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MEMORANDUM FOR: Donald J. Lavoy, Acting Deputy Assistant Secretary, Office of Field Operations, PQ

Michael A. Motulski

FROM: For John A. Dvorak, Office of Inspector General, Office of Audit, 1AGA

SUBJECT: HUD's Controls over Energy Audits and Using Recovery Act Funds for Energy Equipment Did Not Warrant Further Audit Testing.

INTRODUCTION

We reviewed the U.S. Department of Housing and Development's (HUD) process for ensuring that grantee public housing agencies (PHA) receiving American Recovery and Reinvestment Act of 2009 (Recovery Act) Capital Funds complied with Section 152 of the 2005 Energy Act.¹ We reviewed this process because during a recent Recovery Act audit we identified some non-Energy Star compliance and premature replacement purchases² and during 2008 grantees paid \$1.6 billion for utilities, representing 24 percent of their operating costs.

Our objectives were to evaluate HUD's management controls to ensure that grantees (1) conducted energy audits and implemented cost-saving measures, (2) purchased equipment that met Federal efficiency standards, and (3) only replaced equipment that was obsolete or near the end of its expected useful life.

This report contains no recommendations. If you or your staff has any questions, please contact Kristin Ekmalian, Assistant Inspector General for Audit at 978-994-8380.

¹ This review gathered information without performing detailed audit verification to (1) identify controls and areas that were susceptible to error, illegal acts, or abuse and (2) determine whether an audit was necessary or to suspend the assignment.

² HUD Office of Inspector General audit number BO 10 0017, Hartford, CT, Housing Authority ARRA [Recovery Act] Capital Funds

METHODOLOGY AND SCOPE

Our review was limited to gaining an understanding of controls related to our audit objectives and performing testing to determine whether additional audit work was warranted. Our review of management controls complied with generally accepted government auditing standards. However, our transaction tests were neither designed nor extensive enough to verify that all grantee PHA purchases complied with Federal requirements.³ Rather, our testing was designed to assess the risk that grantee PHAs were in material noncompliance with Federal requirements, and if so, an audit with additional detailed testing would have been warranted. We believe our tests provided a reasonable basis for determining that further audit work was not warranted.

We conducted our review from January 19 to April 28, 2011, and reviewed the pertinent laws, regulations, and HUD guidance including The U.S. Housing Act of 1937,⁴ The Energy Policy Act of 2005,⁵ 24 CFR (Code of Federal Regulations) Part 965,⁶ and HUD's Office of Public and Indian Housing (PIH) Notice 2009-25.⁷

We conducted process interviews with HUD PIH to determine the design and extent of its controls. We also selected a sample of 15 grantees to evaluate their implementation of the controls⁸. We used a sample because the amount of energy purchases for all grantees was unknown.⁹ To ensure that we selected an adequate amount of energy purchases, we biased our selection toward grantee PHAs that reported using their Recovery Act funds for energy equipment.¹⁰ For grantee PHAs that reported purchasing energy equipment, we further biased our selection toward grantee PHAs that did not provide descriptions that reported purchasing Energy Star or energy-efficient products. We calculated that energy purchases at the 15 grantee PHAs totaled more than \$12 million.

We also selected one grantee PHA due the extra large size of its total Recovery Act grant, which totaled more than \$174 million. Because of the size of the grant and the grantee PHA's unique organizational structure, we did not include its results with the 15 grantees selected. This work will be reported in a separate memorandum or audit report.

We limited our tests of energy audits and cost savings because HUD was establishing new regulations in this area.⁶ We also tested each sample grantee PHA's purchase of heating and cooling equipment, major kitchen appliances, and windows in our sample to verify that the purchase (1) complied with Energy Star or Federal Energy Management Program efficiency standards and (2) was made to replace an item that was either obsolete or near the end of its useful life.¹¹ HUD did

³ Due to a very large population of grantee PHAs and \$3 billion in Recovery Act funds provided to them

⁴ The U.S. Housing Act of 1937, section 9(d)(1)(c)

⁵ Energy Policy Act of 2005, P.L. 109-58

⁶ 24 CFR Part 965, Subpart C - Energy Audits and Energy Conservation Measures

⁷ HUD PIH Notice 2009-25, Energy Investment Guidance Under American Recovery and Reinvestment Act of 2009

⁸ The total number of grantees was 3,134

⁹ The amount was unknown because HUD's chart of accounts does not specifically classify energy equipment or items.

¹⁰ Grantee PHAs were required to describe their energy purchases on Recovery.gov; however, the amount spent for the purchases was not required.

¹¹ We did not review lighting fixtures or light bulbs or plumbing devices such as water-saving shower heads and toilets.

not have a specific regulation or guidance defining obsolete items. Thus, for our review, we considered an item obsolete if a cost study was conducted or provided showing that purchasing the new item resulted in increased energy efficiency and overall cost savings. To determine whether an item was prematurely replaced, we used the grantee PHA's physical needs assessments conducted by contractors to determine the date the replaced item was installed and its expected useful life, condition, and expected replacement date. We considered the replacement of items in poor condition or with three or fewer years of expected useful life remaining to be reasonable. We also considered other factors to determine whether the replacement met the reasonableness standard required by Office of Management and Budget Circular A-87 Revised. For the one grantee PHA that prematurely replaced its energy equipment, we are performing a separate review and additional tests to determine whether further work is warranted to determine the reason for the premature replacement of equipment.

BACKGROUND

The Energy Policy Act of 2005 required HUD to develop an energy strategy to reduce utility expenses through conservation and efficiency measures. HUD's strategy included funding incentives for grantee PHAs related to conservation and promoting the use of Energy Star products, which may improve the energy efficiency of an average home by as much as 30 to 40 percent. Energy Star products include heating and cooling equipment, refrigerators, windows, and lighting fixtures.

HUD regulations at 24 CFR Part 965 also require grantee PHAs to (1) conduct energy audits at least every 5 years, (2) undertake all identified cost-saving measures as funds become available, and (3) purchase equipment that meets U.S. Department of Energy standards for energy efficiency.¹²

President Obama signed the Recovery Act on February 17, 2009. The Recovery Act included \$4 billion for grantee PHAs to carry out capital and management activities, with \$3 billion distributed as formula funds and the remaining distributed through a competitive process. Competitive and formula grants have different requirements; thus, we limited our audit to formula grants.

Grantee PHAs were authorized to use the \$3 billion in formula grants for needs addressed in their annual and 5-year capital plans, which may have included replacing energy equipment and obsolete utility systems.

¹² 24 CFR 965.302, .307, and .306, respectively

RESULTS OF REVIEW

HUD's controls over energy audits could be improved to ensure that grantees conduct energy audits and implement cost-saving measures. However, HUD indicated that the controls should be improved in fiscal year 2012 when new regulations are issued, and HUD included new energy audit procedures and directed grantees to complete energy audits at least every 5 years as part of its physical needs assessment process. Also, the review showed that grantee PHAs generally purchased equipment that met Federal efficiency standards, and 14 of 15 grantee PHAs evaluated completed energy system modernization in accordance with their annual and/or 5-year plan.

Energy audits: HUD was developing new regulations for energy audits at 24 CFR Part 965. The proposed regulations were under HUD PIH legal review awaiting approval for release to the other HUD offices and for public comment. HUD expected the proposed rule to become final sometime during the 2012 calendar year. According to HUD, the proposed regulations identified specific requirements for energy audits that, if properly implemented, should ensure that grantees perform quality energy audits and identify potential cost savings. However, HUD's Office of Inspector General will perform its review of the regulations when the new regulations are released for comment. Therefore, further audit work at this time was not warranted in this area.

Energy-efficient purchases: Our review results indicated that grantee PHAs generally purchased equipment that met Federal efficiency standards.¹³ Limited tests of more than \$12 million in energy product purchases at 15 grantee PHAs showed that more than 97 percent of those purchases complied with Federal requirements. HUD PIH officials advised that HUD should ensure that PHAs are aware of the requirements through the Code of Federal Regulations, HUD notices, and its Ecowise newsletter. Also HUD indicated that its PHA review checklist (form HUD-5834) checks whether PHAs purchase energy Star products, but its use was not mandated.

Equipment replacements: Although HUD does not have a clear standard for what constitutes a premature replacement, our review results showed that the grantee PHAs tested generally replaced equipment that was obsolete or near or at the end of its expected useful life. Our tests showed that 1 of 15 grantee PHAs prematurely replaced its energy equipment. The error rate did not indicate that this was a systemic problem area.

CONCLUSION

HUD's controls over energy audits could be improved, and HUD has proposed new regulations for energy audits that, according to HUD, should improve controls. The review did not find any significant error rates regarding energy-efficient purchases or equipment replacements. Therefore, this report contains no recommendations and requires no further action.

¹³ We tested the following items for compliance with Energy Star and Federal Energy Management Program efficiency standards: boilers, furnaces, air conditioners/condensers, hot water heaters, refrigerators, and windows.