

Energy Efficiency & Renewable Energy

Biennial Report to Congress on the Progress of the Federal Government in Meeting the Renewable Energy Goals of the Energy Policy Act of 2005



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1.0 Executive Summary

As a whole the Federal government met its statutory goal to consume renewable electricity to meet not less than 3 percent of total facility electricity use. However, overall Federal renewable electricity use declined 32% from 2007 to 2008¹, dropping from 2.8 terawatthours (TWh) (4.9%) to 1.9 TWh (3.4%). Of the 22 agencies reporting, 13 increased renewable energy use, but 7 agencies reported significant declines that more than offset the increases, while deployment was stagnant in 2 others. Higher prices for renewable energy certificates (RECs) and reduced incentives to purchase renewable energy because of the phase out of old rules that allowed counting renewable energy purchases towards energy efficiency goals were major reasons cited for the decline. In addition, there was a steep reduction of 73% in self-generated or on-site renewable energy. Although self-generated renewable energy declined, some facilities demonstrated a new approach to developing projects by selling high-value RECs to help finance projects, and then used some of the savings to purchase lower-cost replacement RECs. This approach, exemplified by the National Renewable Energy Laboratory's (NREL) Mesa Top PV project, reduces the cost of meeting the goal, and allows the project to count as on-site energy production. EPAct 2005 only allows agencies, including the Department of Defense (DoD), to count renewable energy the agency consumes toward the EPAct goal and it only allows agencies to count electricity from renewable resources, not thermal energy. Under EPAct, ground-source heat pumps which provide thermal energy are not allowed. DoD has a separate statutory goal that counts production and consumption of both electricity and thermal energy from renewable sources, but DOD is also required to meet EPAct 2005 goals.

The reduction in self-generated or on-site renewable energy is of particular concern. Given this trend, meeting the goal in 2009 may be difficult; increasing renewable energy use to 5 percent of facility electricity use in 2010 will be unlikely without a much greater effort. Agencies urgently need to increase attention to the renewable energy goal and take action to meet the goal. Removing barriers to these projects is also critically important.

2.0 Summary of Authority

This report was prepared under authority of Section 203 of the Energy Policy Act of 2005 (EPAct), PL 109-58. This report is due April 15, 2007 and every two years thereafter (42 U.S.C. 15852(d)).

Section 203 of EPAct (42 U.S.C. 15852 (a)) requires the Secretary of Energy to seek to ensure that, to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes, the following amounts are renewable energy as defined in section 203 of the Act:

(1) Not less than 3 percent in fiscal years 2007 through 2009.

¹ Fiscal Year 2008 data is considered preliminary until the Fiscal Year 2008 FEMP Annual Report to Congress on Federal Government Energy Management and Conservation Programs is approved for submission to Congress. Fiscal Year 2007 data is from the Fiscal Year 2007 FEMP Annual Report to Congress on Federal Government Energy Management and Conservation Programs, as submitted.

- (2) Not less than 5 percent in fiscal years 2010 through 2012.
- (3) Not less than 7.5 percent in fiscal year 2013 and each fiscal year thereafter.

Section 203 also provides a bonus to Federal agencies by allowing them to double count renewable energy if it is produced on-site and used at a Federal facility, produced on Federal lands and used at a Federal facility, or produced on Indian land and used at a Federal facility (42 U.S.C. 15852 (c)).

Section 203 states that the term "renewable energy" means electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

3.0 Fiscal Year 2007 and 2008 Federal Renewable Energy

Consumption Compared to Goal

The Federal renewable energy goals in EPAct begin in Fiscal Year 2007. Based on available 2007 and 2008 data reported to the Department of Energy's (DOE) Federal Energy Management Program (FEMP), renewable energy use in the Federal government exceeded the goal in both years, as shown in Figure 1. Electricity from self-generated renewable energy, purchases and bonuses accounted for 4.89% of Federal electricity use in 2007, but declined to 3.38% in 2008.

The decline is partly the result of reduced purchases of Renewable Energy Certificates (RECs). Self-generation declined partly

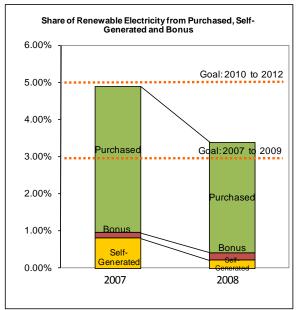


Figure 1: Overall Progress Toward Goal

because agencies are selling the RECs for their on-site projects to help with financing, which means they can no longer count the generation toward their goals. In turn, this reduces opportunities for claiming the bonus for generation on Federal or Indian land. New guidance effective January 2008 set tighter rules requiring retention of RECs to count on-site projects, Additionally, Federal agencies are no longer allowed to count renewable energy purchases against both renewable energy and energy efficiency goals, thus reducing somewhat the incentive to purchase REC's, while increasing incentives for investment in efficiency enhancements. This guidance is Renewable Energy Requirement Guidance for EPACT 2005 and Executive Order 13423, dated January 28, 2008. The guidance is available at

http://www1.eere.energy.gov/femp/pdfs/epact05_fedrenewenergyguid.pdf.

In some cases, sites like NREL are using part of the proceeds from selling high-value RECs from on-site projects to purchase lower-cost replacement RECs, which allows them to reclaim the bonus and count the project as on-site. Flooding on the Mississippi also reduced hydropower generation used by the Army.

Figure 2 shows progress toward the renewable energy goal by agency for both 2007 and 2008. The top bar for each agency corresponds to 2007. Agency performance varies, which is partly the result of differences in access to competitive renewable energy, different levels of expertise in acquiring renewable energy, and different budget constraints. Only a few agencies managed to increase renewable energy use as a share of their total electricity use from 2007 to 2008. Appendices B and C provide further data on the actual amount of renewable energy used by each agency for 2008 and 2007.

4.0 Agency Methods to Meet Renewable Energy Goals

Agencies relied on self-generated renewable energy, purchases of renewable energy, and bonuses to meet their goals. Figure 1 shows the relative contribution from each of these methods.

Self-generated renewable energy is from projects on Federal facilities, Federal land, or Indian land. These projects provide renewable energy as long as the projects are in operation, usually 20 years or more. Bonuses were created by EPAct to encourage agencies to acquire more renewable energy from projects on their own land or Indian land. Like self-generated renewable electricity the bonuses continue as long as the projects operate.

Purchasing renewable energy from local energy suppliers is an attractive option when onsite renewable energy projects are not technically feasible or economical. These purchases typically span 1-3 years. Renewable energy certificates (RECs) are another form of renewable energy purchase. A REC provides the buyer with exclusive claim to the renewable energy and environmental attributes of power from a renewable energy project, but does not require the seller to deliver the electricity associated with those attributes directly to the purchaser. RECs allow Federal facilities to acquire renewable energy attributes from anywhere in the country at competitive prices, and usually span 1-3 years.

5.0 DOE Support to Agencies

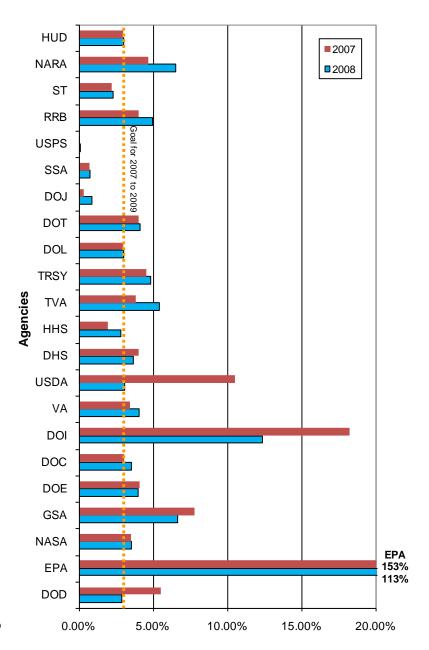
DOE's FEMP provided technical and acquisition assistance to help agencies leverage all three methods for meeting their renewable energy goals in 2007 and 2008.

5.1 Technical Assistance and Outreach

FEMP offers technical advice, Figure 2: Progress by Agency expert analysis, and analysis tools to Federal energy managers. Technical assistance includes surveys of facilities, detailed help with designs for on-site projects, resource and economic analyses, and other services.

FEMP documents success stories and offers case studies to demonstrate how agencies can successfully develop projects and make purchases. Through its awards programs, FEMP recognizes Federal energy managers who develop innovative renewable energy projects as an incentive for individual energy managers to lead their agencies and further

FY2007 and 2008 Progress by Agency



publicize renewable energy successes. Eleven of the twenty-six Presidential and Federal energy award winners in 2008 included renewable energy projects in their nominations, including renewable power purchases, wind energy, solar energy and biofuels.

5.2 Partnerships to Acquire Renewable Energy

FEMP, the Defense Energy Support Center (DESC), the General Services Administration (GSA), and the Environmental Protection Agency (EPA) continue to identify and remove obstacles to renewable energy purchasing. Just as FEMP and its partners worked to create mechanisms for agencies to purchase renewable energy when these markets were starting to develop, they continue to work on new approaches to specifying and buying renewable energy and RECs in rapidly expanding markets. For example, because of growing demand for RECs to meet state renewable portfolio standards in some states agencies are finding that utilities and developers often prefer to keep the RECs associated with Federal projects because of their high local value. In consultation with other agencies, FEMP developed guidance that allows Federal sites to give up the more valuable RECs from their on-site projects and then substitute less expensive RECs purchased at either a national level or from renewable resources that are less in demand to help reduce their costs. This maintains the requirement that agencies purchase and consume renewable energy to count it toward their goal, while at the same time providing flexibility to "swap" low-cost RECs for high-value RECs and save taxpayer money. This swap option is automatically calculated in FEMP's energy data collection from agencies.

FEMP also developed or helped to develop essential acquisition tools for implementing renewable energy and energy efficiency technologies including energy savings performance contracts (ESPC) and utility energy services contracts (UESC). UESCs for solar energy are of growing interest because for the first time Federal tax credits for solar energy investments are available to utilities. FEMP also helps Federal facilities make the most of agency appropriations and state incentives. FEMP is working closely with BLM and other agencies to pursue environmental impact studies and assessments that will speed siting and construction of renewable energy projects on Federal and Indian land.

State and utility company incentives for renewable energy are often difficult for agencies to use because they take the form of tax credits, or explicitly exclude government agencies. As noted in last year's report, FEMP and its partners worked with Federal facilities to develop contracting methods that can leverage state incentives in some areas. Examples include Marine Corps Logistics Base Barstow in California which installed a 1.5 MW wind turbine with assistance from its local utility, Southern California Edison, and took advantage of state rebates to reduce the cost of the system by 25%.

FEMP worked with the National Renewable Energy Laboratory (NREL) to demonstrate a Power Purchase Agreement (PPA) involving a 705 kW PV system that was installed, owned and operated by a private developer. In order to make the PPA cost-effective NREL worked with Western Area Power Administration (WAPA) to act as an intermediary to purchase and deliver the electricity. WAPA executed a 20-year PPA contract, rather than the 10-year contract available under NREL's authority. WAPA will pay the private developer for the power and in turn will bill NREL for energy delivered.

This arrangement allows the developer to take advantage of Federal and state incentives for solar energy that NREL could not access directly, and included the sale of high-value RECs to the local utility, while passing on some of the savings. NREL used part of the savings to purchase lower-cost replacement RECs which allowed them to claim the bonus and count the project as an on-site project toward their EPAct requirement.

6.0 Other Federal Renewable Energy Efforts

The Energy Independence and Security Act of 2007 (EISA) created additional renewable energy requirements and opportunities for renewable energy in the Federal Sector. Section 523 requires 30 percent of the hot water demand in new Federal buildings (and renovations) to be met with solar water heating if it is cost-effective. Section 433 requires that standards for new Federal buildings reduce fossil fuel use, starting with a reduction to 55% in 2010 and gradually reaching 100% in 2030. This will create an incentive to integrate renewable energy in new buildings. Other provisions clarified agencies' ability to fund ESPC projects with a combination of appropriations and private financing, and expanded the definition of energy savings for ESPCs to include excess electrical or thermal energy generated from on-site renewable sources. Both of these provisions make it easier to pursue larger renewable energy projects through ESPCs. Larger projects are often more cost-effective.

While the EPAct renewable energy goal emphasizes consumption of electricity from renewable energy, agencies also acquired or produced renewable energy in response to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management. The Executive Order requires agencies to use new (placed in service after January 1, 1999) renewable energy sources to meet at least one-half of their EPAct goal. It also allows agencies to meet the requirement for new sources by allowing them to substitute thermal renewable energy. Thermal renewable energy cannot be used to meet the EPAct goal directly because the law limits the goal to electricity. However, agencies can use thermal renewable energy to meet the Executive Order standard for new sources, so it can help agencies count all or most of the electricity they may derive from older sources of renewable energy. Thermal renewable energy use continues to be an attractive option: in 2008 agencies consumed 4 trillion BTUs of thermal renewable energy, which is equivalent to 65% of total eligible renewable electricity use.

The National Defense Reauthorization Act of 2007 requires the Department of Defense to produce or procure "energy equal to 25% of its electrical energy from renewable energy by 2025." This goal is separate from the EPAct goal, and is distinctly different in that it allows both thermal and electric sources of renewable energy and does not require the DoD to consume the electricity. This encourages DoD to lease land for renewable energy development, without being concerned about purchasing the energy from projects. In 2008 DoD estimates that it produced or procured energy equal to 9.7% of its electrical energy from renewable sources.

Figure 3 illustrates how significant these other renewable energy activities are in relation to the EPAct renewable energy goal. The smallest square represents only electricity from renewable energy that agencies consumed, plus any bonuses consistent with EPAct, which is equivalent to 3.38% of Federal electricity consumption. If EPAct recognized renewable non-electric energy (mostly thermal), the Federal government's renewable energy use would increase to 5.6% of Federal electricity use, assuming on-site thermal would receive the same bonus allowance. If the entire Federal government used a goal similar to DoD's requirement to produce or consume renewable electricity, with no bonuses, Federal renewable energy use would reach 9.2% of electricity consumption, or 4.6% of total facility energy consumption (electricity plus other fuels). The estimate of renewable energy production is conservative in that it only includes incremental hydropower developed by the Department of Interior, which excludes major wind,

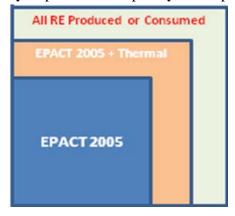


Figure 3: Different Definitions of Renewable Energy Use

geothermal, solar and other renewable energy developments that Interior is encouraging on Federal lands. Appendix D includes a table of data from 2008 agency energy reports that shows renewable energy consumption and production figures using these different definitions and provides information on the significant amount of "old" renewable energy agencies developed before January 1, 1999 excluded from the EPAct and EO goal. However, renewable energy that is produced on Federal land, but where the agency does not use the renewable energy, or retain corresponding RECs, does not meet requirements under the 'accepted greenhouse gas accounting principles' required under EO 13514, and

would not count towards targets under that order.

7.0 Conclusion

The Federal government continues to meet the EPAct renewable energy goals. FEMP is aware of many on-site projects under development and anticipates that the Federal agencies will continue to meet EPAct goals and other current requirements in 2009. However, the trend from 2007 to 2008 was negative and if renewable energy use continues to decline or levels off the Federal government is unlikely to meet the more aggressive 5 percent goal in 2010. One of the key factors cited for the decline – rising prices for RECs – is unlikely to abate as demand for RECs increases in order to meet state and local renewable energy requirements. There is a strong foundation of experience achieved from existing renewable energy projects and purchases to build

² Federal agencies generally purchase RECs in voluntary markets. RECs in voluntary markets are generally less expensive than in compliance markets where utilities are required to purchase renewable energy or RECs to meet minimum generation requirements. As more states enact renewable portfolio standards, more renewable energy development will be eligible to sell in compliance markets at higher prices. The increased cost of RECs is cited in DoD's FY08 Annual Energy Management Report as a major reason for the decline in their renewable energy use. An explanation of supply, demand and cost trends for renewable energy certificates in voluntary and compliance markets is available in *Emerging Markets for Renewable Energy Certificates: Opportunities and Challenges*, by Ed Holt and Lori Bird, National Renewable Energy Laboratory, August 2005.

upon. However, in order to continue to meet existing and future goals, the decline in renewable energy use from 2007 to 2008 must be reversed through more aggressive leveraging of financing mechanisms, pursuit of larger projects, and stronger management attention to increase acquisition of on-site projects. Agencies urgently need to increase attention to the renewable energy goal and take action to meet the goal.

8.0 Appendix A: Section 203 of the Energy Policy Act of 2005 SEC. 203. FEDERAL PURCHASE REQUIREMENT.

- (a) REQUIREMENT.—The President, acting through the Secretary, shall seek to ensure that, to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be renewable energy:
 - (1) Not less than 3 percent in fiscal years 2007 through 2009.
 - (2) Not less than 5 percent in fiscal years 2010 through 2012.
- (3) Not less than 7.5 percent in fiscal year 2013 and each fiscal year thereafter. (b) DEFINITIONS.—In this section:
 - (1) BIOMASS.—The term "biomass" means any lignin waste material that is segregated from other waste materials and is determined to be non-hazardous by the Administrator of the Environmental Protection Agency and any solid, non-hazardous, cellulosic material that is derived from—
 - (A) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, or non-merchantable material; (B) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste (garbage), gas derived from the biodegradation of solid waste, or paper that is commonly recycled;
 - (C) agriculture wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues, and livestock waste nutrients; or
 - (D) a plant that is grown exclusively as a fuel for the production of electricity.
 - (2) RENEWABLE ENERGY.—The term "renewable energy" means electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.
- (c) CALCULATION.—For purposes of determining compliance with the requirement of this section, the amount of renewable energy shall be doubled if—
 - (1) the renewable energy is produced and used on-site at a Federal facility;
- (2) the renewable energy is produced on Federal lands and used at a Federal facility; or
- (3) the renewable energy is produced on Indian land as defined in title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.) and used at a Federal facility. (d) REPORT.—Not later than April 15, 2007, and every 2 years thereafter, the Secretary shall provide a report to Congress on the progress of the Federal Government in meeting the goals established by this section.

(42 U.S.C. 15852)

9.0 Appendix B: FY 2008 Renewable Energy Consumption by Federal Agencies

Agency	Bonuses*	Purchased Electricity	Self- Generated RE	Total Renewable Electricity	Total Facility Electricity Use	Goal Progress
	MWH	MWH	MWH	MWH	MWH	Percentage
DOD	75595.5	723,148.8	75,813.9	874558.3	29730478.8	2.94%
EPA	94.1	149,433.1	94.1	149621.3	128306.5	116.61%
NASA	288.7	56,716.8	288.7	57294.1	1613847.0	3.55%
GSA	1195.5	186,795.2	2,928.8	190919.5	2874919.5	6.64%
DOE	1120.5	196,959.7	495.5	198575.6	4956568.1	4.01%
DOC	0.0	11,652.4	172.2	11824.6	332811.4	3.55%
DOI	8601.5	64,262.9	11,042.4	83906.8	678152.0	12.37%
VA	6353.6	116,363.3	6,353.6	129070.5	3175625.3	4.06%
USDA	446.3	15,912.0	1,414.2	17772.5	579118.2	3.07%
DHS	209.9	29,596.0	229.0	30034.9	820700.8	3.66%
HHS	0.0	29,130.7	0.0	29130.7	1020152.9	2.86%
TVA	11564.0	1,170.0	15,694.0	28428.0	523699.8	5.43%
TRSY	0.0	20,183.6	0.0	20183.6	414588.0	4.87%
DOL	0.0	8,782.4	0.0	8782.4	292590.5	3.00%
DOT	410.5	33,246.8	430.3	34087.6	829750.5	4.11%
DOJ	0.0	12,545.2	1,175.1	13720.3	1542218.3	0.89%
SSA	125.9	1,192.7	125.9	1444.5	189586.8	0.76%
USPS	2965.0	0.0	2,972.2	5937.2	6064059.8	0.10%
RRB	0.0	216.4	0.0	216.4	4328.6	5.00%
ST	0.0	2,852.0	0.0	2852.0	122333.3	2.33%
NARA	188.8	5,594.2	188.8	5971.8	91886.2	6.50%
HUD	0.0	717.2	0.0	717.2	23906.3	3.00%
TOTAL	109,159.7	1,666,471.4	119,418.7	1,895,049.9	56,009,628.9	3.38%

^{*}Bonuses can exceed self-generated renewable electricity if an agency purchases electricity from a project on Federal or Indian land that qualifies for the bonus. Purchases that qualify for the bonus are included in the purchased electricity total.

NOTE: EPA's purchase of Renewable Energy Certificates and other renewable energy consumption exceeds their facility electricity use because EPA made a commitment to offset all of its electricity consumption with clean energy sources and part of its non-electric energy consumption as part of their environmental mission.

10.0 Appendix C: FY 2007 Renewable Energy Consumption by Federal Agencies (Preliminary Data)

	Bonuses*	Purchased Electricity	Self- Generated RE	Total Renewable Electricity	Total Facility Electricity Use	Goal Progress
Agency	MWH	MWH	MWH	MWH	MWH	Percentage
DOD	67,848.1	1,154,454.48	417,621.50	1,639,924.08	29656103.1	5.53%
EPA	117.8	200,024.92	117.78	200,260.48	130422.6	153.55%
NASA	205.1	56,165.58	205.10	56,575.78	1610501.4	3.51%
GSA	900.1	226,901.76	988.73	228,790.61	2934656.4	7.80%
DOE	2,686.8	201,595.04	2,686.82	206,968.69	5048296.2	4.10%
DOC	60.7	9,456.06	60.72	9,577.50	315834.6	3.03%
DOI	2,753.2	103,945.10	5,206.60	111,904.90	613623.4	18.24%
VA	3,465.3	100,000.00	3,465.26	106,930.53	3128623.6	3.42%
USDA	443.9	57,808.34	1,540.00	59,792.24	569732.4	10.49%
DHS	209.9	29,095.76	229.04	29,534.69	729494.3	4.05%
HHS	250.2	13,965.74	4,650.64	18,866.54	973602.6	1.94%
TVA	7,542.0	1,170.00	11,772.00	20,484.00	532117.1	3.85%
TRSY	0.0	18,467.80	0.00	18,467.80	403747.2	4.57%
DOL	0.0	8,554.80	0.00	8,554.80	289449.3	2.96%
DOT	493.8	36,970.40	493.80	37,958.00	946175.7	4.01%
DOJ	0.0	4,392.00	1,115.50	5,507.50	1760928.4	0.31%
SSA	130.9	1,189.70	130.90	1,451.50	195000.0	0.74%
USPS	0.0	0.00	2,535.68	2,535.68	6582347.9	0.04%
RRB	0.0	183.00	0.00	183.00	4519.0	4.05%
ST	0.0	2,555.90	0.19	2,556.09	115020.9	2.22%
NARA	0.0	4,414.70	0.00	4,414.70	94497.3	4.67%
HUD	0.0	665.10	0.00	665.10	22169.9	3.00%
TOTAL	87,107.74	2,231,976.18	452,820.27	2,771,904.19	56,656,863.51	4.89%

^{*}Bonuses can exceed self-generated renewable electricity if an agency purchases electricity from a project on Federal or Indian land that qualifies for the bonus. Purchases that qualify for the bonus are included in the purchased electricity total.

NOTE: EPA's purchase of Renewable Energy Certificates and other renewable energy consumption exceeds their facility electricity use because EPA made a commitment to offset all of its electricity consumption with clean energy sources and part of its non-electric energy consumption as part of their environmental mission.

11.0 Appendix D: FY 2008 Federal Renewable Energy Consumption/Production Under Different Definitions

	<u></u>	5.36%	55.42%	11.17%	3.55%	2.69%	1.85%	28.34%	2.58%	1.51%	2.14%	1.19%	5.41%	3.26%	1.32%	4.30%	0.29%	0.49%	0.07%	2.11%	1.21%	3.54%	2.22%	4.59%
c and nc	% All Facility Energy	2	52	11	c	2	1	28	2	_	2	_	D.	e.	1	4	0	0		2	1	m	2	4.
nuses (electrio electric)	% Electricity	11.51%	154.38%	19.02%	%99.9	4.23%	3.56%	22.67%	6.73%	3.07%	3.78%	3.44%	5.43%	4.87%	3.00%	5.72%	0.89%	0.76%	0.10%	2.00%	2.33%	9:20%	3.00%	9.19%
All RE with Bonuses (electric and non- electric)	BBTU	11671.10	675.84	1047.11	652.89	714.91	40.40	1288.02	729.67	90.09	105.81	119.72	97.00	68.87	29.97	161.99	46.81	4.93	20.26	0.74	9.73	20.38	2.45	17569
	% Electricity BB	6.75%	135.42%	18.99%	6.61%	4.20%	3.56%	53.96%	5.20%	2.99%	3.69%	3.44%	3.22%	4.87%	3.00%	4.87%	%68:0	0.70%	0.05%	2.00%	2.33%	6.29%	3.00%	890'8
All RE No Bonuses	BBTU	9891.07	592.85	1045.92	648.08	710.85	40.37	1248.47	563.35	59.12	103.43	119.64	57.54	68.87	29.97	137.75	46.81	4.50	10.14	0.74	9.73	19.73	2.45	15411
EPAct + Thermal	% Electricity	5.94%	135.49%	19.01%	9:99	4.23%	3.56%	12.81%	5.40%	3.07%	3.72%	2.86%	5.43%	4.87%	3.00%	4.91%	0.89%	0.76%	0.10%	2.00%	2.33%	9:20%	3.00%	2.58%
EPAct +	BBTU	6023.77	593.17	1046.91	652.16	714.67	40.37	296.49	585.03	90.09	104.15	99.47	00'.00	18.89	29.97	139.15	46.81	4.93	20.26	0.74	9.73	20.38	2.45	19901
Old Disqualified	% Electricity	4.71%	0.00%	0.00%	0.00%	0.00%	0.00%	42.41%	0.00%	0.00%	0.00%	0.00%	0.00%	%00:0	0.00%	%00:0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.01%
J PIO	BBTU	4776.80	0.00	0.00	0.00	0.00	0.00	981.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5758
Old Qualified	% Electricity	1.17%	0.00%	1.08%	0.00%	0.21%	1.01%	1.28%	1.93%	0.78%	0.81%	1.50%	0.78%	1.16%	0.17%	0.38%	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.88%
) PIO	BBTU	1190.68	0.00	59.71	0.00	35.36	11.41	29.58	209.37	15.42	22.68	52.21	13.99	16.38	1.72	10.67	10.53	0.00	0.02	0.00	0.00	0.00	0.00	1679.74
t Eligible	% Electricity	2.94%	116.61%	3.55%	6.64%	4.01%	3.55%	12.37%	4.06%	3.07%	3.66%	2.86%	5.43%	4.87%	3.00%	4.11%	%68'0	0.76%	0.10%	2.00%	2.33%	9.20%	3.00%	3.38%
EPAct El	BBTU	2983.99	510.51	195.49	651.42	677.54	40.35	286.29	440.39	60.64	102.48	99.39	97.00	68.87	29.97	116.31	46.81	4.93	20.26	0.74	9.73	20.38	2.45	6465.91
Facility Energy and Electric Use	All Energy BBTU	217868.47	1219.50	9376.71	18366.04	26592.67	2182.39	4544.71	28290.01	4028.94	4936.39	10078.55	1793.06	2115.49	2271.17	3769.75	15974.85	1014.91	27057.91	34.96	804.24	575.17	110.47	383006.38 6465.91
Facility En Electri	Electricity BBTU	101440.39	437.78	5506.45	9809.23	16911.81	1135.55	2313.85	10835.23	1975.95	2800.23	3480.76	1786.86	1414.57	998.32	2831.11	5262.05	646.87	20690.57	14.77	417.40	313.52	81.57	191104.85
		000	EPA	NASA	GSA	DOE	D0C	DOI	٧A	USDA	DHS	HHS	TVA	TRSY	DOL	DOT	DOJ	SSA	USPS	RRB	ST	NARA	HUD	TOTAL