THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release July 25, 1998

July 25, 1998

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

SUBJECT: Cutting Greenhouse Gases through Energy Savings Performance Contracts

My Administration has made addressing the threat of global climate change one of our top environmental priorities. As the Nation's largest consumer of the fossil fuels that scientists believe are driving global warming, the Federal Government has a special responsibility to lead in developing clean energy solutions and in reducing Federal energy consumption. While Government-wide energy saving activities over the last several years have resulted in significant achievements, we can and should do more.

On March 9, 1994, I issued Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities, which directed all executive agencies to reduce energy consumption 30 percent below 1985 levels by the year 2005. We have made significant strides, but in order to achieve this goal we must make better use of a critical energy management tool. Energy Saving Performance Contracts (ESPCs), which are authorized under the National Energy Conservation Policy Act, as modified by the Energy Policy Act of 1992, provide significant opportunities for making Federal buildings more energy efficient at little or no cost to taxpayers. Under ESPC authority, agencies can contract with private energy service companies to retrofit Federal buildings with no up-front payments by the Government. These companies recover their costs from a negotiated share of the energy cost savings, with the remaining savings being returned to the contracting agency and to taxpayers. The Federal Government must make more use of these highly cost-effective contracts.

I therefore direct all Federal agencies to maximize use of this authority by the year 2000, when the authority expires. I also

direct the Department of Energy (DOE) to lead an interagency effort to develop a legislative proposal extending ESPC authority past the year 2000. As part of this effort, I direct all agencies to identify and propose areas for expansion of ESPC authority -- for instance, as appropriate, to some leased buildings, mobility, and other Federal assets. In addition, I direct agencies to propose ways to procure electricity produced using cost-effective renewable sources.

While ESPC authority has existed for some time, I have encouraged significant steps to streamline and promote greater use of this tool. To this end, the DOE and the Department of Defense (DOD) have negotiated contracts with energy service companies over most regions of the country. These ESPCs currently allow up to $5 billion worth of projects at Federal facilities within these regions. The DOE and the DOD anticipate that by the end of this year they will negotiate contracts allowing an additional $2.7 billion worth of such work in specific regions. The combined $7.7 billion provides, in effect, the total dollar amount of retrofit projects that Federal agencies can complete at their facilities using ESPCs. In addition, the DOE anticipates negotiating over $1 billion for ESPCs to finance the installation of renewable energy and other efficient technology systems in the near future.

To further compliance with this directive, I have asked the Office of Management and Budget to provide new guidance to agencies that will help remove barriers and provide more incentives for using ESPCs. This guidance will change the budgetary treatment of these contracts to be consistent with the unique statutory authority for ESPCs. Specifically, the full amount of budget authority for the contract will no longer be needed up front, but can be made available over a number of years. In addition, this guidance will encourage agencies to permit up to 50 percent of the energy savings from ESPCs to remain at the facility or site where they occur. Both of these policies will help motivate Federal energy managers to make greater use of ESPCs and reduce agency operating costs.

To make use of this authority, Federal facilities need to contact the DOE or the DOD to engage contractors already pre-approved to complete ESPC work. Agencies can also consider using direct appropriations or contract with their local utilities. I also direct Federal agencies to maximize efforts to earn an ENERGY STAR label, demonstrating to the public that they rank in the top 25 percent for building energy efficiency. Combining energy savings contracting authority with utility programs and agency funded efforts can save taxpayers as much as one billion dollars a year in energy costs over the next 15 years, and can reduce greenhouse gas emissions by up to 3 million metric tons of carbon

annually.

To ensure the full use and benefits of ESPC authority, I further direct each executive agency to submit to me, in the next 90 days, a memorandum detailing:

1. Your agency's accomplishments in reducing energy consumption since 1985, and your plans to reduce energy consumption 30 percent below 1985 levels by 2005, in compliance with Executive Order 12902;

2. Your agency's plans to use ESPCs and other tools, as well as your plans to achieve ENERGY STAR labels for your facilities, as part of your increased attention to saving money through energy efficiency and renewable energy;

3. Your proposals on how to expand the Federal Government's use of these tools, for inclusion in our request to the Congress for extending ESPC authority beyond the year 2000; and

4. Your strategy for encouraging use of ESPCs and other financing mechanisms to install renewable energy production systems -- such as those called for in the Million Solar Roofs Initiative.

WILLIAM J. CLINTON

# # #

PRESIDENT CLINTON'S
TEN POINT FEDERAL ENERGY EFFICIENCY INITIATIVE

The Federal government is the nation's largest energy consumer *with an annual bill of $8 billion. Significantly reducing this cost* cuts Federal spending, reduces pollution, and helps deploy energy efficient and renewable technologies. In addition, we make our nation more secure by cutting our reliance on foreign oil and by capturing significant cost savings at the Department of Defense --the government's single largest energy consumer --which can be turned back into direct military expenditures. Significant strides have already been made over the last decade, but much more remains to be done. Today, President Clinton announced three central parts of his pledge to have the federal government lead in *energy efficient management practices.*

Expand Use of Energy Savings Performance Contracts

Energy Savings Performance Contracts (ESPCs) and other tools such as agreements with utilities use private investment capital and expertise to accomplish energy and cost saving projects in Federal facilities. Private sector firms invest in federal energy efficiency improvements and are repaid from the delivered cost savings. All additional savings accrue to the government.

- Today, the President issued a directive to all cabinet agencies to expand the use of these contracts by Federal agencies, *and announced that the Departments of Defense and Energy have made ____ of new contracting authority available. Together with today's announcement, up to $6 billion of Federal contracting authority is available for energy saving investments.*

- *The President's directive sets a goal of* $X billion in contracts to be signed, *by the year 2000 for a energy savings for taxpayers* of $XXX million per year, and over 2.2 million tons of carbon reduction annually.

- *The President* will ask the Cabinet for recommendations within 60 days for expanding these waste busting tools to *buildings leased by the Federal government, vehicles and other Federal assets*, and will seek Congressional *support and* authority to use these tools into the 21st century.

- The Federal government will *seek to boost agency participation in these money saving techniques and encourage partnerships with private sector suppliers* at a Federal Energy *Efficiency Workshop and Exposition in Bellvue, Washington on August 3-5.. Called ENERGY 98, this* Workshop is expected to draw thousands of participants.

Sustainable Design in new Federal Buildings

The Department *of Defense* has taken the lead in *adopting* "sustainable design" *principles for* all its new building construction, *beginning in FY 2000. Their plan will mean that new*

*construction at the Department of Defense will use up to*50% less energy than *similar* buildings, *resulting in annual energy savings of over 500 billion BTUs and over $5 million. The* President announced that the Departments of Energy, Transportation, *the National Park Service, the Postal Service, the Environmental Protection Agency,* and the General Services Administration, will join forces with DOD to commit that all new building construction will be done adopting "sustainable design" principles. The President asked all other agencies to work to incorporate these principles into their own new construction.

- The Department of Defense, the federal government's largest single energy user, has already constructed XX facilities using these principles, reaping an estimated $XX savings in energy costs. DOD expects *to build 16 million square feet of new facilities in each of the early years of the next decade. Applying sustainable design to this construction would save over 500 billion BTUs in annual energy costs,* with an ultimate cost savings to taxpayers of $5 billion per year.

- *The President directs all Federal agencies to participate in the Federal Energy Star Buildings Program Partnership. Participating agencies commit to pursue energy-efficient, cost-effective, environmentally beneficial building technologies and procedures. Seven Agencies have joined, representing 91% of the total square footage in the Federal buildings inventory.*

Federal lighting purchasing and retrofit campaign

The enormous purchasing power of the federal government can not only set an important example, but also can have a significant impact on helping drive down the per unit cost of important energy saving equipment. Enormous energy savings, for instance, can be gained by simply switching from inefficient incandescent bulbs *to* more efficient compact fluorescent lights (CFLs). CFLs produce the same amount and quality of light, using a quarter the energy of incandescent bulbs, and last XX as long.

- The President announced that the Federal government will purchase and use 100,000(??) CFLs each year, for the next three years. This will produce an annual cost savings in electricity costs of $XXX million, as well as a savings of XX MMT of CO2.

- The President also set a goal of replacing XX old-style florescent tubes with more modern replacements, particularly through *the use of* ESPCs. This will produce a cost-savings of $XXX million, and prevent the emission of XX MMT of CO2.

In addition to these efforts, *announced today*, the President *said* he will hold a Cabinet meeting in *the early Fall* to kick off the remaining aspects of the Federal Energy Efficiency initiative. These include:

- ***Transportation Initiatives for Federal* Vehicles:** *One third of Federal energy use occurs in the transportation sector. Interagency working groups are meeting at the*

President's direction to review federal energy use in this sector and to propose innovative solutions to reduce fuel use, to encourage alternative fuel use, to maximize use of public transit by federal employees and other issues.

- **Improve Federal Procurement of Energy Efficient Technologies --Looking Beyond First Cost.** Provide high-level Administration support and direction for agencies to buy energy efficient *products and services.* Under current practice, many Federal agencies buy products based on the lowest first cost, without calculating the long-term costs associated with their use. These practices waste energy and taxpayer dollars over time. While agencies are required to consider life-cycle costs when undertaking large retrofits or purchasing major equipment, this financial analysis is not *always* used with smaller product purchases. Efforts to change this pattern have begun and *will* be encouraged by Administration officials and procurement rules.

- **Energy Efficient Windows -Helping Federal Agencies Stay Warm in Winter and Cool in Summer.** The Administration will support new efforts to improve the use of energy efficient windows in Federal buildings. The new DOE/EPA ENERGYSTAR recommendations for residential windows, as well as efforts to include energy efficiency in Federal guide specifications for commercial scale windows, can help Federal agencies choose the most energy efficient windows for new construction and retrofits. By following the ENERGY STAR recommendations, Federal agencies can significantly reduce their heating and cooling energy needs when they purchase windows for new buildings, or replace windows during renovations of existing buildings.

- **Establish Standards for Federal Purchase of Renewable Energy.** Over the course of *this fiscal year, the Federal government will issue over $2.0 million in funding for solar and other renewable technologies for use by the Federal government. The President will direct that ESPCs for renewable technologies be issued and used where appropriate. Also the President has asked that over* the next year, the Federal Government establish standards to ensure a percentage of electricity used by the Federal government is generated from renewable resources. The restructured electric marketplace gives customers, including the Federal government, the opportunity to develop renewable energy projects and purchase green power in meeting part of their energy needs.

- **Expand Federal Use of Combined Heat and Power Technologies.** Combined heat and power systems generate multiple types of power, including electricity, steam, chilled water, and mechanized energy using the same fuel source. These systems can provide significant energy savings as well as environmental benefits compared with traditional power systems. This initiative will highlight the energy savings and greenhouse gas reductions Federal agencies already contribute through use of these technologies at many sites, demonstrate new applications and provide technical information to encourage expanded use of these technologies.

- ***Report Greenhouse Gas Emissions.*** *The President has directed that each Federal agency track and report its overall greenhouse gas emissions. As part of a process of reviewing, consolidating and reinventing Executive Orders, a working group will respond to the President's directive with a plan to collect this information, along with other information essential to the Administration and Congress to enable the assessment of progress in reducing the Federal energy bill and documenting the Federal government contribution to reducing pollution.*

- ***Complete Federal agency audits.*** *Federal agencies are required to audit their facilities for energy use and potential for improvement. The President has asked that Federal agencies accelerate completion of these audits.*

PRESIDENT CLINTON:
LEADING THE FIGHT AGAINST GLOBAL WARMING
JUNE 3, 1999

President Clinton, in a Cabinet meeting today, issued an Executive Order to help meet the challenge of global warming by dramatically improving energy efficiency in Federal buildings. By 2010, the resulting energy savings will reduce annual greenhouse gas emissions by 2.4 million tons – the equivalent of taking 1.7 million cars off the road – and save taxpayers over $1 billion a year. As a prime example of the savings that can be achieved, the President also announced a major contract to retrofit over 800 buildings at five military installations in the Washington, D.C. area, saving taxpayers over $150 million [a year].

Leading by Example. The Federal Government is the nation's largest power consumer with an annual energy bill of over $8 billion – more than $4 billion to heat, cool and power its 500,000 buildings. Federal agencies already have reduced energy consumption 15% per square foot below 1985 levels. Today's order builds on that progress by:

Setting Aggressive Goals – The Order requires federal agencies to achieve by 2010:
35% greater energy efficiency in buildings relative to 1985 levels;
30% cut in greenhouse gas emissions from building-related energy use relative to 1990 levels.

Mobilizing Cutting-Edge Strategies -- The Order directs agencies to make greater use of:
Energy Saving Performance Contracts, in which private contractors make energy-saving improvements on federal facilities at their own expense and receive a portion of the resulting savings.
Life-cycle cost analysis, so agencies see the long-term savings from energy investments;
ENERGY STAR & other energy efficient products, everything from light bulbs to boilers;
Renewable energy technologies and sources (solar, wind, geothermal, and biomass).

Strengthening Accountability -- The Order requires that annual scorecards evaluating agency progress be submitted to the President; gives OMB, in consultation with the Department of Energy, oversight authority, and directs agencies to appoint energy management teams to help meet the goals of the Order.

Concrete Steps, Concrete Savings. The partnership announced today between the Department of Defense and Viron/Pepco Energy Services – the largest energy-saving performance contract ever awarded – will cut energy in 837 buildings at Ft. Belvoir, Ft. A.P. Hill, Ft. Meyer, Ft. McNair, and Ft. Meade. ~~Other examples of energy-saving actions to be accelerated under today's order include:~~ ignore

Aaa
Bbb
Ccc
Ddd

Incentives For Businesses and Homeowners, Too. To help American businesses and consumers reap the same kinds of energy and cost savings, the President today also calls on Congress to enact his proposed **$3.6 billion package of tax incentives** for the purchase of energy efficient homes, appliances, cars, and energy from renewable sources.

Q. What Does this Executive Order Do?

A. The Executive Order signed by the President directs Federal agencies to undertake new energy efficiency activities that will achieve real financial savings to the government and benefits to our environment. The EO directs agencies to:

- improve energy efficiency in Federal buildings by 35% over 1985 levels by 2010;
- reduce greenhouse gas emissions resulting from building energy use by 30% relative to 1990 levels by 2010;
- expand use of renewable energy technologies and electricity from renewable energy sources.

Meeting these goals will reduce greenhouse gas emissions by an amount equal to [X] million metric tons of carbon (MMTCE) – the equivalent of taking over 2 million cars off the road or planting XX acres of trees.

The EO also provides a framework to hold agencies accountable for their progress in meeting its goals; identifies tools through which agencies can meet the goals of the order; promotes renewable energy technologies, such as solar, wind, geothermal, and biomass.

Q. How is This Order Different Than Previous Orders?

A. Unlike previous energy efficiency orders, the Executive Order that the President signed today contains a specific carbon reduction goal. The inclusion of a carbon goal ensures that agencies will not merely concern themselves with reducing energy use, but will also concern themselves with reducing emissions of greenhouse gases.

The Executive Order also identifies specific tools that agencies can use to reach the goals established by the order. Such tools include the use of alternative financing contracting mechanisms, including Energy Savings Performance Contracts and utility energy-efficiency service contracts; the use of ENERGY STAR® and other energy efficient products; the adoption of facilities to meet ENERGY STAR® Building criteria for energy performance and indoor environmental quality; the use of sustainable design principles when siting, designing, and constructing new facilities; the use of leases that incorporate provisions that encourage energy and water efficiency; and the use of off-grid generation systems, including solar hot water, solar electric, solar outdoor lighting, small wind turbines, fuel cells, and other off-grid alternatives.

The Executive Order also increases public accountability by mandating the issuance of agency scorecards that will identify those agencies that are meeting the goals of the order, and those agencies that have fallen behind.

Finally, this Executive Order recognizes that many of the decisions that affect the government's consumption of energy are made by individuals throughout the Federal government – individuals who have competing responsibilities and mandates to meet. In order to heighten their sensitivity to energy efficiency issue, this order established a mechanism for recognizing those federal employees who demonstrate leadership in meeting the important goals of this order.

Q. Doesn't This Order Just Amount to a Slight (5%) Uptick in the Energy Efficiency Goal Already Required by 12902?

A. No. This order not only increases the energy efficiency gains that agencies must obtain by 200_, the order also directs them to reduce their emissions of greenhouse gases within that same time period. Moreover, we believe that it is important that the government continue to strive to maintain its trend of increasing the energy-efficiency of its operations.

Q. How Much Success Have You Had With the Previous Orders (like 12902)? Which Agencies are Complying and Which Aren't?

A. The Federal government's progress in meeting the goals established in Executive Order 12902 is mixed. While 6 major agencies are on track to meet the goals set out in the order, several other agencies, including some of the largest consumers of energy (i.e., DOD, Postal Service, Department of Veterans Affairs, and the General Services Administration) are not currently making sufficient progress to meet the goal. We believe, however, that the tools identified in the new order, and the increased level of importance attached to this issue will enable all agencies to meet the goals in the new order.

Q. Are you on track to meet the goals in 12902? If not, why are you proposing even tougher goals? What makes you think you'll be able to meet them?

A. Although certain agencies are not on track to meet the current goals, we believe that it is important that the Federal government demonstrate leadership and commit to refocusing on achieving this critical goal. We believe that the tools identified in the new order, and the increased level of emphasis that agencies will place on achieving the goals of the new order will enable all agencies to meet the goals in the new order.

Q. Isn't a 30% reduction of greenhouse gases below 1990 levels unrealistic? How will the government reduce by 30% when the rest of the country only has to do 7%, under Kyoto?

A. A 30 percent reduction in greenhouse gases below 1990 levels for the Federal

government is quite realistic. The government is already 14 percent below 1990 level because of a combination of efficiency improvements and downsizing. We believe that further government downsizing, combined with aggressive implementation of cost-effective efficiency improvement measures will enable the government to meet its goal.

Q. Isn't a 30% reduction goal for ghg a sham since you're going to get there anyway as long as you meet the energy reduction goals already in 12902?

A. ???

Q. What is OMB going to do in its oversight role that DOE hasn't done to assure compliance?

A. By giving OMB the responsibility for overseeing agency compliance with the Executive Order, we are elevating the goals and directions contained in the order to a higher level of importance and visibility. We believe that this will make it easier for federal energy managers to obtain the support within their agencies necessary to undertake energy-efficient projects.

Q. Isn't this EO a paper tiger? Don't agencies have a "cost-effectiveness" out for most everything you're asking them to do?

A. Although agencies are not directed to implement measures that are not cost-effective, we believe that there are numerous opportunities for energy efficient improvements throughout the government that are also cost-effective. Further, the Executive Order identifies a suite of tools that will allow agencies to undertake cost-effective measures that will also improve energy efficiency. Even if agencies undertake only those measures that are cost-effective, we are confident that the government can meet the goals set out in this order.

Q. Isn't This Executive Order Going to Cost Agencies Money They Don't Have? Who is Going to Finance the Higher Up-Front Costs for the Green Products You're Telling Agencies to Buy?

A. This Executive Order will not cost agencies money that they do not have. We believe that the Federal government can meet the goals set out in this order by making cost effective investments in energy efficient products and the adoption of cost effective management practices.

Some of the investments will be paid for by private energy management companies that sign energy saving performance contracts with the Federal government. Private firms that enter into such contracts will pay the cost of upgrades to efficient equipment and will be paid back from the savings in energy costs over the lifetime of the equipment. We expect that agencies will pay for other projects once they recognize the long-term benefit of making wise investments.

Q. How Are Agencies Supposed to Afford Additional Renewable Energy When it Costs More than Conventional Energy?

A. Although customers currently pay a premium for renewable energy, the Federal government believes that by increasing the demand for renewable energy, it can reduce the cost so that it will be more affordable for all Americans.

Moreover, although power companies may currently charge more for renewable energy than non-renewable energy, the overall costs of renewable energy may compare favorable with non-renewables when the external costs of non-renewable energy are included in the overall calculation. In other words, by purchasing renewable energy the government will be working to reduce the level of power plant emissions, the level of power plant construction in our communities, and the environmental harm caused by mining, drilling, and other methods by which non-renewable energy sources are developed. Once all of these costs are considered, we believe that the overall cost of renewable energy compares favorably with traditional non-renewable energy.

Q. What is the Point of the Agency Scorecards? Are They Going to Be Made Public?

A. Agency scorecards will serve as a measure of compliance with the Executive Order. They are also intended to highlight agency progress in meeting the order's goals.

By sharing its progress with the public, the Federal government will demonstrate leadership in achieving economic savings and the reduction of greenhouse gas and other emissions through the use of energy efficient equipment and practices throughout the economy.

DOD-Viron/Pepco Energy Saving Performance Contract
June 1999

In conjunction with the signing of a new Executive Order to promote energy efficiency, President Clinton announced today the Pentagon's award of the Federal government's largest-ever Energy Saving Performance Contract (ESPC), under which Viron Energy Services/Pepco Energy Services (Viron/Pepco) will upgrade the energy performance of 837 Federal buildings at no up-front cost to taxpayers. The 18-year service contract, covering five military installations in the Washington, DC area, will save over $150 million in energy costs, while reducing ~~annual~~ each year greenhouse gas emissions by ~~an amount equal to~~ almost 24,000 metric tons of carbon (MTCE) – equivalent of taking X [thousand] cars off the road.

Energy Saving Performance Contracts – Energy Savings at No Cost to Taxpayers

The new Executive Order directs Federal agencies to maximize their use of ESPCs -- innovative financing mechanisms that mobilize private sector investment and expertise to save energy and save money in Federal facilities. Under ESPC authority, Federal agencies hire private energy service companies to conduct energy audits of facilities, propose energy saving retrofits, and privately finance, install, and maintain retrofits. There are no up-front payments by the government and contractors are paid from a share of the savings, with the remaining savings accrue to the agency.

Real Savings and Real Environmental Benefits

The energy upgrades under the new contract will be done at five installations in the Army's Military District of Washington – Ft. Belvoir, Ft. A.P. Hill, Ft. Meyer, Ft. McNair, and Ft. Meade. These measures will save money and improve the environment. In particular, these measures will:

- Avoid almost 24,000 MMTCE of greenhouse gas emissions annually – a 26% reduction;
- Save taxpayers over $150 million in energy costs **($16 million annually OR $5 million annually)** a 17% savings; **[viron/pepco – call me on this]**
- Reduce (annual) electricity use by 89 million kilowatt hours (kWh) of energy (annually); choose one
- Reduce fuel use by 294,000 million British Thermal Units (MMBTUs) annually; and,
- Save over 50 million gallons of water annually.
- Reduce ~~pollutants that cause~~ smog and acid rain by [150] metric tons annually

These improvements to buildings and equipment will support Army operations well into the next century, without the need for additional funding, and will provide more comfortable living conditions and improved quality of life for those who live and work at the five installations.

Energy Efficiency Measures to be Taken

Expected energy efficiency measures include:

- ***Cooling system retrofits.*** Some 888 cooling units will be replaced or retrofitted, cutting energy use in 343 buildings, reducing associated energy costs by over $1 million annually and annual

DOD-VIRON/PEPCO ENERGY SAVING PERFORMANCE CONTRACT
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annual greenhouse gas emissions by 4,900 MTCE.

- ***Air Handling Units.*** Replacement and retrofitting of air handling units in 126 buildings will reduce annual energy consumption by 14 million kWh. This will mean annual savings of $742,000 and 3,500 MCTE of greenhouse gas emissions avoided each year.

- ***Lighting Retrofits or Replacement.*** Some 142,600 light fixtures will be replaced or retrofitted in 714 buildings, reducing annual energy consumption by 29.8 million kWh, saving $1.4 million annually, and reducing annual greenhouse gas emissions by 4,800 MTCE.

- ***Central Heating Plant Upgrade.*** Two central steam plants will be replaced with new gas fired boilers, reducing annual fuel use by 138,000 MMBTU, saving $655,000 annually, and reducing annual greenhouse gas emissions by 2,900 MTCE.

- ***Central Cooling Plant Upgrade.*** A new absorption chiller and chilled water distribution line will be installed at one site, reducing annual electricity use by approximately 270,000 kWh and saving $21,000 annually.

- ***Water Conservation.*** Water consumption and waste water will be reduced in 213 buildings through replacement existing plumbing equipment with ultra low-flow units, saving approximately 50.5 million of gallons annually, or $195,000.

Administration Efforts to Expand ESPC Use

While ESPC authority has existed since 1992, President Clinton has taken significant steps to streamline and promote greater use of this tool. Streamlined contracts – known as "Super ESPCs" -- put in place by the DOE and DOD have accelerated large investments in energy projects at **[dozens? Hundreds?]** of Federal facilities. Super ESPCs allow all agencies and facilities to place delivery orders under an umbrella contracts, substantially reducing the lead time to contract with an energy services company. There are two types of Super ESPCs: regional and technology specific. Regional specific contracts cover a designated geographic area; technology specific contracts are in effect nationwide for a particular emerging technology, such as solar collectors.

In the last year, the Department of Energy has awarded almost $6 billion in ESPC contracting authority to 44 private contractors to perform energy and cost saving work. Projects have been designed and awarded that will mobilize $28.7 million of private investment to perform energy saving work in Federal agencies. The contractors will be paid from the $62.5 million projected savings. Well over a hundred agreements are currently under negotiation as this alternative financing tool for energy and taxpayer savings becomes more commonly used by Federal agencies. Other agreements are also under negotiation with utility contractors and under the Department of Defense contracts which are also available for use by the rest of the Federal government.

The DOD-Viron/Pepco ESPC is the largest by far of any ever awarded by the Federal government

and serves as a model for other agencies to replicate in implementing the President's new Executive Order.

[It is estimated **[BY WHOM?]** that ESPCs can cut emissions by 2 million metric tons of greenhouse gases and save taxpayers as much as $700 million a year.] **[Unless there is something very good, we should delete this sentence. Joan – I got this sentence from the Buenos Aires fact sheet I put together on Federal energy, meaning someone at DOE cleared on it – do you know where it's from?]**

DOD's Partnership With Viron/Pepco

With the assistance of the Department of Energy's National Renewable Energy Lab, DOD sought bids from private sector experts to provide solutions to the energy needs of the Military District of Washington. DOD's Defense Energy Support Center chose Viron/Pepco to provide a range of services including energy engineering, equipment installation, construction supervision, and measurement and verification. Under the contract, all capital investments will be made within the first three years of the contract and Viron/Pepco will be paid from a share of the verified energy savings resulting directly from its conservation measures.

More than 2,800 buildings on the five installations were examined for possible energy improvements. Under the contract, over 40 percent of the buildings currently in use will benefit from one or more of the slated improvements and upgrades in the initial task order. The contract is also structured so that either the government or Viron/Pepco can suggest additional conservation measures for the remaining buildings.

John D. Gibson
04/02/99 09:53:10 AM

Record Type: Record

To: See the distribution list at the bottom of this message

cc:
Subject: new dod fact sheet

dodespc5.doc PLEASE READ ASAP -- we need clearance on this by noon. DoD -- Viron/Pepco: you must go over each line carefully and sign off on the numbers. There are still a couple of question marks. In particular, see numbers associated with specific ecms and the cost savings.

Message Sent To:

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White House Climate Change Task Force

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FACSIMILE TRANSMISSION SHEET

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Office Number		**Office Number**	395-2310

Comments:

Pages: 6 **, including this cover sheet.**

IF TRANSMITTAL IS INCOMPLETE, PLEASE PHONE

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Office		**Date**	
Fax Number		**Fax Number**	395-2342
Office Number		**Office Number**	395-2310

Comments:

Pages: _____ **, including this cover sheet.**

IF TRANSMITTAL IS INCOMPLETE, PLEASE PHONE

FEDERAL LEADERSHIP ON CLIMATE CHANGE & ENERGY EFFICIENCY
JUNE 1999

President Clinton, in a Cabinet meeting today, issued an Executive Order to help meet the challenge of global warming by dramatically improving energy efficiency in Federal buildings. By 2010, the resulting energy savings will reduce annual greenhouse gas emissions by 2.4 million tons – the equivalent of taking 1.7 million cars off the road – and save taxpayers over $1 billion a year. As an example of the savings that can be achieved, the President also announced today a major contract to retrofit 837 buildings at 5 military installations in the Washington, D.C. area, saving taxpayers over $150 million in energy costs. [opening paragraph will be put in box]

Executive Order Sets Example For Nation

Aggressive Goals. The Federal Government is the nation's largest energy consumer with an annual energy bill of over $8 billion. Actions to date have reduced energy consumption per square foot in Federal buildings by 15% relative to 1985 levels. Today's order will extend this progress, requiring:

- **35% greater energy efficiency** in Federal buildings relative to 1985 levels by 2010; and,
- a **30% reduction in greenhouse gas emissions** from buildings relative to 1990 levels by 2010 -- the first-ever Federal goal tied to greenhouse gas emissions.

Cutting-Edge Tools and Strategies. Today's Order directs agencies to make greater use of:

- **Energy Saving Performance Contracts (ESPCs) & Utility Contracts**, in which contractors are paid out of the savings resulting from energy improvements they propose and install. To date, the Department of Energy (DOE) and the Department of Defense (DOD) have put in place over $6 billion in ESPC contract authority (available for all agencies to use);
- **Life-cycle cost analysis**, so agencies consider the real, long term cost of energy investments;
- **ENERGY STAR & other energy efficient products**, everything from light bulbs to boilers;
- **Renewable energy** technologies and sources (solar, wind, geothermal, and biomass).

Accountability. There will be close coordination among the Federal Energy Management Program, the President's Management Council, OMB, and agencies in meeting the Order's requirement's. Scorecards evaluating each agency's progress will be submitted annually to the President.

Examples of Real Progress

The partnership between DOD and Viron/Pepco Energy Services for building improvements is by far **the largest ESPC ever awarded**. Other recent Federal actions of the type today's Order is designed to foster and accelerate, include: [HOLD FOR INSERT – 4 bullets]

- Aaa
- Bbb
- Ccc
- Ddd

President Calls On Congress To Act

American businesses and homeowners can reap substantial by taking steps similar to the measures called for in today's Executive Order. To spur this process, the President calls on Congress to enact his proposed **$3.6 billion package of tax incentives** for consumers and businesses purchasing energy efficient homes, appliances, cars, and energy from renewable sources.

Executive Order #XXXXX:
Greening the Government through Efficient Energy Management
DRAFT – May 28, 1999/ 2-4 pager

Saving Taxpayer Dollars while Improving the Environment

Executive Order #xxxxx continues President Clinton's drive to make the Federal government a leader in addressing the challenge of global of climate change and managing energy use wisely. Meeting the Order's aggressive energy efficiency goals will result in over $1 billion in annual savings to taxpayers by 2010, expand markets for renewable technologies, reduce air pollution, and reduce greenhouse gas emissions that contribute to global warming by an amount equal to 2.4 million metric tons of carbon – the equivalent of taking 1.7 million cars off the road.

Aggressive New Goals

The Federal government, working toward goals established under prior legislation and Executive Orders, has already reduced its energy consumption per square foot in Federal buildings by over 15% from 1985 levels. However, tremendous energy and cost savings, as well as environmental benefits, can still be achieved. Executive Order #xxxxx builds on the Federal government's progress to date, extends current goals, and sets new goals for greenhouse gas reductions, renewable energy use, and water conservation.

- New Energy Efficiency Goal for Facilities
  The Order requires each Federal agency to improve its energy efficiency in Federal buildings by 35 percent relative to 1985 levels by 2010. (Current goal is 30 percent by 2005.)

- New Energy Efficiency Goal for Industrial and Laboratory Facilities
  The Order requires each Federal agency to improve its energy efficiency in industrial and laboratory facilities by 25 percent by 2010. (Current goal is 20 percent by 2005.)

- New Greenhouse Gas Reduction Goal
  The Order requires each Federal agency to reduce greenhouse gas emissions that result from building energy use by 30 percent relative to 1990 levels by 2010.

- Expanded Use of Renewable Energy
  The Order requires Federal agencies to expand their use of renewable energy technologies and electricity from renewable energy sources, such as solar, wind, geothermal, and biomass. Building on the President's commitment to 20,000 Federal solar energy systems by 2010, the Order calls for new investments in renewable energy through applications of solar, wind, geothermal, and biomass technologies at Federal facilities and through the purchase of electricity from renewable energy sources.

- Water Conservation
  The Order calls for Federal agencies to improved their water efficiency, not only to reduce water consumption, but also to reduce associated energy use. The Order requires the

Department of Energy to work with other Federal agencies to develop water consumption baselines and then set appropriate goals for water conservation.

- Fewer Exempt Facilities
  Under current practice, a large number of facilities are exempt from meeting Federal energy goals. Under this Order, all facilities are subject to these goals and requirements unless they meet new exemption criteria to be developed by the Department of Energy. In addition, in their Annual Report to the President, each agency must report all exempt facilities and explain the rationale for excluding them from Federal energy goals.

Cutting-Edge Tools and Strategies

The Order calls for agencies to use a wide range of energy management tools and strategies to fulfill the new energy efficiency, renewable energy, and greenhouse gas reduction goals.

- Life-Cycle Cost Analysis
  It is critical that Federal agencies recognize the importance of considering the full cost of their investments, including energy, operation and maintenance costs, not simply the purchase cost of projects or products. To date, agencies have generally only invested in projects that pay for themselves within 10 years. But, if a piece of equipment has a general working life of 25 years, then the costs over its full life must be taken into account when making investment decisions. By taking all costs into account, agencies can save money and energy. To that end, the Order requires agencies to consider life-cycle costs – that is, investment costs, capital costs, installation costs, energy costs, operating costs, maintenance costs, and disposal costs, over the life of the project or product.

- Alternative Financing
  Financing options, like Energy Savings Performance Contracts (ESPCs) and utility energy efficiency service contracts, offer Federal agencies a powerful tool for leveraging private sector financing to fund cost-saving energy improvements at no net cost to taxpayers. Under ESPCs, private sector energy service companies finance the up-front cost of purchasing and installing new energy efficient equipment. The Federal government uses a portion of the savings it accrues through reduced energy bills to repay the energy service company over the life of the contract. Contractors then receive a predetermined share of the value of the energy savings generated by their efforts, and may be paid only if actual savings result from the reduced energy use. All additional savings accrue to the government. The government benefits from new equipment, reduced energy costs, improved energy efficiency, reduced greenhouse gas emissions, and conservation of nonrenewable fuels.

  To date, the Department of Energy and Department of Defense have put into place over $6 billion in ESPC contract authority -- available for all Federal agencies to fund energy improvements. In addition, many of these contracts are "Super ESPCs" which rely on the same principals as regular ESPCs but offer an umbrella contract to allow expedited service. The Order calls for agencies to maximize their use of ESPCs and utility energy efficiency service contracts to realize energy and cost savings.

- Highly Efficient Energy Systems
  This Order calls for agencies to make greater use of highly efficient energy systems, including combined heat and power systems that use "waste" heat from industrial processes to supply power to other needs. These types of systems can offer not only tremendous energy and cost savings, but also significant environmental benefits.

- Off-Grid Electricity Generation
  This Order requires agencies to consider off-grid electricity opportunities that often provide energy and environmental benefits, while allowing agencies to avoid the costs of build new transmission lines or digging up existing lines. Off-grid options can be particularly effective in remote locations, including in our National Parks. The systems range from solar outdoor lighting to small wind turbines and fuel cells.

- Sustainable Building Design
  In July 1998 as part of the President's radio address on Federal energy issues, a number of Federal agencies committed to constructing sustainably-designed buildings. This Order requires all Federal agencies to apply sustainable design principles to the siting, design, and construction of new facilities and thereby save energy, save taxpayer dollars, and reduce pollution.

- ENERGY STAR® and Other Energy Efficient Products
  The Order calls for agencies to purchase ENERGY STAR® and other energy efficient products. These products, ranging from compact fluorescent light bulbs to highly efficient boilers, can save Federal agencies **millions of dollars**???.

- Electricity from Renewable Energy and Energy Efficient Sources
  Given that over **50?????** percent of the Federal government's energy costs in buildings comes from electricity, the Order requires agencies to consider the source of their electricity and opt for cleaner, more efficient electricity generation. Specifically, the Order calls for agencies to minimize the greenhouse gas intensity of purchased electricity. In addition, agencies must adopt policies to increase the use of electricity from renewable energy sources.

Greater Agency Accountability

The Order provides a framework to hold agencies accountable for their progress in Federal energy management. The following new management strategies and reporting requirements will help ensure that all Federal agencies manage energy use wisely and reap great benefits for the economy and the environment for years to come.

- Annual Reports to the President and Annual Score Cards
  Under the Order, each Federal agency must submit an Annual Report to the President to describe its progress in meeting the goals of this Order. In addition, the Deputy Director for Management of the Office of Management Budget will evaluate each agency's performance and submit agency score cards to the President. The score card evaluations will consider agencies' progress toward the energy efficiency, renewable energy, and

greenhouse gas goals. The score cards will also take into account how effectively agencies have used key energy management tools and strategies.

- President's Management Council
  The President's Management Council, which generally consists of Deputy Secretaries from all agencies, will monitor agencies' progress on Federal energy management and provide a high-level forum for identifying ways to accelerate improvements.

- Agency Energy Teams
  Each agency must form a technical energy support team within 90 days to ensure that energy management strategies are implemented across all facilities. These energy teams will bring together legal, procurement, and other essential agency representatives to expedite activities that will lead to energy and cost savings.

- Funding for Energy Management Activities
  While smart energy management will lead to taxpayer savings in the long run, initial agency investments are needed in order to implement energy savings performance contracts and purchase energy efficient equipment among other cost-savings activities. Therefore, the Order calls for agencies to consider the full range of their energy management responsibilities and include these costs in their budget requests.

- New Public/Private Advisory Committee
  The Order calls for the Department of Energy to organize an advisory committee to bring together private and public sector experts who can advise agencies on how to improve their energy management practices. The Committee will include representatives from energy service companies, utility companies, equipment manufacturers, and other private, non-profit, and public sector organizations that focus on energy issues.

Shelley.Fidler@ee.doe.gov
05/28/99 05:25:11 PM

Record Type: Record

To: John D. Gibson/WHCCTF/EOP

cc:
Subject: ESPC Material

In the last year, the Department of Energy has awarded almost $6 billion in contracting authority to 44 private contractors to perform energy and cost saving work. In a 12 month period, projects have been designed and awarded that will utilize $28.7 million of private investment to perform energy saving work in Federal agencies. The contractors will be paid from the $62.5 million projected savings. Well over a hundred agreements are currenly under negotitation as this alternative financing tool for energy and taxpayer savings becomes more commonly used by Federal agencies. Other agreements are also under negotitation with utility contractors and under the Department of Defense contracts which are also available for use by the rest of the Federal government

What is an Energy Savings Performance Contract (ESPC)?

ESPC is a financing mechanism in which a private sector energy service company finances the up-front cost of purchasing and installing new energy efficient equipment. The Federal government uses a portion of the savings it accrues through reduced energy bills to repay the energy service company over the life of the contract. Using private capital, the contractors design, purchase, install and maintain energy efficiency improvement projects at the facility. Contractors then receive a predetermined share of the value of the energy savings generated by their efforts, and may be paid only if actual savings result from the reduced energy use. All additional savings accrue to the government. The government benefits from new equipment, reduced energy costs, improved energy efficiency, reduced greenhouse gas emissions, and conservation of nonrenewable fuels.

Describe how the contracting authority is awarded.

DOE and DOD put regional contracts in place whereby energy service companies (ESCOs) are pre-selected to deliver energy services. A Federal agency requiring energy services will develop site-specific requirements and a delivery order using Super ESPC guidelines. All Federal agencies that have government-owned facilities can use the ESPC vehicle. Agencies may select one ESCO or request proposals from more than one ESCO without advertising the procurement. Given the umbrella ESPCs and the streamlined process, demands on agency resources to develop and award contracts should be greatly reduced and energy savings should be realized more quickly.

Describe the competitive process.

The process for selecting and awarding the Super ESPC contracts is competitive. Energy service companies are given an opportunity to access the federal government energy market using conventional procurement practices for announcing, negotiating and awarding the work. Awards were made to multiple contractors for each of the regional Super ESPCs entered into to date.

List existing and planned authority.

Planned contracting authority through ESPCs -- including DOE regional contracts, technology specific contracts, and DOD contracts -- totals over $9 billion. This amounts to $7.7 billion in general ESPCs and $1.32 billion in technology-specific ESPCs.

The total contract authority of DOD ESPC contracts is $3.2 billion. The total contract authority of DOE's regional contracts is $4.5 billion. Finally, the total contract authority of technology-specific ESPCs is $1.32 billion.

To date, DOE has awarded four regional contracts -- with a total of $3 billion in contract authority. The Western Region Super ESPC was awarded in May 1997 and the Southeastern Region Super ESPC was awarded in January 1998. This month, DOE awarded the Central and Midwest Regional Super ESPCs. Two additional contracts -- providing another $1.5 billion in contract authority -- will be awarded in the Northeast and Mid-Atlantic regions

by the end of this year.

The DOD/Army Super Regional ESPCs awarded, in a 4-state region, seven contracts in January 1997; the 46-state Super Regional ESPC awarded eleven contracts in August 1997. Together they provide authority for $2 billion of contractor investment. In June 1998, the DOD/Navy Caribbean Regional ESPC awarded a single ESPC contract providing authority for $22 million.

DOE plans to award two more regional contracts, valued at $1.5 billion. The DOD/Air Force plans to award six regional ESPCs providing authority for $1.2 billion of investment in October 1998.

The six regional DOE awards plus the DOD regional awards that will be issued by October 1998 represent about $7.7 billion of contracts with the private sector.

NOTE: For the DOE part: $4.5 billion means that half (2.25) goes toward investment. Savings amount to 4 times the investment level(2.25) – therefore, 9 billion in savings. Half of that savings goes to the contractor; half remains with the feds. So, $4.5 billion results in $9 billion in savings, $4.5 of which is saved by the taxpayers.

Will it all be awarded by end of 1998?

All of the DOD and DOE regional Super ESPCs will be awarded by the end of the 1998 calendar year. These contracts total $7.7 billion in contracting authority.

In addition, the technology specific Super ESPCs, which value over $1.3 billion, will be awarded over the next few years. Some of these contracts have already been awarded. Almost $500 million of this contract authority will be used to finance renewable energy projects.

What is the contracting authority?

All federal agencies that have government-owned facilities have the authority to enter into ESPCs by virtue of the authorizing legislation: P.L. 102-486, Energy Policy Act of 1992, Codified as 42 USC 8287 of NECPA for civilian agencies. DOD authorizing language is found in 10 USC 2865, Energy Savings at Military Installations.

Does every agency and then every facility need to engage in a competitive process to choose a contractor?

Under the Super ESPCs, agencies select contractors through a more streamlined process, given that a smaller number of qualified suppliers and providers have already been chosen through a competitive process. Agencies take into account the specific projects needed and can use commercial style procedures to compare and select among qualified suppliers.

How can DOE and DOD offer a program to all other federal agencies?

The Department of Defense (DOD) and the Department of Energy (DOE) have streamlined the contracting process by putting in place regional ESPC multiple award contracts, that are available for use to all executive agencies and the Architect of the Capitol. All other Congressional agencies and Judicial agencies currently do not have the authority to enter into ESPCs such as the Government Printing Office.

Why has the program been slow to deliver?

Previously, energy conservation projects were implemented primarily through direct appropriations. The process of implementing the same projects through ESPCs and third party financing is relatively new and completely different.

Management and contracting, technical, legal, and financial staff must understand and familiarize themselves with the process to carry out a successful project. DOE has provided a solution by developing the Super ESPC vehicle that any Federal agency can use. DOE is offering workshops that teach agencies how to use the Super ESPCs. DOE also provides technical, legal, and contracting assistance and expertise on a reimbursable basis.

How many projects have been completed?

Since the late eighties, 61 energy savings performance contracts have been awarded. These projects were carried out using the conventional contracting approach where each facility undertook its own contracting.

How many projects are in the pipeline?

Thirteen projects -- that were specifically included as part of the requests for proposals for the regional ESPCs sites -- are in the pipeline. In addition, under the Western region Super ESPC alone, which was the first regional ESPC awarded, there are more than 60 projects under development. The demand for projects is even greater in other regions. Although the new Super ESPCs have only recently been awarded, demand for services is impressive and already exceeds the number of projects implemented under conventional ESPCs since the late eighties.

Why did we pick $7.7 billion?

DOE and DOD analyzed the need for energy efficiency and renewable energy projects across all Federal facilities. This analysis also considered the potential for funding projects through utility contracts and appropriations. Based on this analysis, DOE and DOD calculated that $7.7 billion in ESPC authority would be necessary for Federal agencies to reach the Federal goal of a 30 percent reduction in energy use per square foot by 2005, relative to 1985 levels.

How do we know we'll spend $7.7 billion by 2005 given our past record?

The Federal government is instituting an aggressive approach to accelerate the use of these contracts. OMB's guidance, along with the Presidential directive, encourage agencies to actively

use the ESPCs to generate energy and cost savings at their facilities. With active agency participation, the Federal government can implement energy improvements and use the full $7.7 billion in contract authority. As demonstrated in just the past year, Federal agencies are interested in using the Super ESPCs to cut their costs, improve their facilities, and cut emissions. We are fully committed to training energy and procurement managers and working at all levels of the Federal government to make these savings a reality.

What are Super ESPCs and how did they come to be?

In order to expedite the contracting process, DOE began a process of putting regional contracts in place that all agencies can use. These contracts, known as Super Energy Saver Performance Contracts, allow all agencies and facilities to place delivery orders under the umbrella contracts in order to undertake individual energy improvement projects. Super ESPCs are similar to conventional ESPCs and use the same general contract terms and provisions. Agencies can use Super ESPCs to purchase equipment, products, and services that increase energy efficiency and solve environmental problems. Like conventional ESPCs, acquiring private-sector funding is a primary feature of the Super ESPC.

Super ESPCs differ from conventional ESPCs in two fundamental ways. First, a Super ESPC covers a large geographic territory; a conventional ESPC is used for a specific site. Second, Super ESPCs substantially reduce the lead time to contract with an ESCO for energy services.

DOE has two types of Super ESPCs: regional and technology specific. Regional Super ESPCs are designated for a certain geographic region. Technology specific Super ESPCs typically cover the entire nation and emphasize a particular emerging technology such as solar collectors.

What does Congress have to authorize?

Current ESPC authority expires April 10, 2000. In order to continue ESPC activities, Congress needs to extend the ESPC authority. Congress should expand ESPC authority to include water conservation, mobility, leased federal buildings, non-federal facilities and state and local government facilities.

How does an agency use the contracting authority?

DOD is working with its installations in the Army and Air Force to notify them of the existing and planned authority and assist them in carrying out projects under these contracts. DOE is informing all agencies of the new contract authority through its DOE regional support offices and other outreach vehicles. DOE's contractors in the field are also approaching agencies to advise them of the opportunities now available through the Super ESPCs.

Interested Federal agencies can make use of the ESPC authority by placing delivery orders that allow the pre-selected energy service companies to carry out specific energy improvements. DOE

and DOD are working with agencies to provide them with information packages and assist them in evaluating offers, negotiating the terms and conditions of orders, and managing the projects. Agencies have to notify Congress if an individual project will exceed $750,000.

How will the President's announcement and OMB guidance speed up the program to this dramatic extent.

The President's announcement and directive will highlight the Federal government's responsibility to use energy resources wisely, cut greenhouse gas emissions, and set an example for the nation. The OMB guidance, along with the Presidential directive, direct agencies to use ESPCs more widely in achieving energy savings. In particular, the President's directive requests that agencies outline their plans for using ESPCs and accomplishing the Federal goal of reducing energy consumption 30 percent below the 1985 levels. The directive and guidance will help in encouraging agencies to attend to this important concern and be accountable for their involvement.

Provide a listing of current projects and those in the pipeline.

See attached.

Benefits of OMB Guidance

Agencies look to OMB as the lead authority for management and contracting policy matters. OMB's guidance on the use of ESPCs will help clarify at all levels how to use this contracting mechanism. OMB's efforts to simplify budgetary accounting principles with regard to agency accounting for ESPCs will provide enormous benefits to agencies and increase their use of ESPCs.

Executive Order #XXXXX:
Greening the Government through Efficient Energy Management
DRAFT – May 28, 1999/ 2-4 pager

Saving Taxpayer Dollars while Improving the Environment

Executive Order #xxxxx continues President Clinton's drive to make the Federal government a leader in addressing the challenge of global of climate change and managing energy use wisely. The Federal Government spends $8 billion on energy costs each year -- with over $4 billion for energy expenses in its 500,000 buildings. Meeting the Order's aggressive energy efficiency goals will result in over $1 billion in annual savings to taxpayers by 2010, expand markets for renewable technologies, reduce air pollution, and reduce greenhouse gas emissions that contribute to global warming by an amount equal to 2.4 million metric tons of carbon – the equivalent of taking 1.7 million cars off the road.

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9175 Guilford Road Suite 216
Columbia Maryland 21046
Phone: 410-792-9777 Fax: 410-792-9445

Viron Energy Services

Fax

To: JOHN GIBSON From: LARRY TRYBUS

Fax: 202-395-2342 Pages: 2

Phone: Date: 6/1/99

Re: CC:

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

I will call with explanation of the increase to $219 mm in savings.

2nd Fax

3rd Fax - Changes to ESPC press release.

DOD Awards Energy Saving Performance Contract

TO VIRON/ PEPCO ENERGY SERVICES

JUNE 1999

In conjunction with the issuance of the Executive Order #xxxxx, the Department of Defense (DOD) is awarding an Energy Saving Performance Contract (ESPC) to Viron Energy Services/Pepco Energy Services (Viron/Pepco) for building improvements throughout the U.S. Army's Military District of Washington (MDW).

Annual $15,945

Viron Energy Services is a subsidiary of York International Corporation (NYSE:YRK), York, PA, and Pepco Energy Services is a subsidiary of Potomac Electric Power Co. (NYSE: POM), Washington, DC.

This contract will result in over $219 million in MDW cost savings to taxpayers – making it the largest ESPC ever executed by a Federal agency. Over the 18 year life of the contract, it will also reduce emissions of greenhouse gases that contribute to global warming by an annual amount equal to [86,000] metric tons of carbon dioxide (MTCE) – the equivalent of taking X million cars off the road.

2,988
69
150

ESPCs – Energy Savings at No Cost to Taxpayers

Executive Order #xxxxx directs Federal agencies to make greater use of ESPCs, which are innovative financing mechanisms that leverage private sector investment and expertise to accomplish energy and cost-saving projects in Federal facilities at no net cost to taxpayers. Under ESPC authority, Federal agencies contract with private energy service companies to audit facilities, propose energy saving retrofits, and privately finance, install, and maintain retrofits. There are no up-front payments by the government and contractors are paid from a share of the savings, with the remaining savings returned to the taxpayers and the agency.

219,889
68,466
over 150

DOD's Partnership With Viron/Pepco

The partnership between DOD and Viron/Pepco came about through the efforts of the Defense Logistics Agency's Defense Energy Support Center (DESC), the MDW, and its five installations in the Washington, DC area – Ft. Belvoir, Ft. A.P. Hill, Ft. Meyer, Ft. McNair, and Ft. Meade. Drawing on the expertise of the Department of Energy's (DOE) Energy's National Renewable Energy Laboratory (NREL), DESC issued a commercial solicitation which encouraged private sector experts to provide installation-wide optimum solutions to the MDW's energy needs. Using "best value" buying techniques, DESC determined that Viron/Pepco's bid provided the greatest overall benefits to the Government in the areas of energy engineering, equipment installation, construction supervision, and measurement and verification. Viron, a recognized national energy services company is teamed with Pepco Energy Services, a utility owned regional energy services company to undertake this ESPC partnership with DOD. Under the contract, all capital investments will be made within the first three years of the contract and

Viron/Pepco will be paid from a share of the verified energy savings resulting directly from its conservation measures.

Real Savings and Real Environmental Benefits

More than 2,800 buildings on the five installations were examined for possible energy improvements. Under the contract, over 40 percent of the buildings currently in use will benefit from one or more of the slated improvements and upgrades in the initial task order. The contract is also structured so that either the government or Viron/Pepco can suggest additional conservation measures for the remaining buildings. Highlights of work to be performed include(S omit) retrofits of:

- 142,600 lighting fixtures;
- 888 cooling systems;
- 5 central cooling and heating systems; and,
- Over 10,000 [sensors] providing inputs for over 430 energy management control systems.

These improvements to buildings and equipment will support Army operations well into the next century (without the need for additional funding) and will provide more comfortable living conditions and improved quality of life for those who live and work at the five installations. They will also, of course, result in significant fiscal and environmental benefits, including:

- 86,000 MTCE of greenhouse gas emissions avoided annually - a 26% reduction;
- Over $100 million in energy savings for taxpayers (over $5.5 million annually or 17%);
- Over 50 million gallons of water will be saved annually;
- 89 million kilowatt hours (kWh) of energy we be saved annually; and,
- Over 599,000 MMBTUs will be saved annually.

Energy Conservation Measures to be Taken

Fuller descriptions of some of the more prominent (specific omit) energy conservation measures are provided below.

- ***Cooling System Retrofits.*** A total of 888 cooling units will be replaced or retrofitted, cutting energy use in 343 buildings and reducing associated energy costs by over $1 million annually.

- ***Air Handling Units.*** Replacement and retrofitting of air handling units in 126 buildings will reduce energy consumption by 14 million kWh. This will mean annual savings $742,000 and 3,300 MCTE of greenhouse gas emissions avoided each year.

- ***Lighting Retrofits or Replacement.*** Some 142,600 light fixtures will be replaced or retrofitted in 714 buildings, reducing energy consumption by 29.8 million kWh, saving $1.4 million annually, and reducing greenhouse gas emissions by [17,800] MTCE. [Not clear which numbers are annual and which are not.]

- ***Water Conservation.*** Water consumption and waste water will be reduced in 213 buildings

through replacement existing plumbing equipment with ultra low-flow units, saving approximately 50.5 million of gallons annually, or $195,000.

- ***Central Heating Plant Upgrade.*** Two central steam plants will be replaced with new gas fired boilers, avoiding fuel use of 138,000 MMBTU and saving $655,000 annually.

- ***Central Cooling Plant Upgrade.*** A new absorption chiller and chilled water distribution line will be installed at one site, saving approximately 270,000 kWh and $21,000 annually.

Administration Efforts to Expand ESPC Use

While ESPC authority has existed since [1992], President Clinton has taken significant steps to streamline and promote greater use of this tool. Streamlined contracts put in place by the DOE and DOD have already accelerated large investments in energy projects at many Federal facilities. In July 1998, DOE announced $1.5 billion in new ESPC contract authority, bringing to $5 billion the total amount of ESPC authority currently available to Federal agencies. Last year the President directed Federal agencies to develop proposals on ways in which ESPC authority can be expanded, and Congress voted to renew existing ESPC authority through 2002. [more complete ESPC information to be provided by Joan G.]

It is estimated that ESPCs can cut emissions by 2 MMTCE and save taxpayers as much as $700 million a year. In addition to the DOD-Viron/Pepco contract, other significant ESPCs announced by the Federal government over the past year include: [waiting for material to be inserted].

About Viron Energy Services
Based in Kansas City, MO, Viron Energy Services is an engineering-based energy services company specializing in energy performance contracting and turnkey energy retrofit services. Viron is also a DOD 46 State Super ESPC awardee. Viron is an independently operated, wholly owned subsidiary of York International, the largest independent supplier of HVAC&R equipment in the U.S. and a leading competitor internationally.

About Pepco Energy Services
Pepco Energy Services, the unregulated subsidiary of Potomac Electric Power Company (Pepco), was founded in 1995 to provide comprehensive energy solutions for large energy users throughout the Mid-Atlantic region. Pepco Energy Services offers cost savings through design, installation, and financing of energy efficiency projects; competitively priced electric and natural gas; operations and maintenance services; and energy information services. Customers include government agencies, property management firms, hospitals, universities and other large energy users.

DOD-VIRON/PEPCO ENERGY SAVING PERFORMANCE CONTRACT

JUNE 1999

In conjunction with the ~~President's~~ signing of a new Executive Order to promote energy efficiency, the Pentagon ~~is today announcing~~ the Federal government's largest-ever Energy Saving Performance Contract (ESPC), under which Viron Energy Services/Pepco Energy Services (Viron/Pepco) will upgrade the energy performance of over ~~1000~~ Federal buildings at no cost to taxpayers. The 18-year service contract, covering five military installations in the Washington, DC area, will save over $150 million in energy costs, while reducing greenhouse gas emissions by an amount equal to 24,000 metric tons of carbon – equivalent of taking X [thousand] cars off the road.

Energy Saving Performance Contracts – Energy Savings at No Cost to Taxpayers

The new Executive Order directs Federal agencies to maximize their use of ESPCs -- innovative financing mechanisms that ~~use~~ private sector investment and expertise to save energy and save money in Federal facilities. Under ESPC authority, Federal agencies hire private energy service companies to audit facilities, propose energy saving retrofits, and privately finance, install, and maintain retrofits. There are no up-front payments by the government and contractors are paid from a share of the savings, with the remaining savings returned ~~to [the taxpayers and]~~ the agency.

Real Savings and Real Environmental Benefits

The energy upgrades under the new contract will be done at five installations in the Army's Military District of Washington – Ft. Belvoir, Ft. A.P. Hill, Ft. Meyer, Ft. McNair, and Ft. Meade. These measures will save money and improve the environment. In particular, these measures will:

- Avoid ~~86,000~~ metric tons of greenhouse gas emissions annually – a 26% reduction;
- Save [taxpayers] over ~~$190~~ million in energy ~~savings~~ ($5.5 million annually) a 17% savings;
- Save over 50 million gallons of water annually;
- Save 89 million kilowatt hours (kWh) of energy annually;
- Save over 599,000 million [MBTUs] annually.

These improvements to buildings and equipment will support Army operations ~~well into~~ the next century, without the need for additional funding, and will provide more comfortable living conditions and improved quality of life for those who live and work at the five installations.

Energy Efficiency Measures to be Taken

Expected energy efficiency measures include:

- ***Cooling system retrofits.*** Some [888] cooling units will be replaced or retrofitted, cutting energy use in 343 buildings and reducing associated energy costs by over $1 million annually.

- ***Air Handling Units.*** Replacement and retrofitting of air handling units in 126 buildings will reduce energy consumption by 14 million kWh. This will mean annual savings $742,000 and 3,100 MCTE of greenhouse gas emissions avoided each year.

- ***Lighting Retrofits or Replacement.*** Some 142,600 light fixtures will be replaced or retrofitted in 714 buildings, reducing energy consumption by 29.8 million kWh, saving $1.4 million annually, and reducing greenhouse gas emissions by [~~17,800~~] MTCE. [Not clear which numbers are annual and which are not.]

- ***Water Conservation.*** Water consumption and waste water will be reduced in 213 buildings through replacement existing plumbing equipment with ultra low-flow units, saving approximately 50.5 million of gallons annually, or $195,000.

- ***Central Heating Plant Upgrade.*** Two central steam plants will be replaced with new gas fired boilers, avoiding fuel use of 138,000 MMBTU ~~and~~ saving $655,000 annually.

- ***Central Cooling Plant Upgrade.*** A new absorption chiller and chilled water distribution line will be installed at one site, saving approximately 270,000 kWh ~~and~~ $21,000 annually.

Administration Efforts to Expand ESPC Use

While ESPC authority has existed since [1992], President Clinton has taken significant steps to streamline and promote greater use of this tool. Streamlined contracts put in place by the DOE and DOD have already accelerated large investments in energy projects at many Federal facilities. In July 1998, DOE announced $1.5 billion in new ESPC contract authority, bringing to $5 billion the total amount of ESPC authority currently available to Federal agencies. Last year the President directed Federal agencies to develop proposals on ways in which ESPC authority can be expanded, and Congress voted to renew existing ESPC authority through 2002. [more complete ESPC information to be provided by Joan G.] **[Needs to be redone. Explain Super ESPCs on regional basis, etc.]**

It is estimated **[BY WHOM?]** that ESPCs can cut emissions by 2 million metric tons of greenhouse gases and save taxpayers as much as $700 million a year. **[Unless there is something very good, we should delete this sentence.** In addition to the DOD-Viron/Pepco contract, other significant ESPCs announced by the Federal government over the past year include: [waiting for material to be inserted].

DOD's Partnership With Viron/Pepco

With the assistance of the Department of Energy's National Renewable Energy Lab, DOD sought bids from private sector experts to provide solutions to the energy needs of the Military District of Washington. DOD's Defense Energy Support Center chose Viron/Pepco to provide a range of services including energy engineering, equipment installation, construction supervision, and measurement and verification. Under the contract, all capital investments will be made within the first three years of the contract and Viron/Pepco will be paid from a share of the verified energy

savings resulting directly from its conservation measures.

More than 2,800 buildings on the five installations were examined for possible energy improvements. Under the contract, over 40 percent of the buildings currently in use will benefit from one or more of the slated improvements and upgrades in the initial task order. The contract is also structured so that either the government or Viron/Pepco can suggest additional conservation measures for the remaining buildings.

FEDERAL LEADERSHIP ON CLIMATE CHANGE & ENERGY EFFICIENCY
JUNE 1999

President Clinton, in a Cabinet meeting today, issued an Executive Order to help meet the challenge of global warming by dramatically improving energy efficiency in Federal buildings. By 2010, the resulting energy savings will reduce annual greenhouse gas emissions by 2.4 million tons – the equivalent of taking 1.7 million cars off the road – and save taxpayers over $1 billion a year. As an example of the savings that can be achieved, the President also announced today a major contract to retrofit 837 buildings at 5 military installations in the Washington, D.C. area, saving taxpayers over $150 million in energy costs.

Executive Order Sets Example For Nation

Aggressive Goals. The Federal Government is the nation's largest energy consumer with an annual energy bill of over $8 billion. Actions to date have reduced energy consumption per square foot in Federal buildings by 15% relative to 1985 levels. Today's order will extend this progress, requiring:

- **35% greater energy efficiency** in Federal buildings relative to 1985 levels by 2010; and,
- a **30% reduction in greenhouse gas emissions** from buildings relative to 1990 levels by 2010 -- the first-ever Federal goal tied to greenhouse gas emissions.

Cutting-Edge Tools and Strategies. Today's Order directs agencies to make greater use of:

- **Energy Saving Performance Contracts (ESPCs) & Utility Contracts**, in which contractors are paid out of the savings resulting from energy improvements they propose and install. To date, the Department of Energy (DOE) and the Department of Defense (DOD) have put in place over $6 billion in ESPC contract authority (available for all agencies to use);
- **Life-cycle cost analysis**, so agencies consider the real, long term cost of energy investments;
- **ENERGY STAR & other energy efficient products**, everything from light bulbs to boilers;
- **Renewable energy** technologies and sources (solar, wind, geothermal, and biomass).

Accountability. There will be close coordination among the Federal Energy Management Program, the President's Management Council, OMB, and agencies in meeting the Order's requirement's. Scorecards evaluating each agency's progress will be submitted annually to the President.

Examples of Real Progress

The partnership between DOD and Viron/Pepco Energy Services for building improvements is by far **the largest ESPC ever awarded**. Other recent Federal actions of the type today's Order is designed to foster and accelerate, include: [HOLD FOR INSERT – 4 bullets]

- Aaa
- Bbb
- Ccc
- Ddd

President Calls On Congress To Act

American businesses and homeowners can reap substantial by taking steps similar to the measures called for in today's Executive Order. To spur this process, the President calls on Congress to enact his proposed **$3.6 billion package of tax incentives** for consumers and businesses purchasing energy efficient homes, appliances, cars, and energy from renewable sources.

and serves as a model for other agencies to replicate in implementing the President's new Executive Order.

[It is estimated **[BY WHOM?]** that ESPCs can cut emissions by 2 million metric tons of greenhouse gases and save taxpayers as much as $700 million a year.] **[Unless there is something very good, we should delete this sentence. Joan – I got this sentence from the Buenos Aires fact sheet I put together on Federal energy, meaning someone at DOE cleared on it – do you know where it's from?]**

Have you this in reference Fed. energy bill of $8B

DOD's Partnership With Viron/Pepco

With the assistance of the Department of Energy's National Renewable Energy Lab, DOD sought bids from private sector experts to provide solutions to the energy needs of the Military District of Washington. DOD's Defense Energy Support Center chose Viron/Pepco to provide a range of services including energy engineering, equipment installation, construction supervision, and measurement and verification. Under the contract, all capital investments will be made within the first three years of the contract and Viron/Pepco will be paid from a share of the verified energy savings resulting directly from its conservation measures.

More than 2,800 buildings on the five installations were examined for possible energy improvements. Under the contract, over 40 percent of the buildings currently in use will benefit from one or more of the slated improvements and upgrades in the initial task order. The contract is also structured so that either the government or Viron/Pepco can suggest additional conservation measures for the remaining buildings.

Executive Order #XXXXX:
Greening the Government through Efficient Energy Management
DRAFT – May 24, 1999

Improving Federal Energy Efficiency and Reducing Greenhouse Gases

Today the President signed an Executive Order that significantly strengthens the federal government's ability to reduce energy consumption, improve air quality, and meet the challenge of global climate change. On October 27, 1997, the President said, "We must reinvent how the federal government, the nation's largest energy consumer, buys and uses energy." This Executive Order sets aggressive goals, provides essential tools, and lays a foundation for the Federal government to lead the nation in energy efficiency.

With this Executive Order, agencies will –

- improve energy efficiency in Federal buildings by 35 percent by 2010 relative to 1985 levels;
- reduce greenhouse gas emissions that result from building energy use by 30 percent by 2010 relative to 1990 levels; and,
- expand use of renewable energy technologies and electricity from renewable energy sources.

Tremendous Cost, Air Quality, and other Environmental Benefits

Enhanced action on Federal energy management will translate into tremendous savings for taxpayers and significant environmental improvements. By meeting the new goals and commitments set forth in the Executive Order, the Federal government will save taxpayers approximately $1 billion each year from energy efficiency in buildings alone by 2010. And, these energy improvements will result in air quality benefits -- the equivalent of taking over 2 million cars off the road or planting XX acres of trees.

Providing Tools and Accountability to Advance Smart Federal Energy Management

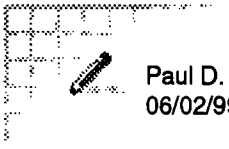
The Executive Order offers a wide range of strategies and tools to assist agencies in meeting these important goals. Most importantly, the Order calls for agencies to work closely with private and public partners, such as energy service companies and utilities, to achieve dramatic Federal energy and cost savings. Agencies can leverage private sector investment to fund energy improvements and then pay back the investment with a portion of guaranteed savings.

The Order also provides a framework to hold agencies accountable for their progress in Federal energy management. Agency performance will be evaluated in annual score cards and each agency must submit an annual report to the President to describe their progress in meeting the goals of this Order. The Office of Management and Budget, along with the President's

Management Council and key Federal departments, will provide the leadership and technical assistance necessary to help agencies reap great benefits for the economy and the environment for years to come.

Promoting the Use of Clean, Efficient, and Renewable Energy Technologies

As part of a comprehensive strategy for improved Federal energy management, the Executive Order encourages agencies to use emerging energy management tools, including sustainable building design, off-grid electricity generation, combined heat and power, and industrial process improvements. Building on the President's commitment to 20,000 Federal solar energy systems by 2010, the Executive Order calls for new investments in renewable energy through applications of solar, wind, geothermal, and biomass technologies at Federal facilities and through the purchase of electricity from renewable energy sources. The Order reinforces the requirement for agencies to purchase ENERGY STAR® and other highly efficient products and thereby significantly reduce Federal energy costs. And, the Order's charge to agencies to invest in water conservation will result not only in water savings, but lower energy costs.



Paul D. Glastris
06/02/99 08:14:03 PM

Record Type: Record

To: See the distribution list at the bottom of this message

cc:
Subject: draft of tomorrow's statement--comments back ASAP please

Draft 6/02/99 8:00 p.m.
Glastris

PRESIDENT WILLIAM J. CLINTON
STATEMENT AFTER CABINET MEETING
ROSE GARDEN, THE WHITE HOUSE
June 3, 1999

Acknowledgments: Sec. Shalala; Sec. Riley; Dep. Att. Gen. Holder

I have just had a very informative and productive meeting with my Cabinet. We discussed range of issues of vital importance to the American people and to the future of our nation. I want to highlight two of them.

First, we discussed new actions I am taking today to deal with what I called in my State of the Union Address "our most fateful" environmental challenge: global warming. Almost every month we see disturbing new evidence of climate change. Scientist now believe that 1998 was likely the warmest year in a millennium. Whole species of frogs are disappearing from the cloud forests of Costa Rica because the air there is getting hotter and drier. In the Arctic, the permafrost has started to warm and the sea ice is shrinking. These are alarming signs. Yet some still insist that the vast majority of scientists are simply wrong and that we should do nothing, while others call for a raft of new regulations and big energy taxes. I believe there is a third way, a better way: invest in technologies that reduce greenhouse gases while also spurring economic growth. Many of those technologies are on hand right now.

The federal government, as the nation's single largest consumer of power, has an obligation to lead the way. That is why today I am directing all federal departments and agencies to take steps that will dramatically improve the energy efficiency of federal buildings. With new technologies and contracts with private firms, the federal government will be able to cut its greenhouse gas emissions by 30 percent. That is the equivalent of taking 1.7 million cars off the road. By taking these steps, we can also save taxpayers over ~~a billion~~ 750 million dollars a year.

As a prime example of these environmental and fiscal benefits, I am also pleased to announce that the Defense Department will award by the end of this month the largest energy-saving contract in the history of the federal government. Under this contract, the

This innovative approach makes sense for the budget . . . for the environment . . . and for the nation.

This award will save money -- it involves no up-front payments because the contractors will be paid from future savings, which will amount to over $200 million.

This award will help save the environment -- the reductions in annual greenhouse gas emissions will be as if we took 1.7 million cars off the road.

This award – as does the President's Executive Order – sets a new standard for environmental protection.

President Clinton and Vice President Gore have worked hard to prove that environmental protection and economic growth need not be *mutually exclusive*, but can be *mutually reinforcing*.

The same is true with the military – we can, and we will, protect America's *environmental* security while protecting our *national* security.

GREENING THE GOVERNMENT EFFICIENT ENERGY MANAGEMENT
JUNE 3, 1999

The Executive Order issued by President Clinton today helps meet the challenge of global warming by dramatically improving energy efficiency in Federal buildings. By 2010, the resulting energy savings will reduce annual greenhouse gas emissions by 2.4 million tons – the equivalent of taking 1.7 million cars off the road – and save taxpayers over $750 million a year. The Order will also expand markets for renewable technologies, reduce air pollution, and serve as a powerful example to American businesses and consumers who can reap substantial benefits from energy improvements.

Aggressive New Goals

The Federal Government is the nation's largest energy consumer with an annual energy bill of over $8 billion – more than $4 billion to heat, cool, and power its 500,000 buildings. Federal agencies have already reduced energy consumption 17% per square foot relative to 1985 levels. Today's order builds on that progress, extending current energy efficiency goals and setting new goals for greenhouse gas reductions, renewable energy use, and water conservation.

- **New Energy Efficiency Goal for Facilities.** The Order requires each Federal agency to improve its energy efficiency in Federal buildings by 35 percent relative to 1985 levels by 2010. (Current goal is 30 percent by 2005.)

- **New Energy Efficiency Goal for Industrial and Laboratory Facilities.** The Order requires each Federal agency to improve its energy efficiency in industrial and laboratory facilities by 25 percent by 2010. (Current goal is 20 percent by 2005.)

- **New Greenhouse Gas Reduction Goal.** The Order requires each Federal agency to reduce greenhouse gas emissions that result from building energy use by 30 percent relative to 1990 levels by 2010. This is the Federal Government's first-ever goal tied to greenhouse gas reductions.

- **Expanded Use of Renewable Energy.** The Order requires Federal agencies to expand their use of renewable energy technologies and electricity from renewable energy sources, such as solar, wind, geothermal, and biomass. Building on the President's commitment to install 20,000 Federal solar energy systems by 2010, the Order calls for new investments in renewable energy through applications of solar, wind, geothermal, and biomass technologies at Federal facilities and through the purchase of electricity from renewable energy sources.

- **Water Conservation.** The Order calls for Federal agencies to improve their water efficiency, not only to reduce water consumption, but also to reduce associated energy use. The Order requires the Department of Energy (DOE) to work with other Federal agencies to develop water consumption baselines and then set appropriate goals for water conservation.

- **Fewer Exempt Facilities.** Under current practice, a large number of facilities (accounting for

17% of building energy use) are exempt from meeting Federal energy goals. Under this Order, all facilities are subject to these goals and requirements unless they meet new exemption criteria to be developed by DOE. In addition, in their Annual Report to the President, each agency must report all exempt facilities and explain the rationale for excluding them from Federal energy goals.

Cutting-Edge Tools and Strategies

The Order calls for agencies to use a wide range of energy management tools and strategies to fulfill the new energy efficiency, renewable energy, and greenhouse gas reduction goals.

- **Alternative Financing.** Financing options, like Energy Savings Performance Contracts (ESPCs) and utility energy efficiency service contracts, offer Federal agencies a powerful tool for leveraging private sector financing to fund cost-saving energy improvements at no net cost to taxpayers. Under ESPCs, private sector energy service companies finance the up-front cost of purchasing and installing new energy efficient equipment. The Federal government uses a portion of the savings it accrues through reduced energy bills to repay the energy service company over the life of the contract. Contractors then receive a predetermined share of the value of the energy savings generated by their efforts, and may be paid only if actual savings result from the reduced energy use. All additional savings accrue to the government. The government benefits from new equipment, reduced energy costs, improved energy efficiency, reduced greenhouse gas emissions, and conservation of nonrenewable fuels.

  To date, DOE and the Department of Defense have put into place over $8 billion in ESPC contract authority -- available for all Federal agencies to fund energy improvements. In addition, many of these contracts are "Super ESPCs" which rely on the same principals as regular ESPCs but offer an umbrella contract to allow expedited service. The Order calls for agencies to maximize their use of ESPCs and utility energy efficiency service contracts to realize energy and cost savings.

- **Life-Cycle Cost Analysis.** It is critical that Federal agencies consider the full cost of their investments, including energy, operation and maintenance costs, not simply the purchase cost of projects or products. To date, agencies have generally only invested in projects that pay for themselves within 10 years. But, if a piece of equipment has a general working life of 25 years, then the costs over its full life must be taken into account when making investment decisions. By taking all costs into account, agencies can save money and energy. To that end, the Order requires agencies to consider life-cycle costs – that is, investment costs, capital costs, installation costs, energy costs, operating costs, maintenance costs, and disposal costs, over the life of the project or product.

- **ENERGY STAR® and Other Energy Efficient Products.** The Order calls for agencies to purchase ENERGY STAR® and other energy efficient products. These products, ranging from compact fluorescent light bulbs to highly efficient boilers, can save Federal agencies hundreds of millions of dollars.

- **Electricity from Renewable Energy and Energy Efficient Sources.** Given that over 70percent of the Federal government's energy costs in buildings comes from electricity, the Order requires agencies to consider the source of their electricity and opt for cleaner, more efficient electricity generation. Specifically, the Order calls for agencies to minimize the greenhouse gas intensity of purchased electricity. In addition, agencies should adopt policies to increase the use of electricity from renewable energy sources.

- **Highly Efficient Energy Systems.** This Order calls for agencies to make greater use of highly efficient energy systems, including combined heat and power systems that use "waste" heat from industrial processes to supply power to other needs. These types of systems can offer not only tremendous energy and cost savings, but also significant environmental benefits.

- **Off-Grid Electricity Generation.** This Order requires agencies to consider off-grid electricity opportunities that often provide energy and environmental benefits, while allowing agencies to avoid the costs of build new transmission lines or digging up existing lines. Off-grid options can be particularly effective in remote locations, including in our National Parks. The systems range from solar outdoor lighting to small wind turbines and fuel cells.

- **Sustainable Building Design.** In July 1998, as part of the President's radio address on Federal energy issues, a number of Federal agencies committed to constructing sustainably-designed buildings. This Order requires all Federal agencies to apply sustainable design principles to the siting, design, and construction of new facilities and thereby save energy, save taxpayer dollars, and reduce pollution.

Strengthening Agency Accountability

The Order provides a framework to hold agencies accountable for their progress in Federal energy management. The following new management strategies and reporting requirements will help ensure that all Federal agencies manage energy use wisely and reap great benefits for the economy and the environment for years to come.

- **Annual Reports to the President and Annual Score Cards.** Under the Order, each Federal agency must submit an Annual Report to the President describing its progress in meeting the goals of the Order. In addition, the Deputy Director for Management of the Office of Management Budget will evaluate each agency's performance and submit agency score cards to the President. The score card evaluations will consider agencies' progress toward the energy efficiency, renewable energy, and greenhouse gas goals. The score cards will also take into account how effectively agencies have used key energy management tools and strategies.

- **President's Management Council.** The President's Management Council, which generally consists of Deputy Secretaries from all agencies, will monitor agencies' progress on Federal energy management and provide a high-level forum for identifying ways to accelerate improvements.

- **Agency Energy Teams.** Each agency must form a technical energy support team within 90

days to ensure that energy management strategies are implemented across all facilities. These energy teams will bring together legal, procurement, and other essential agency representatives to overcome barriers to realizing energy and cost savings.

- **Funding for Energy Management Activities.** While smart energy management will lead to taxpayer savings in the long run, initial agency investments are needed in order to implement energy savings performance contracts and purchase energy efficient equipment among other cost-savings activities. Therefore, the Order calls for agencies to consider the full range of their energy management responsibilities and include these costs in their budget requests.

- **New Public/Private Advisory Committee.** The Order calls for DOE to organize an advisory committee to bring together private and public sector experts who can advise agencies on how to improve their energy management practices. The Committee will include representatives from energy service companies, utility companies, equipment manufacturers, and other private, non-profit, and public sector organizations that focus on energy issues.

Concrete Steps, Concrete Savings

In conjunction with the signing of a new Executive Order to promote energy efficiency, President Clinton announced today the Pentagon's intent to award (by the end of June) **the Federal government's largest-ever Energy Saving Performance Contract (ESPC)**, under which Viron Energy Services/Pepco Energy Services (Viron/Pepco) will upgrade the energy performance of 837 Federal buildings at no up-front cost to taxpayers. The 18-year service contract, covering five military installations in the Washington, DC area, will reduce annual energy consumption by 17%, saving the Department of Defense (DOD) over $219 million in energy and related costs and reducing annual greenhouse gas emissions by 24,000 metric tons of carbon (MTC) – equivalent of taking over 19,000 cars off the road.

Other examples of energy-saving actions of the kind the President's Order is designed to promote include:

- **Energy Efficient Procurement.** The Defense Logistics Agency (DLA), which supplies almost 20% of all light bulbs purchased by the Federal government, has teamed up with DOE to offer half price compact florescent light bulbs (CFLs) (the bulbs that replace normal incandescent bulbs in fixtures such as lamps).. The half price offer is open to any Federal purchaser with a maximum purchase of 400 bulbs per order.

  Last year, the DLA supplied 1.5 million of these bulbs to Federal purchasers. If they had all been CFL's savings would have totaled $7.5 million. Just last week the DOE added CFLs to the ENERGY STAR product rating program providing consumers with specifications for reliable, long lived, low cost CFLs. CFLs last 800% longer than an incandescent bulb and can last up to five years. Each bulbs saves $67 over its lifetime.

- **Renewable Energy Projects.** Some 18 Federal agencies – including the Departments of Agriculture, Interior, Transportation, DOD, DOE, Smithsonian Institution, the National

Science Foundation, The Environmental Protection Agency (EPA), NASA, the U.S. Postal Service, and the Western Area Power Administration will soon -- receive a combined $1.5 million DOE funding for more than 100 cost-effective renewable energy projects at government sites. The technologies include more than 50 new or renovated solar water heating systems, large and small photovoltaic (solar electric or "PV") systems, PV-powered lights and "solar walls" which preheat outside air for building heating and cooling. There are also some wind projects and a combination PV and wind project.

- **Buying Renewable Power.** The Environmental Protection Agency's Richmond, California laboratory has become the first major Federal facility supplied 100% with renewable energy. Initially, 60 percent of the power supplied will come from geothermal sources and 40 percent will come from biomass. Eventually power will be supplied by a new landfill gas facility expected to begin service in the fall of 1999. The General Service Administration (GSA) and DOE provided support to EPA in this effort. This green power purchase will produce environmental benefits equivalent to reducing over 2 million passenger car miles driven in California each year. The purchase will prevent greenhouse gas emissions equal to [2.3 million lbs. per year.]

- **Energy Star Buildings.** GSA's Foley Square Federal Office Building in New York City has been retrofitted to achieve the ENERGY STAR Building Label by EPA. The ENERGY STAR Building Label signifies that the building is in the top 25% of similar buildings with regard to energy efficiency. Opened in 1994, the building encompasses 1.2 million square feet and houses offices of the Federal Bureau of Investigation, the Internal Revenue Service and the Environmental Protection Agency. By deploying equipment and products that qualify the building for the ENERGY STAR label, the GSA saves $1.3 million annually compared to the cost of other similar buildings without the energy efficiency equipment or products. [do we have a percentage?]

White House Climate Change Task Force

734 Jackson Place, N.W. • Washington, DC 20503

FACSIMILE TRANSMISSION SHEET

To	Larry	**From**	JOHN GIBSON (EMC)
Office		**Date**	
Fax Number	(410)-792-9445	**Fax Number**	395-2311
Office Number		**Office Number**	395-2310

Comments:

Pages: 5 , **including this cover sheet.**

IF TRANSMITTAL IS INCOMPLETE, PLEASE PHONE

White House Climate Change Task Force

734 Jackson Place, N.W. • Washington, DC 20503

FACSIMILE TRANSMISSION SHEET

To		**From**	
Office		**Date**	
Fax Number		**Fax Number**	395-2311
Office Number		**Office Number**	395-2310

Comments:

Pages: _____ **, including this cover sheet.**

IF TRANSMITTAL IS INCOMPLETE, PLEASE PHONE

PRESIDENT CLINTON: LEADING THE FIGHT AGAINST GLOBAL WARMING
JUNE 3, 1999

President Clinton, in a Cabinet meeting today, issued an Executive Order to help meet the challenge of global warming by dramatically improving energy efficiency in Federal buildings. By 2010, the resulting energy savings will reduce annual greenhouse gas emissions by 2.4 million tons – the equivalent of taking 1.7 million cars off the road – and save taxpayers over $750 million a year. As a prime example of the savings that can be achieved, the President also announced a major contract to retrofit over 800 buildings at five military installations in the Washington, D.C. area, saving some $219 million in energy and related costs.[to be put in text box]

Leading By Example. The Federal Government is the nation's largest energy consumer with an annual bill of over $8 billion – more than $4 billion to heat, cool, and power its 500,000 buildings. Federal agencies have already reduced energy consumption 17% per square foot relative to 1985 levels. Today's order builds on that progress by:

Setting Aggressive Goals – the Order requires Federal agencies to achieve by 2010:
- **35% greater energy efficiency** in buildings relative to 1985 levels; and,
- **30% cut in greenhouse gas emissions** from building-related energy use relative to 1990.

Mobilizing Cutting-Edge Strategies -- the Order directs agencies to make greater use of:
- **Energy Saving Performance Contracts & Utility Contracts**, in which private contractors make energy-saving improvements on Federal facilities at their own expense and receive a portion of the resulting savings;
- **Life-cycle cost analysis**, so agencies see the long-term savings from energy investments;
- **ENERGY STAR & other energy efficient products**, everything from light bulbs to boilers;
- **Renewable energy** technologies and sources (solar, wind, geothermal, and biomass).

Strengthening Accountability – The Order requires that annual scorecards evaluating agency progress be submitted to the President; gives OMB, in consultation with the Department of Energy (DOE), oversight authority, and directs agencies to appoint energy management teams to help meet the goals of the Order.

Concrete Steps, Concrete Savings. The partnership announced today between the Department of Defense and Viron/Pepco Energy Services – the largest energy-saving performance contract ever awarded – will cut energy use in 837 buildings at Ft. Belvoir, Ft. A.P. Hill, Ft. Meyer, Ft. McNair, and Ft. Meade. Other examples of energy-saving actions of the kind today's Order is designed to promote include:
- The Defense Logistics Agency (DLA) and the DOE have teamed up to offer high efficiency compact florescent light bulbs at half price to Federal purchasers;
- 18 Federal agencies (including the Smithsonian Institution, NASA, and the Postal Service) will receive DOE funding for more than 100 renewable energy systems;
- A New York GSA building housing the FBI and the IRS has been retrofitted to ENERGY STAR Building standards, with an annual energy cost savings of $1.3 million.
- Environmental Protection Agency's laboratory in Richmond, California has become the first major Federal facility supplied 100% with renewable energy (geothermal and biomass);

Incentives For Businesses and Homeowners, Too. To help American businesses and consumers reap the same kinds of energy and cost savings, the President today also calls on Congress to enact his proposed **$3.6 billion package of tax incentives** for the purchase of energy efficient homes, appliances, cars, and energy from renewable sources.

DOD-VIRON/PEPCO ENERGY SAVING PERFORMANCE CONTRACT
JUNE 1999

In conjunction with the signing of a new Executive Order to promote energy efficiency, President Clinton announced today the Pentagon's intent to award (by the end of June) the Federal government's largest-ever Energy Saving Performance Contract (ESPC), under which Viron Energy Services/Pepco Energy Services (Viron/Pepco) will upgrade the energy performance of 837 Federal buildings at no up-front cost to taxpayers. The 18-year service contract, covering five military installations in the Washington, DC area, will reduce annual energy consumption by 17%, saving the Department of Defense (DOD) over $219 million in energy and related costs and reducing annual greenhouse gas emissions by 24,000 metric tons of carbon (MTC) – equivalent of taking over 19,000 cars off the road.

Energy Saving Performance Contracts – Energy Savings at No Up-front Cost to Taxpayers

The new Executive Order directs Federal agencies to maximize their use of ESPCs -- innovative financing mechanisms that mobilize private sector investment and expertise to save energy and save money in Federal facilities. Under ESPC authority, Federal agencies hire private energy service companies to conduct energy audits of facilities, propose energy saving retrofits, and privately finance, install, and maintain retrofits. There are no up-front payments by the government and contractors are paid from a share of the savings, with the remaining savings accruing to the agency.

The DOD-Viron/Pepco ESPC is the largest by far of any ever awarded by the Federal government and serves as a model for other agencies to replicate in implementing the President's new Executive Order.

Real Savings and Real Environmental Benefits

Under the new contract, some $70 million in private investment will fund energy upgrades at five installations in the Army's Military District of Washington – Ft. Belvoir, Ft. A.P. Hill, Ft. Meyer, Ft. McNair, and Ft. Meade. These measures will save money and improve the environment. In particular, they will:

- Avoid almost 24,000 MTC of greenhouse gas emissions annually – a 26% reduction;
- Save DOD a total of over $219 million in energy and related costs
- Reduce annual energy costs by 17%;
- Reduce annual electricity use by 89 million kilowatt hours (kWh) of energy annually;
- Reduce fuel use by 294,000 million British Thermal Units (MMBTUs) annually;
- Reduce pollutants that cause smog and acid rain by more than 600 metric tons annually; and,
- Save over 50 million gallons of water annually.

These improvements to buildings and equipment will support Army operations well into the next century, without the need for additional funding, and will provide more comfortable living conditions and improved quality of life for those who live and work at the five installations.

Administration Efforts to Expand ESPC Use

While ESPC authority has existed since 1992, President Clinton has taken significant steps to streamline and promote greater use of this tool. Streamlined contracts – known as "Super ESPCs" -- put in place by DOE and DOD have accelerated large investments in energy projects at hundreds of Federal facilities. Super ESPCs allow all agencies and facilities to place delivery orders under umbrella contracts, substantially reducing the lead time to contract with an energy services company. There are two types of Super ESPCs: regional and technology specific. Regional specific contracts cover a designated geographic area; technology specific contracts are in effect nationwide for a particular emerging technology, such as solar collectors.

In the last year, the DOE has awarded over $5 billion in ESPC contracting authority to 44 private contractors to perform energy and cost saving work. Projects have been designed and awarded that will mobilize $28.7 million of private investment to perform energy saving work in Federal agencies. The contractors will be paid from the $62.5 million projected savings. Well over a hundred agreements are currently under negotiation as this alternative financing tool for energy and taxpayer savings becomes more commonly used by Federal agencies. Other agreements are also under negotiation with utility contractors and under the DOD contracts (worth over $3 billion) which are also available for use by the rest of the Federal government.

Energy Efficiency Measures to be Taken

Expected energy efficiency measures include:

- ***Cooling system retrofits.*** Some 888 cooling units will be replaced or retrofitted, cutting energy use in 343 buildings, reducing associated energy costs by over $1 million annually and annual greenhouse gas emissions by 4,900 MTC.

- ***Air Handling Units.*** Replacement and retrofitting of air handling units in 126 buildings will reduce annual energy consumption by 14 million kWh. This will mean annual savings of $742,000 and 3,500 MTC of greenhouse gas emissions avoided each year.

- ***Lighting Retrofits or Replacement.*** Some 142,600 light fixtures will be replaced or retrofitted in 714 buildings, reducing annual energy consumption by 29.8 million kWh, saving $1.4 million annually, and reducing annual greenhouse gas emissions by 4,800 MTC.

- ***Central Heating Plant Upgrade.*** Two central steam plants will be replaced with new gas fired boilers, reducing annual fuel use by 138,000 MMBTU, saving $655,000 annually, and reducing annual greenhouse gas emissions by 2,900 MTC.

- ***Central Cooling Plant Upgrade.*** A new absorption chiller and chilled water distribution line will be installed at one site, reducing annual electricity use by approximately 270,000 kWh and saving $21,000 annually.

- ***Water Conservation.*** Water consumption and waste water will be reduced in 213 buildings through replacement of existing plumbing equipment with ultra low-flow units, saving approximately 50.5 million of gallons annually, or $195,000.

DOD's Partnership With Viron/Pepco

With the assistance of the Department of Energy's (DOE's) National Renewable Energy Lab, DOD sought bids from private sector experts to provide solutions to the energy needs of the Military District of Washington. Using full and open competition, DOD's Defense Energy Support Center has issued a Notice of Intent to Award a contract to Viron/Pepco to provide a range of services including energy engineering, equipment installation, construction supervision, and measurement and verification. Under the contract, all capital investments will be made within the first three years of the contract and Viron/Pepco will be paid from a share of the verified energy savings resulting directly from its conservation measures.

More than 2,100 buildings on the five installations were surveyed for possible energy improvements. Under the contract, almost 40 percent of the buildings currently in use will benefit from one or more of the slated improvements and upgrades in the initial task order. The contract is also structured so that either the government or Viron/Pepco can suggest additional conservation measures for the remaining buildings.

Thank you, President Clinton . . . and thank you for your continuing leadership on this issue.

As the President noted, later this month the Department of Defense will award a landmark Energy Saving Performance Contract.
Under the plan, over *800* buildings at 5 military installations in the area Washington will be audited, assessed, and retrofitted.
Hundreds of cooling units and over 100,000 lighting fixtures will be replaced.
This will be the largest contract of its kind ever.

DOE
Dave Howard

Subj: Answers to questions on Viron/PEPCO ESPC
Date: Tuesday, June 1, 1999 1:34:55 PM
To: John_D._Gibson@whcctf.eop.gov
cc: jcarter@viron.com, weissd@pepco-services.com, creid@desc.dla.mil

Question 1 Emission savings...

I have converted the savings previously provided for carbon dioxide (CO2) to MMTCE . Annual quantities reduced are as follows:

Carbon dioxide (CO2) total emissions = 87,602 metric tons
Carbon equivilent saved = 23,891 MMTCE
from elec : 17,750 Metric tons Carbon eq.
Sulphur dioxide (SO2) total emissions = 121 metric tons
~~Sulphur equivilent saved = 61 MMTSE~~

Nitrogen oxides (NOX) total emissions = 34 metric tons
~~Sulphur equivilent saved = 10 MMTNE~~

Question 2 - 89 million kWh...

→ 100% efficiency

This ESPC will reduce annual electric use by 89,491,852 kWh. At 3413 btu per kWh, ~~this equates to 305,436 MMbtu.~~ Heating fuel use avoided adds 294.012 MMbtu for a ~~total MMbtu avoided use of 599,448~~.

do not use these ↗

use this ↑

Question 3 - The 305,000 MBtu listed... → don't use

As stated above, I used the end user conversion of kWh to btu of 3,413 for these calculations. It is my understanding that the 1.6 lbs/kWh for this region incorporates the total fuel consumption required to produce each kWh by the regions electric producers. Therefore, use of a production conversion figure (10,000 or higher) would overstate the emissions. No, it doesn't overstate emissions, because that's how much fuel has to be burned to make 89×10^6 kWh

question 4 - Ultimately, we question expressing energy saved...

Keep separate

The only reason we express energy saved as electricity and heating fuel in btu is to permit aggregating the values together as required for reporting ECM savings under both DOD and DOE ESPC processes. All of our calculations and basic reporting is done in the energy source specific units.

Question 5 - Total energy savings..."over 100 million..."

Answer to this question was sent earlier by L. Trybus.

Question 6 - What is the total number of buildings?...

The total number of buildings for which we are proposing some ECM is 837. The 888 number is the quantity of cooling units to be replaced or retrofit and does not correlate with the total number of buildings because some buildings do not have cooling units proposed and some have multiple cooling units proposed.

I hope this answers your questions, John. The only discrepancy between the numbers on the briefing materials you sent me on Friday and my data is that the total carbon dioxide emissions you quoted was 86,000 metric tons whereas the actual number is 87,602. I think this is due to some slight changes that were made in the proposal submitted on 4/19/99. The 86,000 was based on our Best and Final Proposal submitted in November of 1998.

Terry E. Simms - Sr Project Manager

9175 Gulford Road Suite 216
Columbia Maryland 21046
Phone: 410-792-9777 Fax: 410-792-9445

Viron Energy Services

Fax

To: JOHN GIBSON From: TERRY SIMMS

Fax: 212-595-2342 Pages: 2 + Cover

Phone: Date: 6/1/99

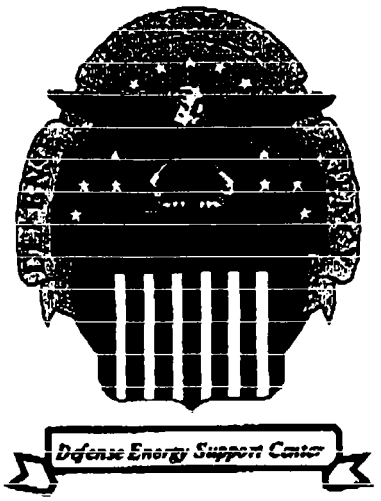
Re: MDW EMISSION CC:

☒ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

FAX COPY OF E MAIL RESPONSES SENT EARLIER

T. SIMMS



FAX

DESC-A
DEFENSE ENERGY SUPPORT CENTER
FT. BELVOIR, VA

To: Ms. Martha Walford
Fax: 202-395-2342

Pgs 9

From: Ms. Sharon Murphy
703-767-8572
FAX 703-767-8757

Bruce Blank 703 767-8532 Sharon Murphy (703) 767 8572 fax 703 767 8757 smurphy@desc.dla.mil

Energy Savings Performance Contracting

Conserving Energy and Improving Buildings and Equipment Through Private/Public Partnering

DRAFT

Viron Terry Sims ph. (410) 792 9777

Through a partnership established between the Defense Logistics Agency's Defense Energy Support Center (DESC), the U.S. Army's Military District of Washington (MDW) and its five installations in the metropolitan Washington D.C. area, and the Department of Energy's National Renewable Energy Laboratory (NREL), DESC is prepared to award the largest single Energy Savings Performance Contract (ESPC) project executed by a Federal Agency to date. Viron/Pepco Services (Viron/Pepco) been issued a notice of intent to award and will act as the Federal Government's partner in meeting important energy reduction goals and providing needed building and equipment upgrades without the requirement for spending additional tax dollars. **It is anticipated that over the 18-year contract period, savings will exceed $100 million, a reduction of more than 17 percent in overall energy costs.** Building and equipment improvements will be authorized through a single contract task order, the first of its kind for a group of installations. The five participating MDW installations, Ft. Belvoir, Ft. A.P. Hill, Ft. Myer, Ft. McNair, and Ft. Meade, will reap the benefits of the cooperative effort.

fax 410 792 9445

A Commitment to Work Together. DESC brought together representatives from the MDW and five of its installations in a source selection process. In addition, DESC tapped into the Department of Energy's expertise by enlisting the help of NREL. Recognizing the expertise of commercial sector energy service providers, DESC issued a commercial solicitation which encouraged private sector experts to provide installation-wide optimum solutions to the Government's energy conservation needs. Utilizing "best value" buying techniques, DESC, in conjunction with its Government partners, determined that Viron/Pepco's offer provided the greatest overall benefits to the Government in the areas of energy engineering, equipment installation, construction supervision, and measurement and verification. All capital investments will be made within the first three years of the contract and Viron/Pepco will be paid through shared savings drawn from verifiable energy savings resulting directly from its completed Energy Conservation Measures (ECMs).

Energy Savings Performance Contract. As a result of the established partnership, the five installations included in the partnership **will have their overall energy consumption reduced by at least 23 percent in comparison to 1998 levels by the year 2005.** This translates into annual reductions of 89 million kilowatt-hours of electricity and 294,000 MMBTU in fuel.

Environmental Benefits through Building and Equipment Upgrades. Improvements to buildings and equipment will not only support Army operations well into the next millennium without the requirement for additional funding, it will also bring about significant environmental benefits. Along with modernization of buildings and equipment comes a reduction in energy usage that results in a diminishing amount of electricity required to meet demand and, therefore, a decrease in pollutants created by utility generating facilities. Coupled with other upgrades that allow installations to greatly reduce or eliminate their requirement to burn fossil fuels, the building and equipment upgrades received through the public/private partnership denote good news for the environment. When compared to 1998 MDW consumption figures, there will be a **26 percent reduction in harmful carbon** ^dioxide^ **emissions, equal to approximately 86,000 metric tons** MMTCE**, resulting from reductions in installation demand and consumption** as a result of the partnership. In addition, **over 50 million gallons of water will be saved annually**. Old air conditioner units and heating systems will be replaced, serving the dual purpose of reducing the waste of electricity and fuel while enhancing the comfort of those who work at each installation. The replacement of outdated light fixtures with new energy efficient fixtures alone will lead to reductions in energy demand and usage which will result in **the reduction of Carbon, Sulfur, and Nitrous Oxide emissions produced by power generating facilities by nearly 18,000 metric tons.** MMTCE

Site Improvements. More than 2,800 buildings on the five installations were examined for improvements in energy savings. **Over 40 percent of buildings currently in use will benefit from one or more building and equipment improvements to be initiated in the initial task order.** The contract is also structured in a fashion that allows either the Government or Viron/Pepco to suggest in the future additional energy conservation measures for the remaining buildings. Those that are accepted by the installation can be completed under the same contract. As part of the initial task order, outdated and inefficient heating, air conditioning, lighting and water fixtures will be replaced with newer energy and water saving devices. Viron/Pepco expects to retrofit or install over 142,000 lighting fixtures, nearly 900 cooling systems, and five central cooling and heating plants. Along with increased energy efficiency and needed building and equipment upgrades, the MDW will attain more comfortable living conditions and improved quality of life for those who live and work at each of the partner installations.

ltrybus@viron.com [Larry Trybus (301) (410) 792-9777 ext. 13 fax bullet

at end [to streamline + make easier there are now these super ESPCs ... oasis]

BACKUP DATA

Some of the initial benefits of this partnership with Viron/Pepco Services are expected to be as follows. The Energy Conservation Measures (ECMs) and estimated savings listed below are not intended to be all-inclusive.

- **Maximizes savings to the government through a single procurement**
- **Establishes a simplified analysis methodology for measurement and verification of ECMs**
- **Reduces unit costs for equipment through quantity purchasing**
- **Provides a single management organization for all five sites from conception through the life of the contract**
- **Further enables the Military District of Washington (MDW) to progress towards achievement of energy conservation goals established by statute.**
- **Provides improvements to buildings and equipment that will support Army operations well into the next millennium**

In order to attain the savings expected in this partnership the Viron/Pepco Services team expects to retrofit:

- **142,600 lighting fixtures**
- **888 cooling systems**
- **Over 10,000 control points for over 430 energy management control systems**
- **5 central cooling and heating plants**

The overall results of these savings measures can be best highlighted in the following examples of expected savings:

- **89 million kiloWatt hours of energy will be saved per year**
- **Over 86,000 metric tons of harmful emissions will be reduced**
- **Over 599,000 MMBTU will be saved annually (305,000 MMBTUs of electricity and 294,000 MMBTUs of fuel)**
- **Over 50 million gallons of water will be saved annually**
- **Over $5.5 million will be saved annually in energy costs alone by the Military District of Washington**

Cooling System Retrofit Total Energy Savings This energy savings measure will replace existing air-cooled reciprocating chillers; existing air-cooled condensing units; existing water-cooled centrifugal chillers; conversion of constant flow chilled water loop to variable flow with variable frequency drives (VFD), consolidation of multiple cooling units into integrated or multiple building cooling plant (central cooling); and replace or retrofit existing cooling units with a geothermal loop, heat pump unit.

This ECM will cut energy usage in 343 buildings, by installing 888 cooling units, while reducing associated energy costs by $1.01 million annually.

Air Handling Units. Air handling unit fans, conversion of air handling systems to variable air volume terminal dampers, and the conversion of constant volume, terminal reheat air handling systems to variable air volume in 126 buildings will reduce electricity consumption and demand and heating fuel use.

Total annual kWh avoided by installing this system is 14.0 million kWh. CO_2 emission reduction is estimated to be 3,300 metric tons. Energy savings to the Government is estimated to be over $742,000 per year.

Lighting Retrofits or Replacement. Seven hundred fourteen (714) buildings will receive a total of 142,600 new light fixtures. New or replaced fixtures will reduce electricity consumption and demand, reducing Carbon, Sulfur, and Nitrous Oxide by 17.8K metric tons.

Total electricity usage avoided is estimated at 29.8 million kWh. The annual savings to the Government is estimated to be $1.4 million.

Water Conservation. Water consumption and wastewater will be reduced in 213 buildings. Toilet bowls, urinals and flushometer valves will be replaced with ultra low-flow units. Existing faucet aerators will be replaced with less gallon-per-minute aerators.

Annual water savings will be approximately 50.5 million gallons. Savings are approximately $195,000 annually.

Central Heating Plant Upgrade. Two central steam plants will receive new gas fired boilers. Two central steam plants will be completely decommissioned. New gas fired, local boilers will be installed in each building. This will result in a net fuel use reduction across the board.

Total fuel use avoided is over 138,000 MMBTU and fuel savings will be in excess of $655,000 per year.

Central Cooling Plant Upgrade. A new absorption chiller and chilled water distribution line will be installed at one of the sites. Installation of this ECM will reduce electricity consumption and demand.

This ECM will save approximately 270,000 kWh and $21,000 annually.

Additional Backup

Note: Energy Conservation Measures and Energy Savings reflected below are not intended to be all-inclusive.

1. Cooling System Retrofit	
▪ Number of buildings involved	343
▪ Number of units to be installed	888
▪ Total Electricity and Fuel use avoided by installing of the ECM (per year)	89,984 MMBTU per year
▪ Total emissions reduction due to the ECM (per year)	18,087 metric tons /year of CO2, Nox, SO2 → 4,933 MTCe
▪ Dollar savings to the Government for the ECM	$1,016,400 per year

2. Cooling Controls	
▪ Number of buildings involved	404
▪ Number of units to be installed	404 Systems
▪ Effects of the ECM	This ECM will reduce cooling energy consumption and demand, extending cooling system life, and helping improve indoor air quality
▪ Total emissions reduction due to the ECM (per year)	Over 3,325 metric tons per year of CO2, SO2, Nox → 907 MTCe
▪ Dollar savings to the Government for the ECM	$179,953 per year

3. Air Handling Units	
▪ Number of buildings involved	126
▪ Number of units to be installed	685
▪ Effects of the ECM	Reduce electricity consumption and demand as well as heating fuel usage and improved indoor air quality
▪ Total emissions reduction due to the ECM (per year)	12,969 metric tons per year of CO2, SO2 and Nox → 3,537 MTCe
▪ Dollar savings to the Government for the ECM	$742,436 per year

4. Economizer (outdoor air) Cooling Retrofit	
▪ Number of buildings involved	23 buildings affected and 42 economizer systems to be installed
▪ Effects of the ECM	Reduce electricity consumption and reduce CO2 and other related emissions. Improve Indoor air quality and wear on mechanical cooling systems
▪ Total emissions reduction due to the ECM (per year)	532 metric tons per year of CO2, SO2, and Nox
▪ Dollar savings to the Government for the ECM	$18,026 per year

145 MTCe

5. Heating Unit Replacement and/or Retrofit	
▪ Number of units to be installed	355 units to be replaced
▪ Number of buildings involved	258 buildings
▪ Number of systems which will be switched from central steam or hot water loop systems	Two steam systems to be decommissioned on Ft. Meade, and two new central plant boilers to be installed on Ft Belvoir. One additional steam boiler at Ft. Myer
▪ Number of pipelines or traps to be installed	One new pipeline to be installed.
▪ Effects of the ECM	There will be a substantial reduction of heating fuel consumption and emissions
▪ Total emissions reduction due to the ECM (per year)	1,430 metric tons per year of CO2, SO2, Nox
▪ Dollar savings to the Government for the ECM	$191,416 per year

390 MTCe

6. Heating System Control Retrofit	
▪ Number of hot water and airside reset controls to be installed	440 systems
▪ Number of constant flow hot water systems to be converting to variable flow with VFD	212
▪ Effects of the ECM	Will reduce cooling energy consumption and demand.
▪ Total emissions reduction due to the ECM (per year)	5,610 metric tons per year of CO2, SO2, Nox
▪ Dollar savings to the Government for the ECM	$371,519 per year

1,530 MTCe

7. Lighting Retrofit or Replacement	
▪ Number of light fixtures to be installed	142,600
▪ Number of buildings involved	714
▪ Effects of the ECM	Reduce electricity consumption and demand.
▪ Total emissions reduction due to the ECM (per year)	17,774 metric tons per year
▪ Dollar savings to the Government for the ECM	$1,376,014 per year

4,847 MTCe

8. Installation of Direct Digital Control Based Energy Management Control Systems (EMCS)	
▪ Number of systems to be installed	434
▪ Number of buildings involved	434
▪ Effects of the ECM	Electrical and fuel usage will be less
▪ Total emissions reduction due to the ECM (per year)	15,394 metric tons per year
▪ Dollar savings to the Government for the ECM	$728,118 per year

4198 MTCe

9. Retrofit Building Envelopes	
▪ Number of windows to be replaced	865 windows
▪ Number of buildings in which systems will be installed	22
▪ Effects of the ECM	Heating and cooling loads will be reduced as well as related energy use
▪ Total emissions reduction due to the ECM (per year)	612 metric tons per year of CO2, SO2, and Nox
▪ Dollar savings to the Government for the ECM (per year)	$45,636 per year

10. Recapture Heating and Cooling Energy from Building Exhaust	
▪ Number of systems to be installed	6
▪ Number of buildings involved	6
▪ Effects of the ECM	Will reduce heating and cooling loads and related energy usage
▪ Total emissions reduction due to the ECM (per year)	238 metric tons per year of CO2, SO2, and Nox
▪ Dollar savings to the Government for the ECM (per year)	$16,405 per year

11. Water Conservation	
▪ Number of toilet bowls and urinals to be installed	2,826 Toilets 299 Urinals
▪ Number of aerator faucets to be installed	1,388
▪ Number of buildings involved	213
▪ Effects of the ECM	Will reduce water consumption and wastewater generation thus reducing costs of water utilization throughout MDW.
▪ Amount of water to be saved on an annual basis	50,454 million gallons of water per year
▪ Total emissions reduction due to the ECM (per year)	616 metric tons of CO2, SO2, and Nox
▪ Dollar savings to the Government for the ECM	$194,792 per year

12. Central Heating Plant Upgrade	
▪ Number of plants to be installed	4 plants involved. 2 upgrade with new equipment and 2 decommissioned
▪ Effects of the ECM	Eliminate #6 fuel oil usage and increase natural gas consumption and demand
▪ Total emissions reduction due to the ECM (per year)	10,685 metric tons per year of CO2, SO2 and Nox
▪ Dollar savings to the Government for this ECM (per year)	$654,794 per year

2,914 MTCe

13. Central Cooling Plant Upgrade	
• Number of central cooling plants involved	1
• Number of units to be installed	1 central plant
• Effects of the ECM	The Chiller will tie into existing distribution lines and electrical interfaces
• Total kWh avoided with the ECM	269,229 kWh avoided per year
• Dollar savings to the Government for the ECM	$20,746 per year

53 MTCe

The Military District of Washington ESPC

Viron/Pepco

Viron/Pepco Organization

- **Viron Corporation and Pepco Services Inc.**
  - General partnership
  - Partnership formed May 1996
  - Fully staffed local offices
  - Combined financial backing of two multi-billion dollar parent corporations
  - Combined energy project/conservation experience of over 40 years

Viron & Pepco Corporate History

Viron Corporation

- *Formed 1974 as an independent energy engineering company*
- *Completed over $150 million in ESPCs*
- *Became a subsidiary of York International in1988*
- *Engineering oriented with an extensive modeling capability*
- *VA VISN 5 -$15 mil ESPC 5 Hospitals*

  USPS- Detroit - $9 mil -144 facilities

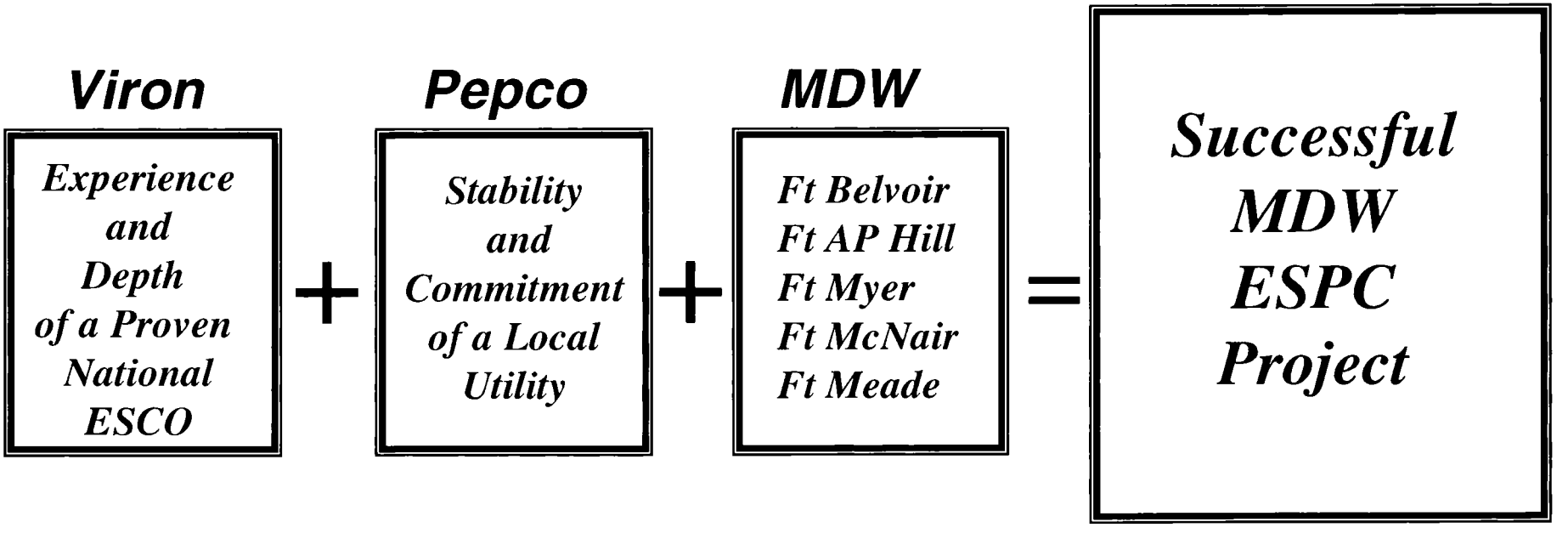
  Fort Monmouth -$3.5 Mil Energy project

Pepco Services Inc.

- *A subsidiary of PEPCO formed in 1995*
- *PEPCO has serviced the federal government for over 100 years*
- *In-depth knowledge of Washington metro area and federal contracting*
- *PEPCO initiated DSM Programs in the mid-1980s*
- *IRS HQ - $12 million energy project USPS DC/MD. $6.8 mil 220 facilities*

  DOI HQ -$2.5 Mil Chiller plant, lighting DOD/Hoffman- $4 Mil HVAC, Lighting,

Benefits of the Viron/Pepco/MDW Partnership



ECM Benefits

- Reduced energy cost
- Lower maintenance cost
- Infrastructure improvement
- Decreased pollution levels
- Reduction in CFCs and PCBs
- Better indoor air quality
- Improved lighting
- Improved occupant comfort and productivity

ECM Categories

1. Cooling unit retrofit
2. Cooling control retrofit
3. Air handling system retrofit
4. Economizer implementation
5. Heating unit retrofit
6. Heating control retrofit
7. Lighting retrofit
8. Energy Management Control System
9. Building envelope retrofit
10. Exhaust heat recovery
11. Water conservation
12. Central heating plants
13. Central cooling plants
14. Misc. Technologies
15. Asbestos Abatement

Capital Investment

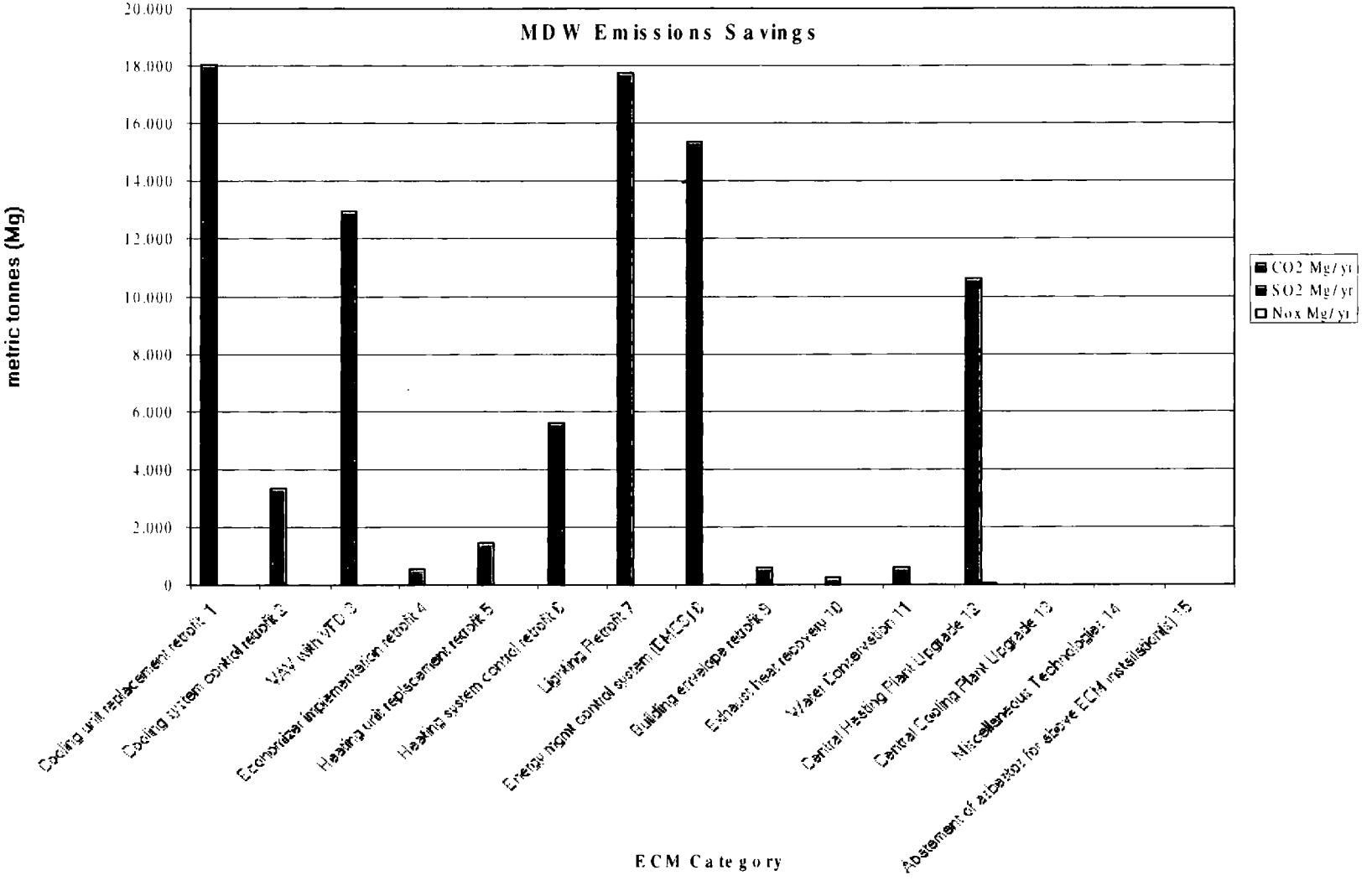
- Fort Meade - $20.8 Million
- Fort Myer - $ 5.0 Million
- Fort McNair - $ 5.5 Million
- Fort Belvoir - $29.9 Million
- Fort A. P. Hill - $ 5.6 Million
- Total Investment - $65.5 Million

- Buildings included in the project - 888

MDW - ECM Summary

ECM Number	ECM Type	Capital Investment
1	Cooling Unit Replacement/Retrofit	$16,772,143
2	Cooling System Control Retrofit	$ 203,414
3	Airside VAV/VFD drives	$ 2,459,286
4	Economizer Implementation Retrofit	$ 9,629
5	Heating Unit Replacement/Retrofit	$ 6,177,147
6	Heating System Control Retrofit	$ 977,197
7	Lighting Retrofit/Replacement	$ 8,690,745
8	Energy Management Control System	$13,730,740
9	Building Envelope Retrofit	$ 1,170,892
10	Exhaust Heat Recovery	$ 200,054
11	Water Conservation	$ 1,750,453
12	Central heating Plant Upgrade	$ 7,342,967
13	Central Cooling Plant upgrade	$ 688,547
14	Miscellaneous Technologies	$ 3,000
15	Building Asbestos Abatement	$ 529,433
Total		$65,562,100

MDW Emissions Savings



Green House Gas Reductions

Site	Electric kWh	Fuel MMBtu	TOTAL MMbtu
Fort Myer	9,745,998	17,947	51,209.69
Fort McNair	5,853,418	5,009	24,987.12
Fort AP Hill	1,648,877	8,993	14,620.12
Fort Meade	23,482,404	158,602	238,747.14
Fort Belvoir	48,761,155	103,462	269,883.62
TOTAL	**89,491,852**	**294,012**	**599,448**

TOTAL MDW EMISSIONS REDUCTION due to ESPC per Year

	for all kWh avoided	for all fuel use avoided	Total emission reduction in Mg	lbs/MMBtu
CO2 Mg/yr 1.6lbs/kWh	64,935.29	22,667	87,602	170.0
SO2 Mg/yr 8.7g/kWh	369 ~~47.54~~	74	443 ~~121~~	0.552817
Nox Mg/yr 2.4g/kWh	173 ~~15~~	19	192 34	0 140

TOTAL MDW EMISSIONS REDUCTION due to ESPC over 15 life of contract

	for all kWh avoided	for all fuel use avoided	Total emission reduction in Mg
CO2 Mg/life	974,029	340,003	1,314,032
SO2 Mg/life	713	1,106	1,819
Nox Mg/life	226	280	506

Mg = tonne, metric

Summary of Benefits

	1998 TOTAL KWH	1998 TOTAL ELECTRIC COST	1998 TOTAL THERMAL (FUEL) USE, MMBTU	1998 TOTAL THERMAL (FUEL) COST ($5.28/MMBTU)	TOTAL 1998 ENERGY USE, MMBTU	TOTAL CO2 EMISSIONS, METRIC TONS	1998 TOTAL ENERGY COST
TOTAL MDW 1998 FISCAL YEAR	297,085,848	$ 22,988,755	1,540,158	$ 8,129,146	2,554,112	334,304	$ 31,117,901
SAVINGS WITH ESPC	88,614,871	$ 3,869,643	293,462	$ 1,548,929	595,905	87,602	$ 5,418,572
SAVINGS AS PERCENT OF TOTAL	29.8%	16.8%	19.1%	19.1%	23.3%	26.2%	17.4%

Project Summary

• Savings Over Project life	*$224 Million*
• Investment in equipment	*$65.5 Million*
• Total Annual Guaranteed Savings	*$13.7 Million*

• Emissions Eliminated Annually	*86,000 Metric Tons*
• MMBTU Fuel Saved Annually	*294,000*
• kWh Electricity Saved Annually	*89,000,000*
• Gallons water saved Annually	*50,000*