




OFFICE OF THE VICE PRESIDENT  
WASHINGTON

February 11, 2000

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18 FEB 0

TO: See Attached Distribution

FROM: Morley Winograd   
Senior Policy Advisor to the Vice President

SUBJECT: Review of Secretary Richardson's Performance Agreement with the President for the Department of Energy

Secretary Richardson's proposed Performance Agreement with the President for FY 2000 is enclosed for your review. This review should ensure that commitments in this agreement are consistent with Administration policies and represent significant public outcomes expected from the Department of Energy.

DOE will address concerns raised as a result of this review and make changes as appropriate. If you have any questions please contact John Kamensky at the National Partnership for Reinventing Government, tel # (202) 395-5521, fax # (202) 632-0390.

**Please send your comments by fax to John no later than Tuesday, February 22.**

Attachment

Distribution:

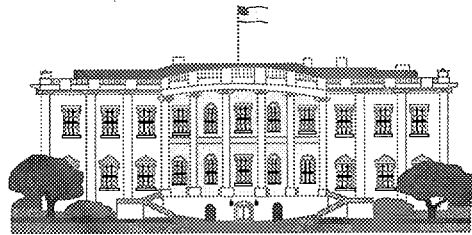
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**PERFORMANCE  
AGREEMENT**  
(REVISED FINAL PERFORMANCE PLAN)

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BETWEEN



**THE PRESIDENT OF THE UNITED STATES  
WILLIAM JEFFERSON CLINTON**

AND



**THE SECRETARY OF ENERGY  
BILL RICHARDSON**

**FISCAL YEAR 2000**

Editor's Note:

The Department is concurrently working on updating the Strategic Plan published in September 1997. Since that document is in the early stages of development, we are presenting our FY 2000 performance goals under the strategic goals and objectives of the approved 1997 Strategic Plan. If the new Strategic Plan is approved before the publication of this Agreement we will reorganize the annual performance goals under the new objectives.

Copies of this document will available from the Office of Strategic Planning, and Program Evaluation (CR-70), Office of the Chief Financial Officer, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington DC 20585.

## DEPARTMENT OF ENERGY

### *Our Mission*

*The Mission of the Department of Energy is to foster a secure and reliable energy system that is environmentally and economically sustainable, to be a responsible steward of the Nation's nuclear weapons, to cleanup our own facilities, and to support continued United States leadership in science and technology.*

## Overview

The Department of Energy began developing Annual Performance Agreements with the President in FY 1995 as one of the re-invention initiatives of the Vice President's National Performance Review. These agreements are now a key component of the Department's Strategic Management System and take the Government Performance and Results Act of 1993 (GPRA) one step further. The Performance Agreement documents DOE's final annual performance commitments after the Congressional budget appropriation process. This Agreement is subtitled "Revised Final Performance Plan" because it revises, based on the appropriated budget, the Performance Plan proposed with the budget request in February 1999.

The FY 2000 Agreement builds on our experience with the five previous years' agreements. It establishes specific commitments and measures related to the general goals and strategies in the Department's Strategic Plan submitted to Congress in September 1997 under GPRA.

We are striving to demonstrate organizational excellence and are measuring this improvement, through the use of Malcolm Baldrige Performance Excellence Criteria, in the areas of ***Customer Satisfaction, Employee Satisfaction and the achievement of Business Results***. We are continuing to streamline our workforce and work processes in order to become a government agency that works better and costs less.

### *Our Vision*

*The Department of Energy, through its leadership in science and technology, will continue to advance U.S. energy, environmental, economic, and national security by being:*

- *A key contributor to ensure that the United States has a flexible, clean, and efficient system of energy supply and end-use with minimal vulnerability to disruption;*
- *A vital contributor to reducing the global nuclear danger through its national security, nuclear safety, and nonproliferation activities;*
- *A world leader in environmental restoration, nuclear materials stabilization, waste management, facilities decommissioning, and pollution prevention;*
- *A major partner in world class science and technology through its National Laboratories, research centers, university research, and its educational and information dissemination programs; and*
- *A safe and rewarding workplace that is recognized for business excellence, nurtures creativity, is trusted, and delivers results.*

## Linkage to Strategic Plan and Budget

The Department is concurrently working on updating the Strategic Plan published in September 1997. Since that document is in the early stages of development, we are presenting our FY 2000 performance goals under the strategic goals and objectives of the approved 1997 Strategic Plan. Our five strategic goals are presented below with the budget for FY 2000. In the Strategic Plan, each goal is supported by objectives and in turn, each objective is supported by strategies. In this Agreement, each objective is advanced by what we have called "commitments". Commitments are statements of expected outcomes and are

associated with the strategies in the Department's strategic plan. To clarify and make tracking of this linkage easy, commitments have been numbered to identify the objective and long-term strategy they support. Each commitment has, consistent with our budget for FY 2000, "performance measures".

<u>Strategic Plan</u>	<u>Performance Agreement</u>
Strategic Goal	Strategic Goal
↳ Objectives	↳ Objectives
↳ Strategies	↳ Commitments with Performance Measures

Business Line	Strategic Goal	Program Secretarial Offices <sup>(2)</sup>	FY 2000 Budget <sup>(1)</sup> (in millions)
<b>Energy Resources (ER)</b>	<i>The Department of Energy and its partners promote secure, competitive, and environmentally responsible energy systems that serve the needs of the public.</i>	EE, FE NE, EI, PMAs	\$2,083
<b>National Security (NS)</b>	<i>Further strengthen national security, and reduce the global danger from weapons of mass destruction.</i>	DP, NN MD, NR WT, CI, CN	\$5,775
<b>Environmental Quality (EQ)</b>	<i>Aggressively clean up the environmental legacy of nuclear weapons and civilian nuclear research and development programs, minimize future waste generation, safely manage nuclear materials, and permanently dispose of the Nation's radioactive wastes.</i>	EM, RW	\$6,223
<b>Science (SC)</b>	<i>Deliver the scientific understanding and technological innovations that are critical to the success of DOE's mission and the Nation's science base.</i>	SC	\$2,835
<b>Corporate Management (CM)</b>	<i>The Department of Energy will strive to demonstrate organizational excellence in its environment, safety and health practices, in its communication and trust efforts, and in its corporate management systems and approaches.</i>	DA, EH	\$ 451 <sup>(3)</sup>
<b>DOE's Total Budget for FY 2000:</b>			<b>\$17,367</b>

Notes:

- The budget dollars include the cost of Salaries and Benefits for a Full Time Equivalent (FTE) Staffing Level of 16,297.
- PSO offices are grouped under Business Lines to provide an aggregate of budget resources by Business Line. Except for NE, the aggregate for each Business Line is the sum of program offices budgets (NE's Naval Reactors budget is included in the National Security aggregate), Departmental Administration (DA) includes: CI, CFO, ED, GC, IA, IG, MA, PA, PC, and PO.
- CM budget includes Departmental Administration and Environmental Safety and Health. It also includes adjustment of \$ 17 million from excess FERC receipts.
- The budget for the new Security Office and the Office of Independent Oversight and Performance Assurance is included within the NS, ER and SC budgets. It will be displayed separately for FY 2001 and beyond.

The following sections document our commitments and performance measures under each of the five strategic goals. In this FY 2000 Agreement, we have set forth a total of 66 commitments and 229 performance measures.

# ENERGY RESOURCES

## STRATEGIC GOAL

*The Department of Energy and its partners promote secure, competitive, and environmentally responsible energy systems that serve the needs of the public.*

### OBJECTIVES

- ER1:** *Reduce the vulnerability of the U.S. economy to disruptions in energy supplies.*
- ER2:** *Ensure that a competitive electricity generation industry is in place that can deliver adequate and affordable supplies with reduced environmental impact.*
- ER3:** *Increase the efficiency and productivity of energy use, while limiting environmental impacts.*
- ER4:** *Support U.S. energy, environmental, and economic interests in global markets.*
- ER5:** *Carry out information collection, analysis, and research that will facilitate development of informed positions on long-term energy supply and use alternatives.*

The following commitments describe our most significant performance goals for FY 2000 towards the Energy Resources strategic goal and objectives.

### OUR COMMITMENTS

**ER1:** *Reduce the vulnerability of the U.S. economy to disruptions in energy supplies.*

**ER1-1 BOOSTING THE NATION'S PRODUCTION OF DOMESTIC OIL**  
Support research and development, policies, and improved regulatory practices capable of ending the decline in domestic oil production before 2005. (FE)

*Performance target for FY 2000:*

- *Complete demonstration and transfer of seven advanced secondary and tertiary technologies, adding 92 million barrels of reserves, increasing the number of economic wells and reducing abandonment rates.*
- *Complete field testing and monitoring of two technologies for downhole separation for oil and water, resulting in reduction in produced water and potential increase in oil production per well.*

**ER1-2 MAINTAINING AN EFFECTIVE STRATEGIC PETROLEUM RESERVE**

Maintain an effective Strategic Petroleum Reserve (SPR) to deter and respond to oil supply disruptions, and act cooperatively with the importing member nations of the International Energy Agency. (FE)

*Performance target for FY 2000:*

- *Complete the Life Extension Program to ensure the long-term reliability, effectiveness, and operational readiness of SPR facilities and systems.*

- *Ensure the achievement of a calculated site availability of 95% or greater with drawdown capability of 4.1 million barrels per day for a sustained 90 day period within 15 days notice by the President.*
- *Complete contracting for the transfer and/or exchange of 28 million barrels of Federal Royalty Oil from the Department of Interior for a net increase of approximately 23 million barrels in SPR inventory, with deliveries of a remaining 4 million barrels in FY 2001.*

**ER1-3 DIVERSIFYING THE INTERNATIONAL SUPPLY OF OIL AND GAS**

Diversify the international supply of oil and gas. (IA)

- *Performance targets for FY 2000:*
  - *Continue DOE leadership in international energy initiatives that are instrumental in developing, through government-to-government efforts, an effective legal and regulatory framework for private sector energy investment and policies to encourage development of a broad portfolio of fuel supplies.*

**ER1-4 DEVELOPING ALTERNATIVE TRANSPORTATION FUELS AND MORE EFFICIENT VEHICLES**

Develop alternative transportation fuels and more efficient vehicles that can reduce year 2010 projected oil (crude plus refined products) imports of 12 million barrels per day by 5 percent. (EE)

- *Performance targets for FY 2000:*
  - *Demonstrate conversion of agricultural wastes to ethanol at a small commercial scale using a genetically engineered fermentative microorganism.*
  - *Complete testing of baseline prototype, 50-volt high power lithium-ion modules for use in hybrid vehicles.*
  - *Launch two projects that will lead to 100 percent penetration of alternative fuel vehicles in selected niche applications such as a local taxi fleet or the busses for a particular school.*

- *Complete solicitation for, and selection of, candidate industrial teams for the Entry Entrance Coproduction Plant (EECP) project in which innovative alternative fuels will be coproduced along with electricity and chemical products. (FE)*

**ER1-5 [Combined with ER1-4]**

**ER1-6 TAKING MEASURES TO AVOID DOMESTIC ENERGY DISRUPTIONS**

Take measures to avoid, but when needed, respond to domestic energy disruptions. (S2)

- *Performance targets for FY 2000:*
  - *Complete final preparations for a smooth Y2K transition in U.S. energy markets in cooperation with industry organizations and other government agencies. Provide for timely communication to the public of information regarding readiness status, contingency planning activities, and real-time performance of the nation's energy infrastructure during the Y2K rollover. (PO)*
  - *Ensure that each power system control area operated by a Power Marketing Administration (PMA) receives, for each month of the fiscal year, a Control Compliance Rating of "Pass" using the North American Electric Reliability Council performance standard. (PMAs)*
  - *Meet the repayment plan for the principal on the power investment for each PMA. (PMAs)*
  - *Achieve a safety performance of 3.3 or fewer recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor Statistics' industry rate, whichever is lower. (PMAs)*
  - *Work with industry organizations and government agencies, including the National Petroleum Council, to assess the impact of changing market conditions and regulations on the level and variability of petroleum prices and supply, and provide recommendations to minimize disruptions during change. (PO)*



**ER2:** *Ensure that a competitive electricity generation industry is in place that can deliver adequate and affordable supplies with reduced environmental impact.*

**ER2-1 ESTABLISHING A MORE OPEN, COMPETITIVE ELECTRIC SYSTEM**

Advance Congressional action on comprehensive electricity restructuring legislation by incorporating additional elements of the Administration's 1999 proposal during full committee and floor consideration to achieve an outcome that benefits consumers, the economy, and the environment. Also, support administrative actions to promote establishment of a more open, competitive, and reliable electric system, with improved environmental performance.

(PO)

- *Performance targets for FY 2000:*
  - *Use recently enhanced modeling capabilities to demonstrate the impact of provisions to address market power and properly sized regional transmission organizations in support of the legislative process.*

**ER2-2 BOOSTING THE NATION'S PRODUCTION OF NATURAL GAS**

Support R&D policies and improved regulatory practices that can increase domestic natural gas supplies, moderate future price increases, and fuel 25 percent of the anticipated 6 trillion cubic feet (TCF) increase in natural gas demand (of which 3.5 TCF is for electricity generation) through 2010. (FE)

- *Performance targets for FY 2000:*
  - *Demonstrate a cost effective horizontal well and advanced exploration and stimulation technologies in low permeability natural gas formations for increasing recovery of the 5,000+ TCF of gas in place in the Greater Green River and Wind River Basins.*

**ER2-3 DEVELOPING RENEWABLE DOMESTIC ENERGY**

Develop renewable energy technologies and support policies capable of tripling non-hydroelectric renewable energy generating capacity by 2010. (EE)

- *Performance targets for FY 2000:*
  - *Facilitate the installation of 20,000 solar energy systems in support of the Million Solar Roofs Initiative, bringing the total number of installed systems to 70,000.*
  - *Develop a 13 percent efficient stable prototype thin-film photo-voltaic module.*
  - *Demonstrate fully autonomous operation of a 10 kW dish engine system for off grid applications.*
  - *Complete three projects which will be co-firing with biomass on a regular basis.*
  - *Complete two designs of advanced air-cooled condensers for geothermal applications.*
  - *Install and begin testing of two proof-of-concept turbines under Next Generation Turbine program leading to commercial availability of technology capable of producing electricity at 2 1/2 cents per kWh in 15 mph wind resource by 2003.*
  - *Complete one nationwide technology Super-Energy Savings Performance Contract (ESPC) for use by all agencies, bringing the total number of technology Super-ESPCs to four.*
  - *Establish an Interagency Council and an Advisory Committee on biobased products and bioenergy. By April 30, 2000 develop a Strategic Plan for the development and use of biobased products and bioenergy as required by Executive Order 13134.*

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**ER2-4 REDUCING EMISSIONS FROM EXISTING FOSSIL FUEL POWER PLANTS AND DEVELOPING CLEAN HIGH EFFICIENCY FOSSIL FUELED POWER PLANT FOR THE 21ST CENTURY**

By 2015, significantly reduce emissions from currently existing fossil fuel powerplants, and from new plants by: (1) developing market-ready coal power systems with efficiencies over 60 percent (new plants are currently about 35 percent) and near zero emissions; and (2) integrating advanced turbine and fuel cell technology to achieve market-ready gas-fueled powerplants with efficiencies over 70 percent.

(FE)

□ *Performance targets for FY 2000:*

- *Begin testing of first market prototype solid oxide fuel cell for distributed power applications.*
- *Complete validation testing for critical components of advanced utility-scale turbines with over 60 percent efficiency (combined cycles mode) and ultra-low NOx emissions.*
- *In support of Vision 21, complete testing of a 250kw fuel cell/turbine hybrid and deliver a conceptual design of a 1-MW fuel cell/turbine hybrid powerplant to facilitate market entry.*
- *Complete demonstration of the third integrated gasification combined cycle project (Pinion Pine) utilizing air-blown gasification and hot gas cleanup for improved thermal efficiency, and continue operations of one other project (Polk) in order to establish the engineering foundation leading to new generation of 60 percent efficient powerplants.*
- *Complete pilot studies on mercury emission controls that augment existing pollution control technologies, and are expected to reduce mercury emissions by over 50 percent at less than half the cost originally estimated in EPA's December 1997 report to Congress on Mercury.*
- *Complete the first large scale (600MW) test of selective non-catalytic reduction, which will allow coal-fired power plants to satisfy ozone transport (OTAG) requirements for reduction of*

*emissions of oxides of nitrogen and also reduce fine particulate matter.*

- *Continue coordination of the Russian-American Fuel Cell Consortium (RAFCO) which has as one of its primary goals, the opening up of the Russian market to U.S. manufactured fuel cells.* (IA)

**ER2-5 and ER2-6 [Combined with ER2-4]**

**ER2-7 SUPPORTING RESEARCH TO IMPROVE EXISTING NUCLEAR POWER PLANTS**

Support research to improve nuclear power plant reliability and availability, and increase the capacity factor of existing nuclear power plants from the 1996 average of 76 percent to 85 percent by 2010.

(NE)

□ *Performance targets for FY 2000:*

- *Implement a cooperative cost-shared R&D program by working with industry, universities, national laboratories, and the Nuclear Regulatory Commission, to address technical issues that could impact continued operation of current nuclear power plants.*
- *Issue the first update to the Joint DOE/EPRI Strategic Research and Development Plan to Optimize U.S. Nuclear Power Plants.*

**ER2-8 MAINTAINING NUCLEAR POWER AS A VIABLE OPTION FOR THE FUTURE**

Maintain a viable nuclear option for future, carbon-free baseload electricity through cooperative technical development activities with U.S. electric industry, national laboratories, and universities that would maintain domestic nuclear capabilities and that would facilitate a U.S. order of an advanced nuclear power plant by 2010. (NE)

□ *Performance targets for FY 2000:*

- *Continue Nuclear Energy Research Initiative (NERI) research to improve the understanding of new reactor and fuel cycle concepts, and nuclear waste management technologies and begin to develop a preliminary feasibility assessment of the concepts and technologies.*

- *Advance the state of scientific knowledge and technology to enable incorporation of improved proliferation resistance, safety and economics in the potential future design, and development of advanced reactor and nuclear fuel systems.*

### **ER2-9 DEVELOPING ADVANCED TURBINES FOR COGENERATION**

Develop and introduce advanced turbines for cogeneration that can reduce annual industrial energy costs by \$500 million and carbon emissions by nearly 1.7 million metric tons in 2010. (EE)

- *Performance target for FY 2000:*
  - *Demonstrate two advanced industrial turbine system engines at end-user sites.*

**ER3: *Increase the efficiency and productivity of energy use, while limiting environmental impacts.***

### **ER3-1 DESIGNING AND DELIVERING THE VEHICLES OF THE FUTURE**

Develop and deploy vehicles, fuels, and systems of the future, contributing significantly to the Partnership for a New Generation of Vehicles goal to develop, by 2004, prototype mid-sized cars capable of 80 miles per gallon that will reduce CO<sub>2</sub> emissions by two-thirds compared to 1993 new car average without compromising safety, comfort, and cost. (EE)

- *Performance target for FY 2000:*
  - *Work with three domestic automakers to incorporate the most promising Partnership for a New Generation of Vehicles (PNGV) technologies in concept vehicles with up to three times average fuel economy of 1993 Taurus, Lumina and Concorde models.*

### **ER3-2 IMPROVING EFFICIENCY OF ENERGY INTENSIVE INDUSTRIES**

By 2010, reduce industrial energy use per unit of output by 25% by supporting industry/government/academia partnerships in R&D to

improve efficiency of the Nation's energy intensive industries. (EE)

- *Performance target for FY 2000:*
  - *Initiate 12 solicitations with industry in support of the roadmaps developed in the Industries of the Future program.*
  - *Establish partnerships with 50 Industries of the Future plants to provide integrated delivery of tools and technical assistance to target motors, steam, compressed air, and combined heat and power system opportunities.*
  - *Continue support for Industrial Assessment Centers operating at 30 participating universities that will conduct approximately 750 combined energy, waste, and productivity assessments.*

### **ER3-3 IMPROVING THE ENERGY EFFICIENCY OF BUILDINGS**

By 2010, improve the energy efficiency of the existing U.S. building stock, by reducing annual energy consumption by 2 quadrillion btu by the year 2010, relative to what would have otherwise been consumed. (EE)

- *Performance target for FY 2000:*
  - *Weatherize 68,000 homes, bringing the total number of homes weatherized to 4.8 million.*
  - *Recruit 5 utility partners to promote Energy Star products; an additional 500 retail stores to promote Energy Star products; and 40 window partners to promote Energy Star Windows.*
  - *Recruit 50 new Rebuild America Partners, increasing the total number of Rebuild America communities to 290. New partners will begin action plans that will result in over 100 million square feet of floor space renovated, reducing annual energy costs by \$28 million and reducing CO<sub>2</sub> emissions by 100 thousand metric tons when local actions are completed in 2003.*
  - *In partnership with Building America, develop more than 2,000 highly energy-efficient, environmentally sound, and cost-effective houses and disseminate results to builders of 15,000 other houses through Partnership for Advanced Technology in Housing (PATH).*

- Continue efforts to reduce the use of energy in Federal buildings and report the results achieved through the end of FY 1998, towards the goal of achieving a 20 percent reduction by the end of FY 2000 as compared to 1985 energy use. Preliminary data indicates that agencies had achieved a 17 percent reduction at the end of FY 1997.
- Issue final rules regarding energy efficiency standards for fluorescent lamp ballasts and water heaters and issue proposed rules regarding energy efficiency standards for clothes washers and central air conditioners.

- Leading and facilitating the development of U.S. positions on technology issues in the climate negotiations including participation in the UNFCCC technology consultation process.

**ER4: Support U.S. energy, environmental, and economic interests in global markets.**

**ER4-1 PLANNING FOR ENERGY RELATED GREENHOUSE GAS REDUCTIONS**

Develop policies, programs, and information to facilitate energy sector reductions in greenhouse gas emissions. (PO)

- Performance targets for FY 2000:
  - Develop a DOE proposal for guidelines for implementing the flexibility mechanisms included in the Kyoto Protocol.
  - Support, through quantitative analysis and international contacts, Administration efforts to obtain meaningful commitments for reducing greenhouse gas emissions from developing countries.
  - Lead the U.S. Government technology and climate change strategy development and implementation through:
    - Chairing and expanding the Annex II countries' Climate Technology Initiative which promotes the objectives of the UN Framework Convention on Climate Change (UNFCCC) by fostering international cooperation for accelerated development and diffusion of climate-friendly technologies and practices for all activities and greenhouse gases.

**ER4-2 COOPERATING INTERNATIONALLY TO DEVELOP OPEN ENERGY MARKETS**

Cooperate with foreign governments and international institutions to develop open energy markets, and facilitate the adoption and export of clean, safe, and efficient energy technologies and energy services. (IA)

- Performance target for FY 2000:
  - Increase U.S. energy-related business internationally by removing policy, legal and fiscal barriers for U.S. companies by:
    - Continuing to implement with other APEC economies and the private sector an initiative to promote accelerated investment in natural gas infrastructure and trading networks in the APEC region;
    - Implementing the "U.S.-China Energy and Environment Cooperation Initiative" including coordination of interagency effort involving DOE programs, EPA, Commerce and OSTP to promote rural electrification, urban air quality, clean energy sources, and energy efficiency;
    - Continuing to lead a regulatory reform initiative to promote economic growth through private investment in environmentally sound energy development and regional integration in Sub-Saharan Africa, including South Africa;
    - Continuing to lead a regulatory reform initiative under the Binational Commission to promote adoption by the Russian Government of transparent, fair and consistent regulations in the oil and gas, and power sectors in order to attract investment.

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**ER5: Carry out information collection, analysis, and research that will facilitate development of informed positions on long-term energy supply and use alternatives.**

**ER5-1 EXPANDING PUBLIC ACCESS TO ENERGY INFORMATION**

Develop and expand public access to energy data, forecasts, analyses, and educational materials. (EI)

- Performance targets for FY 2000:
- Achieve a growth rate of at least 20 percent per year, through 2002, in the average number of unique monthly users of the Energy Resources Board Web Site (from about 71,000 per month in 1997).
  - Publish domestic and international Annual Energy Outlooks forecasting energy supply and consumption through the year 2020.
  - Respond to 70,000 inquiries by individuals, small businesses, and state and local government through the Energy Efficiency and Renewable Energy Clearinghouse (EREC). (EE)

**ER5-2 DEVELOPING INNOVATIVE OPTIONS FOR 21ST CENTURY ENERGY MARKETS**

Carry out research and scenario analysis to help identify and understand options that could revolutionize 21st century energy markets. (FE)

- Performance targets for FY 2000:
- Demonstrate over 90 percent absorption of CO<sub>2</sub> in a sorbent enhanced reformer reactor for hydrogen production. (EE)
  - Identify a site containing gas hydrates suitable for testing the feasibility of methane recovery.
  - Commence 3-4 small scale carbon sequestration development projects from those selected in the FY 1998 Novel Concepts solicitation, and feasibility studies for 1-2 sequestration projects selected under FE's August and September 1999 solicitations

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# NATIONAL SECURITY

## STRATEGIC GOAL

*Further strengthen U.S. national security, and reduce the global danger from weapons of mass destruction.*

### OBJECTIVES

- NS1:** *Maintain confidence in the safety, reliability, and performance of the nuclear weapons stockpile without nuclear testing.*
- NS2:** *Replace nuclear testing with a Stockpile Stewardship Program.*
- NS3:** *Ensure the vitality of DOE's national security enterprise.*
- NS4:** *Reduce nuclear weapons stockpiles and the proliferation threat caused by the possible diversion of nuclear materials.*
- NS5:** *Continue leadership in policy support and technology development for international arms control and nonproliferation efforts.*
- NS6:** *Meet national security requirements for naval nuclear propulsion and for other advanced nuclear power systems.*
- NS7:** *Improve international nuclear safety.*

The following commitments describe our most significant performance goals for FY 2000 towards the National Security strategic goal and objectives.

### OUR COMMITMENTS

**NS1:** *Maintain confidence in the safety, reliability, and performance of the nuclear weapons stockpile without nuclear testing.*

#### NS1-1 MAINTAINING THE ENDURING STOCKPILE

Extend the life of U.S. nuclear weapons by continuing the Stockpile Life Extension Program and Stockpile Maintenance activities. Improve detection and prediction capabilities for assessing nuclear weapon component performance and the effects of aging, and continually evaluate the safety, reliability, and performance of the nuclear weapons stockpile. (DP)

*Performance targets for FY 2000:*

- *Report annually to the President on the need or lack of need to resume underground testing to certify the safety and reliability of the nuclear weapons stockpile.*
- *Meet all annual weapons alteration and modification schedules developed jointly by DOE and DoD.*
- *Complete an internal comprehensive review of the Stockpile Stewardship Program.*

**NS1-2 and NS1-3** [Combined with NS1-1]

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**NS1-4 DEVELOPING A REPLACEMENT SOURCE OF TRITIUM**

Provide a reliable source of tritium as required for the nuclear weapons stockpile by FY 2005 based on the selection of commercial light water reactor technology. (DP)

- Performance target for FY 2000:*
  - *Begin implementation of the commercial light water reactor technology to provide a reliable source of tritium.*

**NS2: *Replace nuclear testing with a Stockpile Stewardship Program.***

**NS2-1 REPLACING UNDERGROUND TESTING WITH SCIENCE**

Develop the advanced simulation and modeling technologies necessary to confidently mitigate the loss of underground testing by FY 2004. (DP)

- Performance target for FY 2000:*
  - *Demonstrate a computer code capable of performing a three-dimensional analysis of the dynamic behavior of a nuclear weapon primary, including a prediction of the total explosive yield, on an ASCI computer system.*

**NS2-2 DEVELOPING NEW EXPERIMENTAL CAPABILITIES FOR UNDERSTANDING WEAPONS SCIENCE**

Develop new nuclear weapons physics experimental test capabilities. (DP)

- Performance target for FY 2000:*
  - *Continue construction of the National Ignition Facility (NIF) and rebaseline future construction, total costs, and schedules by June 2000.*

**NS2-3 CONDUCTING EXPERIMENTS TO ADVANCE OUR UNDERSTANDING OF WEAPONS BEHAVIOR**

Advance our understanding of the fundamental characteristics of weapons behavior through systems engineering and advanced experiments and modeling to support future assessments of weapons safety, reliability, and performance. (DP)

- Performance target for FY 2000:*
  - *Conduct further subsets of the subcritical experiment begun in FY1999 (Oboe) and one additional subcritical experiment at the Nevada Test Site to provide data on the behavior of nuclear materials during the implosion phase of a nuclear weapon.*

**NS3: *Ensure the vitality of DOE's national security enterprise.***

**NS3-1 DOWNSIZING AND MODERNIZING THE NATIONAL SECURITY ENTERPRISE**

Provide an appropriately-sized, cost-effective, safe, secure, and environmentally sound national security enterprise. Ensure that sufficient scientific and technical personnel are available to meet DOE's long-term national security requirements. (DP)

- Performance targets for FY 2000:*
  - *Ensure that all facilities required for successful achievement of the Stockpile Stewardship Program remain operational.*
  - *Meet the established schedules for downsizing and modernizing our production facilities.*

NS3-2 [Combined with NS3-1]



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### NS3-3 PROTECTING NUCLEAR MATERIALS, FACILITIES AND INFORMATION

Ensure the security of the Department's nuclear materials, facilities, and information assets. Provide DOE-related intelligence and threat assessment support to members of the national security community. (SO)

- *Performance target for FY 2000:*
  - *Reinforce security awareness through a Department wide campaign.*
  - *Implement Zero Tolerance Policy for unauthorized disclosure of classified safeguards and security information.*
  - *Develop a streamlined Site Safeguards and Security Plan process.*
  - *Develop policies to safeguard DOE nuclear materials, classified matter and facilities on a graded basis.*
  - *Consolidate the Personnel Security Assurance Program and the Personnel Assurance Program into a single departmental Human Reliability Program.*
  - *Finalize revision to the DOE Protective Force Order (DOE Order 473.2) to include specific direction which addresses security planning, training and exercises to prepare for a weapon of mass destruction event.*
  - *Implement advanced safeguards and security technologies to reduce DOE facilities' vulnerabilities to chemical and other threats.*
  - *Initiate efforts to implement and maintain core material control and accounting software to standardize nuclear material accounting throughout DOE.*
  - *Continue material control and accountability upgrades at DOE facilities with weapons-usable material.*
  - *Expand forensic analysis for improved cyber security for classified and sensitive unclassified information systems.*
  - *Initiate the correction of DOE infrastructure vulnerabilities identified by the President's Commission on Critical Infrastructure Protection.*

- *Improve the Department's ability to identify foreign intelligence targeting against Departmental facilities, personnel, information, and technologies through better exploitation of all-source intelligence information.* (CN)
- *Reduce DOE facilities' vulnerabilities to chemical threats through sensor development and chemical protective equipment.* (NN)

### NS3-4 [Combined with NS3-3]

### NS3-5 MAINTAINING READINESS FOR NUCLEAR OR OTHER EMERGENCIES

Maintain nuclear test readiness and enhance emergency management capabilities to address any nuclear weapons, radiological, or other emergency in the United States or abroad. (DP/SO)

- *Performance targets for FY 2000:*
  - *Ensure that the capability to resume underground testing is maintained in accordance with the Presidential Decision Directive through a combined experimental and test readiness program.* (DP)
  - *Demonstrate improvement of a comprehensive management system to ensure effective Departmental response to all DOE emergencies.* (SO)
  - *Maintain robust emergency response assets in accordance with Presidential Decision Directive 39, The Atomic Energy Act, Executive Order 12656, and Federal Emergency Plans.* (SO)

### NS3-6 MANAGING CONTRACTOR WORK FORCE RESTRUCTURING

Mitigate the impacts on workers and communities from contractor work force restructuring and assist community planning. (WT)

- *Performance targets for FY 2000:*
  - *Limit involuntary termination of employment at Department of Energy defense nuclear facilities between 30 and 60 percent of positions eliminated.*
  - *Achieve annual recurring costs savings from separated workers that is at least three times the one time cost of separation.*

- *Support local community transition activities that will create 3,000 to 5,000 jobs during FY 2000, bringing the total jobs created to between 20,000 and 25,000 by the end of FY 2000.*

**NS4: Reduce nuclear weapons stockpiles and the proliferation threat caused by the possible diversion of nuclear materials.**

**NS4-1 REDUCING THE WEAPONS STOCKPILE**

Dismantle nuclear warheads that have been removed from the U.S. nuclear weapons stockpile in a safe and secure manner. (DP)

- *Performance target for FY 2000:*
  - *Adhere to approved schedules for the safe and secure dismantlement of nuclear warheads that have been removed from the U.S. nuclear weapons stockpile.*

**NS4-2 REDUCING INVENTORIES OF SURPLUS WEAPONS-USABLE FISSILE MATERIALS WORLDWIDE IN A SAFE, SECURE, TRANSPARENT, AND IRREVERSIBLE MANNER**

Implement the disposition of surplus highly enriched uranium (HEU) and plutonium and provide technical support to attain reciprocal actions for the disposition of surplus Russian plutonium. Minimize the future demand for HEU in civilian programs through the development of alternative low enriched uranium (LEU) fuels for research reactors and targets for medical isotope production. Support international efforts to place excess fissile materials under International Atomic Energy Agency (IAEA) safeguards. (NN/MD)

- *Performance targets for FY 2000:*
  - *Complete Title I design of the MOX Fuel Fabrication Facility required for submittal of license application to the Nuclear Regulatory Commission. (MD)*
  - *Ship 4MT (8% of 50MT) of surplus HEU to the United States Enrichment Corporation. (MD)*
  - *Begin to implement a bilateral agreement with Russia for plutonium disposition. (MD)*

- *Issue the Record of Decision on a site(s) for three plutonium disposition facilities. (MD)*
- *Monitor the conversion of 30 metric tons of HEU from dismantled Russian nuclear weapons into low enriched uranium (LEU) for purchase by United States-Enrichment Corporation. (NN)*
- *Conduct up to 24 special monitoring visits to four Russian facilities and maintain permanent presence office at one site. (NN)*
- *Install permanent monitoring equipment at the Zheleznogorsk blending facility. (NN)*
- *Maintain and monitor the UF6 flow and enrichment measurement equipment installed at the blend points at a Russian HEU dilution facility. (NN)*
- *Compile and analyze collected data and information into an assessment of confidence of compliance with the nonproliferation objectives of the HEU Agreement. (NN)*
- *Conduct Russian technology demonstrations to further warhead dismantlement or transparency measures. (NN)*

**NS5: Continue leadership in policy support and technology development for international arms control and nonproliferation efforts.**

**NS5-1 STRENGTHENING THE NUCLEAR NONPROLIFERATION REGIME**

Strengthen the nuclear nonproliferation regime through support of treaties and international agreements. (NN)

- *Performance target for FY 2000:*
  - *Support the Comprehensive Test Ban Treaty implementation and ratification activities.*
  - *Support U.S. Government lead negotiations on the Fissile Materials Cut-off Treaty and for the Biological Weapons Convention negotiations.*
  - *Implement a nuclear spent fuel maintenance plan by continuing technical dialogue with the Democratic Peoples Republic of Korea (DPRK).*

- *Lead, via the Joint Chairmanship, the interagency task force on warhead and fissile material to implement a START III concept for warhead elimination by July 2000.*
- *Provide equipment, technologies, and expertise to the IAEA and the United Nations Special Commission (UNSCOM) to support their nuclear inspections in North Korea and Iraq.*

#### **NS5-2 MINIMIZING THE RISKS OF PROLIFERATION**

Work with the states of the former Soviet Union and others to minimize the risks of proliferation. (NN)

##### *Performance targets for FY 2000:*

- *Ensure safe, secure storage of spent nuclear fuel at the BN-350 Reactor in Aktau, Kazakhstan. Complete canning of the fuel on-site, including the existing core. Begin work on the long-term disposition program.*
- *Continue to install MPC&A upgrades in Russia for defense-related sites civilian sites, Russian Navy projects, and the transportation sector.*
- *Begin consolidation of weapons-usable material into fewer buildings and fewer sites, and eliminate 200 kilograms of weapons-grade nuclear material by converting it to non-weapons grade form thereby improving security and reducing overall cost.*
- *Further the Nuclear Cities Initiative promoting cooperation with the closed cities in the Russian nuclear weapons complex to improve the prospects for defense conversion and employment of former weapons scientists.*
- *Equip 2-3 Russian sites and conduct 2 joint training sessions under a Second Line of Defense Initiative.*
- *Cooperate with Russian Federation Customs to block nuclear smuggling at Russian border posts with nuclear detection equipment.*
- *Engage approximately 2000 scientists, engineers and technicians at nuclear NIS institutes, and approximately 800 scientists, engineers and technicians at NIS chemical/ biological institutes in 50 projects to provide long-term commercial employment.*

#### **NS5-3 ADVANCING NONPROLIFERATION TECHNOLOGY**

Develop technologies and systems for detection of nuclear weapons proliferation and for nuclear explosion monitoring. (NN)

##### *Performance targets for FY 2000:*

- *Develop improved technologies and systems for early detection, identification, and response to weapons of mass destruction proliferation and illicit materials trafficking.*
- *Launch the Multispectral Thermal Imager (MTI) small satellite to demonstrate temperature measurement from space for the passive detection and characterization of proliferant activities.*
- *Deliver three improved sensor systems for treaty nuclear explosion monitoring to the U.S. Air Force.*
- *Deliver to the U.S. National Data Center 60% (Release 4) of an operational knowledge base that can be accessed by automated processing systems and human analysts to provide monitoring and verification confidence.*
- *Test first generation prototype hand-held detector for enhanced detection of chemical agents.*
- *Complete architecture development to protect a "special event" from biological attacks.*
- *Develop and test a prototype subway protection system that integrates chemical sensor and predictive models into an emergency response information system.*

**NS6: *Meet national security requirements for naval nuclear propulsion and for other advanced nuclear power systems.***

#### **NS6-1 PROVIDING SPECIAL NUCLEAR POWER SYSTEMS FOR NATIONAL SECURITY**

Provide the U.S. Navy with safe, militarily-effective nuclear propulsion plants and ensure their continued safe and reliable operation. Meet ongoing and future national security requirements for special nuclear power systems. (NE)

- *Performance targets for FY 2000*
  - *Ensure the safety, performance reliability, and service-life of operating reactors. Develop new reactor plants, including the next generation submarine reactor, the design of which will be 90 percent complete by the end of FY 2000, and complete initial development efforts on a reactor plant for the next generation aircraft carrier.*
  - *Ensure radiation exposures to workers or the public from Naval Reactors' activities are within Federal limits and no significant findings result from environmental inspections by State and Federal regulators.*

- *Establish a Ukrainian Center for Nuclear Fuel and Reactor Core Design and collect information that will be used to design and test nuclear fuel.*
- *Obtain final design approval for the Chornobyl Heat Plant, and complete delivery of major equipment to the construction site.*

NS7-2 and NS7-3 [Combined with NS7-1]

NS6-2 [Combined with NS6-1]

## **NS7: *Improve international nuclear safety.***

### **NS7-1 ENHANCING THE SAFETY OF SOVIET-DESIGNED REACTORS AND PROMOTING INTERNATIONAL NUCLEAR SAFETY**

Assist countries in reducing the risks from Soviet-designed nuclear power plants and implement a self-sustaining nuclear safety improvement program capable of reaching internationally accepted safety practices. Promote nuclear safety culture improvements internationally by providing strong leadership in international nuclear safety organizations and centers. (NN)

- *Performance targets for FY 2000:*
  - *Complete the installation of Safety Parameter Display Systems to improve operator response to emergencies in Russia and at South Ukraine Unit 2, Rivne Unit 3, and Zaporizhzhya in Ukraine.*
  - *Complete a full-scope simulator for Kola Unit 4 and Balakovo Unit 4 in Russia, and for South Ukraine Unit 3 in Ukraine.*
  - *Complete a probabilistic risk assessment for Kola Unit 4 in Russia and for South Ukraine and Rivne plants in Ukraine.*

# ENVIRONMENTAL QUALITY

## STRATEGIC GOAL

*Aggressively clean up the environmental legacy of nuclear weapons and civilian nuclear research and development programs, minimize future waste generation, safely manage nuclear materials, and permanently dispose of the Nation's radioactive wastes.*

### OBJECTIVES

- EQ1:** *Reduce the most serious risks from the environmental legacy of the U.S. nuclear weapons complex first.*
- EQ2:** *Clean up as many as possible of the Department's 44 remaining contaminated geographic sites by 2006.*
- EQ3:** *Safely and expeditiously dispose of waste generated by nuclear weapons and civilian nuclear research and development programs and make defense high-level radioactive wastes disposal-ready.*
- EQ4:** *Prevent future pollution.*
- EQ5:** *Dispose of high level radioactive waste and spent nuclear fuel in accordance with the Nuclear Waste Policy Act as amended.*
- EQ6:** [Combined with EQ2]
- EQ7:** *Maximize the beneficial reuse of land and effectively control risks from residual contamination.*

The following commitments describe our most significant performance goals for FY 2000 towards the Environmental Quality strategic goal and objectives.

### Our Commitments <sup>1</sup>

**EQ1:** *Reduce the most serious risks from the environmental legacy of the U.S. nuclear weapons complex first.*

#### EQ1-1 REDUCING WORKER, PUBLIC, AND ENVIRONMENTAL RISKS

Identify and fund projects to reduce the most serious risks first and prevent further increases in relative risk at all sites. (EM)

*Performance targets for FY 2000:*

- *Move 35.1 metric tons of heavy metal (MTHM) of spent nuclear fuel (SNF) to dry storage. This will complete 2 percent of MTHM of SNF that will be moved to dry storage between FY 1998 and life-cycle completion.*
- *Stabilize 400 containers of plutonium metals/oxides, 41,000 kilograms bulk of plutonium residues, and 130 handling units of other nuclear material in other forms. This will complete about 10 percent of the containers of plutonium metals/oxides, 70 percent of the kilograms bulk of plutonium residues, and 3 percent of the handling units of other nuclear material in other forms that require stabilization between FY 1998 and life-cycle completion.*

<sup>1</sup> Performance targets related to the completion of release sites and facilities, waste disposal, SNF and nuclear material stabilization (EQ1-1, EQ2-1, EQ3-1) are estimates based on best available projections.

**EQ2: *Clean up as many as possible of the Department's 45 remaining contaminated geographic sites by 2006.***

**EQ2-1 ACCELERATING AND COMPLETING GEOGRAPHIC SITE CLEANUP<sup>2</sup>**

Complete clean up at 24 of the Department's 44<sup>3</sup> remaining sites by 2006. Continue cleanup at the 20 remaining sites, including the five largest sites, scheduled for completion in the post 2006 time-frame (EM)

*Performance targets for FY 2000:*

- *Complete remediation at 2 geographic sites, increasing the total completed to 70 of 113 geographic sites.*
- *Complete 378 release site assessments.*
- *Complete 252 release site cleanups. This will bring the number of completed release site cleanups to 4,700 out of a total inventory of approximately 9,700 release sites.*
- *Complete 64 facility decommissioning assessments.*
- *Complete 82 facility decommissionings. This will bring the number of completed facility decommissionings to 630 out of a total inventory of approximately 3,300 facilities.*

**EQ2-2 & EQ2-3 [Combined with EQ2-1]**

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<sup>2</sup> Cleanup progress is measured by completion of geographic sites where EM is responsible for remediation of contaminants and other material. Interim progress is demonstrated by cleaning up portions of the EM geographic sites, referred to as "Release Sites" and "Facilities". Cleaning up these areas ultimately leads to the completion of the entire geographic site. Long-term Stewardship activities will be implemented to protect human health and the environment from hazards remaining at DOE sites after cleanup is complete.

<sup>3</sup> EM's responsibilities include facilities and areas at 113 geographic sites (excluding the 21 sites in the Formerly Utilized Sites Remedial Action Program that transferred to the U.S. Army Corps of Engineers). As of the beginning of FY 2000, 69 geographic sites had been completed and 44 geographic sites (including WIPP which is a disposal site) remained to be cleaned up. These geographic site completions are based on the latest baseline information reported in the draft 1999 Accelerating Cleanup: Paths to Closure report.

**EQ2-4 DEVELOPING AND DEPLOYING INNOVATIVE CLEANUP TECHNOLOGIES**

Develop and deploy innovative environmental cleanup, nuclear waste, and spent fuel treatment technologies that reduce cost, resolve currently intractable problems, and/or are more protective of workers and the environment. (EM/NE)

*Performance targets for FY 2000:*

- *Accomplish 60 innovative technology deployments. (EM)*
- *Demonstrate 30 alternative technology systems that meet the needs identified by the Site Technology Coordination Groups. (EM)*
- *Make 30 alternative technology systems ready for implementation with cost and engineering performance data. (EM)*
- *Maintain the Fast Flux Test Facility in a safe, environmentally-compliant standby condition while implementing a Secretarial decision to conduct a National Environmental Policy Act review of the environmental impacts of returning the facility to operation. (NE)*
- *Complete the conversion and disposition of 100 percent of the secondary sodium coolant from the Experimental Breeder Reactor-II and 40 percent of the Fermi reactor sodium coolant in storage at Argonne National Laboratory-West. (NE)*
- *Initiate draining sodium from EBR-II primary system and processing it for disposal. (NE)*
- *Complete the Fuel Conditioning maintenance items and resume sodium-bonded fuel treatment activities if electrometallurgical treatment is chosen as the most appropriate technology. (NE)*
- *Meet commitments to the Ohio Environmental Protection Agency, the Tennessee Department of Environment and Conservation, and the Defense Nuclear Facilities Safety Board to ensure the safety of the Department's inventory of depleted UF<sub>6</sub>. (NE)*

**EQ3: *Safely and expeditiously dispose of waste generated by nuclear weapons and civilian nuclear research and development programs and make defense high-level radioactive wastes disposal-ready.***

**EQ3-1 DISPOSE OF WASTE GENERATED DURING PAST AND CURRENT DOE ACTIVITIES**

Safely and expeditiously dispose of waste generated during past and current DOE activities. Continue shipment of transuranic (TRU) waste for disposal at the Waste Isolation Pilot Plant (WIPP). (EM)

- Performance targets for FY 2000:
  - Ship 1,200 cubic meters of TRU waste to WIPP for disposal. This will bring the total TRU waste shipped to 1,550 cubic meters, which is about 1 percent of the total TRU waste that requires disposal between FY 1998 and FY 2034.
  - Dispose of 10,000 cubic meters of MLLW. This will bring the total MLLW disposed to 35,500 cubic meters which is about 15 percent of the total MLLW that requires disposal between FY 1998 and FY 2070.
  - Dispose of 40,000 cubic meters of LLW. This will bring the total LLW disposed to 116,000 cubic meters, which is about 7 percent of the total LLW that requires disposal between FY 1998 and FY 2070.
  - Produce 200 canisters of HLW at the Defense Waste Processing Facility at the Savannah River Site, and 5 canisters of HLW at the West Valley Demonstration Project. This will complete about 4 percent of the total canisters that will be produced from FY 1998 to life-cycle completion.

**EQ4: *Prevent future pollution.***

**EQ4-1 PREVENTING FUTURE POLLUTION**

Incorporate pollution prevention, including waste minimization, recycling and purchases of recycled material, into all DOE activities to meet the Department's "Pollution Prevention and Energy Efficiency Leadership (P<sup>2</sup>E<sup>2</sup>)" goals and "Greening the Government" Executive Orders. (S2/EM)

- Performance targets for FY 2000:
  - Reduce annual routine waste generation by 50% by December 1999, based on 1993 waste generation rates.
  - Prepare pollution prevention plans outlining specific strategies to meet the new Departmental P<sup>2</sup>E<sup>2</sup> goals for 30 DOE sites.
  - Conduct pollution prevention projects/practices to reduce waste from site cleanup and stabilization activities by 10% as compared to the annual planned baseline volumes and report the results achieved through December 1999 by April 2000.

**EQ5: *Dispose of high level radioactive waste and spent nuclear fuel in accordance with the Nuclear Waste Policy Act as amended.***

**EQ5-1 CONTINUING WITH YUCCA MOUNTAIN SITE CHARACTERIZATION**

Complete the scientific and technical analyses of the Yucca Mountain site, and if it is determined to be suitable for a geologic repository, obtain a license from the Nuclear Regulatory Commission. (RW)

- Performance targets for FY 2000:
  - Complete public hearings on the Draft Environmental Impact Statement which was published in August 1999.
  - Select the reference design for site recommendation and license application.
  - Select the reference natural systems models for site recommendation and license application.

**EQ5-2 [Combined with EQ5-1]**

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**EQ6: [Combined with EQ2]**

**EQ7: *Maximize the beneficial reuse of land and effectively control risks from residual contamination.***

**EQ7-1 CARRYING OUT LONG TERM STEWARDSHIP**

In conjunction with stakeholders, develop comprehensive land use plans for DOE sites that provide information on alternative uses, ownership, environmental requirements, and implementation schedules and ensure environmental remedies remain protective.

(EM)

- *Performance targets for FY 2000:*
  - *By June 2000, produce the draft study on long-term stewardship pursuant to the 1998 PEIS settlement agreement.*
  - *Continue coordination with the National Academy of Sciences/National Research Council on the release of their analyses on long-term stewardship (“closure”).*



# SCIENCE

## STRATEGIC GOAL

*Deliver the scientific understanding and technological innovations that are critical to the success of DOE's mission and the Nation's science base.*

### OBJECTIVES

- SC1:** *Develop the science that underlies DOE's long-term mission.*
- SC2:** *Deliver leading-edge technologies that are critical to the DOE mission and the Nation.*
- SC3:** *Improve the management of DOE's research enterprise to enhance the delivery of leading-edge science and technology at reduced costs.*
- SC4:** *Assist in the government-wide effort to advance the Nation's science education and literacy.*

The following commitments describe our most significant performance goals for FY 2000 towards the Science and Technology strategic goal and objectives.

### OUR COMMITMENTS

**SC1:** *Develop the science that underlies DOE's long-term mission.*

#### **SC1-1 CONDUCTING RELEVANT, HIGH QUALITY, INNOVATIVE RESEARCH THAT RESPONDS TO THE NEEDS OF THE DOE MISSION**

Conduct relevant, high quality, innovative research that responds to the needs of the DOE mission. (SC)

*Performance targets for FY 2000:*

- *Complete the sequencing of 50 million subunits of human DNA to submit to publicly accessible databases in FY 2000.*
- *Maintain the high quality and relevance of DOE's science as evaluated by annual peer reviews and advisory committees.*
- *Maintain and operate scientific user facilities to serve thousands of researchers from universities, national laboratories, and industry such that the unscheduled downtime is less than 10 percent of the total scheduled possible operating time on average.*
- *Meet the cost and schedule milestones for upgrade and construction of scientific facilities.*

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**SC1-2 PROVIDING NEW INSIGHTS INTO THE FUNDAMENTAL NATURE OF ENERGY AND MATTER**

Provide new insights into the fundamental nature of energy and matter. (SC)

- *Performance targets for FY 2000:*
  - *Move the newly upgraded D-Zero and CDF detectors at Fermilab into position in the Main Injector tunnel and begin commissioning in the third quarter of the fiscal year.*
  - *Re-establish collisions in the Tevatron at Fermilab using the new Main Injector, and perform an engineering run for the new mode of operation.*
  - *Advance knowledge from experiments at the Relativistic Heavy Ion Collider to see possible evidence of the predicted quark-gluon plasma; a high temperature, high density state of nuclear matter that may have existed a millionth of a second after the "Big Bang".*
  - *Complete and make available for use via the web a new energy transport code framework, based on modern computing techniques.*
  - *Operate the B-factory at the Stanford Linear Accelerator Center, the Main Injector for the Tevatron at Fermilab, the Thomas Jefferson National Accelerator Facility, and the Relativistic Heavy Ion Collider at Brookhaven National Laboratory, and deliver on the FY 2000 U.S./DOE commitments to the international Large Hadron Collider project.*

**SC1-3 SEARCHING FOR AND UTILIZING THE BEST SCIENTIFIC TALENT FROM ALL SOURCES TO PERFORM DOE RESEARCH**

Search for and utilize the best talent from all sources to perform DOE research. (SC)

- *Performance targets for FY 2000:*
  - *Continue Partnerships for Academic-Industrial Research where peer reviewed grants are awarded to university researchers for fundamental, high-risk work jointly defined by the academic and industrial research partners.*

- *Begin new funding opportunities in basic plasma sciences and junior plasma physics facility development programs provided through competitive announcements.*

**SC1-4 DEVELOPING SCIENCE TO SUPPORT DOE'S PARTICIPATION IN ENERGY AND OTHER NATIONAL POLICY FORMULATIONS**

Develop science to support DOE's participation in energy and other National policy formulations. (SC)

- *Performance targets for FY 2000:*
  - *Proceed on the development of the next generation coupled ocean-atmosphere climate model, leading to better information for assessing climate change and variability at regional, rather than global scales. This next generation model will change grid size from the current 300-500 kilometers on a side to less than 200 kilometers on a side.*
  - *Continue collaborative efforts with NASA on space science and exploration.*
  - *Complete the genetic sequencing of over 10 additional microbes with significant potential for waste cleanup and energy production.*
  - *Develop and implement, in cooperation with Basic Energy Sciences, a comprehensive research program within the Climate Change Technology Initiative where the focus areas are those with the maximum potential to affect carbon management.*

**SC1-5 SUPPORTING EMERGING SCIENCES THAT ARE IMPORTANT TO THE FUTURE OF DOE AND THE NATION**

Support emerging sciences that are important to the future of DOE and the Nation, including interdisciplinary research that addresses the Nation's most pressing problems. (SC)

- *Performance target for FY 2000:*
  - *Determine the molecular structures of proteins with more than 60 percent of the new structures that are published in the peer reviewed literature resulting from data generated at synchrotron*

user stations by BER structural biology program.

- Operate a novel magnetic fusion confinement device, the National Spherical Torus Experiment, with 0.5 megampere plasma currents approaching 0.5 second pulse lengths and 1 megampere currents for shorter pulses.

#### SC1-6 LEVERAGING RESEARCH OPPORTUNITIES

Leverage research opportunities through science partnerships and pursue international science collaborations. (SC)

□ Performance targets for FY 2000:

- Make operational three innovative concept exploration experiments in fusion science--The LSX field-reversed configuration and the flow-through Z pinch, both at the University of Washington and the Pegasus quasi-spherical toroidal plasma at the Wisconsin-- providing basic scientific understanding of relevant concept phenomena.
- In cooperation with NASA, NSF, USDA/Forest Service, and the Smithsonian Institution, provide quantitative data on the annual exchange of carbon dioxide between the atmosphere and terrestrial ecosystem from 25 AmeriFlux sites representing major types of ecosystem and land uses in North and Central America. Provide data on environmental factors, such as climate variation, on the net sequestration or release of carbon dioxide and the role of biophysical processes controlling the net exchange.

**SC2: Deliver leading-edge technologies that are critical to the DOE mission and the Nation.**

#### SC2-1 DEVELOPING THE TECHNOLOGIES TO MEET DOE'S ENERGY, NATIONAL SECURITY, AND ENVIRONMENTAL GOALS

Develop the technologies required to meet DOE's energy, national security, and environmental quality goals. (SC/NE)

□ Performance targets for FY 2000:

- Supply quality stable and radioactive isotopes for industrial, research, and medical applications that continue to meet customer specifications and maintain 95 percent on-time deliveries. (NE)
- Complete at least 60 percent of the construction of the Los Alamos Isotope Production Facility, which is needed for the production of short-lived isotopes for medical research. (NE)
- Invest in two new process development technologies as requested by researchers that enhance isotope production, services and delivery application systems. (NE)
- Implement the Advanced Nuclear Medicine Initiative by providing isotopes or financial assistance for at least five researchers. (NE)
- Complete bench scale demonstration of the process to recover Pu-238 scrap for reuse in power systems for future missions using radioisotope power systems. (NE)
- Execute industrial contract and initiate associated laboratory efforts to develop small Radioisotope Thermoelectric Generators (RTGs) for anticipated use on NASA's Europa Orbiter and Pluto/Kuiper missions planned for launch in 2003 and 2004. (NE)
- Develop advanced computing capabilities, computational algorithms, models, methods, and libraries, and advanced visualization and data management systems to enable new computing applications to science. (SC)
- Continue to fabricate, assemble, and operate premier supercomputer and networking facilities that serve researchers at national laboratories, universities and industry enabling understanding of complex problems and effective integration of geographically distributed teams in national collaborations. (SC)
- Complete Site characterization of the first Natural and Accelerated Bioremediation Research (NABIR) Field Research Center, and commence activities necessary to enable sample collection and distribution to investigators. (SC)

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## SC2-2 PURSUING TECHNOLOGY RESEARCH PARTNERSHIPS

Pursue technology research partnerships with industry, academia and other government agencies and proactively accelerate the transition of technologies to end users. (SC)

Performance targets for FY 2000:

- Initiate 7 Laboratory Technology Research projects that address the Department's top priorities for science and technology, through cost-shared research partnerships with industry.
- Review and select for Phase II funding approximately 80 Small Business Innovation Research (SBIR) proposals that satisfy proof of concept under Phase I funding. In a separate competition, select about 200 SBIR proposals for Phase I funding.

**SC3: Improve the management of DOE's research enterprise to enhance the delivery of leading-edge science and technology at reduced costs.**

## SC3-1 MANAGING THE NATIONAL LABORATORIES, SCIENCE-USER FACILITIES, AND OTHER DOE RESEARCH PROVIDERS AND RESEARCH FACILITIES

Manage the National Laboratories, science-user facilities, and other DOE research providers and research facilities in a more integrated, responsive, and cost-effective way, building on unique core strengths and corresponding roles. Design, construct, and operate research facilities in a timely and cost-effective manner. (SC)

Performance targets for FY 2000:

- Continue construction of the Spallation Neutron Source, at cost and timetables as contained in the Critical Decision II agreement, to provide beams of neutrons used to probe and understand the physical, chemical, and biological properties of materials at an atomic level.
- Continue fabrication of instrumentation for the short-pulse spallation source at the Manuel Lujan Jr. Neutron Scattering Center at the Los Alamos Neutron Science Center.

- Conduct five intensive operations periods at the Atmospheric Radiation Measurement (ARM) Southern Great Plains site.
- Operate the DIII-D Tokamak facility to test the feasibility of using increased radio frequency heating power and improved power exhaust capabilities to extend the pulse length of advanced operating modes, a requirement for future fusion energy sources.

SC3-2 [Combined with SC3-1]

## SC3-3 IMPROVING THE MANAGEMENT, DISSEMINATION, SHARING, AND USE OF SCIENTIFIC AND TECHNICAL INFORMATION ACROSS DOE

Improve the management, dissemination, sharing, and use of scientific and technical information. (SC)

Performance targets for FY 2000:

- Meet 75 percent of the requirements of computer facilities and networks users.
- Increase by 25 percent over FY 1999 the availability of peer-reviewed scientific journal literature, preprints, and reports to DOE and the public through collaborations with publishers, data compilers, exchange partners, and R&D programs using Web-based mechanisms.
- Increase visibility and use of energy-related scientific and technical information by government, academia, industry, and the public through electronic Web-based products that promote scientific advancement, resulting in 15 percent more customer usage over FY 1999.

SC3-4 [Combined with SC3-1]

**SC4: Assist in the government-wide effort to advance the Nation's science education and literacy.**

**SC4-1 DEVELOPING AND PROMOTING TECHNOLOGIES AND PROGRAMS THAT DELIVER INFORMATION AND CONTRIBUTE TO LEARNING IN SCIENCE, MATH, ENGINEERING AND TECHNOLOGY**

Develop and promote technologies and programs that deliver information and contribute to learning in science, math, engineering and technology, and in general, expand access to DOE's technical information. Leverage DOE's human and physical research infrastructure, working with the National Science Foundation and other Federal agencies, to promote science awareness, enable advanced educational research opportunities, build capabilities at educational institutions, and improve educational opportunities for diverse groups.

(SC/ NE)

□ *Performance targets for FY 2000:*

- *Continue the Global Change Research Education Program to support 15 graduate and 20 undergraduate students conducting DOE-related global change research. Continue to participate in the multi-agency "Significant Opportunities in Atmospheric Research and Science" Program (SOARS). (SC)*
- *Make 4 to 10 appointments in both the BER Alexander Hollaender Distinguished Post Doctoral Fellowship Program and the Historical Black Colleges and Universities Faculty and Student Research Programs for research across all areas of the BER program. (SC)*

- *Support U.S. universities' nuclear energy research and education capabilities by: (NE)*
  - *Providing fresh fuel to all university reactors requiring this service;*
  - *Providing funding for reactor upgrades and improvements at least 23 universities;*
  - *Partnering with 17 or more private companies to fund DOE/Industry Matching Grants Programs for universities;*
  - *Increasing the funding for Reactor Sharing by 20 percent over FY 1998, enabling each of the 29 schools eligible for the program to improve the use of their reactors for teaching, training, and education within the surrounding community.*
- *Attract outstanding U.S. students to pursue nuclear engineering degrees by: (NE)*
  - *Providing 18-20 fellowships;*
  - *Increasing the number of Nuclear Engineering Education Grants to 45 existing and new grants;*
  - *Providing scholarships and summer on-the-job training to approximately 50 sophomore, junior and senior nuclear engineering and science scholarship recipients.*

**SC4-2 [Combined with SC4-1]**

# CORPORATE MANAGEMENT

## STRATEGIC GOAL

*The Department of Energy will strive to demonstrate organizational excellence in its environment, safety and health practices, in its communication and trust efforts, and in its corporate management systems and approaches.*

### OBJECTIVES

**CM1:** *Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities.*

**CM2:** *As a good neighbor and public partner, continually work with customers and stakeholders in an open, frank, and constructive manner.*

**CM3:** *Use efficient and effective management systems and approaches to guide decision making, streamline and improve operations, align resources and reduce costs.*

**CM4:** *Improve the delivery of products and services through contract reform and the use of business-like management practices.*

**CM5:** *Implement information systems so employees can perform their jobs efficiently and effectively.*

**CM6:** *Improve performance through evaluations, reviews, audits, and inspections.*

The following commitments describe our most significant performance goals for FY 2000 towards the Corporate Management strategic goal and objectives.

### OUR COMMITMENTS

**CM1:** *Ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Departmental activities.*

#### CM1-1 INSTITUTING A SOUND ES&H CULTURE

Integrate and embed risk-based outcome oriented environment, safety, and health (ES&H) management practices into the performance of DOE's day-to-day work. Clearly identify and fund ES&H priorities and ensure resources are appropriately spent on those priorities. (EH)

#### Performance targets for FY 2000:

- Prevent fatalities, minimize serious accidents, and minimize environmental releases at Departmental sites.
- Conduct oversight special reviews, assessments, evaluations, and inspections of such topics as emergency management, safety management, and accidents.
- Propose legislation to Congress that would establish a program to compensate:
  - Current and former Federal and contractor workers and beryllium vendor employees who are ill because of beryllium exposure; and
  - Certain workers at the Oak Ridge East Tennessee Technology Park and the Paducah Gaseous Diffusion Plant in Kentucky who have illnesses associated with exposures which occurred during their employment.

- *Provide medical screening to all DOE workers formerly exposed to beryllium during their employment at DOE facilities.*
- *Develop a stronger, more coherent public health agenda at and surrounding DOE sites.*
- *Accomplish the milestone of the FMFIA corrective action plan to complete the nuclear safety standards upgrade project.*
- *Implement Integrated Safety Management Systems in all major management and operations contracts.*

**CM1-2**[Combined with CM1-1]

**CM1-3 ENSURING EMPLOYEES ARE QUALIFIED IN THEIR ES&H RESPONSIBILITIES**

Ensure that all DOE employees are appropriately trained and technically competent commensurate with their ES&H responsibilities. (MA)

- *Performance target for FY 2000:*
  - *Improve Federal technical workforce capabilities at defense sites by implementing the FY 2000 milestones of the Revised Implementation Plan for DNFSB Recommendation 93-3.*

**CM1-4 INVESTIGATING FEASIBILITY OF INDEPENDENT EXTERNAL OVERSIGHT OF SAFETY AND HEALTH AT DOE SITES**

Work with the Nuclear Regulatory Commission and the Occupational Safety and Health Administration to evaluate issues related to independent external regulation of safety and health. (EH)

*The Department has completed the pilot program. No new performance goals are proposed for FY 2000.*

**CM2: As a good neighbor and public partner, continually work with customers and stakeholders in an open, frank, and constructive manner.**

**CM2-1 INVOLVING STAKEHOLDERS IN THE POLICY- MAKING PROCESS**

Foster strong partnerships with neighboring DOE communities, regulators, and other stakeholders to determine priorities and solutions. (EM)

- *Performance target for FY 2000:*
  - *Conduct stakeholder meetings to increase public involvement in crosscutting environmental quality issues. The stakeholders will include advisory board members, state and local governments, Native American Tribes, and others across the country.*
  - *Respond to an estimated total of 500,000 public requests for information and documents from the Center for Environmental Management Information within an average of two business days per request.*

**CM2-2 IMPROVING COMMUNICATIONS WITH CUSTOMERS AND THE PUBLIC**

Increase customer and public awareness of DOE's mission areas by improving the quality, timeliness, and sufficiency of information disseminated on the Department's functions, successes, lessons learned, and future activities. (MA)

- *Performance targets for FY 2000:*
  - *Develop baseline data for the average time it takes to process Freedom of Information Act cases, and make improvements to reduce the average processing time by 5 percent.*

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### CM2-3 PROTECTING NUCLEAR NATIONAL SECURITY INFORMATION

Protect nuclear national security information in the interest of national security and releasing to the public information not warranting protection. (SO)

- *Performance targets for FY 2000:*
  - *Implement all declassification actions concurred in by DOD that were recommended by the Fundamental Classification Policy Review and other internal DOE reviews, within six months of final DoD approval.*
  - *Issue two updated classification guides in the streamlined guidance format.*
  - *Conduct three on-site reviews of the Restricted Data implementation programs of other agencies to evaluate their implementation of requirements contained in 10 CFR Part 1045 or the Special Historical Records Review Plan required by Public Law 105-261, Section 3161.*
  - *Audit documents declassified by other agencies implementing section 3.4 of Executive Order 12958 to ensure that nuclear weapon design information is not inadvertently released.*
  - *Reduce by 15 actions the processing backlog of requests for classified documents submitted under the Freedom of Information Act and Executive Order 12958 mandatory review provisions.*

**CM3:** *Use efficient and effective corporate management systems and approaches to guide decision making, streamline and improve operations, align resources and reduce costs.*

### CM3-1 IMPROVING MANAGERIAL PERFORMANCE AND ACCOUNTABILITY

Continue to streamline and improve operations, improve decision-making, ensure accountability, maximize departmental resources, and achieve intended results by corporately managing the Department's mission, functions, and activities. (CFO/MA)

- *Performance targets for FY 2000:*
  - *Complete the development of requirements and the creation of a new account structure. Purchase commercial Core Financial System software for 150 users for a pilot implementation at one of the three accounting service centers and two of its satellite sites. Begin implementation solutions for special DOE requirements. (a milestone of a FMFIA corrective action plan). (CFO)*
  - *Update and publish the Department's Strategic Plan by April 2000. (CFO)*
  - *Conduct self-assessments to measure organizational performance using the National Performance Excellence Standard, the Malcolm Baldrige criteria. Evaluate results, measure trends and recommend organizational improvements to leadership. (MA)*
  - *Improve overall efficiency and safety of aviation services by conducting a comprehensive aviation program study by July 2000, including an OMB Circular A-76 analysis and a cost effectiveness evaluation; and, by establishing a review process for the conduct of charter and contract aviation services (MA)*

CM3-2 [Combined with CM3-1]

### CM3-3 IMPROVING HUMAN RESOURCE PRACTICES

Implement quality management principles, value diversity, and continue to improve human resources systems and practices. (MA)

- *Performance targets for FY 2000:*
  - *Continue hiring welfare to work recipients to exceed the Presidential FY 2000 goal of 55.*
  - *Increase the electronic transfer of documents through implementation of paperless workflow and reduce personnel paper transactions by 15 percent.*
  - *Improve workforce skills and reduce training costs by implementing the FY 2000 milestones in the DOE Corporate Education, Training, and Development Plan.*



#### **CM3-4 MODELING DIVERSITY FOR THE NEW MILLENNIUM**

Create a model organization that fosters and embraces diversity by addressing under representation of minorities and women, and by committing to equity, inclusion, opportunity, accommodation, and non-discrimination in the workplace. (ED)

- *Performance targets for FY 2000:*
  - *Determine how well the Department's diversity goals are being met by tracking the Department's personnel actions on hiring and competitive promotions against the current Civilian Labor Force statistics.*
  - *Ensure equitable opportunities for minority educational institutions and small, minority, and women owned businesses to compete.*
  - *Increase employee awareness by publicizing DOE-wide the scope of the employee concerns program, the availability of the ombudsman function, and the DOE employee concerns program offices at the operations and field offices.*

#### **CM4: Improve the delivery of products and services through contract reform and the use of business-like management practices.**

#### **CM4-1 USING PRUDENT CONTRACTING AND BUSINESS MANAGEMENT PRACTICES**

Use prudent contracting and business management approaches that emphasize results, accountability, and competition; improve timeliness; minimize costs; and ensure customer satisfaction. (S2)

- *Performance targets for FY 2000:*
  - *Prepare and publish an annual accountability report that includes the Department-wide audited financial statement with an unqualified opinion to the Office of Management and Budget by March 1, 2000. (CFO)*
  - *Convert all management and operating contracts awarded in FY 2000 to Performance Based Management Contracts using government-wide standards. [FAR, (48 CFR Part 39( and*

*Office of Federal Procurement Policy letter 91-2]. (MA)*

- *Convert one support services contract at each major site to Performance Based Service Contract (PBSC) using the government-wide standards. [Federal Acquisition Regulations, (48 CFR Part 39) and Office of Federal Procurement Policy letter 91-2]. (MA)*
- *Achieve 90 percent of contract professionals certified under DOE professional development standards. (MA)*

#### **CM4-2 APPLYING BUSINESS-LIKE PRACTICES TO MANAGEMENT OF DOE PROJECTS AND ASSETS**

Strengthen the management of projects, materials, facilities, land, infrastructure, and other assets, to ensure safe, sound, and cost-effective operations, appropriate maintenance of sites, and to ensure intended project results. (CFO)

- *Performance targets for FY 2000:*
  - *By April 2000, implement new project management policies and procedures that strengthen the management of projects, and by July 2000, have new systems in place to verify progress against established project scope, schedule and cost baselines on projects valued at \$5 million or more.*
  - *Complete all planned External Independent Reviews (EIRs) of projects on schedule, to support both the needs of the project managers and timely delivery of EIR reports, with the programs' corrective action plans, to the Congress.*

#### **CM5: Implement information systems so employees can perform their jobs efficiently and effectively.**

#### **CM5-1 ENSURING DEPARTMENT'S INFORMATION SYSTEMS ARE BASED ON COST EFFECTIVE TECHNOLOGY SOLUTIONS**

Utilize, under the auspices of the Chief Information Officer (CIO), an integrated Department-wide framework for planning, budgeting, evaluating, and implementing information management requirements to reduce costs and improve operations. (SO)

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- *Performance targets for FY 2000:*
    - *Complete all FY 2000 milestones in the Corporate Management Information Program (CMIP) plan.*
    - *Satisfy all program office computing/telecommunications requirements in Working Capital Fund Service agreements.*

**CM6: *Improve performance through evaluations, reviews, audits, and inspections.***

**CM6-1 PROMOTING THE EFFECTIVE, EFFICIENT, AND ECONOMICAL OPERATION OF THE BUSINESS LINES THROUGH AUDITS, INVESTIGATIONS, INSPECTIONS, AND OTHER REVIEWS (S/IG)**

- *Performance targets for FY 2000:*
  - *Complete the required annual financial statement audits by designated due dates in the law.*
  - *Complete at least 60 percent of the audits planned for the year and replace those audits not started with more significant audits which identify time-sensitive issues needing review.*
  - *Initiate at least 80 percent of inspections planned for the year and replace those not started with inspections having greater potential impact.*
  - *Obtain judicial and/or administrative action on at least 35 percent of all cases investigated during the fiscal year.*
  - *Obtain at least 75 percent acceptance rate on criminal and civil cases formally presented for prosecutorial consideration.*

## MEASUREMENT AND MONITORING PERFORMANCE

To maintain focus, a sense of urgency, and to have a real impact on performance, there will be periodic reviews of progress, discussion of difficulties encountered, and agreement on appropriate actions. These reviews will be held between the President and/or his designees and Department officials and with greater frequency within the Department. Any specific reporting requirements will be developed jointly with the Department.

## ADMINISTRATION SUPPORT

In order to accomplish the goals herein described, it is the Administration's objective to:

- Provide visible, high profile support for:
  - The Department's National Security programs, including the stockpile stewardship program and the Department's leadership in reducing the global nuclear danger.
  - Maintaining the fusion energy option for the United States.
  - Full utilization of, and international collaboration in, major science facilities.
  - The Department's meeting its environmental cleanup and compliance commitments.
  - The Department's efforts to expand international trade in energy technology for U.S. companies.
  - The Department's efforts to promote economic growth and protect environmental quality through advancing energy efficiency, renewable energy and advanced clean fossil fuel technologies.
  - Maintaining the Nation's Strategic Petroleum Reserve and coordinating U.S. responses to oil supply disruptions with the importing member nations of the International Energy Agency.

## TERMS OF AGREEMENT

*This agreement is intended only to improve the internal management of the Executive Branch and is not intended to and does not create any right, benefit, trust or responsibility, substantive or procedural, enforceable by law or equity by any party against the United States, its agencies, its officers, or any person.*

*This agreement will remain in effect until modified. It is expected that it will be updated at least annually to reflect significant changes in budget, policy, personnel, or other factors that may affect the accomplishment of objectives.*

*This agreement represents our joint commitment to a Department of Energy that works better, and more efficiently to fulfill our responsibilities to the American People.*

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**BILL RICHARDSON** (S)  
**SECRETARY OF ENERGY**

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**WILLIAM J. CLINTON**  
**PRESIDENT OF THE UNITED STATES**

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**T. J. GLAUTHIER** (S2)  
**DEPUTY SECRETARY**

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**ERNEST J. MONIZ** (S3)  
**UNDER SECRETARY**

# SECRETARIAL OFFICERS' CONCURRENCE

We concur with the commitments made in this agreement with the President, and further agree to fulfill our individual responsibilities.

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**JOHN ANGELL** (CI)  
Assistant Secretary  
Congressional & Intergovernmental Affairs

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**THOMAS F. GIOCONDA** (DP)  
Acting Assistant Secretary  
Defense Programs

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**DAN W. REICHER** (EE)  
Assistant Secretary  
Energy Efficiency & Renewable Energy

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**DAVID MICHAELS** (EH)  
Assistant Secretary  
Environment, Safety & Health

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**CAROLYN L. HUNTOON** (EM)  
Assistant Secretary  
Environmental Management

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**ROBERT W. GEE** (FE)  
Assistant Secretary  
Fossil Energy

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**DAVID L. GOLDWYN** (IA)  
Assistant Secretary  
International Affairs

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**ROSE GOTTEMOELLER** (NN)  
Assistant Secretary  
Nonproliferation & National Security

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**MICHAEL L. TELSON** (CFO)  
Chief Financial Officer

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**MARY ANNE SULLIVAN** (GC)  
General Counsel

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**MARTHA A. KREBS** (SC)  
Director  
Science

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**JOHN M. GILLIGAN** (CIO)  
Chief Information Officer

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**EDWARD J. CURRAN** (CN)  
Director  
Counterintelligence

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**JAMES B. LEWIS** (ED)  
Director  
Economic Impact & Diversity

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**LAWRENCE H. SANCHEZ** (IN)  
Director  
Intelligence

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**DAVID M. KLAUS** (MA)  
Director  
Management & Administration

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**LAURA S. H. HOLGATE** (MD)  
Director  
Fissile Materials Disposition

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**WILLIAM D. MAGWOOD, IV** (NE)  
Director  
Nuclear Energy, Science & Technology

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**GLENN S. PODONSKY** (OA)  
Director  
Independent Oversight and Performance Assurance

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**BROOKE ANDERSON** (PA)  
Director  
Public Affairs

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**WALTER S. HOWES** (PC)  
Director  
Contract Reform and Privatization

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**MARK MAZUR** (PO)  
Director  
Policy

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**IVAN ITKIN** (RW)  
Director  
Civilian Radioactive Waste Management

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**EUGENE E. HABIGER** (SO)  
Director  
Office of Security and Emergency Operations

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**GARY KING** (WT)  
Director  
Worker & Community Transition