



UNITED STATES
CIVILIAN BOARD OF CONTRACT APPEALS

July 2, 2018

CBCA 4980–FEMA

In the Matter of NON-FLOOD PROTECTION
ASSET MANAGEMENT AUTHORITY, LOUISIANA

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Mark Riley, Deputy Director, and Mark DeBosier, Assistant Deputy Director, Governor's Office of Homeland Security and Emergency Preparedness, Baton Rouge, LA, appearing for Grantee.

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Before the Arbitration Panel consisting of Board Judges **SOMERS** (Chair), **HYATT**, and **ZISCHKAU**.

The Non-Flood Protection Asset Management Authority of Louisiana (Authority or applicant) submitted a timely request for arbitration to the Board pursuant to section 601 of the American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115, 164 (2009), and its implementing regulations, 44 CFR 206.209 (2016). The request sought review of the determination of the Federal Emergency Management Agency (FEMA) denying the Authority's application for hazard mitigation funding for the construction of a flood control system which applicant contends is critical to the protection of structures at the

New Orleans Lakefront Airport, located on a man-made peninsula in Lake Pontchartrain in New Orleans, Louisiana. The Authority seeks mitigation funding as a public assistance grant under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), 42 U.S.C. §§ 5121-5207 (2012).

The applicant maintains that FEMA's denial of the requested funding is inconsistent with its regulations and policies relevant to hazard mitigation funding and is an abuse of the agency's discretion under the Stafford Act. FEMA responds that its decision is correct for a number of reasons, including that (1) the applicant's proposed large-scale flood protection project does not meet the statutory and regulatory requirements to be eligible for Section 406 hazard mitigation funding; (2) the project is not cost-effective under the benefit-cost analysis requirement for Section 406 mitigation funding; and (3) FEMA is prohibited from funding new construction in a coastal high hazard area. For the reasons stated below, we find that FEMA has properly applied the applicable Stafford Act provisions, its implementing regulations, and the agency's policies and guidance in evaluating the Authority's application.

Background

The Lakefront Airport, originally built in the 1930s, was constructed on a man-made peninsula extending approximately 1.3 miles from the southern shore of Lake Pontchartrain.¹ At the time it was built, a 10,000 foot concrete seawall was constructed jutting out into the lake and hydraulic fill was pumped in to create the land mass needed to locate the airport where no land had previously existed. The airport's terminal building was considered to be an art deco architectural masterpiece at that time, featuring Depression-era murals and friezes, which, following Hurricane Katrina, have now been restored using historic preservation funds.

Many of the Lakefront Airport's structures sustained severe damage from a combination of high winds, storm surge, and wave action when Hurricane Katrina struck New Orleans on August 29, 2005. Following the storm, the Authority applied for and received public assistance grants to repair and replace affected facilities at the airport. The largest individual grant was for a project worksheet (PW) approved by FEMA for the

¹ Although the airport served for a time as the primary commercial airport in the New Orleans area, the Louis Armstrong New Orleans International Airport, located in nearby Kenner, Louisiana, a much larger facility, is now the predominant airport serving New Orleans.

replacement of two hangars with a consolidated facility. The airport is located in a coastal high hazard area, as defined by 44 CFR 9.4, and is subject to damage from high velocity water including waves. In approving public assistance grant money for this project, FEMA recognized that it would not have been practicable to relocate the structure outside of the floodplain. Some ninety PWs relevant to the Lakefront Airport have been obligated for eligible emergency and permanent work for a total of \$64,026,934, including mitigation measures directly applied to affected structures.

On November 30, 2010, FEMA obligated PW 19266, for the replacement of the extensively damaged Bastian and Mitchell Hangars with a consolidated facility, the Bastian-Mitchell Hangar, at an estimated cost of \$14,393,270.59. On July 10, 2014, following completion of construction, version 3 of PW 19266 was amended to reflect a final cost of \$14,062,441.36. The replacement facility incorporated measures designed to enable the new building to better withstand weather events comparable to Hurricane Katrina.

On February 13, 2015, the Authority submitted a new request under PW 19266, seeking hazard mitigation funding, pursuant to section 406 of the Stafford Act, 42 U.S.C. § 5172(c)(1)(B)(iii), for the construction of a flood wall and other flood protection measures around the entire Lakefront Airport at an estimated cost of about \$65 million. The proposal called for construction of stationary walls on the west and east sides of the airport and a rapid deploy barrier on the north side, along with a pump station. The Authority stated that the proposed flood wall system would modify the existing concrete seawall and berm which had previously served as a “flood wall.”

FEMA rejected this application as ineligible for Section 406 hazard mitigation funding under its regulations. FEMA cited multiple reasons for denying the request: (1) the Authority requested funding in conjunction with a PW issued for a replacement facility, not a restoration as contemplated by Section 406 of the Stafford Act; (2) the project, in essence, required new construction in a coastal high hazard area and did not meet the exception for a dependent use under implementing policies; and (3) even if the request was otherwise eligible for a grant of funds, the project would not be a cost-effective measure under the applicable FEMA policy. FEMA also expressed concern about the technical feasibility of the proposed design.

Following the issuance of an engineering assessment by the United States Army Corps of Engineers, which identified concerns with the plan submitted to FEMA, the Authority retained an expert to review the Corps’ report and prepared a revised technical proposal intended to address the Corps’ points. The revised technical plan increased the previously estimated cost of the project to \$83,370,000.

Based on the revisions to the proposed flood wall, FEMA moved to dismiss the application for lack of jurisdiction, arguing that the proposed revisions to the design that had been considered by FEMA were so extensive as to require FEMA to reconsider the proposal in its entirety, thus divesting the Board of jurisdiction. This motion was denied, and a hearing was held with respect to the application.

At the hearing, the parties provided considerable testimony concerning the proposed flood wall, its feasibility, whether the system should be regarded as new construction, and the considerations required for inclusion in a proper benefit cost analysis with respect to the cost-effectiveness of the project.

Discussion

Jurisdiction

In its posthearing brief, FEMA asks us to revisit whether the Board may properly entertain this application. FEMA continues to maintain that the panel should dismiss the application for lack of jurisdiction on the ground that the proposed design and cost changes for the revised flood wall project were so different from the original proposal as to constitute a new project on which FEMA had not had an opportunity to rule. We denied the motion prior to the hearing because we were not persuaded that anything in the regulations required us to find that jurisdiction had been ousted by the revised design of the flood wall project. The Board reasoned that the key matters in dispute, including whether the project is eligible for Section 406 funding, whether the project is new construction, and what types of benefits should be included in a benefit cost analysis, would remain unchanged regardless of the technical and pricing revisions to the flood wall system. *Non-Flood Protection Asset Management Authority, Louisiana*, CBCA 4980-FEMA, 17-1 BCA ¶ 36,685. The evidence adduced at the hearing confirmed the conclusion that, although the proposed design of the flood control system has been modified to account for feasibility concerns expressed by the Corps of Engineers, the project itself serves the same purpose, relies on the same conceptual approach, and is subject to the same fundamental concerns articulated in the FEMA decision that prompted the request for arbitration.

Hazard Mitigation Funding under Section 406 of the Stafford Act

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.). The Act provides for hazard mitigation funding in two provisions. Section 404, *id.*, § 5170(c), covers measures intended to protect facilities subject to recurring weather-related damages

without reference to a specific disaster. Section 406, *id.*, § 5172 (e) (1)(A) (ii), the provision relied upon by the Authority, provides for hazard mitigation funding to protect eligible facilities that have received public assistance in connection with a presidentially-declared disaster, for the purpose of enhancing the damaged facilities' ability to withstand such damage in future events.

Section 406 of the Stafford Act is implemented by regulations promulgated by FEMA and published at 44 CFR 206.226. The regulation addresses restoration of eligible damaged facilities and, in pertinent part, provides that:

In approving grant assistance for restoration of facilities, the Regional Administrator may require cost effective hazard mitigation measures not required by applicable standards. The cost of any requirements for hazard mitigation placed on restoration projects by FEMA will be an eligible cost for FEMA assistance.

44 CFR 206.226(e).

As FEMA points out, PW 19266, as authorized, included certain hazard mitigation measures specific to that project:

In order to comply with V-zone construction requirements, building components below the DFIRM [Digital Flood Insurance Rate Map] elevation will be break-away construction type where appropriate and/or of flood proof construction. . . . Applicant has provided documentation describing lower level breakaway construction technology used in construction. Based on the design, footprint and estimated replacement costs, the project is approved for reconstruction in the V-zone.

FEMA's Response and Recovery Policy 9526.1 (1998), in effect at the time of Hurricane Katrina's occurrence, similarly reinforces the conclusion that Section 406 funds are not appropriate for replacement buildings or alternate projects and must be specific to eligible disaster-related damages of an eligible facility:

Section 406 hazard mitigation funding and Section 404 hazard mitigation funding are distinct. Proposals for measures intended to benefit undamaged facilities, and measures not directly related to the damaged elements for which restoration work on a facility is performed are candidates for funding under Section 404. Section 406 funding is more appropriately viewed as stemming from and related directly to, the repair work required as a result of the disaster.

Policy 9526.1 also provides that:

Mitigation measures must be determined to be cost-effective. Any one of the following means may be used to determine cost-effectiveness:

1. Measures may amount to up to 15% of the total eligible cost of the eligible repair work on a particular project.
2. Certain mitigation measures (see Appendix A) will be determined to be cost-effective, as long as the mitigation measure does not exceed the eligible cost of the eligible repair work on the project.
3. For measures that exceed the above costs, the Grantee or Subgrantee must demonstrate through an acceptable benefit/cost analysis that the measure is cost-effective.

The parties are in agreement that the first two tests set forth in the recovery policy are inapplicable, since the cost of the proposed system far exceeds the eligible costs incurred for the construction of the Mitchell-Bastian Hangar, and indeed would likely exceed the combined total of FEMA grant funding provided to various eligible projects at the airport. Thus, to justify the proposed expenditures, the applicant would have to demonstrate through an acceptable benefit-cost analysis that the measure is cost-effective.

In the case of the consolidated hangar facility, FEMA has funded all eligible code and standards upgrades, including flood protection measures, for the facility funded by PW 19266. The Stafford Act provision and implementing regulations simply do not admit of the interpretation asserted by the Authority. FEMA has properly concluded that this is not the type of project contemplated to be funded under Section 406 of the Stafford Act, which by its plain terms limits such hazard mitigation measures to those that are directly incorporated in or related to repairs to eligible facilities. The proposed flood wall system, which is intended to protect the entire airport campus, not simply an existing eligible facility, does not fall within the scope of Section 406.

FEMA's reasoning is also consistent with, and effectuates the intent of, Executive Order 11988, Floodplain Management, 44 CFR Part 9.11(d), which provides a process to ensure that projects proposed for floodplains are subject to the general requirement that:

- (1) There shall be no new construction or substantial improvement in a floodway, and no new construction in a coastal high hazard area, except for

- (I) A functionally dependent use; or
- (ii) A structure or facility which facilitates an open space use.

The focus of the parties has been on whether the system is prohibited as new construction in a high hazard coastal area. Evidence presented in the hearing supports FEMA's position that the floodwall system would not simply augment or improve the existing concrete seawall that the Authority argues serves as a flood wall, but would be constructed as an entirely separate structure with new foundations. As such, the system would constitute new construction in a coastal high hazard area subject to a showing that it qualified as a functionally dependent use. FEMA has defined the term "functionally dependent" in the context of floodplain management to refer to a "use which cannot perform its intended purpose unless it is located or carried out in close proximity to water (e.g., bridges and piers)." 44 CFR 9.4. Although comments on the proposed definition suggested that a broader definition, to include flood walls, might be appropriate, that suggestion was never adopted.² Thus, under FEMA's guidelines for floodplain management, the proposed flood wall project, involving new construction, is not eligible for Section 406 funding.

The Authority disagrees with FEMA's reasoning and urges that Executive Order 11988 should be understood to encourage projects such as the proposed flood wall system because the broad purpose of the order is to encourage federal agencies to take actions to mitigate adverse effects of storms on structures that already exist in floodplains and cannot, like the airport, be practicably relocated. This more expansive reading might support an application for Section 404 funding, but given the specificity of Section 406, which links mitigation funding to particular structures that have been repaired as a result of a disaster, it cannot transform the proposed system to one that qualifies for funding under Section 406.

Although it is not necessary to consider the cost-effectiveness of the proposed flood wall system, given that it is not eligible for funding under this provision, we note that the parties have each presented benefit-cost analyses. FEMA has followed its guidelines in considering the likely benefits of the project as compared to the projected cost to construct the proposed wall. The Authority made broad assumptions about possible benefits that would accrue from such a measure to arrive at the conclusion that the benefits of the flood wall would exceed the expense of constructing it. FEMA, performing a more limited

² In any event, the proposed flood system is only coincidentally to be located in a floodplain because of the Airport's location. Its purpose is to mitigate flooding experienced by the Airport, which is not functionally dependent upon a location in a floodplain.

analysis, considered the amounts invested in the Bastian-Mitchell hangar and, evaluating benefits associated with avoiding a recurrence of such damages, concluded that the cost would far exceed the benefits. Given the speculative nature of many of the benefits identified by the Authority, we are disinclined to invalidate FEMA's analysis. In the context of the purpose of Section 406, and its implementing policies and regulations, FEMA's approach appropriately reflects the limits of funding under this provision.

To conclude, FEMA's decision to deny this request for funding for the flood wall system is entirely consistent with statutory and regulatory constraints. The project is simply not one for which Section 406 hazard mitigation funding is intended to be made available. The airport itself was not the subject of public assistance funding; rather, the FEMA grants approved were limited to specific public structures at the airport that were eligible for disaster assistance. The airport is a large facility housing both eligible and noneligible structures. Although it is understandable that the Authority would like to achieve this level of protection for the airport, and there are no doubt many benefits that might follow from implementation of the project, that does not make it an appropriate subject for section 406 hazard mitigation funding.

Decision

The panel affirms FEMA's denial of the Authority's request for Section 406 funding for the construction of a flood wall for the Lakefront Airport.

Jeri Kaylene Somers
JERI KAYLENE SOMERS
Board Judge

Catherine B. Hyatt
CATHERINE B. HYATT
Board Judge

ZISCHKAU, Board Judge, dissenting.

The Authority has presented a compelling hazard mitigation proposal that meets the requirements of Stafford Act Section 406 and FEMA's regulations. Approving the proposal would directly support FEMA's hazard mitigation responsibility to reduce the risk of flood losses, minimize the impact of floods on human life and property, and build a disaster-resistant community. Unfortunately, FEMA's rejection of the proposed flood protection system for the airport contradicts the remedial purpose of Section 406 hazard mitigation and ignores its own regulations, policy, and prior practice. The decision to sustain FEMA's rejection leaves the entire airport facility—and a considerable number of people—at risk and unprotected from future hurricanes and flood disasters.

Beyond the resulting serious risks to persons and property at the airport itself, FEMA's rejection also poses risks for the population of New Orleans. The uncontradicted evidence in the record shows that the airport's first responders and emergency personnel saved over 2000 lives in New Orleans in the aftermath of Hurricane Katrina. The rescue and triage operations at the airport implicitly also prevented and minimized injuries to many more people. More lives would have been saved in the first days after Katrina struck New Orleans if the airport itself had not been subject to the significant hurricane-induced flooding and damage. In fact, one of FEMA's early airport project worksheets provided funding for emergency repairs to the existing seawall bulkheads and berms so that emergency rescue and triage operations could proceed at the Airport. The purpose of the Authority's floodwall proposal is to augment the existing walls on the east and west sides of the airport with higher and more storm-resistant walls, and install a removable wall on the north side of the airport to fill the gap left when the seawall on the north side was removed in the 1960's to allow for lengthened runways. This airport proposal is similar to a Section 406 proposal that was approved by FEMA for building an augmented floodwall around a wastewater treatment plant which was seriously damaged by Katrina. There is no principled reason here for FEMA's rejection of the Authority's floodwall proposal.

Applicability of Stafford Act Section 406

FEMA first attacks the floodwall proposal as not proper under Stafford Act Section 406 and FEMA regulations because the floodwall would not only benefit the damaged or destroyed FEMA-eligible airport facilities (which cost over \$64 million to repair or replace), but would also benefit other damaged or destroyed facilities which cost the Federal Aviation Administration (FAA) and other government and private entities many millions of dollars more to repair or replace. So FEMA is really claiming that if a proposed hazard mitigation measure will benefit *any* other federal or private facilities not eligible for FEMA public assistance—or even will benefit the people who use those facilities (i.e., save lives, provide

safety, protect health)—then Section 406 hazard mitigation funding cannot be used. Following FEMA’s “logic,” if all of the damaged FEMA-eligible facilities were clumped together on half of the airport peninsula, a cost effective floodwall surrounding just the FEMA-eligible facilities would be fine for Section 406 funding, but if the floodwall perimeter were to include any non-eligible facility within its protection, then Section 406 funding is prohibited. This approach finds no support in Section 406 and FEMA’s regulations.

Stafford Act Section 406 authorizes repair, restoration, reconstruction, or replacement of a public facility damaged or destroyed by a major disaster. 42 U.S.C. § 5172 (2012). Section 406 states that public assistance contributions are authorized “to fund hazard mitigation measures that the State or local government determines to be necessary to meet a need for governmental services and functions in the area affected by the major disaster.” *Id.* § 5172(c)(1)(B)(iii). Clearly, the Lakefront Airport was an “area affected by the major disaster” and clearly Louisiana and the local Authority have determined that hazard mitigation in the form of a floodwall is “necessary to meet a need for governmental services and functions,” namely, to safely maintain and operate an airport and to protect the people and facilities at the airport from catastrophic flooding. Section 406(e) authorizes funding additional measures in conformity with “floodplain management and hazard mitigation criteria required by the President.”

FEMA’s regulations define mitigation as “the process of systematically evaluating the nature and extent of vulnerability to the effects of natural hazards present in society and planning and carrying out actions to minimize future vulnerability to those hazards to the greatest extent practicable.” Executive Order 11988, which addresses floodplain management, provides that agencies “shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains.” In 44 CFR 9.2 (“Policy”), FEMA “shall take action to . . . [r]educe the risk of flood loss . . . [and] [m]inimize the impact of floods on human health, safety and welfare.” Mitigation measures placed on restoration projects by FEMA “will be an eligible cost for FEMA assistance.” 44 CFR 206.226(e). In the definitions of 44 CFR 206.201 for public assistance project administration, “hazard mitigation” is defined as “any cost effective measure which will reduce the potential for damage to a facility from a disaster event.” A “facility” means “any publicly or privately owned building, works, system, or equipment, built or manufactured or an improved and maintained natural feature.” Similarly, “hazard mitigation” is defined in 44 CFR 201.2 as any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. FEMA is to minimize “[p]otential harm to lives and the investment at risk from the base flood.” 44 CFR 9.11(c)(1).

These provisions do not in any shape or form require Section 406 hazard mitigation proposals to benefit only FEMA-eligible facilities. Strikingly, there is more emphasis in the regulations on the protection of human life and health than on the protection of property. And the people who are to be protected by the mitigation measures identified in these regulations certainly are not categorized by reference to eligible damaged facilities and other non-eligible facilities. The airport's floodwall proposal is meant to protect the airport complex, simultaneously minimizing the impact of floods on all people and facilities at the airport, and permit life-saving local disaster response efforts. As a result of Katrina, there was widespread damage and destruction across the entire airport complex of facilities and property, including: the historic Lakefront Airport Terminal building, the FAA control tower and buildings, National Guard hanger and ancillary buildings, a large number of airport hangers, aircraft, runways, airfield aprons, taxiways, piers, the seawall and berms, the airport instrument landing system, office and administrative buildings, public health facilities, fire station, fuel farm, railroad structures, automobiles, and roadways. FEMA eligible facilities and other facilities not subject to public assistance from FEMA are commingled within the complex. But all of the facilities are operationally dependent on each other for a fully-functioning airport. Thus, a mitigation proposal that protects the airport complex as a whole, both the facilities restored or replaced with FEMA funding *and* the other inter-related airport facilities and property, is both logical and consistent with Stafford Act Section 406, the regulations, and the hazard mitigation policies. Indeed, FEMA approved Section 406 mitigation funding for building a floodwall system on an existing berm surrounding the East Bank Wastewater Treatment Plant in New Orleans in order to protect the plant facilities from future flooding events comparable to Katrina. The treatment plant suffered significant damage from Katrina and the new floodwall surrounds and protects the entire plant (containing various buildings, structures, and equipment) in much the same way that the Authority proposes a floodwall to surround and protect the airport complex. The record identifies other FEMA-approved mitigation projects where the benefits of the Section 406 mitigation measures were not limited to a specific FEMA-eligible damaged facility.

The 1998 FEMA Hazard Mitigation Funding Under Section 406 Recovery Policy, the FEMA policy that the parties agree applies to this Section 406 mitigation proposal, states that the purpose of the policy is to “promote measures that reduce future loss to life and property, protect the federal investment in public infrastructure, and, ultimately, help build disaster resistant communities.” FEMA RR9526.1, ¶ 4 (1998). Paragraph 7 of this same policy provides that 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.” These policy statements certainly cannot be interpreted as limiting Section 406 hazard mitigation only to measures “that are directly incorporated in repairs to eligible facilities” (as claimed by FEMA). Measures that “reduce future loss of life and property”

is broadly stated and does not exclude measures that simultaneously protect FEMA-eligible facilities and non-eligible facilities. The phrase “protect the federal investment in public infrastructure” also cannot be read as limited to FEMA investment but certainly includes investments by other federal agencies such as the FAA. The final phrase of helping to “build disaster resistant communities” similarly is worded broadly to encompass mitigation measures that support the entire community, in this case the entire airport community—not some walled-off section of FEMA-eligible buildings. Paragraph 7 confirms this broadly stated policy by stating that the mitigation measures must be “*related to* eligible disaster-related damages” and “directly reduce the potential” of future, similar damages. The floodwall proposal here is certainly *related* to the eligible disaster-related damages and will directly reduce the potential of future similar damages because the floodwall protection will provide substantial protection to all of the eligible facilities. It will also provide the same substantial protection to other federal and private facilities and all of the population that use the airport. Obviously, hazard mitigation measures may be incorporated into repair or replacement eligible facilities but there is no statutory or regulatory limitation that the mitigation measures can only be those which may be incorporated into the repairs of a particular building. The small scale mitigation measures (such as break-away first floor walls), built into the repairs of some of the buildings, will not be effective to prevent significant damages in the future because the record shows that the parties used a figure of approximately \$17 million in damages just to FEMA-eligible facilities for each recurrence of a Katrina-type storm. The Authority’s worthy proposal of building a cost-effective floodwall to protect the airport personnel, buildings, and property, and making a disaster resistant airport complex is exactly in line with this FEMA policy, the regulations cited above, and Section 406.

FEMA also argues that Section 406 hazard mitigation funding is not authorized because the mitigation proposal is attached to a replacement hanger PW. Here, the Authority attached the mitigation proposal to the largest PW. In the East Bank floodwall project, the mitigation proposal was in a freestanding PW and not attached to any of the PWs that were used for repair and replacement of the damaged wastewater treatment facilities and equipment. The airport floodwall mitigation proposal was not simply directed at the replacement hanger, but was meant to provide hazard mitigation to protect all airport facilities and personnel within the floodwall perimeter. FEMA has always understood this to be the purpose of the proposal. Thus, it is irrelevant whether the Authority presented the proposal through one of the existing PWs or through a freestanding PW.

Regarding FEMA’s argument that the Authority should have sought hazard mitigation funding pursuant to Stafford Act Section 404 (pre-disaster mitigation) rather than Section 406 (post-disaster mitigation), FEMA’s own hazard mitigation assistance guidance directs applicants first to seek public assistance funding (which includes Section 406

mitigation funding) before applying for FEMA's hazard mitigation grant program for Section 404 funding. The Authority followed this guidance. Moreover, FEMA found eligible costs from Katrina totaling over \$64 million and the FAA and other airport entities incurred millions more in damages at the airport. Certainly, there were ample disaster-related damages incurred at the airport that reasonably support the Authority's decision to apply for Section 406 post-disaster mitigation funding. Although the Authority was open to using a hybrid of Section 406 and 404 funding for the project, FEMA adamantly rejected any Section 406 funding for the project.

Functionally Dependent Use

FEMA inexplicably claims that the proposed floodwall system cannot be built on the airport perimeter because it is "new construction" in a coastal high hazard area that fails to comply with Executive Order 11988 as implemented by FEMA in 44 CFR part 9. The regulations provide a "functionally dependent use" exception which allows new construction. FEMA and the panel seem to conclude that the floodwall does not meet the exception for being a "functionally dependent use" as stated at 44 CFR 9.11(d)(I). FEMA initially cited a definition for "functionally dependent use" found at its website. As correctly noted by the Authority, the applicable definition for "functionally dependent use" found at 44 CFR 9.4 is "a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water (e.g., bridges, and piers)." Although FEMA devotes many pages of its post-hearing brief to explain why the proposed floodwall is not a functionally dependent use, the argument defies common sense. The purpose of this floodwall system is to stand as a barrier between the storm surges and flooding waters of Lake Pontchartrain and the airport personnel, property, and facilities. Thus, the function of the floodwall certainly depends on being in "close proximity to water," just as a bridge over water and a pier in water meet the exception of 44 CFR 9.11(d)(I). The regulation uses "e.g." to show that those are examples of valid dependent uses, not the only types of uses dependent on being located near water. Executive Order 11988 and 44 CFR 9.11(d) do not prohibit construction of the proposed floodwall around the airport.

The Benefit-Cost Analysis

All agree that for this floodwall project to be cost effective, the benefits must exceed the costs. The panel seems to countenance FEMA's erroneous approach to the benefits side of the benefit-cost analysis (BCA). FEMA argues that, at the time of Katrina, the only valid benefits were future avoidance of the FEMA-eligible disaster-related damages. In other words, FEMA says the benefits calculation should not include: cost avoidance by the FAA and other federal agencies, and net social benefits, which cover *inter alia* avoidance of loss of airport functions, environmental damage avoidance, avoidance of loss of life, avoidance

of private damages, and economic development. This FEMA position contradicts applicable long-standing OMB guidance on BCAs, the practice of other federal agencies, FEMA regulations, FEMA's own 2001 BCA guidance document for hazard mitigation projects, and FEMA's past practice on numerous other projects. Even FEMA's own expert agreed that OMB Circular A-94 applied and required inclusion of net social benefits that could be substantiated. It appears that FEMA feels compelled to maintain this erroneous position because it realizes that to recognize these benefits would lead to the conclusion that the proposed floodwall project is cost effective.

OMB Circular A-94, which provides Government-wide guidance to agencies in performing benefit-cost analyses, states:

Identifying and Measuring Benefits and Costs. Analyses should include comprehensive estimates of the benefits and costs to society based on established definitions and practices for program and policy evaluation. Social net benefits, and not the benefits and costs to the Federal Government, should be the basis for evaluating government programs or policies that have effects on private citizens or other levels of government.

FEMA's hazard mitigation regulations direct FEMA to minimize the potential harm to lives and the investment at risk from flooding. 44 CFR 9.11©. FEMA's applicable Section 406 hazard mitigation policy, RR9526.1 (1998), states that mitigation measures must be determined to be cost-effective, and that the grantee/subgrantee must demonstrate "through an acceptable benefit/cost analysis that the measure is cost-effective."

FEMA's 2001 *Guidance on Benefit-Cost Analysis of Hazard Mitigation Projects*, whose scope includes Section 406 mitigation projects, restates OMB Circular A-94 guidance and explicitly advises that "[t]he goal of [BCAs] of hazard mitigation projects is always to count *all* of the benefits of each mitigation project whether or not the categories of benefits are covered by FEMA programs or programs of other federal agencies." The FEMA *Guidance* states: "This OMB guidance [A-94] means that benefits must always be counted from the perspective of the affected community, not from the perspective of FEMA or the federal government. Thus, for benefit-cost analysis of hazard mitigation projects, a broad range of benefits may legitimately be counted, even if Federal programs do not address [or] compensate for the damages when they occur." The FEMA *Guidance* also highlights the importance of including loss of function in a BCA and lists the following examples of loss of function costs: loss of rental income, loss of business income, lost wages, disruption time for residents, loss of public services, economic impact of loss of utility services, economic impact of road/bridge closures, and displacement costs for temporary quarters. The *Guidance* further states that "OMB guidance for benefit-cost analysis mandates that the

benefits to be considered in FEMA's benefit-cost analyses are social net benefits, not the benefits to FEMA or to the federal government.”

The record persuasively shows that the benefits of the proposed floodwall exceed costs. When considering in addition the benefits of avoiding loss of life, the benefits of the proposed floodwall substantially exceed costs.

The Authority has presented a hazard mitigation proposal that brings substantial benefits and protection to the people and facilities at the airport. The floodwall proposal meets all of the requirements of Stafford Act Section 406 and FEMA's regulations, and directly supports FEMA's hazard mitigation responsibility to reduce the risk of flood losses, minimize the impact of floods on human life and property, and build a disaster-resistant community. Building a floodwall to protect the airport does not violate floodplain requirements but will enhance the safe use of the airport facilities and will provide life-saving disaster response capabilities to the surrounding region. The floodwall proposal is cost effective, with benefits substantially exceeding the costs. The panel should have approved the Authority's application. I hope that the Authority is able to find another solution, legislative or otherwise, to proceed with the full design and construction of the floodwall system for Lakefront Airport.

Jonathan D. Zischkau
JONATHAN D. ZISCHKAU
Board Judge