



UNITED STATES
CIVILIAN BOARD OF CONTRACT APPEALS

March 20, 2018

CBCA 5684-FEMA

In the Matter of CITY OF NEW ORLEANS

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Charles Schexnaildre, Office of Chief Counsel, Federal Emergency Management Agency, Department of Homeland Security, Baton Rouge, LA; and Angelica Saavedra, Office of Chief Counsel, Federal Emergency Management Agency, Department of Homeland Security, Washington, DC, counsel for Federal Emergency Management Agency.

Before the Arbitration Panel consisting of Board Judges **SHERIDAN**, **SULLIVAN**, and **O'ROURKE**.

More than twelve years ago, Hurricane Katrina hit New Orleans, causing damage to the City of New Orleans's Municipal Auditorium as well as thousands of other buildings in Louisiana and Mississippi. In this arbitration, we were asked to decide what damage to the auditorium resulted from the disaster and a reasonable estimate of the cost of its repair. The passage of time makes this task difficult.

The parties differ as to the scope of the work that is eligible for a public assistance grant. These differences include the cause of the damage and the quantities of damaged items. The parties also differ as to the estimated cost to repair the damage, asking the panel

to adopt their position as to what is a reasonable cost. For the most part, the panel finds that the City of New Orleans (CNO) has not met its burden to prove its entitlement to amounts over those obligated by the Federal Emergency Management Agency (FEMA), in project worksheet (PW) 1964, version 9, which was issued to fund permanent repairs for the auditorium. However, we find that FEMA has not included a couple of items in its approval of the eligible scope of the project and direct that FEMA amend the PW to include amounts for these items. We also deduct amounts for items unchallenged by FEMA, based upon the evidence presented at the hearing regarding the deterioration of the building. However, we reject FEMA's post-hearing attempt to withdraw funds that were obligated for other items because FEMA's purported basis for these reductions is contradicted by testimony of knowledgeable FEMA employees or other evidence in the record.

Background

Hurricane Katrina hit New Orleans on August 29, 2005. The storm damaged the roof and caused flooding in the basement and the first floor of the auditorium. Water leaked into the building and caused damage to ceilings and walls. All of the equipment in the basement was damaged, including electrical systems; heating, ventilation and air conditioning (HVAC) equipment; and pumps for the fire suppression system. In addition, the floors and the walls on the first floor were damaged.

Immediately following the disaster, CNO hired Shaw Environmental, Inc. to repair temporarily the roof and stabilize the interior of the building by removing wet carpeting and drywall and cleaning surfaces. FEMA paid for the work performed by Shaw. CNO also sought and FEMA funded temporary lighting and power for the building and the pumping of water from the basement, first on a temporary and then on a permanent basis.

After Shaw's initial stabilization efforts, the building sat empty and idle while CNO focused its efforts on other pressing priorities, such as restoring the criminal justice facilities for the city. The parties detail a lengthy history of developing different versions of PW 1964, as well as other PWs for the auditorium.

CNO did not obtain a comprehensive damage report (CDR) for the auditorium until March 2012. CNO did not have a comprehensive estimate for this CDR until August 2015, when it submitted its request for \$89 million. This estimate, which was presented as version 9 of the PW, was an increase of more than \$60 million over what FEMA obligated in version 8. In September 2016, FEMA obligated almost \$42 million for version 9.

CNO asks us to find that FEMA should obligate the full \$89 million.¹ The record before the Board consists of CNO's request for arbitration, CNO's supplement to that request, and FEMA's response to CNO's request and the exhibits that accompanied those pleadings. We also received the recommendation of the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) in support of CNO's request. The panel conducted a hearing in this matter October 31 - November 3, 2017, during which witnesses from CNO and FEMA testified as to the preparation of their respective estimates and the bases for them.

The parties have identified numerous disputes in eligible scope and estimated costs for the direct costs of the construction work (part A in the cost estimating format (CEF) used by FEMA). In our decision and the attached appendix, we decide issues that drive the differences in estimates for part A. We also decide the dispute over three factors used to estimate non-construction costs (parts B-H) and other issues presented by CNO's request for arbitration.

Discussion

I. Issues Driving Differences in Estimates

A. Eligible Work

The Stafford Act authorizes FEMA to provide grant assistance “to a State or local government for the repair, restoration, reconstruction, or replacement of a public facility damaged or destroyed by a major disaster.” 42 U.S.C. § 5172(a)(1)(A) (2012.). FEMA's regulations provide that “[t]o be eligible for financial assistance, an item of work must . . . [b]e required as the result of the emergency or major disaster event.” 44 CFR 206.223(a)(1) (2017). Prior arbitration panels of the Board have construed this requirement to mean that “cause and effect [for any damage claimed] must be established.” *City of Kenner*, CBCA 4086-FEMA, 15-1 BCA ¶ 35,875, at 175,387. FEMA will not provide assistance to an applicant “for damages caused by its own negligence.” 44 CFR 206.223(e); *Sewage & Water Board of New Orleans*, CBCA 1761-FEMA, 10-1 BCA ¶ 34,454, at 170,000 (finding that age and failure to mitigate damages was cause of corrosion, rather than Hurricane Katrina). Our standard of review of eligible items is de novo, meaning that we are not bound by prior

¹ Post-hearing, CNO removed from its estimate items that were shown at hearing to have been removed by Harrah's Casino, when it vacated the building. Despite these deductions and other changes, CNO's request in arbitration remains \$89 million. CNO did not explain how or why its estimate remains unchanged.

determinations of FEMA. *Bay St. Louis-Waveland School District*, CBCA 1739-FEMA, 10-1 BCA ¶ 34,335, at 169,577 (2009).

In defending its denial of additional funds in version 9, FEMA focuses upon CNO's failure to maintain the auditorium or to prevent further damage to the building while waiting for the PW for the repair project to be approved. CNO acknowledges that FEMA funded the permanent roof repair and that it could have moved ahead to repair the roofs and prevent further damage. CNO did not undertake this repair because it planned to replace the entire roof, not all of which FEMA had deemed to be eligible work. If CNO moved ahead with the replacement of the roof and the other repairs needed to stabilize the building without FEMA's approval of the work as an improved project, CNO was concerned that FEMA would deem the work to be ineligible and withhold funds that had been obligated. In CNO's estimation, it was better to wait for consensus on the scope of eligible work and then seek approval as an improved project, rather than risk funding for the projects.

The problem with CNO's approach is that the condition of the auditorium deteriorated further while waiting for FEMA's approval of new estimates for changing scopes of work. This deterioration is shown most markedly in the mold growth throughout the building and in the HVAC system and the corrosion of the fire sprinkler system. CNO seeks funds to address these issues; FEMA contends that this work is not eligible because it is not the direct result of the disaster.

There are two components to the fire suppression system that CNO seeks to replace: (1) pumps, control system and other components that had been located in the basement, and (2) the piping and sprinkler heads throughout the building. FEMA agrees that the components that had been in the basement are eligible to be replaced with FEMA funds because the basement flooded during the disaster. FEMA disagrees that the piping and the sprinkler heads are eligible work because CNO has not shown that the existing piping was damaged as a result of the disaster.

The weight of the evidence indicates that the pipes were corroded by prolonged exposure to moisture and humidity. CNO offered the opinions of two expert firms regarding the cause of the damage to the existing system. One firm reported that the corrosion of the pipes, fittings, and sprinkler heads was caused by "prolonged periods of exposure to high levels of humidity." FEMA agreed with this assessment. Another firm opined that, while a full investigation had not been made, the failure of the jockey pump in the basement or the lack of power to CNO's water pumping system would have allowed the system to partially drain, which could lead to corrosion of the pipes and sprinkler heads. However, this possibility was discounted by a more knowledgeable FEMA witness, who explained that the system had check valves that would have prevented the system from emptying upon either

the failure of the jockey pump or the water supply. CNO also provided a report showing microbial contamination in one portion of the fire suppression piping that could have impeded the functioning of the system. However, as the report stated and a FEMA witness explained, this contamination would have been very localized and would not have required the replacement of the entire system.

CNO seeks funding for the replacement of the entire HVAC system in the building. The parties agree upon the eligibility of the components in the basement and the first floor annex for replacement. These components were flooded during the disaster. CNO also seeks funds to replace components located on the upper floors, including piping, duct work, and air handling units, because these components are contaminated with mold. CNO's expert acknowledged that the number one cause of the mold growth in the HVAC system is the lack of ventilation in the building. CNO also seeks funding for mold remediation throughout the building.

The mold growth and the corrosion on the fire suppression system resulted from the lack of ventilation in the building, which was the result of the loss of power, which was the result of Hurricane Katrina. This lack of ventilation is an intervening cause between the disaster and the damages. Because of this intervening cause, the mold growth and corrosion of the fire suppression system did not result directly from the disaster. While there may have been mold growth during the years that CNO elected to keep the auditorium idle, CNO did not take steps to address the lack of ventilation and mitigate the mold growth.² Having failed to do so, CNO cannot establish the nexus necessary to receive public assistance monies to address these issues.

Based upon its "post-hearing review," FEMA seeks to withdraw funding for scope that it deemed eligible in version 9.³ Many of the reductions are based upon two pages from the record that purport to detail the work that Shaw did in 2006. Based upon these pages, FEMA asserts that the scope CNO seeks either duplicates work already performed by Shaw and paid for by FEMA or indicates that the item was not damaged. These two pages do not supply the basis for removing this scope because they do not provide sufficient detail for the

² FEMA witnesses testified that CNO could have installed temporary measures to reestablish climate control in the building and sought emergency funds from FEMA to pay for this effort. 44 CFR 206.225.

³ CNO asserts that FEMA's requested deductions total approximately \$7 million and seeks to strike FEMA's post-hearing submission because it represents new argument not previously presented. Because the panel has not found any of FEMA's proposed deductions to be supported, we deny CNO's motion as moot.

panel to know that the work Shaw did duplicates scope that CNO is seeking. The only FEMA witness to testify as to the scope of Shaw's efforts could only describe those efforts based upon paperwork he had reviewed. FEMA also relies upon the quantities removed by Shaw as evidence of the quantities for division 9 (finishes) that need replacing. However, a FEMA witness testified that FEMA's estimate for division 9 quantities was based upon FEMA's own room-by-room survey and what FEMA was able to verify during site visits. The panel finds the testimony about the basis for FEMA's estimates obligated in PW 1964, version 9 to be more credible than reference to two pages from a document about which no one testified.

For other items on the upper floors of the auditorium, FEMA simply contends these items were not damaged in the disaster because the flood waters did not reach these floors. FEMA's post-hearing contentions conflict with the testimony of its own witnesses regarding damage found in the building. Shaw's report regarding its efforts also undercuts FEMA's position regarding these items, as it stated that there was "water damage to drywall, plaster, equipment, carpet and furniture on floors one, two, three and four." As detailed in the appendix, the panel has not found a basis to remove these amounts based solely upon FEMA's unsupported or contradictory "post-hearing review."

B. Unverified Scope

The parties' estimates also differ because of differences in quantities for damaged elements. FEMA regulations place the burden upon the applicant to identify all eligible work, although FEMA may prepare the project worksheet that identifies the quantities:

Project worksheets. (1) An applicant's authorized local representative is responsible for representing the applicant and for ensuring that the applicant has identified all eligible work and submitted all costs for disaster-related damages for funding.

(i) We or the applicant, assisted by the State as appropriate, will prepare a Project Worksheet [] for each project. The Project Worksheet must identify the eligible scope of work and must include a quantitative estimate for the eligible scope.

44 CFR 206.202(d). FEMA's public assistance guide further advises that "damage must be described in terms of the facility, features, or items requiring repair. All damaged elements must be defined in quantitative terms with physical dimensions (such as length, width, depth, and capacity). Without appropriate dimensions of the damaged elements, proper estimates

of material quantities cannot be developed.” Public Assistance Guide (PA Guide) 322, at 72-73 (1999).

There are several groups of costs for which the parties’ quantities differ greatly—division 8, Windows and Doors; division 9, Finishes; division 26, Electrical; and, Architectural Finishes. FEMA agrees that there was damage to windows and doors and certain finishes, but, based upon its own survey, it disputes the quantities sought by CNO. CNO relies upon a room-by-room survey that it obtained, which became the basis for its estimate in version 8. CNO did not offer any testimony supporting the quantities that it sought, other than to mention the room-by-room survey. CNO argues that FEMA had agreed to scope quantities in version 8, but has now revised those quantities downward and said it is unable to verify those same quantities in version 9. Similarly, CNO argues that FEMA verified all but one of CNO’s 2900+ historic items in the auditorium that CNO had identified for restoration and included funds for that restoration in version 8. In essence, CNO seeks to have FEMA bound by its previous determinations as to eligible scope for these items.

FEMA is bound by statute to provide funding for the repair, restoration, or replacement of items damaged by a natural disaster. This statutory authority requires that FEMA provide funding to repair or replace items that were damaged and only those that were damaged. CNO has not convinced the Board on this record that its quantities for these items are correct and we cannot hold FEMA to a prior quantity that has now been shown to be overstated or in error.

C. Cost Estimating Differences

1. Means and methods

The parties also dispute each other’s cost estimates applied to eligible scope. The Stafford Act directs FEMA to “estimate the eligible cost of repairing, restoring, reconstructing, or replacing a public facility or private nonprofit facility—(i) on the basis of the design of the facility as the facility existed immediately before the disaster; and (ii) in conformity with codes, specifications, and standards . . . applicable at the time at which the disaster occurred.” 42 U.S.C. § 5172(e)(1)(A). FEMA regulations do not contain guidance as to how costs are to be estimated, but do provide that “actual project costs [may] exceed the approved Project Worksheet estimates.” 44 CFR 206.204(e). If this happens, “[t]he subgrantee must evaluate each cost overrun and, when justified, submit a request for additional funding. [Such a request] will contain sufficient documentation to support the eligibility of all claimed work and costs.” *Id.*; see also PA Guide at 115-16.

The first category of disputes is regarding the means and methods for performing the eligible scope. CNO asks the panel to determine that its estimates regarding how the permanent repair work should be performed are correct and should be funded at the levels identified. FEMA asserts that the panel need not decide these actual cost disputes because it will reimburse all actual reasonable costs if those costs are backed by a competitive contract award or a licensed contractor determining that the work must be performed in a different manner.

For the most part, the panel accepts FEMA's representation that it will reimburse CNO all reasonable, actual costs, per the guidance quoted above. A contractor's bid that is sufficiently detailed and obtained through competition will supercede FEMA's determination as to means and methods and will be sufficient evidence of cost reasonableness. However, with respect to the hoisting requirements for the roof replacement, the panel determines that CNO has shown the need for the use of tower cranes. The parties agree that the roof needs to be replaced. FEMA's estimate includes only the cost of a mobile crane, the same type used by Shaw when it temporarily patched the roof. CNO included the cost of two tower cranes and a third crane because the cranes need to reach all portions of the roof, not just the portion repaired by Shaw. CNO established that there is not enough room around the auditorium to use a mobile crane of the size that would be needed.

2. Choice of cost estimating data

For other costs, the parties dispute which national database of costs should be used as a proxy for the cost of the work in the estimate. FEMA's Public Assistance Guide provides that "[r]easonable costs can be established through . . . published unit costs from national cost estimating databases," among other sources. PA Guide at 34. The instructional guide for the CEF directs, when a FEMA project officer is unable to obtain local unit prices, "R.S. Means cost data publications are the recommended source of cost data for the CEF." Cost Estimating Format for Large Projects Instructional Guide, version 2 (Nov. 1998) (CEF Guide) at 25. The guide further directs that the project officer "should use the most current available R.S. Means cost data. Care should be taken in selecting the appropriate R.S. Means cost data reference for the work." *Id.* at 10.

CNO used R.S. Means for facilities maintenance and repair cost data in the preparation of its estimate. CNO contends that use of this cost data is appropriate based upon criteria published by R.S. Means to account for complexities that may affect the work,

including physical constraints, operational constraints, and sequence constraints.⁴ CNO asserts that the database it chose best fits the work required to renovate a “damaged, historically significant commercial facility.”

FEMA used the R.S. Means for new construction because the complexity of the renovation of the auditorium is accounted for in the application of one of the CEF non-construction factors, C.2, Facility or Project Constructability. To use both the R.S. Means repair and remodeling data set for the part A estimate and then apply a percentage in the CEF factor C.2, would be duplicative, FEMA asserts. CNO acknowledges that FEMA’s CEF factors account for these same complexities, but counters that the application of a percentage in C.2 merely supplements the cost. FEMA also notes that its standard practice for large projects resulting from Hurricane Katrina has been to use the R.S. Means for new construction data set.

Although not backed by written guidance to applicants, the panel accepts FEMA’s representation that R.S. Means for new construction is the proper basis for cost estimates. Looking at the items for which this is the only dispute, it appears that the difference between the costs on a line item basis is minimal. As noted in the appendix, often FEMA’s estimate is greater than CNO’s estimate for the same scope of work. Since the difficulties of this construction are addressed in the CEF factors and FEMA will reimburse actual reasonable costs, the panel sees no merit to requiring FEMA to change the R.S. Means data set that it used.

D. Cost Estimating Format (CEF) Factor Differences - Parts B-H

In addition to the eligible scope differences in part A, the parties also differ as to the percentages that should be applied for three of the CEF factors: C.3, E, and H. According to the CEF Guide, the factors in parts B through H “represent the non-construction costs . . . [that] can reasonably be expected to occur during the course of construction. These factors are applied to the Part A base construction costs to estimate the total cost of completing the project.” CEF Guide at 4.

Part C of the CEF factors provides cost allowances for construction cost contingencies. Part C.3, specifically staging, addresses difficulties in the “timing and

⁴ CNO also contends that FEMA used R.S. Means for repair/replacement in preparing prior versions of the PW, based upon the calculation of its estimator; but FEMA’s estimator testified that FEMA only used R.S. Means for new construction and the statements to the contrary on prior versions were mistakes.

execution of the work, which could be complicated by occupation of facilities, lack of space, and access to the facility. This factor should be used for sites that have work access limitations because services must continue to run in spite of the construction, such as hospitals and city halls.” CEF Guide at 34. CNO believes that three percent is an appropriate factor because the auditorium is located within the Louis Armstrong Park and next to the Mahalia Jackson Theater of the Performing Arts, both of which are open and operating. FEMA believes that only two percent should be applied because the auditorium itself is not open or operating. Based upon the descriptions of part C.3, access, storage, and staging, it would appear that the site access factor addresses CNO’s concerns about difficulties getting to the auditorium and the staging factor addresses limitations of the building itself. The panel determines that two percent is an appropriate percentage for C.3 staging.

Part E provides an adjustment for estimated construction costs “to account for inflation during the design and construction period.” CEF Guide at 36. The panel is unable to determine what the difference is between the parties on this factor because there is no narrative in the request for arbitration or in FEMA’s determination. CNO witnesses asserted that a proper time frame would be forty-two months, but provided no cogent explanation as to how this figure was developed. FEMA disputes how CNO calculated the time line, but does not explain or cite to any proper calculation of this factor. According to the summary of version 9 prepared by FEMA, there was agreement upon the time line and the percentage to be applied (thirty-six months at 0.103%). The panel leaves this determination undisturbed.

Part H provides for recovery of “the applicant’s costs for overall project development and management throughout the design.” CEF Guide at 40. The parties both refer to and rely upon guidance issued by the Louisiana Office of Facilities Planning & Control (OFPC). CNO explains that it picked its percentages from a manual issued by OFPC, based upon the complexity of the project renovating a historic structure. CNO used these same percentages for work performed both before and after Katrina, including on projects approved by FEMA for funding. FEMA posits that the auditorium project is comparable to a project that OFPC undertook on a state-owned building and that the percentages used by OFPC for that other project should be applied to this one. Since we have no way to know whether the OFPC project was of similar complexity and CNO represents that FEMA has accepted its proposed percentages on other projects since Katrina, the panel decides that CNO’s percentages (renovation factor of 1.25, modification factor of 1.1) shall be applied.

II. Use of Hazard Mitigation Funds

FEMA has designated the use of hazard mitigation funds for the repair and replacement of the roof and the relocation of flooded HVAC and electrical equipment to the

roof. FEMA may “fund mitigation measures in conjunction with the repair of damaged facilities. The mitigation measures must be related to eligible disaster-related damages and must directly reduce the potential of future, similar disaster damages to the eligible facility.” FEMA Response and Recovery Directorate Policy 9526.1, Hazard Mitigation Funding Under Section 406, at 2 (1998). Although FEMA suggests in briefing that hazard mitigation funding could be jeopardized somehow if CNO chooses to pursue an improved project for the auditorium, FEMA’s policy clearly states that “funds recommended for mitigation measures may be approved for an improved project which will include the work required to repair the disaster-damaged facility and restore its function, as well as improvements.” *Id.* at 3.

CNO argues that insurance standards require removal of all the current gypsum panels and concrete decking and replacement with metal decking, thereby making this scope of work eligible for funding as a repair project. 42 U.S.C. § 5172(e)(1)(A). FEMA could not verify that codes and standards require the replacement of the current type of roof decks (gypsum) with a metal roof deck, but it recommended the installation of metal decking as a mitigation effort. We see no reason to disturb FEMA’s determination. The testimony and documentary evidence provided by CNO do not establish that a new gypsum roof deck cannot be placed on the auditorium. Instead, this evidence speaks to what is required now that the roof is being replaced. CNO does not take issue with FEMA’s determination to fund the placement of the mechanical, electrical, and plumbing (MEP) equipment on the roof as hazard mitigation.

III. Repair Project or Improved Project

The director of the CNO office responsible for seeking funding from FEMA testified that CNO plans to undertake the work necessary to repair and stabilize the facility to the point that it is a “white box.” At that point, a developer would develop the property for whatever purpose it would be used for in the future. Although CNO had requested that FEMA consider its request to be one for an improved project, it withdrew this request later. All that is before the panel is CNO’s current request for a repair project, for which it requested \$89 million in funding.

The panel makes no determination regarding CNO’s plans and whether those plans are permitted by FEMA regulation or policy. Before agreeing upon an improved project, FEMA and CNO have to agree upon the scope and estimated cost of eligible work. We have settled those issues with this decision. Now, the parties may move forward with the next step in the process, be that undertaking a repair project or seeking approval for an improved

project wherein the funds provided by FEMA will be capped at the amount determined herein.⁵

Decision

The panel directs FEMA to calculate the final CEF amount based upon the amounts for Part A set forth in the appendix and the part B-H factors either agreed upon by the parties or determined above and amend PW1964, version 9, to reflect that amount.

PATRICIA J. SHERIDAN
Board Judge

MARIAN E. SULLIVAN
Board Judge

KATHLEEN J. O’ROURKE
Board Judge

⁵ It appears that FEMA anticipated receiving an improved project again when it issued version 9 of the PW, wherein it noted that “[t]his alignment [of eligible scope and cost] will allow the Improved Project request to be developed by identifying the eligible cost that could be capped . . . and allow CNO to identify the improvements which will be included in the project beyond the eligible repairs.”

APPENDIX – DETERMINATION OF ELIGIBLE SCOPE AND COST BY DIVISION

The parties disagree on the scope of work that is eligible for funding in part A of project worksheet (PW) 1964, version 9. Post-hearing, the panel directed each party to prepare a matrix that briefly described the party's position regarding the eligible scope and cost for each of the items within each division, using FEMA Demonstrative 1¹ as a starting point for the analysis. The panel further directed the parties to include citations to the record, including the hearing transcript, or FEMA policy guidance that support its position for each of these items. The panel carefully reviewed these submissions, the hearing transcript, and the materials in the record and determined the proper cost estimate for the scope of work described. We have set forth those amounts at the beginning of each section and explained the basis for our determination in the paragraphs that follow.

Division 2 – Demolition

Wash ceiling: \$102

Shore posts: \$0

Cleaning of hydraulic fluid: \$0

Wash ceiling: The parties agree upon the scope of work for this item and FEMA's estimate is higher than CNO's. The panel does not adjust FEMA's estimate.

Shore posts in basement: CNO seeks funds for the replacement of shore posts that were submerged in flood waters in the basement. CNO asserts that these posts are integral to the structure of the building. FEMA disagrees. Transcript at 1106. In the alternative, CNO also asks that PW 1964 include contents to cover these posts because the PW for contents of the municipal auditorium is closed. FEMA's representative testified that these posts would be considered on a separate PW for contents. Transcript at 1107. The panel affirms FEMA's determination that replacement of these posts is not eligible scope.

¹ At the hearing, FEMA provided the panel a demonstrative that identified the major items in each division and the parties' estimates for the cost of each of those items. Given the number of items in dispute, the panel found the demonstrative helpful to organize the resolution of the issues.

Cleaning of hydraulic fluid in basement: CNO seeks funds for the cleanup of hydraulic fluid in the basement that leaked from the stage lifting equipment. Exhibit 1 at 14, 22 (picture). FEMA denied funding because Shaw chemically cleaned the area where the stage lifting equipment is located. Transcript at 1108-09. Any new spill would be the result of flooding in the basement since Shaw stabilized the building and not the result of Hurricane Katrina. The panel affirms FEMA's determination that this cleanup is not eligible scope.

Division 3 – Concrete

Remove concrete equipment pads: \$0

Replace concrete equipment pads: \$112,262

Roof deck demolition: \$81,396

Patch floor: Removed by CNO

Stairs: \$3932

Remove concrete equipment pads: CNO seeks funds to remove concrete pads in the basement upon which equipment had been located. CNO asserts that it cannot leave the pads because they are a tripping hazard, but acknowledges that it could paint the pads as a safety measure. CNO also seeks funds to remove pads in the mechanical room because that room is being re-purposed to hold a new air handling unit and the fire pumps, but CNO did not break out its estimate for the pads in the basement versus those in the mechanical room. FEMA denied funding for the removal of the pads in the basement because no equipment will be returned to the basement, except for sump pumps, so the safety issue is not as great. Transcript at 1111. In the mechanical room, FEMA believes that the new pads can be poured on top of the old pads, eliminating the need to remove the old pads. *Id.* at 1112. If the contractor hired to construct the new pads for the equipment in the electrical room determines that the old pads need to be removed, FEMA will reevaluate this issue when CNO seeks reimbursement for those costs. *Id.* at 1113. The panel does not add funds for this item. If a contractor determines that the pads in the mechanical room need to be removed prior to the installation of the new pads, CNO may seek those costs from FEMA as an actual cost of the work.

Replace concrete equipment pads: CNO seeks funds for the replacement of more than 9000 square feet of equipment pads, an estimate prepared by its architect to support the relocation of various pieces of equipment. Applicant's Exhibit 2 at 12-13; Applicant's Exhibit 35.

FEMA agrees that some of the equipment to be relocated needs to be placed upon new concrete pads, but it could not verify the pads that needed to be replaced or where they were located. In response to a request for information about these pads, CNO only stated that this amount was the “anticipated area of concrete housekeeping pads.” FEMA’s Exhibit 112 at 1. FEMA also contends that CNO duplicates costs in its line items. Applicant’s Exhibit 1 at 25, lines 29-30, 40-41. CNO describes these as separate items. Applicant’s Exhibit 2 at 13. The amount set forth above is FEMA’s estimated cost to construct pads necessary to elevate heating, ventilation, and air conditioning (HVAC) and other equipment that is being replaced. The panel does not adjust FEMA’s estimate. If a contractor determines that additional pads need to be constructed as part of the relocation of damaged equipment, CNO may seek those costs from FEMA as an actual cost of the work.

Roof deck demolition: CNO seeks funds to demolish the existing roof. Its estimate is based upon the recommendation of the roof manufacturer. Applicant’s Exhibit 2 at 14; Transcript at 345. FEMA’s estimate for the scope of work is lower because it could not validate the quantities and the pricing underlying CNO’s estimate. FEMA also seeks to correct its estimate post-hearing. It removed costs for the demolition of two concrete roofs (\$6912), but increased estimated costs of removal of a third roof (\$6345), resulting in a net decrease of \$566. FEMA Matrix (citing Applicant’s Exhibit 1 at 45).² The panel does not adjust FEMA’s estimate. If a contractor determines that additional pads need to be constructed as part of the relocation of damaged equipment, CNO may seek those costs from FEMA as an actual cost of the work.

Stairs: The parties agree upon the scope of work to replace concrete stairs. FEMA’s estimate is lower because of the use of the R.S. Means database for new construction. The panel does not adjust FEMA’s estimate.

Division 4 – Masonry

Clean interior: \$0

Clean exterior level to three-foot level: \$10,342

Clean exterior of building above the three-foot level: \$0

² FEMA did not paginate its post-hearing matrix. The citations are to the page upon which the item is discussed.

Clean canopies and replace soffits: \$0

Barrel roof wall and room 5013 wall: \$55,313

Clean interior: CNO seeks funds to power wash the basement walls, clean the existing floor tile and walls, and clean the exterior limestone walls to a height of three feet. Applicant's Exhibit 2 at 16. CNO asserts that FEMA found this work to be eligible in version 8, but has deemed it to be ineligible in version 9. *Id.* FEMA asserts that this scope duplicates work performed by Shaw and paid for by FEMA. FEMA's Exhibit 11 at 22 (chart listing work performed in basement and mechanical room in January 2006). CNO disputes this claim. Transcript at 28. FEMA also questioned the basis for CNO's estimate of approximately 400,000 square feet. Exhibit 149, Attachment 2 at 1. FEMA notes that this requested scope duplicates mold/asbestos-containing material remediation work to be performed. Transcript at 1117; Exhibit 135, Folder 7, CEF at 58. The panel does not add funds for this effort.

Clean exterior to three-foot level: The parties agree upon the scope of work for this item and FEMA's estimate is higher. The panel does not adjust FEMA's estimate.

Clean exterior above three-foot level: CNO seeks funds for the cleaning of the exterior of the building above the three foot level. CNO states the cleaning is necessary due to roof leaks, Applicant's Exhibit 1 at 34, but provided no further explanation regarding this item. FEMA notes that the area CNO seeks to clean is above the level of the flood waters from Katrina. Transcript at 1118. The panel affirms FEMA's determination that this cleaning is not eligible scope.

Clean canopies and replace soffits: CNO seeks funds to clean canopies and replace soffits that were damaged when roofs 6 and 7 were damaged in the disaster. Applicant's Exhibit 1 at 34. FEMA could not verify the damage to these canopies or soffits, Transcript at 1119, and CNO provided no further information regarding this damage. The panel affirms FEMA's determination that this cleaning is not eligible scope.

Repair barrel roof wall and room 5103 wall: The parties agree upon scope of work for this item, but differ as to the means and methods, specifically the type and size of crane needed for this work. Transcript at 1120; Applicant's Matrix; FEMA's Matrix. As noted in our decision, the panel finds CNO's explanation of its need for a larger crane to be compelling. But, we cannot determine from the materials provided by CNO whether there is overlap in the cranes sought for this scope of work and the cranes for the replacement of the roof in division 7. FEMA's witness on this item noted that a contractor's bid for this scope of work will supercede FEMA's estimate. Transcript at 1218. For this reason, we do not adjust FEMA's estimate for the scope of work. If the actual crane costs for this scope of work and

the roof replacement exceed the amounts that have been obligated, CNO may seek those costs from FEMA as an actual cost of the work.

Division 5 – Metals

Welding blankets and safety tiedowns: \$95,908

Firewatch/welding plates to purlins/staging: \$102,762

Roof deck, St. Ann and St. Peter Street canopies: \$203,783

Clean and repaint orchestra pit steel, clean stage valances: \$0

Annex roof demolition: \$0

Miscellaneous metal items: \$22,535

Basement grating: \$0

Welding blankets and safety tiedowns: The parties agree upon the scope of work, but differ on the means and methods of the repair and estimated quantities. CNO seeks funds to cover the costs of welding blankets and the labor to reposition the welding blankets as work proceeds on the roof. Applicant's Exhibit 1 at 47, lines 70-71. CNO estimates that it will need blankets to cover twenty percent of the roof at any given time and that the welding blankets will be used ten times during roof replacement operations. Applicant's Exhibit 1 at 45. CNO estimates that the area to weld will be 5307 square feet. *Id.* CNO calculates that the number of blankets estimated by FEMA will cover less than four percent of the roof. *Id.* FEMA estimates a lower cost for the welding blankets alone (twenty-five blankets at \$187 per blanket). FEMA's Exhibit 135, CEF, Division 7, line 243. FEMA also disagrees with CNO's estimate of the size of the roof that requires repair and projection regarding how much of the roof will be open at any given time during repair. FEMA's estimator calculated the actual area of welding to be 2199 square feet and then calculated the number of blankets and tie-downs as well as other roofing needs. Transcript at 1228-37.

The panel has no basis on which to determine that CNO's estimates for these items are more accurate and we do not adjust FEMA's estimates. If a contractor determines that additional materials or different means and methods are necessary to perform the eligible scope, CNO may seek those costs from FEMA as an actual cost of the work.

FEMA estimates CNO will require \$91,237 for safety tie-downs. Applicant's Exhibit 1 at 48. This amount exceeds CNO's estimate of \$51,917 for the same items. *Id.* We do not adjust FEMA's estimate.

Firewatch/welding plates to purlins/staging: The parties agree upon the daily rate for firewatch costs, but FEMA estimates twenty-six days (\$12,033) while CNO estimates 110 days (\$51,371). *Compare* Applicant's Exhibit 1 at 49, line 78 *with* FEMA Exhibit 135, CEF, Division 7, Hazard Mitigation Project (HMP) line 245.

CNO seeks \$379,680, for the welding plates to be attached to the purlins. The panel is unable to determine what FEMA's original estimate was for this item because the parties' submissions do not match and FEMA, when it realigned its amounts, did not provide an estimate for this item. If we subtract FEMA's estimated cost of firewatch and staging, the amount would be \$258,447. The difference in the estimated quantity of welding plates is tied to the estimates of welding required. Transcript at 1228. FEMA discovered an error in its estimate in preparing its post-hearing briefing, an error that increases the estimate for welding plates by \$16,082.

The costs of staging are for a platform to be built to allow the welders access to the portion of the roof being worked on. Applicant's Exhibit 1 at 46. CNO's estimate for staging is \$117,859. Applicant's Exhibit 1 at 52, lines 109-112. FEMA's estimate for staging appears to be \$32,277. FEMA Exhibit 135, CEF, FEMA Div. 7, lines 235-241. According to FEMA, CNO's estimate is to construct staging across the entire roof. FEMA estimated the cost to construct staging on the portion of the roof that was being worked on and then the staging could be moved.

The panel has no basis on which to determine that CNO's estimates for these items are more accurate and we do not adjust FEMA's estimates, except as noted. If a contractor determines that additional materials or different means and methods are necessary to perform the eligible scope, CNO may seek those costs from FEMA as an actual cost of the work.

Roof deck, St. Ann and St. Peter Street canopies: CNO seeks funds to replace 66,311 square feet of metal roof at a cost of \$3.20 per square foot. CNO attributes the difference between its estimate and FEMA's estimate to the use of different R.S. Means databases. Applicant's Exhibit 1 at 45. CNO also seeks the costs of the roof repair for the St. Ann and St. Peter's canopies at a cost of \$36,143, which was added after the September 2015 walk-through. The report of NY Associates Inc., CNO's architect, from April 2012, discusses the damage to these roofs resulting from Hurricane Katrina. Applicant's Exhibit 88 at 4-5. Due to this damage and the need to bring the roofs up to code, NY Associates recommended replacing the roofs.

Prior to the hearing, FEMA estimated that 63,306 square feet of metal roof needed to be replaced at a price of either \$2.61 or \$3.17 per square foot, depending upon the size of the roof, for a total cost of \$168,843. FEMA's Exhibit 135, Folder 7, CEF at 10, 12, 63-65. Post-hearing, FEMA seeks to reduce the amount that it estimated for this work, by the costs of roofs 11 and 13, because these roofs are described as concrete, rather than metal roofs, by Jacobs Engineering, CNO's cost estimator. Applicant's Exhibit 1 at 45. FEMA also increases the cost of its estimate for roof 1, resulting in a net decrease of approximately \$1000, for this item. The panel accepts FEMA's recalculation of the estimated cost to replace the roof deck and adds funds for the canopies, the damage to which is supported by CNO's architect.

Clean and repaint orchestra pit steel, clean stage valances: CNO provided drawings showing that stage lifting equipment was submerged and pictures of the pit steel in its current condition, Applicant's Exhibit 1 at 63, 67, but did not address FEMA's contention that this work is unnecessary because FEMA has determined that the replacement of the stage lift equipment in divisions 11 and 14 is eligible scope. Without an explanation as to why this additional work is necessary, the panel declines to direct FEMA to provide funding for this effort.

Annex roof demolition: CNO seeks funds for the removal or demolition of steel supports to make room for new equipment (basement switchgear and air handling units) to be placed on the roof. Applicant's Exhibits 1 at 64-66 (drawings and estimates of demolition to roof structures), 2 at 21. Because equipment is not being "replaced" on the roof, FEMA contends the work is not directly related to the disaster. Instead, FEMA is funding the placement of the equipment on the roof as hazard mitigation and FEMA will fund the demolition work at actual cost once the placement of the equipment and the actual scope of work are known. FEMA's Exhibit 135, PW 1964, version 9 (original) at 56-57.

Miscellaneous metal items: FEMA was unable to verify all of the scope identified by CNO, including painting of several metal surfaces. Applicant's Matrix at 176-77; FEMA's Matrix. CNO has provided no explanation of what these items are, how they were damaged in the disaster, or the basis for its estimate. The panel affirms FEMA's scope of work and estimate for this item.

Basement grating: CNO seeks funds for removal of a metal grated walkway in the basement, Applicant's Exhibit 1 at 54, 68, but has provided no explanation as to how this effort is the result of the disaster or necessary to restore the building to its function. The panel affirms FEMA's determination that removal of this grating is not eligible scope.

Division 6 – Rough Carpentry

Rough carpentry: \$985

Roof blocking: \$0

Gypsum sheathing: \$0

Moldings/plywood shelving: \$7195

Barrel roof wall: \$4493

Stage valance: \$0

Rough carpentry: CNO seeks \$2362 for several rough carpentry items. For the items challenged by FEMA pre-hearing, CNO relies upon the fact that FEMA had previously accepted the work as eligible. Applicant's Exhibit 2 at 27. For the work FEMA approved as eligible, but questioned the estimate, CNO asserts that FEMA relies upon the wrong cost estimating database. *Id.* at 28. CNO provided no testimony in support of its claim for costs for this division. FEMA deemed the replacement of wood furring strips to be ineligible because CNO did not identify the strips damaged as a result of the disaster in requests for information or site visits. FEMA's Exhibits 112 at 2, 124 at 16.

FEMA, prior to the hearing, had obligated \$985 for the costs of selective demolition of cabinetry. Post-hearing, FEMA seeks to remove those amounts because it contends Shaw performed this demolition in the immediate aftermath of the disaster. The panel does not see any reference to removal of damaged cabinets on the page cited by FEMA. FEMA's Exhibit 11 at 19. The panel directs FEMA to obligate the amount that it obligated for this item in PW 1964, version 9.

Roof blocking: CNO seeks \$39,698 for roof blocking. CNO states that FEMA placed this scope in division 7, but the statement of work does not align. CNO also cites to division 7 for an explanation, but the panel does not see a discussion of roof blocking in that division. *See* Applicant's Exhibit 2 at 26, 30-34. CNO states that other quantities of roofing material may have been incorrectly calculated by FEMA, *id.* at 32-33, but did not explain this problem at hearing or how that problem could be tied to the costs sought in this division. FEMA obligated \$1446 for roof blocking based upon the drawings for the new roof at the roof wall, Applicant's Exhibit 30 at 519; FEMA's Exhibit 135, Folder 7, CEF at 8, but CNO states that this work duplicates work in division 7 and it should be removed. Applicant's Matrix at 176.

Gypsum sheathing: CNO has reduced this item cost to \$8210, because it could not substantiate other amounts. Applicant's Matrix at 176. CNO cites to division 7, lines 35, 73, and 199, and to Roof HMP section, lines 14, 48, 87, 110, 136, and 166, but these different line items do not explain how this item is necessary as a result of the disaster or why the estimated cost is proper. CNO's other explanations of its claim do not explain this item. Applicant's Exhibit 2 at 26, 31-34. FEMA states that it funded a portion of this scope in division 7, but that CNO did not demonstrate that other damage was eligible. Because CNO has provided no further explanation of this item, the panel affirms FEMA's determination that this additional gypsum sheathing is not eligible scope.

Moldings, plywood shelving: CNO seeks \$7379 for plywood shelving; it removed the claim for moldings. Applicant's Matrix at 178. Its estimate differs from FEMA's estimate because of the use of a different cost estimating database. FEMA, prior to the hearing had obligated \$7195 for these two items. Post-hearing, FEMA seeks to reduce its funding to zero because Shaw did not identify any plywood shelving as damaged. *See* Applicant's Exhibit 19, PW 10698, version 0 (original) at 20-21. The list of actions undertaken by Shaw to stabilize the property does not establish that the plywood shelving was not damaged, only that it was not removed. Moreover, a FEMA witness testified that the damage to the plywood shelving was located under the portion of the roof that experienced the main failure. "We did agree that [the plywood] had been exposed to enough conditions due to Katrina that the plywood finishes in that room should be replaced." Transcript at 1124. On this record, the replacement of the plywood shelving is eligible scope and shall be funded based upon FEMA's estimate in version 9.

Barrel roof wall: The parties agree upon the eligible scope for this item and FEMA's estimate is greater than CNO's estimate. The panel does not adjust FEMA's estimate.

Stage valance: CNO seeks funds for repair of the stage valance. Applicant's Exhibit 1 at 74 (drawing showing how the stage valance was submerged when the basement flooded). FEMA contends that these costs are unnecessary because FEMA has obligated funds to replace the stage lift and valances. FEMA's Exhibit 135, Folder 7, CEF at 36, line 2. Although CNO submitted its post-hearing matrix after FEMA, it did not respond to FEMA's explanation that these costs are unnecessary because the entire system is being replaced. The panel has no basis on which to direct the obligation of the requested funds.

Division 7 – Moisture Protection

Installation of new roof: \$1,130,749

Demolition and removal of roof: \$284,202

Disposal: \$79,000

Hoisting (cranes): \$451,489

Temporary roof: \$91,850

Installation of new roof: CNO and FEMA agree that the roof of the auditorium needs to be replaced. Transcript at 365. As part of its post-hearing analysis, FEMA corrected its estimate to include the proper depth of insulation. As a result of these additions, FEMA's total estimate for the installation of the roof is \$1,130,749. FEMA's Matrix. The "install" line items in CNO's spreadsheet total \$1,473,866. Applicant's Matrix at 188-189. The difference between these two amounts appears to be, in part, differences in estimated quantities of caulking and sheet metal for the new roof. Applicant's Exhibit 1 at 76. The panel has no way to determine which estimates are correct and no basis upon which to adjust FEMA's estimate.

Demolition and removal of roof: The parties differ on the quantities to be demolished and removed. Applicant's Exhibits 1 at 96, 2 at 32; FEMA's Exhibit 135, CEF at 9. The panel did not hear testimony on these estimates and has no means of reconciling these estimates or determining which is correct. We do not adjust FEMA's estimate upwards, but, if a contractor determines that additional quantities of demolition are necessary, CNO may seek those costs from FEMA as an actual cost of the work.

Disposal: FEMA challenges the quantities provided and methods identified by CNO for disposal. Transcript at 1240. CNO provides no explanation of its estimate of disposal costs. Applicant's Exhibits 1, 2. The panel does not adjust FEMA's estimate.

Hoisting (cranes): CNO plans to rent two tower cranes and a truck crane with a 100-ton capacity for the work on the roof. Applicant's Matrix at 189-90. CNO needs to use tower cranes because the space around the auditorium in which a mobile crane could be placed is very limited. Transcript at 356-57; Applicant's Exhibit 2 at 33-4. A tower crane can also be used to transport personnel to the roof, which will eliminate the need for personnel to climb five flights of non-continuous stairs through the building to reach the roof. Applicant's Exhibit 2 at 33. FEMA's estimate is based upon the use of two truck cranes, with capacities

of twenty-five and thirty-three tons, similar to those used by Shaw in 2006, when it made temporary repairs to the roof. Transcript at 1241; FEMA's Exhibit 135, CEF at 17. CNO explained that a crane of the size Shaw used is inadequate because the crane will need to reach all portions of the roof, not just the portion where Shaw made the temporary repairs. Transcript at 362. FEMA also challenges the number of months estimated for tower crane use because, although CNO estimated that the roof replacement would require thirty weeks, Applicant's Exhibit 1 at 102, its estimate is for twelve months of rental costs. Transcript at 1241-42. CNO's estimate appears to contain an estimate for rental costs based upon a twelve-month duration. Applicant's Matrix at 189, lines 218, 220. The panel accepts CNO's explanation as to the need for the tower cranes and truck crane, but adjusts downward the estimate for the rental period to seven months.

Temporary roof: CNO estimates the costs of a temporary tarp that can be placed over the open portion of the roof to protect the inside of the building at the end of the day. Applicant's Exhibit 2 at 34. FEMA believes that the primer that is put down as part of the roofing system to be installed will provide sufficient protection. FEMA's Exhibit 135, CEF, lines 12, 42, 82, 105, 126, 142, 152, 162, 172, 184, 194. CNO's proposed tarp system appears to be necessary to protect the inside of the building while the roof is replaced and the panel directs FEMA to obligate funds for this scope of work.

Division 8 – Doors and Windows

Doors and windows: \$150,833

CNO seeks \$562,035 for the replacement of windows and doors that it has identified based upon its survey of the building. Transcript at 330. CNO relies solely upon the fact that FEMA, in approving version 8, agreed to its scope for this division, albeit at lower estimated costs because of use of R.S. Means for new construction. Applicant's Exhibit 2 at 35. CNO provided no testimony or other evidence regarding the accuracy of its survey or calculation of quantities of doors or windows. FEMA's estimate includes the costs of removal and replacement of all doors in the flooded areas of the building (basement and first floor) and the barrel roof door. FEMA's Exhibit 135, CEF, at 18-32, lines 231-33; FEMA's Exhibit 135, Folder 10, Drawings 001, 002; Transcript at 1130-31. It also includes costs to replace window panes broken during the disaster and the rental cost of an aerial lift to repair the windows. FEMA's Exhibit 135, CEF, at 18-32, lines 235-54; Transcript at 1130-31. Based on its own survey, FEMA could not verify the number of damaged doors and windows in CNO's estimate, Transcript at 1126-29, and reduced the eligible scope accordingly. FEMA's Exhibit 135, Folder 7, CEF at 18-32. The panel affirms FEMA's determination regarding

eligible scope because CNO has provided no basis upon which the panel can increase the estimate provided by FEMA for windows and doors.

Division 9 – Finishes

Demolition: \$154,843

Drywall plaster: \$168,456

Ceramic tile: \$18,407

Suspended acoustic ceilings: \$204,432

Resilient flooring and base: \$103,384

Carpet: \$141,812

Sound attenuation: \$3016

Painting: \$190,542

Wood strip flooring: \$5731

Scaffolding: \$130,619

Exterior wall Treme Street: \$0

Stage valance repair: \$0

Demolition: CNO seeks funds for demolition of ceilings, walls and floors. Applicant's Exhibits 1 at 131-32, 2 at 38-40. CNO relies upon a room-by-room survey that was attachment 2 to version 8 of the PW as support for its estimates. Applicant's Exhibit 17, PW 1964, version 8 (original) at 613-721. This document lists the square footage of each of the elements in each room (ceiling, walls, and floor) and states whether the surface needs to be replaced, remediated, or painted. Although one witness testified that CNO's estimate was compiled using a room-by-room estimate, Transcript at 330, no one testified that this room-by-room survey underlies the quantities sought by CNO. CNO attributes the difference between its estimate and FEMA's to be based upon quantity and unit cost.

FEMA, in version 9, obligated \$154,843 for demolition activities, based upon its own room-by-room survey to verify the quantities CNO sought. Transcript at 1134-35, 1146. Post-hearing, FEMA seeks to withdraw all funds except for those necessary to demolish a small portion of the plaster ceiling where the water leaked in as a result of the original roof damage, estimated at \$8380. FEMA contends the remaining work would duplicate work that Shaw did as part of the stabilization activities. FEMA's Exhibit 11 at 19, 20-21. We do not find the evidence FEMA relies upon to be persuasive regarding the scope of Shaw's efforts. Without a further explanation, the panel directs FEMA to obligate the amount that it obligated in version 9 for this scope of work.

Drywall, plaster/ceramic tile/suspended acoustic ceilings/resilient flooring base/carpet/sound attenuation/ painting: The differences in the parties' estimates for these items are attributable to quantity and unit cost differences. FEMA's pre-hearing survey and site visits confirmed quantities upon which its estimates are based, Transcript at 1134-35, 1146, and CNO provides no basis for increasing these estimates. Post-hearing, FEMA seeks to reduce the amounts obligated for these items based upon the quantities removed by Shaw as evidence of the quantities that need replacing. FEMA's Exhibit 11 at 19, 21-22. The panel finds that the quantities about which FEMA witnesses testified are more credible than the two-pages prepared by Shaw, which no one explained, and directs FEMA to obligate the amounts that it obligated in version 9 for each of these items.

Wood strip flooring: In its request for arbitration, CNO seeks funds for the removal and replacement of the arena floor. In its version 9 request, CNO had included an estimate to refinish the existing floor, but based upon a site visit in February 2016, CNO determined that the floor needed to be replaced. Applicant's Exhibit 1 at 132, 157 (center photo). CNO attributes the damage to the floor to the leaks from the roof as well as the water bottles stored on the arena floor. *Id.* at 132.

FEMA presented persuasive evidence that the current condition of the floor is not attributable to the disaster. Transcript at 833-35, 1036. Because it appears that refinishing the floor would not be useful, given its current condition, the panel directs FEMA to withdraw the funding for the refinishing of the wood floor, in the amount of \$66,813.92, but retain the amounts for the wood strip flooring in the Coker room (\$5731). FEMA's Exhibit 135, CEF at 34, lines 49-50.

Scaffolding: CNO seeks funds to erect scaffolding below 16,819 square feet of ceiling where there is "the highest probability of damage," noting that the "total extent of the damage is not evident." Applicant's Exhibit 1 at 131. FEMA obligated funding for scaffolding based upon its review of drawings and pictures of actual damage to the ceiling. Transcript at 1152; FEMA's Exhibit 135, Folder 7, Non-Photo (Drawing) 7.2.10. FEMA

explains that it cannot obligate additional funds based upon anticipated damage or to perform damage surveys, but any new damage CNO identifies will be evaluated. Transcript at 1153. Post-hearing, FEMA seeks to withdraw funding for the costs of an aerial lift estimated to be \$63,000. FEMA states that the condition of the paint on the portions of the ceiling to be reached by this lift cannot be attributed to the disaster but cites no hearing testimony or other documentation to support its further deduction of these costs. Based upon this record, the panel directs FEMA to fund this scope of work at the amount obligated in version 9.

Exterior wall Treme Street: CNO seeks funds to remove and replace the lower three feet of the exterior wall at the Treme Street entrance because this portion of the wall sat in flood waters and the rusting of the steel supports is visible. Applicant's Exhibit 1 at 131. (In its post-hearing submission, CNO notes "need to verify" in the far right-hand column and provides no citation as support.) FEMA did not obligate any funds for this effort because it did not see any damage to the wall in the location. FEMA's Exhibit 189. As noted in division 4, FEMA acknowledges that the exterior of the building was flooded to three feet and includes funds to clean the building to this height. On this record, the panel has no basis on which to direct the obligation of the requested funds.

Stage valance repair: CNO seeks funds for repair of the stage valance. Applicant's Exhibit 1 at 74, 131. FEMA contends that these costs are unnecessary because FEMA has obligated funds to replace the stage lift and valances. FEMA's Exhibit 135, Folder 7, CEF at 36, line 2. Although CNO submitted its post-hearing matrix after FEMA, it did not respond to FEMA's explanation that these costs are unnecessary because the entire system is being replaced. The panel has no basis on which to direct the obligation of the requested funds.

Division 10 – Specialties

Toilet partitions: \$39,030

In approving version 9, FEMA agreed that replacement of the partitions was eligible scope, but it provided funding for a lesser quantity based upon the drawings prepared by CNO's architect. Transcript at 1153-54. The parties' estimates also differed based upon the use of different cost estimating databases. Applicant's Exhibit 2 at 40-41. Post-hearing, FEMA seeks to withdraw all funding for this division because the restrooms in which the partitions will be replaced are located on floors 1-4 of the auditorium, which were not inundated during the disaster. As support, FEMA cites to four drawings prepared by NY Associates, Inc. that appear to be plans and specifications for the demolition activities for the auditorium. Applicant's Exhibit 30 at 511-14. FEMA provides no explanation why these drawings, which had been used to validate the quantities, now show that the scope is not eligible. On

this record, the panel affirms FEMA's determination of eligible scope and the estimate obligated in version 9.

Division 11 – Equipment

Dimmer board: \$331,200

Stage equipment and stage equipment demolition: \$0

Food preparation equipment: \$508,000

Refrigeration, etc. selective demolition: \$13,938

Arena seating demolition: \$132,943

Dimmer board: Both parties agree that dimmer board needs to be replaced. FEMA's estimate is higher than CNO's. The panel does not adjust FEMA's estimate.

Stage equipment and stage equipment demolition: The panel cannot determine what equipment CNO seeks to replace for this line item. CNO mentions a Thyseen Krupp quote, but the panel does not find such a quote in the claim narratives. Applicant's Exhibits 1 at 161-66, 2 at 42. FEMA observed no damage to the equipment in the fly loft, Transcript at 1082, and CNO, in correspondence, stated only a "concern that the theatrical equipment would require replacement" because it was below an area of the roof that sustained damage. FEMA's Exhibit 87 at 5. CNO also seeks the costs of demolition of the existing equipment, which it estimates to be half the costs of the labor to install the new equipment. Applicant's Exhibit 1 at 161. The panel is unable to locate the supporting documentation for this estimate. Without an understanding of the equipment at issue and the damage it sustained, the panel has no basis to grant CNO any funds for this line item.

Food preparation equipment: The estimates for this item are based upon a square footage of the kitchen area multiplied by the R.S. Means code for food prep equipment. CNO's estimate is larger because its estimate for kitchen square footage is larger and it used the R.S. Means data for repair and replacement. Applicant's Matrix at 244; Applicant's Exhibit 1 at 164. On this record, the panel has no basis to determine that CNO's estimate is better or more accurate than FEMA's estimate for this scope. Post-hearing, FEMA seeks to withdraw all funding for food prep equipment because the area in which this equipment was located did not flood during Hurricane Katrina. FEMA's Matrix. Once again, this basis for a

reduction is contrary to FEMA witness testimony at the hearing, wherein a witness testified that the food preparation equipment “was obviously water damaged.” Transcript at 1039; *see also id.* at 1084 (testimony as to the difference between the two estimates for this item). Based upon this record, the panel directs FEMA to obligate the amount that it obligated in version 9 for this equipment. If the actual costs of the food preparation equipment are greater, CNO may seek those costs from FEMA in a future request.

Refrigeration, etc. selective demolition: The estimates for this cost are also based upon square footage multiplied by the R.S. Means code for demolition. CNO’s larger estimate was again driven by a larger square footage estimate and the use of a different R.S. Means data set. Applicant’s Matrix at 244. On this record, the panel has no basis to determine that CNO’s estimate is better or more accurate than FEMA’s estimate for this scope. Post-hearing, FEMA has attempted to recalculate its estimate based upon a new determination as to the square footage that was inundated during the disaster. FEMA’s Matrix. The panel did not hear any testimony regarding this determination and has no basis to alter the estimate. The panel directs FEMA to obligate the amount that it obligated in version 9 for this scope of work.

Arena seating demolition: The difference between the parties’ pre-hearing estimates for this item are due to the use of different R.S. Means databases. Applicant’s Matrix at 245. Post-hearing, FEMA seeks to remove all of the funds for this effort because it purportedly duplicates work that Shaw did when it stabilized the auditorium right after the disaster. FEMA’s Matrix. As support, FEMA again cites the two pages from version 0 of PW 1964, which detail the work that Shaw performed, including the chemical cleaning of 188 seats. FEMA’s Exhibit 11 at 19, 21. The panel is unable to determine whether this work that Shaw performed is the same as the arena demolition costs that CNO seeks. The panel directs FEMA to obligate the amount that it obligated in version 9 for this scope of work.

Division 12 – Furnishings

Bars/back bars: \$18,435

Casework: \$21,218

Arena seating: \$205,344

Grilles: \$0

Chandeliers: \$7497

Bars/back bars: The parties agree upon the scope of work to replace bars in the auditorium, but the estimates for the work differ based upon the application of different R.S. Means databases. Applicant's Matrix at 246. CNO also seeks funds for work to replace a back bar, but provides no supporting explanation as to what this bar is, where it is located, or how it was damaged. The panel does not adjust FEMA's estimate for this scope of work.

Casework: The difference between the parties' pre-hearing estimates is due to the use of different R.S. Means databases. Applicant's Matrix at 246. Post-hearing, FEMA seeks to remove all of the funds for this effort because it purportedly duplicates work that Shaw did when it stabilized the auditorium right after the disaster and there was no damage to the floors where this casework is located. FEMA's Matrix. As support, FEMA again cites a page from version 0 of the PW 1864, which detail the work that Shaw performed. FEMA's Exhibit 11 at 19. While the page cited by FEMA does not support its contention that Shaw demolished the cabinetry at issue with this request, it does note that there was disaster-related damage on floors one through four of the auditorium. *Id.* The panel directs FEMA to obligate the amount that it obligated in version 9 for this scope of work.

Arena seating: CNO seeks funds to purchase 2459 new arena seats and treat those same seats with fire retardant chemicals and to purchase 1488 plastic chairs. In version 9, FEMA agreed that the arena seats, with fire retardant, and the plastic seats needed to be replaced. FEMA's Exhibit 135, CEF at 37. The difference in the estimates was due to the use of a different R.S. Means database. Applicant's Matrix at 247. Post-hearing, FEMA seeks to remove all of the funds for this scope of work because Shaw cleaned all of the chairs that were damaged in the disaster and the need to replace the seats now purportedly is because CNO failed to maintain the building. FEMA's Matrix; FEMA's Exhibit 11 at 19, 21. Unlike other issues, throughout the arbitration, FEMA did present testimony and argument about the condition of the arena and CNO's negligence in maintaining it. Transcript at 833-35. Moreover, CNO notes in its own submission that the arena seating is contaminated with mold. Applicant's Exhibit 2 at 46. On this basis, the panel reduces the amount for replacement of the arena seats by \$790,569. FEMA does not address the amount that it previously deemed eligible for plastic seats. Further, in its submission, the panel found a report prepared by Shaw that details the removal of all the folding chairs from the arena post-disaster and includes pictures of these chairs in dumpsters. FEMA's Exhibit 135, Folder 7, Sub-folder 7.1, Drawing 7.1.9 Shaw Building Stabilization at 20-22. The panel directs FEMA to obligate the amount that it obligated in version 9 to replace these chairs.

Grilles: CNO seeks the costs necessary to remove, clean, and reinstall the grilles in the catwalk in the arena due to mold on the surfaces of the grilles. Applicant's Exhibit 2 at 47. FEMA denied any funding because it did not validate any disaster-related damage to these

grilles, which are located above the flood level. *Id.*; Transcript at 1156. As previously discussed, the presence of mold in the arena is due to CNO's failure to maintain the building. The panel affirms FEMA's determination that cleaning these grilles is not eligible scope.

Chandeliers: FEMA obligated funds for the effort to remove, clean and service, and reinstall nine chandeliers in the auditorium because the ceilings above these chandeliers were damaged. FEMA's Exhibit 135, CEF at 37-38; Transcript at 1222. FEMA also included the costs of one aerial lift for this effort. FEMA's Exhibit 135, CEF at 37. Post-hearing, FEMA has included the cost for a second aerial lift. CNO requests additional funds in this item to clean the metal parts of the chandeliers, to protect the floor during the cleaning, and to provide special supervision for this effort. Applicant's Exhibit 1 at 167. FEMA determined that this effort was not eligible scope. Transcript at 1223. CNO did not provide any support for these additional costs or efforts; therefore, the panel declines to increase the amount estimated by FEMA.

Division 13 – Special Construction

Demolition - walk-in refrigerators: \$0 (funding shown in division 11)

Walk-in refrigerators: \$112,712

Demolition - walk-in refrigerators: FEMA explains that this line item duplicates amounts sought in division 11, Equipment. Although it responded to FEMA's post-hearing submission, CNO did not address this contention. Comparing the material submitted in support of its claim, it appears that CNO has included demolition costs for at least two of the refrigerators twice. *Compare* Applicant's Exhibit 1 at 164 *with id.* at 178. Without further explanation as to what these refrigerators are or how they are different, the panel is left without a basis to direct FEMA to obligate funds for this scope.

Walk-in refrigerators: Pre-hearing, the parties differed upon the size and number of refrigerators required. Their estimates also differed with the use of different cost databases. CNO provided no explanation as to why its estimate was better or more accurate. Post-hearing, FEMA seeks to reduce the amount it obligated in version 9 based upon a new calculation of the square footage of refrigerator space that was damaged as a result of the disaster. Again, this reduction is contrary to the testimony of a FEMA witness regarding how the estimate was calculated in version 9. Transcript at 1245. The panel has no basis to adjust the amount for this item in version 9. The panel directs FEMA to obligate the amount that it obligated in version 9 to replace these refrigerators. Because CNO will be buying refrigerators, any cost difference can be accounted for in the reimbursement phase.

Division 14 – Conveying Systems

Elevator demolition: \$43,560

S Stop freight elevator: \$193,945

Passenger elevators 1 and 2: \$266,650

Elevator 4: \$111,000

Orchestra and stage lifts, including demolition costs: \$2,744,288

Freight and passenger elevators, including demolition costs: Pre-hearing, the parties agreed upon the scope of work. Applicant’s Matrix at 250. Post-hearing, FEMA seeks to withdraw all funds for the removal and replacement of all the elevators, except for the orchestra and stage lifts. FEMA’s Matrix. FEMA takes this position, despite testimony from a FEMA witness that, as to “the freight elevator and the passenger elevators, we don’t have any disagreement that those elevators would be removed and replaced.” Transcript at 1160-61. Moreover, FEMA states that its final estimate is for the costs to repair or replace flood damaged components of the elevators, FEMA’s Matrix, but the panel has no basis for ascertaining that these are the correct amounts.

The same FEMA witness explained that the only difference in the estimated costs was that CNO’s estimate included the costs of maintenance agreements for the first year because these are operating costs for the building. Transcript at 1161. FEMA does not pay for maintenance agreements as part of a replacement project funding. PA Guide at 58; Transcript at 1306. CNO counters that this first-year cost is part of the installation cost. Applicant’s Exhibit 1 at 182. The maintenance on the elevators is a cost that CNO would have incurred absent the disaster and is not resulting from the disaster. The panel directs FEMA to obligate the amount that it obligated in version 9 to remove and replace the elevators.

Orchestra and stage lifts: The parties agree upon the scope of work for the replacement of the damaged orchestra and stage lifts. FEMA’s estimate, which includes demolition costs, exceeds CNO’s estimate. Transcript at 1080-82; FEMA’s Matrix. The panel does not adjust FEMA’s estimate.

Division 21 – Fire Protection

Demolition sprinklers, fire pumps: \$2923

Demolition FM 200: \$2230

Air compressor: \$0

FM 200 System: \$26,928

Fire pumps: \$59,800

HMP piping: \$0

Semper Fire: \$0

Install sprinklers: \$0

Standpipe: \$0

Tamper switches: \$1420

Drain and test: \$0

Commissioning: \$0

Ceilings: \$0

There are two components to the fire suppression system that CNO seeks to replace: (1) the pumps, control system and other components that had been located in the basement; and (2) the piping and sprinkler heads throughout the building. CNO also seeks the costs to drain and test the sprinklers, and replace the ceilings where the sprinklers are located. The panel affirms FEMA's determination that demolition and replacement of the components located in the basement is eligible scope and FEMA's estimate of the costs of that scope. If the actual costs for this scope of work exceed the amounts that have been obligated, CNO may seek those costs from FEMA as an actual cost of the work. As discussed above, because the weight of the evidence indicates that the pipes were corroded by prolonged exposure to moisture and humidity, the remainder of the items that CNO seeks to replace in this division are not within the eligible scope.

HMP Piping: CNO seeks funds for new piping to bring water from the municipal supply line to the new fire pump. FEMA will consider funding this item under hazard mitigation once the location of the new fire pump is finalized. FEMA's Matrix.

Tamper switches: FEMA, in its post-hearing review, determined that it had inadvertently omitted the costs of the tamper switches. FEMA's Matrix.

Commissioning: See discussion in division 22.

Division 22 – Plumbing

Booster pumps: \$43,400

Demolition: \$17,473 (demolition costs for fire system moved to division 21)

Roof drains: \$245,672

Grease interceptor: \$256

Fixtures: \$228,000

Water coolers: \$20,280

Sump pumps: \$0

Fuel oil tank and pump: \$0

Water heater: \$0

Commissioning: \$0

Booster pumps: The parties agree upon the scope of work for this item. FEMA's estimate is slightly less due to the use of the R.S. Means for new construction data. Applicant's Exhibit 2 at 60. The panel does not adjust FEMA's estimate.

Demolition/Roof drains/grease interceptor: The parties agree upon the scope of work for these items. FEMA's estimates for these items are either the same or more than CNO's estimate. FEMA's Matrix. The panel does not adjust FEMA's estimates.

Fixtures/water coolers: The scope of work is to replace damaged plumbing fixtures and water coolers. Pre-hearing, the difference in the parties' estimates was solely attributable to the use of the different R.S. Means data. Post-hearing, FEMA seeks to withdraw all funding for fixtures and the water coolers because these items on floors 1 through 4 of the auditorium were not inundated by the flood waters. Instead, FEMA asserts, the items need to be replaced due to CNO's failure to maintain the building. FEMA's Matrix. Again, FEMA's contention is contrary to the testimony of one of its witnesses, who testified to the flood damage to the chiller equipment. Transcript at 1085-87. In addition, a FEMA summary of a 2011 site visit stated that these pieces of equipment needed to be replaced because the mechanical room where they were located was flooded to three-to-four feet. Applicant's Exhibit 91 at 7; Transcript at 1036. The panel directs FEMA to obligate the amount that it obligated in version 9 to replace this equipment.

Sump pumps/fuel oil tank and pump: CNO removed these items from its claim because it was not able to substantiate them. CNO Matrix at 262.

Water heater: CNO seeks funds to replace a water heater that was located in the basement. Applicant's Exhibit 1 at 322. CNO notes that FEMA has not reviewed its claim for this item. Applicant's Matrix at 262. FEMA states that it deemed replacement of this water heater to be ineligible in version 4 of the PW because CNO was not using it at the time of the disaster. FEMA's Exhibit 34 at 46. The panel sees no basis upon which to require funding for the replacement of this water heater.

Commissioning: CNO seeks funds for commissioning of the plumbing work to be performed, to certify that the work was installed and operates as required by the design documents. Applicant's Exhibit 2 at 62. According to CNO, "commissioning is part of the scope of every project." *Id.* FEMA deems this work ineligible because it is not work to restore an item damaged in the disaster. PA Guide at 24. The panel affirms FEMA's determination that commissioning is not eligible scope.

Division 23 – HVAC

Demolition and removal: \$88,039

Pipe, fittings, and valves: \$591,130

Air handling units (AHU) and fans: \$749,350

Elevate AHU equipment/renovate machine rooms: \$49,062

Chillers, cooling towers, and pumps: \$1,581,435

Elevate chiller equipment/renovate chiller room: \$35,994

Ductwork: \$105,289

Exterior ductwork: \$38,805

Grills, registers, and diffusers: \$0

Fan coil work: \$40,427

Filters: \$239,835

Miscellaneous, including Phase 1 additional items: \$17,400

Hoisting: \$34,390

Controls: \$2240

Balancing: \$14,907

Commissioning: \$0

Relocate basement and 1st floor equipment to roof: \$0 (funding in division 26)

FEMA correctly determined that eligible work for division 23 included the effort to replace components that were flooded during the disaster. The panel does not make any adjustments to those amounts. The items that require further explanation are set forth below.

Demolition and removal: CNO seeks the costs to remove all of the HVAC systems in the building, including the ductwork. In addition, CNO seeks the costs to remove the existing equipment on the roof top. Because replacement of the roof and placement of new HVAC equipment on the roof has been deemed eligible work, CNO argues that work necessary to make way for that work should also be deemed eligible. Applicant's Exhibit 2 at 63. For other items related to the placement of equipment on the roof, FEMA has stated that a funding determination will be made when CNO has a plan for the relocation of the equipment. At that time, CNO may seek funding for the removal of existing equipment.

Pipes, fittings, and valves: CNO seeks to replace the pipes, fittings, and valves throughout the entire building. CNO contends that FEMA's estimates for the amount of piping necessary to move the large components are incorrect and that the piping throughout the building is contaminated with mold. Applicant's Exhibit 2 at 65. Although CNO's estimator testified how he used the drawings for the building when it was configured as a Harrah's Casino to determine the number of feet of pipe required, Transcript at 434-35, 437-40; Applicant's Exhibit 1 at 375, a FEMA estimator testified that drawings prepared after Harrah's Casino left the building showed that some of this piping had been removed. Transcript at 1054-64. On this record, we cannot determine if CNO has prepared a better estimate of the amount of piping to be replaced. Since the parties agree that piping needs to be replaced with the relocation of the larger components from the basement and first floor annex, if greater amounts of piping require replacement than FEMA estimates, CNO may seek the actual cost of this work.

Air handling units and fans/elevate AHU equipment/renovate machine rooms: CNO seeks to replace all of the AHUs in the building. Applicant's Exhibit 1 at 330. In addition to the AHUs in the basement and first floor annex that FEMA agrees should be replaced and elevated, Transcript at 1056, CNO contends that the remainder are eligible because of "damage to the internal insulation, wiring and AHU interior surfaces from the mold infestation in the building." *Id.* Because the mold infestation resulted from a lack of ventilation, not the disaster, the panel has no basis to adjust upward FEMA's estimate.

Chillers, cooling towers and pumps: The parties agree that these components need to be replaced, but differ on the capacity of the replacement components. FEMA's estimate was based upon the description of the new systems from CNO's architect. FEMA's Exhibit 135, Folder 9, MEP HMP Attachment 1 at 7. If the necessary capacity of the installed system is proved to be greater, CNO may seek the increased costs of that capacity.

Ductwork: CNO seeks to replace all of the interior ductwork due to mold contamination. Applicant's Exhibit 2 at 69. FEMA's estimate includes funds to clean the ductwork and duct accessories connected to the basement fans. Because the mold infestation was the result of a lack of ventilation, the panel will not increase the amount obligated by FEMA.

Exterior ductwork: The parties agree that the storm-damaged exterior ductwork needs to be replaced, but disagree on the extent of that damage. Applicant's Exhibit 1 at 331; FEMA's Exhibit 135, CEF at 44, line 51. CNO contends that FEMA's estimate does not include insulation for the duct to be replaced and that insulation on the exterior ductwork has become waterlogged because of storm damage. Because it is not clear what insulation CNO is describing, the panel has no basis upon which to increase the amount obligated by FEMA.

Grills, registers, and diffusers: CNO seeks funds to replace the grills, registers, and diffusers along with the interior ductwork, due to the mold infestation. Applicant's Exhibit 2 at 71. FEMA obligated funds to clean the existing grills, registers, and diffusers, although it does not explain why cleaning these components should be its responsibility. Given that the mold infestation is not the result of the disaster, the panel directs FEMA to remove the funds for cleaning these items.

Fan coil work: It appears that CNO's estimate for this work is far less than FEMA's because CNO has removed scope. Applicant's Matrix at 283-84. The panel accepts CNO's downward revision for this scope and estimate cost of this work.

Filters: The parties agree upon the scope of work and FEMA's estimate is greater. The panel does not adjust FEMA's estimate.

Miscellaneous, including phase 1 additional items: CNO seeks funds for fire stopping penetrations in rated walls and floors and the replacement of two air compressors and an air separator, vacuum control, and expansion tank. Applicant's Exhibit 2 at 71-72. FEMA could only validate the disaster-related damage to one air compressor. FEMA's Exhibit 135, CEF at 42, line 18; FEMA's Exhibit 149, Attachment 2 at 3. The panel does not increase the amount obligated by FEMA for these items, although it notes that FEMA deemed fire stopping to be eligible scope with the installation conduit in division 26. If, during the installation of the new components of the HVAC system on the roof or in the annex, it is determined that penetrations need to be fire stopped to meet code or other requirements, CNO may seek those costs as eligible scope.

Hoisting: The parties agree that CNO will incur costs to hoist the new HVAC components to the roof, but FEMA contends that only the costs to hoist the eligible components are eligible costs. The panel does not alter the amount obligated by FEMA.

Controls: CNO originally sought the cost of installing a digital control system for the new HVAC equipment, but revised its request to seek the cost of a pneumatic one like one that it found in the building. Applicant's Exhibit 1 at 332. FEMA has obligated only the costs of controls to be placed upon individual units because drawings for the building indicate this was the existing way units were controlled. Transcript at 1074; FEMA's Exhibit 135, Folder 7, File Mechanical at 1, n.4. Since FEMA may only replace the existing functionality for systems, the panel affirms FEMA's determination of the eligible scope for this item.

Balancing: CNO seeks the costs to perform balancing for the entire new HVAC system when it is installed. Applicant's Exhibit 1 at 332. FEMA has obligated funds only to

perform balancing for the components for which it is providing funding. FEMA's Exhibit 135, CEF at 45, lines 56-60. The panel does not adjust FEMA's estimate.

Commissioning: See discussion in division 22.

Division 26 – Electrical

Motors: \$12,700

Bus duct: \$466,500

Conduit feeds and wiring: \$1,593,129

Switchgear: \$1,355,534

Generator: \$150,600

Building systems: \$912,768

Temporary light and power: \$156,511

Commissioning: \$0

Motors: FEMA's estimate includes the costs of motors that had been recorded in other divisions. CNO asserts that FEMA's price does not include the cost of installing the motors, but it appears that CNO has removed the labor costs from its final costs. Applicant's Matrix at 298. CNO also seeks the costs of three 200-horsepower motors and 182 motor connections. *Id.* FEMA deemed these costs not eligible because FEMA did not observe and CNO could not identify these items in the building during the last site visit. FEMA's Exhibit 149 at 4. CNO's estimator could not recall that he saw a 200-horsepower motor during his site visits. Transcript at 471. The panel does not adjust FEMA's estimate for this item.

Bus duct: The parties agree upon the scope of work for replacing the bus duct in the building. Transcript at 957-60. The difference between the estimates is solely attributable to the use of the different cost estimates. *Id.* The panel does not adjust FEMA's estimate.

Conduit feeds and wiring: FEMA's estimate includes the cost to replace conduit, conductors, and feeders for equipment that was damaged in the disaster. Transcript at 963-64; FEMA's Exhibit 135, CEF at 47-52. FEMA included costs to fire seal penetrations for CNO's

quantity of concrete holes. FEMA's Exhibit 135, CEF at 52. FEMA also included funds for the conduit necessary to relocate pieces of HVAC and electrical equipment to the roof. Transcript at 962-63. FEMA could not validate other items, such as circuits that were used for gaming equipment when Harrah's occupied the auditorium conduit for the upper floors of the building. The panel does not adjust FEMA's estimate.

Switchgear: The parties agree upon the scope of work to replace motor control centers, panel boards, and fused switches that were located in the basement. Transcript at 968-69. FEMA's estimate for this scope of work is higher than CNO's estimate. *Id.* at 969. CNO seeks funds for replacement of transformers and installations by the power company that FEMA did not observe in the building or on building drawings. Applicant's Exhibit 2 at 77; Transcript at 969-72. CNO also requested funds to test electrical panel boards to ensure the building's electrical system is safe. Applicant's Exhibit 2 at 77. FEMA will not obligate funds for work to look for possible damage. The panel does not adjust FEMA's estimate.

Generator: The parties agree upon the scope of work, which is the replacement of a generator, transfer switch, and feeder. FEMA's estimated price is slightly higher than CNO's. The panel does not adjust FEMA's estimate.

Building systems: This category covers several electrical items, including lighting, fire alarms, and electrical receptacles. FEMA's estimate is lower because it did not find all of the light fixtures and electrical receptacles that CNO had included in its estimate in the building. Transcript at 975-82. For example, CNO requested replacement of 867 light fixtures, but FEMA only counted 516 light fixtures in the basement and on the first floor. *Id.* at 978.

CNO also included in this category the installation of temporary electrical service to the building through overhead wires for the roof repair and temporary HVAC system to stabilize the temperature and humidity levels in the building. Applicant's Exhibit 1 at 404. FEMA deemed this scope to be ineligible because power was not provided to the building through overhead lines prior to the disaster and FEMA was funding work to restore the underground power service to the building. Transcript at 984. The panel does not adjust FEMA's estimate.

Temporary light and power: CNO seeks funds to provide temporary light and power during construction. FEMA's estimate is lower because FEMA used the minimum quantity identified in the R.S. Means database because it is already funding light and power to the building. Transcript at 987. FEMA did not include an estimate for light and power in the attic space because FEMA found no eligible work in the attic. *Id.* The panel does not adjust FEMA's estimate.

Commissioning: See discussion in division 22.

Restoration of Character Defining Features

Room 1001 Light Fixtures: \$1848

Scaffold: \$0

CNO seeks approximately \$40,000, to restore lights, signs and other character defining features in the auditorium. With the exception of a set of lights in one room, FEMA did not find this work eligible because it either did not see any disaster-related damage to the items identified or it could not locate the items CNO identified. Transcript at 1164-69. While CNO repeatedly noted the fact that the building is eligible for placement on the registry of historic places, CNO provided no hearing testimony or other evidence to support its request for funds to restore these specific items.

Room 1001 Light Fixtures: FEMA obligated funds for restoration of light fixtures in room 1001. Its estimate for these light fixtures was significantly less than CNO's because CNO included the cost of an aerial lift that FEMA did not think was necessary. Transcript at 1169. Post-hearing, FEMA seeks to reduce the costs obligated for the restoration of these lights because, in reviewing pictures, FEMA did not see any damage. FEMA's Matrix. FEMA's contention is contrary to the testimony of FEMA's witness that FEMA identified the restoration of these light fixtures as eligible work because the ceilings above the light fixtures were damaged. Transcript at 1168-69. The panel directs FEMA to obligate the amounts that it obligated for this item in version 9.

Scaffold: CNO seeks funds to pay for scaffolding "for additional work around Arena perimeter and the underside of the Stage Equipment opening to restore the Architectural Elements at the locations which have been damaged and require work to return them to their pre-disaster condition." Applicant's Exhibit 1 at 449. Other than this explanation in its request for arbitration, CNO provided no evidence regarding the damage to be repaired or explanation as to how the scaffolding would be used. FEMA declined to obligate funds because it could not identify the damage that CNO needed the scaffolding to repair. Transcript at 1170. Moreover, it is not clear whether this request for scaffolding overlaps with the other scaffolding requested by CNO. On this record, the panel has no basis to direct the obligation of funds for scaffolding.

Mold/Asbestos Containing Materials

Wipe-down: \$0

Demolition: \$0

GOHSEP Part A alignment: \$0

The panel determines that the unabated mold growth was not the result of Hurricane Katrina, so the effort to remove this mold growth is not eligible scope. Although we heard testimony that there was mold growth in the building after Shaw had completed its stabilization activities, that mold growth has been eclipsed by the mold growth that CNO allowed to occur unabated. On this basis, we direct FEMA to remove funds for mold remediation efforts that were obligated in version 9.

Exterior Improvements

Exterior lighting: \$6880

Temporary fencing: \$83,895

Exterior railings: \$0

Exterior lighting: The parties agree upon the scope of work. The difference in estimated cost is attributable to FEMA's use of RS Means for New Construction. Applicant's Exhibit 2 at 90. The panel does not adjust FEMA's estimate.

Temporary fencing: The parties agree upon the scope of work. The difference in estimated cost is attributable to FEMA's use of R.S. Means for new construction. Applicant's Exhibit 2 at 91. The panel does not adjust FEMA's estimate.

Exterior railings: CNO seeks funds to repair the hand railings at the entrances to the building to address "potential degradation" because they were submerged in flood water and represent a possible safety hazard. Applicant's Exhibit 1 at 479. FEMA deemed the work to be ineligible because CNO did not demonstrate any actual disaster-related damage. Transcript at 1173-74. The panel does not adjust FEMA's estimate.

Watchman/Cleanup

Watchman: \$288,272

Clean-up during work: \$263,091

Final clean-up: 1% of total Part A cost

Watchman: The parties agree upon the scope of work and the cost of a watchman for the project.

Clean-up during work: The parties agree upon the scope of work. The difference in estimated cost is attributable to FEMA's use of R.S. Means for new construction. The panel does not adjust FEMA's estimate.

Final clean-up: The parties agree that the final clean-up will be one percent of the total Part A cost. Applicant's Exhibit 2 at 89; Transcript at 1172.