



Homeland Security

August 11, 2009

MEMORANDUM FOR: Michael Moriarty, Acting Administrator
FEMA Region II

FROM: C. David Kimble, Director *C. David Kimble*
Eastern Regional Office

SUBJECT: *Hurricane Georges Activities for Puerto Rico
Electric and Power Authority*
Public Assistance Identification Number: 000-92043
FEMA Disaster Number 1247-DR-PR
Report Number DA-09-21

We audited public assistance grant funds awarded to the Puerto Rico Electric and Power Authority (PREPA). The objective of the audit was to determine whether PREPA accounted for and expended Federal Emergency Management Agency (FEMA) funds according to federal regulations and FEMA guidelines.

PREPA received a public assistance grant award of \$159.6 million from the Puerto Rico Office of Management and Budget, a FEMA grantee, for damages caused by Hurricane Georges in September 1998. The award provided 90% FEMA funding for debris removal activities, emergency protective measures, repair of the electric transmission and distribution system, repair/replacement of buildings and equipment, and other disaster-related activities. The award consisted of 49 large projects and 302 small projects¹.

We reviewed costs totaling \$69.7 million under 34 large projects and 221 small projects (see Exhibit A). The scope of work for small projects was limited to determining whether claimed costs were covered by insurance proceeds. The audit covered the period September 21, 1998, to April 5, 2005, during which PREPA received \$59.7 million of FEMA funds under the projects included in our audit scope.

We conducted this performance audit under the authority of the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

¹ Federal regulations in effect at the time of Hurricane Georges set the large project threshold at \$47,100.

We judgmentally selected samples of project costs documentation (generally based on dollar value); interviewed PREPA, grantee, and FEMA personnel; reviewed PREPA's grant accounting system and procurement policies and procedures; reviewed applicable federal regulations and FEMA guidelines; and performed other procedures considered necessary under the circumstances. We did not assess the adequacy of PREPA's internal controls applicable to its grant activities because it was not necessary to accomplish our audit objective. We did, however, gain an understanding of PREPA's grant accounting system and its policies and procedures for administering activities provided for under the FEMA award.

RESULTS OF AUDIT

PREPA did not account for FEMA funds on a project-by-project basis as required by federal regulations for large projects. We also identified questioned costs totaling \$16,800,558 (FEMA share \$15,120,502) resulting from duplicate charges; losses covered by insurance; unsupported, excessive, unrelated, and unauthorized charges; an unapplied credit; and a mathematical error.

- A. Project Accounting. PREPA's accounting system did not separately account for large project expenditures on a project-by-project basis as required by 44 CFR 13.20(b)(2). PREPA established a special account within its accounting system to record disaster expenditures. However, expenditures for FEMA-related projects were comingled with non FEMA-related disaster expenditures within the account. Also, PREPA's accounting system did not permit the tracing of funds to a level of expenditures adequate to establish that such funds have not been used in violation of applicable regulations and guidelines (44 CFR 13.20(a)(2)). As a result, the accuracy of PREPA's claim for individual projects could not be readily verified.

PREPA assigned account numbers for the emergency work on the electric transmission and distribution lines for each of its district offices. However, the breakdown of the cost data was not recorded in PREPA's official accounting system. PREPA did maintain separate folders by account number that contained job orders, invoices, time sheets, equipment usage records, and payment records for expenditures related to the FEMA projects. We used these records, when available, to conduct the audit.

- B. Duplicate Charges. PREPA's claim under Project 06827 included \$3,609,950 of charges that were also claimed under Project 15717. This consisted of \$3,553,700 of labor and transportation charges for repairs to the electric transmission and distribution system and \$56,250 to repair the public lighting system. We determined that the charges were allocable to Project 15717. Therefore, we question the \$3,609,950 of duplicate charges claimed under Project 06827.
- C. Losses Covered by Insurance. The Stafford Act (Section 312) does not allow FEMA funds to be used for activities covered by other federal sources or insurance. According to PREPA's insurance policy and the insurance statement of loss and reimbursement provided by PREPA's risk manager, the deductible for windstorm losses under Hurricane Georges was \$2 million. However, FEMA mistakenly used the deductible applicable for an earthquake incident, which was \$25 million, to determine eligible costs. As a result, PREPA's claim of \$6,713,769 for activities under numerous projects included \$4,713,769 of damages that were covered by insurance. The table below identifies the total number of projects and amount claimed by activity.

Description of Activities	Number of Projects	Total Amount
Road Repairs	12	\$ 974,684
Building & Equipment Repairs	127	2,073,836
Utilities Repairs	97	3,424,019
Other Facilities Repairs	10	241,230
Total Claimed	246	\$ 6,713,769
Less: Insurance Deductible		(2,000,000)
Total Losses Covered by Insurance		\$ 4,713,769

D. Project Charges Not Supported by Documentation. PREPA's claim included \$3,933,614 of charges that were not supported by adequate documentation. According to 44 CFR 13.20(b)(6), a subgrantee must maintain supporting documentation such as cancelled checks, invoices, payroll records, time and attendance records, and contract documents for all charges to FEMA projects.

1. PREPA claimed \$36,203,091 (Projects 02462, 06828, and 15717) for the repair of the electric transmission and distribution system in its Caguas and Mayaguez Regions, but did not have supporting documentation for \$3,491,004 of the costs claimed.

- *Labor and Fringe Benefits Charges.* PREPA claimed \$20,705,688 for labor and fringe benefits, but had time and attendance records, time distribution records, and/or labor foreman activity logs to support costs of only \$18,823,272. We question the unsupported difference of \$1,882,416 as shown in the table below.

Project Number	Location (Region)	Amount Claimed	Amount Supported	Amount Unsupported
02462	Caguas	\$ 6,849,956	\$ 5,771,239	\$1,078,717
	Mayaguez	5,365,515	5,328,765	36,750
06828	Caguas	3,577,202	3,184,843	392,359
	Mayaguez	3,620,862	3,431,448	189,414
15717	Caguas	652,534	533,548	118,986
	Mayaguez	639,619	573,429	66,190
Total		\$20,705,688	\$18,823,272	\$1,882,416

- *Per Diem Charges.* PREPA claimed \$1,234,484 for per diem costs of repair crews, but had daily records to support charges of only \$1,133,457. We question the unsupported difference of \$101,027 as shown in the table below.

Project Number	Location (Region)	Amount Claimed	Amount Supported	Amount Unsupported
02462	Caguas	\$ 300,218	\$ 256,163	\$ 44,055
	Mayaguez	293,623	290,461	3,162
06828	Caguas	256,162	230,163	25,999
	Mayaguez	313,543	291,342	22,201
15717	Caguas	34,853	32,079	2,774
	Mayaguez	36,085	33,249	2,836
Total		\$1,234,484	\$1,133,457	\$101,027

- *Force Equipment Charges.* PREPA claimed \$1,196,635 for equipment usage, but had daily equipment usage records and foreman activity logs to support only \$1,083,406. We question the unsupported difference of \$113,229 as shown in the table below.

Project Number	Location (Region)	Amount Claimed	Amount Supported	Amount Unsupported
02462	Caguas	\$ 427,475	\$ 360,635	\$ 66,840
	Mayaguez	279,134	277,019	2,115
06828	Caguas	198,537	179,366	19,171
	Mayaguez	201,362	190,903	10,459
15717	Caguas	46,383	38,239	8,144
	Mayaguez	43,744	37,244	6,500
Total		\$1,196,635	\$1,083,406	\$113,229

- *Material Charges.* PREPA claimed \$7,073,612 for materials, but had invoices and material inventory records to support only \$6,051,555. We question the unsupported difference of \$1,022,057 as shown in the table below.

Project Number	Location (Region)	Amount Claimed	Amount Supported	Amount Unsupported
02462	Caguas	\$1,849,242	\$1,591,225	\$ 258,017
	Mayaguez	1,803,676	1,784,145	19,531
06828	Caguas	1,682,606	1,027,876	654,730
	Mayaguez	1,181,973	1,169,384	12,589
15717	Caguas	184,319	107,129	77,190
	Mayaguez	371,796	371,796	0
Total		\$7,073,612	\$6,051,555	\$1,022,057

- *Contract Charges.* PREPA claimed contract charges of \$3,896,236 under Project 02462, but had invoices, payment records, equipment usage records, and/or foreman activity logs to support only \$3,523,961 of the charges. We question the unsupported difference of \$372,275.
2. PREPA claimed \$2,861,175 (force account labor equipment, per diem, materials, and contract costs) under Project 06827 for repairs to the electric transmission and distribution line system and public lighting system. However, PREPA had documentation such as time and attendance records, time distribution records, labor foreman activity logs, and invoices to support only \$2,500,582 of costs claimed. We question the unsupported difference of \$360,593.
 3. PREPA claimed \$30,050 for lodging costs of repair crews under Project 05074, but had hotel invoices to support only \$27,717 of the room charges claimed. We question the unsupported difference of \$2,333.

4. PREPA claimed \$1,182,435 under Project 15846 for materials used in the relocation of the San Demetrio electric line, but had documentation such as warehouse requisitions, purchase orders, invoices, and payment records to support only \$1,102,751 of the costs claimed. We question the unsupported difference of \$79,684.

E. Overhead Charges. FEMA subgrantees receive a statutory administrative allowance to cover the necessary costs of requesting, obtaining, and administering federal assistance. Federal regulation 44 CFR 206.228(b)(2) states that no other indirect costs of a subgrantee are separately eligible for FEMA reimbursement. However, PREPA's claim under several projects included \$1,433,481 of overhead charges, as follows:

- \$1,145,547 added to materials used to repair electric transmission and distribution lines and the public lighting system (Projects 02462, 06828, and 15717). The overhead charges ranged from 5% to 25%. We question the \$1,145,547 (see Exhibit B).
- \$101,945 added to materials used in repairing the public lighting system (Project 06827). The overhead charges ranged from 25% to 39.56%. We question the \$101,945 as shown in the table below.

District Office	Amount Claimed	Overhead Rates Charged	Excess Charges
Caguas	\$182,481	25%	\$ 45,620
Cayey	40,983	39.56%	16,213
Aguadilla	105,852	25%	26,463
San German	26,198	25%	6,550
Humacao	28,395	25%	7,099
Total	\$383,909		\$101,945

- \$185,989 added to labor, per diem, material, and equipment charges for electrical repairs in Vega Baja's Algarrobo Ward (Project 15846). PREPA originally claimed \$1,010,628 of overhead charges under the project. However, prior to our review, the grantee disallowed \$824,639 of the charges. Therefore, we question the difference of \$185,989.

F. Helicopter Charges. PREPA claimed \$2,078,382 under Project 05074 for helicopters used in restoration of the electric transmission and distribution system. The claim consisted of \$1,863,954 for two contracted helicopters (AS-332L Super Puma and AS350B2) and \$214,428 for a PREPA-owned helicopter. The Super Puma helicopter was contracted for highly specialized aerial work along mountainous terrain where conventional equipment could not be used. The AS350B2 helicopter was contracted to transport work crews and material and supplies to work sites. However, we concluded that PREPA's claim for the contracted helicopters contained \$865,798 of excessive charges.

Flight documentation for the contracted helicopters included a journey log and a load manifest that contained information related to the flight from the station, and the departure and arrival times. The type of activities performed by the helicopters was not recorded on the manifest. Upon reviewing the contractor's flight manifest and conducting interviews of PREPA personnel, we determined that the contract charges of \$1,441,831 claimed for the rental and flight time of

the Super Puma helicopter were excessive because the helicopter was used only to transport repair crews and cargo and not used to perform the specialized work contracted for under the contract.

To determine reasonable reimbursement costs for use of the Super Puma helicopter in transporting repair crews and cargo, we compared the capacity of the two contracted helicopters. Based on this comparison, we determined that the Super Puma had double the capacity of the AS350B2 helicopter. Therefore, we used twice the contract rental rate of the AS350B2 helicopter, which was \$1,890 per day and flight time rate of \$412 per hour, to calculate reasonable compensation for the Super Puma helicopter. Using this methodology, we concluded that the contract costs claimed for the Super Puma were overstated by \$865,798, as shown in the table below.

Activity/ Time	Rate Claimed	Number of Days	Number of Hours	Cost Claimed	Reasonable Rate (Calculated)	Total Cost	Excess Charges
Standby	\$9,550	95.625		\$ 913,219	\$3,780	\$361,463	\$551,756
Flight	\$2,030		260.4	528,612	\$ 824	214,570	314,042
Total				\$1,441,831		\$576,033	\$865,798

G. Labor Charges. PREPA's claim under Project 02462 included \$123,811 of excessive labor and fringe benefits charges, as follows:

- PREPA's personnel policies and procedures provided for annual Christmas bonuses to be paid to permanent executive personnel. The compensation was to be based on 8% of earned salaries up to \$40,000, and 4% for earnings in excess of \$40,000. However, PREPA's Districts payroll system calculated the bonuses at 8% for all earnings. As a result, PREPA's claim for labor charges was overstated by \$54,489.
- The employer's contribution for FICA tax in 1998 was 6.20% and was limited to the first \$68,400 of an employee's earnings. However, PREPA's Districts payroll system continued to calculate the tax on salaries earned in excess of the \$68,400 cap. As a result, PREPA's claim for fringe benefits was overstated by \$6,274.
- PREPA determined that labor charges were based on incorrect rates and needed to be adjusted by \$63,048 to reflect actual pay rates. However, we noted that the project's final costs were not adjusted to reflect correct labor charges. Therefore, we question the \$63,048.

H. Contract Charges. FEMA funded \$11.6 million and \$1.9 million, respectively, under Projects 11608 and 15789 to cover electric transmission and distribution line work performed by a prime contractor and three subcontractors. The prime contractor submitted invoices totaling \$15.5 million to PREPA for labor charges, vehicles usage, employee expenses, and other charges incurred by the contractor and its sub-contractors under the projects.

The activities under the two projects were initially started under a contract from the General Services Administration (GSA) and later transferred to PREPA. GSA's Office of Inspector General (OIG) conducted an audit of the costs claimed under the contract and concluded that rates billed by the contractors for general and administrative expenses, labor overhead, and taxes were overstated. Using the rates established by GSA/OIG, we determined that the contractors' billings to PREPA contained \$1,831,580 of excessive charges for administrative and general expenses, labor overhead, and tax gross-up charges.

1. *Administrative and General Expenses.* The prime contractor and subcontractors billed PREPA \$1,736,923 using rates that ranged from 23.34% to 34%. However, the contractors should have billed PREPA a total of \$1,258,771, or \$478,152 less, by applying the GSA/OIG established rates of 17.37% to 34%. Therefore, we question the \$478,152 as shown in the table below.

Invoice/ Contractor	A&G Rate	A&G Charged	A&G Correct Rate	A&G Eligible Cost	A&G Excess Charges
1-A	30.59%	\$ 374,794	17.37%	\$ 192,176	\$182,618
4-A	25.00%	396,172	17.37%	251,221	144,951
4-B	34.00%	539,567	34.00%	443,451	96,116
8-C	23.34%	426,390	20.36%	371,923	54,467
Total		\$1,736,923		\$1,258,771	\$478,152

2. *Labor Overhead.* The prime contractor and subcontractors billed PREPA \$2,680,977 using a rate that ranged from 43.78% to 44.10% for labor overhead (i.e., insurance, benefits, vacation, holiday expenses, etc.). However, the contractors should have billed PREPA a total of \$1,176,937, or \$539,941 less, by applying the GSA/OIG established rates of 15.88% to 28.46%. Therefore, we question the \$539,941 as shown in the table below.

Invoice/ Contractor	Total Labor Cost	Labor Overhead Rate Billed	Labor Overhead Claimed	Labor Overhead Correct Rate	Eligible Labor Overhead	Excess Charges
1-A	\$ 775,795	43.780%	\$ 339,643	28.460%	\$220,791	\$ 118,852
4-A	903,357	43.780%	395,489	28.460%	257,095	138,394
4-B	1,001,825	44.100%	441,805	15.882%	159,110	282,695
Total	\$2,680,977		\$1,176,937		\$636,996	\$539,941

3. *Tax Gross-Up.* A subcontractor billed PREPA \$1,244,474 by applying a 39% tax gross-up to its billings to recover corporate taxes paid to the Commonwealth of Puerto Rico. However, GSA/OIG determined that the actual taxes paid by the subcontractor were \$575,000, consisting of \$144,013 allocable to contract work done under the GSA mission assignment and \$430,987 allocable to work directly performed for PREPA. Therefore, we question the excess tax billing of \$813,487 (\$1,244,474-\$430,987) applicable to work directly billed to PREPA.

- I. Unrelated Project Charges. According to 44 CFR 206.223, an item of work must be required as direct result of the disaster to be eligible for FEMA financial assistance. PREPA claimed \$35,105 under Project 05074 for the use of two force account helicopters. However, we determined, based on daily flight reports, that the charges were for flying hours related to non-disaster related activities such as pilot training, maintenance, and transportation of media personnel and PREPA's Executive Director. Therefore, we question the \$35,105.
- J. Unauthorized Project Charges. PREPA's claim included \$7,929 of unauthorized project charges. Project 05074 authorized the reimbursement of lodging expenses for work crews engaged in repairing the electrical system during the period of September 20, 1998, to December 31, 1998. PREPA's claim, however, included \$2,564 for lodging expenses during the period of January 1-11, 1999. We question the unauthorized project charges of \$2,564.

Also, Project 15846 authorized funding to repair a transmission and distribution line and to relocate a 38 kilovolts line at Laguna Tortuguero. The project's scope of work authorized the installation of 16 poles at 45 feet in length each for a total of \$9,575. However, we determined based on a site inspection that PREPA installed 16 poles of 65 feet in length each for total costs of \$14,940. Therefore, we question the \$5,365 of extra costs incurred for installing poles that exceeded the length authorized under the project.

- K. Unapplied Credit. Federal cost principles for State, Local, and Indian Tribal Governments (U.S. Office of Management and Budget, Circular A-87, Attachment A, Section C) states that costs claimed under a federal award must be net of applicable credits. Such credits, whether accruing to or received by the governmental unit, shall be credited to the federal award either as a cost reduction or cash refund, as appropriate. However, under Project 02462, PREPA did not credit project costs for \$206,045 in proceeds received from the sale of scrap material (aluminum, lamps, copper, and other scrap material). Therefore, we question the unapplied credit of \$206,045.
- L. Mathematical Error. PREPA claimed \$96,320 of material costs under Project 15717. However, we determined that actual material charges totaled only \$56,844. The difference of \$39,476 was the result of an error made when calculating the claim amount — an adjustment of \$19,738 was added to the material charges when it should have been deducted. Therefore, we question the excess claimed amount of \$39,476.

RECOMMENDATIONS

We recommend that the Acting Regional Administrator, FEMA Region II, in coordination with the grantee:

Recommendation #1. Inform PREPA, for future disasters, to separately account for project costs on a project-by-project basis and to maintain supporting documentation that facilitates the tracing of project expenditures in its accounting system, as required by federal regulation 44 CFR 13.20.

Recommendation #2. Disallow the \$16,800,558 of questioned costs.

DISCUSSION WITH MANAGEMENT AND AUDIT FOLLOW-UP

The audit results were discussed with PREPA, FEMA, and grantee officials on September 25, 2008. PREPA officials concurred with Findings A, B, E, G, I, J, K, and L, but indicated they needed additional time to review and/or locate documentation to support the questioned costs for Findings C, D, F and H.

Please advise me by October 9, 2009 of the action taken to implement the recommendations contained in this report. Should you have any questions concerning this report, please call me at (404) 832-6702, or Salvador Maldonado-Avila at (787) 294-2530. Key contributors to this assignment were Salvador Maldonado-Avila and Vilmarie Serrano.

cc: Audit Liaison, FEMA Region II
Audit Liaison, FEMA

Puerto Rico Electric and Power Authority
FEMA Disaster 1247-DR-PR
Schedule of Amount Awarded, Audited, Received, and Questioned

Project Number	Amount Awarded	Amount Audited	Amount Questioned
Large Projects:			
02462	\$ 74,335,005	\$ 21,149,776	\$ 2,760,699
06828	38,007,092	12,575,193	1,807,177
15717	5,450,849	2,478,122	438,007
04896	2,196,144	425,710	0
05074	2,078,373	2,078,373	905,800
06827	6,471,125	6,471,125	4,072,488
10402	1,876,734	1,876,734	0
11608	13,475,936	13,475,936	1,831,580
15846	2,491,133	2,493,740	271,038
Large Projects for Insurance (25) ²	3,978,009	3,978,009	3,978,009
Other Large Projects (15)	5,314,771	0	0
Sub-Total	\$ 155,675,171	\$ 67,002,718	\$ 16,064,798
Small Projects:			
Small Projects for Insurance (221)	\$ 2,735,760	\$ 2,735,760	\$ 735,760
Other Small Projects (81)	1,191,115	0	0
Sub-Total	\$ 3,926,875	\$ 2,735,760	\$ 735,760
Grand Total	\$ 159,602,046	\$ 69,738,478	\$ 16,800,558

² Questioned costs of \$3,978,009 includes \$528,132 awarded under Project 10402 (\$2,404,866-\$1,876,734)

Puerto Rico Electric and Power Authority
FEMA Disaster 1247-DR-PR
Schedule of Questioned Costs for Material Overhead

Project 02462			
Region	Amount Claimed	Amount Eligible	Overhead Charges
Arecibo	\$ 1,140,591	\$ 1,083,561	\$ 57,030
Bayamon	1,975,099	1,876,344	98,755
Caguas	1,742,925	1,655,780	87,145
Carolina	1,485,598	1,411,318	74,280
Mayaguez	2,000,280	1,900,266	100,014
Ponce	1,630,706	1,549,171	81,535
San Juan	1,012,430	961,808	50,622
Eng./Const.	1,391,755	1,391,755	0
Sub-Total	\$12,379,384	\$ 11,830,003	\$ 549,381

Project 06828			
Region	Amount Claimed	Amount Eligible	Overhead Charges
Arecibo	\$ 635,993	\$ 604,193	\$ 31,800
Bayamon	1,390,682	1,314,845	75,837
Caguas	850,277	713,990	136,287
Carolina	1,355,972	1,288,173	67,799
Mayaguez	1,319,872	1,253,879	65,993
Ponce	1,607,660	1,527,277	80,383
San Juan	443,128	420,972	22,156
Eng./Const.	335,055	335,055	0
Sub-Total	\$ 7,938,639	\$ 7,458,384	\$ 480,255

Project 15717			
Region	Amount Claimed	Amount Eligible	Overhead Charges
Arecibo	\$ 124,641	\$ 117,800	\$ 6,841
Bayamon	26,323	19,742	6,581
Caguas	132,654	125,016	7,638
Carolina	523,998	477,296	46,702
Mayaguez	436,265	391,669	44,596
Ponce	71,056	67,503	3,553
San Juan	0	0	0
Eng./Const.	0	0	0
Sub-Total	\$ 1,314,937	\$ 1,199,026	\$ 115,911
Total	\$ 21,632,960	\$20,487,413	\$1,145,547