August 14, 2023

CBCA 7510-FEMA

In the Matter of APOSTOLIC ASSEMBLY CHURCH OF THE LORD JESUS CHRIST, INC.

Javier Delgado and W. Anthony Loe of Merlin Law Group, P.A., West Palm Beach, FL, counsel for Applicant.

Stephanie Stachowicz, General Counsel, Florida Division of Emergency Management, Tallahassee, FL, counsel for Grantee; and Marija Diceviciute, Appeals Officer, and Melissa Shirah, Recovery Bureau Chief, Florida Division of Emergency Management, Tallahassee, FL, appearing for Grantee.

Charles Schexnaildre, Office of Chief Counsel, Federal Emergency Management Agency, Department of Homeland Security, Baton Rouge, LA, counsel for Federal Emergency Management Agency.

Before the Arbitration Panel consisting of Board Judges BEARDSLEY (Chair), GOODMAN, and ZISCHKAU.

BEARDSLEY, Board Judge, writing for the panel.

The applicant, Apostolic Assembly Church of the Lord Jesus Christ, Inc., seeks public assistance (PA) funding from the Federal Emergency Management Agency (FEMA) to repair or replace the roof of one of its buildings (Building 2) that was damaged by Hurricane Michael. We find that the disaster directly caused damage to Building 2's roof system, requiring the replacement of the roof's metal panels and purlins. The need to repair or replace the roof's trusses remains undetermined.

Background

Following Hurricane Michael in October 2018, the President issued a major disaster declaration (FEMA-4399-DR-FL) for Florida. *See* FEMA's Response, Exhibit 2 at 12. The applicant, a 501(c)(3), private, non-profit entity located in Jackson County, Florida, sought PA reimbursement for work necessary to repair alleged disaster-caused damage to multiple buildings, including Building 2. *Id.* FEMA estimated a cost of \$447,873 for eligible repairs to disaster-caused damage to the applicant's buildings, including \$43,891.93 for Building 2. *See id.*, Exhibit 1 at 3, 5. The funded repairs to Building 2 included replacement of stucco, soffit, drip edge metal, two stucco wall coins, glass aluminum frames, door jambs, side doors, wood trim, carpet, and insulation. Form 90-91 at 9. FEMA allocated no PA funds for repair or replacement of Building 2's roof.

The applicant requests PA funding for repair or replacement of Building 2's roof. The applicant claims that the declared disaster, specifically the rain intrusion and high winds, caused severe damage to the roof of Building 2. *See* Request for Arbitration (RFA), Exhibit B at 2-5. FEMA asserts that the applicant cannot establish that the roof was damaged or that the damage to the roof was a direct result of the declared disaster.

Building 2 was completed in April 2015, with a certificate assuring compliance with the Florida building codes, state regulations, and fire prevention codes. *See* Applicant's Third Supplemental Filing, Exhibit 1. In January 2019 and again in March 2020, FEMA conducted post-disaster site inspections of Building 2. FEMA's Response, Exhibit 1 at 4. In July 2020, FEMA advised the applicant that the photographs provided to validate the roof damage were insufficient to substantiate the damage claimed and that the site inspector was unable to visibly verify the damage during the inspection.² *Id.* at 5. FEMA asserted that the applicant also failed to provide pre-disaster photographs of the roof. *Id.* at 8.

The applicant hired Hagerty Consulting (Hagerty) to inspect Building 2's roof in October 2020, and document its findings.³ See RFA, Exhibit B at 1-2. After inspecting the

The disaster caused significant damage to the applicant's other buildings, including tearing the roof off of one of the buildings adjacent to Building 2.

FEMA policy prevented inspectors from climbing ladders to access the attic space and the roof; instead, the inspectors attempted to verify roof damage from the ground.

Unlike FEMA, the panel does not discount Hagerty's findings because the report's author does not have a professional engineer's license. Not only does the author of the Hagerty report have an engineering degree and thirty years of experience in project management, civil engineering, coastal engineering, cost estimating, and construction management, but the Hagerty report was validated by the CORE Forensics report, which was

truss system from inside the attic space and climbing on the roof, Hagerty documented "horizontal deflection" of at least one truss member, which created "a bowing effect of the rafters and associated joist." *Id.* at 3. Hagerty also noted displacement of the insulation near the front of the building as a result of a gap between the floor's fascia and soffit. *Id.* As for the exterior, Hagerty noted "evidence that many of the panels had been slightly displaced during the high winds as there was a gap between the metal roof panels and roof huggers (nails) in numerous locations." *Id.* at 3-4. Hagerty observed that the northern wall top plate and the bottom of the truss members had a gap of approximately one inch, and the entire roof system experienced a vertical uplift and shifted south as a result of the high winds. *Id.* at 4. The inspector noted this shift was consistent with Hurricane Michael's counterclockwise rotation. *Id.* Hagerty concluded:

Both horizontal and vertical displacement of this building's roof structure was observed during the inspection. In its current "twisted" condition, repair of the roof system is not feasible and the entire roof needs to be replaced with new construction. Reconstruction of the roof will not be possible without a complete demolition and removal of the existing roofing system.

Id. at 5.

In March 2021, FEMA issued a determination memorandum (DM) denying costs associated with Building 2's roof, citing insufficient documentation and lack of ample detail to support the costs or validate the damage. FEMA's Response, Exhibit 2 at 14. In September 2022, at the applicant's request, CORE Forensics inspected the roof of Building 2 and found interior and exterior damage similar to the damage described in the Hagerty report. See RFA, Exhibit I at 1-2. CORE Forensics concluded that "the roof structure has suffered such severe wind uplift and displacement by the high winds during Hurricane Michael, that repairs are not feasible, and the system will require full replacement." *Id.* at 4-5. In totality, CORE Forensics validated Hagerty's findings. *Id.* On September 12, 2022, the applicant filed its RFA asking the Board to find that the disaster was the direct cause of the roof's damage, requiring full roof replacement. RFA at 3.

In October 2022, FEMA had a professional engineer review and evaluate the documents⁴ submitted by the applicant to determine if the disaster was the cause of the damage and whether replacement or repair was warranted. *See* FEMA's Response, Exhibit 3 at 20. FEMA's expert found the documents submitted by the applicant insufficient to conclude that the damage alleged by the applicant was caused by the disaster. *Id.* at 28.

co-signed by a professional engineer. See RFA, Exhibit I.

FEMA's expert did not visit the site, but, instead, he reviewed the inspection reports, the Hagerty and CORE Forensics reports, and the applicant's photographs.

Specifically, FEMA's expert found three potential, alternative causes of the damage. *See id.* at 24-27. He opined that the roof truss damage could be attributable to improper long-term storage of the trusses horizontally over a two-year period of construction, which may have allowed moisture to warp the untreated trusses, causing the trusses to bow. *Id.* at 24. Alternatively, he suggested that the roof truss damage could be the result of Building 2 not being built in accordance with the Florida building code, arguing that a building built to the Florida building code would have been able to withstand the wind speed of Hurricane Michael. *Id.* Lastly, he opined that the purlin damage and roof uplift could be attributed to alleged poor construction techniques, specifically the use of the wrong type of nail (i.e., use of a smooth nail instead of a ring nail) to fasten the metal panels directly to the purlins. *Id.* at 26-27. In any event, FEMA's expert did not find evidence to support roof replacement but found that roof system repairs, if necessary, should be limited to repairing the purlins.

The applicant responded to FEMA's expert's findings by (1) showing that it is trade practice to store trusses the way the trusses were stored; (2) noting that Hurricane Michael was the fourth most powerful hurricane to hit the United States, destroying 400 buildings and damaging 600 more buildings in the applicant's county; (3) explaining that there is no conclusive evidence that the nails were not ring nails; and (4) providing evidence that the roof system was installed pursuant to the Florida building code. *See* Applicant's Reply to FEMA's Response to Applicant's Expert Report, Exhibit 7, at 3-7.

Discussion

To be eligible for PA, the work must be required as the result of the emergency or major disaster event. 44 CFR 206.223(a) (2022). "[C]ause and effect [for any damage claimed] must be established." *City of New Orleans*, CBCA 5684-FEMA, 18-1 BCA ¶ 37,005, at 180,199 (quoting *City of Kenner*, CBCA 4086-FEMA, 15-1 BCA ¶ 35,875, at 175,387). "It is the applicant's burden to establish that the declared disaster caused the claimed damage to the public facility." *Monroe County Engineer*, CBCA 7251-FEMA, et al., 22-1 BCA 38,061, at 184,801 (citing Public Assistance Program and Policy Guide (PAPPG) (Apr. 2018) at 9, 19); *see* PAPPG at 133 ("[I]t is the Applicant's responsibility to substantiate its claim as eligible.").

The applicant has met its burden to establish that the roof system of Building 2 was damaged by Hurricane Michael. Building 2 was properly constructed inaccordance with the Florida building code, yet the damaged soffit and blown-around insulation is evidence that

Hurricane Michael's wind speeds ranged from 102 miles per hour to 155 miles per hour. FEMA notes that the applicable Florida building code required buildings to be designed to withstand wind speeds of 124 miles per hour. FEMA's Response, Exhibit 3 at 24. The roof, however, did withstand the winds of Hurricane Michael, as it remained in place.

wind was able to get under the roof and into the roof system. This wind caused a shift in the roof system resulting in a one-inch gap between the top plate of the walls and the truss members, lifting the screws that secured the metal panels to the purlins, causing additional separation between the metal panels and the purlins, and displacing screws. Moreover, the storm dented and bent the metal panels, removing the metal panel's protective coating.

We found none of FEMA's expert's alternative explanations to be persuasive or consistent with the magnitude and severity of the damage described by Hagerty and CORE Forensics, especially given that the building was relatively recently constructed in compliance with the Florida building code. The fact that FEMA's expert did not visit the site and FEMA's inspectors did not climb onto the roof or into the attic to observe the damage claimed by the applicant weighs in favor of the analysis and findings of Hagerty and CORE Forensics.

The goal of PA funding is to restore the facility to its pre-disaster condition in the most cost-effective way. See 42 U.S.C. § 5172(e) (2018); 44 CFR 206.226 ("Work to restore eligible facilities on the basis of the design of such facilities as they existed immediately prior to the disaster . . . is eligible."); PAPPG at 87. Here, the metal panel system needs to be replaced. Partial replacement is cost prohibitive. As the applicant's expert explained in his testimony at the hearing, "it would cost more to try to put [the metal panels] back than it would . . . to replace [them]." The screws that connect the metal panels to the purlins each secure several overlapping panels, requiring the removal of multiple panels to repair one. In addition, to examine the trusses and repair the purlins requires the wholesale removal of the metal panels. The amount of work to ensure that the panels, screws, holes, and purlins all align with partial replacement would exceed the costs associated with full replacement. Therefore, replacement of all of the metal panels is warranted to restore the roof to its predisaster condition.

The applicant's expert explained that reusing the purlins would require the reuse of the pre-existing purlin holes to fasten the new metal panels to the roof system. These pre-existing holes cannot secure the new metal panels. As such, full replacement of the purlins is also necessary.

As for the trusses, there is evidence in the record which indicates that the roof shifted and was lifted up as a result of the hurricane. However, there is insufficient information to know to what degree and magnitude this shift and uplift damaged the trusses. This information will only be available once the metal panels are removed from the roof and the truss system can be fully examined.

Decision

The Board concludes that the disaster directly caused damage to Building 2's roof system, requiring PA funding for replacement of Building 2's metal panels and purlins. The question of whether the trusses require repair or replacement remains undecided until the metal roof panels are removed and the trusses are examined.

Erica S. Beardsley
ERICA S. BEARDSLEY
Board Judge

Allan H. Goodman
ALLAN H. GOODMAN
Board Judge

Jonathan D. Zischkau
JONATHAN D. ZISCHKAU
Board Judge