



FEMA

November 18, 2009

BY HAND-DELIVERY

Clerk of the Board
Civilian Board of Contract Appeals
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Washington, D.C. 20036

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BOARD OF
CONTRACT APPEALS

DOCKET NUMBER: CBCA-1757-FEMA

Dear Sir or Madam:

Please find attached the Response of Federal Emergency Management Agency (FEMA) to the arbitration request submitted by the Mississippi State Port Authority of Gulfport, Mississippi and filed as CBCA-1757-FEMA. Submitted with the Response is a binder(s) of exhibits.

Please add the following Office of Chief Counsel contacts for all notices and correspondence to FEMA related to the arbitration hearing: Linda M. Davis, Associate Chief Counsel – Program Law Division, 202-646-3327 or lindam.davis@dhs.gov; and Kim A. Hazel, Senior Counsel – Program Law Division, 202-646-4501 or kim.hazel@dhs.gov.

Very truly yours,

Amy M. Weinhouse
Senior Attorney
Office of Chief Counsel
DHS/Federal Emergency Management Agency
500 C St., S.W.
Washington, D.C. 20472

**Mississippi State Port Authority
Request for Arbitration of Limited Application of Cost Estimating Factors to
Building 14, Freezer, and Building 15, Chiller
Project Worksheets: 8908 and 9836
FEMA-1604-DR-MS
Docket # CBCA 1757-FEMA**

**RESPONSE OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY TO
ARBITRATION REQUEST OF MISSISSIPPI STATE PORT AUTHORITY AT
GULFPORT, MS**

On October 19, 2009, the Federal Emergency Management Agency (“FEMA”) received the request of the Mississippi State Port Authority (hereafter “the Port”) at Gulfport, MS, to arbitrate FEMA’s decision to limit the application of Cost Estimating Format (“CEF”) factors to eligible estimated repair costs for the Port’s Buildings 14 and 15. The amount in dispute for this request is \$18,969,703. This document, with attached declarations and exhibits, constitutes FEMA’s response to the Port’s arbitration request.

ARBITRATION PANEL JURISDICTION

The Mississippi State Port Authority has met the regulatory guidelines for filing an arbitration request as outlined in Title 44 Code of Federal Regulations (hereafter C.F.R.) § 206.209 as follows:

- Project Worksheets (PWs) 8908 and 9836 represent eligible damage to two separate Port projects. Since the issue is the same for both projects, FEMA’s response addresses both projects.
- The arbitration request for \$18,969,703 exceeds the \$500,000 project threshold.
- FEMA responded to the Port’s first appeal on August 27, 2009.

- The Port has opted to file this arbitration request in lieu of filing a second appeal.
- The Port filed its arbitration request by letter dated October 19, 2009, with all supporting documentation; thus, the Port has met the October 30, 2009, arbitration request submittal deadline.

SUMMARY OF FEMA'S POSITION

Of the \$18,969,703 in dispute, FEMA agrees that an additional \$7,065,579 is eligible for reimbursement. The remainder of the request, \$11,904,124, is without merit. In accordance with Federal regulations 44 C.F.R. § 206.226 (f) and Disaster Assistance Policy 9524.4, *Repair vs. Replacement of a facility under 44 C.F.R. 206.226(f)* (“*The 50% Rule*”), FEMA has determined that Building 14 is eligible for full replacement as the storm related damage was greater than 50 percent of the replacement costs, Building 15 is eligible for repair because the disaster-related damage to the structure was not greater than 50 percent of the replacement costs, and the refrigeration equipment for both facilities is eligible for replacement. See FEMA Exhibit 1, FEMA Policy 9524.4 *Repair vs. Replacement of a Facility (The 50 Percent Rule)*. FEMA funds repair/replacement costs for in-kind function and design capacity at the time of the storm. Unless the applicant requests an Improved or Alternate Project, FEMA funds the actual eligible costs of large projects based upon the approved scope of work in the PWs. See FEMA Exhibit 2, FEMA Reference Topic Large Projects.

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In order to prepare accurate estimates, FEMA utilizes a forward pricing model known as Cost Estimating Format (CEF) which captures the components of the estimate in a Part A through Part H depending on type of cost. The CEF combines the base cost to complete a construction project with non-construction costs such as field supervision, temporary utilities and facilities, contingencies, general contractor's overhead and profit, cost escalation, building permits, owner's reserves, and design and management fees. Each factor of non-construction cost is calculated as a percentage of the base cost. The percentage used for each factor is based on FEMA's professional determination of the type of damage experienced and specific conditions related to the repair or replacement project. See FEMA Exhibit 3, Public Assistance Cost Estimating Format for Large projects.

FEMA's position is that funding for Building 14 and 15 should be based on separate CEF estimates for the structure and for the refrigeration equipment. FEMA made this determination based upon the professional judgment of experienced FEMA staff, who determined that the structure and refrigeration equipment estimates would contain factors applied at different percentages based upon the expected project requirements and conditions for each. FEMA also believes that the facility function could reasonably be restored by utilizing two separate contractors; one for the structures and one for the refrigeration equipment.

In the absence of an approved Improved or Alternate Project request, FEMA funds actual costs for the completion of the approved scope of work for a large project based upon a

final inspection and financial reconciliation. The intent of CEF is to allow applicants to more accurately forecast and manage project budgets until the actual costs can be reconciled and funded. Id.

Therefore, in order to provide the most accurate estimate, FEMA, in response to this arbitration request, has reviewed and revised its estimates to replace the pre-disaster function of Building 14 and Building 15. The original repair/replacement construction estimates, or Part A of the CEF, remain the same and are not disputed by the Port. The Port is only disputing FEMA's application of the non-construction costs, CEF Parts B-H. However, for Building 15, by inference the applicant appears to be requesting full replacement.

FEMA's revised estimates for the Port's refrigeration and chiller equipment, which incorporate appropriate CEF factors, are now \$29,315,997 and \$9,584,543, respectively. See FEMA Exhibit 4, Revised CEF for Shed 14, and FEMA Exhibit 5, Revised CEF for Shed 15. The revised estimate to replace Building 14 is \$10,086,952 and the cost to repair Building 15 is \$2,246,285. In this instance, FEMA determined that the factors applied in the CEFs for the buildings under dispute were excessive and reduced these accordingly. While this application increased eligible costs for replacement of refrigeration equipment, eligible costs for building replacement (Building 14) and repair (Building 15) were reduced. The total revised estimate to replace Building 14 is \$39,402,949 ($\$29,315,997 + \$10,086,952$) for uncompleted work. The revised estimate to repair Building 15, including the replacement of chiller equipment, is \$11,830,828

(\$9,584,543 + \$2,246,285). The revised estimates represent an increase of \$6,535,276 for the refrigeration equipment in Building 14 and \$2,289,638 for the chiller equipment in Building 15 over previous FEMA's estimates, for a total addition of \$8,824,914 in equipment funding. See FEMA Exhibit 6, PW 8908 Cost/CEF Comparison for Shed 14 and FEMA Exhibit 7, PW 9836 Cost/Comparison for Shed 15. Because eligible building costs were reduced, the net increase for the Port's eligible overall costs is \$7,065,579.

FEMA maintains that Building 15 is eligible for repair only. FEMA assessed repair costs for Building 15 to be 42 percent of the replacement costs. See FEMA Exhibit 8, PW 9836 V0 Shed 15, Warehouse and Chiller. By Federal regulations, Building 15 is not eligible for full replacement costs. See 44 C.F.R. § 206.226 (f). See Table 1.

Table 1. Appeal and Arbitration Request Cost Comparison Summary

Applicant's First Appeal and Arbitration Request	
Applicant's Arbitration Request Building 14	\$11,712,261
Applicant's Arbitration Request Building 15	\$7,257,422
Applicant's Arbitration Request	\$18,969,703.00
Amount Disputed in First Appeal	\$12,865,341.00
Amount Denied in First Appeal	\$12,865,341.00
Difference Between Arbitration Request and First Appeal	\$6,104,362.00
Arbitration Request	
Item	Funding change
Building 14	
Building 14- Building CEF	(\$1,465,347.00)
Building 14- Equipment CEF	\$6,535,276.00
Total Building 14	\$5,069,929.00
Building 15	
Building 15- Building CEF	(\$293,988.00)
Building 15- Equipment CEF	\$2,289,638.00
Total Building 15	\$1,995,650.00
Amended CEF Estimates (Building 14 + 15)	
Building	(\$1,759,335.00)
Equipment	\$8,824,914.00
Total Amended Funding	\$7,065,579.00
FEMA Recommended Arbitration Response	
Applicant Arbitration Request	\$18,969,703.00
FEMA Amended Funding	\$7,065,579.00
Total Recommended Denial	\$11,904,124.00

BACKGROUND

The Stafford Act

FEMA, a component agency of the United States Department of Homeland Security, is responsible for administering and coordinating the Federal governmental response to Presidential-declared disasters pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act).¹ See 42 U.S.C. §§ 5121 *et seq.* Assistance pursuant to the Stafford Act is triggered when, at the request of the governor of a state, the President declares an affected area to be a “major disaster.” See 42 U.S.C. § 5170; 44 C.F.R. §§ 206.36; 206.38. Once a disaster is declared, the President determines the types of discretionary assistance that may be made available in the declared area. See 42 U.S.C. § 5170.

Among other types of assistance available under the Stafford Act, FEMA may provide grants for Public Assistance (“PA”). Specifically, the Stafford Act states that FEMA “may make contributions” for the repair, restoration, and replacement of damaged facilities. See 42 U.S.C. § 5172. FEMA may, at its discretion, provide disaster assistance to states, local governments, and certain non-profit organizations if FEMA determines that the Subgrantee, facility, and work meet eligibility requirements. Subgrantees are local governments or other legal entities, such as the Mississippi State

¹ The Stafford Act authorizes FEMA to promulgate rules and regulations necessary to carry out the provisions of the Stafford Act. See 42 U.S.C. § 5164.

Port Authority (the Port or Applicant), which are eligible to receive Federal financial assistance for disaster damage. See 44 C.F.R. §§ 206.200 - 229. FEMA provides PA funding for permanent repairs or replacement costs in the form of grants for the state or local government's own recovery efforts, See 44 C.F.R. § 206.203. FEMA may fund permanent repairs or replacement costs to restore eligible facilities on the basis of the design of such facilities as they existed prior to the disaster. See 44 C.F.R. § 206.226. FEMA PA may also fund the relocation of eligible destroyed facilities if the existing facility is subject to repetitive heavy damage and the overall project is cost effective. See 44 C.F.R. § 206.226(g). FEMA's main objective is to provide Federal disaster assistance to states, local governments, and certain non-profit organizations if FEMA determines that the Subgrantee's facility and work meet eligibility requirements. See 44 C.F.R. §§ 206.200 - 229.

To receive PA funding for permanent restorative work, an eligible Subgrantee must have a facility that was damaged by a declared major disaster; that facility must be within the disaster-declared area; and, that facility and the work to repair it must be the legal responsibility of the eligible Subgrantee. See 42 U.S.C. § 5122; 44 C.F.R. §§ 206.221 - .223; 206.226(c)(1). With PA, a Federal inspection team accompanied by the Subgrantee's local representative surveys the damaged facilities and estimates the scope and cost of necessary repairs. See 44 C.F.R. § 206.202(d). The inspectors record the information they gather on project worksheets ("PWs"). Id. PWs record the estimate of damage caused by the disaster, whether the repair work is eligible for PA, and list, among other information, the scope and "quantitative estimate for the cost of eligible work." Id.

After PW completion, FEMA reviews the completed PW in order to determine whether to approve funding for eligible work. Id. Thereafter, FEMA may make Federal disaster assistance funds available (*i.e.*, “obligate”) based on the approved PW. See 44 C.F.R. § 206.202(e). A PW is not a contract between FEMA and the State and/or Subgrantee to pay Federal disaster assistance and does not create any right to receive any such Federal funds. See 44 C.F.R. § 206.202(d). Rather, a PW establishes the scope of work and provides cost estimates based upon the engineering analysis and on-site investigation, of the anticipated cost of a project. See 44 C.F.R. § 206.202(e); Gardiner v. Virgin Islands Water & Power Auth., 145 F.3d 635 (3rd Cir. 1998) (providing that required authorization cannot be implied for contracts in emergency situations as specific steps are required to bind the United States). If the actual cost to complete the approved scope of work described in the PW exceeds the estimate, FEMA may approve additional funding during the project closeout process.

The State of Mississippi is the grantee for all FEMA Public Assistance delivered in the state. See 44 C.F.R. § 206.201(e). The Mississippi State Port Authority is a Subgrantee of the State. See 44 C.F.R. § 206.201.

This Panel must afford considerable deference to FEMA’s interpretation of the statutory scheme it has been entrusted to administer, and to its own regulations. See Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 844 (1984); Udall v. Tallman, 380 U.S. 1, 16-17 (1965)(explaining that the “ultimate criterion is the

administrative interpretation, which becomes controlling weight unless it is plainly erroneous or inconsistent with the regulation”); Hawaiian Elec. Co., Inc. v. E.P.A., 723 F.2d 1440, 1447 (9th Cir. 1984). As with judicial review under the Administrative Procedure Act (APA), this Panel must affirm FEMA’s decision unless it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law. See 5 U.S.C. § 706(2); Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 415 (1971); Friends of the Earth v. Hintz, 800 F.2d 822, 830-831 (9th Cir. 1986). A final agency decision is entitled to a presumption of regularity and must be upheld as long as there is a rational basis for it. Citizens to Preserve Overton Park v. Volpe, 401 U.S. at 415; Friends of the Earth v. Hintz, 800 F.2d at 831. Under the “highly deferential” standard of APA review, this Panel, like a court, “may not substitute [its] judgment for that of the agency” but instead must presume “the agency action to be valid and [will affirm] the agency action if a reasonable basis exists for its decision.” See Kern County Farm Bureau v. Allen, 450 F.3d 1072, 1075-76 (9th Cir. 2006)(internal citations omitted).

Appeals and Arbitration

The Stafford Act authorizes appeals of PA decisions. See 42 U.S.C. § 5189(a). There are two levels of appeal; the first to the Regional Administrator, the second to the Assistant Administrator for the Disaster Assistance Directorate. See 44 C.F.R. § 206.206(b). The American Recovery and Reinvestment Act of 2009, P.L. 111-5, establishes a new option for arbitration under the PA program for award determinations related to Hurricanes Katrina and Rita under major disaster declarations DR-1603-LA,

DR-1604-MS, DR-1605-AL, DR-1606-TX, and DR-1607-LA.² See 44 C.F.R. §

206.209. The arbitration panel's decision shall constitute the final decision on the issue under dispute, is binding on all parties, and is not subject to judicial review, except as permitted by 9 U.S.C. § 10. See 44 C.F.R. § 206.209(k)(3).

The Disaster Declaration

On August 29, 2005, the President issued a major disaster declaration for the State of Mississippi as a result of Hurricane Katrina pursuant to his authority under the Stafford Act. See 42 U.S.C. § 5170. This declaration authorized all categories of Public Assistance, including emergency protective measures. See FEMA Exhibit 9, Presidential Declaration for DR-1604. Emergency protective measures include measures necessary to save lives, to protect public health and safety, and to protect improved property including, but not limited to emergency shelter. See 42 U.S.C. § 5170b; 44 C.F.R. § 206.225; [and applicable policies]. The President's declaration included assistance for State and local governments and agencies in Mississippi, making the Port eligible to apply for FEMA Public Assistance for reimbursement of eligible emergency protective measures and permanent restorative work.

² Approved disaster requests are assigned serially ordered major disaster declaration numbers beginning with declaration #1, a Georgia tornado approved by President Eisenhower in May 1953.

The Port's Grant Applications

Following Hurricane Katrina, FEMA approved \$88,657,560 to remove debris and clean, repair or replace disaster-related damage to the Port's facilities and infrastructure. FEMA prepared sixty four (64) PWs to support the Port's recovery. Among these were PWs 8908 and 9836 for the replacement of Building 14 and the repair of Building 15, respectively.

The Port owned and operated Buildings 14 and 15 prior to the major disaster and is eligible for federal assistance for these facilities. See 44 C.F.R. § 206.223 (a)(3). Building 14 was a 106,721 square-foot (SF) short-term freezer storage facility, which included a U.S. Department of Agriculture (USDA) inspection facility and a docking area. Building 14 was constructed as a pre-engineered metal warehouse in 1972. In 1976, the Port undertook a freezer expansion project inside the existing warehouse which added 318,420 cubic feet (CF) of freezer space. A USDA meat inspection facility was added in 1987. In 1994, the Port built a 14,542 SF addition to the warehouse, which contained three (3) blast freezers and one (1) additional freezer. See FEMA Exhibit 10, PW 8908 V0 Shed 14, Freezer and USDA Inspection Station (#38). Building 15 was constructed in 1974 as a 55,266 SF pre-engineered metal warehouse. In 1992, the Port installed a refrigeration and humidification system for air/water atomization in three sections in the warehouse. See FEMA Exhibit 8.

The Applicant demolished both facilities before FEMA could inspect them for disaster-related damage. FEMA project officers relied on pre-disaster photographs, insurance reports, and engineering drawings dating from 1972 through 1994 to compile dimensional and other facility characteristics for use in preparing the PWs. The Applicant provided FEMA line drawings depicting the installation of refrigeration and chiller equipment in these buildings subsequent to the initial construction in the early 1970s. See FEMA Exhibits 8 and 10. The FEMA project officers also used damage assessment reports prepared by the Port's engineering firm, Lanier and Associates, dated September 21, 2005 and September 23, 2005. See FEMA Exhibit 11, Lanier and Associates Report for Shed 14 and FEMA Exhibit 12, Lanier and Associates Report for Shed 15. The FEMA project officers used RS Means Cost Works 2006 and obtained vendor quotes for the equipment replacement estimates. See FEMA Exhibits 8 and 10.

FEMA determined that Building 14 and the installed equipment were eligible for replacement and estimated eligible base costs of \$6,651,621 for the building and \$19,505,565 for the freezer equipment, respectively. FEMA obligated PW 8908 on August 17, 2006; the total obligated amount was \$27,603,123, which included the \$1,104,447 of completed work and \$341,490 for estimated engineering fees in addition to building and equipment replacement estimates. See FEMA Exhibit 13, PW 8908 V0 (Database Copy) Shed 14, Freezer and USDA Inspection Station (#38).

FEMA determined that Building 15 (Chiller), on the other hand, was eligible for repair assistance only and not full replacement, in accordance with Federal regulations 44

C.F.R. § 206.226 (f) and Disaster Assistance Policy 9524.4, *Repair vs. Replacement of a facility under 44 C.F.R. 206.226(f) "The 50% Rule."* See FEMA Exhibit 1. FEMA obligated PW 9836 on December 19, 2006, for eligible building repair base costs, which FEMA estimated to be \$1,438,308. FEMA determined that the chiller equipment, which had been installed in the building, was eligible for replacement and estimated these eligible base costs to be \$6,231,639. With estimated engineering fees, the PW totaled \$7,756,245. See FEMA Exhibit 14, PW 9836 V0 (Database Copy) Shed 15, Warehouse and Chiller.

In 2007, the Port identified PW 8908 and PW 9386 for Buildings 14 and 15, respectively, as potential Improved Projects and requested FEMA apply CEF to these PWs. See FEMA Exhibit 15, MSPA/FEMA/MEMA Alternate/Improved Project Tracker Spreadsheet. Federal regulations limit the amount FEMA can contribute on Improved Projects to the estimated project costs only. See 44 C.F.R. 206.203 (d)(1). On March 3, 2008, a FEMA estimator developed CEF estimates for each facility. See FEMA Exhibit 16, March 3, 2008 CEF for Shed 14 and FEMA Exhibit 17, March 3, 2008 CEF for Shed 15. To date, the Port has not filed a formal request for approval of either an Improved or Alternate Project for either PW, and indicates in its arbitration request that they will complete the approved scope of work.

In the CEF for Building 14, the estimator included \$1,104,448 in demolition and other costs which, as completed work, is not to be included in the CEF estimate for uncompleted work. See FEMA Exhibit 3. He also assessed Building 14 as an integrated

cold storage unit and applied all CEF factors to the combined building and equipment replacement costs. The FEMA estimator calculated that the Port's Building 14 integrated replacement cost would be \$44,318,755. See FEMA Exhibit 16. The base cost estimate, or Part A of the CEF, for construction costs remained the same as the original estimate for Building 14. See FEMA Exhibit 6.

The FEMA estimator applied the repair costs to the CEF for Building 15, consistent with the initial PW finding that it was not eligible for replacement, and then applied all CEF factors to the equipment replacement costs. He estimated the costs to repair Building 15, including replacement of the equipment, to be \$12,714,755. See FEMA Exhibit 17. The Part A base cost estimate for construction costs remained the same as the original estimate for Building 15. See FEMA Exhibit 7.

The Port, however, disputed the application of the non-construction costs estimated in the CEF Part B-H for these estimates citing, in particular, the failure of the FEMA estimator to allow for cost escalation factors in the assessment of Building 15.³ See Applicant Exhibit A-21. At the Port's request, FEMA reevaluated CEFs for both facilities. This reevaluation concluded, however, that the FEMA estimator had erred in his application of CEF to these facilities.

Consequently, FEMA estimators recalculated CEFs for both facilities on March 28, 2008.

See FEMA Exhibit 18, March 28, 2008 CEF for Shed 14 and FEMA Exhibit 19, March

³ The CEF methodology allows for cost inflation over the projected life of a construction project. At this time in FEMA 1604 CEF applications, estimators were not allowing for cost escalation.

28, 2008 CEF for Shed 15. For Building 14, the FEMA estimator separated warehouse and equipment replacement costs, limited the application of CEF factors within the equipment replacement calculation and developed a new CEF estimate which totaled \$34,333,021 versus \$44,318,755 in the initial CEF estimate. See FEMA Exhibit 6. For Building 15, the FEMA estimator retained the warehouse repair estimate, but reduced the number of CEF factors to be applied to the equipment replacement. The new CEF total for Building 15 was \$9,835,178, versus \$12,714,755 in the initial CEF estimate. See FEMA Exhibit 7.

As noted above, FEMA separated building repair/replacement costs from costs associated with equipment replacement in this application of CEF. FEMA did not apply all the CEF factors to its assessment of equipment replacement costs. FEMA's reason for applying the CEF in this manner was that the refrigeration equipment had been installed by speciality contractors subsequent to and separate from the construction of the pre-engineered metal warehouses.

FEMA determined that while all CEF factors would be applied to building repair and/or replacement estimates, the application of these factors would be limited in the development of eligible equipment replacement costs. FEMA limited these factors to those representing such "non-construction" costs, as project management and design costs, cost escalation, plan review and construction permitting fees. The basis of this determination was FEMA's assessment that the equipment had been purchased separately

and installed in these warehouses incrementally over the course of 20 years after the original construction in the early 1970s.

The Port protested these new estimates, but after a prolonged dispute, FEMA prepared versions to PWs 8908 and 9836 to incorporate these new CEF estimates. See FEMA Exhibit 20, PW 8908 V2 Shed 14, Freezer and USDA Inspection Station (#38) and FEMA Exhibit 21, PW 9836 V2 Shed 15, Warehouse and Chiller. FEMA obligated PW 8908 on March 3, 2009 and PW 9836 on April 15, 2009. See FEMA Exhibit 22 PW 8908 V2 (Database Copy) Shed 14, Freezer and USDA Inspection Station (#38) and FEMA Exhibit 23 PW 9836 V2 (Database Copy) Shed 15, Warehouse and Chiller.

PROCEDURAL HISTORY

The Port received notification of FEMA's obligation of the versions containing revised CEF estimates on or about February 6, 2009. Id. Pursuant to 44 C.F.R. § 206.206, the Port had 60 days after that date to appeal the FEMA determination. On March 27, 2009, the Port notified the Mississippi Emergency Management Agency of its intention to file a first appeal. See Applicant Exhibit D. The Grantee submitted that appeal to FEMA's Regional Administrator on May 20, 2009. See FEMA Exhibit 24, Grantee Letter with MSPA Appeal Letter Attachment.

The Port's appeal requested FEMA reinstate the original CEF costs. The amount in dispute for this appeal was \$12,865,341 – the difference in costs between the first and

second CEFs performed by FEMA. The Port did not address repair versus replacement of Building 15 in the appeal, nor did they dispute the estimated repair costs. The Port did assert that both facilities should have been assessed and estimated as integrated units (building and equipment). Id.

FEMA's Regional Administrator decided that FEMA had assessed the facilities correctly in that each was originally constructed as a pre-engineered metal warehouse and that the Port had incrementally added refrigeration equipment to the facilities over the course of 20 years. On August 27, 2009, the FEMA Regional Administrator denied the Port's first appeal. See FEMA Exhibit 25, Regional Administrator's Response to the First Appeal.

In accordance with 44 C.F.R. § 206.206, the Port had 60 days to file a second appeal to the FEMA. The Port decided to file this request for arbitration in lieu of filing a second appeal, as is permissible under 44 C.F.R. § 206.209. Pursuant to this regulation, the Port filed its arbitration request with the Civilian Board of Contract Appeals on October 19, 2009. In its arbitration filing, the Port requests the arbitration panel to increase its combined eligible costs for both buildings by \$18,969,703. See Applicant's Arbitration Request at page 10.

In its Arbitration Request, the Port requested an increase in funding of \$11,712,261 for Building 14 and \$7,257,422 for Building 15 and states the total amount in dispute is now

\$18,969,703.⁴ As noted above, in its first appeal the Port disputed \$12,865,341. See FEMA Exhibit 25. In its arbitration submission, the Port does not account for the additional \$6,104,362 it is now requesting.

DISCUSSION AND ANALYSIS

A major disaster is by definition an event for which Federal assistance is necessary “to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.” See 42 U.S.C. § 5122(2). As part of the process of “alleviating the damage, loss, hardship, or suffering,” the Stafford Act authorizes assistance for “the repair, restoration, reconstruction, or replacement of a public facility damaged or destroyed by a major disaster.” See 42 U.S.C. § 5172 (a) (1) (A). Federal regulations are clear that eligible work for these purposes must be required as the result of a major disaster event. See 44 C.F.R. § 206.223(a)(1). The Stafford Act and Federal regulations also stipulate that eligible facilities are to be repaired or replaced on the basis of the design of the facility “as it existed immediately prior to the major disaster and in conformity with current applicable codes, specifications, and standards.” See 42 U.S.C. § 5172 and 44 C.F.R. § 206.226.

The Stafford Act and Federal regulations also allow for applicants to request funding for Improved Projects, in which an applicant “desires to make improvements, but still restore

⁴ FEMA notes that the actual total of these figures is \$18,969,683. The number cited above is that provided by the Port in its arbitration request on page 10.

the pre-disaster function of a damaged facility.” See 42 U.S.C. § 5172 and 44 C.F.R. § 206.203 (d). Subgrantees may also request an Alternate Project when they determine that the “public welfare would not be best served by restoring a damaged public facility or the function of that facility.” Id. For FEMA 1604-DR-MS, FEMA funding for Alternate Projects was reduced by 25 per cent of the total eligible assistance costs. FEMA’s Regional Administrators have the authority to approve Alternate Project requests.

The Cost Estimating Format (CEF)

The CEF is a forward pricing model that is used to estimate eligible and reasonable costs associated with the completion of large projects. The intent of CEF is to allow applicants to more accurately forecast and manage project budgets. See FEMA Exhibit 3. The model combines the base cost to complete a construction project with non-construction costs such as field supervision, temporary utilities and facilities, contingencies, general contractor’s overhead and profit, cost escalation, building permits, owner’s reserves, and design and management fees. Each factor, or Part, of non-construction cost is calculated as a percentage of the base cost. The CEF lists a range of values for each factor. The value for each factor is based on the type of damage experienced and specific conditions related to the repair or replacement project. Below is a description of each CEF factor.

- Part A (base cost) is the sum of estimated costs to complete each construction activity.

- Part B includes construction costs not typically itemized in Part A that facilitate the work. Part B includes such costs as general contractor's field supervision costs and job site costs such as temporary services and utilities, safety and security measures, quality control and administrative submittals.
- Part C reflects construction cost contingencies and is designed to address budgetary risks associated with project complexity in determining scope of work. Part C factors are determined on the basis of the amount of design work completed at the time the estimate is prepared, the complexity of the project and the degree of difficulty for site access, storage, and staging.
- Part D accounts for the contractor's home office overhead, insurance, bonds, and profit.
- Part E accounts for cost escalation over the duration of the project and is based upon an inflation adjustment from the time the estimate is prepared until the mid-point of construction for the eligible scope of work.
- Part F includes fees for building permits, plan checks, and special reviews.
- Part G is the applicant's reserve for change orders and differing site conditions.
- Part H accounts for the applicant's cost to manage the design and construction of the project.

FEMA's Revised Estimates For Building and Refrigeration Equipment Costs

In response to this arbitration request, FEMA reviewed and re-evaluated the application of CEF to Buildings 14 and 15 (structure and equipment). In contrast to its earlier March

28, 2008 assessment, FEMA applied all CEF Parts and additional CEF factors within those Parts to base construction and equipment replacement costs. In this approach, the FEMA professional estimator assessed the project as having two (2) separate general contractors – one for the design and construction of a pre-engineered building and one for the design and installation of the specialized refrigeration equipment. This is consistent with the facilities pre-disaster design and construction and would restore the same function in the most cost-effective manner. Moreover, because the building represents a separate and distinct scope of work from that of the equipment, the CEF factor percentages which are applied for each distinct scope assignment (building or equipment) should be applied as deemed appropriate for that specific scope assignment. In addition, in FEMA's assessment, for the Port to utilize one contractor as the general contractor and the other as a subcontractor, would not provide any benefit to the project and would compound the non-construction costs. See FEMA Exhibits 4 and 5.

The following provides a description of the basis for differences in the application of CEF Factors and ranges between the CEF estimates obligated in PWs 8908 and 9368 and the revised CEF presented in this arbitration response. See FEMA Exhibits 6 and 7.

Building 14

- Part A: The base costs of \$6,651,621 for the building and \$19,505,565 for the equipment were the same in the March 28, 2008, and the newly revised CEF

- Part B - General Requirements and General Conditions:

For Factor B.1, for building replacement costs, both CEFs allowed 4 percent for safety and security, 1 percent for temporary services and utilities; and 1 percent for quality control. The revised CEF allowed 2 percent for contractor generated submittals whereas the first CEF allowed for 2.5 percent. The reason this percentage was reduced is that the contractors would not incur higher costs for submittal of sample materials and specifications to the Port's architecture and engineering firm for approval on such a large project. Overall, this represents a decrease in \$33,258 for building replacement costs. However, the revised CEF applied this factor and the same ranges to equipment costs, which increased that total by \$1,365,390. This represents a net increase of \$1,332,132 for this factor.

For Factor B.2, both CEFs used 4.25 percent for the building for General Contractor's general conditions; the revised CEF applied this factor to equipment as well as building replacement costs, which resulted in an increase of \$828,987.

The total increase for Factor B is \$2,161,118 in the revised CEF.

- Part C – Construction and Contingencies:

For Factor C.1, the March 28, 2008 CEF allowed 6 percent for “Working Drawings.” The revised CEF made no allowance for this factor, as it was determined that a project of this nature would encounter few if any applicable scope changes at this point in the project. This represents a net decrease of \$449,982 for this factor.

For Factor C.2, neither CEF allowed for this factor; it is for repair/retrofit projects only. Building 14 is a replacement project.

For Factor C.3, the March 28, 2008 CEF applied 2 percent to all three factors: access, storage and staging contingencies. The revised CEF allowed for 1 percent for storage contingencies only, but applied this factor to both building and equipment replacement costs. FEMA determined that onsite storage is the only applicable factor in this grouping given the secure conditions at the Port and the high accessibility of the Port. This reduced eligible costs for this factor by \$158,319.

For Factor C.4, the March 28, 2008 CEF made no reduction for “Economies of Scale” whereas the revised CEF made a 2 percent reduction. This is based on FEMA’s assessment that given the scale of this project there are potential costs savings for the contractor when buying in bulk. This reduces eligible

costs by \$583,328. This factor addresses both quantity of items or size of structures. Larger structures, for example, consistently cost less per square foot than similar, but smaller structures (with no relation to number of items). FEMA's CEF program uses a sliding scale which adjusts for "Economies of Scale" starting at \$500,000 with -0.5 percent factor up to projects exceeding \$10,000,000 with -2 percent factor.

Overall, the revised CEF reduced eligible costs for this factor by \$1,191,627.

- Part D - General Contractor's Overhead and Profit:

For Factor D.1, both CEFs applied 7.7 to building replacement costs; the revised CEF also applied this range to the equipment replacement costs. This increased eligible costs for this factor by \$1,576,580.

For Factor D.2, both CEFs applied 3.3 percent to building replacement costs; the revised CEF also applied this range to equipment replacement costs. This increased eligible costs for this factor by \$675,677.

For Factor D.3, both CEFs applied 3 percent for general contractor's profit for new construction of the building; the revised CEF applied this percentage to the equipment replacement costs as well. This increased eligible costs for this factor by \$681,819.

Overall, the revised CEF added \$2,934,076 to the Port's eligible building and equipment replacement costs for this factor.

- Part E – Cost Escalation Factor:

This factor allows for consideration of cost inflation which could occur between the time the CEF is performed and the mid-point of construction. The March 28, 2008 CEF assessed the mid-point to be 15 months and used a monthly factor of .390 percent. The revised CEF used the same percentage but assessed the mid point of the project to be 13 months. The FEMA estimator considered this to be a more realistic assessment based on the following assumptions about the complexity of this project. The revised assessment assumes six months to begin the project and 7 months to the mid point of the project. Both CEFs applied this factor to building and equipment replacement costs.

Consequently, the revised CEF reduced eligible costs for this factor by \$29,139.

- Part F - Plan Review and Construction Permit Cost:

For Factor F.1, both CEFs applied .005 percent of construction costs for both building and equipment replacement. The revised CEF increased eligible costs for this factor by \$19,372.

For Factor F.2, allowances for permitting were included in F.1, therefore no allowance was made for this factor.

Overall, the revised CEF added \$19,372 to the Port's eligible building and equipment replacement costs for this factor.

- Part G - Applicant's Reserve for Change Orders:

Both CEFs applied the allowed 3 percent to building replacement costs; the revised CEF also applied this factor to the equipment replacement costs. This increased eligible costs for this factor by \$739,310.

- Part H - Applicant's Project Management and Design Costs:

For Factor H.1, both CEFs applied the 1 percent allowance for Applicant's Project Management – Design Phase. The revised CEF increased the eligible costs for this factor by \$46,331.

For Factor H.2, the March 28, 2008 CEF allowed 4.8 percent for a project of average complexity; the revised CEF allowed 4.7 percent. The percentage applied is derived from FEMA's Cost Curves and is calculated against the total project costs Parts A through G. FEMA estimator assessed that both the building structure and refrigeration equipment have design requirements within the contractor's costs; therefore, the design requirements for architectural and engineering design firms would be limited. However, this increased the eligible costs for this factor by \$205,165.

For Factor H.3, both CEFs allowed for the 3 percent for project management during the construction phase. This increased eligible costs for this factor by \$185,324.

Overall, the revised CEF added \$436,820 to the Port's eligible building and equipment replacement costs for this factor.

As a consequence of allowing for additional factors to be applied to the Port's CEF for Building 14, FEMA increased the eligible cost estimates for building and equipment replacement by \$5,069,929. The FEMA estimator reduced building replacement costs by \$1,465,347, but increased equipment replacement costs by \$6,535,276.

Building 15

- Part A: The base costs of \$1,438,308 for the building and \$6,231,639 were the same for the March 28, 2008 and revised CEF.
- Part B - General Requirements and General Conditions:

For Factor B.1, for building repair costs, both CEFs allowed 4 percent for safety and security and 1 percent for temporary services and utilities. The revised CEF allowed 1.5 percent for contractor generated submittals for building repairs and 2 percent for equipment replacement, whereas the March 28 CEF allowed for 2.5 percent for building repairs only. These differences were based on the location of the proposed construction within the Port, which is a controlled access facility. The March 28, 2008 CEF had 1 percent for quality control; the revised CEF eliminated this because no outside testing would be required for a repair project. Overall, this represents an increase of \$407,449 for this factor.

For Factor B.2, both CEFs used 4.25 percent for the building for General Contractor's general conditions; the revised CEF applied this factor to equipment as well as building repair costs, which increased eligible costs for this factor by \$264,845.

The total increase for Factor B is \$672,293 in the revised CEF

- Part C – Construction and Contingencies:

For Factor C.1, the March 28, 2008 CEF allowed 6 percent for “Working Drawings.” The revised CEF made no allowance for this factor, as it was determined that a project of this nature would encounter few if any applicable scope changes at this point in the project. This results in a \$97,302 reduction in eligible costs for this factor.

For Factor C.2, the revised CEF allowed for a 1 percent allowance for project complexity as this a building repair. No allowance was made for equipment as this is a repair/retrofit project. This increases eligible costs for this factor by \$15,929.

For Factor C.3, the March 28, 2008 CEF applied 2 percent to all three factors: access, storage and staging contingencies. The revised CEF allowed for 1 percent for storage contingencies only, but applied this factor to both building repair and equipment replacement costs. FEMA determined that onsite storage is the only applicable factor in this grouping given the secure conditions at the Port and the Port is highly accessible. This decreased the eligible costs for this factor by \$12,046.

For Factor C.4, the March 28, 2008 CEF made no reduction for “Economies of Scale” whereas the revised CEF made a 1 percent reduction for equipment replacement only. This is based on FEMA’s assessment that given the scale of this production there are potential costs savings for the contractor when buying in bulk. No such economies of scale would be available for building repairs. This reduced eligible costs by \$69,327.

The revised CEF reduces eligible costs for Part C by \$162,744.

- Part D - General Contractor’s Overhead and Profit:

For Factor D.1, both CEFs applied 7.7 percent to building repair costs; the revised CEF also applied this range to the equipment replacement costs. This increased eligible costs for this factor by \$519,071.

For Factor D.2, both CEFs applied 3.3 percent to building repair costs; the revised CEF also applied this range to equipment replacement costs. This increased eligible costs for this factor by \$222,459.

For Factor D.3, both CEFs applied 4.5 percent for the repair/retrofit of this building; the revised CEF applied this percentage to the equipment replacement costs as well. This increased eligible costs for this factor by \$336,722.

Overall, the revised CEF added \$1,078,253 to the Port's eligible building repair and equipment replacement costs.

- Part E – Cost Escalation Factor:

This factor allows for consideration of cost inflation which could occur between the time the CEF is performed and the mid-point of construction. The March 28, 2008 CEF assessed the mid-point to be 15 months and used a monthly factor of .390 percent. The revised CEF used the same percentage but assessed the mid point of the project to be 12 months. The FEMA estimator considered this to be a more realistic allowance based on his assessment of the complexity of this project.

Consequently, the revised CEF reduced eligible costs for this factor by \$23,250.

- Part F - Plan Review and Construction Permit Cost:

For Factor F.1, both CEFs applied .005 percent of construction costs for both building repair and equipment replacement. The revised CEF increased eligible costs for this factor by \$7,823.

For Factor F.2, allowances for permitting were included in F.1, therefore no allowance was made for this factor.

Overall, the revised CEF added \$7,823 to the Port's eligible building and equipment replacement costs.

- Part G - Applicant's Reserve for Change Orders:

Both CEFs applied the allowed 3 percent to building repair costs; the revised CEF also applied this factor to the equipment replacement costs. This increased eligible costs for this factor by \$246,047.

- Part H - Applicant's Project Management and Design Costs:

For Factor H.1, both CEFs applied the 1 percent allowance for Applicant's Project Management – Design Phase. The revised CEF increased the eligible costs for this factor by \$18,184.

For Factor H.2, both CEFs allowed 5 percent for this project of average complexity. The FEMA estimator assessed that both the building structure and refrigeration equipment have design requirements within the contractor's costs; therefore, the design requirements for architectural and engineering

design firms would be limited. This increased the eligible costs for this factor by \$86,309.

For Factor H.3, both CEFs allowed for the 3 percent for project management during the construction phase. This increased eligible costs for this factor by \$72,737.

Overall, the revised CEF added \$177,230 to the Port's eligible building repair and equipment replacement costs for this factor.

As a consequence of allowing for additional factors to be applied to the Port's CEF for Building 15, FEMA increased the eligible cost estimates for building repair and equipment replacement by \$1,995,650. The FEMA estimator reduced building repair costs by \$293,988, but increased equipment replacement costs by \$2,289,638.

The revised CEFs are reasonable estimates to complete the approved scopes of work for Building 14 and 15.

Building 15 Is Not Eligible For Replacement

In its arbitration request, the Port does not make a direct request for the Panel to grant it eligibility for full replacement costs for Building 15; however, it does state that the

building was damaged to the point of a total loss by the storm. In order to continue port operations at the same level as on August 29, 2005, this building must be completely reconstructed. See Applicant's Arbitration Request at page 2.

Federal regulations state that if the cost to repair disaster damage is equal to or greater than 50 percent of the cost to replace a facility to its pre-disaster condition, the facility is eligible for full replacement cost. See 44 C.F.R. § 206.226 (f). FEMA policies provide detailed guidance on how FEMA project officers are to apply this regulation and the limitations on cost factors to be included in the calculation of repair vs. replacement costs of a facility. See FEMA Exhibit 1,

FEMA project officers were not able to inspect Building 15 prior to preparing PW 9836 because the Port demolished the building in February 2006. See Applicant's Arbitration Request at page 9. The Port's Arbitration Request disputes that statement of fact. It asserts that the original FEMA project officer was given a "tour of the port property." That tour occurred on October 12, 2005. See FEMA Exhibit 26, MSPA Case Management File and FEMA Exhibit 27, Chronology. However, FEMA records indicate that this FEMA project officer was a debris specialist, who was focused primarily on debris removal and Port clean up operations. A "tour of the port property" hardly suffices for the type of detailed physical inspection of damaged facilities that FEMA project officers conduct prior to preparing project worksheets.

Consequently, FEMA's project officer relied on assessments the Port's engineering firm conducted in September 2005 to prepare PW 9836. With regard to Building 15, the Port's engineering firm concluded that "with the exception of the extreme north end wall and associated canopy, the structural frame appears to be sound, and the deck appears to be in pre-storm condition." In contrast to the engineering firm's assessment of Building 14, the engineer firm did not recommend that the Port demolish Building 15. See FEMA Exhibit 11.

Moreover, in a report by the same firm delivered to the Port on November 8, 2005, the engineering firm concluded that "the floor system, building framing, concrete chain walls, and roof system appear to be in generally good condition and suitable for continued use." See Applicant's Exhibit A-4. With the building demolished by the Port before FEMA could conduct a physical inspection, the Lanier and Associates report provided the FEMA project officer a solid basis for determining that Building 15 was eligible for repair costs only. See FEMA Exhibits 8 and 12.

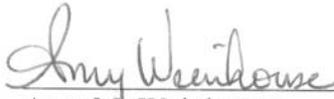
Using pre-storm photographs and line drawings produced by the Port's architect and engineering firm, the FEMA project officer estimated the cost to repair Building 15 to be \$1,438,308 and the cost to replace the building to be \$3,400,954. See FEMA Exhibit 8. Applying the *50 Percent Rule* calculation, the repair vs. replacement ratio was 42 percent. However, the FEMA project officer did determine that the chiller equipment was eligible for replacement costs. Id.

To summarize, the Port's decision to demolish the building eliminated FEMA's ability to perform a physical inspection of the post-disaster facility or to determine the post-disaster condition of the facility. Absent that opportunity, FEMA relied on the assessment performed by the Port's engineering firm of the overall condition of this building to develop the scope of work and cost estimate to repair eligible damage to Building 15.

CONCLUSION AND RECOMMENDATION

FEMA has determined that the total eligible costs, including completed work, to replace Building 14 are \$40,507,397 and to repair Building 15, including replacement of equipment, is \$11,830,828. As a result of the revised CEF estimates, FEMA increased eligible refrigeration equipment costs by \$8,824,914, but reduced the estimate for already obligated building costs by \$1,759,335. Therefore, the net increase for the Port's overall eligible funding is \$7,065,579 above the amount FEMA has obligated to date. FEMA has demonstrated that the additional \$11,904,124 of the Port's arbitration request of \$18,969,703 for uncompleted work is without merit. ($\$18,969,703 - \$7,065,579 = \$11,904,124$). Therefore, FEMA recommends that the Panel deny this portion of the Port's request.

Respectfully submitted on this 18th day of November 2009 by,



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