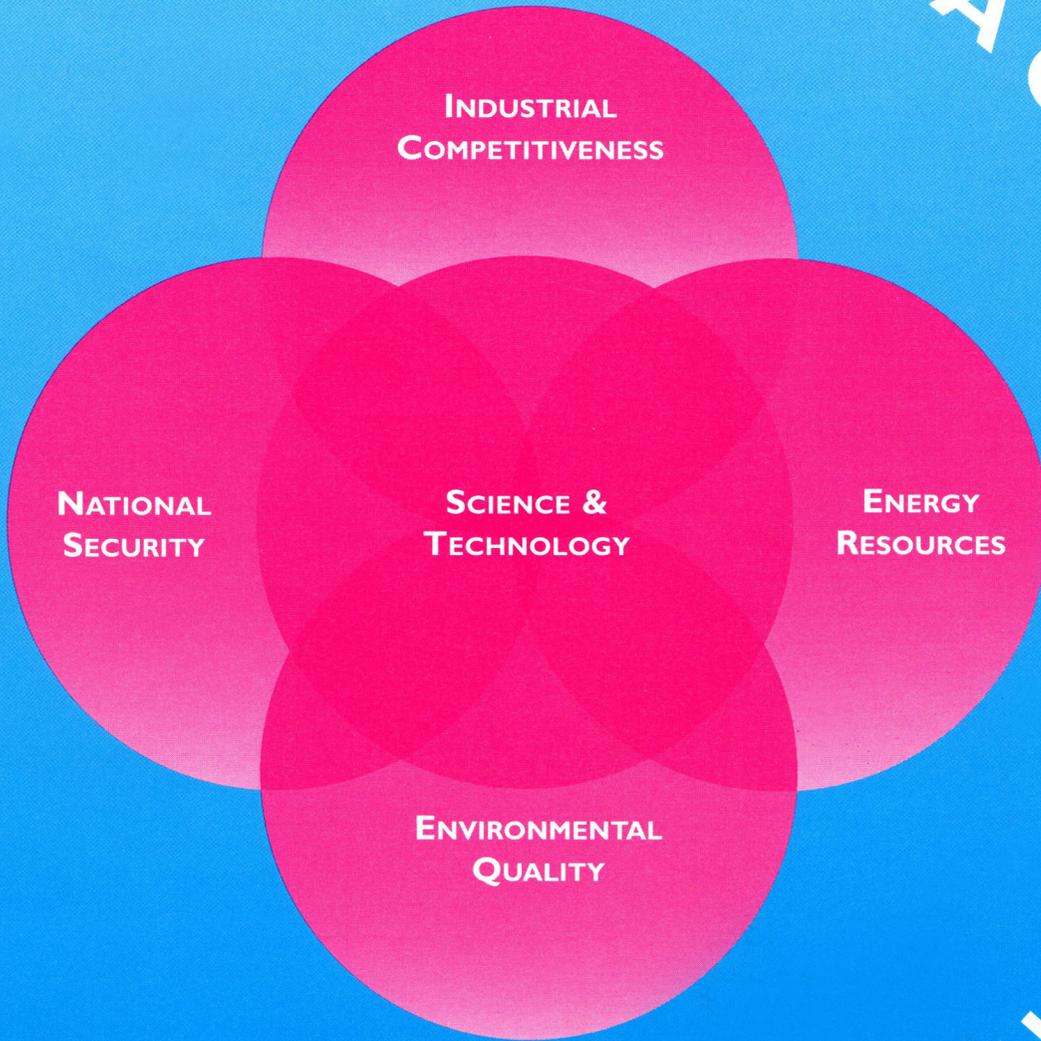


FUELING A COMPETITIVE ECONOMY



STRATEGIC PLAN

UNITED STATES
DEPARTMENT OF ENERGY

APRIL 1994

OUR CORE VALUES

We have developed the following core values which will allow us to fulfill our vision.

1. We Are Customer-Oriented

- Our decisions and actions are responsive to the customer's needs.
- We foster a participatory way of doing business in which the opinions and input of diverse stakeholders are sought and considered prior to making decisions.
- Policies to address major challenges are developed in a proactive, collaborative way with our customers and stakeholders.

2. People Are Our Most Important Resource

- We value the needs of individuals.
- We are committed to improving the knowledge, skills, and abilities of our employees by providing opportunities for professional development and achievement.
- We are committed to providing a safe and healthy workplace for all our employees and contractors.
- We value the richness, experience, and imaginative ideas contributed by a diverse workforce.
- We share credit with all contributors.
- We value listening as an essential tool in learning from others.
- Employees are forthright in sharing their experiences so we can learn from each other.

3. Creativity and Innovation Are Valued

- We are committed to a flexible operating environment that facilitates the pursuit of new technologies, processes, programmatic approaches, and ideas that challenge the status quo.
- We seek out, nurture, and reward innovation in daily activities, ranging from the routine to the complex.
- Employees are empowered to pursue creative solutions.
- Resourcefulness, efficiency, and effectiveness are recognized and well regarded.
- Adaptable, entrepreneurial approaches that can respond quickly to the rapidly changing world business and political environment are essential.

4. We Are Committed to Excellence

- Quality and continuous improvement are essential to our success.
- We are committed to excellence in everything we do.

- Through scientific and technical excellence, we are committed to enhancing the Nation's ability to compete globally.

5. DOE Works as a Team and Advocates Teamwork

- We reinforce the notion of a common or greater departmental good and encourage interdepartmental teamwork to achieve this goal.
- We value teamwork, participation, and the pursuit of win/win solutions as essential elements of our operating style.
- We work as a team with other Federal agencies, government organizations, and external stakeholders in pursuing broader national objectives.
- We recognize the needs of others for information, and we communicate knowledge and information in an open and candid manner.

6. We Respect the Environment

- We will be a leader in improving the quality of the environment for future generations.
- We recognize the importance of the environmental impacts of our operations, and we develop and employ processes and technologies to reduce or eliminate waste production and pollution in these operations.
- We place high priority on the protection of public health and safety and restoration of the environment through cleanup of environmental damage caused by past operations.

7. Leadership, Empowerment, and Accountability Are Essential

- We are visionary in our everyday activities.
- Leaders trust and support individuals to make informed decisions about the processes they own.
- We are effective stewards of the taxpayer's interests.
- Our actions are result-oriented.

8. We Pursue the Highest Standards of Ethical Behavior

- We maintain a personal commitment to professionalism and integrity.
- We assure conformance with applicable laws, regulations, and responsible business practices.
- We keep our commitments.
- We are objective and fair.



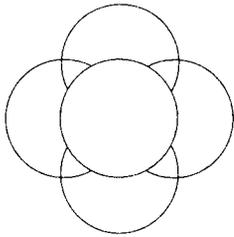


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MESSAGE FROM THE SECRETARY



The Department of Energy has a rich heritage of meeting important national goals in the areas of energy, national security, science, and technology. The end of the Cold War, and the election of President Clinton, have given us a new national agenda. Through a comprehensive strategic planning process, we have determined that the Department must now unleash its extraordinary scientific and technical talent and resources on new and more sharply focused goals: fueling a competitive economy, improving the environment through waste management and pollution prevention, and reducing the nuclear danger.

These goals cut across our program areas, core competencies, and disciplinary expertise. Tackling them requires a commitment to teamwork throughout the Department and our Administration, with the goal of a high level of integration across departmental business lines. We need the advice and thinking of our customers and stakeholders. We need new partnerships with communities, other Federal agencies, academia, State and local governments, and industry.

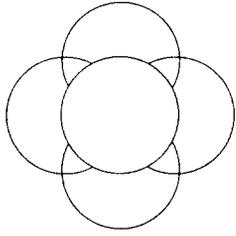
This strategic plan is an initial step in an ongoing effort to define and integrate the business activities of the Department of Energy. The plan helped shape the fiscal year 1995 budget and will play a central role in shaping future budgets.

In addition to redefining what our business lines are, we are changing how we do business. Critical to our success has been an innovative approach to communication and trust, human resources, environment, safety, and health, and management practices. We embrace continuous quality improvement as the only path to successful change.

The goals, strategies, and performance indicators presented in this plan will allow us to measure progress toward our new vision—a vision of providing bold leadership in addressing some of the Nation's most important needs. I look forward to working with you to make this strategic plan a reality.

A handwritten signature in cursive script that reads "Hazel R. O'Leary". The signature is fluid and elegant, with a long, sweeping underline.

Hazel R. O'Leary
Secretary of Energy



THE DEPARTMENT OF ENERGY'S STRATEGIC OUTLOOK

THE WORLD HAS CHANGED

This Administration was elected with a new mandate and vision for America: our challenge is to move away from the Cold War economy, invest in people and technology to strengthen the economy and protect the environment, and reinvent a government that is efficient, serves the American people, and provides more services with fewer resources.

This strategic plan realigns and integrates the Department's unique scientific and technological assets to achieve this vision.

The Department's first priority is to help the President achieve his vision of an investment-driven economy capable of creating high-wage jobs that increase the incomes of the American people. That requires a strategy for empowering and utilizing the Department's tremendous scientific and technological assets—30,000 scientists and engineers, including 58 Nobel Prize winners, at laboratories with a capital value of \$30 billion—to help U.S. industry compete in a global economy. The Department has a unique role in reconciling economic, energy, and environmental goals by helping industry develop environmentally conscious processes, technologies, and materials.

Only recently have the public and policy makers begun to understand inter-relationships between energy production and use, and its impact on the environment and economic growth. We are shifting our energy research and development focus to capitalize on the massive markets at home and abroad for sustainable energy

technologies that create jobs by emphasizing energy efficiency and commercializing renewable resources, and to ensure that we use fossil fuels economically and cleanly.

The end of the Cold War has given us a new set of challenges to address in our national security mission: nonproliferation, the safe dismantlement of nuclear weapons, and maintenance of the stockpile without nuclear testing. The old danger was the threat of nuclear conflict. The new danger is proliferation of nuclear weapons and materials into the hands of rogue states and terrorist groups. The Department is addressing these challenges through the innovative and broad application of our assets.

Nuclear weapons production created an estimated \$300 billion cleanup legacy that is, today, the single largest environmental program in history. We are now redirecting the same national commitment that built our nuclear arsenal toward addressing the resulting environmental and safety risks at thousands of contaminated sites. We can succeed in this mission only by meaningfully involving States, Native American Nations, and citizens in the decision-making process, by developing new technologies to clean up sites, and by reducing future costs through new strategies for minimizing waste and preventing pollution.

Just as changes in the world demand a strategic response to what we do, they require a strategic response to how we do it. The shift in our national security mission requires a strategy for replacing secrecy with openness. Similarly, we are moving from a reactive approach to environment, safety, and health concerns to a proactive approach.

Finally, one of the biggest changes is that this Administration is serious about reducing the Federal budget deficit, which means we must take on our new missions and deliver more results with less money. This requires a strategy for adopting the best management, human resources, and environmental, safety, and health practices of the private sector: total quality management, defect prevention, diversity, and customer responsiveness.

THE STRATEGIC RESPONSE

Recognizing these changes in the world, and our need to change with them, led to the massive reshaping of our missions, priorities, and business practices. Tinkering around the edges was not enough—we had to start anew.

Our response to this challenge began in the summer of 1993 with an empowerment summit at Motorola-Milliken Quality Institute to address these issues. Through a total quality management learning experience and through listening to citizens, business groups, our neighbors, and our industry partners, we agreed that dramatic change was required, not only in the Department's business lines but in how we managed our business. The Department's strategies for an ongoing planning process emerged from those meetings.

Continuous quality improvement is the only path to successful change.

The strategic planning process, led by Susan Tierney, the Assistant Secretary for Policy, Planning, and Program Evaluation, has been the most ambitious and wide-ranging planning exercise in the history of the Department of Energy. We began by breaking down the walls and barriers that isolated our business lines. For the first time, we challenged everything we do. The

process included all of the Department's leadership, hundreds of career employees from headquarters and the field, our national laboratories, and external stakeholders. It was the highest priority activity for all involved.

The results of this process have been far-reaching. The words that follow explain a new Department of Energy, an organization with new priorities and a sense of purpose, a new vigilance, and a culture and values that will bear no resemblance to the previous organization that grew out of the Cold War.

The vision, priorities, and strategies that emerged from this process are detailed in this plan. They have already been used to realign the Department's fiscal year 1995 budget. As this plan evolves, the process will reach out even further to involve additional customers and stakeholders. It is the roadmap to guide the Department's conscience, policies, and decision-making in the years to come.

OUR UNIQUE CAPABILITIES

A critical step in our strategic planning process was to inventory our existing capabilities. What we found was that the Department of Energy has developed a mix of core competencies that make it uniquely suited to advance science and technology to fuel a competitive economy, secure clean, reliable energy resources, improve the global environment, and reduce the nuclear danger.

The Department of Energy's roots can be traced to the Manhattan Engineer District of the U.S. Army Corps of Engineers, which was established in 1942 to manage development of the atomic bomb. After World War II, Congress created the Atomic Energy Commission in 1946 to direct the design, development, and production of nuclear weapons.

multi-program laboratories, 10 single-purpose laboratories, 11 smaller special-mission laboratories, and a wide range of special user facilities critical to U.S. industry's global competitiveness.

In fiscal year 1994, the Federal Government's total funding for research and development was \$72 billion, spread across 24 agencies. The Department of Energy's share of this research, \$7 billion, is the fourth largest and represents almost 10 percent of the total Federal spending.

Recent breakthroughs emanating from the Department's system of laboratories include:

- The world's record in photovoltaic energy conversion efficiency at the National Renewable Energy Laboratory.
- The world's record for fusion power levels produced at the Princeton Plasma Physics Laboratory.
- The world's most powerful source of "soft" x-rays at the Lawrence Berkeley Laboratory.

The Department has extended its basic science with a new emphasis on applied research and partnering with industry. This is best exemplified by the Clean Car Initiative, a Cooperative Research and Development Agreement, negotiated with General Motors, Chrysler, and Ford to develop efficient, clean vehicles that are practical and affordable. Other examples of innovative partnerships include DOE defense technology that is now being used to reduce medical radiation doses and provide better images of mammograms, a broad-based partnership with the integrated textile industry (AMTEX), and a new process for soldering printed circuit boards that eliminates the use of ozone-depleting chemicals while saving energy.

We are the leading Federal agency in patent applications with more than 1,000 from

1990 to 1992, as well as the leading agency in licenses granted with more than 400 during that same period. As an example, the Los Alamos National Laboratory developed and patented an acoustic resonant ultrasound spectroscopy technology to detect defects in aircraft wheels and that is now being used to determine the structural integrity of bridges throughout the Nation.

In 1993, the Federal Government received 34 "R&D 100 Awards" given annually for the most important inventions—DOE won 26 of them. An example of an award from 1992 is the solar water detoxification system which has become part of a Cooperative Research and Development Agreement with industry. The system uses sunlight and a nontoxic catalyst to destroy hazardous organic substances in groundwater and industrial waste water.

OUR MISSION

We possess the human and physical assets to achieve the mission that follows:

The Department of Energy, in partnership with our customers, is entrusted to contribute to the welfare of the Nation by providing the technical information and the scientific and educational foundation for the technology, policy, and institutional leadership necessary to achieve efficiency in energy use, diversity in energy sources, a more productive and competitive economy, improved environmental quality, and a secure national defense.

VISION

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

THE DEPARTMENT OF ENERGY

VISION

MISSION

IN PARTNERSHIP WITH CUSTOMERS, CONTRIBUTE TO NATION'S WELFARE... PROVIDE TECHNICAL INFORMATION & SCIENTIFIC & EDUCATIONAL FOUNDATION... TO ACHIEVE EFFICIENCY IN ENERGY, DIVERSITY IN ENERGY SOURCES, A MORE PRODUCTIVE AND COMPETITIVE ECONOMY, IMPROVED ENVIRONMENTAL QUALITY & SECURE NATIONAL DEFENSE.

CORE VALUES

- CUSTOMER-ORIENTED
- PEOPLE ARE VALUED
- CREATIVITY & INNOVATION
- COMMITTED TO EXCELLENCE
- TEAMWORK
- RESPECT THE ENVIRONMENT
- LEADERSHIP, EMPOWERMENT, ETHICAL BEHAVIOR

- ### CRITICAL SUCCESS FACTORS
- HUMAN RESOURCES
 - COMMUNICATION & TEAMWORK
 - ENVIRONMENT, SAFETY & MANAGEMENT PRACTICES

SET STRATEGIC GOALS

MEASURE FOR SUCCESS

MAKE IT HAPPEN

PROGRESS CHECK

ENERGY RESOURCES

INDUSTRIAL COMPETITIVENESS

SCIENCE & TECHNOLOGY

NATIONAL SECURITY

ENVIRONMENTAL QUALITY

CUSTOMER FOCUS & SATISFACTION

LEADERSHIP & QUALITY

INFORMATION & ANALYTICS

SCIENCE & INNOVATION

COMMUNICATE

STRATEGIC QUALITY PLANNING

NATIONALLY RECOGNIZED

HUMAN RESOURCE DEVELOPMENT & MANAGEMENT

TRUSTWORTHY

OPERATIONAL EXCELLENCE

★ PARTNERS IN WORLD CLASS SCIENCE & TECHNOLOGY

- NATIONAL LABS
- RESEARCH CENTERS
- EDUCATION
- INFORMATION SHARING

★ ENVIRONMENTAL WORLD LEADER

- ENVIRONMENTAL RESTORATION
- WASTE MANAGEMENT

★ ENERGY LEADER

- CLEAN
- RELIABLE
- COMPETITIVE
- DIVERSE
- SUSTAINABLE

★ U.S. IS GLOBAL LEADER

- ECONOMY
- INDUSTRY
- ENVIRONMENTAL TECHNOLOGY

★ VITAL CONTRIBUTOR GLOBAL SECURITY

- NATIONAL SECURITY
- NONPROLIFERATION

★ OPERATIONS SHOWPLACE

- SAFETY
- ENVIRONMENTAL RESPONSIBILITY
- ALL FACILITIES

★ REWARDING WORKPLACE

- FOSTERS CREATIVITY
- REWARDS ACHIEVEMENT
- RESULTS ORIENTED
- FUN

RESULTS

RESPECTED FOR PRODUCTS & SERVICES

OPEN COMMUNICATION

EMPLOYER OF CHOICE

RAY VELEZ

- A key contributor in ensuring that the United States leads the world in developing, applying, and exporting sustainable, clean, and economically competitive energy technologies.
- A key contributor in maintaining U.S. global competitiveness through leadership in environmentally-conscious materials, technologies, and industrial processes.
- A major partner in world class science and technology through its national laboratories, research centers, university research, and its educational and information dissemination programs.
- A world leader in environmental restoration, waste management, and pollution prevention.
- A vital contributor to reducing the global nuclear danger through its national security and nonproliferation activities.
- A safe and rewarding workplace that promotes excellence, nurtures creativity, rewards achievement, and is results-oriented and fun.

CORE VALUES

The Department will succeed only through the efforts of its people. How well we perform individually and collectively is a function of the beliefs and values that motivate our behavior. The employees of the Department of Energy have chosen the following core values to serve as guideposts and our conscience in fulfilling our mission and achieving our vision.

1. We are customer-oriented.
2. People are our most important resource.
3. Creativity and innovation are valued.
4. We are committed to excellence.

5. DOE works as a team and advocates teamwork.
6. We respect the environment.
7. Leadership, empowerment, and accountability are essential.
8. We pursue the highest standards of ethical behavior.

THE TOTAL QUALITY PHILOSOPHY

Our core values will define our culture. Our culture will help us achieve our vision to fuel a competitive economy. A philosophy of total quality management and continuous improvement will serve as the foundation to meet the needs of our customers and allow us all to maximize our potential and make work rewarding.

Total quality will be achieved through customer satisfaction, leadership commitment, continuous improvement, labor/management partnering, and employee involvement. Our journey towards total quality has already begun, and there are many important efforts underway that support this new approach. Examples include customer service plans, process improvement teams, leadership training to support our core values, and implementation of total quality guidelines.

Employees and management working together on these key initiatives will empower all of us to improve customer satisfaction, focus our energy on value-added products and services, and make our jobs more rewarding.

DOE'S FIVE BUSINESSES

In response to world changes and today's new challenges and priorities, we took a fresh look at our business lines. What we

found were mission areas that operated in a vacuum from one another. There was little synergy or integration of departmental assets. In general, little communication across organizational lines occurred. We found an organization structured to meet demands and challenges that were no longer relevant. We recognized that our science and technology capabilities had not been strategically leveraged. We decided to fundamentally reorient both the nature of our businesses and how they were managed.

Through our strategic planning efforts, we identified five businesses that most effectively utilize and integrate our unique scientific and technological assets, engineering expertise, and facilities for the benefit of the Nation. These new businesses which directly affect the security and the quality of life of every American, are:

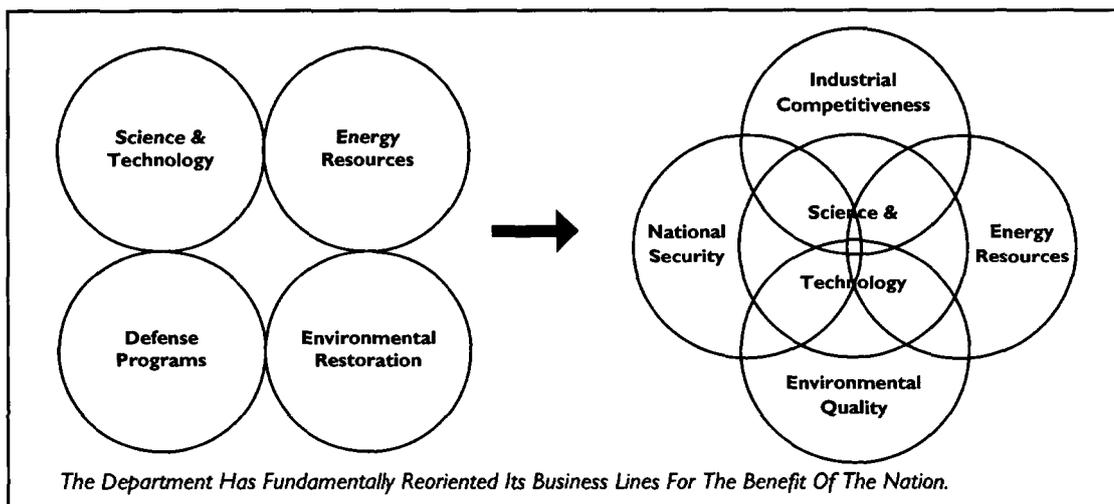
Industrial Competitiveness: Promote economic growth and the creation of high-wage jobs through research and development partnerships with industry, drive products into the domestic and international marketplace, and help industry become more competitive by cost-effectively shifting from waste management to resource efficiency and pollution prevention.

Energy Resources: Encourage efficiency and advance alternative and renewable energy technologies; increase energy choices for all consumers, assure adequate supplies of clean, conventional energy, and reduce U.S. vulnerability to external events.

Science and Technology: Use the unique resources of the Department's laboratories and the country's universities to maintain leadership in basic research, increasingly focus applied research in support of the Department's other business lines, and maintain world technical leadership through long-term, systemic reform of science and mathematics education.

National Security: Effectively support and maintain a safe, secure, and reliable enduring stockpile without nuclear testing, safely dismantle and dispose of excess weapons, and provide the technical leadership for national and global nonproliferation activities.

Environmental Quality: Understand and reduce the environmental, safety, and health risks and threats from DOE facilities and decisions, and develop the technologies and institutions required for solving domestic and global environmental problems.



DOE'S CRITICAL SUCCESS FACTORS

Working together, we recognized that for our business lines to produce results for the American people, our organizational systems needed realignment and integration. We have identified four critical success factors that must be integrated into our five business lines. These critical success factors are:

Communication and Trust - how we communicate information and build trust within the organization and with our stakeholders and customers.

Human Resources - how we recruit, train and develop, reward performance, motivate, and promote diversity within our workforce.

Environment, Safety, and Health - how we ensure the safety and health of workers and the public, and protect and restore the environment.

Management Practices - how we allocate, spend, and account for resources and procure, produce, and contract for goods and services—the tools we use to get it all done.

KEY CUSTOMER AND STAKEHOLDER CONSIDERATIONS

DOE's customers and stakeholders include the U.S. taxpayer; the energy consumer, the energy producer, the energy regulator, and the energy investor; citizens who live near DOE facilities; the businesses who work

Our most important customers are the next generations.

with DOE laboratories, or who are affected by their products; the family of DOE employees, laboratories, universities, contractors, and suppliers; Federal agencies, State and local governments and Native

American Nations; the Congress; the President and his Administration; foreign governments; and the news media and interest groups.

Our most important customers are the next generations, to whom we wish to leave a more prosperous and secure world.

Our customers and stakeholders have many concerns:

- The public demands more accountability in government actions and spending. They expect more results at lower cost.
- There is widespread national and international concern about the management and disposition of excess worldwide nuclear weapons and their components following the end of the Cold War.
- The resolution of civilian and defense radioactive waste disposal alternatives will require more meaningful and innovative stakeholder participation than in the past.
- Public opposition to the siting of new energy-related facilities is complicating the Nation's energy infrastructure.
- The public's questioning of its support for basic science creates a challenge for the Nation because our knowledge-based economy has historically benefited from science's contribution.
- The Department's current approach toward increasing industrial competitiveness does not reach a sufficient number of small businesses. A better technology deployment infrastructure is needed.
- The public and business communities are increasingly concerned about how we reconcile the goals of economic growth and job creation with environmental quality goals.

SITUATION ANALYSIS

What are the key factors in today's world affecting the future of the Nation and the Department's programs? A situation analysis for each of the five businesses and four critical success factors is summarized as follows:

Businesses

Industrial Competitiveness. Industrial competitiveness requires partnering with industry and other Federal agencies to put the vast scientific and technological assets of the Department and its laboratories and facilities to the best use in advancing the U.S. position in a global market that is increasingly competitive. Continued scientific and technological innovation is the key to sustaining long-term economic growth to the year 2010 and beyond.

High-wage jobs will be created by economic growth based on technological innovation. At the same time, a cleaner environment will result from continued DOE-led research in energy and material efficiency for industrial processes. Industrial resource efficiency prevents pollution and increases competitiveness by improving overall process efficiency, while simultaneously helping to promote the knowledge-based jobs that are the key to enduring economic success. This technology strategy is also the key to sustainable development.

Enhancing energy efficiency is good for the economy, the environment, and the Nation's security.

Over the next 30 years, there will be a huge international market for energy efficient, renewable energy, and environmental technologies. As developing nations invest in new industrial infrastructure to fuel growth, there will be a growing emphasis on clean manufacturing processes, as well as

continued interest in cleanup and waste management. The Department's goal is to assist industry in developing these technologies so that U.S. firms can take advantage of these opportunities.

The Department of Energy is well positioned to provide substantial contributions to industrial competitiveness and environmental quality, although achieving the potential will be a continuing challenge. This challenge will include continuous process improvement in developing strategic partnerships with industry, close coordination and teaming with other Federal agencies, a more focused use of our national laboratories, and disciplined attention to quality management principles.

Energy Resources. A strategic energy policy is essential to promoting economic growth, high-wage jobs, and energy security while preserving the environment. Improving the efficiency with which the Nation uses energy is essential to reconciling these goals. The Energy Policy Act of 1992 will provide guidance in achieving our energy objectives, although fulfilling its requirements will be difficult in this era of fiscal constraint. Enhancing energy efficiency is good for the economy, the environment, and the Nation's security, and is clearly the number one energy priority of this Administration.

Fossil fuels will remain critical components of energy supply in every nation for the foreseeable future. Domestically, coal, natural gas, and oil will continue to provide the majority of energy for electricity generation and the buildings, industrial, and transportation sectors. We must focus on using these fossil fuels more efficiently and cleanly.

The Nation's dependence on oil imports is increasing significantly. This dependency

may be reduced by increasing the efficiency of energy use in buildings, appliances, production processes and equipment, and in the transportation sector; greater use of renewables and alternative fuels; and boosting American production through the Domestic Natural Gas and Oil Initiative including enhanced investments in technology research and market expansion. At the same time, we must keep open all supply options to maintain the flexibility to respond to dynamic market conditions.

One way the Federal Government can set an example for the Nation is through the improved energy management of its buildings and facilities and the wider use of energy-efficient, alternative fuel vehicles. Additionally, the President's Climate Action Plan will provide a catalyst for mobilizing the public/private cooperation necessary to increase the use of energy efficiency and renewable energy.

Science and Technology. Investments in research and development have a strong influence on long-term productivity and

Science and technology provide the knowledge that drives our future.

high-wage job growth. As the United States prepares to compete in a dynamic global economy, it must lead in knowledge-based skills. This requires that both government and industry significantly invest in basic and applied science and the facilities, infrastructure, and trained work force to support technological leadership. Federal spending is constrained, however, so the Department must carefully balance its investments in long-term fundamental research against research and development with a near-term payoff.

Careful management of the scientific portfolio is particularly important as American companies are increasingly using

corporate funds for short-term development and improvements of their products and services while cutting back on long-term research. The challenge to the Department's science and technology programs is to help industry compete effectively in the near-term and also to meet their need for long-term research while providing the accountability and environmental responsibility expected by the public. This has become increasingly important as industry continues to shift away from basic research.

National Security. The end of the Cold War and the collapse of the Soviet Union require a profound change in the nature of the Department's nuclear weapons complex and a strengthening of our nuclear nonproliferation activities. The nuclear weapons complex was created to yield large numbers of increasingly sophisticated weapons. The complex must be transformed into a system whose purpose is to reduce the nuclear danger. This transformation will enable some of the science and technology of the DOE weapons laboratories and facilities to be redirected to help meet new needs, both domestically and abroad, such as flexible, clean, energy-efficient manufacturing.

The Department foresees a future national security environment in which there will be significant numbers of nuclear weapons in a still risky and chaotic world. In this environment, the United States will continue to rely on nuclear deterrence and a nuclear-powered navy. We are committed to a science-based program to maintain the nuclear stockpile without testing, safely dismantle nuclear weapons, achieve a comprehensive test ban treaty, extend the Nuclear Nonproliferation Treaty, and counter the proliferation of weapons of mass destruction.

Recognizing that openness is essential to accountability and trust, we will take an aggressive approach to declassify

information about the Department's activities while maintaining the Nation's security.

Environmental Quality. The Administration is committed to honoring the Government's obligation to address the legacy of the U.S. nuclear weapons complex and high-level nuclear waste from nuclear power plants in order to protect human health and safety and the environment. We are determined to achieve those objectives efficiently and cost-effectively, which will require continued management reforms. At the same time, we will use pollution prevention to reduce the Department's ongoing waste streams.

DOE has responsibility for 137 sites nationwide. Portions of the over 3,300 square miles of lands managed by DOE contain contaminated soil, groundwater, and structures. As the weapons complex is downsized, facilities no longer needed will be decommissioned and decontaminated—a formidable task compounded by a lack of adequate environmental technology and a complex regulatory regime.

We must include the public in frank discussions of risk, resources, and priorities. Still, the increasing clash between the legal requirements relating to the Department's environmental activities, the current technical limitations of technologies and risk knowledge, and the Nation's ability to pay may jeopardize the Department's environmental quality goals.

Critical Success Factors

The Department's five business lines represent the activities the Department will be engaged in. However, a successful business requires much more than understanding products and priorities. Critical to success is the integration of communication and trust; effective human resource management; a genuine concern for

the environment, safety, and health of our workers and the public; and highly efficient management practices into everything we do. The following areas discuss these critical success factors.

Communication and Trust. The Department is undergoing a transformation from a secretive, weapons producing agency, little understood outside of Washington, to a service-oriented, customer-driven leader in science, technology, and environmental management. That transformation mandates a change in culture—a new emphasis on openness, communication and trust. Only an open and accountable government will achieve the level of public trust needed to address complex problems such as the management of plutonium and redirection of our national laboratories.

Every action DOE takes from now on must be considered a communication that can enhance or hinder the trust of the American people. Behaviors that encourage trust to

Trust results from open and honest communication.

grow can and must be required. We must be responsive to the growing public demand for the declassification of millions of pages of DOE documents with a special focus on nuclear weapons testing, experimentation with radioactive materials, and environmental releases and contamination.

Human Resources. The Department seeks greater alignment of resources with agency priorities and increased diversification of the workforce, including gender, ethnicity, age, and skills. This diversification will bring new thinking and perspectives that heretofore have not had a voice in departmental decision-making. We seek flat organizations, fewer levels of management, empowered employees, and lessened regulation by oversight agencies so we can

rapidly respond to today's challenges and meet public needs.

Barriers to achieving human resources' goals include resource constraints, a complex personnel system, competition for diversity talent, limited management commitment and accountability, lack of trust, individual over corporate interest, and lack of an effective mechanism to reallocate resources and retrain individuals.

Environment, Safety, and Health. In addition to the Department's environmental problems, safety and health concerns are formidable. The Department has limited public health expertise, insufficient worker medical surveillance programs, and inadequate safety training in the workplace. We are committed to improve policies, programs, and professional expertise in key areas such as occupational medicine, risk management, and data management.

We are shifting from a reactive approach to environment, safety, and health to one that emphasizes prevention. All departmental businesses are proactively ensuring that there is no compromise in public and worker safety.

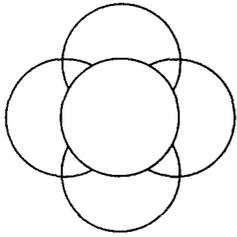
Increasing external regulation is an opportunity to improve the Department's performance and credibility. Meaningful and value-added independent regulation can serve to clarify requirements and can provide a framework for more disciplined internal

responsibilities and actions. External regulation promotes transparency and public involvement. Efforts are accelerating to improve information access, "open up" the Department's records related to environment, safety and health, and improve external relationships.

Management Practices. The Department has over 800 separate systems for managing its operations, which limit the Department's flexibility. DOE must become more streamlined and agile. Change is needed in information systems, procurement and contracting, planning and budgeting, financial management, directives management, and project and facilities management.

The Department has not been customer oriented. Meeting or exceeding all of our customers' reasonable expectations requires integrated, cost-effective, "open" management systems that are easy to understand and free of manipulation.

The Department will continue to contribute to the Administration's deficit reduction objectives through savings resulting from the realignment of its mission priorities, its focus on customer service and total quality management, its contract reform initiatives, and its leadership role in support of the reinventing government initiative. In short, we intend to achieve greater results with less money.



THE BUSINESS STRATEGIES

The efforts of the Department's five business strategic planning teams are summarized in this section. The action plans to achieve these goals are included in each of the team's actual strategic plans.

INDUSTRIAL COMPETITIVENESS

The Department of Energy has an essential role to play in assisting U.S. economic competitiveness as a result of its unique laboratory system and research and

development (R&D) capabilities. DOE's laboratories and facilities have expertise in many areas that are critical to major high-technology industries and services and to reconciling economic and environmental goals.

DOE's core competencies include energy and environmental technologies, advanced materials development, high-performance computing and communications, and advanced manufacturing. These competencies have provided the basis for unprecedented growth over the past few years in collaborative research and development activities between the



Partnership: General Motors, Advanced Engineering Technology Group, and Los Alamos National Laboratory executives describe a fuel cell being jointly developed for automotive use to President Clinton and Secretary O'Leary.

Department and the private sector. Although most of these collaborative agreements are multi-year partnerships that were initiated in only the past two years, many already have proven successful at generating commercial products, improving market share, and creating jobs.

Help industry sustain long-term economic growth that has created high-wage jobs and a cleaner environment.

Through these interactions, the Department and the laboratories have gained a great deal of experience that now must form the basis for moving to a new, highly-integrated, and strategic approach for DOE's overall interactions with the private sector.

VISION

In the year 2010, the Department of Energy uses its leadership in energy, science, and technology to help industry sustain long-term economic growth that has created high-wage jobs and a cleaner environment. Because of our record of success, industry seeks out DOE as an innovative and productive partner. Working together, DOE, industry, and other Federal agencies have made the U.S. economy the most productive in the world in its use of energy, material, and human resources.

GOAL 1

Help industry shift from waste management to resource efficiency and pollution prevention.

STRATEGIES

- Develop resource efficient, pollution prevention, renewable energy, and other clean technologies.

- Coordinate Federal activities to establish roles and responsibilities.
- Help industry expand global market share.
- Work with the technological, financial, and regulatory communities to overcome barriers to the adoption of clean technologies.

SUCCESS INDICATORS

- Decrease in energy use, amount of raw materials, and generation of waste per unit of Gross Domestic Product.
- Increase in U.S. industries' share of global market for clean technologies.

GOAL 2

Establish DOE as industry's R&D provider of choice in its areas of scientific and technical competency.

STRATEGIES

- Develop integrated R&D program plans with industry, including technology roadmaps.
- Maximize integration of R&D partnerships across DOE through co-planning and co-funding.
- Develop consistent, reliable, standardized, and fair policies and procedures across the Department and its facilities so that access by potential partners is simplified.
- Develop a communications strategy that helps industry know which resources are available within the Department and where.
- Provide timely and reliable technology partnership funding, and ensure prompt decision-making regarding such funding, across all departmental programs and offices.

SUCCESS INDICATORS

- Increase in number of jobs created and value of products created from R&D partnerships.
- Increase in total annual amount of non-Federal resources applied to mission-related research through R&D partnerships.
- Increase in number of new or extended agreements entered into by past participants as a measure of repeat business.
- High marks on industrial partner surveys of DOE performance.

GOAL 3

Maintain core competencies and leverage resources by partnering with private sector and other agencies for dual benefit, two-way technology exchange.

STRATEGIES

- Develop a budget structure and business strategies that support DOE's technology infrastructure.
- Work with the Administration and Congress to advance dual-benefit work with industry.
- Make access to DOE facilities easier for Federal, State, and local agencies.
- Establish regional programs to retrain and maintain skills of national security and other workers affected by program transitions.

SUCCESS INDICATORS

- Increase in number and value of new or enhanced products/processes created and used by industry.

GOAL 4

Accelerate national use of available and emerging competitive technologies, processes, and practices.

STRATEGIES

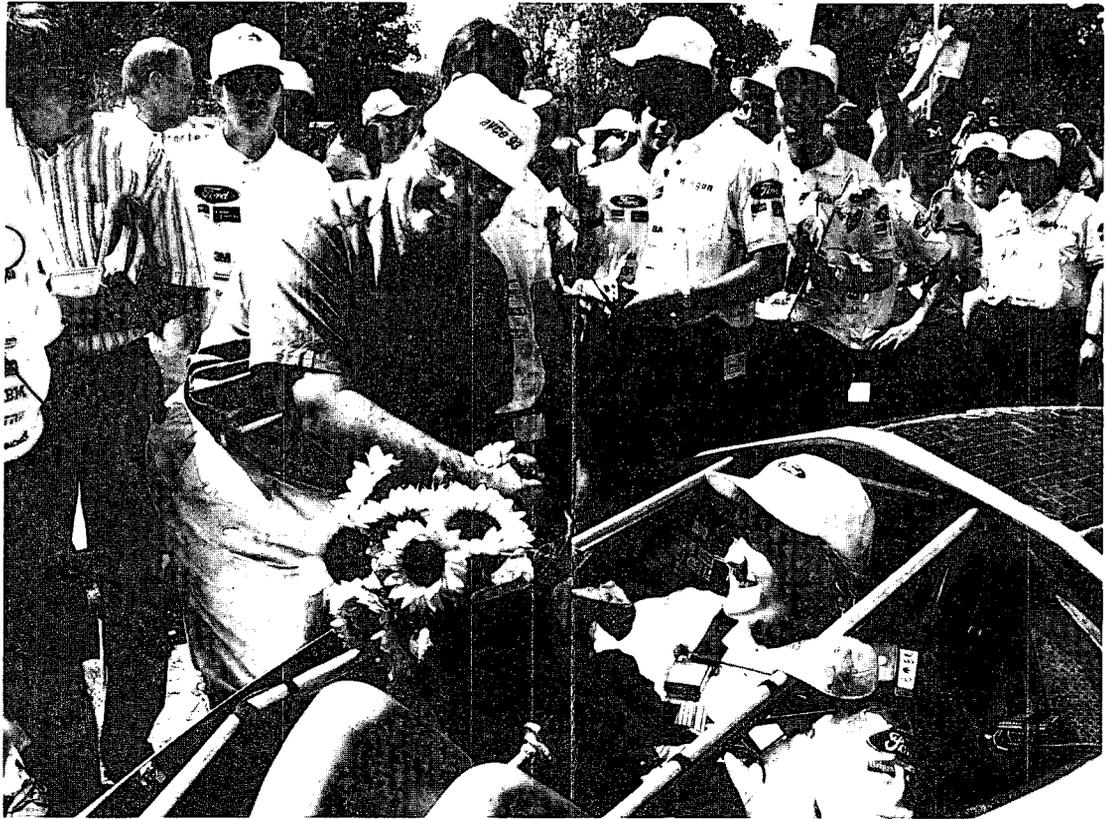
- Make DOE laboratories and facilities available as an integrated technical resource for existing manufacturing extension and technology outreach systems, such as those managed by the Department of Commerce.
- Develop, test, and pursue a portfolio of deployment programs.
- Work with other agencies to address institutional barriers.

SUCCESS INDICATORS

- Increase in degree of customer satisfaction reported by program participants.
- Increase in number of businesses accessing informational and/or technical assistance through deployment programs and number of repeat customers.
- Increase in geographical distribution and diversity of businesses reached.

ENERGY RESOURCES

Energy fuels a competitive economy. Strategic energy policy can lead to the creation of high-wage jobs, an improved national and global environment, and reduced vulnerability to supply disruptions. In *A Vision of Change for America*, President Clinton states, "The Administration will launch initiatives to develop new, clean, renewable energy sources that cost less and preserve the environment. We will also encourage energy efficiency and conservation to lower the energy bill of middle-class Americans, and lessen our vulnerability to events outside our control."



Sunrayce '93; congratulating a driver for University of Michigan's winning team. DOE sponsors this biennial student built solar car cross-country collegiate competition, which challenges science, math, and engineering students and promotes scientific competition.

VISION

Energy services are needed for a wide range of valued human activities. To meet these needs, they must be reliably and fairly available at low environmental and economic costs. In our vision for the year 2010 and beyond, the United States will be a worldwide leader in the development, application, and export of sustainable, environmentally attractive and economically competitive energy systems—and will have in place a flexible, clean, efficient, and equitable system of energy supply and end-use, with minimum vulnerability to disruption.

GOAL I

Enhance energy productivity to strengthen the United States economy and improve living standards.

STRATEGIES

- Accelerate energy efficiency in all sectors cost-effectively.
- Promote programs that will establish the United States as a world leader in developing and deploying energy technologies and services throughout the world.
- Achieve a major gain in the value of exports of energy technologies and services compared to imports.

- Emphasize and promote more open and efficient energy markets, reflective of social costs.

SUCCESS INDICATORS

- Amount of energy saved.
- Reduction of energy use per dollar of U.S. Gross Domestic Product.
- Increase in total jobs created directly and indirectly by DOE investments.
- Total increase in U.S. Gross Domestic Product created directly and indirectly by DOE investments.

GOAL 2

Ensure reliable energy services with reduced vulnerability to energy price and supply volatility.

STRATEGIES

- Facilitate the acceptance of greater diversity of competitive energy sources and technologies into the marketplace.
- Increase reliance on risk-sharing mechanisms using a systems approach (full life-cycle costs).
- Increase efficiencies in energy supply, conversion, and utilization through financial and regulatory assistance and incentives.
- Promote flexibility in the energy sector.

SUCCESS INDICATORS

- Increased penetration of alternative transportation fuels by the year 2010.
- Reduction of oil use per dollar of U.S. Gross Domestic Product.
- Increased penetration of natural gas.
- Maintenance of all energy options to ensure flexibility.

- Increased level of fuel-switching capabilities among energy fuels.
- Adequate emergency planning and liquid fuel reserves to mitigate severe impacts of oil price and supply disruptions.

GOAL 3

Reduce adverse environmental impacts associated with energy production, delivery, and use.

STRATEGIES

- Reduce energy-related emissions of greenhouse gases below 1990 levels by the year 2000 through development and deployment of efficiency-enhancing and alternate-energy technologies and processes and through continued operation of safe, economical nuclear powerplants.
- Reduce regional and local impacts of U.S. energy-related emissions and discharges through the development and deployment of lower emission energy transformation, delivery, and end-use technologies.
- License and operate a repository for the Nation's spent nuclear fuel and other high-level radioactive waste.
- Improve the global environment through policy leadership at home and programs for the export of advanced energy and environmental technologies.

SUCCESS INDICATORS

- Increase in market penetration of energy technologies that reduce greenhouse gases, sulphur dioxide, nitrogen oxides, and other critical pollutants.
- Increase in number of alternative fuel vehicles in use in the commercial transportation sector.

- By 1995, determine a long-term waste repository program funding policy and profile, rebaseline the Yucca Mountain site suitability effort, and, by 1996, define the departmental role regarding nuclear spent fuel interim storage at reactor sites and in the Federal waste management system.
- Increase in percentage of U.S. market share in the export of clean energy technologies.

GOAL 4

Promote economic and regional equity for all Americans through changes in the systems of energy production, delivery, and end-use.

STRATEGIES

- Develop tax policies and fund programs that ensure universal access to affordable energy services.
- Develop policies that eliminate disproportionate adverse environmental effects of energy systems on geographic regions, minority and low-income groups, and local communities.

SUCCESS INDICATORS

- Increase in percentage of public utility commission decisions giving explicit recognition to equity issues.
- Increase in number of low-income households weatherized.
- Decrease in ratio of energy system costs to benefits, by population groups.
- Increase in equity considerations in the siting of new energy systems.

SCIENCE AND TECHNOLOGY

First-class basic and applied science are needed to advance industrial competitiveness, clean energy resources, national security, and environmental quality through technology leadership. The Administration's technology plan of February 23, 1993, recognizes this by setting a key goal for the Nation of world leadership in science, mathematics, and engineering.

VISION

Science and Technology provide the knowledge that drives our future. World-class scientists and engineers; working in world-class facilities on leading-edge problems will spawn the knowledge that revolutionizes technology—the knowledge and technology that others need to achieve their vision.

GOAL 1

Provide the science and technology core competencies that enable DOE's other businesses to succeed in their missions.

STRATEGIES

- Maintain and validate program excellence and balance in basic science and applied science that supports the energy, environment, national security, and industrial competitiveness missions.
- Fully utilize research facilities, as appropriate, to reduce unit costs.
- Develop innovative options for funding R&D partnerships.
- Build on and nurture appropriate DOE core competencies.
- Encourage flexibility in research programs.



DOE's advanced photon source will provide research opportunities that could lead to higher quality products that last longer. When experiments begin in 1996, it will produce x-ray beams one trillion times more brilliant than conventional x-ray machines. Joint research teams from industrial, university, and government labs will build and operate research facilities at the site.

- Improve communications and establish partnerships among suppliers, customers, and stakeholders.
- Increase in DOE's influence in developing the information superhighway.

SUCCESS INDICATORS

- Quality of science, as indicated by favorable outside peer reviews and judgments of expert advisory committees.
- Closer linkage of energy research programs to DOE's energy, national security, and environmental technology programs.
- Maintain or improve the performance and preeminence of the Department's large research facilities, as indicated by the reliable and cost-effective operation and maintenance of world-class research facilities and endorsements from the research users.

GOAL 2

Provide new insights into the nature of matter and energy, address challenging problems, and create a climate in which breakthroughs occur.

STRATEGIES

- Maintain and validate program excellence and balance in high energy and nuclear physics and other fundamental sciences.
- Ensure a flow of knowledge into society by striking a reasonable balance in support of principal investigators, new facilities, and existing facility operations.

- Partner with universities and the international scientific community to maximize benefits.
- Ensure adequate support for priorities by utilizing management systems that reflect state-of-the-art business practices.
- Earn confidence by making realistic claims and delivering on what is promised.

SUCCESS INDICATORS

- Quality of science and innovativeness of research, as indicated by favorable outside peer review and expert advisory committee reports.
- Sustained achievement in advancing knowledge, as indicated by the impact of knowledge gained in other scientific and technological fields, and the number of publications, citations, and awards generated by DOE-supported research.
- Optimal operation of major experimental facilities, as indicated by operating efficiency and performance benchmarking.
- Development of new technologies that advance fundamental research capabilities and reduce costs, as indicated by new scientific and technology programs that emerge from the research.

GOAL 3

Construct leading-edge experiments and user facilities on schedule, within budget, and in a safe and environmentally responsible manner.

STRATEGIES

- Ensure that all facilities are “best-in-class” by using total quality management benchmark processes and state-of-the-art management information systems.

- Develop an oversight process that involves affected parties in a team approach to facility review.
- Employ risk-based cost benefit analysis to help set priorities and make decisions.
- Involve the international community to develop a global research facility network.
- Use innovative technologies to reduce costs.

SUCCESS INDICATORS

- Preeminence of facilities, as indicated by support by DOE and users, comparison with other facilities worldwide, the nature and extent of university and industrial involvement, and investment by users in the facility.
- Improved performance of facilities, as indicated by meeting original target performance plans and meeting expectations of users.
- Achieving construction cost and schedule milestones, as agreed upon prior to construction.
- Establishment and documentation of methods for determining and ensuring the level of and compliance with environmental, safety, and health standards.

GOAL 4

Add value to the U.S. economy through the application of new and improved technologies.

STRATEGIES

- Strengthen alignment between DOE programs and industry needs. Adequately plan and fund partnerships with industry.
- Streamline and improve the technology transfer process and learn how to work better with small businesses.

- Provide adequate funding for partnerships with industry.
- Provide adequate support for applied research and technology development.
- Forge links with other agencies and academia to leverage research benefits and avoid duplication.
- Strengthen links between laboratories.
- Establish national laboratories as regional centers to stimulate industrial competitiveness.

SUCCESS INDICATORS

- Increase in number and magnitude of cooperative activities with industry.
- Increase in technologies developed and deployed as a result of partnerships with industry.
- Increase in number of new projects at companies and problems solved or avoided that can be attributed to interactions with DOE programs.
- Increased leverage of government dollars with private sector funding.

GOAL 5

Help provide a technically trained and diverse workforce for the Nation and enhance American scientific and technical literacy, especially in energy, the environment, and the impact of science on the economy.

STRATEGIES

- Increase DOE participation in pre-college mathematics and science and continuing education programs.
- Increase DOE programs for teachers and students in the Department's laboratories.
- Support and encourage greater involvement by DOE science and

technology staff in educational and community outreach programs.

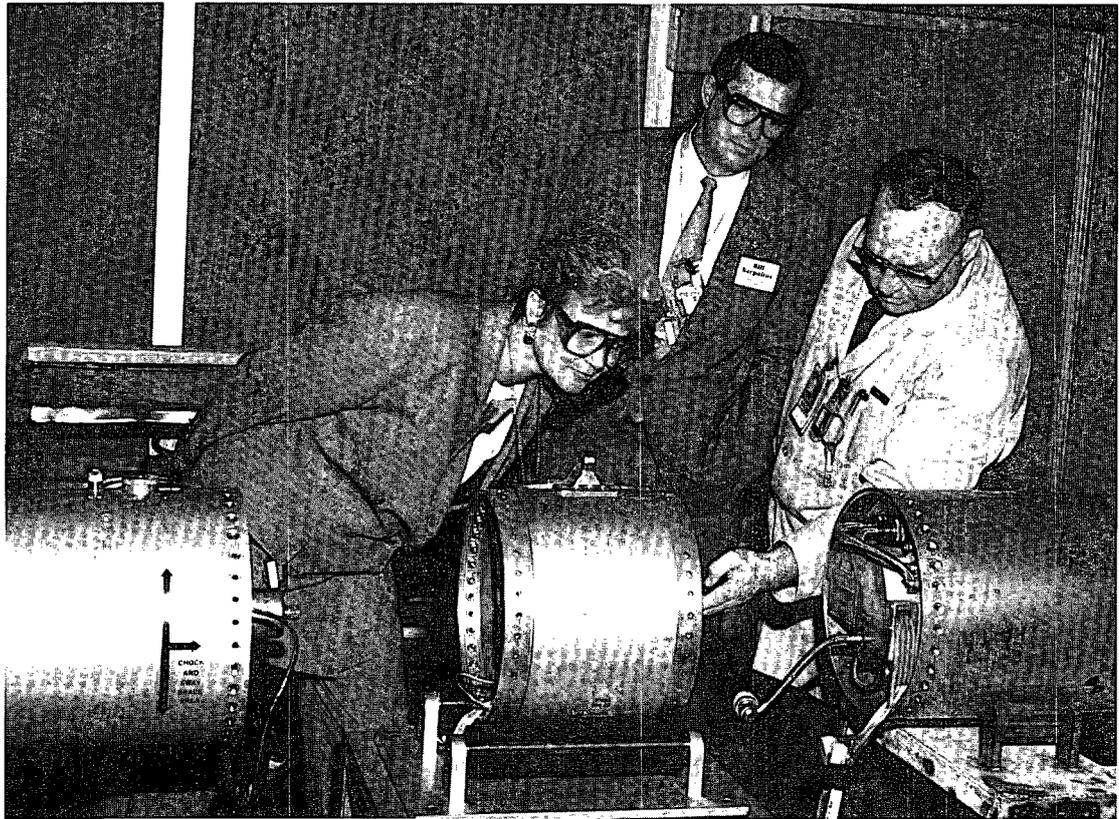
- Expand opportunities in science at an early age for traditionally under-represented groups.
- Provide scientific and technical energy information through dissemination mechanisms responsive to customer needs, such as teacher networks, use of electronic networks, public television, and outreach vans and buses.

SUCCESS INDICATORS

- Improved scientific literacy of the American public and workers and increased participation of traditionally under-represented groups in technical education programs.
- Improved technical effectiveness of DOE and contractor employees, as indicated by work performance and community outreach.
- Increases in level of customer demand for departmental information resources and more positive feedback from information users.

NATIONAL SECURITY

For almost fifty years, our national security has relied on the deterrent provided by nuclear weapons. The diminishing strategic military threat, due to the end of the Cold War and break-up of the Soviet Union, has provided the opportunity to redirect priorities from weapons production activities to other critical missions. At the same time, the Nation continues to rely on its nuclear deterrent, including nuclear powered warships, to fulfill critical national security missions. Their continued safe and effective operations are essential to national security.



Reducing the nuclear danger: Secretary O'Leary and U.S. Representative Bill Sarpalius of Texas are briefed by Pantex plant training specialist Jim Dugger during a '93 visit. Pantex plays a role in reducing the nuclear stockpile by safely and securely dismantling nuclear weapons, which contributes to the Administration's nonproliferation efforts.

Reducing the continuing and new nuclear dangers that the world faces, responding with programs that build upon and enhance the strengths of the DOE complex and the national laboratories, and emphasizing commitments to environment, safety, and health, are the essence of the Department's national security strategy.

VISION

Reducing the global nuclear danger. Accomplishing this vision means that by the year 2010:

- There will be fewer nuclear weapons worldwide.
- The stockpile will continue to be safe, secure, and reliable—without underground nuclear testing.

- Nuclear weapons-capable materials will be safe, secure, and headed for final disposition worldwide.
- The Department's national security infrastructure will continue to be a full participant in U.S. nonproliferation efforts.
- The DOE national security enterprise will be small, cost-effective, flexible, and environmentally sound.
- The Naval Reactors program will continue with, and enhance, the policies and practices that have achieved a worldwide reputation for excellence and safety.

GOAL 1

Assure that DOE remains a full participant in preventing the spread of nuclear weapons, materials, and expertise, and the preeminent agency in providing the technology to do this.

STRATEGIES

- Maintain national recognition of DOE as the preeminent research and development organization.
- Determine customer requirements.
- Maintain close coordination with other policy and research and development organizations addressing nonproliferation and arms control challenges.

SUCCESS INDICATORS

- Increase in frequency with which customers call DOE for support in arms control and nonproliferation efforts.
- Increase in number and quality of research and development initiatives completed/applied and decrease in time from concept to application.
- Increase in percentage of research and development efforts for which there are specific applications and customers.

GOAL 2

Maintain nuclear weapons technology and competence that are responsive to national security needs—within expected fiscal constraints.

STRATEGIES

- Continue maintenance and retrofit capability for the current stockpile.
- Enhance the surveillance program.
- Develop and implement a stockpile stewardship program to assure confidence that the stockpile remains

safe, secure, and reliable—without underground nuclear testing.

SUCCESS INDICATORS

- Meeting schedules for stockpile surveillance evaluations, regular maintenance requirements, and experiments to assess reliability and safety of the stockpile.
- Improvement in time required to respond to unanticipated stockpile problems.
- Time required to return to testing, if directed, is acceptable.
- Compliance with environmental, safety, security, and health requirements.
- Meeting design, construction, and operations schedules for the facilities in the stockpile stewardship program.
- Success of computer codes to evaluate experimental results.
- Ability to match past tests with experiments in new facilities.

GOAL 3

Reduce the worldwide nuclear stockpile by safely and securely dismantling thousands of nuclear weapons. Support safe, environmentally sound control and disposition of nuclear materials and components that could contribute to proliferation by providing capabilities, technologies, and systems.

STRATEGIES

- Develop and implement an approach for processing and storage of materials returned from the stockpile.
- Implement “transparency” through measures that include international inspections and bilateral agreements providing for the confirmation of declared inventories of materials returned from weapons stockpiles and

the methods for their storage, processing, and disposition.

- Work within U.S. Government, with other countries, and with stakeholders to plan and implement prioritized, continuous improvements for environment, safety, and health, security, and cost-effectiveness of dismantlement and disposition operations.

SUCCESS INDICATORS

- Degree to which DOE's capacity for dismantlement meets requirements.
- Quantity of excess weapons fissile materials that is accounted for and/or subject to international verification.
- Decrease in number of environmental, safety, health, and security-related incidents associated with dismantlement.

GOAL 4

Achieve continual enhancement of the technology infrastructure and core competencies for execution of the national security mission while further assisting industrial competitiveness.

STRATEGIES

- Develop and implement a process to assess the adequacy of the science and technology base for national security and industrial competitiveness.
- Work with customers to determine their requirements, interests, and conditions for long-term support.

SUCCESS INDICATORS

- Quality of the program, as measured by review groups.
- Increase in citations and R&D awards.
- Increase in number of proposals for partnerships and extent of reduction in processing time.

- Increase in overlap of technology infrastructure with industrial competitiveness requirements.

GOAL 5

Transform the DOE national security infrastructure to meet all current and future requirements for 1) management of nuclear weapons design, testing, and manufacturing technology, 2) safe, secure disposition of weapons capable materials, and 3) maintenance of arms control and related technologies. Make the infrastructure cost-effective, responsive, flexible, agile, and environmentally responsible.

STRATEGIES

- Use the programmatic environmental impact statement re-scoping process to define the scope of restructuring and assure integration of issues.
- Address local concerns about employment losses by promptly developing each site's programs for defense conversion/worker retraining.
- Integrate and revitalize the stockpile stewardship and technology infrastructure program to minimize technical risk and assure that national security capabilities remain "second to none."

SUCCESS INDICATORS

- A complex that is smaller, less diverse, more cost effective, secure, and environmentally responsible.
- Meeting the percentage of equipment relocated, facilities modified, construction completed, or processes qualified at receiver sites against the plan for nonnuclear consolidation.
- Office of Management and Budget and Congressional support for budget requests and outyear funding requirements needed to complete the approved plan are provided.

ENVIRONMENTAL QUALITY

The principal environmental quality objective—and the greatest challenge—of the Department of Energy is to eliminate the risks and imminent threats posed by past departmental activities and decisions. With the end of the Cold War, we have turned our focus to understanding and eliminating the enormous environmental problems created by the Department's historical mission of nuclear weapons production.

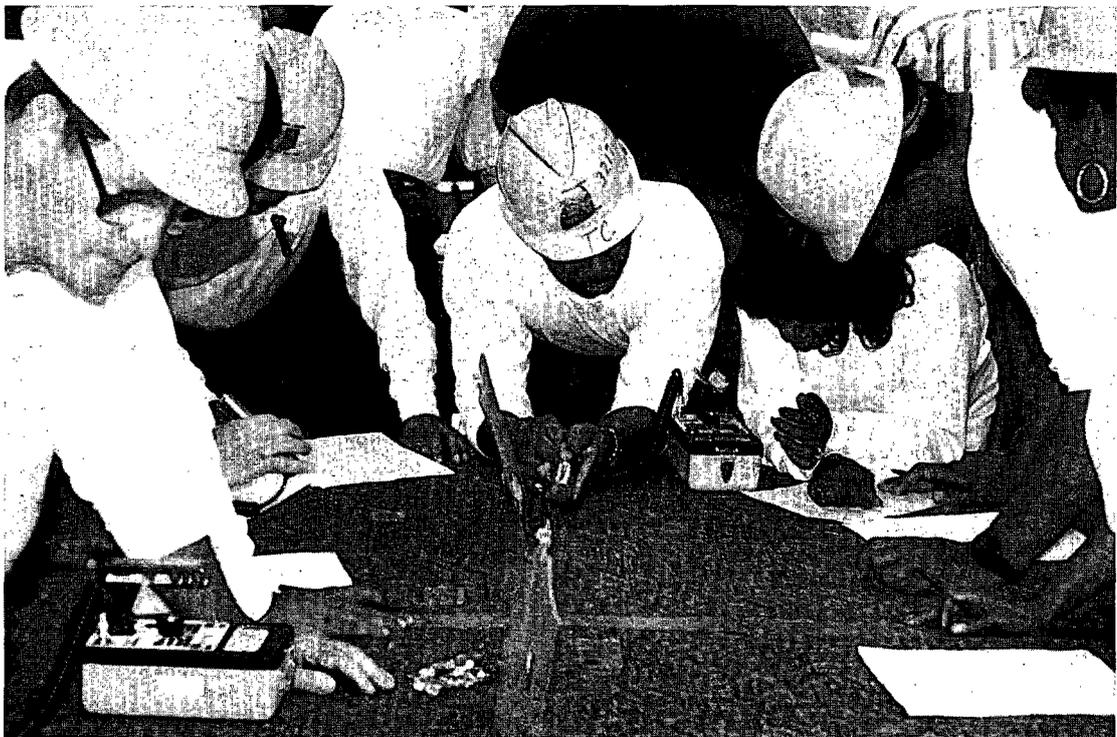
While we are just beginning to understand the scope and cost of the environmental degradation, the Department affirms the great need to eliminate risks and imminent threats to human health and the environment. We also affirm the need to

minimize and prevent the pollution from on-going departmental activities.

VISION

The environmental quality vision is:

- There will be full incorporation of improved environmental quality considerations in DOE's daily operations and decisions to ensure no further degradation.
- The environmental, safety, and health risks at all DOE facilities will be well understood.
- DOE will manage, control, and/or return as much land as possible to alternative uses and ownership.
- DOE will be a world leader in environmental technology development and application.



Environmental Quality: workers at training sessions are taught to perform a radiological survey for contamination.

- DOE will promote the use of cleaner energy and production processes.

GOAL 1

Reduce uncertainties, prioritize risks, and eliminate threats of our activities to improve environmental quality.

STRATEGIES

- Characterize and assess all risks and threats to environment, safety, and health.
- Strengthen enforcement of environmental, safety, and health performance.
- Ensure releases are below regulatory limits and implement aggressive waste minimization and pollution prevention activities.
- Promote independently enforced, risk and health-based standards.

SUCCESS INDICATORS

- Releases are below regulatory limits and departmental requirements.
- Increased percentage of departmental land and facilities turned over for appropriate alternative use.
- Environmental, safety, and health performance at departmental facilities is better than that of private industry.
- All risks/threats are assessed and characterized.
- Enforcement of agreed-upon risk and health-based standards. ("How clean is clean?")
- Environmental enhancement opportunities are assessed and prioritized.

GOAL 2

By the year 2000, attain credibility and public trust and demonstrate openness.

STRATEGIES

- Improve overall access to information on departmental activities.
- Expedite Freedom of Information Act requests.
- Plan and encourage advisory boards for major DOE sites.

SUCCESS INDICATORS

- Increase in number of declassified documents.
- Decrease in number of new classified documents.
- More timely processing of Freedom of Information Act requests.
- Decrease in number and dollar amount of environmental fines and lawsuits.

GOAL 3

By 1996, be in control managerially and financially of environmental activities, and be demonstrably perceived as such by our stakeholders.

STRATEGIES

- Improve contract management and reduce costs through establishment of clear performance objectives and penalties.
- Increase the number of projects with fully defined scopes, schedules, and cost baselines.

SUCCESS INDICATORS

- Decrease in average life-cycle cost of contracts.
- Decrease in required rework of products.
- Increase in number of projects with fully defined scope, schedule, and cost baselines.

- Attainment of cost savings and productivity improvement in environmental quality activities.
- Increase in stakeholder satisfaction, based on opinion surveys.

GOAL 4

Achieve independent and credible regulation of departmental activities and facilities and eliminate conflicting requirements.

STRATEGIES

- Promote legislative actions to increase independent and cost-effective regulation of DOE activities.
- Participate in and strengthen interagency efforts to evaluate existing and proposed statutes (including the Atomic Energy Act) and work with Congress and the Executive Branch to implement legislative modification or requirements.
- Review existing internal directions, DOE Orders, tasking memoranda, and other mechanisms to eliminate overlap.

SUCCESS INDICATORS

- Established interagency task force drafts and submits legislation and works with Congress to secure enactment.
- Value-added external regulation is accomplished by the implementation of a systematic approach for transfer of

responsibility for worker safety and health to the Occupational, Safety, and Health Administration.

- Measures associated with reducing conflicting regulations and internally generated mandates are identified and systematic implementation is initiated.
- Full compliance with environmental, safety, and health standards.

GOAL 5

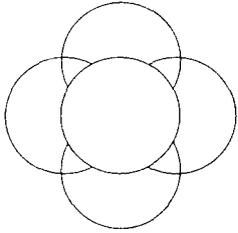
By the year 2005, be a leading Federal agency in environmental technology development focused on the Nation's needs.

STRATEGIES

- Develop an integrated systems approach for environmental technology development.
- Establish an environmental technology coordination mechanism within the Department.
- Ensure that the United States becomes the major world supplier of environmental technology applications.

SUCCESS INDICATORS

- Increase in number of advanced environmental technologies used by Federal agencies.
- Increase in commercialization of advanced technologies.



THE CRITICAL SUCCESS FACTOR STRATEGIES

The previous strategies have described what the Department's five businesses are going to accomplish. The following sections describe the strategies for how the Department will conduct its operations.

COMMUNICATION AND TRUST

The Department of Energy has a unique responsibility to establish a relationship with the American people based on communication and trust. As the Federal agency entrusted with the Nation's nuclear weapons complex and resulting radioactive and hazardous wastes, the Department must deal honestly and fairly with the public it serves, to increase knowledge about its mission and activities, and reduce unwarranted fears. Habits that encourage communication and trust must become part of the agency's daily decision-making processes.

VISION

Trust in DOE's role in contributing to the U.S. science and technology base and energy policy, and in reducing the nuclear danger, results from open and honest communication of responsible action.

GOAL 1

The Department's vision, mission, performance, and contributions to science, technology, and national competitiveness in the global marketplace are recognized and valued.

STRATEGIES

- Ensure every communication reinforces DOE's identity.
- Develop a graphic device to identify DOE products.
- Produce a brief, clear, candid Annual Accomplishments Report, reflecting both successes and inadequacies, assessing and widely disseminating the degree to which DOE has fulfilled its vision.
- Develop a proactive Speakers' Bureau to provide speakers to community organizations and talk shows around the Nation.

SUCCESS INDICATORS

- Regular surveys show increase in customer and public awareness of DOE and its missions.
- The ratio of positive-to-negative media stories increases.

GOAL 2

DOE is trusted and trusting both internally and externally.

STRATEGIES

- Live up to our core values and vision ("walk our talk").
- Take customer feedback seriously.
- Use "validators" with public credibility (e.g., National Academy of Sciences, professional/technical societies, and respected public interest groups) to review DOE decisions.

- Use innovative partnerships to enhance public understanding and to accomplish DOE's mission.
- Make public access to information and facilities easier (establish a policy of openness).

SUCCESS INDICATORS

- Commitments are met.
- Customer survey results are applied to program planning initiatives and budgets.
- Partnerships are established and information is shared with other Federal agencies, State and local governments, Native American Nations, industry, public interest organizations, and academic institutions.
- Much national security information is declassified and future classification is minimized.

GOAL 3

DOE communications (both internal and external) are timely and of high quality.

STRATEGIES

- Identify end use and goals of all communications products and create quality products to meet those goals.
- Understand customers, and determine and respond to their communication needs.
- Institutionalize training in communication and customer service skills.
- Minimize public's need to invoke the Freedom of Information Act to obtain information.

SUCCESS INDICATORS

- User-friendly public inquiry system is developed (1-800 number).

- Overall customer satisfaction (internal and external) with transactions with members of the DOE family is high.
- "One-stop" public access system for obtaining DOE reports and documents is established.
- Ineffective products are eliminated and communication plan is adopted to ensure the need for and responsiveness of future products.

GOAL 4

DOE listens and responds to its customers and partners in a fair and open process that encourages participation.

STRATEGIES

- Conduct public participation in good faith.
- Make participation with public and use of customer feedback a routine and valued practice.
- Ensure that all DOE officials designated as liaisons to customers act not only as communicators (or defenders) of DOE policy, but as conduits and advocates of customer reactions.
- Establish "Secretary's Annual Excellence in Public Involvement Award" to be given to organizations that creatively and effectively implement public involvement initiatives.

SUCCESS INDICATORS

- Officials who deal directly with the public are empowered to make commitments and explain why decisions are made.
- Increase in percentage of customer suggestions that become DOE policy.
- Decrease in number of lawsuits filed by unsatisfied customers.

- First “Secretary’s Annual Excellence in Public Involvement Award” is presented in 1994.

GOAL 5

All members of the DOE family serve the communication needs of their internal and external customers knowledgeably and responsibly.

STRATEGIES

- Take full advantage of new technology to provide quality communications internally and externally by 1999.
- Develop a plan to take advantage of current technology—computer, optical, document management, telecommunications—to improve communications, internally and externally.
- Develop a real-time reference base of information—e.g., speech information, visual aids—that can be readily accessed by all members of the DOE family.
- Develop a technical data base accessible by external and internal customers that addresses budgets, contracts, grants, environmental, safety, and health programs, waste management and defense activities, energy technologies, science, and energy-related consumer information.

SUCCESS INDICATORS

- Technology implementation plans are incorporated in planning and budget decisions.
- DOE-wide electronic mail systems are integrated so all personnel can communicate easily.
- Data base system is automated and accessible by DOE family and external customers.

- High percentage of inquiries and investigations is satisfied by output from data bases.

GOAL 6

All members of the DOE family see themselves as part of a community of service sharing a common vision and applying core values.

STRATEGIES

- Communicate short, clear, focused statements of DOE mission and vision to DOE family.
- Modify the recognition system to reward teamwork.
- Train all employees in communications, team building skills, listening skills, and the Department’s core values.
- Provide flexibility in the work schedule for participation in professional and community organizations.

SUCCESS INDICATORS

- Improvement in morale and pride in the Department, as measured by increased productivity and number of successfully adopted suggestions.
- Continuous quality improvement processes are established and evaluated regularly.

HUMAN RESOURCES

People are our most important resource. The more successful our people are, the more successful the organization can be. Our human resources future will determine the Department’s future.

VISION

We are an energized team of creative and dedicated people achieving departmental excellence.

GOAL 1

Align human resources with departmental priorities and requirements.

STRATEGIES

- Assure there is a common understanding of the Department's priorities and requirements.
- Allocate human resources consistent with the Department's priorities and requirements.
- Provide incentives and support for doing more with less.

SUCCESS INDICATORS

- Agreement is reached within the Department regarding workforce planning and analysis strategy.
- Skills bank is established.
- Target number of employees retrained/reassigned is reached.

People are our most important resource.

GOAL 2

Ensure a diverse and talented workforce.

STRATEGIES

- Achieve the benefits afforded by a diverse and talented workforce through strengthened management commitment and accountability.

SUCCESS INDICATORS

- Increase in percentage of minorities, women, and persons with disabilities in

the workforce and in management positions.

- Enhanced training is established for managers and supervisors.
- Increased participation in programs such as upward mobility.

GOAL 3

Develop and maintain a well trained and versatile workforce.

STRATEGIES

- Institutionalize strategic planning for training and development.
- Establish an integrated career partnership system.
- Develop and implement a management training curriculum.
- Develop and implement a departmental technical intern program.

SUCCESS INDICATORS

- Increase in number of career tracks and mentoring relationships established.
- Strategic planning process for training and development is established.
- Increase in number of individual development plans.

GOAL 4

Ensure a highly motivated workforce.

STRATEGIES

- Reduce human resources regulations and practices for optimum flexibility.
- Foster and institutionalize the core values of the Department.

SUCCESS INDICATORS

- Streamlined human resources processes.
- Improved morale as measured by employee surveys.

- Simplified performance appraisal system and an equitable awards program implemented.

GOAL 5

Use quality management principles in all aspects of the way we do business.

STRATEGIES

- Build and institutionalize a total quality management infrastructure.
- Focus on internal and external customer satisfaction.
- Identify and continuously improve human resources processes.

SUCCESS INDICATORS

- Increase in number of organizations engaged in total quality management implementation.
- Increase in number of employees involved in process improvement teams.
- Decrease in number of internal/external customer complaints.

ENVIRONMENT, SAFETY, AND HEALTH

Ensuring the safety and health of workers and the public and the protection and restoration of the environment are fundamental responsibilities of the Department of Energy. Excellence in environmental, safety, and health activities and timely implementation are critical to the success of each of the Department's businesses. It is the foundation of the Department's largest program, environmental management.

VISION

The hallmark and highest priority of all our activities is daily excellence in the protection of the worker, the public, and the environment. Fundamental to the attainment of this vision are personal commitment, mutual trust, open communications, continuous improvement, and full involvement of all interested parties.

GOAL 1

Empower workers and take other necessary actions to prevent all serious injuries and all fatalities, and to eliminate all worker

We respect the environment.

exposures and environmental releases in excess of established limits. By eliminating these exposures and releases, reduce the incidence of illness among workers and the public, and prevent damage to the environment.

STRATEGIES

- Establish effective employee complaint and employee suggestion processes, and establish labor/management safety and health committees to cover all workers at all sites.
- Train individuals to appropriate and established levels of job competency and proficiency.
- Establish a consistent and effective approach to adequately resolve common DOE-wide safety and health problems.
- Modify prime contractors' contracts to strengthen accountability for safety and health, including performance of all subcontractors in these areas.
- Establish an effective medical surveillance program at all sites and



Acid rain research: college intern measures rates of leaf photosynthesis with a field portable gas analyzer system at DOE national lab. Measurements have been important indicators of pollutant effects on plant growth.

utilize it to improve conduct of operations and worker health and safety.

- Develop DOE-wide definitions for serious injury/illness and other appropriate health indicators, and develop information management systems for health outcome data.
- Implement a safety analysis system for all new technologies, including system-specific Standard Operating Procedures, training prior to start-up of new technologies, and clearly defined roles and responsibilities within DOE.

SUCCESS INDICATORS

- All worker safety and health complaints are acknowledged within 48 hours and resolved in a timely fashion.
- Number of complaints rises over the first year and declines thereafter.
- Decrease in number of fatalities, serious injuries, incidents of illness, and exposures and releases (in excess of established limits).

GOAL 2

Ensure there are specific environmental, safety, and health performance requirements for DOE activities which are the basis for measuring progress toward continuous improvement.

STRATEGIES

- With stakeholder input, develop and apportion performance elements and benchmark DOE's performance against other government agencies and the private sector that have comparable activities.
- Establish a focus group to define accountability and ownership of the performance indicators and implement recommendations of the focus group.

- Develop a system to achieve consistent management tracking of environmental, safety, and health issues and performance.
- Develop a process to systematically define health/risk-based standards and requirements.

SUCCESS INDICATORS

- Performance elements are in place and measured.
- All performance indicators have owners who are accountable.
- Number of health/risk-based standards increases over time.
- Volume of facility effluents decreases over time.

GOAL 3

Establish clear environmental, safety, and health priorities and manage all activities in proactive ways that effectively and significantly increase protection to the environment and to public and worker safety and health.

STRATEGIES

- Establish a sound departmental approach to environmental, safety, and health priority setting, and define clear and accountable indicators to gauge success in satisfying established priorities.
- Revise DOE budget processes to account for environmental, safety, and health expenditures and priorities, require justification of needs, and provide the framework for incorporating environmental, safety, and health planning into all phases of the budget cycle.

SUCCESS INDICATORS

- Environmental, safety, and health “high priority” needs are funded.
- Decrease in proportion of unplanned (reactive) versus planned expenditures in budget cycle.
- Decrease in time to complete National Environmental Policy Act actions.

GOAL 4

Demonstrate respectable performance related to environmental protection and worker/public safety and health. Ensure related DOE information is reliable, comprehensive, and available through an open process. As a result, earn public credibility.

STRATEGIES

- Commit to seek independent and credible external regulation as soon as possible, and establish working groups (including interagency) to plan for the transition and implementation.
- Declassify as many documents as possible, and seek resources to improve information access and dissemination, including reduced response time for information requests. Involve local and State governments in information dissemination/reliability processes.
- Participate and provide leadership in Administration efforts to address issues related to human experimentation conducted by governmental agencies.
- Improve reliability of information through willingness to provide raw data and to seek outside expert review.
- Conduct stakeholder meetings and operate in as open an environment as possible. Seek customer input in decision-making processes and provide feedback.

- Educate the public, media, and the Congress on DOE’s environmental, safety, and health issues and progress.

SUCCESS INDICATORS

- DOE credibility improves in the polls and good press increases.
- Increase in ratio of external to internal oversight.
- Increase in level of stakeholder involvement and two-way feedback.
- Increase of available unclassified data.
- Decrease in number of Freedom of Information Act requests and Department’s response time for current information.

MANAGEMENT PRACTICES

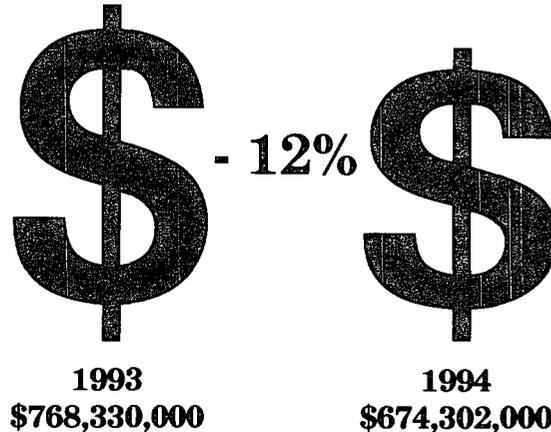
The Department has an urgent need to embrace the best management practices to improve processes and customer satisfaction, prevent defects, and eliminate waste. It has an \$18 billion budget, over 20,000 employees, and a large number of research laboratories, facilities, and Operations Offices. It oversees large-scale special operations such as the processing and storage of nuclear materials and the

The Department will be viewed as “best in class.”

production of power for large regions of the country. It is one of the largest owners of public facilities in the world. Still, it contracts out about 85 percent of its work by dollar amount.

The management of such an operation must have a coherent and well structured architecture so that it may more effectively

Changes in Dollars Spent on Support Service Contracts from 1993 - 1994



Secretary O'Leary presented her contract reform report on February 3, designed to make contractors more accountable for performance, increase competition for DOE business, and tighten cost controls.

meet the requirements of its customers and its national and international responsibilities.

VISION

The Department will be viewed as "best in class" in its management practices. Customer expectations of its management practices will be met or exceeded. People will be empowered through integrated and open management systems that are results-oriented and cost-effective.

GOAL 1

Ensure management practices meet or exceed customer expectations.

STRATEGIES

- Determine customer requirements with customer participation.
- Reconcile customer requirements with statutory requirements and resource limits.

SUCCESS INDICATORS

- Increases in customer/stakeholder satisfaction levels.

GOAL 2

Ensure management practices are driven by, and supportive of, mission needs.

STRATEGIES

- Define management practice owners and practices to be improved.
- Clarify roles and responsibilities for decision-making.

SUCCESS INDICATORS

- Meeting action plan schedules.
- Increase in number of decision levels, regulations, and processes eliminated.
- Increase in number of systems improvements implemented.
- Contract dollars saved.

GOAL 3

Ensure management practices mirror our best public and private sector counterparts.

STRATEGIES

- Use total quality management and DOE-wide benchmarking to reengineer and integrate management practices for continuous improvement.
- Implement a comprehensive training/education program.
- Use award criteria as guidelines for continuous improvements.

SUCCESS INDICATORS

- Increase in effectiveness, as measured by timeliness, accuracy, and costs.
- Decrease in time required to implement changes.
- Increase in number of employees trained in management practices.
- Improvements in management controls (e.g., by Federal Manager's Financial Integrity Act Reports and General Accounting Office/Inspector General Audits).

ADDENDA

DOE Strategic Plan *Fueling a Competitive Economy*

- Strategic Plan Cover Letter by Susan Tierney, April 5, 1994
- Flyer – Strategic Plan Town Meeting, April 26, 1994
- Graphic – Department's Strategic Plan schematic
- DOE Accomplishments Report from Hazel O'Leary, February 21, 1996



Department of Energy

Washington, DC 20585

April 5, 1994

Dear Co-Employee:

It is with great pleasure that I take this opportunity to share with you the attached Department of Energy Strategic Plan. It represents months of effort by several hundreds of participants, including our own DOE staff and many of our customers and stakeholders. In recognition that people are our most important asset, the plan is being provided to each employee first—ahead of its release to the press and general public.

I hope that each of you will take the opportunity to read the plan. It is the first time the Department has addressed the future direction of all of its "businesses" in one document. It is also the first time that strategic planning for our important crosscutting systems—communication and trust; human resources; environment, safety, and health; and management practices—has been formally addressed. As world events and departmental priorities change, we will continue to update and improve the plan.

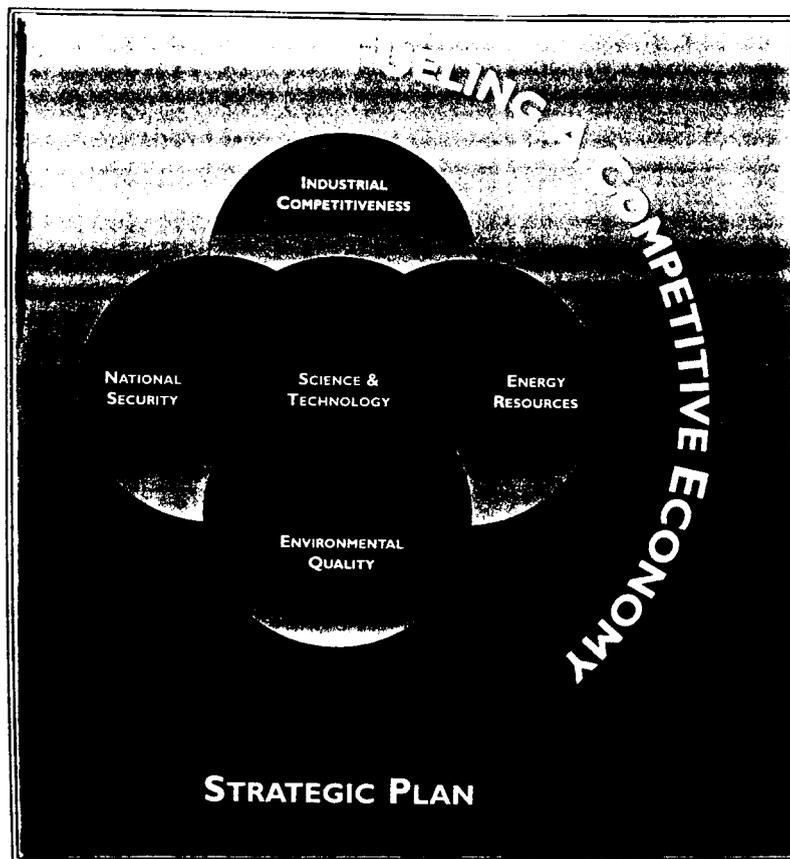
You might think of strategic planning as a kind of roadmap providing guideposts (goals and strategies) to move us in the right direction along the path (vision) we chose to follow. By defining these elements, we create a common understanding of who we are, where we are going, and how we will get there—the essential ingredients of total quality management.

On April 26, at 11:00 am EDT, I and Nancy Weidenfeller of the Quality Management Office will host a Town Meeting to discuss the strategic plan and to answer questions. This event will be held in the Forrestal main auditorium with video downlinking and interactive audio with as many of the field sites and laboratories as possible. I hope many of you will be able to participate in this event.

I encourage you to review the plan and discuss it with your coworkers. My staff in the Office of Strategic Planning and Program Analysis is available to answer questions and receive comments (202) 586-5390. I hope this Strategic Plan helps to explain our direction for the future.

A handwritten signature in cursive script that reads "Sue Tierney".

Susan Tierney
Assistant Secretary for Policy,
Planning, and Program Evaluation



ALL DEPARTMENT OF ENERGY EMPLOYEES ARE INVITED TO ATTEND

DOE'S STRATEGIC PLAN TOWN MEETING

TUESDAY, APRIL 26, 1994

11:00 A.M. AND 2:00 P.M. IN THE FORRESTAL MAIN AUDITORIUM

SUE TIERNEY, ASSISTANT SECRETARY FOR POLICY, PLANNING, AND PROGRAM EVALUATION AND NANCY WEIDENFELLER, DIRECTOR OF THE OFFICE OF QUALITY MANAGEMENT, WILL HOLD A MORNING AND AFTERNOON TOWN MEETING TO TALK ABOUT THE DEPARTMENT'S STRATEGIC PLAN AND QUALITY INITIATIVE AND ANSWER PARTICIPANT'S QUESTIONS. THIS IS YOUR OPPORTUNITY TO LEARN HOW THIS PLAN AFFECTS YOU AND HOW YOU WILL BE PART OF MAKING IT A REALITY. EACH SESSION OF THE "TOWN MEETING" WILL BE BROADCAST BY SATELLITE TO GERMANTOWN AND TO FIELD FACILITIES. GERMANTOWN EMPLOYEES AND STAKEHOLDERS CAN VIEW THE TOWN MEETING ON CHANNEL 1 OR IN THE GERMANTOWN MAIN AUDITORIUM. THE TOWN MEETING WILL BE CARRIED ON CHANNEL 3 IN THE FORRESTAL BUILDING.

Department's Strategic Plan

Mission

What our business is

Vision

What we want to be

Values

What we believe and how we will act

Critical Success Factors

Human Resource Management

Business Management

Environment, Health and Safety

Communication and Trust

Business Priorities:

- Science and Technology
- Technology and Competitiveness
- Energy
- National Security
- Waste Management

Strategic Planning:

*What you Do

- Strategic Issues
- Strategies
- Strategic Goals
- Performance Measures
- Actions Plans
- Program Plans
- Budgeting

Quality Management Planning:

*How you do it

- Quality Leadership
- Customer Focus
- Training & Recognition
- Empowering Teams
- Tools for Measurement
- Process Quality
- Quality & Productivity Results
- Performance Based Budgeting

Integration

and

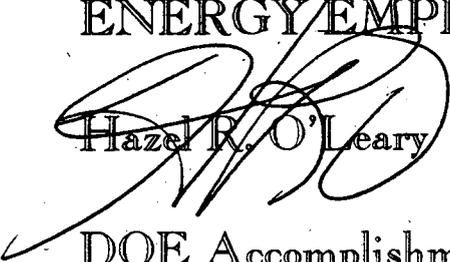
Alignment



The Secretary of Energy
Washington, DC 20585

MEMORANDUM FOR: ALL DEPARTMENT OF
ENERGY EMPLOYEES

FROM:


Hazel R. O'Leary

SUBJECT:

DOE Accomplishments Report

DATE:

February 21, 1996

Our successes over the past three years have been impressive. Your skills, focus and dedication have brought credit to you and benefits to all Americans. Thank you for the full and consistent support you have shown for a new Department of Energy.

Your willingness to refine skills, to adopt new ways and devote your professional abilities to your work benefits the American taxpayers. We have created a firm platform for Increased U.S. Economic Productivity; Secure Energy Resources; World-Class Basic and Applied Science and Technology; a Safe Enduring Nuclear Stockpile and a Reduction in the Global Nuclear Danger; and the Improved Quality of Our Environment and Lives.

I am proud of your successes and proud of you.

I firmly commit to see our critical work advance as we so carefully planned.



Department of Energy Accomplishments Report

Science and Technology: *We continue to lead the way*

1995: Achievements Recognized

- ✓ Continued world-class research: four of the five 1995 Nobel Prizes in chemistry and physics were awarded to scientists who were supported by DOE's predecessor agencies.
- ✓ Won 11 Awards for Excellence in Technology Transfer from the Federal Laboratory Consortium, recognizing federal laboratory employees who have done an outstanding job of transferring technologies to the private sector.
- ✓ Won 33 of *R&D Magazine's* 1995 R&D 100 Awards, selected from international entries by a panel of 70 experts. Since the awards began in 1963, DOE has received more awards than all other government agencies combined, including NASA and NIST, and more than twice as many as the top industrial winner, General Electric.
- ✓ Announced discovery of the top quark, the last of a family of six subatomic particles predicted by current scientific theory. This discovery strongly supports the prevailing theory of the particles and forces that determine the fundamental nature of matter and energy. (Discoveries in basic science, such as this, lead to future discoveries and technological advances which cannot be predicted at the present time.)
- ✓ Provided new instructional tools for educating young scientists to over 100,000 teachers.

1994: Major Advancements

- ✓ Assisted in the locating a gene that contributes to susceptibility to breast cancer in some women. This research has contributed medical knowledge that may lead to improved screening and treatment for breast cancer.
- ✓ Delivered the first beam of electrons for research at the Continuous Beam Accelerator Facility (CEBAF) in Newport News, Virginia, using innovative superconducting technology. CEBAF's unique capability will allow scientists for the first time to make a detailed investigation of the structures hidden deep within nuclei.

1993: Building on Foundations for Scientific Advancement

- ✓ Set a world record for fusion power, enough to power more than 2,000 homes if sustained on a continuous basis—helping to demonstrate the feasibility of fusion as an inexhaustible energy supply. (Set world records again in 1994 and 1995.)
- ✓ Completed on time and within budget the world's most powerful source of soft x-rays. The brilliant x-rays from the Advanced Light Source at Lawrence Berkeley Laboratory will allow researchers to produce images of molecules as chemical and biological reactions take place. This will enhance the study of the structure of materials, including high-temperature superconductors and viruses.
- ✓ Genetically engineered a line of mice exhibiting sickle cell disease for testing preventive drug therapy.

National Security:

We are ensuring the safety and reliability of our nuclear stockpile without underground testing and reducing the global nuclear danger.

1995: Made Significant Progress toward a Safer World

- ✓ Assured the President that a science-based stockpile stewardship program could ensure the safety and reliability of the stockpile without underground testing. This allowed the President to announce that the U.S. would pursue a true zero-yield Comprehensive Test Ban Treaty.
- ✓ Certified the stockpile as safe and reliable, using non-nuclear methods.
- ✓ Signed a multimillion-dollar contract to develop by the end of 1996 a computer that is ten times more powerful than today's most capable machine. This technology will support improved non-nuclear methods of certifying stockpile reliability.
- ✓ Determined that the National Ignition Facility would support U.S. nonproliferation objectives.
- ✓ Safely dismantled 1,393 nuclear weapons, reducing the nuclear danger and enhancing international peace.
- ✓ Improved worldwide control of nuclear weapons by supporting International Atomic Energy Agency inspections of some of our excess fissile materials.
- ✓ Played a pivotal role in the achievement of an indefinite extension to the Nonproliferation Treaty.
- ✓ Obtained 6.2 metric tons of highly enriched uranium from former Soviet weapons (enough for approximately 250 weapons, at 25 kilograms per weapon).
- ✓ Invigorated and expanded U.S. effort to work with Russia and the Newly Independent States to protect and control stockpiles of weapons-usable nuclear material—work has been done at over 25 sites to improve the security of approximately 8 tons of plutonium and highly enriched uranium.
- ✓ Led U.S. effort to control and store the spent nuclear fuel at the North Korean nuclear facility at Nyongbyon.
- ✓ Established an International Nuclear Safety Center at Argonne National Laboratory to promote continuing improvement of nuclear safety worldwide.
- ✓ Filled tritium bottles for approximately 1,500 weapons, helping to ensure the reliability of the stockpile.
- ✓ Selected a dual-track strategy to assure a future tritium supply.

1994: Initiated a New Stockpile Stewardship Strategy

- ✓ Developed consensus to support the President's decision to extend the moratorium on nuclear testing through September 1995.
- ✓ Initiated a contract to purchase 500 metric tons of highly enriched uranium from former Soviet weapons, enough for approximately 20,000 weapons.
- ✓ Secured 600 kg of highly enriched uranium, originally from Kazakhstan, through Project Sapphire (approximately 25 weapons worth).
- ✓ Safely dismantled 1,369 nuclear weapons.

1993: Proposed a New Approach to Nuclear Stockpile Stewardship

- ✓ Recommended that U.S. extend the moratorium on underground testing.
- ✓ Developed Science-Based Stockpile Stewardship program to replace reliance on underground testing by determining the safety and reliability of the nuclear stockpile through the development of an Advanced Strategic Computing Initiative. This provides improved simulation capabilities and continuing research to provide insights into weapons physics phenomena (the National Ignition Facility) and enhanced surveillance capabilities (the Los Alamos Neutron Scattering Center).
- ✓ Safely dismantled 1,556 nuclear weapons.

Energy Resources: *We are developing cleaner energy technologies for a more sustainable future and a more productive economy.*

1995: Built on Our Successes

- ✓ Saw a DOE-funded lighting technology win the *Discover* award for Environmental Technology Innovation and become a *Popular Science* Technology Award Winner for 1995. The Sulfur Light produces four times the light for a third the cost, compared to conventional lighting.
- ✓ Launched a partnership with the private sector to save building owners as much as \$700 million a year in energy costs by 2000 through investments in energy-efficient equipment.
- ✓ Partnered with industry to bring online the nation's first fully commercial coal gasification combined-cycle power plant, creating a new option for clean, efficient electricity generation.
- ✓ Successfully advocated deep water royalty relief and removal of Alaska North Slope Oil restrictions. The removal of the restrictions is expected to result in an increase in domestic production of 100,000 barrels per day and 6,000 jobs by the year 2000. Together we expect these legislative actions will add 220,000 barrels per day and 13,000 jobs by 2010.
- ✓ Demonstrated advanced imaging technologies that can be applied to geologically complex oil basins to pinpoint previously undetected oil reserves.
- ✓ Obtained 800 private and public utility pledges of support for climate change initiatives expected to contribute to reducing carbon emissions by 23 million metric tons, producing \$15 billion in energy savings, and stimulating \$20 billion in industrial investments by 2000.
- ✓ Led overseas trade missions that advanced private sector agreements on future sales of U.S. energy technologies with a potential value of \$19.7 billion.
- ✓ Added 24 cities to the Clean Cities Program, each having committed to purchase fleet vehicles, invest in infrastructure and otherwise increase the deployment of alternative fuel vehicles.

1994: Began to See Clean Energy Dividends

- ✓ Saw first commercial introductions of advanced environmental controls and clean combustion processes emerge from the Clean Coal Technology Program—more than half a billion dollars in sales of retrofit, low-polluting burners alone and the creation of more than 3,400 jobs.
- ✓ Brought a cogeneration power plant on line at Elk Hills Naval Petroleum Reserve, saving \$10 million annually and producing \$2 million in sales of electricity.
- ✓ Transferred first innovations from the Advanced Gas Turbine program to private sector developers. This resulted in commercial offerings of higher-efficiency, more economical utility and industrial natural gas-fueled turbines.
- ✓ Launched the Clean Cities Program by adding 17,000 alternative fuel vehicles to Federal and local fleets to help 15 cities reach their air quality objectives as defined in the Clean Air Act. (This equates to 150,000 fewer barrels of oil consumed each year.)
- ✓ Developed and launched the President's Climate Change Action Plan with commitments from business, industry and government to voluntarily reduce greenhouse gas emissions.

1993: Initiated Strategies and Funding for Cleaner Energy

- ✓ Negotiated contracts with GM and Ford to develop electric vehicles capable of fuel switching.
- ✓ Introduced a cost-shared program to develop new wind turbine prototypes and the biennial solar car competition, "Sunrayce," to promote solar technology. Both technologies reduce greenhouse gas emissions, for a more sustainable energy future.
- ✓ Announced the Domestic Natural Gas and Oil Initiative to provide a long-term strategy to reduce dependence on foreign oil and protect our future by increasing gas and oil production an average of 450,000 barrels per day (oil equivalent) during the 2001-2010 period.
- ✓ Obtained voluntary commitments from 200 private and public utilities to reduce or avoid carbon dioxide emissions.

Environmental Quality: *We are taking aggressive action to address the environmental impacts of our present and past work.*

1995: Achieved Significant Progress

- ✓ Completed 119 interim and 75 large-scale environmental cleanups of contaminated sites at DOE facilities, constituting approximately 5 million cubic yards of mill tailings, soil, rubble, and debris—enough to fill a hole the size of a football field and over half a mile deep.
- ✓ Completed cleanup at 6 formerly utilized sites (21 complete out of 46 total) and completed surface cleanup at 2 uranium mill tailings sites (15 complete out of 24 total).
- ✓ Streamlined the Environmental Impact Statement process with a goal of reducing process time from 33 months to 15 months, saving an estimated \$26 million over five years. The Department received the 1995 Federal Environmental Quality Award for this effort.
- ✓ Saved \$37 million in waste treatment costs by shipping 186,987 gallons of uranium-contaminated nitric acid for reuse in Sellafield, England.
- ✓ Completed more than 2 miles of tunneling into Yucca Mountain, Nevada to investigate the site's suitability for geologic disposal of spent nuclear fuel and high level radioactive waste.
- ✓ Completed the Baseline Environmental Management Report, the cost and schedule analysis for cleaning up the Cold War legacy (\$230 billion, 75 years) as a step toward improving management efficiency.
- ✓ Obtained approval of plans for treating mixed waste at 35 sites in 20 states. Together, the plans call for 95 percent of DOE mixed waste to be treated at the site where it is currently stored or generated. The plans are the culmination of a 3-year, collaborative effort by DOE, the states, the Environmental Protection Agency, and stakeholders.
- ✓ Permitted the Department's first mixed waste incinerator at the Idaho National Energy Laboratory for treatment of mixed low level waste (only one other is permitted in the country). It will allow for the treatment of a large portion of DOE's waste subject to the Federal Facility Compliance Act.
- ✓ Began stabilizing approximately 80,000 gallons of plutonium solutions at the Savannah River site. This addresses an urgent risk identified by the Plutonium Vulnerabilities Study.
- ✓ Established performance-based contracting by tying payment to performance instead of level of effort. The new Rocky Flats contract awarded to Kaiser-Hill ties fully 85 percent of the contractor's fees to meeting performance goals.
- ✓ Established a Departmental Environmental Justice plan to reduce disproportionate negative impacts of our operations and facilities on low-income and minority communities.
- ✓ Implemented the Environment, Safety, and Health Management Planning Process (risk-based planning and budgeting) for all operating elements.

1994: Reduced Risks

- ✓ Completed 132 interim and 32 larger-scale environmental cleanups of contaminated sites.
- ✓ Virtually eliminated the threat of explosion from flammable gas build-up in "Tank 101 SY", a high level radioactive waste tank at Hanford, by using a state-of-the-art mixing pump.
- ✓ Provided 24 new technologies for commercial development by private industry and demonstrated 60 bench- and full-scale environmental technologies.
- ✓ Completed DOE's first comprehensive spent fuel, plutonium, and chemical vulnerability studies, paving the way for the Department to resolve these vulnerabilities.

1993: Prioritized Resources

- ✓ Budgeted, for the first time, more for environmental efforts than for defense activities.

Changing the Way We Do Business:

We are positioning ourselves to meet new challenges

1995: The Results Are In

- ✓ Signed a Performance Agreement with the President and then delivered on our commitments.
- ✓ Received four Hammer Awards from Vice President Gore for efforts that will save taxpayers more than \$3 billion over five years.
- ✓ Committed to \$14.1 billion in savings over the next five years through implementation of the recommendations from the Strategic Alignment Team, Galvin and Yergin Task Forces, and other cost savings initiatives.
- ✓ Committed to align, consolidated, and streamline organizations, eliminating 3,788 positions over the next five years. As of January 3rd, 1996, reductions were ahead of schedule with onboard staffing down by 675 positions since May 1995 through retirements and attrition.
- ✓ Reduced Departmental directives by 50 percent and acquisition regulations by 25 percent, resulting in \$38 million in cost avoidance.
- ✓ Increased the number of employees per supervisor by 44 percent.
- ✓ Began a fundamental policy review to evaluate the basis for DOE classification activities.
- ✓ Released more than 250,000 pages of records and helped thousands of citizens find information on their possible participation in human radiation experiments.
- ✓ Replaced bureaucratic internal and contractor oversight activities with effective self assessments.
- ✓ Completed self-assessments in 95 percent of Headquarters and 83 percent of Field organizations establishing a baseline for improved quality processes.
- ✓ Created Energy Quality Awards which received widespread employee acceptance and recognized 15 organizations for service to customers and commitment to excellence.

1994: Began Changes

- ✓ Aligned the Department's resources and management processes to conform to the Strategic Plan—initiated management reforms in contract management; quality management; strategic alignment; diversity; laboratory management; and regulatory reform. In contract management alone, savings through the end of FY 98 are estimated at \$5 billion.
- ✓ Baseline external customer satisfaction: 73 percent of customers were satisfied or very satisfied with DOE's products and services.
- ✓ Declassified and released information on the U.S. atmospheric and underground nuclear testing program.
- ✓ Began the declassification review of 32 million pages of classified documents.
- ✓ Issued the first ever strategic plan on diversity for the Department
- ✓ Received a Hammer Award from Vice President Gore for the Chief Financial Officer's streamlining of financial management services to save over \$1 million annually.

1993: Decided to Change

- ✓ Completed a DOE-wide strategic planning process, involving hundreds of field and headquarters employees and external stakeholders and resulting in the first ever DOE Strategic Plan, *Fueling A Competitive Economy*. This process redefined our business lines and how we do business and established new, more sharply focused goals for the Department.
- ✓ Implemented a policy of openness to move the culture away from Cold War secrecy; declassified and began releasing information to assist nonproliferation, environment, safety, and health remediation and environmental cleanup.
- ✓ Imposed a one-year contractor salary freeze, that was estimated to save \$1.55 billion over five years.