MEMORANDUM OPINION AND ORDER

MILLER, Judge.

This case involves a claim for the provision of dining facility services for the United States Army at Camp Anaconda, one of the largest United States military bases in Iraq during the troop buildup following the March 2003 invasion. Its resolution calls for reconciliation of the prime contractor’s burden to provide reasonable justification—years after the fact—for claimed costs that were passed through to the prime contractor under fixed-price contracts with the reality that the costs were incurred during the exigencies of war.
FACTS 1/

I. Background

1. The LOGCAP III Contract

In connection with the Government’s Logistics Civil Augmentation Program (“LOGCAP”), in December 2001, the United States Army (the “Army”) awarded Contract No. DAAA09-02-D-0007 (the “LOGCAP III Contract” or the “Contract”) to Brown and Root Services, Inc., a division of Kellogg Brown & Root, Inc. Joint Stipulation filed Dec. 2, 2011, ¶ 1 (“Jt. Stipl. I”); JX 2, at 7590. On August 1, 2003, the LOGCAP III Contract was novated from Brown and Root Services, Inc., to Kellogg Brown & Root Services, Inc. (“KBR” or “plaintiff”). Jt. Stipl. I ¶ 1. The LOGCAP III Contract was a cost-plus-award-fee arrangement that incorporated the provisions of 48 C.F.R. § 52.216-7 (2000), whereby the Army would reimburse KBR for all costs that it incurred in contract performance, including payments to subcontractors, along with a fee determined by subcontract costs. See JX 2, at 7626; Jt. Stipl. I ¶ 9.

Pursuant to the Contract, plaintiff would provide logistics support services, including dining facility (“DFAC”) services, to the Army during contingency operations in support of Operation Iraqi Freedom. A “contingency operation” is defined in the Federal Acquisition Regulation (“FAR”) as a military operation that

“(1) [i]s designated by the Secretary of Defense as an operation in which members of the armed forces are or may become involved in military actions, operations, or hostilities against an enemy of the United States or against an opposing military force; or

(2) [r]esults in the call or order to, or retention on, active duty of members of the uniformed services [under specified sections of the United States Code] . . . during a war or during a national emergency declared by the President or Congress.”

The Contract required KBR to provide services to the Army as directed by the issuance of individual task orders (“TOs”).  Id. ¶ 3.  On June 13, 2003, the Army issued to KBR a Notice to Proceed (“NTP”) to begin providing logistics services at various locations throughout Iraq, id. ¶ 4, involving sites H2 and H4. The Army directed or otherwise prohibited KBR from employing Iraqi or “Host Country” nationals to work in DFACs in connection with the provisioning of DFAC services in Iraq. Id. ¶ 6. On August 12, 2003, the Army issued TO 59 to KBR. Id. ¶ 7. TO 59 had a period of performance of June 13, 2003, through April 30, 2005—687 days, id. ¶ 8—and required KBR to provide, install, operate, and maintain DFACs in accordance with its Statement of Work (“SOW”) for permanent and transient camp populations. JX 3, at 12964. The work required was subject to revision through the issuance of a modification to TO 59 or a Letter of Technical Direction (“LOTD”). Jt. Stipl. I ¶ 10. TO 59 was followed by TO 89, which effectively continued the logistics efforts required under TO 59, including DFAC services at sites H2 and H4. Id. ¶ 13. Performance under TO 89 began on May 1, 2005. Id. ¶ 12. TO 89 also provided for KBR to be compensated on a cost-plus-award-fee basis and incorporated FAR § 52.216-7. Id. ¶ 14.

Plaintiff contracted with subcontractors to provide certain services, such as DFAC services, required by the Army’s TOs. Following award of various DFAC subcontracts in the summer of 2003, the Defense Contract Auditing Agency (the “DCAA”) expressed concerns regarding the pricing structure of these subcontracts, disagreeing with KBR’s use of a fixed, per person/per day (“PPPD”) price based on either the headcounts set forth in the subcontracts’ SOWs or the number of meals actually served, whichever was higher. See Tr. at 910 (plaintiff’s counsel); Tr. at 91-92 (Charles A. Carr, KBR’s then-Head of the Tiger Team, a DFAC team in charge of administering DFAC subcontracts in Iraq and Kuwait). The DCAA was troubled by the lack of transparency regarding individual cost elements and the fact that KBR was paying its subcontractors for meals that were not served. See Tr. at 91-92 (Carr). Additionally, the Army was concerned that it was paying for the DFAC facilities—which were built by the subcontractors and leased by KBR—several times over. See Tr. at 94 (Carr).

To address those concerns, KBR, via Mr. Carr, designed a new subcontract structure that KBR used to recompete its DFAC subcontracts in early 2004 when the initial period of performance for the original subcontracts expired. See Tr. at 94 (Carr). These second-generation subcontracts contained three 1000-person numerical ranges designated “headcount bands.” See Tr. at 95 (Carr). Semi-variable and fixed costs were organized into these headcount bands based on the stated capacity that the band encompassed. The middle headcount band was established with reference to the headcount set forth in the subcontracts’ SOW. See Tr. at 95 (Carr). The upper and lower headcount bands, which were, respectively, 1,000 troops above and 1,000 troops below the range represented by the middle headcount
band, were created to account for fluctuations in the number of troops fed. See Tr. at 95 (Carr). The upper and lower bands “were both prepriced options that would be implemented with a change order to the subcontractor once [KBR was] directed to change the head count that was contractually required through an LOTD from the client.” Tr. at 96 (Carr). This series of subcontracts was referred to as the “SK series.” See id.

In March 2004 personnel from KBR, DCAA, and the Defense Contract Management Agency (“DCMA”) participated in a conference call during which Jill E. Pettibone, a KBR employee who worked with Mr. Carr and the Tiger Team, and Mr. Carr laid out the new subcontract structure. See Tr. at 112-16 (Carr). Mr. Carr testified that the conference call participants responded favorably and did not voice any objections to the SK series. See Tr. at 116 (Carr). Following the conference call, plaintiff began competing and awarding the SK subcontracts.

2. The SK 465 Subcontract

SK 465 involved the provision of DFAC services at site H4, which was located near Mosul, Iraq. 2/ Mosul, Iraq is located approximately 220 miles north-northwest of Baghdad, Iraq. Jt. Stipl. I ¶ 5. Between July 2003 and March 10, 2004, before implementation of the SK series of subcontracts, DFAC services at site H4, a tent facility, were subcontracted to The Event Source (“TES”) under Master Agreement 4 Work Release 7. Id. ¶ 30. At the time that plaintiff awarded the initial subcontract to TES, the Army instructed KBR to prepare to serve a camp population of up to 6,196 troops. See Def.’s Br. [No. 45] filed Nov. 21, 2011, at 3. In January 2004 KBR issued Request for Proposal No. H4 Mosul DFAC (“RFP”) seeking offers for the provisioning of DFAC services at site H4. Jt. Stipl. I ¶ 31. Plaintiff’s RFP initially identified the anticipated headcount at site H4 as 6,196. Id. ¶ 32. On February 17, 2004, after KBR issued its RFP but before the submission of bids, Administrative Contracting Officer (“ACO”) Russell J. Blaine, having the requisite delegated authority, issued LOTD No. 04-59-CJTF7-03 (the “February 17 LOTD”). JX 6 (Feb. 17, 2004 e-mail from Mr. Blaine to various Army personnel regarding February 17 LOTD altering anticipated camp populations at five H sites); Jt. Stipl. I ¶ 11. The February 17 LOTD reduced the anticipated camp population at site H4 from 6,196 to 2,573. See JX 6. After receiving the February 17 LOTD, KBR amended its RFP to identify the anticipated headcount at site H4 as 2,573. Jt. Stipl. I ¶ 33. KBR instructed offerors that their proposals should set forth pricing for three headcount bands: (1) 1,500-2,500; (2) 2,501-3,500; and (3) 3,501-4,500. JX 7. KBR received six offers in response to its RFP. Jt. Stipl. I ¶ 34.

2/ Site H4 previously had been known as “Camp Glory” or “Camp Marez.” See Def.’s Br. [No. 45] filed Nov. 21, 2011, at 3.
On March 8, 2004, KBR awarded a subcontract—SK 465—to ABC International Group (“ABC”). Jt. Stipl. I ¶ 35. SK 465 included a SOW with a headcount of 2,573 and had a period of performance of March 8, 2004, through June 12, 2004, with an optional period of performance from June 13, 2004, through June 12, 2005. Id. ¶¶ 35-36. ABC was tasked with constructing a Kirby-style (prefabricated metal) DFAC building to replace the existing tent structure as well as the provisioning of DFAC services for a camp population of 2,573. Jt. Stipl. I ¶ 35; see also JX 10 (SK 465 as executed by KBR and ABC). ABC’s proposed monthly prices for the period beginning June 13, 2004, were, as follows:

<table>
<thead>
<tr>
<th>Item/Service Description</th>
<th>Price Per Headcount 1,500-2,500</th>
<th>Price Per Headcount 2,501-3,500</th>
<th>Price Per Headcount 3,501-4,500</th>
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<tr>
<td>Equipment</td>
<td>$52,100.00</td>
<td>$58,000.00</td>
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<td>Refrigeration Units</td>
<td>$45,000.00</td>
<td>$50,000.00</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>Generators</td>
<td>$31,000.00</td>
<td>$31,000.00</td>
<td>$31,000.00</td>
</tr>
<tr>
<td>Lease of Kirby DFAC</td>
<td>$50,000.00</td>
<td>$53,735.00</td>
<td>$53,735.00</td>
</tr>
<tr>
<td>Labor</td>
<td>$395,000.00</td>
<td>$427,000.00</td>
<td>$475,000.00</td>
</tr>
<tr>
<td>Consumables</td>
<td>$230,000.00</td>
<td>$250,000.00</td>
<td>$290,000.00</td>
</tr>
</tbody>
</table>

JX 10, at 83026.

Although the award was made on the basis of ABC’s being the lowest bidder, that was not the case. See Tr. at 163-64 (Carr). Eurest Support Systems (“ESS”) priced its proposal $1 million less than ABC’s, but, due to a mathematical error in the bid tabulation sheet prepared by Jamal Nasery, KBR DFAC Services, Subcontract Administrator Team Leader, it appeared that ESS’s proposal was $100,000.00 more expensive than ABC’s. See Tr. at 163-64 (Carr); Def.’s Br. [No. 45] filed Nov. 21, 2011, at 4-5. This error, however, was not discovered until after SK 465 had been awarded to ABC. See Tr. at 163 (Carr).

Defendant made much of this error, speculating as to projected savings that would have been secured had ESS received the award. For example, Mr. Carr, Mr. Nasery’s supervisor, who would not concede that ESS necessarily would have been awarded the SK 465 subcontract based on the error, acknowledged on cross-examination that ESS’s long-term costs were over $1 million less than ABC’s. See Tr. at 163-64 (Carr). Mr. Carr stated that
had he discovered Mr. Nasery’s error, he “would have sent that [the bid tabulation] back to Jamal and asked him to correct the error, re-evaluate it commercially and make another recommendation.” 3/ Tr. at 164 (Carr).

On June 7, 2004, Major Thomas D. Hunter, an ACO, 4/ issued an LOTD directing KBR to stop the construction of the new Kirby-style DFAC at site H4 (“June 7 LOTD”). Jt. Stipl. I ¶¶ 37-38; see also JX 11, at G-0194571 (June 7 LOTD). Major Hunter explained that, out of concern for “force protection,” the Army was considering a different site for the DFAC facility. JX 11, at G-0194571. On June 22, 2004, Major Hunter issued LOTD No. 04-59-H4-08 (“June 22 LOTD”). Jt. Stipl. I ¶ 39. The June 22 LOTD provided KBR with notice to proceed to enter into a lease-to-purchase agreement for a new DFAC facility constructed of reinforced concrete in place of the Kirby-style facility provided for in SK 465. See JX 12, at G-0194597 (June 22 LOTD). Moreover, the June 22 LOTD increased the SOW base camp population from 2,573 persons to 6,200+ persons. See id. It further indicated that KBR should provide the following information to Major Hunter within five business days: “a) Estimated cost to perform this effort. b) A schedule of activities leading to the successful conclusion of this effort. c) Propose[d] performance criteria for government consideration. d) Suggested changes to the Statement of Work necessitated by this effort.” Id. At this point, the court finds, plaintiff was responding to exigent circumstances, and Major Hunter’s cagey testimony only reinforced the challenge that the Army gave plaintiff.

Thomas R. Donley, then-DFAC Procurement, Material, and Property Manager for Iraq and Kuwait, testified that, upon receipt of the June 22 LOTD, KBR personnel held a meeting to determine what action needed to be taken. See Tr. at 195, 233 (Donley). He stated that, although KBR considered issuing a competition for the new work, it ultimately decided to keep ABC on site because

it was determined because of the [June 7] LOTD, because of the location, because of the sense of urgency . . . within which this needed to be dealt with,

3/ The court is more concerned with Mr. Nasery’s inadequate Price Negotiation Memorandum (the “PNM”), recognized as such long before this case was in litigation. Mr. Carr testified that he determined that Mr. Nasery’s analysis was “not adequate because it did not have the level of documentation of support that it would need,” Tr. at 172 (Carr), and he agreed that the PNM did not provide a breakdown of the different price components nor how circumstances had or had not changed since the original bid four months earlier. See Tr. at 173 (Carr). The problems associated with the PNM are discussed in greater detail infra.

4/ Major Hunter has since been promoted to the rank of Lieutenant Colonel. For clarity, however, reference is made herein to “Major Hunter.”
and because [ABC] was already working to build a DFAC, which is now changing, [KBR] deemed that it was reasonable to keep [ABC] on the site. Also, had [KBR not kept ABC on site], there would have been extensive demobilization costs involved.

Tr. at 233-34 (Donley).

On June 23, 2004, Mr. Nasery requested a proposal for the new work from ABC, which ultimately was embodied in Change Order 1 (“CO 1”). See PX 44 (June 23, 2004 e-mail from Mr. Nasery to Waleed Al-Awadi, President & CEO of ABC, requesting proposal in response to June 22 LOTD). ABC submitted its proposal on June 27, 2004. See PX 51. The proposal provided prices for three headcount bands. The middle band—5,501 to 6,500 troops—encompassed the increased camp population figure (6,200+) identified in the June 22 LOTD, which would serve as the new SOW headcount. See PX 51, at 1399. ABC’s proposed monthly prices were, as follows:

<table>
<thead>
<tr>
<th>Item/Service Description</th>
<th>Price Per Headcount 4,501-5,500</th>
<th>Price Per Headcount 5,501-6,500</th>
<th>Price Per Headcount 6,501-7,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>$145,000.00</td>
<td>$145,000.00</td>
<td>$174,000.00</td>
</tr>
<tr>
<td>Refrigeration Units</td>
<td>$125,000.00</td>
<td>$125,000.00</td>
<td>$149,000.00</td>
</tr>
<tr>
<td>Generators</td>
<td>$177,500.00</td>
<td>$177,500.00</td>
<td>$194,200.00</td>
</tr>
<tr>
<td>DFAC Concrete Building</td>
<td>$566,000.00</td>
<td>$566,000.00</td>
<td>$598,200.00</td>
</tr>
<tr>
<td>Labor</td>
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<tr>
<td>Consumables</td>
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<td>$625,000.00</td>
<td>$721,000.00</td>
</tr>
</tbody>
</table>

PX 58, at 0609.

ABC also proposed plans and specifications for the new DFAC, which would be constructed with reinforced concrete and would include a VIP dining room. See PX 51, 5/ See PX 51, 5/ The parties disagree about whether the Army requested the VIP room. Major Hunter testified that he did not direct KBR to include such a room, see Tr. at 435-36
at 1400. ABC explained that its proposed rates were based on a twelve-month amortization period ending on June 12, 2005, and after which time KBR would receive ownership of the facility, refrigeration units (“reefers” 6/), and generators. Id. at 1397. The monthly cost for the new capacity was $2,606,000.00—almost triple the cost of SK 465 as initially awarded.

ABC provided a follow-up to its proposal submission in an unsolicited e-mail “clarifying the prices offered to serve 6200 persons.” PX 49 (June 27, 2004 e-mail from Mr. Al-Awadi to Mr. Nasery regarding the prices in ABC’s June 27, 2004 proposal). Mr. Al-Awadi’s e-mail explained that, in order to serve the increased camp population, additional generators, freezers, kitchen and serving equipment, and dining hall furniture would be needed, as well as “a minimum of 240 personnel.” Id. Citing the “current violence and the beheading of hostages by terrorists,” Mr. Al-Awadi noted “a drastic increase in the cost of labor and a severe shortage of available staff who are willing to work in Iraq.” Id. According to ABC, these factors accounted for the cost of its new proposal.

On June 28, 2004, Mr. Nasery forwarded ABC’s proposal to Philip Parenti, a consultant to KBR with an expertise in DFACs and camp catering, see Tr. at 312 (Donley), for further review. See PX 51, at 1397. On July 5, 2004, ABC, at KBR’s request, furnished additional information regarding its proposal to Mr. Nasery. See PX 53 (July 5, 2004 e-mail from Mr. Al-Awadi to Mr. Nasery providing information clarifying its proposal). Mr. Al-Awadi again commented on the increased cost of labor resulting from the violence-induced labor shortage. See id. at 0188-89 (“This increased cost of labor . . . includes salaries, benefits, indemnity, bonuses, medical examinations, insurance, air tickets from home countries to Kuwait, and [additional transportation costs resulting from] unsafe passage by road from Kuwait to Mosul.”).

On July 10, 2004, Messrs. Parenti, Nasery, and Al-Awadi, along with Terry Kleinsasser, a KBR Subcontract Administrator, met to discuss ABC’s proposal. See DX 103, at 0924-25 (draft of memorandum summarizing discussions at July 10, 2004 meeting regarding ABC’s proposal). The attendees discussed the need to add and remove various pieces of equipment, and KBR representatives opined that labor costs were 10% too high.

5/ (Cont’d from page 7.)

(Hunter), but a February 26, 2004 LOTD from Major Hunter’s predecessor, Major Ramona McCaa, states that “[t]he Government requests KBR to install a VIP meeting room inside the DFAC located on H4. This room will accommodate any VIP luncheons and meetings,” see PX 84, at 0562. The court finds that the VIP room was an included requirement.

6/ According to Mr. Donley, a reefer is a mobile refrigerated containerized unit, or semi-truck with a refrigerator unit. Tr. at 315 (Donley).
See id. at 0924. Despite the airing of these issues, the record contains no evidence indicating that ABC modified its proposal in any way following the meeting. See Def.’s Br. filed June 8, 2012, at 9-10 [No. 09-428C]; Pl.’s Br. filed May 25, 2012, at 25 [No. 09-428C]. On July 16, 2004, Mr. Nasery authored a Price Negotiation Memorandum (the “PNM”), which concluded that ABC’s proposed prices were reasonable. See PX 58, at 0612-13 (CO 1 containing Mr. Nasery’s PNM). Mr. Nasery’s PNM, however, was based on an analytic flaw that was not discovered until later. In justifying ABC’s prices, Mr. Nasery stated that

[s]ince the US Army has doubled the headcount at [site H4] and therefore stopped construction to redesign[] a larger upgraded DFAC [that will be] double the size thus doubling the necessary equipment and labor as well, it is decided to justify the new revised rates by a comparable analysis by doubling the originally competed rates on [SK 465].

PX 58, at 0612. Essentially, Mr. Nasery’s methodology justified a quadrupling of the total price because he doubled not only the number of troops to be served, multiplied by the rate per person, but also the per-person rate. Mr. Nasery’s task was to justify the price given the exigencies of war. Those circumstances did not justify the inadequacy that his memorandum displayed in this respect, as well as others. 7/

Prior to its execution, proposed CO 1 was subject to KBR’s greensheet-approval process, which is “the approval authorization trail . . . for any type of transaction or subcontractor contract that KBR made.” Tr. at 331 (Donley). The greensheet-approval process was a review of the actions taken “in the field” by Mr. Nasery and others regarding proposed CO 1. See Def.’s Br. filed June 8, 2012, at 11 [No. 09-428C]. Mr. Donley testified that he, along with Mr. Parenti; Mr. Nasery; Tom Quigley, Procurement, Material, and Property Manager for Iraq; and Wayne Agness, KBR Food Service Project Manager, undertook a technical review and analysis of all documents supporting CO 1 to determine if CO 1 should be approved and implemented. See Tr. at 332-34, 374-75 (Donley). He stated that

the team . . . would have thoroughly reviewed all the required documents, and the packet [of CO 1 documents] that would have been delivered to me would have been complete, and I would have made sure that all the attachments referred to were in place. I would have read through everything . . . and what it . . . discussed in writing to make sure, and I was satisfied that it covered, even in many different ways, what was desired by the [Army].

7/ See note 3 supra.
I knew exactly what to expect [in CO 1] because it was something that had been thoroughly discussed amongst ourselves in the analyzation of it and the procedures that we needed to follow to implement it.

Tr. at 332-34 (Donley). According to Mr. Donley, his analysis of CO 1 as part of the greensheet-approval process included review of Mr. Nasery’s PNM to ensure that it sufficiently justified the expenditure. See Tr. at 334 (Donley). Following this review, on July 17, 2004, CO 1 received greensheet approval, having been approved by Messrs. Nasery, Donley, and Quigley. See PX 58, at 0611. CO 1 was executed by KBR and ABC on the same day. See PX 58, at 608-10; Jt. Stipl. ¶ 41.

Mr. Donley impressed the court with his percipient knowledge of the situation on the ground at the time. He was a sincere and earnest witness who credibly characterized plaintiff’s timely delivery of the June 7 and June 22 LOTD requirements with the statement “I would humbly submit that [it] would be quite an achievement stateside in any city let alone in a war zone.” Tr. at 324-25 (Donley). Nonetheless, defendant on cross-examination was able to distance Mr. Donley from his general overall endorsement of Mr. Nasery’s PNM. Mr. Donley conceded that the PNM “lacked lots of details that in hindsight should have been included and they weren’t there.” Tr. at 377 (Donley).

BY MR. PROUTY:
Q Now do you consider this a reasonable way to justify the prices of a change order?
A I would say that I would do it differently today.
Q And again that’s not the question. Now is that a reasonable way of calculating the reasonableness of the prices of the change order?
A I don’t know.
Q This document does not discuss facility costs, does it?
A Not specifically.
Q Nor any individual price components, correct?
A Correct
Q Although it refers to the prevailing conditions and circumstances at the bottom of the page, it does not describe how they have changed, does it?
A Say again sir.
Q I’m sorry?
A Could you repeat that, please.
Q. Certain. Although it says it’s fair and reasonable for the type of work required under the prevailing conditions and circumstances, it does not set forth how those prevailing conditions and circumstances might have changed since the originally competed subcontract, does it?
A. No, it’s not detailed there, not at all.

Tr. at 367-69 (Donley). 8/

Pursuant to CO 1, ABC was to recover its costs to perform DFAC services through twelve monthly payments, at the end of which time KBR would own—on the Army’s behalf—the new concrete DFAC, as well as all reefers and generators. To enable the twelve monthly payments, CO 1 was made retroactive to June 13, 2004—the beginning of SK 465’s option period. Jt. Stipl. ¶ 42; Pl.’s Br. filed Oct. 31, 2011, at 23.

Shortly after CO 1 was executed by KBR and ABC, ACO Major Hunter requested documentation revealing the “delta cost increase from the original DFAC to the new designed and larger DFAC at H4.” PX 63, at 1377-78 (June 27 to August 2, 2004 e-mail chain among Army, KBR, and ABC personnel); see also PX 64, at 1863-64 (same). In response Mr. Nasery provided two tables that depicted total annual costs for SK 465 and CO 1. See PX 63, at 1381. The tables indicated that the “Grand Total for the original DFAC” was $13,767,635.71, and the “Grand total for the new DFAC” was $33,870,666.00. See id. Despite the quoted titles, the stated dollar amounts included costs for all items and services for which ABC was responsible, not solely the facility costs. See PX 70, at 0221. Major Hunter mistakenly concluded that the $33-million figure was the total price for only the new DFAC facility. See id. at 0222. On September 8, 2004, he e-mailed Mr. Nasery, expressing concern that construction of the DFAC appeared to be a “massive undertaking” costing $33 million. See id. at 0221-22. In accordance with KBR policy, Gordon Wohlfeil, KBR Project Manager for Northern Iraq, responded to Major Hunter’s concerns. See PX 71. Mr. Wohlfeil clarified that the $33-million figure—which actually was $37 million—was “inclusive of all facilities, labor, and consumables” and that “[t]he lease purchase of the DFAC by itself [was] $7,738,726 if you include new mobilization costs.” See id. at 4826. He further stated that the $33-million (or $37-million) cost assumed a headcount of 6,200 but noted that “[w]e’ve yet to break 2500 in headcount.” Id. When Major Hunter responded with surprise that the headcount had not exceeded 2,500 troops, Mr. Wohlfeil informed him

8/ The court agrees with plaintiff that defendant may be pressing the point by criticizing Mr. Nasery’s PNM for not addressing economics of scale. However, the PNM’s other omissions were significant.
that, although he would look into it, “the headcount for yesterday was less than 2,000.” See id. at 4825.

Given that Major Hunter’s June 22 LOTD also functioned as a NTP, once KBR and ABC executed CO 1, ABC began to perform pursuant to it. See Tr. at 400-02 (Hunter). Major Hunter apparently accepted Mr. Wohlfeil’s explanation, see Tr. at 409-10 (Hunter), because he raised no further objections and did not order KBR to stop work. See Pl.’s Br. filed June 22, 2012, at 8. Nor did he issue a subsequent LOTD modifying the SOW anticipated capacity upon learning that actual headcounts were not even approaching the 6,200+ SOW figure—an action that he had authority to take. See Tr. at 391-92 (Hunter). Indeed, the Army and Major Hunter were less responsive to the realities on the ground than plaintiff was responsive to the LOTDs.

On April 29, 2005, the Army commenced TO 89 by issuing a limited NTP. TO 89 continued TO 59 at site H4 and anticipated a camp population of 6,200 or more. Jt. Stipl. ¶ 13. Performance under TO 89 began on May 1, 2005. Id. ¶ 12. KBR paid ABC in accordance with the terms of SK 465 and CO 1. KBR included amounts paid to ABC in vouchers submitted to the Army for reimbursement in accordance with TOs 59 and 89. The Army paid KBR’s vouchers. On June 12, 2005, the date on which performance of SK 465 ended, title to the reinforced concrete DFAC at site H4 passed to the Army. Id. ¶ 44. As of June 9, 2011, the Army was continuing to use the DFAC. Id. ¶ 43.

In July 2007 KBR personnel became aware that DCAA was reviewing KBR’s justification for the costs associated with construction of the concrete DFAC at site H4. See DX 90, at 3783-84. Borbala “Bori” Ungvari, a Subcontract Administrator in KBR’s Procurement Compliance Department, stated in an e-mail to Greg Whitty, KBR’s Senior Manager, Project Controls, that “[t]he file doesn’t have adequate price justification so we are trying to find historical data that we can use for the basis of comparison to justify the price after the fact.” Id. at 3783. KBR personnel exchanged various information via e-mail regarding pricing. See id. at 3770-84. On July 24, 2007, Mr. Carr e-mailed Craig Castellana, KBR’s then-Procurement Supply Manager for LOGCAP III, instructing him to review SK 465 and draft a price-reasonableness justification. See Tr. at 460-61 (Castellana); DX 90, at 3770. Mr. Carr explained that, because Mr. Nasery’s PNM was not adequate, it was necessary that someone prepare a new price-fair-and-reasonableness determination for CO 1 to SK 465. See DX 90, at 3770. Upon receiving Mr. Carr’s e-mail, Mr. Castellana, along with his supervisor, George Nguyen, called Mr. Carr, who requested the new justification “in short order.” Tr. at 462 (Castellana). Mr. Castellana testified that he was directed to “go back and look at the contract file and review the original price justification, and look specifically at the building itself, and . . . write an updated price justification based on the facility.” Tr. at 460-61 (Castellana).
Mr. Carr also instructed Mr. Whitty and Jorge Alberch, a Senior Estimator, KBR Estimating, to prepare an Independent Cost Estimate ("ICE") for the H4 DFAC. See DX 90, at 3770-80. Mr. Carr selected Messrs. Whitty and Alberch to perform the ICE because they had experience building facilities in Iraq and Afghanistan. See Tr. at 176 (Carr). The ICE would use KBR’s internal analysis to compare the H4 DFAC to other, similar DFACs and thereby determine a reasonable price for the H4 DFAC in CO 1. See Tr. at 180 (Carr). However, Messrs. Whitty and Alberch both were included in the e-mail chain initiated by Ms. Ungvari announcing the need for an adequate price justification of the H4 DFAC price in CO 1. See DX 90. They therefore were aware that the total purchase price for the H4 DFAC was approximately $7 million and had a target in mind when they set out to perform what was deemed an independent analysis. See Tr. at 177-78 (Carr); DX 90, at 3779, 3783.

Paul A. Christianson, Project Manager of KBR’s Design and Construction Group, provided Messrs. Whitty and Alberch with a DFAC to use in performing the ICE. See DX 90, at 3781-82. The building—Q-West—was located in Jordan, but Mr. Carr mistakenly testified that it was located in Mosul in northern Iraq. See Tr. at 181 (Carr), 1642, 1644-45, 1648 (Check). Q-West measured out at approximately 3,400 square meters. See Tr. at 179 (Carr). However, was approximately 5,000 square meters. See DX 90, at 3783; Tr. at 180 (Carr). To enable a more meaningful comparison, Messrs. Whitty and Alberch applied an area adjustment to Q-West, which effectively rendered it 4,500 square meters for comparison purposes. See JX 27, at 0422; Tr. at 182-83 (Carr). Messrs. Whitty and Alberch e-mailed the finished ICE to Mr. Carr on July 23, 2007. See DX 90, at 3772. The ICE indicated a cost of $6,781,224.00 for the H4 DFAC, including mechanical, plumbing, and electrical costs. See JX 27, at 422; Tr. at 184 (Carr).

Thereafter, Messrs. Castellana and Nguyen began their assignment to prepare an adequate price justification for the cost of the H4 DFAC in CO 1. They adopted a two-pronged approach, which utilized the ICE and a second facility for comparison purposes, see Tr. at 184 (Carr), after reviewing KBR’s fifty-one subcontracts in order to identify a second facility that was similar in size—in terms of headcount—to the concrete DFAC at site H4 that could be used as a comparable, see Tr. at 462-63 (Castellana). Because KBR procurement guidelines provided that, when performing a comparative price analysis, employees should use for comparison items that are no greater than one year old at the time of the analysis, Messrs. Castellana and Nguyen selected the dining facility at site D16 at Camp Kalsu in south-central Iraq. See Tr. at 463-64, 469 (Castellana). The D16 facility had been built recently and had a SOW headcount of 5,050 troops, plus a twenty-percent surge, yielding a total headcount of 6,060. See Tr. at 463-65 (Castellana). Other DFACs with
similar SOW headcounts existed, but Mr. Castellana explained that he chose the DFAC at site D16 because it offered the most current pricing. 9/ See Tr. at 464-65 (Castellana).

Although the D16 DFAC was intended to serve a similar SOW headcount as the H4 DFAC, the two facilities had considerable differences. The D16 DFAC was a Kirby-style—i.e., prefabricated—structure with “soft-skinned” aluminum walls that lacked built-in force protection. See Tr. at 467 (Castellana). The H4 DFAC, on the other hand, had built-in force protection in that the walls, flooring, and ceiling were reinforced concrete. See Tr. at 467 (Castellana). To account for those differences, Mr. Castellana added the cost of concrete T-walls 10/ that could surround the D16 facility in order to offer comparable force protection to the actual cost of the D16 DFAC. See Tr. at 467-68 (Castellana). He did not, however, factor in a cost for overhead protective structures. See Tr. at 473 (Castellana). Mr. Castellana attested that the level of violence at the H4 DFAC was comparable to that experienced at the D16 DFAC. See Tr. at 469-70 (Castellana).

Messrs. Castellana and Nguyen’s undertaking culminated in a two-page memorandum authored by Mr. Castellana on July 26, 2007 (the “2007 Justification”). See Tr. at 473 (Castellana); JX 26. The 2007 Justification was accompanied by three attachments. See JX 27. The first attachment contained documents that Mr. Al-Awadi had sent to Mr. Nasery in June 2004 when Mr. Nasery was preparing to draft his PNM for CO 1. Included were a sketch of the layout for the H4 DFAC, a list of materials that ABC intended to use to construct the DFAC, and the anticipated monthly costs for three headcount bands. See id. at 0399-0403. The second attachment contained the pricing schedule for the D16 DFAC. See id. at 0405-08. Finally, KBR’s ICE was included as the third attachment. See id. at 0410-22. In concluding the 2007 Justification, Mr. Castellana stated that “[t]he pricing that was paid for the building at H 4 under subcontract SK 00465 is fair and reasonable based on a comparable procurement with the additional protective measures added and KBR’s independent cost estimates of the DFAC facility construction.” JX 26, at 0393. Presumably,

9/ It is not clear to the court why a facility with the most current pricing would be the best comparable by which to assess the reasonableness of the costs associated with a facility constructed several years earlier. The court sought clarification of this logic from Mr. Castellana, who stated that that was the policy and he followed it. See Tr. at 464-67 (Castellana).

10/ T-walls are concrete blocks placed around the perimeter of a permanent or temporary structure. Tr. at 468 (Castellana). The T-walls depicted at trial were twelve feet tall, six feet wide, and weighed approximately 64,000 pounds each. Tr. at 468 (Castellana); see PX 187. They “provide blast protection from rockets and mortars and small arms fire to an otherwise unprotected building.” Tr. at 468 (Castellana).
the 2007 Justification was sent to DCAA, which performed an audit of KBR’s incurred costs on SK 465.

On November 28, 2007, DCAA issued a Notice of Contract Costs Suspended and/or Disapproved (the “Original Form 1”) suspending payment of certain costs that KBR paid to ABC pursuant to CO 1 such as costs for dining equipment, the facility lease, reefers, generators, labor, and consumables, and totaled $11,337,261.00. JX 29. DCAA supplemented the Original Form 1 on December 12, 2008. See JX 36, at G-0027597 (discussing December 12, 2008 exit conference). It subsequently issued a revised Notice of Contract Costs Suspended and/or Disapproved (the “Revised Form 1”) on July 8, 2009, disapproving $12,529,504.00 of KBR’s costs incurred in paying ABC pursuant to CO 1. See JX 36, at G-0027590 (DCAA Revised Form 1, dated July 1, 2009 and received by KBR’s Accounting Supervisor on July 8, 2009); Jt. Stipl. I ¶ 45. The Revised Form 1 provided, as follows:

We are disapproving $12,529,504 relating to dining facilities (DFAC) subcontract costs billed under LOGCAP III Contract No. DAAA09-02-D-0007 for ABC International Corporation subcontract SK00465 as unreasonable pursuant to FAR 31.201-3, Determining Reasonableness. We consider the costs as unreasonable because KBR[] performed an inadequate analysis related to (i) the prices for higher headcount bands, and (ii) the costs of building a new DFAC facility. In addition, KBR[] billed costs using a headband that was significantly higher than the actual headcount served.

JX 36, at G-0027590. The Revised Form 1 differed from the previous version not only in amount but also in that it no longer questioned the amounts that KBR paid to ABC for reefers and generators. On October 1, 2008, KBR filed a certified claim challenging the Government’s withholding of the amount disapproved in the Revised Form 1 regarding SK 465 and CO 1. Joint Stipulation filed Mar. 28, 2012, ¶ 1 (“Jt. Stipl. II”). The claim was received by the Government on October 6, 2008. Id.

The parties each presented experts to opine on the reasonableness of KBR’s incurred costs from ABC. James J. Check, Managing Director, Chess Consulting LLC, qualified as plaintiff’s expert on the subjects of government contract cost and pricing and the application of the FAR to government contracts. See Tr. at 818-19 (court). Mr. Check performed a price analysis 11/ of the prices agreed to by KBR in CO 1. Tr. at 822-23 (Check); see also PX 142,

11/ A price analysis is “the evaluation of a contract price without looking at the individual cost elements or profit that make up that price.” Tr. at 822 (Check).
at 10-11 (Mr. Check’s expert report for No. 09-428C regarding SK 465 and CO 1). He testified that price analysis—as compared to cost analysis—is the preferred method of determining reasonableness under the FAR, particularly when the technique utilized to execute a price analysis is price competition or comparison to previously approved prices. See Tr. at 823 (Check).

To assess the reasonableness of the prices in CO 1, Mr. Check’s price analysis compared the prices in CO 1 with the prices in SK 465, which had been obtained by way of a price competition among various bidders. See Tr. at 824 (Check). He prepared the following chart to depict his analysis:

<table>
<thead>
<tr>
<th>Description</th>
<th>Original Subcontract</th>
<th>CO 1</th>
<th>[5] % Change (2,573 vs. 6,200+ Headcount)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Labor Consumables</td>
<td>$58,000</td>
<td>$22.54</td>
<td>$145,000</td>
</tr>
<tr>
<td></td>
<td>$427,000</td>
<td>165.95</td>
<td>1,067,500</td>
</tr>
<tr>
<td></td>
<td>$250,000</td>
<td>97.16</td>
<td>625,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$735,000</td>
<td>$285.66</td>
<td>$1,837,500</td>
</tr>
</tbody>
</table>

See PX 142, at 11. Explaining the process underlying his analysis, Mr. Check testified, as follows:

[O]n the left you’ll see a column headed original subcontract, so that’s of course the SK465 original subcontract pricing. And listed there [in the column marked No. 1] is the price per month of the middle band for [equipment, labor, and consumables]. And then [as depicted in the column marked No. 2] I took the statement of work target headcount for the original subcontract of 2573 and came up with a price per person per month based on that target headcount.

Moving to the right, I did the same thing with CO1 in that I took the middle band pricing figure [as seen in the column marked No. 3], used the statement of work target headcount of 6200 and came up with a price per person per month [depicted in the column marked No. 4].
And then the far right column [column No. 5] shows the percentage change between the two price per persons at the target statement of work headcount figures [column Nos. 2 and 4], and . . . it shows a 3.75 percent increase in Change Order 1.

Tr. at 824 (Check). When asked why he used SK 465’s middle headcount band—2,501-3,500 persons—Mr. Check responded that he wanted to determine a per-person price for the SOW headcount figure (2,573), which fell within the middle headcount band and thus was subject to the pricing listed therein. See Tr. at 825 (Check). Accordingly, he followed the same process to determine a per-person price for the SOW headcount figure in CO 1, which was 6,200 persons. See Tr. at 825-26 (Check). Mr. Check concluded that a 3.75% increase was “a very modest increase[,] . . . akin to an inflation adjustment that you often see with the passage of some time.” Tr. at 826 (Check). Seemingly conceding that a significant amount of time had not passed between execution of SK 465 and CO 1, Mr. Check remarked that the increasing violence and difficulty obtaining laborers accounted for the percentage increase. See Tr. at 826-27 (Check). The CO 1 prices, he concluded, thus were reasonable. See Tr. at 836 (Check).

Mr. Check also analyzed the price KBR paid for construction of the reinforced concrete DFAC at site H4. See Tr. at 829 (Check). For comparison Mr. Check opted to use the DFAC at site D16. See PX 142, at 10-11. Mr. Check recognized that, unlike the concrete H4 facility, the D16 DFAC was a Kirby-style facility that lacked overhead protection. See Tr. at 829-30 (Check). However, he emphasized that the price of the D16 DFAC was considered reasonable because it was obtained based on adequate price competition and that the anticipated headcount was in line with that for the H4 facility. Tr. at 829-30, 839 (Check). To compare the DFACs, Mr. Check computed a price per person by dividing the total price of each facility by the headcount provided in the SOW for that facility. See PX 142, at 10. The result can be illustrated, as follows:

<table>
<thead>
<tr>
<th></th>
<th>H4</th>
<th>D16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>$6,792,000.00</td>
<td>$6,474,500.00</td>
</tr>
<tr>
<td>Headcount</td>
<td>6,200+</td>
<td>5,050</td>
</tr>
<tr>
<td>Price Per Person</td>
<td>$1,095.48</td>
<td>$1,282.08</td>
</tr>
</tbody>
</table>

12/ The D16 DFAC actually lacked side protection, as well as overhead protection; however, the facility price that Mr. Check used for comparison was that determined by Mr. Castellana when he prepared the 2007 Justification and thus included the cost of T-wall side protection to render the D16 facility more similar to the H4 one.
See PX 142, at 10. Based on his comparison of the price per person for each facility, Mr. Check concluded that the H4 price was reasonable. See Tr. at 830-31 (Check). He explained that “the H4 number is lower and that’s indicative of a reasonable price, particularly when one considers that the D-16 number does not include overhead protection, which I’ve learned . . . [is] in the neighborhood of[,] if you price it out[,] $10 or $11 million.” Tr. at 830 (Check).

Sandra A. (“Sam”) Hadley, Partner, Cotton & Company LLP, qualified as defendant’s expert on the subjects of auditing and accounting in relation to government contracts, price reasonableness determinations, and the application of the FAR to government contracts. See Tr. at 1190 (court). Ms. Hadley began her testimony by noting that, although SK 465 was awarded to ABC pursuant to a price competition, the award resulted from a flawed bid tabulation, which, if performed correctly, would have shown that ESS, not ABC, was the low bidder. See Tr. at 1203-05 (Hadley); see also Tr. at 163-64 (Carr); Def.’s Br. [No. 45] filed Nov. 21, 2011, at 4-5. Indeed, ESS’s bid was approximately $1 million less than ABC’s. See Tr. at 1204 (Hadley). Ms. Hadley thus challenged Mr. Check’s emphasis on the fact that he was comparing CO 1 prices to the competitively awarded prices in SK 465, explaining that “we don’t know had ESS been awarded [SK 465] what they would have proposed for Change Order 1 prices.” Tr. at 1205 (Hadley). As stated above, the court views this criticism as too conjectural, as the projected cost impact of this discrepancy cannot be determined.

Ms. Hadley next questioned KBR’s ability to evaluate the reasonableness of the prices, given that the prices in SK 465 and CO 1 commingled the costs of constructing a Kirby-style facility and a concrete DFAC, respectively, with the other costs to administer the contract, such as labor and consumables, rendering it difficult to determine to what extent the unit prices apart from the facility’s cost would have remained constant. See Tr. at 1208-09 (Hadley). Despite this inherent difficulty, Ms. Hadley noted that KBR undertook to perform various reasonableness assessments. She criticized Mr. Nasery’s PNM for its “flawed methodology,” Tr. at 1207 (Hadley), which “assumed that the unit price would double,” Tr. at 1211 (Hadley). According to Ms. Hadley, it was more likely that, as capacity increased, “the unit price would either stay the same or decline with economies of scale.” Tr. at 1213 (Hadley). Although Ms. Hadley’s objection to doubling of the price is reasonable, the court does not fault plaintiff’s price justification analysis on the specific ground that it failed to take account of economies of scale. Ms. Hadley’s analysis of Mr. Check’s approach to his headband in all other respects was apt.

Regarding the 2007 Justification prepared by Mr. Castellana, Ms. Hadley opined that “the analysis done by comparing the H4 building price in the change order to the two other buildings [the D16 and Q-West facilities] that were selected [was] inadequate to support the
reasonableness of the price for the H4 building” because D16 was not of the same construction as the H4 DFAC and both D16 and Q-West were smaller in size and built in a different time frame. Tr. at 1216-17 (Hadley). Despite testimony that the D16 facility had a similar headcount as the H4 DFAC, Ms. Hadley stated: “I don’t believe that it’s comparable. . . . I believe that the size of the building and the type of construction have a much more significant impact on the reasonableness of the price than a head count capacity would.” Tr. at 1217 (Hadley). Finally, as for the ICE, Ms. Hadley expressed the opinion that it was not a truly independent estimate because it was prepared after the fact by individuals who knew the price that was being justified. See Tr. at 1221-22 (Hadley). She ultimately concluded that “KBR did not [e]nsure [that] the DFAC [b]uilding [p]rice was [r]easonable.” DX 91, at 10.

Ms. Hadley submitted a report that set forth textually and graphically her separate conclusion that KBR had failed to justify the component prices in CO 1. See DX 91 (Ms. Hadley’s expert report for No. 09-428C regarding SK 465 and CO 1). Unlike Mr. Check’s analysis, Ms. Hadley’s analysis used the monthly price for each headcount band since only one price was proposed for all headcounts that fell within a given headcount band. See id. at 11; Tr. at 1233 (Hadley). Ms. Hadley prepared the bar graph reproduced below to depict the price increase for each element from SK 465 to CO 1. See DX 91, at 11. The first three numbers on the bottom of the bar graph—2000, 3000, and 4000—represent the medians of the headcount bands from SK 465, while the latter three numbers are the medians of the headcount bands in CO 1. See id. The numbers on the left side depict the range of monthly prices for each element.
Id. Ms. Hadley explained that, as evidenced by the bar graph,

[e]very price element shows a significant increase from the original, competitive subcontract pricing to the non-competitive pricing in Change Order 1. As a whole (excluding the dining facility) the price more than doubled from the 4,000 count headband [the high headcount band] in the original subcontract to the 5,000 headcount band [the low headcount band] in Change Order 1.

Id. In light of the sizable price increases, Ms. Hadley stated that, had the PNM not been based on a flawed methodology, it would have led KBR to question ABC’s proposed prices for CO 1, and it would have been unlikely that management would have approved the prices. See id. Accordingly, Ms. Hadley concluded that “KBR [i]gnored [a]vailable [d]ocumentation [i]ndicating that [p]roposed [c]ost [c]omponent [p]ricing was [u]nreasonable.” Id.

3. The SK 466 Subcontract

SK 466 involved the provision of DFAC services at site H2, which was located near Mosul, Iraq. There is no contention that the prices agreed upon in SK 466 and Change Order 7 to SK 466 (“CO 7”) were not reasonable; rather, the issue presented is whether KBR paid its subcontractor, ABC, in accordance with the terms of SK 466 and CO 7. Between July 2003 and March 10, 2004, before implementation of the SK series of subcontracts, DFAC services at site H2, as with those at site H4, were subcontracted to TES under Master Agreement 4 Work Release 5. Jt. Stipl. I ¶ 15. In January 2004 KBR issued a RFP seeking offers for the provisioning of DFAC services at site H2. Id. ¶ 16. KBR’s RFP initially identified the anticipated headcount at site H2 as 6,252. Id. ¶ 17. After KBR received the February 17 LOTD, which reduced the anticipated camp population at site H2 from 6,252 to 2,929, KBR modified its RFP to reflect the new anticipated headcount. Id. ¶ 18; see also JX 6. KBR received five offers in response to its RFP. Jt. Stipl. I ¶ 19. In March 2004 KBR awarded a subcontract—SK466—to ABC for the provisioning of DFAC services at site H2. Id. ¶ 20; see also PX 185, at 6577-78. SK 466 included a SOW with a headcount of 2,929 and had a period of performance from March 11, 2004, through June 12, 2004, with an optional period of performance from June 13, 2004, through June 12, 2005. Jt. Stipl. I ¶¶ 20-21. Like SK 465, SK 466 utilized a headcount band structure pursuant to which KBR would pay ABC.

For some months in 2004, actual headcount at site H2 was lower than that represented by the middle headcount band, which was created based on the SOW headcount. See Def.’s Br. filed June 8, 2012, at 1 [No. 09-578C]; Pl.’s Br. filed Oct. 31, 2011, at 2 [No. 09-578C].
In January 2005 the monthly Maximum Average Daily ("MAD") headcount at site H2 exceeded 4,500. Jt. Stipl. I ¶ 22. The monthly MAD headcount also exceeded 4,500 in March and April 2005. Id. ¶ 23. Despite the magnitude of this surge, ABC fed the additional troops. The headcount bands in SK 466 for the optional period within which ABC was operating when the surge occurred were, as follows:

<table>
<thead>
<tr>
<th>Item/Service Description</th>
<th>Price Per Month 1,501-2,500</th>
<th>Price Per Month 2,501-3,500</th>
<th>Price Per Month 3,501-4,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>$16,100.00</td>
<td>$16,100.00</td>
<td>$16,100.00</td>
</tr>
<tr>
<td>Reefers</td>
<td>$7,900.00</td>
<td>$7,900.00</td>
<td>$7,900.00</td>
</tr>
<tr>
<td>Generators</td>
<td>$5,200.00</td>
<td>$5,200.00</td>
<td>$5,200.00</td>
</tr>
<tr>
<td>Lease of Kirby DFAC</td>
<td>$10,800.00</td>
<td>$10,800.00</td>
<td>$10,800.00</td>
</tr>
<tr>
<td>Labor</td>
<td>$558,130.00</td>
<td>$583,200.00</td>
<td>$698,500.00</td>
</tr>
<tr>
<td>Consumables</td>
<td>$267,300.00</td>
<td>$298,400.00</td>
<td>$445,100.00</td>
</tr>
</tbody>
</table>

See JX 34, at 9129 (Plaintiff’s December 19, 2008 Contract Disputes Act Claim). Accordingly, when the headcount at site H2 exceeded 4,500 beginning in January 2005, there was no pricing structure that accounted for the surge.

To compensate ABC for providing meals in excess of the SOW headcount, KBR and ABC entered negotiations for CO 7. ABC proposed adding a new headcount band for 4,501-5,500 troops in order to provide a pricing structure for the additional capacity. Jt. Stipl. I ¶ 25. The proposed pricing for the new headcount band was, as follows:

13/ KBR explains that, “[t]o calculate the MAD headcount, KBR first determines the highest headcount at any one meal during a day for each day during a month. The mean of these daily headcounts is the MAD.” Pl.’s Br. filed Oct. 31, 2011, at 16 n.9 [No. 09-578C].
### Headcount Band Added by CO 7

<table>
<thead>
<tr>
<th>Item/Service Description</th>
<th>Price Per Month 4,501-5,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>$28,600.00</td>
</tr>
<tr>
<td>Reefers (and Dry-Storage Units)</td>
<td>$14,200.00</td>
</tr>
<tr>
<td>Generators</td>
<td>$9,500.00</td>
</tr>
<tr>
<td>Lease</td>
<td>$10,800.00</td>
</tr>
<tr>
<td>Labor</td>
<td>$863,200.00</td>
</tr>
<tr>
<td>Consumables</td>
<td>$556,375.00</td>
</tr>
</tbody>
</table>

See JX 21, at G-0173882-83 (CO 7). KBR agreed to the prices in the new headcount band on February 25, 2005. See JX 19, at 2257-58. Despite having reached an agreement, the parties did not execute CO 7 until June 14, 2005. Jt. Stipl. I ¶ 24. CO 7, however, was effective retroactive to January 1, 2005. See Tr. at 1611 (Paula J. “Penny” Battles, Procurement Supply Manager for LOGCAP III); JX 21, at G-0173882.

Ms. Battles testified that, based solely on its terms, CO 7 called for payment to ABC according to the headcount band in which monthly headcounts fell. See Tr. at 1611 (Battles). Note 8 to CO 7 provides that “[f]or other [non-SOW] headcount prices, refer to Tables 2, 3 & 4,” PX 185, at 6454, suggesting that variable price components were to be paid in accordance with the actual monthly headcount. The parties disagree as to CO 7’s payment terms.

On January 15, 2008, DCAA issued a Form 1, suspending $783,342.00 of KBR’s direct costs, indirect costs, and fee. See Jt. Stipl. I ¶ 27; JX 30, at G-0602875-91 (DCAA Original Form 1 regarding SK 466 and CO 7, dated January 15, 2008). KBR remitted the total suspended amount to the United States Treasury by check dated May 22, 2008. See PX 174 (May 22, 2008 check for $783,342.00 made payable to the Treasurer of the United States); see also Jt. Stipl. I ¶ 29. On May 24, 2010, DCAA issued Revised Form 1, which superseded the Original Form 1 relating to SK 466 and CO 7 and disapproved $698,779.00 of KBR’s incurred costs. See Jt. Stipl. I ¶¶ 26, 28. Although the Revised Form 1 questioned a lesser amount of plaintiff’s costs, the difference between the two Form 1s—$84,563.00—has not yet been returned to KBR despite defendant’s concession that plaintiff is entitled to its return. See Jt. Stipl. I ¶ 29; Def.’s Br. filed June 8, 2012, at 8 [No. 09-578C]. On December 19, 2008, plaintiff submitted a certified claim challenging the
Government’s withholding of the amount disapproved in the Original Form 1 regarding SK 466 and CO 7. Jt. Stipl. II ¶ 2. The claim was received by the cognizant Army contracting officer on December 23, 2008. Id.

Defendant’s expert, Ms. Hadley, opined that DCAA was justified in challenging the prices at issue because KBR permitted ABC to bill in a manner other than that provided for in the contract. See DX 427, at 4. She testified that her review “started from scratch” and “compared each of the invoices that were submitted with the head band and the price that was identified in that invoice, compared it to the contract terms and identified those instances where the invoice had exceeded the contract terms for any of the price elements that were identified.” Tr. at 1279 (Hadley). Having arrived at the same amount as DCAA, Ms. Hadley concluded that there were no errors in DCAA’s review. See Tr. at 1279 (Hadley).

Ms. Hadley further testified that CO 7 “was an after the fact, sole source change order where the services provided by the subcontractor were a known item” and that she “didn’t see any reason to actually create a fourth headband.” Tr. at 1281 (Hadley). Because it applied retroactively, not only did CO 7 compensate ABC for the increased capacity, but it also “allowed [ABC] to bill at a headband that KBR knew that [ABC] hadn’t reached at that point because head counts were already done and turned in.” Tr. at 1281 (Hadley). Ms. Hadley expressed the opinion that the effect of CO 7 could have been accomplished by issuing a CO that provided for equitable reimbursement of the costs ABC incurred on account of the increased headcount. See Tr. at 1281 (Hadley). Mr. Check did not offer an opinion in No. 09-578C.

II. Procedural history

On July 2, 2009, plaintiff filed its complaint for breach of contract in No. 09-428C involving SK 465. KBR thereafter amended its complaint on August 3, 2009. The amendments were minor, non-substantive changes. On September 2, 2009, KBR filed its complaint for breach of contract in No. 09-578C involving SK 466. Although the parties agreed that these cases should not be consolidated, see Jt. Preliminary Status Report filed Oct. 22, 2009, at 1 [No. 09-428C]; Jt. Preliminary Status Report filed Dec. 22, 2009, at 1 [No. 09-578C], plaintiff moved to have these matters, as well as No. 10-839C, which KBR later sought to dismiss without prejudice, jointly tried, see Pl.’s Br. filed May 3, 2011, at 1 [Nos. 09-428C, -578C, 10-839C]. On May 23, 2011, the court granted KBR’s unopposed motion to dismiss No. 10-839C without prejudice. On that same date, the court granted KBR’s motion to have Nos. 09-428C and 09-578C jointly tried and entered an order setting trial to commence on December 12, 2011. See Order entered May 23, 2011 [Nos. 09-428C & -578C].
On August 22, 2011, KBR filed a motion for partial summary judgment in No. 09-428C seeking judgment in its favor permitting it to recover its fixed base fee totaling $126,559.00. KBR argued that it would be entitled to its base fee whether or not its costs were deemed reasonable. See Pl.’s Br. filed Aug. 22, 2011, at 1. Defendant’s responses to plaintiff’s proposed findings of fact established that no genuine issue of material fact was present as to either the fixed nature of the base fee or the Army’s obligation to pay KBR for completed performance under Task Orders 59 and 89. See Def.’s Resp. to Pl.’s Prop. Findings of Uncontr. Fact, Nos. 3, 4, 11, 18, 20, 22, 25, filed Sept. 22, 2011. Accordingly, the court determined that KBR was entitled to recover $84,789.00—the portion of its base fee not held by the Government as reserves; however, the court declined to enter judgment pending resolution of the balance of KBR’s claims, concluding that the interests of justice and efficient judicial administration are not served by entry of a piecemeal judgment. See Order entered Oct. 25, 2011, at 2.

On November 11, 2011, KBR filed an unopposed motion for leave to present Ms. Battles’s live testimony in January 2012 following the conclusion of the five-day trial scheduled to begin on December 12, 2011, because Ms. Battles was working as a civilian contractor for a company other than KBR in Iraq and was not available in December 2011. See Pl.’s Mot. filed Nov. 11, 2011, at 1-2 [No. 09-578C]. The court granted the unopposed motion on November 14, 2011. See Order entered Nov. 14, 2011 [Nos. 09-428C & -578C].

On November 29, 2011, defendant filed two motions in limine. The first, filed in both cases, sought to preclude testimony from Jennifer Freidenberg that is beyond her personal knowledge. The second, filed only in No. 09-578C, sought to exclude parol evidence concerning the SK 486 headband pricing. On that same date, KBR filed a motion in limine in both cases to exclude the testimony of defendant’s expert witness, Ms. Hadley. By order entered December 8, 2011, the court denied defendant’s motion to preclude testimony from Ms. Freidenberg, noting that plaintiff represented that Ms. Freidenberg would testify based on her personal knowledge and/or based on her personal knowledge of a review of plaintiff’s books and records. See Order entered Dec. 8, 2011, at 2. Pursuant to that same order, the court granted in part and denied in part defendant’s motion to exclude parol evidence in No. 09-578C. See id. The motion was granted insofar as plaintiff sought admission of parol evidence as to whether SK 466 required ABC to bill according to prices established for various headcount ranges. See id. The motion was denied to the extent plaintiff sought admission of documents that were created after execution of SK 466 and to the extent an exception to the parol evidence rule applied to specific documents or testimony offered. See id. The court also denied KBR’s motion to exclude Ms. Hadley’s testimony. See id.

Trial commenced on December 12, 2011, and proceeded through December 16, 2011, resuming on April 13, 2012, when Ms. Battles was available to testify. The parties presented
their rebuttal cases on the next business day, April 16, 2012, and closing arguments were heard on April 17, 2012. Post-trial briefing was completed on June 29, 2012.

DISCUSSION

I. The parties’ arguments

1. No. 09-428C

Plaintiff begins by explaining its relationship with its subcontractors in Iraq in 2004, noting that, although it had discretion to choose a subcontractor, KBR had no discretion to vary the subcontracted capacity from what the Army deemed was required regardless of the actual headcount at a particular site. See Pl.’s Br. filed May 25, 2012, at 18 [No. 09-428C]. Only the cognizant ACO possessed the authority to alter the stated capacity requirement through issuance of an LOTD. See id.; see also PX 6, at G-0202048. KBR was unable to account for this lack of discretion as it was forced to enter fixed-price—as opposed to cost-reimbursement—contracts with its subcontractors in Iraq because the subcontractors did not have Government-approved cost-accounting systems. See Pl.’s Br. filed May 25, 2012, at 18 [No. 09-428C]; Tr. at 832-33 (Check).

No. 09-428C involves SK 465, which KBR awarded to ABC on March 8, 2004, after receiving competitive proposals from six offerors. See Jt. Stipl. I ¶ 34; Pl.’s Br. filed May 25, 2012, at 20 [No. 09-428C]. Shortly thereafter, in June 2004, after having been instructed to cease performance at site H4, KBR was ordered to begin constructing a concrete DFAC facility and to prepare to serve an increased headcount of 6,200+ troops. See Pl.’s Br. filed May 25, 2012, at 21 [No. 09-428C]. KBR argues that “given the urgency of the LOTD, the fact that ABC was already in place and performing at Site H4 and the fact that KBR would have incurred significant demobilization and re-mobilization costs if it were to substitute a new subcontractor,” it was reasonable to award the new work—to be memorialized in CO 1—to ABC without holding a competition. Id.; see also Tr. at 233-34, 337 (Donley). KBR was well-aware that time was of the essence because Major Hunter’s June 7 LOTD had informed KBR that modifications to the existing contract were necessary “in the interest of force protection.” JX 11.

Plaintiff further contends both that its decision not to hold a competition was reasonable and also that the prices in CO 1 themselves were reasonable. First, plaintiff notes that ABC’s prices considered factors such as “existing site conditions and . . . political conditions,” including “the current violence and the beheading of hostages by terrorists [which] caused a drastic increase in the cost of labor and a severe shortage of available staff.” Pl.’s Br. filed May 25, 2012, at 23 [No. 09-428C] (quoting PX 49). Despite this
justification for the increase in ABC’s CO 1 prices as compared to its prices for SK 465, “KBR did not simply accept ABC’s June 27, 2004 proposal.” Id. at 24. Rather, KBR sought additional information from ABC to assist in the evaluation of its proposal. See id.; PX 53. Mr. Al-Awadi provided KBR with equipment and staff lists, drawings and design layouts, and material schedules that were used in preparing ABC’s CO 1 proposal. See PX 53. Although defendant faults KBR’s records for failing to document that the increased violence in Iraq affected labor prices, Mr. Al-Awadi stated expressly when submitting the requested additional information that “the violence in Iraq lately has caused a severe shortage of staff that is willing to work in Iraq.” Id. Mr. Donley’s testimony confirmed this assessment. See Tr. at 323 (Donley) (“Because of this elevated amount of violence . . . there was a very, very negative impact on the labor pool that was available.”). Moreover, plaintiff explains that ABC was required to effect the changes detailed in the June 22 LOTD immediately—a difficult undertaking in that capacity was more than doubled and the concrete DFAC was an entirely different structure than the Kirby-style DFAC that was the subject of SK 465. See Pl.’s Br. filed May 25, 2012, at 21, 24 [No. 09-428C]; see also Tr. at 330 (Donley) (“There [was] an intense sense of urgency to get [the work specified in the June 22 LOTD] going. There was lots of pressure from the client [the Army] at the site. There was lots of pressure from the camp manager to begin this construction. The sooner it was built the sooner it would be offering the force protection that was requested by the client.”).

Next, plaintiff relies on the fact that CO 1 was subject to KBR’s greensheet-approval process, whereby various KBR personnel approved the prices proposed in CO 1 after conducting a price analysis. See Pl.’s Br. filed May 25, 2012, at 22-23 [No. 09-428C]. Contrary to defendant’s accusations, plaintiff argues that its greensheet-approval process was not a rubber stamp of ABC’s CO 1 proposal. KBR requested and received additional information from ABC before approving the proposed prices and then analyzed those prices in comparison to the SK 465 prices. See id. at 24-25. According to plaintiff, price analysis is a preferred method of determining reasonableness under the FAR, and KBR’s price analysis—comparing the CO 1 prices to the SK 465 prices—was consistent with its established practices and allowed for a particularly accurate comparison because the SK 465 prices resulted from competition. See id. at 26. In performing its price analysis, KBR factored in the sudden modification of contractual requirements by the June 22 LOTD, increased violence, labor shortage, and sense of urgency that had not affected the prices in SK 465 and determined that the CO 1 prices were reasonable. See id. at 25, 28. Plaintiff admits that Mr. Nasery’s PNM, which was a part of the CO 1 package reviewed during the greensheet-approval process, “could have better reflected the analytical bases for KBR’s price reasonableness determination,” id. at 27, but maintains that, given the “wartime circumstances,” id., its decision to incur the proposed costs was reasonable, even if the PNM “was not a model price analysis,” id. at 28.
Plaintiff further notes that it provided Major Hunter with information and documentation regarding the cost increase from SK 465 to CO 1. See id. at 29; PX 63, at 1381. Major Hunter initially labored under the mistaken belief that ABC’s cost for the concrete DFAC, exclusive of the DFAC services, was $33 million. See Pl.’s Br. filed May 25, 2012, at 30 [No. 09-428C]. He requested further clarification and information from Mr. Nasery in September 2004 and learned that “the $33 million amount that he mistakenly believed was for the facility alone was actually $37 million for both the facility and all of the other effort required to satisfy the capacity increase at Site H4 from 2573 to 6200 plus.” Id.; see also PX 71. KBR also informed Major Hunter in September 2004 that the 6,200 headcount was “suspect,” PX 71, at 4826, because the headcount had yet to exceed 2,500 troops. Pl.’s Br. filed May 25, 2012, at 31 [No. 09-428C]; PX 71, at 4826. Nonetheless, Major Hunter did not issue an LOTD altering the capacity requirement, so KBR and ABC continued to operate under an obligation to provide for a headcount of 6,200+. See Pl.’s Br. filed May 25, 2012, at 31 [No. 09-428C]. Plaintiff also argues that, although Major Hunter testified that he had a duty to object to costs or prices that he deemed unreasonable, see Tr. at 409-10 (Hunter), he never disagreed with the prices in CO 1. See Pl.’s Br. filed May 25, 2012, at 31 [No. 09-428C].

Plaintiff thus concludes, with respect to SK 465, that “in promptly requesting a proposal from ABC, probing the underpinnings of the proposed labor prices, performing both a technical and price analysis, and then executing CO1 following receipt of required approvals [from the greensheet-approval process], KBR’s DFAC Team personnel complied with KBR’s established policies and procedures” in determining that the CO 1 prices were reasonable. Id. at 27. As further support, plaintiff proffers that its expert, Mr. Check, reached the same conclusion after comparing the CO 1 per-person prices at the SOW headcount (6,200+) with the SK 465 per-person prices at the SOW headcount (2,573). See id. at 31-33. Mr. Check’s analysis evaluated the price of the concrete DFAC separate from the other price components—labor, consumables, and kitchen equipment. 14/ See id. at 32. Concluding that the price increase from SK 465 to CO 1 for labor, consumables, and kitchen equipment was 3.75%, Mr. Check opined that the CO 1 prices were reasonable, “particularly in light of the significant changes that were occurring in market and economic conditions at the time.” Id. at 33. Mr. Check reached a similar conclusion after comparing the price of the H4 DFAC with the price of the D16 DFAC. His analysis revealed that the D16 DFAC, which had a lower SOW headcount than the H4 DFAC, was more expensive

14/ Mr. Check’s analysis did not include reefers and generators because KBR maintains that the amounts for those items are not at issue in this case, as DCAA’s Revised Form 1 did not question the amounts that KBR paid ABC for these items. See Pl.’s Br. filed May 25, 2012, at 3 [No. 09-578C].
despite having less built-in force protection. See id. at 35. Consequently, plaintiff maintains that it has satisfied its burden of demonstrating that the CO 1 prices—including the price for the H4 DFAC—were reasonable.

Defendant takes the position that plaintiff is not entitled to recover any questioned amounts because KBR has failed to demonstrate, in accordance with FAR 31.201-3, that the costs incurred from ABC were reasonable. See Def.’s Br. filed June 8, 2012, at 4 [No. 09-428C]. FAR 31.201-3 provides that “[a] cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business.” 15/ Id. (quoting FAR 31.201-3(a)). Defendant advances the argument that, because plaintiff failed to follow sound business practice particularly in its proper review of CO 1, it did not act as a reasonably prudent business. See id. at 8. In support of this argument, defendant highlights the flaws in Mr. Nasery’s PNM and the greensheet-approval process that, arguably, did no more than rubberstamp an inadequate justification. See id. at 10-11. Defendant dismisses plaintiff’s argument that the urgency of the situation led to the omissions and defects in Mr. Nasery’s PNM because, as defendant explains, CO 1 was not signed until one month after it was requested. See id. at 9 n.5. Moreover, although technical reviewers from KBR’s Food Service Division commented that labor was “10 percent too expensive,” id. at 9 (citing DX 103, at 0924), Mr. Nasery failed to address this concern with Mr. Al-Awadi; rather, “Mr. Nasery accepted [ABC’s] first offer on the change order without any attempted revisions or ‘push back,’” id. at 9-10.

15/ Defendant notes that the standard for reasonableness of costs “ha[s] not been of particular controversy in this litigation or in the litigation of the related case of KBR I [see Kellogg Brown & Root Servs., Inc. v. United States, 103 Fed. Cl. 714 (2012)] until KBR filed its post[-]trial brief here.” Def.’s Br. filed June 8, 2012, at 5 [No. 09-428C]. In that brief plaintiff made “three bold new arguments with respect to the standard of review.” Id. First, plaintiff alleged that, once it makes a prima facie showing of reasonableness, the burden of proof shifts to defendant to prove unreasonableness. See id. Next, plaintiff argued that the 1987 amendments improperly dispensed with the presumption of reasonableness and shifted the burden of proof to the contractor. See id. (citing Pl.’s Br. filed May 25, 2012, at 9 n.6 [No. 09-428C]). Finally, plaintiff contended that the appropriate standard of review examines “whether the prices ‘are caused by a contractor’s gross disregard or willful misconduct by senior management with regard to contractual obligations.’” Id. (quoting Pl.’s Br. filed May 25, 2012, at 6 [No. 09-428C]). The court agrees with defendant that plaintiff’s arguments are not supported by law and applies the standard as put forward by defendant. See, e.g., supra note 3.
In addition to his failure to engage in arm’s-length negotiations with Mr. Al-Awadi, Mr. Nasery also relied on a flawed methodology in justifying the CO 1 prices in his PNM. See id. at 11. Defendant maintains that such a glaring flaw should have been discovered during the greensheet-approval process but was not because that process was merely “an uncritical ‘rubber stamp’” of Mr. Nasery’s justification. Id. Thus, defendant contends, KBR cannot argue that it employed sound business practices in deeming ABC’s prices reasonable because “[e]ven the most cursory inspection of the total price of CO 1’s newly[]proposed headbands, in comparison to those in the original SK 465, should [have] capture[d] the reviewer’s attention, demonstrating a large jump, compared to the pre-existing cost trend.” Id. at 12. Defendant supports its argument with Ms. Hadley’s testimony, which revealed that the price increases for labor, equipment, reefers, generators, and consumables were out of proportion with the actual change in demand. See id. at 12-13; Tr. at 1241, 1249, 1251-53, 1259, 1261-62 (Hadley). As a final point underscoring the inadequacy of Mr. Nasery’s PNM and the greensheet-approval process, defendant notes that the justification in the PNM was premised entirely on the fact that the SK 465 prices were the result of competition. See Def.’s Br. filed June 8, 2012, at 14 [No. 09-428C]. However, the award of SK 465 to ABC was the result of errors in the bad tabulation sheets. See id. Absent Mr. Nasery’s errors in tabulating bids, ABC would not have been the lowest priced, technically acceptable bidder and may not have received the subcontract award. See id.

Defendant next addresses KBR’s recognition of the inadequacy of the PNM in 2007 when it prepared two justifications for the costs of the concrete DFAC at site H4. See id. at 15. Defendant challenges the adequacy of the ICE because it compared the H4 DFAC to a facility located in Jordan—and thus subject to conditions far different from those in Iraq, which KBR contended greatly impacted costs—that was smaller in size and constructed two years after CO 1. See id. at 16-17. Moreover, KBR failed to offer a witness who could sponsor or explain the ICE: Mr. Castellana testified that he played no role in the creation of the ICE, Mr. Carr lacked knowledge regarding the facility used as a basis of comparison, and Mr. Check stated that he lacked the technical wherewithal to analyze the ICE. See id.; Tr. at 474 (Castellana), 1721-22 (Check). Defendant further argues that the ICE was not a truly independent estimate because the individuals who prepared it knew the target price from the outset, thereby tainting the reliability of the analysis. See Def.’s Br. filed June 8, 2012, at 17 [No. 09-428C]; Tr. at 1221-22 (Hadley).

Mr. Castellana’s 2007 Justification utilized the questionable ICE as a means for comparison, as well as the Kirby-style facility built at site D16. See Def.’s Br. filed June 8, 2012, at 17-18 [No. 09-428C]. The H4 DFAC and D16 DFAC were constructed with different materials, using different methods, and at different times. See id. at 18. According to defendant, “[t]he only thing the two buildings had in common was a rough similarity in the number of people to be fed.” Id. Although Mr. Castellana purported to provide a price
justification based on a price comparison, the underlying comparables were either unpersuasive (the ICE) or inadequate (the dissimilar D16 DFAC). See id. at 18-19.

Defendant points out that even Mr. Check’s expert price analysis does not demonstrate the reasonableness of the prices because it suffers from two flaws. Mr. Check concedes that what KBR purchased in SK 465 and CO 1 “was the right to give services to between 2501 soldiers and 3500 soldiers for a particular set price[.]” Tr. at 884 (Check); see also Def.’s Br. filed June 8, 2012, at 20 [No. 09-428C]. Accordingly, “[t]he SOW number plays no part in determining what KBR was obligated to pay ABC,” Def.’s Br. filed June 8, 2012, at 20 [No. 09-428C], yet Mr. Check compared the per-person prices at the SOW figures in SK 465 and CO 1, not the stated price for the inclusive headcount band. Defendant argues that the comparison is meaningless because the SOW figures are “irrelevant (as to price).” See id. Indeed, Ms. Hadley re-performed Mr. Check’s analysis by using the figures that represented the mid-point of the headcount bands in SK 465 and CO 1 that included the SOW numbers—instead of using the SOW figures, which fell at arbitrary points within the headcount band—and determined that there was “a far greater percentage increase in cost per person fed.” Id.

The second flaw in Mr. Check’s analysis, according to defendant, was his failure to consider items that KBR purchased via the two subcontracts. See id. at 19. He also did not factor in economies of scale that would have worked to ABC’s benefit when it agreed to the capacity increase. See id. at 20-21. Defendant stresses that KBR’s reliance on the increased violence in Iraq as contributing to higher labor prices is not supported by the record. See id. at 22. While defendant concedes that Iraq was a violent war zone during spring 2004, it questions the effect of the violence on labor prices, noting that “it was never used as a contemporaneous or near-contemporaneous explanation for the prices” and is particularly absent from the PNM, request for greensheet approval and KBR’s internal documentation. Id. at 22-23. Noting that the third-country nationals who served as laborers did not know in advance to which site they would be assigned, defendant surmises that the spike in violence was not listed as the justification for the increased prices because it did not cause labor prices to rise. See id. at 23. Although Mr. Donley testified that he received phone calls from Mr. Al-Awadi expressing concern for his laborers’ security, this testimony was undermined by the fact that, at the time Mr. Donley allegedly received these calls, no ABC employees were working at site H4; instead, the personnel at site H4 at that time were employees of a company that was working as ABC’s labor subcontractor. See id. at 24-25.

Defendant makes the final point that, although the Revised Form 1 did not challenge reefers and generators specifically, it found KBR’s justification of CO 1 completely flawed. See id. at 29. Consequently, defendant advocates, the court must determine a reasonable price for CO 1 because the record is devoid of evidence to support a finding by the court that
even a portion of the CO 1 costs were reasonable, and, “in order for the Court to reconstruct CO 1 to determine a reasonable price, it must address all the price elements in that change order [including reefers and generators] in recognition of the fact that price negotiations may include trade-offs amongst price elements.” Id. at 29-30.

2. No. 09-578C

Plaintiff challenges the Army’s withholding payment by arguing that the Government misinterpreted KBR’s contract with ABC when it contended that KBR was only obligated to pay ABC based on where the MAD headcount fell in a particular month. See Pl.’s Br. filed May 25, 2012, at 9 [No. 09-578C]. According to plaintiff, although “the consumables price . . . would be paid within the headband where the maximum average daily headcount fell in a particular month[,]” the price paid for other items would be based on the SOW headcount. Id. at 10-11; see also Tr. at 109 (Carr). Mr. Carr testified as to the logic behind this type of payment scheme:

BY MR. GALLAGHER:
Q Other than consumables, you considered the [costs of] other[] [items] to be fixed?
A Yes.
Q Why was that?
A The subcontractor was required to set up a facility to be prepared to serve the mid headband range. He had to put in place the reefers and the generators to service that facility, he had to bring the labor force on to serve that many people [specified in the SOW], so once he mobilized all that and put that in place, that was the level of effort that he was expending to perform that service and that’s what entitled him to bill in the middle headband [i.e., the headband that encompassed the SOW headcount figure].

Tr. at 109-10 (Carr). As further evidence to undermine defendant’s interpretation of SK 466 and CO 7, plaintiff draws the court’s attention to ABC’s invoices, which stated: “1. Cost of Operation is per SOW headcount range (2501-[3]500) including Labor since the contractual [sic] required number of Labor [sic] as per SOW is present on site. 2. Cost of consumables is per actual headcount range (1501-2500).” PX 185, at 6097; see also Pl.’s Br. filed May 25, 2012, at 15 [No. 09-578C].

Moreover, plaintiff contends that, when Mr. Carr created the new SK-type subcontract that utilized headcount bands, he discussed the structure with Army contracting personnel and explained that the upper and lower headcount bands were merely “prepriced options that could be utilized by KBR if and when the Government issued an LOTD or other required
change to the Government directed capacity.” Pl.’s Br. filed May 25, 2012, at 11 [No. 09-578C]. The Army personnel were pleased with the new subcontract structure and raised no objections. See id. at 11-12. Finally, plaintiff brands defendant’s contention that KBR should have issued a lump-sum CO instead of creating a new headcount band to account for the troop surge at site H2 as “a last-ditch effort to try to re-write the terms” of SK 466 and CO 7. See id. at 16-17. Nonetheless, plaintiff rejoins that CO 7 essentially did what the Government contends KBR should have done in that CO 7 “made sure ABC was paid for the increased services ABC provided due to the surge in troops” in much the same way as a lump-sum CO providing for equitable reimbursement. Id. at 16-17.

Defendant responds that the terms of SK 466 and CO 7 are unambiguous and required KBR to pay ABC based on the actual monthly headcount. See Def.’s Br. filed June 8, 2012, at 5 [No. 09-578C]. Noting that Note 8 in SK 466 provides that “[f]or other [non-SOW] headcount prices, refer to Tables 2, 3, and 4,” id. at 6 (second alteration in original) (quoting PX 185, at 6454), defendant explains that Table 4 identifies only two variable price components—labor and consumables—indicating that all other price components are to be billed based on actual headcounts. See id. Defendant also interprets plaintiff’s position as suggesting that the new headcount band added by CO 7 reflects a revised SOW headband and argues that such a position is implausible, given that CO 7 expressly states that “[t]he Statement of Work remains unchanged.” See id. at 8 (quoting JX 21, at G-0173882). According to defendant, plaintiff makes this argument because the premise of its contractual interpretation construct is that labor is always billed at the SOW rate[,] and it would be unable to recover the amounts overcharged [i.e., amounts billed by ABC and paid by KBR for troops anticipated but not actually served] during the CO 7 period of performance if the additional headband in CO 7 were not considered to reflect the new SOW number. Id. at 6-7. Despite plaintiff’s attempt to characterize the new headcount band in such a way, defendant posits, the terms of CO 7 are consistent with defendant’s construction of Table 4 that payment is to be based on actual headcounts. See id. at 7.

Defendant further questions KBR’s decision to use a CO that required the creation of a new headcount band instead of issuing a lump-sum CO to reimburse ABC for the costs it incurred in preparing to feed the increased capacity. See id. at 7 n.5. Ms. Hadley testified that

[it would seem that you would just need to issue a change order to equitably reimburse the subcontractor for the increased costs . . . but since [CO 7] was
[issued] after the fact it allowed [ABC] to bill at a headband that KBR knew that [ABC] hadn’t reached . . . because head counts were already done and turned in.

Tr. at 1281 (Hadley). Despite the availability of this option, KBR did not consider it but now contends that its approach had the same effect and should be considered in a similar vein.

II. Standards for cost reasonableness

LOGCAP III incorporates FAR 52.216-7, which permits reimbursement of costs paid to ABC, the subcontractor, by plaintiff, the prime contractor, only to the extent that the contracting officer determines them to be allowable in accordance with FAR subpart 31.2. See FAR 52.216-7(a)(1) (2000) 16/ (“The Government shall make payments to the Contractor . . . in amounts determined to be allowable by the Contracting Officer in accordance with Subpart 31.2 of the Federal Acquisition Regulation (FAR) . . .”). Costs are allowable pursuant to FAR subpart 31.2 if they meet the standard for reasonableness. See FAR 31.201-2 (2000) (“The factors to be considered in determining whether a cost is allowable include the following: (1) Reasonableness.”). FAR 31.201-3 provides the standard for determining reasonableness, as follows:

(a) A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business. Reasonableness of specific costs must be examined with particular care in connection with firms or their separate divisions that may not be subject to effective competitive restraints. No presumption of reasonableness shall be attached to the incurrence of costs by a contractor. If an initial review of the facts results in a challenge of a specific cost by the contracting officer or the contracting officer’s representative, the burden of proof shall be upon the contractor to establish that such cost is reasonable.

16/ The court is unsure whether the parties are citing the current version of the FAR or the version that was in effect when LOGCAP III was awarded to KBR. Other than defendant’s citation to FAR 52.216-7, see Def.’s Br. filed June 8, 2012, at 4 [No. 09-428C], the parties’ citations to the FAR do not include dates. The court’s review of the current and 2000 versions of the cited regulations revealed that, although minor formatting changes were made and a misplaced modifier was corrected, the regulations are almost identical. Accordingly, the version cited is inconsequential.
(b) What is reasonable depends upon a variety of considerations and circumstances, including—

(1) Whether it is the type of cost generally recognized as ordinary and necessary for the conduct of the contractor’s business or the contract performance;

(2) Generally accepted sound business practices, arm’s length bargaining, and Federal and State laws and regulations;

(3) The contractor’s responsibilities to the Government, other customers, the owners of the business, employees, and the public at large; and

(4) Any significant deviations from the contractor’s established practices.


Previously, a contractor’s incurred costs were entitled to a presumption of reasonableness, and the Government bore the burden of proving that the costs were unreasonable. See Bruce Constr. Corp. v. United States, 324 F.2d 516, 519 (Ct. Cl. 1963). This presumption, however, was superseded in 1987 by an amendment to FAR 31.201-3. See 52 Fed. Reg. 19,800, 19,804 (May 27, 1987) (codified at FAR 31.201-3); see Ace Constructors, Inc. v. United States, 70 Fed. Cl. 253, 275 (2006); George Sollitt Constr. Co. v. United States, 64 Fed. Cl. 229, 245 (2005). The current version of FAR 31.201-3 squarely acknowledges the lack of that presumption and imposes on the contractor the burden of proof of reasonableness. See FAR 31.201-3(a) (“No presumption of reasonableness shall be attached to the incurrence of costs by a contractor. . . . [T]he burden of proof shall be upon the contractor to establish that such cost is reasonable.”); see also Lisbon Contractors, Inc. v. United States, 828 F.2d 759, 767 (Fed. Cir. 1987) (“The government was under no obligation to present evidence attacking an item if [the contractor] did not prove *prima facie* that it was properly included.”); Thermalon Indus., Ltd. v. United States, 51 Fed. Cl. 464, 472 (2002); McDonnell Douglas Corp. v. United States, 40 Fed. Cl. 529, 536 (1998), rev’d on other grounds, 182 F.3d 1319 (Fed. Cir. 1999); Fiber Materials, Inc., ASBCA No. 53616, 07-1 BCA ¶ 33,563, 2007 WL 1252481 (Apr. 17, 2007). Thus, the court holds that plaintiff’s burden was to prove by a preponderance of evidence the reasonableness of its claimed costs.

FAR 31.201-3 affords the court significant discretion in determining whether claimed costs are reasonable and sets forth a non-exhaustive list of circumstances to be considered. See FAR 31.201-3(b)(1)-(4). Despite this guidance, case law in which a court or the Armed Services Board of Contract Appeals (the “ASBCA”) has exercised its discretion and
evaluated the reasonableness of a claimed cost in similar circumstances is limited. 17/ Plaintiff relies on Lockheed Martin Tactical Aircraft Systems, ASBCA No. 49530, 00-1 BCA ¶ 30,852, 2000 WL 307741 (Mar. 22, 2000), to support its argument that its costs were reasonable. See Pl.’s Br. filed May 25, 2012, at 16, 33-34 [No. 09-428C]. Lockheed involved the production and sale of military aircraft for the Government of Turkey through the Department of Defense’s Foreign Military Sales program (the “FMSP”). Lockheed, 00-1 BCA ¶ 30,852, at 152,294. Pursuant to the FMSP, the United States enters an agreement with a foreign country—the customer—to serve as the customer’s agent and contracts with a United States contractor for the production of specified goods. Id. The United States, as an agent for Turkey, contracted with Lockheed for the production of military aircraft. Id. at 152,296-97. In conjunction with Turkey’s purchase through the FMSP, the United States brokered a counter-trade military agreement between the Governments of Egypt and Turkey whereby co-production of the aircraft would be performed by a subcontractor in Egypt. Id. The United States was aware that Turkey would incur significant co-production premiums on account of this arrangement. Id. at 152,312.

When Lockheed sought reimbursement of costs incurred in connection with co-production efforts, the United States, contending that the costs were unreasonable, disallowed them. Id. The ASBCA disagreed. Id. at 152,313. Explaining that FAR 31.201-3 provides for an evaluation of reasonableness on the basis of the specific circumstances presented, the ASBCA discussed the “unique facts at work . . . specifically, the period of political and military turmoil which formed the backdrop of th[e] case.” Id. at 152,312-13. The ASBCA recognized that such circumstances will alter the costs of services and stated that “[u]nusually high costs may be necessary where urgency is present or where no alternative sources are available.” Id. at 152,312 (citation omitted) (internal quotation marks omitted). Moreover, the ASBCA noted that the United States, aware of the high estimate for the co-production premium, encouraged Turkey to proceed with the contract, thereby implying that the co-production costs were reasonable. See id. at 152,312-13. When it later disallowed those costs, the United States failed to explain why costs previously deemed reasonable had since

17/ Most of the cases addressing the reasonableness of claimed costs involve challenges to the amount of employee compensation. See Sterling Millwrights, Inc. v. United States, 26 Cl. Ct. 49, 97-98 (1992) (citing FAR 31.201-3(b) and stating that “the reasonableness of compensation is a question of fact that is determined in light of all the relevant facts of a particular case” (citations omitted)); Boeing Aerospace Operations, Inc., ASBCA Nos. 46274, 46275, 94-2 BCA ¶ 26,802, 1994 WL 96970 (Mar. 21, 1994) (determining reasonableness of employee compensation by considering “all of the relevant circumstances existing at the time of the incurrence of the costs” (citation omitted)), aff’d on recons., ASBCA Nos. 46274, 46275, 94-3 BCA ¶ 27,281, 1994 WL 651887 (Nov. 9, 1994).
become unreasonable.  Id. at 152,312.  Accordingly, the ASBCA ruled that Lockheed reasonably incurred the total amount of co-production costs claimed and was entitled to recover them in full.  See id. at 152,313.

Although the ASBCA acknowledged that Lockheed’s claimed co-production costs were significant, it recognized that production was occurring in the midst of “political and military turmoil,” likely resulting in elevated prices for services rendered.  Id. at 152,312.  Plaintiff thus urges that, in evaluating the reasonableness of its claimed subcontractor costs, the court should consider the wartime environment in which KBR was operating.  See Pl.’s Br. filed May 25, 2012, at 33-34 [No. 09-428C].

While the court considers the violence in Iraq as a circumstance bearing on the reasonableness of the agreed-upon prices, the court emphasizes that the determination is not what the court considers to be reasonable; rather, the court will examine whether plaintiff’s evidence supports the claimed amounts as reasonable.  In KBR I this court had a benchmark against which to evaluate the questioned amounts.  See 103 Fed. Cl. at 769-70.  DCAA in that case had questioned the reasonableness of some of the prices that KBR paid for services performed by its subcontractor and then passed on to the Government as reimbursable costs.  The court compared those prices to the prices proposed by the subcontractor in its subsequent competitive bid submitted to the Army in an attempt to win a fixed-price contract for the same services that had been performed by KBR as the prime contractor.  See id.  In concluding that the some of the prices paid were reasonable, the court explained that the “reasonableness of a price can only be judged in terms of some other price figure[,] [and] [i]t is from this other figure, the conceptual anchor point, that one determines if the questioned price is reasonable.”  Id. at 769.  It is from this perspective that the court undertakes to determine whether the questioned costs in these matters are reasonable.

III.  No. 09-428C

This case took an interesting turn when plaintiff filed its opening post-trial brief, which revealed that plaintiff was adding a new dimension to the position that it had taken before and during trial regarding the standard of review for determining the reasonableness of costs.  Throughout trial the standard for determining the reasonableness of costs—set forth above—did not appear to be in dispute; yet, in its post-trial brief, plaintiff advanced a new position, arguing that, in a cost-reimbursement contract, “a contractor’s costs are allowable . . . unless they are caused by a contractor’s gross disregard or willful misconduct by senior management with regard to its contractual obligations.”  Pl.’s Br. filed May 25, 2012, at 6 [No. 09-428C]; see also supra note 15.
Plaintiff contends that it has established a *prima facie* case demonstrating that the costs at issue fit within this standard for reasonableness. See Pl.’s Br. filed May 25, 2012, at 3 [No. 09-428C]. Plaintiff argues that it satisfied its burden by showing that (1) it incurred the questioned costs in connection with its performance of TO 59, (2) the prices in CO 1 were the result of its best efforts to perform under TO 59 in wartime circumstances, and (3) the incurred costs were not the product of management’s gross disregard or willful misconduct. See id. at 7; see also Pl.’s Br. filed June 22, 2012, at 5 [No. 09-428C]. Because of this showing, plaintiff maintains, the burden shifted to defendant to show that the costs were unreasonable. 18/

Defendant balks at plaintiff’s characterization of the standard for determining the reasonableness of the costs in CO 1, and objects that plaintiff is only now—post-trial—raising this argument. Despite plaintiff’s assertion that, “[i]n substance, the Government is attempting to fundamentally alter more than 50 years of established practice regarding cost reasonableness under cost reimbursement contracts[,]” Pl.’s Br. filed June 22, 2012, at 3 [No. 09-428C], defendant argues that it is “apply[ing] the law as-written and contained in the FAR[,]” Def.’s Br. filed June 29, 2012, at 4 [No. 09-428C]. Defendant thus contends that the standard of review in this case—as set forth above—utilizes the “prudent businessperson” standard set forth in FAR 31.201-3. See id. The court agrees, recognizing that in various cases since passage of the 1987 FAR amendments the Federal Circuit and the Court of Federal Claims have applied the post-amendment version of FAR 31.201-3 without restricting its application to indirect costs. See supra at 34-35. Furthermore, the court finds it likely that, had plaintiff raised this argument before or during trial, defendant would have

18/ Plaintiff admits that it bears the burden of proof as to questioned indirect costs, yet makes the argument that the 1987 amendments to the FAR improperly assigned the burden of proof to the contractor with respect to incurred direct costs by dispensing with the presumption of reasonableness that previously applied to costs incurred by a contractor. See Pl.’s Br. filed May 25, 2012, at 9 n.6 [No. 09-428C]. Despite the fact that the language of FAR 31.201-3 does not limit itself to indirect costs, as defendant has noted, see Def.’s Br. filed June 29, 2012, at 4 n.1 [No. 09-428C], plaintiff asserts that “there is ample support for the Court to continue to apply the presumption that KBR’s incurred direct costs are reasonable,” see Pl.’s Br. filed May 25, 2012, at 9 n.6 [No. 09-428C], and urges the court to apply the presumption to its direct costs, notwithstanding its argument that it made a *prima facie* showing that satisfied its burden, id. at 7. The court declines plaintiff’s request because FAR 31.201-3 expressly dispenses with the presumption of reasonableness and applies to “costs” without restricting its application to indirect costs. See FAR 31.201-3 (2012).
presented its case differently and questioned KBR’s former and current personnel in a different vein. 19/

The court finds that KBR has not shown that it employed sound business practices and acted as a reasonably prudent business in accepting ABC’s proposed prices for CO 1. The court accepts KBR’s decision not to hold a competition upon receiving the June 22 LOTD as reasonable, given the sense of urgency conveyed by Major Hunter and the Army. That urgency, however, is insufficient to justify the acceptance of unreasonable prices. Moreover, while it does appear that KBR—whether pursuant to its request or not—received additional information from ABC supporting the prices in the latter’s proposal, this, too, is insufficient to establish reasonableness. This information did not illuminate the costs of the components that ABC would provide; rather, the documents that Mr. Al-Awadi submitted to Mr. Nasery in July 2004 merely identified the numbers of each component that would be provided, the number of laborers for each job title that would be necessary, the layout of the new DFAC, and a schedule of materials to be used. See PX 53.

Plaintiff emphasizes the particularly exigent circumstances, dangerous wartime conditions, and need immediately to increase capacity, taking issue with defendant’s and DCAA’s after-the-fact challenges to KBR’s decisions made in such an environment. Plaintiff responds to defendant’s contention that KBR never documented the effect of these

19/ Notwithstanding the foregoing, if plaintiff’s argument that costs are presumed reasonable unless they resulted from management’s gross disregard or willful misconduct had merit, plaintiff almost certainly has not demonstrated reasonableness. The problem is that KBR’s witnesses and documents admit that plaintiff was aware that the PNM was inadequate. See Tr. at 172-73 (Carr), 366-68 (Donley), 485-86 (Castellana); DX 90, at 3770, 3783. While Mr. Nasery’s failure to investigate the Food Service Division’s concern that labor was too expensive may not have been readily apparent to the four KBR employees (Messrs. Donley, Parenti, Agness, and Quigley) involved in the greensheet-approval process, surely the significant price increase from SK 465 to CO 1 would have raised a red flag, leading the reviewers to discover Mr. Nasery’s flawed methodology that compared SK 465 prices with the CO 1 prices on the basis of a doubled quantity and a doubled rate. See Tr. at 334 (Donley) (stating that greensheet-approval process would have included thorough review of PNM). Alas, Messrs. Donley and Quigley approved CO 1 without detecting the analytical flaw, reducing greensheet approval to little more than a rubber stamp. Having failed to detect what appears to be a glaring miscalculation after an admittedly “thorough[] review[] of all the required [CO 1] documents,” Tr. at 332 (Donley), KBR’s management acted with gross disregard for the reasonableness of the proposed prices and cannot satisfy the standard advanced by plaintiff.
conditions on the labor market by citing Mr. Al-Awadi’s e-mails to Mr. Nasery in June and July 2004, see PX 49; PX 53, as well as Mr. Donley’s testimony that he “received daily phone calls” from Mr. Al-Awadi expressing concern for the safety of his laborers, Tr. at 214 (Donley). The court finds that, while Mr. Al-Awadi did mention the effect of the violence on labor prices in his e-mails to Mr. Nasery, his statements appear to be self-serving, given that neither Mr. Nasery nor anyone else in KBR’s employ ever cited this as a justification for the dramatic price increase in CO 1.

Furthermore, KBR never sought information from ABC as to how the violence-induced price increase for labor manifested. In a July 2004 e-mail to Mr. Nasery, Mr. Al-Awadi remarked that the “increased cost of labor . . . includes salaries, benefits, indemnity, bonuses, medical examinations, insurance, [and] air tickets from home countries to Kuwait.” PX 53. He also attributed increased labor costs to the need to fly laborers to Turkey or Jordan from Kuwait and then transport them by road to the sites in Iraq. See id. While Mr. Al-Awadi’s explanation is logical, KBR accepted it at face value, never seeking further explanation assigning some dollar value to the cost elements. In light of the significant increase, it was unreasonable for KBR to accept this overview of the situation because KBR knew that its subcontractors did not maintain documentary support and would not be able to provide support for the increased costs if the issue were not pressed with Mr. Al-Awadi in this time frame. As for Mr. Al-Awadi’s daily phone calls to Mr. Donley, no ABC employees were working at site H4 at the time these calls allegedly took place. Although the court does not doubt that site H4 experienced a dramatic spike in violence around June 2004, the court has no confidence in plaintiff’s assertion that this resulted in an increase in labor costs commensurate with that from SK 465 to CO 1. Compare JX 10, at 83026, with PX 58, at 0609.

One recurrent point of disagreement between the parties was whether KBR—and, consequently, ABC—was responsible for its laborers being on or off site in accordance with capacity fluctuations. The court finds defendant’s position unreasonable that KBR and ABC were required to send laborers offsite when the headcount dipped below that specified in the SOW, only to recall them when capacity increased. Although keeping unnecessary laborers onsite resulted in the Army at times paying for manpower that it did not require, KBR’s decision avoided the Army’s incurring excessive mobilization and demobilization costs. It is from this refined perspective that the court considers Mr. Check’s testimony supporting the reasonableness of the pricing and Ms. Hadley’s criticism of it. See Tr. at 1265-69 (Hadley); DX 105, at 7.

Despite the fact that SK 465 was executed only four months before CO 1, compare JX 10, with PX 58, some level of price increase is warranted due to the admitted fast-track order to provide for greater capacity. Nonetheless, Mr. Check’s premise—which compared
the prices in SK 465 and CO 1 based on the SOW targets (2,573 and 6,200+, respectively) that fell toward the high end of the headcount band in CO 1 (5,501-6,500) and the low end of the headcount band in SK 465 (2,501-3,500)—is unreasonable. See PX 142, at 11. This methodology had the effect of basing a comparison on per-person prices that were meaningless in that they did not measure the same thing. In other words, the per-person price for 6,200 troops represented the price per person when ABC was serving almost the highest number of troops falling within a given headcount band; consequently, the per-person price will be lower than when ABC is serving a capacity that falls toward the lower end of the headcount band, as is the case with Mr. Check’s per-person price for the SK 465 SOW target. Such a comparison is neither meaningful nor useful in determining the price increase from SK 465 to CO 1 because it fails to measure the overall price increase and, instead, measures the per-person price increase at different activity levels. See id.; see also Tr. at 1273 (Hadley) (“In the beginning of the headband the contractor is earning much more price per person, a much higher profit than it would be when they’re serving at the high end of the band because they obviously have to provide more services [when providing at the high end of the band].”).

Ms. Hadley’s analysis revealed the above defect inherent in Mr. Check’s approach. See DX 106, at 1 (Ms. Hadley’s demonstrative exhibit rebutting Mr. Check’s analysis); Tr. at 1274-75 (Hadley) (“[Y]ou can’t compare the price from the beginning of the headband to the price in another head band at the high end of the headband because you’re providing a different level of productivity and a different level of service.”). To demonstrate her point, Ms. Hadley re-worked Mr. Check’s analysis using the mid-point of the headcount bands that encompassed the SOW targets. See DX 106, at 2. Although Ms. Hadley did not identify the percentage increase yielded by her analysis, she depicted a much steeper price increase than that depicted by Mr. Check. See id. Moreover, as evidenced by Ms. Hadley’s graphic depiction of monthly prices by element reproduced on page 19, monthly prices for individual elements doubled or more than doubled from SK 465 to CO 1. See DX 91, at 11. This casts serious doubt on Mr. Check’s report of a 3.75% price increase.

Ms. Hadley did not offer her own assessment of damages, nor was she required to do so. Urging that the court accept her determination that the results of Mr. Check’s analysis are “badly skewed,” see Def.’s Br. filed June 29, 2012, at 12, defendant correctly observes that the SOW numbers defined nothing in terms of KBR’s contractual obligations to ABC (which is what is relevant in evaluating the reasonableness of the contract between KBR and ABC)[:] regardless of where on a headband the number of troops fed fell, ABC was entitled to the exact same amount of money.
Id. The 3.75% price increase—which could appear to be a modest increase, given the level of violence and urgency of the situation—advanced by Mr. Check is not representative of the actual price increase from SK 465 to CO 1. The court lacks a reliable contemporaneous benchmark against which to assess the CO 1 prices to determine if they are in fact reasonable. Accordingly, the court finds that plaintiff has failed to demonstrate the reasonableness of the costs incurred for pricing elements—not including facility costs—that were questioned by DCAA in its Revised Form 1. 20/

Ms. Hadley did prepare a demonstrative exhibit that forms the basis for a reasonable price for CO 1 based on SK 465’s per-item prices for dining equipment, labor, and generators and the prices per headcount average, e.g., 4,000 would be the headcount average for the 3,501-4,500 headcount band) for consumables and reefers. See DX 105. Ms. Hadley applied these essentially unit prices to the corresponding headcount average and number of required items in CO 1. Ms. Hadley then concluded that the CO 1 prices that devolved from the SK 465 prices represented what would have been a reasonable price for CO 1. The total for Mr. Hadley’s estimated CO 1 was $20,821,188.00 or $1,735,099.00 per month, as compared to CO 1’s actual total and monthly costs of $31,308,000.00 and $2,609,000.00, respectively. 21/

Ms. Hadley next determined the total difference between the actual CO 1 price and her estimated reasonable price—a total of $9,304,181.00. 22/ Plaintiff argues that, because Ms.

20/ The court recognizes the Revised Form 1 as the operative document questioning KBR’s incurred costs. Consequently, the court has not accepted defendant’s challenge to KBR’s costs incurred for reefers and generators because those items were not questioned by DCAA in the Revised Form 1. See JX 36. To the extent the Government is withholding from KBR monies it is owed for reefers and generators, KBR is entitled to return of those amounts.

21/ The total and monthly costs for CO 1, as executed, are derived from the monthly prices listed in the “Pricing” section of CO 1, as well as ABC’s proposal. See PX 58, at 0609. A discrepancy is apparent between the total cost of CO 1, as noted by the parties, which at times was $33 million and at other times was $37 million, and the total derived from the court’s calculation. The cause of the discrepancy is unclear, and for purposes of this exercise, the court will adopt its own calculation based on the figures in CO 1 offered as an exhibit at trial.

22/ By the court’s calculation, the actual difference is $10,486,812.00. Ms. Hadley testified that to arrive at the $9.3-million amount, she first calculated the difference between the actual CO 1 monthly price and the estimated CO 1 monthly price ($2,609,000.00 - $1,735,099.00 = $873,901.00) and then multiplied the difference by twelve to arrive at the total difference for the year ($873,901.00 x 12 = $10,486,812.00). See Tr. at 1266-67.
Hadley, as defendant’s expert, abandoned the $12.5-million amount questioned by DCAA in its Revised Form 1 in favor of her calculation, see Tr. at 1549-50 (Hadley), defendant should no longer be heard to argue in support of the $12.5-million amount, see Pl.’s Br. filed May 25, 2012, at 37 No. 09-428C]. The result of Ms. Hadley’s analysis—as corrected by the court’s calculations and reduced by the amounts listed for reefers and generators, which the court has determined are not at issue—represents the new total of questioned costs. Accordingly, the total amount of questioned costs becomes $8,300,292.00, i.e., $10,486,812.00 - $2,186,520.00 (Ms. Hadley’s questioned amount for reefers and generators) = $8,300,292.00. Thus, KBR is entitled to $4,229,212.00, i.e., the difference between Ms. Hadley’s questioned amount, which represents reasonable adjustments that plaintiff cannot overcome, less reefers and generators and the $12,529,504.00 questioned in the Revised Form 1.

As a final point, plaintiff made the observation at trial that Ms. Hadley’s analysis inexplicably used the lowest headcount band when determining CO 1 and estimated CO 1 prices instead of using the middle headcount band that contained the SOW target. See Tr. at 1688-89 (Check). Moreover, she calculated the price per headcount average using the highest band in SK 465. See DX 105. It is unclear why Ms. Hadley opted to use these headcount bands, although it appears that she was attempting to depict what would have been a natural progressive increase from one band to the next, i.e., from the 3,501-4,500 headcount band in SK 465 to the 4,501-5,500 headcount band in CO 1. The court notes, however, that the difference between the proposed prices for the low and middle headcount bands in actual CO 1 was de minimis. See PX 58, at 0609 (chart indicates that only the price for consumables differs from the low headcount band to the middle headcount band). Ms. Hadley’s result would not have differed significantly had she carried her analysis through to the middle headcount band.

The court emphasizes that the burden was not defendant’s to prove the reasonableness of KBR’s claimed costs. The court found Ms. Hadley’s approach, with the court’s modifications discussed above, adduced the more reliable method for assessing the reasonableness of the increased prices from the benchmark SK 465 prices. The court sees no need for a further adjustment due to its rejection of Ms. Hadley’s consideration to

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22/ (Cont’d from page 41.)

(Hadley). Utilizing this same analysis, the court arrived at $10,486,812.00, not the $9,304,181.00 obtained by Ms. Hadley. The court will use the $10-million figure, which is the correct result of Ms. Hadley’s equation.
economies of scale. The court must be conservative in making allowances in plaintiff’s favor after finding KBR’s direct evidence and documents less persuasive on labor costs.

KBR’s incurred facility costs were considered separately by Ms. Hadley and Mr. Check. One initial dispute that was resolved during trial was the location of the Q-West facility used for comparison in the ICE. It ultimately was determined that that facility was located in Jordan—not Iraq. See Def.’s Br. filed June 8, 2012, at 16-17 [No. 09-428C]. Neither expert relied on Mr. Nasery’s PNM, and Ms. Hadley denounced it as flawed. See DX 91, at 11, 23; Tr. at 1642, 1644-45, 1648 (Check). In analyzing the building price, Mr. Check reviewed Mr. Castellana’s 2007 Justification, which KBR admittedly had prepared at a significant remove. Similar to the 2007 Justification, Mr. Check compared the DFAC at site H4 to the DFAC at site D16 because the SOW targets for each DFAC were relatively close. See PX 142, at 10. After factoring in an estimated cost to provide external force protection to the D16 facility, Mr. Check determined a price per person for each facility. Because the per-person price for the H4 facility was lower, Mr. Check concluded that the price of the H4 DFAC was reasonable, especially because the H4 DFAC had even greater force protection—which would have increased the cost—than that factored in to the price of the D16 facility. See Tr. at 830 (Check).

Ms. Hadley’s analysis of the building price began with an error. In comparing the price of the H4 facility to that of the Q-West facility used for comparison in the ICE, Ms. Hadley deducted the Iraq adjustment that had been added to the cost of the D16 facility to account for the fact that it was constructed outside of Iraq in a region subject to different conditions. See DX 105, at 6. Because it has been determined that Q-West was located outside Iraq, the Iraq adjustment should not have been deducted from the cost of that facility. See Tr. at 1227-28 (Hadley) (stating assumption Iraq adjustment was figure added to facility built outside of Iraq when that facility is being compared to facility within Iraq). After deducting the Iraq adjustment, Ms. Hadley determined a monthly cost for both the Q-West and H4 facilities. See DX 105, at 6. Performing this same analysis without deducting the Iraq adjustment yields a monthly cost of $565,102.00 for the Q-West building, i.e., $6,781,224.00 ÷ 12 months. The monthly cost for the H4 DFAC was $566,000.00. See id. Thus, the H4 DFAC is only slightly more expensive than the Q-West facility, which was approximately 500 square meters smaller even after the addition of a square-footage adjustment to its cost. See DX 90, at 3783; Tr. at 182-83 (Carr). Tellingly, Ms. Hadley opined that “the size of the building and the type of construction have a much more significant impact on the reasonableness of the price than a head count capacity would.” Tr. at 1217 (Hadley). If this is so, then the cost of the H4 DFAC appears even more reasonable, given that it is so close in cost to the Q-West facility that, although constructed of concrete, was smaller and lacked the bells and whistles included in the H4 building. See PX 51, at 1400; PX 84, at 0562.
The court recognizes that KBR’s justification for its facility costs (the 2007 Justification) was prepared long after KBR had agreed to the prices proposed by ABC in CO 1. Nonetheless, given the increased capacity, sudden change in type of construction, and evidence that various VIP extras were required, the court finds that the costs KBR incurred for the construction of the H4 DFAC are reasonable. As the experts’ analyses have revealed, the cost of the H4 DFAC was not significantly greater than either of the two facilities used as comparables, despite the fact that it was a larger, better protected structure whose construction resulted from an urgent LOTD that vastly altered the previous requirements. Accordingly, the court finds that KBR is entitled to payment of the amounts questioned by DCAA relating to the facility lease.

IV. No. 09-578C

Defendant’s challenge in this case is one of contract interpretation. According to defendant, KBR was only obligated to pay ABC based on where the MAD headcount fell in a particular month, contrary to KBR’s assertion that, for all items except consumables, it was obligated to pay ABC based on the SOW figure regardless of actual headcount levels. See Def.’s Br. filed June 8, 2012, at 5-6 [No. 09-578C]. KBR explains that the two headcount bands in addition to the middle headcount band, i.e., the SOW band, were merely pre-priced options that could be utilized by the Army if it issued a LOTD changing the required capacity. The parties’ positions pit testimony from two KBR employees against each other. Defendant relies on testimony from Ms. Battles who stated that CO 7 did not provide explicitly for payment to ABC pursuant to the new (and highest) headcount band regardless of the actual headcount. See Tr. at 1611 (Battles). Mr. Carr, on the other hand, testified that, because ABC set up its facility to accommodate the capacity specified in the SOW and prepared to serve that number of troops, it was entitled to be paid in accordance with the SOW target without reference to actual headcounts. See Tr. at 109-10 (Carr).

By creating a new headcount band in CO 7 to provide a pricing structure for the troop surge, defendant contends that KBR was creating a new SOW band, given that its position previously had been that payment was to be made in accordance with the SOW capacity figure. See Def.’s Br. filed June 8, 2012, at 6 [No. 09-578C]. This, defendant argues, is implausible because CO 7 clearly stated that the SOW was unchanged from that in SK 466. See id. at 6-8. Plaintiff responds that, once ABC incurred costs to serve the capacity set forth in the SOW, it was entitled to be paid for those services even if actual headcounts dipped below the SOW figure because preparations already had been made and ABC was not able to reduce its labor pool or return kitchen equipment with every incidental change in capacity. See Pl.’s Br. filed May 25, 2012, at 13 [No. 09-578C]. However, once capacity increased on account of the troop surge in January 2005, a new pricing structure was necessary to ensure payment to ABC for costs incurred in preparing to serve the influx.
Plaintiff also asks the court to adopt its resolution with ABC of how to charge for serving a capacity level that exceeded that provided for in the highest headcount band. Defendant counters that, rather than addressing the issue unilaterally by creating a new headcount band, KBR should have issued a lump-sum CO or required ABC to submit a request for equitable adjustment to obtain reimbursement of the excess costs it incurred. See Def.’s Br. filed June 29, 2012, at 8-9 [No. 09-578C]; Def.’s Br. filed June 8, 2012, at 7 n.5 [No. 09-578C]; Tr. at 1281 (Hadley).

Although the parties disagree as to SK 466’s and CO 7’s payment terms, it is undeniable that, for some time in 2005, headcounts at site H2 exceeded what was provided for in SK 466’s pre-priced headcount bands. Some construct was necessary to deal with wartime exigencies that resulted in this rapidly increased capacity. If a new construct had not been established, ABC would be faced with the draconian choice of feeding the influx of troops and risking nonpayment for costs incurred in serving a capacity not provided for in the existing headcount band structure or feeding only the maximum number of troops provided for in the existing bands. While defendant may have a point that a lump-sum CO or request for equitable adjustment may have been equally effective in compensating ABC for its incurred costs, KBR’s approach of creating a new headcount band was reasonable in the circumstances. The prices in the new band were derived by computing an incremental increase from the prices in the existing headcount bands that were established competitively. The court thus has an appropriate benchmark against which to measure the reasonableness of the prices in the new band. Consequently, despite the availability of other options for reimbursing ABC, the court finds that KBR acted reasonably when faced with a sudden increase in capacity in this wartime environment and is entitled to reimbursement of costs paid to ABC in the amount questioned in the Revised Form 1 (plus $84,563.00, which represents the difference between the amounts questioned in the Original and Revised Form 1s that has not yet been returned to KBR).

CONCLUSION

Accordingly, based on the foregoing,

1. By October 19, 2012, the parties shall submit a Joint Stipulation, 23/ consistent with the directions listed below, reflecting the amount of judgment to be entered in each case for plaintiff:

23/ Agreement to the amounts signifies that they represent only the amounts awarded to plaintiff in both actions, but does not signify that either party concurs in the awards.
(1) To the extent that KBR remitted payment to DCAA for reefers and generators following DCAA’s issuance of its Original Form 1 regarding SK 465 and CO 1, KBR is entitled to return of that amount because those items were not questioned in the Revised Form 1 for SK 465 and CO 1 and therefore have not been put in issue.

(2) In accordance with the order entered October 25, 2011, on Plaintiff’s Motion for Partial Summary Judgment on Liability, plaintiff is entitled to its base fee in the amount of $84,789.00, which represents the portion of its base fee not held as reserves.

(3) An award of $4,229,212.00 for reasonable costs, which represents the difference between Ms. Hadley’s questioned amounts in SK 465 and CO 1 and the amounts questioned by DCAA in the Revised Form 1. This amount shall be adjusted for applicable contract additions.

(4) The amount of facility lease costs relating to SK 465 and CO 1 that were withheld from KBR.

(5) The total amount questioned in the Revised Form 1 regarding SK 466 and CO 7, i.e., $698,779.00, and challenged by KBR, plus $84,563.00, which represents the difference between the amounts questioned in the Original Form 1 and the Revised Form 1 that KBR remitted to DCAA but that has not yet been returned to KBR despite defendant’s concession that plaintiff is entitled to the latter.

2. When the court orders entry of judgment, the Clerk of the Court will be directed to enter judgment for plaintiff consistent with the total of the amounts reflected in the parties’ Joint Stipulation, including interest pursuant to 41 U.S.C. § 7109 (2006), from October 6, 2008, for KBR’s claim related to SK 465 and CO 1, and from December 23, 2008, for KBR’s claim related to SK 466 and CO 7. Each party shall bear its own costs.

IT IS SO ORDERED.

/s/ Christine O.C. Miller

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Christine Odell Cook Miller
Judge