



ACQUISITION,
TECHNOLOGY
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

SEP 30 2003

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS
AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY
(INSTALLATIONS AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE AIR FORCE
(INSTALLATIONS, ENVIRONMENT AND LOGISTICS)
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF DEFENSE AGENCIES

SUBJECT: FY 2003 Annual Energy Management Report

Executive Order (EO) 13123 requires that Federal Agencies measure and report annually to the President their progress in meeting the goals and requirements of the EO. This report is to be submitted to the Department of Energy (DoE) and the Office of Management and Budget (OMB). Defense Agencies who control Federally-owned building space or directly pay the utilities in leased space are required to submit an energy management report to the Office of the Deputy Secretary of Defense (Installations and Environment).

The report continues to cover energy consumption for tactical vehicles and different categories of buildings, water consumption, strategies used to reduce energy consumption and improve efficiency, and renewable energy utilization. There are no major changes from the FY 2002 reporting requirements.

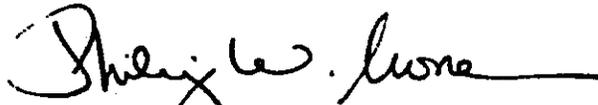
The DoE annual report guidance and OMB Circular A-11 guidance are on their respective websites (www.eere.energy.gov/femp/aboutfemp/report_guid.html and www.whitehouse.gov/omb/circulars/a11/03toc.html). Additional DoD guidance for the FY 2003 Annual Energy Management Report and the FY 2004 Implementation Plan are attached. The FY 2003 DoD Energy Management Data Report and FY 2003 DoD Energy Scorecard have been tailored for DoD use and are included in the DoD guidance. OMB has not yet forwarded the FY 2003 Scorecard. The OMB Scorecard will be provided via separate correspondence.



OMB Circular A-11 is required to be incorporated with the budget submission. In order meet deadlines set by DoE and OMB, we need your input in accordance with the following schedule:

<u>Report</u>	<u>Due Date</u>
OMB Circular A-11, Exhibit 55	October 31, 2003
FY 2003 DoD Energy Scorecard	December 2, 2003
FY 2003 Annual Energy Management Report	December 2, 2003
FY 2004 Energy Management Implementation Plan	December 2, 2003

My point of contact for this task is LCDR Rob Tomiak. He can be reached at (703) 697-6195, FAX (703) 695-1493. Data submissions should be sent to him directly at his E-mail address: robert.tomiak@osd.mil with a copy to etteam@desc.dla.mil. For working level coordination purposes, please have your service/agency representative contact LCDR Tomiak no later than 15 October, 2003 and provide current contact information including name, phone number and email address.



Philip W. Grone
Principal Assistant Deputy Under Secretary of Defense
(Installations and Environment)

Attachment:
As stated

ATTACHMENT

**DEPARTMENT OF DEFENSE GUIDANCE FOR
FY 2003 ANNUAL ENERGY MANAGEMENT REPORT
AND
FY 2004 ENERGY MANAGEMENT IMPLEMENTATION PLAN**

DEPARTMENT OF DEFENSE GUIDANCE FOR
FY 2003 ANNUAL ENERGY MANAGEMENT REPORT
AND
FY 2004 ENERGY MANAGEMENT IMPLEMENTATION PLAN

DoD Reporting Guidance

The DoE and OMB reporting guidance are broad in scope and developed to meet the diverse needs of the various Federal agencies. It is available on the Internet at www.eere.energy.gov/femp/aboutfemp/report_guid.html. The DoE FY 2003 reporting guidance for the narrative and data submission are comparatively the same as FY 2002 and should be followed in Defense Components' input submission unless otherwise noted below to meet the unique requirements of DoD.

Reporting Guidance on FY 2003 Annual Energy Management Report

General Guidance for the Annual Report's Narrative Section. To facilitate streamlining in the submission process, the narrative input for the Annual Report to OSD may be submitted in bullet format where applicable, provided the input succinctly addresses the requirements to describe, discuss, or justify data elements as identified in the DoE guidance. The organization and sequencing of the input should be consistent with the below outline and DoE's guidance. Significant changes from trends developed from previous year data submissions should also be addressed in the narrative section of the Annual Report. Any requirements to provide percentages, change in percentages, or ratios should also include the accompanying denominator and numerator to facilitate compilation at the DoD level. Address any specific goals identified in your FY 2003 Implementation Plan. This will assist OSD to evaluate component's progress in implementing energy management strategies that were identified in the previous year's Implementation Plan.

I. Management and Administration.

A. Energy Management Infrastructure.

- 1. Senior Agency Official.** The Senior Agency Official input to be completed by OSD.
- 2. Agency Energy Team.** Agency Energy Team input to be completed by OSD.

B. Management Tools.

1. **Awards (Employee Incentive Programs).** In addition to describing employee incentive programs in the DoE's guidance, the participation in local or regional awards programs (including programs such as FY 2003 Federal Energy and Water Management Awards) should also be addressed.
2. **Performance Evaluations.** See DoE's guidance.
3. **Training and Education.** The description of training activities should also include types of training (seminar, formal school, videos, interactive computer, correspondence courses, etc), source of training, level of training (maintenance-level worker, supervisor, energy manager, etc), one-time or on-going, coverage (each installation or region), cost and benefits. The DoD target training goal from the FY 2003 Implementation Plan was 2,200 personnel.
4. **Showcase Facilities.** The description of showcase facilities (new or existing) should also include the location, type of building, and technology used. The DoD target goal from the FY 2003 Implementation Plan was at least one showcase facility per Service per year.

II. **Energy Efficiency Performance.**

A. **Energy Reduction Performance.**

1. **Standard Buildings.** The percent change required in DoE's guidance should also include the accompanying denominator and numerator. Use the FY 1985 baseline as reported in the FY 2002 Scorecard submission. The DoD revised FY 1985 baseline is 136,476 Btu/sqft. The Btu reported in Table 1 of Energy Management Data Report shall be the total consumed without taking into account the applicable renewable energy credit. The amount of Btu which should be applied toward the renewable energy credit for this category shall be identified in paragraphs II. B. 1. and 2.
2. **Industrial and Laboratory Facilities.** The unit of measurement for Industrial and Laboratory Facilities in DoE's guidance has been left up to each Federal agency. OSD has determined that British Thermal Unit per gross square foot (BTU/GSF) is the only reasonable metric. Although this metric is imperfect and may lead to inaccurate reporting for some facilities—particularly multi-shift industrial plants—when taken in the aggregate, BTU/GSF will provide a workable standard from which to measure progress. The complexities associated with reporting other metrics, such as unit of production or manpower, make them impractical. Therefore, BTU/GSF shall be used as the metric for this requirement. The percent change required in DoE' guidance should also include the accompanying denominator and numerator. Use the FY 1990 baseline as

reported in the FY 2000 Scorecard submission. The DoD FY 1990 baseline is 213,349 Btu/sqft. The Btu reported in Table 2 of Energy Management Data Report shall be the total consumed without taking into account the applicable renewable energy credit. The amount of Btu which should be applied toward the renewable energy credit for this category shall be identified in paragraphs II. B. 1. and 2.

The Industrial and Laboratory Facility Inventory to be submitted in Section IV D, requires a listing by building. The listings shall be broken out by individual facilities when identifiable, otherwise consider the entire base an industrial facility if 60 percent or more of the base-wide energy use is for industrial purposes.

3. **Exempt Facilities.** See DoE's guidance. The Btu reported in Table 3 of Energy Management Data Report shall be the total consumed without taking into account the applicable renewable energy credit. The amount of Btu which should be applied toward the renewable energy credit for this category shall be identified in paragraphs II. B. 1. and 2. The additional guidance criteria for exempting facilities from EO 13123 goals require DoE approval by a finding of impracticability for each facility. The listing to be provided in Section IV E will serve as the requests to DoE for exemptions. Requests must clearly demonstrate why the facility should be exempted, including justification that explains why this facility impacts on the Component's ability to meet the energy consumption goals. To condense the justification column for the listing in Section IV E, the narrative in this section should define and explain general categories of exemption facilities. Then, only the general categories need be applied to the justification portion of the list.
4. **Tactical Vehicle and Equipment Fuel Use.** See DoE's guidance.

B. Renewable Energy.

1. **Self-Generated Renewable Energy.** DOE guidance was clarified this year to ensure that the figure reported reflects annual energy generated from all renewable energy systems installed after 1990 and in place during FY 2003. In addition to the DoE guidance requirement to identify/estimate energy use from electricity self-generated from renewable sources, a list of projects awarded in FY 2003 should also be provided to include location, description of technology, and size in kilo-watt (kW). Identify the amount of the renewable energy reported in Table 1.7 of the Energy Management Data Report by Btu which should be applied to Standard Buildings, Industrial & Laboratory Facilities, and Exempt Facilities for the renewable energy credit. Discuss facilitated projects in

which renewable energy generated on federal lands or from federal resources is used by non-federal entities.

2. **Purchase of Renewable Energy.** See DoE's guidance. Identify the amount of the renewable energy reported in Table 1.6 of the Energy Management Data Report by Btu which should be applied to Standard Buildings, Industrial & Laboratory Facilities, and Exempt Facilities for the renewable energy credit. The "Guidance for Counting Renewable Energy Projects and Green Energy Purchases Toward Progress in Reaching Greenhouse Gas and Energy Reduction Goals; and Guidance for Estimating Greenhouse Gas Emissions Attributable to Facility Energy Use" includes a worksheet labeled as Exhibit A "Reporting Green Energy Purchases To Receive Credit Toward Executive Order Goals." Additionally, Agency compilation worksheets for source energy reductions and site energy increases are addressed in DoE's "Guidance For Providing Credit Toward Energy Efficiency Goals For Cost-Effective Projects Where Source Energy Use Declines But Site Energy Use Increases." Exhibit A worksheets should be completed and forwarded to DESC and OSD with the Annual Report input submission.

- C. **Petroleum.** In addition to the requirement in DoE's guidance for identification of the type of petroleum-based fuels used and the percent change from the base year; a description of activities undertaken to reduce consumption should also be provided. The percent changes should include the accompanying denominator and numerator.
- D. **Water Conservation.** See DoE's guidance. The potable water usage baseline was established in FY 2000 as 207,366 Million Gallons per Year (MGY). Facilities that have no actual water consumption information should estimate water usage.

III. Implementation Strategies.

- A. **Life Cycle Cost Analysis.** See DoE's guidance.
- B. **Facility Energy Audits.** See DoE's guidance. If a percentage is to be submitted, then the accompanying denominator and numerator should be provided. Energy audits must incorporate a physical inspection of the facility and may include energy audits performed in conjunction with alternative-financed projects.
- C. **Financing Mechanisms.** See DoE's guidance. The narrative information should also include separate lists for any Energy-Savings Performance Contracts (ESPCs) and Utility Energy Services Contracts (UESCs) delivery/task orders issued in FY 2003 (include orders on regional Super-

ESPCs) identifying the location and contracting agency. The Defense Component's management structure, use of other agency contracts, verification methods used, barriers to increased usage and recommendations, and other usage of savings from ESPCs should also be included. The DoD target goal from the FY 2003 Implementation Plan is \$5.35 million in UESC and ESPC task orders/contracts. Discuss any major deviation from your FY 2003 execution and your FY 2002 projection for FY 2003.

D. Energy Star ® and Other Energy-Efficient Products. See DoE's guidance. Energy Star ® products include a wide variety of office space equipment and home heating & cooling product as well as video products(TV, VCR, DVD players), commercial equipment, unitary (rooftop) air conditioners, exit signs, low-voltage distribution transformers, roof products, and telephony (cordless phones, answering machines) equipment.

E. Energy Star ® Buildings. See DoE's guidance. DoD, DoE, and EPA completed a memorandum of understanding regarding ENERGY STAR® labels for all DoD buildings in June 1997. The MOU considers buildings as ENERGY STAR® buildings equivalents if they were included in comprehensive audits and all projects with a 10-year or better payback are implemented, to the maximum extent practicable, within agency resources and allows the installation to self-certify and develop a local label for non-metered buildings. Report number of self-certified ENERGY STAR® building equivalents.

F. Sustainable Building Design. In addition to reporting the incorporation of sustainable building design principles, a list of projects designed or built in FY 2000 using sustainable development and design principles (or equivalent) with location, type of facility, and description of principles used should also be included. If a percentage is to be submitted, then the accompanying denominator and numerator should be provided.

G. Energy Efficiency in Lease Provisions. See DoE's guidance.

H. Industrial Facility Efficiency Improvements. See DoE's guidance.

I. Highly Efficient Systems. See DoE's guidance.

J. Off-Grid Generation. See DoE's guidance.

K. Electrical Load Reduction Measures. See DoE's guidance.

IV. Data Tables and Inventories.

A. FY 2003 Annual Energy Management Data Report. DoE's guidance should be followed. The guidance and the excel spreadsheet are available at

www.eren.doe.gov/femp/aboutfemp/report_guid.html. The FY 2003 DoE Energy Management Data Report has been modified to include the additional Tables 1-1a, 1-2a, and 1-3a for FY 2003 and FY 2004 projections needed for Comptroller and OSD metrics. The spreadsheet includes formulas that will calculate site and source Btu, Btu/gross square foot, unit costs for each of the fuels, and national average carbon emissions. If both the annual consumption and annual cost for Tables 1-1, 1-2, and 1-3 are not known, the submission should clearly note any missing data. Additionally, the demand-side management (DSM) data as a general rule should be reported under Table 2-3 (UESCs) unless a demand reduction rebate check was received. If a demand reduction rebate check was received, then the rebate amount should be reported in Table 2-4 (Rebates).

- B. Energy Scorecard for FY 2003.** OMB has not yet distributed this year's Energy Scorecard. When it is available, DoD will forward guidance out via separate correspondence along with a DoD revised scorecard. The DoD revised scorecard should be used in lieu of the OMB scorecard to facilitate incorporation of component input at the DoD level.
- C. Goals of Executive Order 13123 and NECPA/EPACT.** Submission is optional.
- D. Industrial and Laboratory Facility Inventory.** See DoE's guidance.
- E. Exempt Facilities Inventory.** See DoE's guidance. The categories, as defined in the narrative under Section II B 3, should be used as justification for exempt status.

V. E.O. 13123 Implementation Plan for FY 2004.

While the Defense Components have their own implementation plans, the DoE guidance requires that an Agency Energy Management Implementation Plan for FY 2004 be submitted in the prescribed outline. The DoE Implementation Plan outline follows the outline of the Annual Report and the intent is to compare the FY 2004 Annual Report against the FY 2004 Implementation Plan as a measure of goal achievement. Therefore, your Defense Components Implementation Plan should be modified and submitted in the DoE's guidance format for DoD Compilation and should address specific targets for next year.

REVISED
FY 2003 DoD ENERGY MANAGEMENT DATA REPORT

FY 2003 DoD ENERGY MANAGEMENT DATA REPORT

Agency: _____ Prepared by: _____
 Date: _____ Phone: _____

PART 1: ENERGY CONSUMPTION AND COST DATA

1-1. Standard Buildings/Facilities

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Unit Cost (\$)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH	0.0	\$0.0	#DIV/0! /kWh	0.0	0.0	0
Fuel Oil	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0.0	0
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0	#DIV/0! /Thou Cu Ft	0.0	0.0	0
LPG/Propane	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0.0	0
Coal	S. Ton	0.0	\$0.0	#DIV/0! /S. Ton	0.0	0.0	0
Purch. Steam	BBtu	0.0	\$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Other	BBtu	0.0	\$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Total Costs:		0.0	\$0.0		0.0	0.0	0
Standard Buildings/Facilities (Thou. Gross Square Feet)		0.0		Btu/GSF:	#DIV/0!	#DIV/0!	

1-1a. Standard Buildings/Facilities Out Year Projection

FY 2004				FY 2005			
Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Annual Consumption	Annual Cost (Thou. \$)		
Electricity	MWH	0.0	\$0.0	0.0	\$0.0		
Fuel Oil	Thou. Gal.	0.0	\$0.0	0.0	\$0.0		
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0	0.0	\$0.0		
LPG/Propane	Thou. Gal.	0.0	\$0.0	0.0	\$0.0		
Coal	S. Ton	0.0	\$0.0	0.0	\$0.0		
Purch. Steam	BBtu	0.0	\$0.0	0.0	\$0.0		
Other	BBtu	0.0	\$0.0	0.0	\$0.0		
Total Costs:		0.0	\$0.0				
Standard Buildings/Facilities (Thou. Gross Square Feet)		0.0		Standard Buildings/Facilities (Thou. Gross Square Feet)		0.0	

1-2. Industrial, Laboratory, Research, and Other Energy-Intensive Facilities

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Unit Cost (\$)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH	0.0	\$0.0	#DIV/0! /kWh	0.0	0.0	0
Fuel Oil	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0.0	0
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0	#DIV/0! /Thou Cu Ft	0.0	0.0	0
LPG/Propane	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0.0	0
Coal	S. Ton	0.0	\$0.0	#DIV/0! /S. Ton	0.0	0.0	0
Purch. Steam	BBtu	0.0	\$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Other	BBtu	0.0	\$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Total Costs:		0.0	\$0.0	Total:	0.0	0.0	0
Energy-Intensive Facilities (Thou. Gross Square Feet)		0.0		Btu/GSF:	#DIV/0!	#DIV/0!	

1-2a. Industrial, Laboratory, Research, and Other Energy-Intensive Facilities Out Year Projection

FY 2004			
Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)
Electricity	MWH	0.0	\$0.0
Fuel Oil	Thou. Gal.	0.0	\$0.0
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0
LPG/Propane	Thou. Gal.	0.0	\$0.0
Coal	S. Ton	0.0	\$0.0
Purch. Steam	BBtu	0.0	\$0.0
Other	BBtu	0.0	\$0.0
Total Costs:		0.0	\$0.0
Energy-Intensive Facilities (Thou. Gross Square Feet)		0.0	

FY 2005	
Annual Consumption	Annual Cost (Thou. \$)
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
Total Costs:	\$0.0
Energy-Intensive Facilities (Thou. Gross Square Feet)	0.0

1-3. Exempt Facilities

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Unit Cost (\$)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH	0.0	\$0.0	#DIV/0! /kWh	0.0	0.0	0
Fuel Oil	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0.0	0
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0	#DIV/0! /Thou Cu Ft	0.0	0.0	0
LPG/Propane	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0.0	0
Coal	S. Ton	0.0	\$0.0	#DIV/0! /S. Ton	0.0	0.0	0
Purch. Steam	BBtu	0.0	\$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Other	BBtu	0.0	\$0.0	#DIV/0! /MMBtu	0.0	0.0	0
		Total Costs:	\$0.0				
Exempt Facilities (Thou. Gross Square Feet)		0.0		Btu/GSF:	#DIV/0!	#DIV/0!	

1-3a. Exempt Facilities Out Year Projection

FY 2004			
Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)
Electricity	MWH	0.0	\$0.0
Fuel Oil	Thou. Gal.	0.0	\$0.0
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0
LPG/Propane	Thou. Gal.	0.0	\$0.0
Coal	S. Ton	0.0	\$0.0
Purch. Steam	BBtu	0.0	\$0.0
Other	BBtu	0.0	\$0.0
		Total Costs:	\$0.0
Exempt Facilities (Thou. Gross Square Feet)		0.0	

FY 2005	
Annual Consumption	Annual Cost (Thou. \$)
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
0.0	\$0.0
Total Costs:	\$0.0
Standard Buildings/Facilities (Thou. Gross Square Feet)	0.0

1-4. Tactical Vehicles and Other Equipment

	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)	Unit Cost (\$)	Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Auto Gasoline	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Diesel-Distillate	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
LPG/Propane	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Aviation Gasoline	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Jet Fuel	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Navy Special	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Other	Thou. Gal.	0.0	\$0.0	#DIV/0! /MMBtu	0.0	0
Total Costs			\$0.0		0.0	0

1-5. WATER CONSUMPTION, COST AND EFFICIENCY MEASURES

	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)
Water	Million Gal.	0.0	\$0.0
Best Management Practice Implementation Tracking Data			
Number of facilities* in agency inventory			0
Number of facilities with completed water management plans			0
Number of facilities with at least four (4) BMPs fully implemented			0
*number in the agency inventory, can be buildings, bases, or campuses			

1-6. RENEWABLE GREEN ENERGY PURCHASES

(Only include renewable energy purchases developed or contracted after 1990)

	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)
Electricity from Renewables	MWH	0.0	\$0.0
Natural Gas from Landfill/Biomass Renewable	MMBtu	0.0	\$0.0
Thermal Energy	MMBtu	0.0	\$0.0
Other Renewable Energy *			

*For other renewable energy that does not fit any category, please fill in the type, units used, annual consumption and cost, and include any additional information in your narrative submission. For example, biodiesel used in non-transportation applications. (Renewable fuels used for transportation will be collected through GSA's Fleet Management reporting process.)

1-7. SELF-GENERATED RENEWABLE ENERGY INSTALLED AFTER 1990

	Consumption Units	Total Annual Energy	Energy Used by Agency*
Electricity from Renewables	MWH	0.0	0.0
Natural Gas from Landfill/Biomass Renewable	MMBtu	0.0	0.0
Thermal Energy**	MMBtu	0.0	0.0
Other Renewable Energy ***		0.0	0.0

*Energy used by agency equals total annual generation unless a project sells a portion of the energy it produces to another agency or the private sector. It can equal zero in the case of non-Federal energy projects developed on Federal land.

**Examples are geothermal, solar thermal, and geothermal heat pumps, and the thermal portion of combined heat and power projects. Thermal energy from geothermal heat pumps should be based on energy savings compared to conventional alternatives.

***For other renewable energy that does not fit any category, fill in the type, units used, annual consumption and cost, and include any additional information in your narrative submission. For example energy displaced by daylighting technology or passive solar design.