines Application is a common regulatory calculation for profit appropriate on modifications (app. br. at ex. 3, aff. of I. Leung ¶ 13).

77. The auditors did not offer an opinion or recommendation on the applied 11% since they considered it to be a matter of negotiation for the CO. We find the 11% profit claimed to be reasonable.

78. We find that total subcontract costs are as follows:

METAG	\$356,931
Vega Services Inc.	\$17,302
Kelly & Hayes Electrical	\$316,008
DHL	\$27,655
Total Subcontract Costs	\$717,896
2011 G & A, (8.74%)	\$62,744
Profit (11%)	\$78,968
Total Subcontract Costs	\$859, 608

(7) Claim for Request for Equitable Adjustment (REA) Preparation Costs

79. ECC claims \$4,571 for ECC Contract Manager, Chris Cannon’s preparation of ECC’s REA submitted on June 12, 2012 and denied on July 17, 2013. This claim is based upon 33.5 claimed hours at \$61.18 per hour plus applied indirect

costs and associated profit (Audit at 20 ¶ 5b). After reviewing ECC’s recorded costs and related documentation the auditors found 12.5 hours were not supported by employee time cards. This led the auditors to question \$1,537 of the \$4,118 (cost minus profit) claimed, leaving a verified amount of \$2,581 in total costs.²⁶ The auditors also verified that none of the claimed costs were incurred after July 17, 2013, the date the government denied the REA, i.e., none of these claimed costs were incurred in preparation of the resulting claim that followed on appeal. (Audit at 21 ¶¶ (3)(i), (ii)).

80. Although the audit verified a total cost of \$2,581 that included fringe costs, overhead engineering and construction (E&C), and G&A, the auditors maintained their prior position of not addressing profit (Audit at 21, *see* cost calculation table). Based upon our prior profit rate finding of 11%, we find that ECC is entitled to \$283.91 in profit on its REA preparation claim for a total amount of \$2,865 (*id.*).

Summary of Remove and Replace Claim Quantum findings ASBCA No. 59280

81. We find that ECC is entitled to an equitable adjustment of \$924,295 based upon its claim in appeal ASBCA No. 59280. Below is a summary of our findings:

TOTAL DIRECT LABOR	\$61,822
TOTAL SUBCONTRACT COSTS	\$859,608
REA PREPERATION COSTS	\$2,865
TOTAL CLAIM AMOUNT	\$924,295

ADDITIONAL FINDINGS OF FACT

COMPENSABLE DELAY CLAIM - QUANTUM

ASBCA No. 60760

82. ECC submitted a delay claim on April 19, 2016 seeking \$916,840.82 for a compensable contract extension of 114 calendar days of delay for the period between July 31, 2011 and November 21, 2011 (R4, tab 520). Our findings have established entitlement to 114 calendar days of compensable delay (finding 49). Unlike the Removal and Replacement claim above, the government did not submit a DCAA Audit, expert report, or testimony.

²⁶ The auditors originally questioned all of the proposed REA preparation costs. ECC disagreed with their findings. After discussing the findings with ECC during an exit conference, the auditors revised their questioned cost to reflect their current position - only labor costs associated with labor hours unsupported by the employee time cards. (Audit at 22 ¶¶ c, d)

Testimony on Preparation of Direct Labor Costs

83. Mr. Ivan Leung testified that he prepared the detailed cost calculations for the delay claim (app. br. at ex. 3, aff. of I. Leung ¶ 6.). ECC maintained four Program Management Offices (PMOs) within Afghanistan to support its various projects. These PMO locations were Bastion, Kabul, Kandahar, and Bagram. The TO 56 project was supported by the Bastion PMO which included Program Management, Accounting, Finance, Logistics, Procurement, and Administrative Staff. The labor costs of these personnel along with their support costs (Lodging, Meals, Incidentals, Office Equipment, Office Rent, etc.) were collected within the Bastion PMO costs on a monthly basis. These costs were then allocated to each project that the Bastion PMO supported (including TO 56) for any given month, using a percentage of Direct Labor cost charged to the project by those working in the Bastion PMO. (*Id.* at ¶ 7; app. supp. R4, tab 25).

Testimony on preparation of Extended Field Overhead/General Requirements

84. Mr. Leung testified that ECC's costs for its General Requirements, sometimes referred to as extended field overhead, were included in the delay claim and the record is at app. supp. R4, tab 18. Mr. Leung also explained the methodology used to capture these costs. ECC's WBS captured time-related Labor and Other Direct Costs (ODCs) for ECC's General Requirements for the period of delay claimed in 2011. From these monthly costs, Mr. Leung extrapolated the daily cost for any given month during that period. These daily costs were then applied to the specific number of days for any given month where delay occurred. (App. br. at ex 3, aff. of I Leung ¶ 11)

85. Attached to ECC's claim were 888 pages of supporting cost data (R4, tab 520 at 20 – 908). The attached cost spreadsheets present the accounting data collected by ECC's government approved accounting system for the period between July 31, 2011 and November 21, 2011. ECC explains this costs data is divided into two sections. The first section presents all labor costs. An index (*id.* at 21-22) of all the labor costs is followed by the associated payroll evidence (*id.* at 24-90). The second section presents all non-labor costs, also referred to as Other Direct Costs (ODCs) (*id.* at 91-908). Pages 91 through 92 are a summary of ODC costs and pages 93-908 are the supporting data for the ODC costs. The cost and pricing data for the ODCs is organized by bookmarks. Each bookmark is labeled according to the line item number shown in the Non Labor Cost Index. (R4, tab 520 at 91-92. The spreadsheets also include a calculation for Fringe, Overhead, and G&A for labor costs (*id.* at 22-23) and G&A for ODC (*id.* at 91-92).

86. Our findings establish ECC is entitled to \$916,840 in compensable delay costs. The summary below details the elements of our findings:

COMPENSABLE DELAY CLAIM COST SUMMARY	
Direct Labor	\$251,682
Fringe	\$63,619
Overhead	\$139,205
Subtotal Total Labor	\$454,506
Subtotal Non Labor (ODCs)	\$388,643
G & A	\$73,691
Entitlement Total	\$916,840

87. Unlike the removal and replacement claim, the government did not submit a DCCA audit in support of this compensable delay claim. In fact, the government did not submit anything in opposition to this claim.

DECISION

ENTITLEMENT DECISION

ASBCA No. 59280

This appeal results from appellant's installation of internal wiring during construction of two buildings in Afghanistan. Appellant alleges that after installing substantially all of the wiring, the government rejected the wiring and required appellant to remove and replace the wiring at appellant's expense. Appellant argues that the government order to remove and replace the wire was a constructive change or in the alternative was a waiver of requirements because of the government's previous approval of the initially installed wiring. (App. br. at 29) For appellant to demonstrate a constructive change, the burden of proof is on appellant to show: (1) that it performed work beyond the contract requirements, and (2) that the additional work was ordered, expressly or impliedly, by the government. *Bell/Heery v. United States*, 739 F.3d 1324, 1335 (Fed. Cir. 2014). The parties agreed to have this appeal heard on the record per Board Rule 11. These appeals present an unusual challenge because the government has waived submittal of any briefs or any testimony in lieu of solely relying upon the record to establish that appellant is unable to meet its burden.

Was Appellant's Use of the Vatan Wire Rejected by the Government?

To prevail in its appeal, appellant must show that the authorized government representative required or compelled the contractor to perform the work, and that government personnel did not merely offer advice, comments during discussions, suggestions, or opinion. See *McElroy Mach. & Mfg. Co.*, ASBCA No. 46477, 99-1 BCA ¶ 30,185 at 149,358; *Quality Plus Equip., Inc.*, ASBCA No. 46932, 96-2 BCA

¶ 28,595 at 142,759; *Labarge, Inc.*, ASBCA 19845, 78-2 BCA ¶ 13,376. Appellant argues in its brief that the government’s repeated rejections of the wire, within the context of the financial imperatives involved, amounted to a constructive rejection of the wire (app. br. at 34-35; 35 at n.2). We agree.

The record is devoid of any evidence that the government explicitly ordered appellant to replace the wiring being installed and replace it with what the government considered compliant wire (finding 35). Mr. Turek testified that the government did provide such direction, “on or about May 9, 2011 or May 11, 2011”. He further testified that during the May 9th meeting the project COR “made clear that the Vatan electrical cable was a deficiency that would have to be corrected through removal and replacement”, which was then followed by a Contracting Officer Performance Deficiency Letter on May 11, 2011 (*id.*). Although Mr. Turek’s testimony is unopposed by the government, our findings indicate the May 9, 2011 meeting minutes are ambiguous at best on this point. The meeting minutes do not indicate Mr. Turek was an attendee at these meetings nor do they indicate a direct order to replace the cable; they only state, “Electrical Distribution Cable – will be replaced. Order placed. Delivery date pending based on shipping company ETA – approximately 2 weeks, - May 18th.” (*Id.*)

However, our findings do indicate that the government never accepted COR Lopez’s approval of the wire and continued to reject the wire by finding it non-compliant with contract requirements (finding 33). Even while the government knew appellant was installing the wire, inspectors continued to find the wire non-compliant with NEC 110.3 (findings 33-34). Additionally, T F Power conducted an investigation of the project and found that the wire did not comply with NEC 110.3 (finding 31). The CO met with appellant as the wire was being installed and discussed the issue of the wire and eventually on May 11, 2011 issued a Performance Deficiency Letter (PDL) requesting appellant submit a Corrective Action Plan to include an alleged performance deficiency of “unlisted wires.” The PDL asserted that electrical deficiencies had been noted by Title II inspectors and T F Power since November 2010 and have yet to be addressed. (Finding 36) Appellant argues this letter was a clear rejection of the installed electrical wire and that removal and replacement with UL wiring was the only course available given the government’s repeated rejections of the wire within the context of the project given 80% of the wiring was already installed and the prospect of facing \$6,369 in daily liquidated damages (app. br. at 35 n.2)²⁷.

The government consistently found appellant’s wire non-compliant but did not specifically state why other than it failed to meet the requirements of NEC 110.3 because the wire was not listed or labeled. We conclude the government’s consistent

²⁷ \$436,276.50 in Liquidated Damages were ultimately assessed at the completion of the contract.

position that the installed wire did not meet the contract requirements, culminating in the CO's PDL, coupled with the business imperatives existing at that time, amounted to an implied government rejection of the wire and a constructive order to replace the installed wire with other compliant wire. Despite the fact the cable was approved by the COR, who had authority to do so, the government clearly rejected appellant's wire as non-compliant with NEC 110.3.

Given the Rejection of the Wire, the Burden Shifts to the Government to Prove the Installed Wire Did Not Comply with the Contract Requirements

When the government rejects work as not in compliance with its specifications the burden of proof shifts to the government to demonstrate that fact. *Ensign-Bickford Aerospace & Def. Co.*, ASBCA No. 57929, 16-1 BCA ¶ 36,533 at 177,969; (citing *Sw Welding & Mfg Co. v. United States*, 413 F.2d 1167, 1176 n.7 (Ct. Cl. 1969); and *Yardney Tech. Prods., Inc.*, ASBCA No. 53866, 09-2 BCA ¶ 34,277 at 169,333-34). If the government does not meet that burden, the contractor "is entitled to an equitable adjustment under the Changes clause" of the contract. *M. A. Mortenson Co.*, ASBCA No. 53647 *et al.*, 06-2 BCA ¶ 33,400 at 165,575. Therefore the burden shifts to the government to prove that the wire was not listed or labeled and thus non-compliant with NEC 110.3.

The parties waived a hearing on these appeals and instead requested these disputes be heard on the record. The government also chose not to introduce any testimony or submit any briefs arguing its position. Instead the government relies upon our review of the record to ferret out and divine its legal arguments from a voluminous record. Ours is an adversarial system where it is incumbent upon, and a duty of, the advocates, not the Board, to advocate for their respective clients. It is not incumbent upon the ASBCA to make the government's case for them, or to dig through a voluminous record in search of support for an unsubstantiated argument or uncorroborated assertion. *Lebolo-Watts Constructors, LLC.*, ASBCA No. 59740 *et al.*, 21-1 BCA ¶ 37,789 at 183,426. Given the fact the government did not submit any testimony or briefs, we conclude the government has failed to meet its burden of showing the wire did not meet the contract requirements of NEC 110.3, i.e., that it was not labeled and listed. Therefore, appellant is entitled to an equitable adjustment.

That being said, we have made a diligent effort to review the record and conclude the record yields the same conclusion i.e., based upon the record, the government has failed to prove that the cable did not meet the requirements of NEC 110.3. The beginning point for arriving at this conclusion is a determination of what were the contract requirements? Surprisingly, the record discloses there was some confusion over this basic issue.

What were the contract requirements?

NEC 110.3 creates a regime where specific testing laboratories are not designated for every project. Rather it creates the concept of an authority having jurisdiction (AHJ) that would determine which laboratories qualified to list wire. The NEC cautions that the AHJ is defined “in a broad manner,” and that an AHJ may be a “federal, state, local or other regional department or individual,” or it may be “the property owner . . . commanding officer or departmental official”. (Finding 12) We conclude this definition is broad enough to encompass a CO or COR. In fact, this appears to have been the practice in Afghanistan for some time. Additionally, TO 56 specifically requires any electrical materials be submitted to the COR for approval or disapproval (findings 15-18). This necessarily required the COR (or CO in some cases) to interpret what laboratories met the requirements for listing wire and if the product was labeled in compliance with NEC 110.3. This all changed with the creation of T F Power.

T F Power was created in October 2008 as a result of the tragic military deaths resulting from electrical accidents in Iraq and Afghanistan and the investigations that followed. It was tasked with several responsibilities but, relevant to this appeal, T F Power became the authority to promulgate rules for implementing NEC 110.3 in Afghanistan. (Findings 13-14). Although T F Power already existed at the time of award, February 26, 2010, the record does not disclose the existence or implementation of any T F Power NEC 110.3 rules at that time. In the face of this ambiguity, we conclude TO 56 envisioned the CO to be the primary AHJ by delegating authority to the COR for inspecting and approving or disapproving electrical items falling under NEC 110.3. Our reading of the record indicates this had been the practice in Afghanistan for some time. (Findings 19-20) In fact, appellant forwarded a letter to the CO on September 22, 2010 requesting interpretation of the contract requirements regarding the listing and labeling of electrical equipment. On September 29, 2010, the CO responded stating: “provide electrical materials that are listed / labeled by either Underwriters Laboratory (where specified) or other third party testing certification laboratory for all basic electrical equipment.” (Finding 21)

The record indicates T F Power’s first promulgation of NEC 110.3 rules occurred on August 3, 2010, some six months after award. These new rules specified T F Power recognized only two types of credentials: the CE marking (European Union marking) or listed / labeled and displaying the marking of a Nationally Recognized Testing Laboratory (NRTL) such as Underwriters Laboratory (UL). (Finding 13) Of note, this policy did not restrict listing to a particular laboratory but instead retained the term “Nationally Recognized Testing Laboratory”. However, quickly thereafter on September 16, 2010, T F Power issued rules significantly narrowing the rules by restricting the definition of a “Nationally Recognized Testing Laboratory” to only specific laboratories, stating “For United States (sic) the Nationally Recognized

Testing Labs (NTRL) as listed by the US Department of Labor OSHA www.osha.gov” and “For the European Union as listed by website below.” (*Id.*) In other words, this latter proclamation imposed a new requirement to use only directed sources from the United States or the EU. (*Id.*)

In summary, there were three possible NEC 110.3 standards by the time appellant sought to have the COR approve its proposed wire: one from the CO and two from the T F Power. Our review of the contract language leads us to conclude that the applicable standard to be applied is the one issued by the CO based upon the standard at time of award. It is self-evident in government contracts that a contractor is only bound to the requirements in the contract at the time of award unless modified by a change to the contract pursuant to the changes clause. Be that as it may, we read the following special clause in this contract to specifically address this principal as it relates to updates to regulations implementing NEC 110.3. The contract statement of work at Attachment 1 (January 2010) provides:

The Contractor shall identify, comply with and ensure that its personnel and its subcontractors and subcontractor personnel at all tiers obey... [the] National Electrical Code (NEC)... [and] Regulations, Guidance, and Policy Letters; Executive Orders (EOs), Afghanistan Construction Standards, Central Command orders and directives applicable to personnel in Afghanistan, including but not limited to USCENTCOM, North Atlantic Treaty Organization (NATO), International Security Assistance Force (ISAF) fragmentary orders, instructions and directives; *and include all changes and amendments in effect on the date of issuance of this TO* unless specific relief is sought by the Contractor in writing and granted by the Contracting Officer (CO).

(Finding 14) (emphasis added). We interpret this language to encompass any directives/regulations issued by T F Power and the contractor is only responsible for such rules as exist at time of award, February 26, 2010. It follows that any T F Power mandates issued after award are only binding on the contractor if formally incorporated into the contract by modification. Obviously, the government has the authority to change the contract requirements under the changes clause. However, if it chooses to do so it must do so bilaterally or unilaterally entitling the contractor to a possible equitable adjustment.

There were only three modifications to TO 56 (finding 14). Although two modified contract requirements, none of them incorporated the requirement changes

specified by T F Power.²⁸ Additionally, Modification 1 was effective June 7, 2010 and T F Power's first promulgation of NEC 110.3 rules did not occur until August 3, 2010. So we conclude that the appropriate standard to apply is the one stated by CO Toscano on September 29, 2010. The CO stated that appellant must, "provide electrical materials that are listed/labeled by either Underwriters Laboratory (where specified) or other third party testing certification laboratory for all basic electrical equipment . . . that are listed/labeled." (Finding 21)

*Was Vatan a Listed Third Party Qualified / Nationally Recognized Testing Laboratory?*²⁹

The burden of proof is on the government to show the wire installed was non-compliant with the requirement of NEC 110.3 as stated by CO Toscano, i.e. that the wire was not listed. Mr. Turek's unopposed testimony is that TSE is the nationally recognized testing laboratory in Turkey (finding 10 at n.10). Despite this, the government's repeated rejection of the Vatan cable implicitly meant that the government found TSE not to be a qualified third party or nationally recognized testing laboratory per NEC 110.3. Although implied, we are unable to find anything in the contemporaneous record where the government specifically alleged TSE was not a NEC 110.3 qualified third party or nationally recognized testing laboratory. In fact, after COR's approval of the wire, any government mention of TSE is conspicuously absent in the contemporaneous record. On the other hand, Mr. Turek's unopposed testimony was that Vatan cable had been used on other projects in Afghanistan and that TSE is the nationally recognized testing organization in Turkey. Likewise, Vatan wire, although not this specific wire, was among AFCEE pre-approved wire lists. (Findings 19-20) In summary, the government has failed to present any proof that TSE was not a qualified third party or nationally recognized testing laboratory per NEC 110.3. and, as a result, that the Vatan wire was not "listed".

²⁸ The first modification, effective June 7, 2010, incorporated some changes to the statement of work but there was no change to the above language at § 2.0.; Modification 2 did not involve the statement of work and was effective on November 30, 2010 after the COR had already approved the wire; and modification 3 was effective on November 28, 2011, after the wire had been removed and UL compliant wire ordered May 20, 2011. (Findings 14).

²⁹ We agree it is unclear whether appellant's cable was CE certified. The Title II inspector who assisted and advised the COR when he approved the cable contacted the manufacturer who confirmed they were authorized to display the CE mark. Likewise, the COR had access to Vatan's catalogue which also displayed the CE mark. However, there is no direct proof such as testimony or photos displaying the CE mark. As a result, based upon the record, we cannot conclude whether or not the cable was CE certified.

Labeled by a Qualified Testing Laboratory

We also conclude the Vatan wire was labeled in accordance with NEC 110.3. Our findings establish that NEC 110.3 states the “suitability of equipment use may be *identified by a description marked on or provided with a product*” (finding 7) (emphasis added). Likewise, NEC 110.3 defines “Labeled” as material “to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials” (finding 11). Our findings establish, per the definition above, that NEC 110.3 does not require the label, symbol, or other identifying mark to be stamped on the wire (finding 7). There is evidence in the record, a photo taken during T F Power’s inspection, showing that the wire’s packaging as delivered displays the TSE label (finding 31). Our conclusion is that this is sufficient to meet the definition of labeled under the appropriate standard at that time. Again, the government has failed to prove otherwise.

COR Approval

Additionally, probably the strongest evidence that the wire was compliant with NEC 110.3 requirements is the fact that the COR, who possessed authority to approve the wire, inspected the wire and approved it on November 12, 2010 (findings 23-29). T F Power had already issued two regulations changing the rules for complying with NEC 110.3 by the time the COR approved the wire but the government had not contractually implemented those rules (findings 13-14). Surprisingly, there is no direct contemporaneous evidence in the record that anyone at the construction site was even aware of the T F Power changes. There is no mention of the T F Power rules by the CO, COR, or even the Title II inspectors who later found the wire non-compliant. Additionally, the record is devoid of mention of T F Power until it was brought in to conduct an inspection after the approval and the wire was almost installed. Although T F Power’s inspection report found the wire non-compliant, it only referenced NEC 110.3 but none of its implementing regulations.

CONCLUSION ON ENTITLEMENT

In summary, we conclude, based upon the record, that appellant did meet the requirements of NEC 110.3 as awarded, i.e. that the wire was listed and labeled per NEC 110.3, and the government has not entered any evidence to the contrary. Conversely, the government has failed to meet its burden of proof, i.e. that the wire was not listed or labeled per NEC 110.3. As a result, appellant is entitled to an equitable adjustment under the contract’s Changes clause.

QUANTUM DECISION

ASBCA No. 59280

As claimant, appellant has the burden of proving its damages with “reasonable certainty.” *Precision Pine & Timber v. United States*, 596 F.3d 817, 833 (Fed. Cir. 2010). “[R]easonable certainty” has been defined as, “more than a guess, but less than absolute exactness or mathematical precision” (*id.*). This standard has sometimes also been stated as the moving party “bear[ing] the burden . . . of proving the amount of loss with sufficient certainty so that the determination of the amount of damages will be more than mere speculation”. *Lisbon Contractors, Inc. v. United States*, 828 F.2d 759, 767 (Fed. Cir. 1987). To prevail, appellant must prove three elements: (1) liability- that the government did something that changed the contractor’s costs for which the government is legally liable, i.e. entitlement; (2) causation-that there exists a causal nexus between the basis for liability and the claimed increase in costs; and (3) resultant injury. *Servidone Constr. Corp. v. United States*, 931 F.2d 860, 861 (Fed. Cir. 1991). We conclude, based upon our findings, that appellant has proven its damages with reasonable certainty. Additionally, we conclude that appellant has proven entitlement, causation, and resultant injury entitling appellant to an equitable adjustment under the changes clause in the amount of \$924,295, plus interest under 41 U.S.C. § 7109 from September 6, 2013 until payment. (Findings 53-81)

DECISION

COMPENSABLE DELAY CLAIM - ASBCA No. 60760

Entitlement

ECC seeks a compensable contract extension in the amount of \$916,840.82 for 114 calendar days of delay for the period between July 31, 2011 and November 21, 2011. “To prove entitlement to a compensable delay, [ECC] must show that the government was responsible for specific delays; overall project completion was delayed as a result; and any government-caused delays were not concurrent with delays within appellant’s control”. *WECC, Inc.*, ASBCA No. 60949, 21-1 BCA ¶ 37,948 at 184,306, *citing, Columbia State Bank*, ASBCA No. 59531, 16-1 BCA ¶ 36,399 at 177,456, (*quoting, Versar, Inc.*, ASBCA No. 56857 *et al.*, 12-1 BCA ¶ 35,025 at 172,128). Additionally, ECC “must show that the government’s actions affected activities on the critical path of the contractor’s performance of the contract.” *Kinetic Builder’s Inc. v. Peters*, 226 F.3d 1307, 1317 (Fed. Cir. 2000).

ECC submitted an expert report that found ECC is entitled to 114 calendar days of compensable delay for the period between July 31, 2011 and November 21, 2011 (findings 42-48). Based upon our review of the report, we concur with its conclusions.

Accordingly, our findings establish that the government was responsible for specific delays; the overall project completion was delayed as a result; the government-caused delays were not concurrent with delays within appellant's control; and, the government's actions affected activities on the critical path of the contractor's performance of the contract (findings 41-46). The government did not submit any testimony or brief in opposition to appellant's expert report. The government did submit two emails in opposition that responded to appellant's REA submittal but not to the appellant's expert report. Consequently, we did not ascribe any weight to these submittals. (Findings 47-48)

We conclude that ECC has proven entitlement to a compensable delay of 114 calendar days.

Quantum Compensable Delay Claim, ASBCA No. 60760

Appellant presented testimony from Mr. Leung explaining that he prepared the cost calculations for the delay claim and how the claimed costs were collected and captured in ECC's accounting system. He also testified that the associated general requirements costs (or extended field overhead costs) were included within the delay claim and how he calculated those costs. (Findings 83-85) Appellant's claim included a large amount of detailed support documentation (888 pages of supporting costs data) collected from ECC's accounting system that included names of employees, payment amounts, etc. (Finding 85) Below is a summary of our findings:

COMPENSABLE DELAY CLAIM COST SUMMARY	
Direct Labor	\$251,682
Fringe	\$63,619
Overhead	\$139,205
Subtotal Total Labor	\$454,506
Subtotal Non Labor (ODCs)	\$388,643
G & A	\$73,691
Entitlement Total	\$916,840

Unlike the removal and replacement claim, the government did not submit a DCCA audit addressing this compensable delay claim. In fact, the government did not submit anything in opposition to this claim (finding 87).

Based upon our review of Mr. Leung's testimony and the associated supporting data, we conclude that appellant has met its burden of proof by a preponderance of the evidence. Additionally, the government has not entered any evidence in opposition. Accordingly, we conclude appellant is entitled to compensable delay in the amount of \$916,840 with interest under 41 U.S.C. § 7109 running from April 19, 2016 till paid.

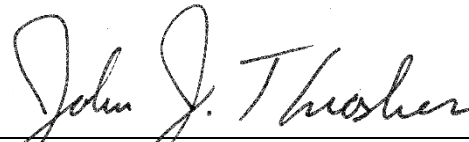
Liquidated Damages

The government assessed liquidated damages based upon 69 days of delay in the amount of \$429,906 (finding 38). The government is not entitled to these damages because we have determined ECC is entitled to 114 days of excusable delay.

CONCLUSION

ECC's appeal in ASBCA No. 59280 is sustained and ECC is entitled to \$924,295 with interest under 41 U.S.C. § 7109 running from September 6, 2013 until paid. Additionally, ECC's appeal in ASBCA No. 60760 is sustained and ECC is entitled to \$916,840 in compensable delay damages with interest under 41 U.S.C. § 7109 running from April 19, 2016 until paid. The government assessed liquidated damages based upon 69 days of delay in the amount of \$429,906. The government is not entitled to these damages.

Dated: July 15, 2022



JOHN J. THRASHER
Administrative Judge
Chairman
Armed Services Board
of Contract Appeals

I concur



RICHARD SHACKLEFORD
Administrative Judge
Vice Chairman
Armed Services Board
of Contract Appeals


I concur



OWEN C. WILSON
Administrative Judge
Vice Chairman
Armed Services Board
of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA Nos. 59280, 60760, Appeals of Environmental Chemical Corporation, rendered in conformance with the Board's Charter.

Dated: July 15, 2022



PAULLA K. GATES-LEWIS
Recorder, Armed Services
Board of Contract Appeals