

# Department of Homeland Security **Office of Inspector General**

FEMA Should Recover \$13.8 Million in FEMA Public Assistance Funds Awarded to Cedar Rapids, Iowa, for Ineligible Hydroelectric Plant



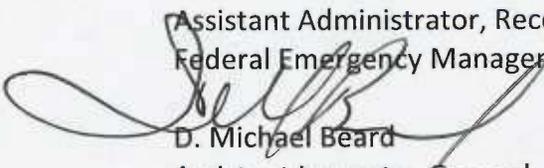


**OFFICE OF INSPECTOR GENERAL**  
Department of Homeland Security

Washington, DC 20528 / www.oig.dhs.gov

MAY 1 2013

MEMORANDUM FOR: Deborah Ingram  
Assistant Administrator, Recovery Directorate  
Federal Emergency Management Agency

FROM:   
D. Michael Beard  
Assistant Inspector General  
Office of Emergency Management Oversight

SUBJECT: *FEMA Should Recover \$13.8 Million in FEMA Public Assistance Funds Awarded to Cedar Rapids, Iowa, for Ineligible Hydroelectric Plant*  
FEMA Disaster Number 1763-DR-IA  
Public Assistance Identification Number 113-12000-00  
Audit Report Number DD-13-09

We are currently auditing \$330 million of FEMA Public Assistance funds awarded to the City of Cedar Rapids, Iowa (City). The Iowa Homeland Security and Emergency Management Division (HSEMD), a FEMA grantee, awarded these funds to the City for disaster recovery work related to flooding that occurred during the period May 25 to August 13, 2008. The purpose of this memorandum is to advise you of an issue that requires your immediate attention.

As discussed below, FEMA agreed to fund the repair of the City's hydroelectric facility (facility) under Project Worksheet 1415 based on a second-level appeal ruling by FEMA headquarters. However, the City included materially inaccurate information in its appeal documents that FEMA headquarters relied upon to make its favorable ruling. Further, the weight of the evidence that we obtained shows that the facility is not eligible for FEMA funding. The facility is not eligible because it was inactive at the time of the disaster, and did not meet any of the three regulatory exceptions needed to fund the project. Your attention to this matter is important because the City is moving forward with its plans to redirect the \$13.8 million in funding to an alternate project.

We are conducting this performance audit pursuant to the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards. Our overall objective is to determine whether the City accounted for and expended FEMA Public Assistance funds according to Federal regulations and FEMA guidelines. At



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the conclusion of our audit, we plan to issue our complete audit report including any additional findings and recommendations.

### BACKGROUND

The facility is a three-turbine hydroelectric generating plant that began operation in 1986. It produced a small amount of the City's total commercial and residential electrical needs. From 1997 through early 2007, the City hired North American Hydro to operate and maintain the facility. The facility has been inactive since January 2007, when frazil river ice damaged the trash racks and straightening vanes of two of the three turbine generators.<sup>1</sup> In June 2008, 17 months following the ice damage, a federally declared flooding disaster caused severe damage to the facility. Before the January 2007 ice damage, the 21-year-old facility needed significant capital expenditures to continue operating efficiently over the long term. Also, according to the City's hydroelectric consultants, the facility generally produced about 20 percent less electricity than expected because its design allows it to capture available water flow only about 35 percent of the time.

Generally, an inactive facility is not eligible for FEMA funding. However, Federal regulation allows funding if a facility can meet at least one of three exceptions. According to 44 Code of Federal Regulations (CFR) 206.226(k)(2), facilities that were not in active use at the time of the disaster are not eligible except in those instances where (1) the facilities were only temporarily inoperative for repairs or remodeling, or (2) active use by the applicant was firmly established in an approved budget, or (3) the owner can demonstrate to FEMA's satisfaction an intent to begin use within a reasonable time.

Below is a chronology of significant funding events.

- In July 2010, FEMA Region VII deemed the facility ineligible under Project Worksheet 1415 because the facility was not in active use at the time of the federally declared disaster.
- In August 2010, the City made its first-level appeal of the ineligibility decision to FEMA Region VII's Regional Administrator. The City asserted that even though the facility was not in use at the time of the June 2008 flood, it met all three of the conditions to qualify for an exception to FEMA's inactive facilities regulation.

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<sup>1</sup> Frazil ice is moving water on the verge of freezing. It freezes when it touches a stationary object. A trash rack is a grated structure used to keep floating debris from entering the turbines.



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- In December 2010, FEMA Region VII's Regional Administrator denied the City's appeal, stating that the facility was not in active use at the time of the disaster; the City had not provided evidence that it intended to repair the facility; and its actions following the disaster demonstrated its intent to abandon, sell, or otherwise dispose of the facility and use FEMA funding for another project.
- In February 2011, the City made its second-level appeal to FEMA headquarters, asserting that the facility was only temporarily inoperative from the ice damage while the City considered its options to repair or dispose of the facility.
- In April 2012, FEMA headquarters reversed Region VII's decision, stating that, because the City was examining its options, the facility should not be disqualified from eligibility under 44 CFR 206.226(k)(2).

### RESULTS

We agree with FEMA Region VII that the hydroelectric facility was inactive at the time of the federally declared disaster and did not meet any of the three exceptions to FEMA's inactive facility regulation. In its second appeal to FEMA headquarters, the City provided inaccurate information about facts and circumstances related to damages from the January 2007 ice storm. Further, the City included inaccurate information in its appeals to FEMA regarding its budget and how much it would cost and how long it would take to repair the 2007 ice damage to the facility. These inaccuracies are important because FEMA headquarters relied on this information when deciding to rule in favor of the City. If the City had submitted accurate information, FEMA headquarters might have ruled differently. Therefore, we urge FEMA headquarters to reconsider its decision to fund the \$13.8 million estimated for this project.

As discussed in this report, FEMA may fund inactive facilities only if (1) the facilities were only temporarily inoperative for repairs or remodeling, or (2) active use by the applicant was firmly established in an approved budget, or (3) the owner can demonstrate to FEMA's satisfaction the intent to begin use within a reasonable time. The following discusses why the City did not demonstrate that any of these exceptions applied.



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#### **The Facility Was Not Temporarily Inoperative for Repairs or Remodeling**

The facility was not temporarily inoperative for repairs or remodeling, but rather was inoperative while the City considered whether to continue operations at all. In fact, at the time of the disaster, the facility had been inoperable for 17 months. During this time, the City took no action to begin the minor repairs needed to restore operability.

The City asserts that the facility was only temporarily inoperative while it considered its ice-damage repair options. However, this assertion is not accurate because the ice storm caused relatively minor damage that the City could have repaired in 7 to 8 months for about \$270,000. Although an applicant should have time to assess the viability of repairing a facility, 17 months is an unreasonably long time to make a decision about minor repairs, especially when the City had insurance that should have covered much of the costs.

The City demonstrated little interest in returning the facility to operation during the 17 months between the undeclared ice damage and the federally declared flooding damage. Rather, the City chose not to operate the 21-year-old facility while it assessed the continued use of a facility that required major deferred maintenance and had marginal economic viability. Therefore, the facility did not meet the criteria of being “only temporarily inoperative for repairs or remodeling.”

In its second appeal, the City incorrectly asserted that to repair the facility would cost about \$1 million and take 24 to 30 months to complete. However, according to the estimate the City obtained, the ice-related damage would cost only \$270,000—not \$1 million—and take only 7 to 8 months to repair—not 24 to 30 months.<sup>2</sup> Based on a document we obtained from the City, the estimate the City provided to FEMA headquarters generally included (1) \$270,000 to repair the ice damage, (2) \$379,814 to replace or repair worn parts unrelated to the ice damage (deferred maintenance), and (3) \$378,186 for a custom spare set of bevels that would take 24 to 30 months to make.

The City knew that it needed these additional repairs when it conducted inspections before and after the ice damage. However, it was only the construction of the custom spare set of bevels that would take 24 to 30 months, not repairing the ice damage or performing deferred maintenance. Further, the City would have needed to shut down the facility for only the 7 months needed to make the repairs caused by the ice-damage, not for the 24 months needed to make the spare set of bevels.

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<sup>2</sup> According to a City official, this is the amount of time needed from conceptualization, through the design and bidding process and the actual completion of the repair work.



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The City also inaccurately told FEMA—in its first appeal documents attached to its second appeal—that the facility was only temporarily inoperative because the City was “expending resources to maintain and repair the Hydro Facility at the time of the Flood of 2008.” However, when we asked the City to provide repair documentation, a City official said the City had not performed repairs on the facility, but rather had only been keeping the lights on. After the 2007 ice damage, the City secured the facility and performed no repair work.

#### **The City Did Not File an Insurance Claim for the Ice Damages**

The City maintained a property insurance policy that covered the facility for perils, including ice damage. However, the City did not pursue a claim against its insurance policy for the estimated \$270,000 in repairs. Not pursuing an insurance claim further demonstrates that the City had little interest in returning the facility to active use. Further, according to a retired City official responsible for the facility, City officials knew as early as 1992 that they would likely shut down the maintenance-intensive facility one day because it did not make sense to keep having “good money chasing bad money.”

Although the City did not make a claim against its own insurance company, it attempted to hold its operating and maintenance contractor, North American Hydro, responsible for the ice damages by asserting a negligence claim against North American Hydro’s liability insurance policy. However, North American Hydro’s insurance company said that, because the City failed to address necessary repairs to trash racks #1 and #3, the City—not North American Hydro—was responsible for the cost of repairing the ice damage. According to the contractor’s insurance company, in February 2006, 11 months before the ice damage event, North American Hydro told the City that water intakes #1 and #3 (the ones damaged by the 2007 ice event) needed trash rack repairs.

North American Hydro’s insurance company also implied that these repairs could have prevented the ice damage. In 2006, the City budgeted \$175,000 for repairs, yet it chose not to make them. Instead, the City reduced the \$175,000 to \$15,000, enough to cover only very minor repairs. Not investing in needed repairs further shows that even before the January 2007 ice damage, the City demonstrated little interest in investing in the long-term operations of the facility.

#### **The City Contracted for a Study on Its Future Ownership Strategy**

The City said it also demonstrated its intent to repair the facility when, in October 2007, 9 months after the ice damage, the City ordered a study titled *Economic Evaluation and Future Ownership Strategy Study* that led to the City awarding a contract to Mead and Hunt in January 2008 to conduct an economic feasibility study. The City said this



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feasibility study was ongoing at the time of the June 2008 federally declared disaster, thereby showing the City's intent to repair the facility.

The City said that it had not made up its mind as to its course of action because the study was not complete at the time of the federally declared flood. The study tasked Mead and Hunt to not only evaluate the City's repair costs and operating options, but also review past performance and future potential revenue and estimated future costs. Ordering the study did not demonstrate the City's intent to repair the facility. Rather, it demonstrated the City's intent to address the economic viability of the \$1 million deferred maintenance investment and future ownership and operating options of an economically marginal hydroelectric plant, including its possible sale or other disposition.

#### **The City Said That Operating Only One Turbine Would Damage It**

Finally, the City told FEMA in its appeal documentation that it voluntarily took the facility offline following the 2007 ice damage to avoid damage to the one operational turbine and to avoid the inefficiency of the reduced flow and resulting output. This statement is also not accurate. A FEMA engineer told us that the remaining turbine could have safely operated independently of the two damaged turbines. The City took the facility offline because operating only one of three turbines was not economically feasible.

In summary, the facility was not temporarily inoperative for repairs or remodeling; it was inoperative while the City assessed what it should do with its worn-out and economically marginal hydroelectric plant.

#### **The City Did Not Firmly Establish Active Use in an Approved Budget**

The City's approved budget for the facility did not include sufficient funds to either operate or repair the facility. The City asserted that it firmly established the facility's active use in its approved budget because it had budgeted \$320,000 for the facility's operating expenses for the 10 fiscal years (FYs) 2009 through 2018. However, this statement was not accurate for three reasons. First, the annual budget line-item that City officials referred to in their appeal documents was not for operating expenses, but rather was for projected capital improvement costs—\$70,000 approved for FY 2009 and from \$0 to \$50,000 for each of the remaining 9 fiscal years.<sup>3</sup> Irrespective of whether the cost to repair the ice damage was a capital improvement or operating expense, the

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<sup>3</sup> The exhibit to this report defines *capital expenditures* and *operating expenses*.



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City's \$70,000 FY 2009 capital improvement budget was not nearly enough to cover the \$270,000 needed to repair the 2007 ice damage.

Second, in March 2008, 3 months before the June 2008 disaster, the City approved its FY 2009 *operating* budget for the facility for the period July 1, 2008, through June 30, 2009. The total operating budget was only \$13,000. This amount did not relate to active use, but rather was for costs that the City would incur without the facility generating electricity. Prior annual operating budgets for the facility had averaged \$199,300 (\$152,500 for North American Hydro, the City's operation contractor, and \$46,800 for electrical delivery costs)—many times more than the \$13,000 in the FY 2009 operating budget. Rather, the \$13,000 represented only the costs to cover exterior repair and maintenance, telephone service, and miscellaneous expenses.

Finally, contrary to the City's assertion that it firmly established the facility's active use in its approved budget, the approved facility budget clearly established the City's intent *not* to actively use the facility.

#### **The City Did Not Demonstrate Its Intent To Begin Use Within a Reasonable Time**

The City did not demonstrate its intent to begin use within a reasonable time because the City never decided to repair the facility. The City asserts that it demonstrated its intent to begin use of the facility within a reasonable time by saying, in its second-level appeal, that even if it had started the repair process after receipt of an August 2007 inspection report, the earliest the facility could have operated would have been August 2009 because of the estimated 24 to 30 months needed to complete the repairs. This statement is not accurate because, as discussed previously, the only work requiring 2 years to complete was the manufacturing of a set of custom spare parts—not to repair the damage caused by the ice storm. The facility could have operated fully as soon as the City repaired the ice-damaged trash racks and straightening vanes. The City's Utilities Director said that these repairs would require 7 to 8 months to complete. The City could have completed the remaining deferred maintenance items, other than the custom-made spare parts, with little disruption to operations.

Although the City's actions before the federally declared disaster did not demonstrate its intent to begin use within a reasonable time, as discussed above the City did demonstrate its intent to explore various ownership and operating options for the facility. Before the federally declared disaster, the City seriously doubted the economic viability of the facility and was trying to decide how to deal with a worn-out and economically marginal hydroelectric facility. Further, in the 17 months between the ice damage and the federally declared disaster, the City made no attempt to repair the minor ice damage. At the time of the June 2008 flood, the City had not even made the



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decision as to whether it would ever resume facility operations, much less when active use would begin. Therefore, given these facts and in light of the inaccurate information the City provided FEMA, the City could not possibly meet the burden to demonstrate, to FEMA's satisfaction, its intent to begin use within a reasonable time.

### DISCUSSIONS WITH CITY AND STATE OFFICIALS

In November 2012, we discussed the finding and recommendation of this report with City and HSEMD officials, who strongly disagreed with our conclusion that the City did not meet any of the three regulatory exceptions to FEMA's inactive facilities rule. They also strongly disagreed that the City provided inaccurate information to FEMA. However, as described in this report, the City's appeal narrative clearly connected the large and time-consuming deferred maintenance costs with the small and relatively quick ice-damage repairs. This narrative was inaccurate and led FEMA headquarters to decide to fund the project. City and HSEMD officials did not refute our facts, but rather said that the supporting information attached to the appeal narrative did not make a connection between the repair costs related to ice damage and those related to deferred maintenance (normal wear and tear). They also said that if FEMA had reviewed the nearly 200 pages of attachments to the narrative, FEMA would have understood what the City meant.

However, we cannot expect, and the City should not expect, FEMA to differentiate these costs when the City's appeal narrative clearly connected the large and time-consuming deferred maintenance costs with the small, relatively quick ice-damage repairs. Following our November discussion, the City and HSEMD provided written responses to our finding and recommendation. However, these responses did not contradict our facts or provide any additional information affecting our finding or recommendation.

Following our February 19, 2013, exit conference with City and HSEMD officials, the City and HSEMD each provided additional written responses. City officials, "in the strongest terms possible," disagreed that they presented materially inaccurate information to FEMA. Further, City officials said that they believed that we mistakenly came to our conclusion by focusing on very small pieces of information. Similarly, HSEMD officials said that they believed that we focused our attention on "one or two isolated phrases" in the City's appeal documents. HSEMD officials also said that the City took a reasonable amount of time to study its options before making a final decision about whether to repair the 2007 ice-related damage.

We disagree. We addressed all material errors in the City's appeal documents. As this report demonstrates, the City provided materially inaccurate information to FEMA that



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FEMA headquarters officials specifically relied on to make their favorable funding decision. Our report focused on (1) providing multiple facts to prove that the facility did not meet any of the three criteria necessary to make an inactive facility eligible for FEMA funding and (2) rebutting all materially inaccurate information that the City provided to FEMA. We also identified some less-material errors in the information that the City provided to FEMA, but did not attempt to address or rebut all of the errors.

### CONCLUSION

FEMA Region VII was correct when it denied funding for this project. The facility is not eligible for FEMA funding because it was not in service at the time of the June 2008 federally declared flood and the City did not demonstrate that the facility met any of the three exceptions to FEMA's inactive facilities regulation. To the contrary, the City's actions before the federally declared disaster demonstrate that the City had (1) no substantive plans to repair the facility, (2) not budgeted for operating the facility or conducting the needed repairs, and (3) not made the decision to begin active use, much less demonstrate that the timeline for the planned active use was reasonable. Also, City officials made several inaccurate assertions about the facility that FEMA relied on to make its favorable funding decision. Therefore, FEMA headquarters should reconsider its eligibility determination and direct FEMA Region VII to deobligate the \$13.8 million planned for this project and put those Federal funds to better use.

### RECOMMENDATION

We recommend that the Assistant Administrator, FEMA Recovery Directorate:

**Recommendation:** Reconsider the decision to fund Project 1415 and deobligate and put to better use the \$13,786,951 (\$12,408,256 Federal share) in Federal funds estimated for the repair of the City's hydroelectric facility.



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### DISCUSSIONS WITH MANAGEMENT AND AUDIT FOLLOW-UP

We discussed the preliminary results of our audit with FEMA, HSEMD, and City officials during our audit and included their comments in this report, as appropriate. We also provided a draft discussion report in advance to these officials and discussed it at exit conferences held with FEMA on November 28, 2012, and again on February 15, 2013; and with HSEMD and the City on February 19, 2013. FEMA decided to withhold comments on our finding and recommendation until after we issue this report. The City and HSEMD disagreed with our finding and recommendation.

Within 90 days of the date of this memorandum, please provide our office with a written response that includes your (1) agreement or disagreement, (2) corrective action plan, and (3) target completion date for each recommendation. Also, please include responsible parties and any other supporting documentation necessary to inform us about the current status of the recommendation. Until we receive your response, we will consider the recommendation to be open and unresolved.

Consistent with our responsibility under the *Inspector General Act*, we will provide copies of our report to appropriate congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post the report on our website for public dissemination.

Major contributors to this report are Tonda Hadley, Director; Christopher Dodd, Audit Manager; Patti Smith, Auditor-in-Charge; and Sharon Snedeker, Senior Auditor.

Please call me with any questions at (202) 254-4100, or your staff may call Tonda Hadley, Director, Central Regional Office, at (214) 436-5200.



**Definition of Accounting Terms Used In This Report**

**Capital Expenditures**

The City defines capital expenditures as those that may require long-term financing, costing more than \$25,000, and that have at least a 10-year minimum life expectancy. Examples include costs such as design, property acquisition, and construction. Such items are not included as part of a department's normal operating expense budget.

**Operating Expenses**

Typically, an operating expense is a regular and routine cost incurred to conduct business, such as wages, utilities, and supplies. The City's primary operating expenses for the hydroelectric facility were "Other Professional Services" (contract services to operate and maintain the facility) and "Wheeling Charge" (cost incurred to produce and transmit the electricity generated by the facility).

*Sources:* City of Cedar Rapids officials and budget documents.



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**APPENDIX**

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