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S	62	1	1	3

George/Roger

I think we should do this perhaps around Wed. 10?

John

February 25, 2000

To: John Podesta
cc: George Frampton
Roger Ballentine

From: David Hawkins, NRDC, on behalf of Green Group Climate Committee

Re: Integrated Powerplant Clean-up Policies

At our meeting with you on February 3 you requested additional information on two issues:

- developments in electric industry views regarding pollution control programs; and
- the relative costs of 3-pollutant versus 4-pollutant control proposals.

Attached are two memos on these topics. Please feel free to have your staff contact me (202-289-6868 or dhawkins@nrdc.org) for any additional follow-up.

Factors Promoting Electric Generator Support for Comprehensive Clean-up Bills

Two converging trends are building interest among some members of the electric generating industry for integrated multi-pollutant powerplant clean-up bills. First, operators face increasing regulatory and judicial liability for additional air pollution controls and significant uncertainty about the timing and magnitude of these obligations. This uncertainty can increase investment risks for generating companies. Second, acceleration of economic deregulation and introduction of competition in the electric generating sector changes the calculus of the traditional "fight and delay" strategy on environmental regulation.

I. Growing Clean-up Demands

Fossil electric generators are major sources of sulfur oxides (SOx), nitrogen oxides (NOx), mercury (Hg) and carbon dioxide (CO2). Regulations requiring significant additional reductions in these pollutants either have been adopted, are under active consideration, or may be adopted during the next decade. While some existing rules have been challenged in the courts and remanded, few observers believe that these control efforts are dead. In addition, well-funded activist campaigns for multi-pollutant powerplant control legislation are making progress at State and Federal levels. Bipartisan bills (Jeffords/Lieberman and Waxman/Boehlert) have been introduced in both Houses of Congress and the environmental community is active in building support for these bills. Finally, suits to enforce the existing New Source Review requirements have been filed by Federal and State governments and by environmental groups. The potential financial liability flowing from these suits is large.

Traditionally, the industry strategy to confront these controls efforts has been to prolong debate and defer the adoption and implementation of new pollution targets for as long as possible. Many in the industry continue to practice this approach. However, there is evidence that the industry is less monolithic, due to emerging competitive pressures and other changes in the economic regulatory landscape.

II. Challenges of Deregulation and Competition

Traditionally, electric generating firms have viewed any new environmental proposal as a production cost adder and therefore something to oppose. However, with the emergence of wholesale-market competition several years ago, companies with cleaner generating assets (or with plants located in areas with a high certainty of added control requirements) have analyzed their situation in a new way. They have realized that what is most important is the impact new air pollution control requirements on their competitive position in the marketplace. Owners of plants already subject to more stringent controls now operate at a competitive disadvantage to firms with a large amount of grandfathered capacity. "Cleaner" firms have recognized that establishing tight caps for the industry with allocations based on a uniform performance standard would eliminate the competitive disadvantage caused by today's disparate air pollution requirements.

Other changes driven by competition create pressures for owners of dirty generating plants as well. Companies are now actively buying and selling existing generating plants. Uncertain future pollution requirements increase the risks to buyers and sellers in these multi-billion dollar transactions. The sale price of an existing plant is a function of how much future revenue it is expected to produce. The stringency and timing of new pollution control requirements will be a major determinant of whether a particular plant's operating costs will be above or below the competitive market price for electricity. And small differences in operating costs will make large differences in how much individual plants run in a competitive market. Today, sellers and buyers are simply guessing about the regulatory future and many are almost certainly guessing wrong. Firms buying and selling plants would value certainty about near- to mid-term policy control requirements as an aid to more accurate determination of asset value.

Competition is also forcing existing firms to think broadly about their strategy to define a successful market position after their monopoly status disappears. The lack of certainty about pollution control requirements complicates analysis of which strategy is best for a particular firm. In the past, delay in adoption of new control requirements was a winning strategy for nearly all firms. When the new requirements eventually were adopted, firms would simply seek rate increase approvals to cover their costs. As economic deregulation progresses, more and more firms will not be able to pass through these compliance costs. The sooner they know the details of new control requirements, the more opportunities they will have to pursue cost-minimizing strategies.

In short, electric generating firms have something to gain from early adoption of an integrated program to lay out their pollution controls obligations for the next decade. While many of them will undoubtedly seek lenient targets and long compliance schedules in such a policy, other firms will support stronger, more rapid action to prevent "dirty" incumbents from securing unbreakable market positions before controls are imposed. This fracturing of industry interests provides opportunities to craft an environmentally strong program that can win passage in the next few years.

The Clean Energy Group, an association of nine generating and distribution companies, has been formed to advocate comprehensive clean-up policies. * Other utilities in the midwest and south, including Cinergy, First Energy, WEPCO, and TVA, while currently opposing Waxman and Jeffords targets, have expressed some interest in integrated policy proposals as well.

* Clean Energy Group members include Consolidated Edison, KeySpan Energy, Niagara Mohawk Power, Northeast Utilities, PECO Energy, PG&E Generating, Public Service Electric and Gas, Rochester Gas and Electric, and Sempra Energy.

Cost Implications of 3-Pollutant v. 4-Pollutant Powerplant Bills

We have been asked to discuss the comparative compliance costs of three different policy scenarios to control air pollution from electric generators:

- a bill requiring large reductions in nitrogen oxides (NO_x), sulfur dioxide (SO_x), mercury (Hg);
- a bill reducing these three pollutants and capping carbon dioxide (CO_2) at 1990 levels;
- a 3-pollutant bill followed by a CO_2 cap bill several years later.

A program that requires reductions in the four major air pollutants from electric generation is likely to have somewhat higher compliance costs than one that controls only the first three pollutants. However, if programs to limit CO_2 are adopted after a 3-pollutant program is enacted, total compliance costs will be higher than if control targets for all four pollutants had been set in one integrated program.

An analysis by EPA in 1997 examined the comparative costs of a NO_x and SO_x control program, a CO_2 cap at 1990 levels, and a combined program reducing all three pollutants. Mercury was not included and the SO_x and NO_x reductions were not as large as required by the Waxman and Jeffords bills. However, the results do demonstrate the benefits of a combined program in reducing total compliance costs. EPA's analysis found annual compliance costs (1995 $) of $4.3 billion for a NO_x/SO_x program only, $3.8 billion for a CO_2 cap only and 5.8 billion for a combined program addressing the three pollutants. Thus, assuming a policy decision to control NO_x and SO_x from powerplants, the incremental compliance costs for capping CO_2 at 1990 levels is $1.5 billion if all targets are established at the same time.

To put these cost estimates in context, current US expenditures on electricity are about $215 billion a year. Over the next decade as restructuring introduces competitive efficiencies, DOE projects savings of $20-40 billion in electricity costs. Going forward now with an integrated clean-up program would give families a "green" dividend from restructuring and still leave bills lower than before.

The reason a combined program is less costly than separately adopted programs is straightforward. As discussed in more detail below, if reduction targets for only the three "conventional" pollutants are set, there will be a heavier reliance on retrofits of existing coal capacity with devices that reduce only one or two pollutants and do not reduce CO_2. In contrast, adopting a 4-pollutant bill will promote greater reliance on replacement of some existing coal capacity with gas, since that strategy will achieve simultaneous reductions in all four pollutants.

We are not aware of any completed studies that have compared the compliance costs of programs with targets at the Waxman and Jeffords levels with and without a carbon cap. However, pending completion of such analyses, we can make some useful qualitative points.

All analyses predict the electric industry would comply with a bill requiring large (>70-90%) reductions in "conventional" pollutants (SOx, NOx, and Hg) in three basic ways:

1. a substantial fraction of existing coal capacity would be "retrofit" with control devices for SOx, NOx, and Hg;
2. some fraction of existing coal capacity would be retired and replaced by new gas (and some renewable) capacity;
3. in addition, some of the remaining coal capacity would likely be run at lower generating rates, with more dispatch to lower-emitting gas units.

Even without an explicit CO_2 cap there will be some CO_2 benefits *if* companies rely significantly on strategies 2 and 3 and less on strategy 1. The assumptions analysts make about the costs of retrofit devices, the other operating costs for existing coal plants, the costs of new gas plants, and the future costs of gas, determine the forecasted degree of reliance on retrofits versus retirements and fuel switching in the models used to analyze compliance costs.

Absent an explicit CO_2 cap, the amount of carbon reduction that results from a NO_x/SO_x/Hg control bill is directly related to how much coal generation is predicted to be replaced with gas. Using different assumptions about relative coal and gas generation costs, analysts have forecast that similar NO_x/SO_x/Hg control proposals would accomplish carbon reductions ranging from only modest changes from business as usual to reductions bringing the industry most of the way back to 1990.

Assuming the same level of NO_x/SO_x/Hg reductions, we can be confident that an analysis will forecast greater reliance on retrofits for a program without a CO_2 cap and greater reliance on coal retirements in a program with a CO_2 cap. Every megawatt-hour of coal generation that is replaced be gas reduces all four pollutants, while retrofits reduce only one or two pollutants and do not reduce CO_2. Hence if firms know that a CO_2 target is part of the program they will use fewer retrofits and replace more coal with gas generation.

Compared to a decision to support a 4-pollutant bill, a scenario of enacting a 3-pollutant program with delayed decision-making on CO_2 has clear cost risks. A decision *not* to include CO_2 in a powerplant clean-up bill is itself a strong signal. It is likely to be interpreted by many in the industry as indicating that if future CO_2 controls are adopted, it will be only after substantial delay. This view would cause them to rely more heavily on retrofits as the apparent short-term least-cost compliance strategy. Having done so they would fight any attempt to put CO_2 on the control agenda within a few years of passage of a 3-pollutant bill with the argument that their retrofit investments would be "stranded." Thus, delay in adoption of a CO_2 target will almost certainly increase the total costs of the program if it can be enacted.

As an example of current piecemeal thinking by electric companies, the successful purchaser of the 30-year-old Centralia power plant in Washington intends to spend about $200 million on SO_x and NO_x controls. This decision does nothing to reduce CO_2; instead it is a significant additional investment in coal at a plant site located next to a gas transmission line.

To provide more quantitative information on costs of integrated programs, we recommend that EPA be asked to conduct a direct cost comparison of three policy options:

1. a 3-pollutant bill with reductions of 70-90% in NO_x, SO_x, and Hg;
2. the option 1 bill integrated with a CO_2 cap at 1990 levels; and
3. the option 1 bill followed by a CO_2 cap bill enacted five years later.

NATURAL RESOURCES DEFENSE COUNCIL

September 21, 2000

Mr. John T. Spotila
Administrator, Office of Information and Regulatory Affairs
Office of Management and Budget
Old Executive Office Building
17th & Pennsylvania Avenue N.W.
Washington, D.C. 20503

Re: Hazardous Air Pollutant Electric Utility Regulatory Determination

Dear Mr. Spotila:

We understand that EPA recently forwarded to OMB for review the draft regulatory determination on hazardous air pollutants from electric generating facilities. The Natural Resources Defense Council is particularly interested in seeing the regulatory determination move forward in order to protect public health and the environment from the harmful effects of mercury contamination.

Methylmercury is a potent neurotoxin, and exposure to it in utero or in early childhood can result in permanent neurological damage. The National Academy of Sciences recently concluded that approximately 60,000 children born each year may be at risk for adverse neurological effects to due exposure to mercury in utero. Some 41 states and territories have fish advisories warning the public to limit consumption of fish because methylmercury contamination.

According to a recent National Academy of Sciences report, approximately 60,000 children born each year in the United States are at risk for exposure to mercury. Nationwide 41 States have issued mercury consumption advisories, cautioning the public to limit their consumption of fish in lakes and streams due to mercury contamination. Fossil fuel-fired power plants are the largest remaining, unregulated source of mercury pollution in the United States, emitting approximately 50 tons annually.

As you know, the Clean Air Act contemplated that EPA would make a regulatory determination on hazardous air pollutants from electric generating facilities in 1993, at the start of this Administration's tenure. Now at the end of this Administration there is an opportunity to complete this work. We urge you to proceed to regulate this important category as one of the more important pollution control legacies for this Administration. If you have any questions please feel free to contact David G. Hawkins at (202) 289-6868. We look forward to working with you on this critical public health issue.

Sincerely,

John Adams

John Adams
President

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NEW YORK · LOS ANGELES · SAN FRANCISCO

Multi-Pollutant Analysis of the Electric Power Sector (*)

Assumptions: (**)

NO_x	Nationwide cap of 1.66 million tons (75% reduction from 1990)
SO_2	Nationwide cap of 4.0 million tons (75% reduction from 1990)
CO_2	Nationwide cap of 1.924 billion tons (1990 levels)
Hg	Nationwide reduction of 73% to 90%

Incremental Costs (approximate in 2010):

NO_x/SO_2	$5 Billion
CO_2	$4 Billion
Hg	$1 to $2 Billion
Total	**$10 to 11 Billion**

Costs Without Multi-pollutant Approach:
Likely greater than $15 Billion

Benefits (for NO_x/SO_2 alone):
$76 Billion

- 13,000 avoided premature deaths
- 7,000 avoided new cases of chronic bronchitis
- 6,000 avoided hospitalizations or emergency room visits
- 12,650,000 avoided days of respiratory-related symptoms

(*) Costs were approximated using the Integrated Planning Model (IPM), a linear programming model of the electric power sector. The benefits were estimated using the same assessment methods that EPA used in other recent analyses, including the Tier II motor vehicle regulations.

(**) Pollutant control levels are equivalent to those proposed in H.R. 2569

Mercury Determination

1990 CAA amendments directed EPA to make a determination as to whether mercury (Hg) emissions from coal-fired power plants should be regulated. It is expected that EPA will announce its decision to regulate in advance of the 15 December deadline. (Nat'l Academy of Sciences has already released a report that supports the data/methodology EPA used in making its determination and the industry has reacted to it.)

A positive determination is expected by the industry. The real issue will be HOW the Agency chooses to regulate emissions. Several key issues: no standard control technology is available (one that works well with different types of coal); would regulations be technology driven (similar to current NSR requirements) or more market-based (cap and trade on national or regional basis).

EPA says the determination will be silent on any regulatory strategies or reduction levels. It will require EPA to propose a rule by 15 Dec. 2003 and promulgate by 15 Dec. 2004; reductions will be required three years later (essentially Jan. 2008).

While no requirements for regulations exist now, the Administration may be asked about intent. It is important to remember that flexibility for companies is key: set an emissions goal and let the private sector decide where and how to meet it.* Technology-based regulations (control equipment on all units) would exacerbate the issue of investment in older plants inhibiting companies' decisions to shut some units down (and fuel switch). Market-based regs would allow companies the flexibility to better incorporate solutions that also limit CO2 emissions (some little-operated units might be left uncontrolled or minimally controlled while big investments – including fuel switching -- are made elsewhere). There is not enough gas available for large-scale fuel switching in this time frame.

*Hg is a bit different in that it is a pollutant with regional effects. A national cap and trade system may not be acceptable from an environmental standpoint, but a regional one would.

JMA
7 November 2000

November 7, 2000

MEMORANDUM FOR JOHN PODESTA

FROM: GEORGE T. FRAMPTON, JR.
ROGER BALLENTINE

SUBJECT: UTILITY HAZARDOUS AIR POLLUTANTS
REGULATORY FINDING

The US Environmental Protection Agency is required to make a finding by no later than December 15, 2000, as to whether it is appropriate and necessary to regulate hazardous air pollutants from electric power generating facilities. If EPA decides to regulate, the Agency has a legal deadline to propose a regulation by December 2003. A final regulation would be issued in December 2004 and would be fully implemented by the end of 2007.

Status

In February, 1998, EPA published a report to Congress on hazardous air pollutants from electric power plants. In it, EPA identified mercury emissions from coal fired power plants as the hazardous air pollutant of greatest concern for public health. Furthermore, although some of the mercury that contaminates the U.S. come from natural and non-U.S. sources, approximately 60 percent of the mercury confirmation in the U.S. comes from U.S. anthropogenic (man made) sources. Since the report to Congress was submitted a number of analytical and research activities have been undertaken by EPA that provides information that is useful to inform the upcoming regulatory decision, including the following:

- Analysis of data collected about mercury emissions from coal-fired electric generating plants. This data, the most accurate and complete information available about the amount and nature of mercury from this sector, confirms that coal-fired power plants are the largest source of mercury emissions in the U.S. (43 tons per year).

- A review of the report of the National Academy of Sciences of recent mercury health studies. The Academy's report confirmed the scientific validity of EPA's assessment of mercury health effects and estimated that over 60,000 children are born each year in the U.S. at risk for the adverse neurological effects due to *in utero* exposure to methylmercury.

- An assessment the effectiveness and costs of control technologies for power plants that can be expected to be available in the 2007 - 2008 time frame. Based on this assessment, EPA has concluded that controlling mercury from coal fired-power plants is feasible within the relevant time frame.

- Control that the industry is using today for SO_2, NO_X and PM can achieve significant mercury control (in some cases up to 95% removal)

- These controls can be augmented with controls to remove mercury specifically, especially activated carbon in combination with other less expensive sorbents.

- The costs of mercury control for coal-fired power plants now appear to be between $1 billion and $2billion which is less than 0.001% of utility industry revenues. This would have no impact on coal-fired capacity and cause less than 2% decrease in coal consumption. It is estimate that it would increase the use of eastern and Midwestern coal.

- Mercury control cost estimates can be expected to continue to fall. A recent study from the North East States concludes that once there is a regulation driving control technology development and commercialization, the costs will fall further.

- Recent research is showing a direct and nearly linear relationship between decreases in mercury emissions and decreases in mercury fish concentrations.

EPA has sent a draft Federal Register Notice to OMB to announce a decision that it is necessary and appropriate to regulate mercury emissions under the Clean Air Act. EPA is awaiting a final Administration decision.

Background

Coal-fired electric generating plants are the largest source category of mercury emissions in the United States, accounting for one-third of the anthropogenic (caused by human activity) emissions to the air. Mercury emissions are transported through the air and deposited to water and land. Once mercury enters waters, either through air deposition, run-off from the land or directly, it can bioaccumulate in fish and animal tissue in a highly toxic form, methylmercury.

Human exposure to mercury occurs primarily by eating contaminated fish. Exposure to high levels of mercury has been associated with serious neurological and developmental effects in humans. Depending on the dose, the effects can include subtle losses of sensory or cognitive ability, tremors, inability to walk, convulsions, and death. Because the developing fetus may be the most sensitive to the effects from methylmercury, women of child-bearing age are regarded as the population of greatest concern.

People who consume average amounts of a variety of commercially available fish as part of a balanced diet are not likely to consume harmful amounts of mercury. The levels of methylmercury found in the most frequently consumed commercial fish are low,

especially compared to levels that might be found in some non-commercial fish from fresh water bodies that have been affected by mercury pollution. While most U.S. consumers need not be concerned about their exposure to methylmercury, those who regularly and frequently consume large amounts of fish -- especially marine species that have much higher levels of methylmercury than the rest of seafood, or freshwater fish that have been affected by mercury pollution -- are more highly exposed.

A number of recent actions by EPA will help to reduce mercury pollution. These include issuing stringent regulations for certain types of waste combustors that significantly contribute to mercury pollution. These actions, once fully implemented will reduce mercury emissions caused by human activities by over 50 percent from 1990 levels. Several other regulations are under development to control emissions of mercury to the air. Once these regulations are promulgated the only large source that will be unregulated is electric power plants.

EPA also has a number of efforts on-going to provide information about mercury to the public.

Until we can eliminate the need for fish consumption advisories, Federal, State and Tribal governments will continue to provide the public information about whether and which fish are safe and in what amounts. Mercury is the most frequent basis for fish advisories; 41 states have fish consumption advisories based on mercury contamination. EPA works with States and Tribes in all aspects of developing advisories to help assure that scientifically sound methods are used to develop, issue and communicate fish consumption advisories.

Beginning this year, electric utilities will need to report their mercury emissions to the Toxics Release Inventory (TRI). Before now, few facilities have reported mercury releases to TRI because the reporting threshold was too high to capture releases from many facilities. EPA recently reduced the reporting threshold for mercury in order to ensure that reporting mercury to TRI will be fully effective.

EPA is also working internationally to reduce human and wildlife exposures to mercury. On April 7, 1997, the United States and Canada signed the Great Lakes Binational Toxics Strategy. The goal of the strategy is to seek, by 2006, a 50 percent reduction in both the deliberate use of mercury and in the release of mercury caused by human activity. In addition, EPA is participating in international fora to encourage the cooperative development and use of relevant scientific information concerning mercury. For example, EPA has chaired the North American Task Force on Mercury (pursuant to the North American Commission on Environmental Cooperation established under NAFTA) and the U.S. is a signatory to the Heavy Metals Protocol for the Convention on Long-Range Transboundary Air Pollution.

Monica –

Here's the bottom line on the Texas auto emissions issue. Because of areas like Houston or Dallas, where air pollution (ozone, primarily) is so bad, the state must implement anti-smog measures. Under Federal law, states can either adopt Federal vehicle emissions standards or more strict standards as in place in California.

In a deal with the automakers, Texas has chosen something in between the Federal standard and California. Enviros are disappointed because they did not adopt the California plan.

- We might say that given the terrible pollution problems that Texas caused for itself through lax environmental standards in the past, this was an inadequate and sweetheart deal made with industry. Especially since parts of Texas have surpassed parts of California as having the worst air in the country, Texas failed to step up to the serious response California has made.

- They might say simply that "Texas has gone beyond what even the Clinton-Gore EPA requires".

Their line is too simplistic, but could be effective – particularly if their argument is made before ours – leaving us with a harder to understand response. If made first, our criticism could be very effective and force them into only a response.

-- Roger

Roger S. Ballentine
05/22/2000 08:48:37 AM

Record Type: Record

To: Kathleen McGinty <kmcginty@bellatlantic.net> @ inet

cc:
Subject: what do you know about this?

Either way, this is bad. Either TX is considering adopting emission standards stronger than ours, or they are not because "U.S. officials" argued against them doing it and pitched them to stick with our weaker federal standard. We should find out what this is all about.

The Texas Natural Resource Conservation Commission postponed a vote scheduled yesterday to decide whether to require California's auto emissions standards on cars sold in Texas.

The delay was prompted by a "last-minute sales pitch" from the big three automakers and U.S. officials, who argued in favor of an alternate federal standard (Bill Dawson, Houston Chronicle, May 18). The agency "hammered out" an agreement with automakers to build automobiles that meet more stringent emissions controls than the federal government requires, but "fall short" of California's.

Paul Bledsoe
05/23/2000 04:18:24 PM

Record Type: Record

To: Roger S. Ballentine/WHO/EOP@EOP

cc:
Subject: TNRCC meeting

Below is a summary of the meeting action from the Lone Star Chapter of the Sierra Club and a story from the *Austin American Statesmen.*

The results of Wednesday's TNRCC meeting were somewhat mixed. The commissioners expressed a desire to adopt the federal standards, rather than the California clean car standards. They had letters of commitment from the three largest auto manufacturers promising that cars sold in Texas would have the same controls on Volatile Organic Compounds (VOCs, or evaporative emissions) as cars sold in California. The commissioners decided to delay their final decision for another two weeks, to wait on approval from the EPA of the arrangement with auto manufacturers, although ongoing citizen pressure may be responsible for the delay as well.

The efforts to reduce VOCs are indeed a step in the right direction, but the Commissioners have not gone far enough. The TNRCC's current plan does not include the California standards' provisions for sales quotas of zero- and low-emission vehicles (the 10% mandate), nor does it address reductions in soot or smog-forming nitrogen oxides. Since the commissioners have again delayed their decision, now until May 31, citizens have a few more days to make their voices heard and demand California clean car standards.

Accord reached on auto emissions

By Gaiutra Bahadur
American-Statesman Staff
Thursday, May 18, 2000

Starting in 2003, automobiles rolling off the assembly lines and headed for theTexas market will probably surpass federal clean-air guidelines, but they will fall short of a California model favored by environmentalists and currently under review by the Texas Natural Resource Conservation Commission.

The agency postponed a vote on adopting the California standards on Wednesday, after hammering out eleventh-hour agreements with three major automakers and the Alliance of Automobile Manufacturers to build cars and trucks that have stronger emission controls than the federal government requires.

In urban areas such as Houston and Dallas/Fort Worth, where ozone levels are above national health thresholds, the state must implement anti-smog

plans.

Under the Clean Air Act, states can choose between a federal clean-vehicle program or California's more rigorous one.

Because the conservation commission's accord with the automakers follows neither guideline but is a "new and different proposal," the delay until its May 31 meeting gives the agency a chance to verify that the U.S. Environmental Protection Agency will recognize the pledges from General Motors, Ford and Daimler-Chrysler.

"There needs to be some kind of a legal mechanism to make it an enforceable commitment," said Bill Jordan, a team leader on the anti-smog plans. "They want to make sure that the EPA gives them appropriate credit."

But environmental activists said the Texas agency's plan, which would result in devices that do a better job of capturing compounds that evaporate from gas when vehicles are idle or at the pump, lacks vision.

"The bargaining process has resulted in at least one concession so far," said Robin Schneider, director of Texas Campaign for the Environment. "But they are not doing enough. Let's look at the big picture."

California's plan calls for the reduction of small particles, or soot, from diesel engines and requires one out of every 10 automobiles to have zero-emission or low-emission designs -- two things that are not a part of the blueprint the Texas agency is considering.

This, environmentalists said, means that consumers will lose out on the chance to buy electric, hybrid or fuel cell-powered vehicles and that Texas will lose out on the high-tech jobs associated with developing them.

"People in Texas want cleaner cars," said Karen Hadden, director of the Sustainable Energy and Economic Development coalition. "What we really want are mandates that bring advanced technology to Texas. It can be great for our economy and result in cleaner air."

Schneider of Texas Campaign for the Environment said: "Californians have lots more options to buy the cleanest cars," adding that those vehicles will probably not become available here until a mandate exists. "Auto manufacturers don't want to do better than California. They don't supply them unless they're forced to."

Tom "Smitty" Smith, director of Public Citizen's Texas office, said consumers in Texas have been unable to find the recently unveiled Honda Insight, the first gas-electric hybrid vehicle available in North America, at dealerships.

But the Alliance of Automobile Manufacturers said the advanced technology vehicles are now offered and will continue to be offered in Texas.

"We believe that due to customer demand and based on the regulatory emission requirements (under the federal plan), these vehicles will become available and delivered to Texas in even greater quantities," said Josephine Cooper,

the association's president, in a letter to the conservation commission.

The plan would not preclude consumers from buying out-of-state cars with less efficient emission controls, but other states, including California, have passed pollution taxes on such purchases. And groups such as the Texas Campaign for the Environment would be likely to lobby for such a penalty, Schneider said.

In California, the low-emission and zero-emission cars cost about $100 more than regular cars, and the trucks cost about $200 more, according to Public Citizen.

But it's hard to predict what vehicles made to meet the proposed Texas requirement would cost, because no other state has adopted a measure that falls between the federal and the California models. New York, Massachusetts, Maine and Vermont have followed the California model when implementing their anti-smog plans.

You may contact Gaiutra Bahadur at gbahadur@statesman.com or 445-3631.

Reformulated Gas: Providing Cleaner Air For All Americans

In 1995, America took an important step to help clean the air we breathe. We started using gasoline blended to burn more cleanly, that reduces emissions and cuts smog in cities with the worst air quality.

The switch to "reformulated" gasoline (RFG) was part of a national strategy outlined by Congress in the Clean Air Act. The U.S. Environmental Protection Agency (EPA) has been working with states to implement a two-phase reformulated gasoline program to improve air quality.

Phase I of the reformulated gasoline program made great progress. Between 1995 and 1999, it cut smog-forming pollutant levels by about 17 percent compared to conventional gasoline in communities where 75 million people live and work.

Phase II, which begins January 1, 2000, takes another step toward cleaner air. It will reduce smog-forming pollutants 27 percent more than conventional gasoline.

BASIC QUESTIONS ABOUT **REFORMULATED GAS**

Why do we need reformulated gasoline?
Since Congress passed the first Clean Air Act in 1970, the U.S. has made tremendous progress in reducing air pollution from gasoline-powered cars and trucks. Today's vehicles are 98 percent cleaner than those on the road 30 years ago.

Despite these improvements, cars and trucks still cause much of the pollution in our cities. There are twice as many cars on the road traveling twice as many miles each year.

The reformulated gasoline program is helping to reduce pollution in areas with the worst air quality problems. Phase I of the program helped make significant progress in cutting emissions that cause smog and toxic air pollutants. Phase II will help make even more progress.

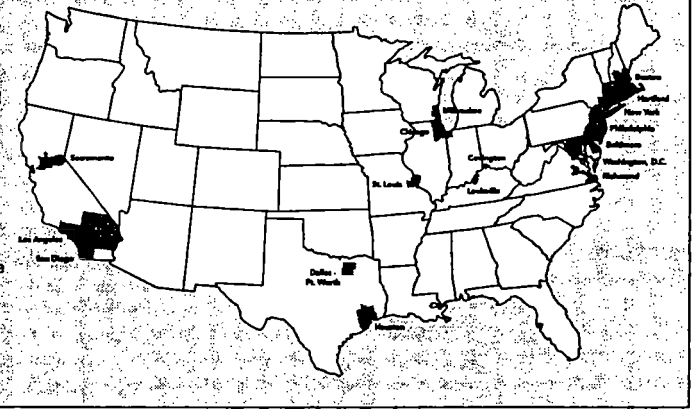
How does reformulated gasoline differ from conventional gasoline?
Reformulated gasoline has the same components as conventional gasoline. However, the components that contribute most to air pollution are further processed and refined. RFG is made in a way that prevents it from evaporating as quickly as conventional gasoline, and it contains chemical oxygen, known as oxygenate, to improve combustion. Reformulated gasoline performs at the same level as conventional gasoline and meets the power requirements of all gasoline vehicles.

How does Phase II reformulated gasoline differ from Phase I reformulated gasoline?
Manufacturers will process and refine the components of Phase II reformulated gasoline to further reduce those that contribute most to air pollution.

Will Phase II gasoline cost more?
EPA estimates it will cost one or two cents more per gallon to produce Phase II reformulated gasoline than Phase I. The slightly higher cost may be reflected at the pump in some cities, depending upon a variety of national, regional, and local market conditions. It is important to note that retail prices may be higher and more changeable at the start of the Phase II program.

Where will Phase II RFG be used?

The Clean Air Act requires those metropolitan areas with the worst smog problems to participate in the reformulated gasoline program. Many communities and states also have opted to participate in Phase II voluntarily. The State of California implements its own reformulated gasoline program; in effect since 1996, it already meets the EPA Phase II RFG requirements. Shaded areas are federal reformulated gasoline areas.



Will Phase II gasoline affect engine performance?
EPA tested Phase II RFG using fleets of cars and trucks in Boston, Chicago, and Houston, logging more than one million miles. Those tests document that vehicle performance with Phase II gasoline is as good as with Phase I gasoline. Tests on small engines, motorcycles and marine engines showed similar results.

Will Phase II gasoline affect my gas mileage?
In EPA testing, vehicles using Phase II reformulated gasoline achieved the same miles-per-gallon performance as those using Phase I fuel.

What should I know about health effects of reformulated gasoline components?
A 1998 study for a coalition of northeastern state air officials, NESCAUM, demonstrated that RFG substantially reduced the relative cancer risk associated with gasoline vapors by 12 percent in Phase I. The study estimates that in Phase II, cancer risks will drop 19 percent.

Does MTBE in RFG pose a health threat?
In July 1999, a blue ribbon panel of independent experts convened by EPA recommended that the use of the oxygenate MTBE should be reduced without sacrificing the gains made in achieving cleaner air. MTBE has been detected in groundwater in some areas, usually as a result of leaking underground gasoline storage tanks. In most cases, MTBE concentrations are below levels of public health concern. Even at minute concentrations, however, MTBE produces a strong taste and odor that may make a water supply distasteful. EPA is improving regulations governing the storage and handling of gasoline to prevent MTBE and other chemicals from leaking into water supplies. EPA is also working with Congress to provide a targeted legislative solution that maintains the air quality benefits of RFG while allowing reductions in the use of MTBE.

For more information about RFG, visit us on the Internet at: **www.epa.gov/oms/rfg.htm**

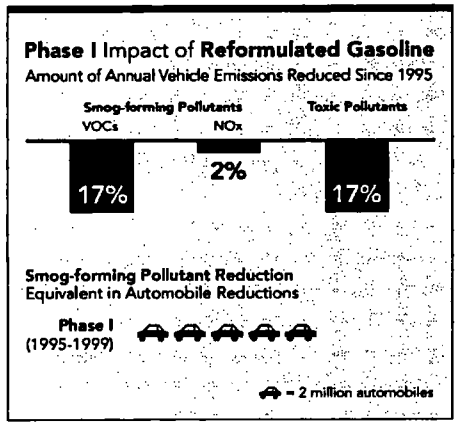
CLEANER GASOLINE
PHASE I: A SUCCESS STORY

Phase I of the reformulated gasoline program was conducted from 1995 through 1999. During that time, drivers in 17 states and the District of Columbia used fuel blended to burn cleaner and reduce emissions. Today, this cleaner-burning fuel represents about 30 percent of the gasoline sold in the U.S.

The results of the Phase I program are impressive.

- By using reformulated gasoline, drivers have cut emissions of pollutants that cause smog 17 percent, compared to conventional gasoline.
- That 17 percent cut means that 64,000 tons of pollution are kept out of the air each year.
- Keeping 64,000 tons out of the air is like taking 10 million cars that burn conventional gasoline off the road.
- Drivers using reformulated gasoline have also cut emissions of toxic pollutants 17 percent.
- Benzene, a known cancer-causing compound, has been reduced 43 percent.

The graph below shows how drivers who use cleaner-burning reformulated gasoline are helping to reduce air pollution and protect the health of millions of Americans.



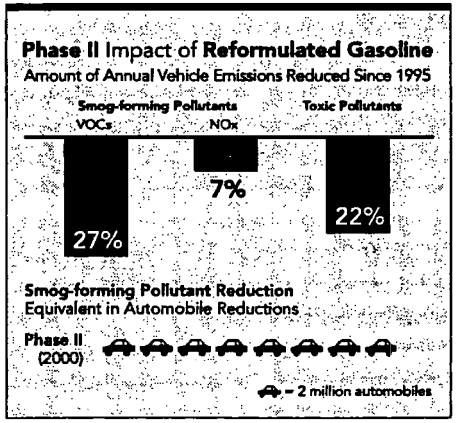
CLEANER GASOLINE
PHASE II: GREATER AIR BENEFITS

Phase II of the reformulated gasoline program begins January 1, 2000. The formula for gasoline sold in cities and states that participate in the reformulated gasoline program will again be adjusted to help them move toward cleaner air.

The Phase II program will further improve air quality in cities with the worst smog.

- It will remove an additional 41,000 tons of smog-forming pollutants from the air, which is like taking 6 million cars that burn conventional gasoline off the road. Two of the key smog-forming pollutants are volatile organic compounds (VOCs) and nitrogen oxide (NOx). Compared to conventional gasoline, Phase II RFG will:
  - ➤ Cut the release of VOCs 27 percent.
  - ➤ Cut NOx emissions 7 percent.
- It will cut emissions of toxic pollutants 22 percent.

The combined impact of Phase I and Phase II of the reformulated gasoline program will be substantial. Reducing emissions of smog-forming chemicals by 105,000 tons is the equivalent of taking about 16 million vehicles that burn conventional gasoline off the road, as shown in the graph below.

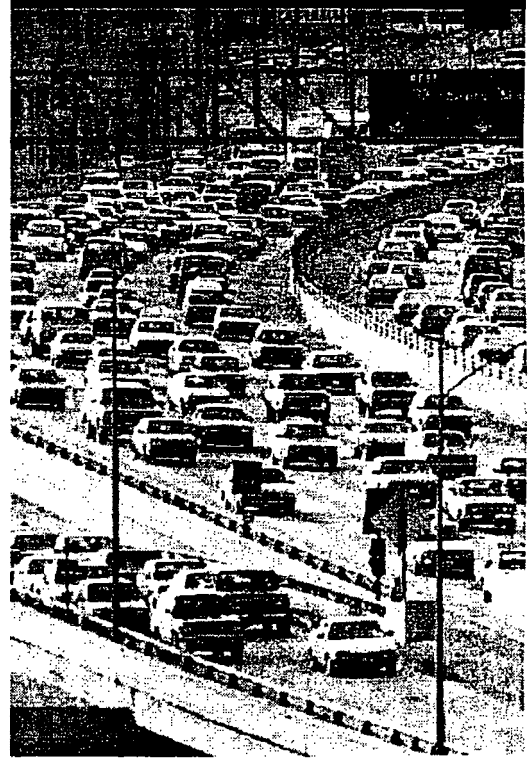


United States Environmental Protection Agency
EPA-420-F-99-013
November 1999
Fuels and Emissions Division

EPA

Phase II Reformulated Gasoline:

The Next Major Step Toward Cleaner Air



Draft; 5/26/00; 5 pm; Gibson/Minsk/Ballentine

Energy Policy Speech
June 1, 2000

Thank you for that kind introduction.

As you know, as White House Chief of Staff I don't often venture before the public to give a speech – let alone put myself directly into the line of fire of the national press corps.

I asked the President if he had any tips for how I should handle myself before such an august gathering.

He said, "John just give them something light, not too complicated, not too intellectual.

"Don't worry, I've heard you speak before, I know you can do it."

Unfortunately for you, my topic here today is *not* light and it *is* complicated.

I'm here to talk about national energy policy.

Energy is the very lifeblood of America's economic performance over the past decade.

As we all know, that performance has been nothing short of amazing:

- The United States is now enjoying the longest economic expansion in its history – 109 months and counting;
- Since 1993, the economy has produced over 21 million new jobs and unemployment is nearly the lowest its been in three decades;
- Real wages have gone up five consecutive years and counting – the longest such increase since the 1960s;
- And we've gone from an era of record deficits to record surpluses that are now being used to help pay off the national debt.

Perhaps even more remarkable is that we are using proportionately less energy even as the economy booms.

Look at the record:

The economy has grown 35% since 1990.

Yet, in that time period, the overall energy intensity of the economy – the amount of energy used per unit of economic output – has declined by 40%. Our use of oil has declined as well. In 1974 we used 15 barrels of oil for each $10,000 of GDP. Today we use only 8 barrels of oil to produce that same amount of economic output.

These figures prove why a sound energy policy requires a balanced approach: one that not only not only focuses on obtaining more energy to run the economy, but one that also emphasizes the efficient use of those our energy resources. Just as technology has helped us achieved significant economic gains through increased worker productivity, it is also an important part of helping us achieve economic growth while protecting our environment through increased efficiency in our production and use of energy.

The challenge for America now is to ensure that we continue to meet our energy needs in a manner that is affordable, reliable, and safe – Safe for our environment and safe for the health of our citizens.

There are essentially two visions before the American people about how we can meet this challenge.

First, there is the balanced, forward-looking approach – an energy policy *for the future*.

This approach seeks to diversify our energy supply, both to protect us against the vagaries of international oil markets;

And to get us ahead of the curve in developing cleaner, next-generation energy technologies that we know will play a big role in the 21st century.

The balanced, forward-looking approach seeks to infuse our energy sector with both efficiency and competition;

It takes into account values such as clean air, clean water, public health and preserving America's natural beauty when we make our energy choices.

And it seeks to cushion America against emergencies in the energy market.

Does it sound like I am announcing a new policy? As you know, in speeches like this we usually announce "deliverables" -- like new policies. Well, I am sorry to disappoint, but this policy I have just described is the policy the Clinton-Gore Administration has been pursuing these past seven years.

The second, competing vision of an energy policy is not an energy policy for the future, but an energy policy *from the past.*

This competing vision looks only at the supply side of the energy equation, and there it looks almost exclusively at resource exploitation.

Its main – if not only focus – is drilling more holes in the ground and the ocean bottom.

This approach says, "Never mind whether or not more drilling is the wisest way to meet our needs;

"Never mind how ecologically sensitive the area is that we want to drill in;

"Never mind the environmental consequences of exploiting resources and burning unlimited quantities of fuel;"

"Never mind investing in advanced, more efficient, cleaner technologies;

"Never mind the enormous economic opportunities for consumers and businesses that can come from energy efficiency."

"Never mind that the single largest untapped source of energy in world is the energy we waste everyday."

And it says, "Never mind preparing our country in case of emergencies in energy markets."

This is the approach favored by the Republican leadership in Congress.

I am here to tell you today that the President and the Vice President are not going to yield to the Congressional Republican "rear view mirror" vision of America's energy future.

I am here to tell you that he believes passionately that building a broad, balanced, forward – looking energy future – one that focuses on both supply and demand and one that promotes our values about the environment and public health – is absolutely critical to America's future.

He is willing to fight for it.

And for the remainder of this Congressional session they *will* fight for it.

Let's look at the particulars of this Administration's energy policy and compare it directly with the policies, actions – and *inaction* – of the Republican Congress.

First, the Administration's policies.

It is very common for us to speak of a monolithic "energy sector" but what we are really talking about is two separate, but related markets.

First, there is the market for power or electricity.

This is what we use when we turn on the lights, air conditioners, and televisions in our homes.

Second, there is the market for transportation fuels – what we use when we turn off the lights, leave the house, and get in our cars.

In each of these markets, the Administration has proposed a balanced package of investments, tax incentives, and regulatory measures that focus on both sides of the supply and demand equation.

The Administration's policies have real accomplishments to show –

Accomplishments for our economy, our energy security and reliability, and accomplishments for our environment and public health.

And much more progress is possible – if Congress would act on proposals we have on the table.

Consider the power sector.

On the supply side, this Administration understands that we need to invest in traditional fuels for our power plants – such as environmentally sound uses of coal, natural gas, nuclear and hydro resources.

That is why, for example, we are investing in advanced technologies for burning coal and natural gas cleaner and more efficiently, with less pollution and less greenhouse gas emissions. Already, advanced pollution control technologies developed by the Department of Energy – DOE – in partnership with industry have been widely deployed in coal-fired power plants across the nation.

The result? Over the past decade coal use is up 17 percent, but emissions of SO2 and NOx have declined significantly, as has the cost of electricity. But we can do better. Think about this: the energy we throw away as waste in our production of electricity every year is more than the total energy consumption of Japan.

While getting the most out of our traditional plants is important, this Administration also understands the need for a balanced, dual-track approach. It is simply common sense for us to also invest in 21st century technologies for renewable energy sources, such as wind, solar, and geothermal energy.

Over the past 20 years, Federal R&D has helped slash the price of solar power by 80% and wind power by almost 90%. With continued public-private partnering, we will have the price of wind power competitive with conventional sources by the middle of this decade.

In the process, we are diversifying our power supply base, increasing America's energy security, fighting climate change and helping the global environment.

That is why between FY 1994 and FY 2000 the Clinton Administration requested a total of nearly $2 billion in increases for wind, solar, and other forms of renewable energy and energy efficiency.

Congress appropriated one tenth of our requests.

For FY 2001, the President has proposed more than $410 million for renewables.

He's also proposed a package of tax and regulatory incentives to spur the growth of solar power, wind power, distributed generation, and electricity produced from biomass and methane from landfills.

To date, Congress has failed to act on this package.

Perhaps even more unfortunate has been Congress' failure to act on comprehensive legislation to restructure the nation's electricity industry.

A more competitive electricity industry will provide real benefits to consumers and lay the foundation for sustained economic growth.

The Administration's bill would lower electricity prices, providing American families some $20 billion in annual savings.

It will strengthen the reliability of the nation's electrical grid – reducing the likelihood of summer brownouts and blackouts. **[we need to decide what we want to say about reliability]**

It will also build in market incentives for energy efficiency, reward plants that wring as much energy as possible out each unit of fuel, and give consumers the power to vote with their wallets for green power.

Overall, it will cut greenhouse gas emissions by 40 to 60 million tons annually by 2010.

But Congress has made no real progress on electricity restructuring legislation for over two years, and investment in new capacity is stalled while the industry waits for Congress to establish the rules of the new world in which the industry will operate.

On the demand side of the power sector, the Clinton Administration recognizes that spurring greater energy efficiency is just plain common sense.

In fact, for American families and businesses it is even simpler – it's about dollars and cents.

We have created a public-private partnership to invest in R&D to make homes 50 percent more energy efficient within a decade

To accelerate the deployment of such technologies, the President has proposed tax credits for energy efficient homes and appliances, such as electric heat pump water heaters, natural gas heat pumps, and fuel cells.

We are trying to expand efforts to help low-income households weatherize their homes and cut their energy bills.

We are accelerating efforts to set new federal efficiency standards for appliances.

And we are working in partnership with industry to see that over 3,400 high efficiency consumer products – from computers to refrigerators – carry the Energy Star label.

These are real, concrete measures that will translate into real savings for families, businesses and the economy as a whole – if the Congress works with us.

Every low-income weatherized home means $200 a year in energy bill savings.

New efficiency standards for water heaters, air conditioners, fluorescent lamp ballasts, and clothes washers will reduce electricity use in 2020 by an amount equal to 17 large power plants; they will save enough energy to heat 72 million homes, and save consumers $50 billion on their energy bills.

If all the nation's households used our most efficient refrigerators, it would eliminate the need for about 10 large power plants.

If everyone used Energy Star products throughout their homes, the United States would save about $100 billion in energy bills over the next 15 years.

One would think that these potential savings from our energy policy are too big to ignore.

But the Congress has done just that. I suspect that you have heard precious little from the other side of the aisle about the importance of energy efficiency.

Unfortunately, we see the same pattern in the transportation sector:

We are creating the future, while the Republican Congress and its special interest allies cling to the past. The Republican energy policies focus only on the supply side energy equation and only a narrow part of the supply side – extraction of fossil fuels.

Their answer for every energy question is the same: more holes in ground.

More drilling in Arctic National Wildlife Refuge;

More drilling on Federal lands;

More drilling offshore.

This Administration, on the other hand, has employed a broad array of tools, recognizing the importance of both traditional and non-traditional, cleaner fuels;

And, again, we focus on both the demand and supply sides of the equation.

We have an aggressive R&D program that has lead to major technological advances, helping domestic oil producers find more oil, at greater depths, both on and off-shore.

The President supports an aggressive set of proposals to give domestic producers more favorable tax treatment for exploration and development costs and delay rental payments.

This Administration has reengineered and streamlined the Department of the Interior's royalty system;

And supported responsible drilling on federal lands and in federal waters – from the Gulf of Mexico to the North Slope of Alaska. But certainly the immediate reality is that our Nation imports a sizeable portion of the oil we consume.

To mitigate against the risks that arise from this fact– and to guard against both cold and hot weather energy emergencies – the President supports:

Reauthorization of the Strategic Petroleum Reserve – which expired at the end of March;

The creation of regional home heating oil reserve for homes in the Northeast and New England;

And an immediate replenishing of the Low Income Home Energy Assistance emergency fund, which was exhausted last winter and may be needed again if it is unusually hot this summer.

And although our overall oil imports have increased over time, our sources have diversified.

So, in fact, we actually import less from OPEC nations today than we did 20 years ago. Our imports from OPEC nations represent only ___ percent of our imports, down from _____ percent in _____.

Over this same time period, OPEC's world market share has dropped from 49 percent down to 41 percent.

And, Secretary of Energy Richardson's adroit energy diplomacy has helped dampened upward price pressure on oil, and this is showing results *today*.

Meanwhile, under our balanced approach, we are also investing in the transportation and fuel technologies of *tomorrow*.

DOE's Ultra-Clean Fuels Initiative is mobilizing industry and our national laboratories to develop and demonstrate technologies for making clean fuels compatible with today's fueling infrastructure.

The President has also proposed tax incentives and $289 million in the FY 2001 budget to help us develop new, cleaner bio-fuels for our cars, using agricultural and forestry waste products.

Meeting the President's goal of tripling our use of bioenergy and biofuels by 2010 will save an amount of oil equal to that used by 70 million cars – that translates into 1,700 oil supertankers – all the oil we import from _____ in a year.

And on the demand side as well, the President's vision has been met with Congressional inaction.

The President has proposed tax incentives of up to $4,000 for drivers who buy qualified electric, fuel cell, and hybrid vehicles. But Congress appears uninterested.

And the Partnership for A New Generation of Vehicles is working with Detroit to deliver attractive, affordable cars that get up two to three times the fuel efficiency of today's cars, and we're now working at extending these technologies to both light and heavy trucks. Think about that. The Republican leadership only a few months ago had a "solution" to high gas prices: repeal a four-cent tax. But if we can give people the cars they want with double the efficiency,

that is the same as cutting gas prices *in half*, and we would reduce our oil consumption by 3.8 million barrels of oil a day – about 40 percent of our daily oil imports. And consumers would save more than $350 annually in fuel costs -- $450 if you drive an SUV.

But Congress has failed to fund [get some stmt from OMB.]

And once again, despite the fact we are facing supply bottlenecks and higher prices at the pump? the Congress has prohibited the Administration from even *thinking* about requiring greater fuel economy for our cars.

Where is the sense in that? – since even increasing the average fuel economy for cars and light duty vehicles by just 3 miles per gallon would save almost a million barrels of oil a day.

For those of you keeping score at home, that is how much oil the proponents say we could expect to get from the Arctic National Wildlife Refuge by 2015 if we opened it for production tomorrow. And guess what – it is the same people who want to open up ANWR who won't even let us think about increasing fuel efficiency standards.

The Administration's energy policy has accomplished much.

But much remains to be done.

We have proposals up on the Hill right now that will help keep us on the path of affordable, reliable energy supply;

And keep us on the road to a cleaner energy future.

The ball is in Congress' court.

And right now, unfortunately, under Republican leadership, Congress has:

Failed to enact the President's proposed tax incentives to support domestic oil production and promote renewable energy;

Failed to adequately-fund efforts to invest in 21st century clean energy technologies;

Failed to move on electricity restructuring legislation;

Failed to enact tax incentives for more efficient homes and cars;

Failed to extend authorization of the Strategic Petroleum Reserve;

Failed to create a regional home heating oil reserve;

Failed to replenish the Low Income Home Energy Assistance Program Emergency Fund.

And they have loaded up a host of spending bills with anti-environmental, anti-common sense riders that throw a wrench into formulation of forward-thinking energy policy.

[maybe move this last piece up?]

Every one is talking about the new Disney movie, "Dinosaur."

But if you want to see a really scary fossil, it's the Republican energy policy now stalking the halls of Congress. Or, switching metaphors, I agree with one commentator's description of the Republican's new energy proposals unveiled a few weeks ago: "They are Building a Bridge to the 19th Century".

They simply do not seem to understand the nature of the challenges we face.

The issue is not, for example, whether we are running out of oil – we are not.

But we didn't move out of the Stone Age because we ran out of stones.

We did it because we found better ways.

We must have more than a Stone Age energy policy.

We need a balanced policy that makes the best use of traditional energy sources while promoting the energy sources and practices of the future. We are trying to do just that.

PRESIDENT CLINTON AND VICE PRESIDENT GORE
A 21RST CENTURY APPROACH TO AMERICA'S ENERGY NEEDS
June xx, 2000

President Clinton and Vice President Gore believe that ensuring the availability of affordable, and environmentally responsible energy is central to maintaining our unparalleled economic growth and prosperity, and to protecting the health of both our environment and our citizens. That is why the Clinton-Gore Administration has consistently advocated a forward-looking and balanced energy policy that utilizes a broad portfolio of energy sources, approaches and technologies.

Unfortunately, Congressional Republicans have consistently obstructed the Administration's energy policies. The Republican's only response to increasing dependence on imported oil is a 19th Century vision of resource exploitation.: ever-increasing levels of drilling for oil in the pristine wilderness of Alaska, on other Federal lands, and off-shore.

The President and Vice President support responsible oil and gas development. But they also have proposed strong investments in alternative and renewable sources of energy, efforts to increase the energy efficiency and ways to improve the reliability of the Nation's energy infrastructure. These additional approaches to energy security are crucial if America is to meet its energy needs in the 21rst Century.

For example, the President's Bioenergy Initiative to help develop fuels and products from plant matter) would reduce oil consumption by _____, greater that the volume of oil available in the Arctic National Wildlife Refuge at peak production, while greatly reducing greenhouse gas emissions and other air pollution. And the Administration's comprehensive electricity restructuring proposal would promote the development of clean efficient power plants while reducing consumer costs by over $20 billion annually. A comprehensive summary of the Administration's energy policy follows:

Key Components of Clinton/Gore Energy Policy:

I. Developing A Broad Range of Energy Sources
II. Energy Efficiency to Save Fuel and Reduce Consumer Costs
III. Electricity Restructuring for Reliability and Savings
IV. Preparation for Energy Supply Emergencies

I. Developing A Broad Range of Energy Sources: To meet our need for energy from traditional sources, the Administration actively supports a balanced package of investments, tax incentives, regulatory and administrative actions to promote the exploration and development, where appropriate, of traditional energy sources, while striving to protect the sensitive environments that are an important part of our natural heritage. But these effrots are supplemented by a wide range of alternative and renewable energy sources. The President and Vice President have proposed and supported:

- Investments and tax incentives to support the domestic energy industry;
- Investments and tax incentives to spur the development of renewable and alternative sources of energy;
- Investments to develop clean coal technologies and to extend the life of nuclear power plants;
- An Ultra-Clean Fuels Initiative to develop cleaner fuels that can be produced by existing refineries;
- Responsible Drilling on Federal Lands and in Federal Waters;,
- Improvements in the system to collect royalties from oil and gas production on Federal land and in Federal water, thereby lowering costs incurred by the industry;
- Investing over $400 million (FY 2001 budget) to support development of domestic sources of renewable energy, including wind, photovoltaics and geothermal energy;
- Investing over $289 million (FY 2001 budget) in a bioenergy initiative that will help us develop new fuels for our cars that will reduce U.S. oil consumption; and,

- Tax credits to promote wind, solar and biomass energy.

II. Energy Efficiency To Save Fuel and Reduce Consumer Costs: Increased energy efficiency has significantly enhanced our energy security by reducing our demand for imported oil. For example, in 1974, we consumed 15 barrels of oil for each $10,000 of GDP; today we only consume 8 barrels of oil per unit of GDP. But much more can be done. The President and Vice President have proposed policies to promote energy security by accelerating the research, development, and deployment of alternative and more efficient energy technologies:

- Investments to develop technologies to make homes and buildings more energy efficient;
- Weatherizing low income homes, reducing homeowners' energy costs and the demand for oil;
- Making America's Vehicles More Efficient. The Partnership for a New Generation of Vehicles is on track to deliver affordable cars that get up to three times the fuel efficiency of today's cars. (Increasing the average fuel economy for cars and light duty vehicles by just three miles per gallon would save almost a million barrels of oil per day, the equivalent to the amount of oil we could expect to produce by 2015 if we opened ANWR for production tomorrow.);
- Creation of a new Clean Air Partnership Fund to help States and localities become more energy efficient;
- Tax Credits For Electric, Fuel Cell, and Qualified Hybrid Vehicles ($2 billion, five-year package);
- Tax Credits for Efficient Homes and Buildings. Increasing the efficient use of power;
- Reducing energy demand in Federal buildings, cutting energy costs by 35 percent costs by 2010 compared to a 1985 baseline; and,
- Energy Star® product and building partnerships, to provide consumers with information to purchase more efficient products and work in more efficient buildings.

III. Electricity Restructuring for Reliability and Savings: Enactment of the Administration's proposed legislation will lower electricity prices, clean the environment, encourage innovation and new services, and increase the reliability of our nation's power supply grid. It will also enhance energy security by enabling us to operate our economy on less fuel. The President and Vice President's proposed legislation, which Congress had failed to act on for over two years would:

- Provide $20 billion in annual savings to America's families, saving typical family of four $232 per year;
- Strengthen Reliable Service by requiring all participants in electric transactions on the grid to comply with mandatory reliability standards developed by a reliability organization; and,
- Improve the environment, through both market mechanisms and policies that promote investments in energy efficiency, renewable energy, distributed power and combined heat and power technologies.

IV. Better Preparation for Energy Supply Emergencies: Notwithstanding our best efforts to promote a diverse and secure supply of energy, the fact remains that we import a sizeable portion of the oil we consume. In order to mitigate that risk, and to address emergencies created by unusually cold or warm weather, the Administration supports:

- Continued authorization of the Strategic Petroleum Reserve;
- The creation of a Northeast/New England Home Heating Oil Reserve; and,
- Full funding of emergency fund in the Low Income Home Energy Assistance Program (LIHEAP).

Republican Complaisance on Energy Policy: Under Republican leadership, Congress has failed to responsibly address critical elements of the Administration's comprehensive agenda. In fact, Congress has abrogated its responsibility to prepare the Nation for energy emergencies, to support modernizing and enhancing the reliability of the electrical grid, to promote a balanced energy policy by ignoring opportunities to reduce demand through increased efficiency, and to move towards alternative fuels that enhance energy security while protecting the environment. Instead, Congress has:

- Failed to extend authorization of the Strategic Petroleum Reserve;
- Failed to create a home heating oil reserve;
- Failed to replenishing the Low Income Home Energy Assistance Program Emergency Fund;

- Failed to enact comprehensive electricity restructuring;
- Failed to enact tax incentives to support domestic oil industry and to promote renewable energy;
- Failed to enact tax increases to support development of efficient cars;
- Prohibited the Administration from even examining an increase of auto fuel efficiency standards.

Republican Priorities: Instead of promoting a balanced approach, Republican leaders in energy policy have focused their enthusiasm on efforts to support:

- More drilling for oil in the Arctic National Wildlife Refuge, the greatest pristine wildlife reserve in the Nation;
- More drilling on Federal lands; and,
- More drilling off-shore.

Congress Should Enact the Administration's Energy Agenda. The President calls on Congress to fullfil its responsibility to provide the American people with a safe, affordable, and reliable energy future. Congress should pass:

Ronald Minsk 05/30/2000 09:16

Record Type: Record

To: Roger S. Ballentine/WHO/EOP@EOP

cc:
Subject: renew

Renewable Energy:

There has been "no great breakthrough with renewable sources." Response:

- Congress cut the FY 2000 solar and renewables budget by $84 million, or 19 percent.

- Wind: electricity from wind can be produced now for as low as 4 cents per kilowatt hour, compared with 35 cents in 1980–a reduction of 85 percent. This cost makes wind close to competitive with other fuels and will continue to drop with new technological developments.

- Photovoltaic: the worldwide market for PV energy is growing rapidly, and the U.S. retains the largest market share. Scientists at National Renewable Energy Las have established new world efficiency records in two promising technology areas–thin films and concentrator PV.

- Biomass: an advanced biomass gasifier in Vermont has successfully demonstrated sustained operation.

- Geothermal: electricity from geothermal resources is now about 5 to 8 cents per kWh, a drop of more than two-thirds since 1980. This cost will also drop as new technology breakthroughs occur.

Energy Efficiency:

- Congress cut the FY 2000 Weatherization budget by $19 million, which would have increased the energy efficiency of 9000 homes–including many in the Northeast where heating bills last winter devastated household budgets.

- PNGV: Ford and GM have unveiled their prototype 80 mile per gallon vehicles developed through the Partnership for a New Generation of Vehicles.

- DOE and GE have developed a natural gas turbine engine that is unsurpassed in efficiency and environmental performance.

- The Federal Energy Management Program already saves taxpayers about one billion

dollars a year in the Government's energy bills.

- A joint program of DOE and the Southwire Company has resulted in the world's first industrial installation of a superconducting cable.

- These breakthroughs are in addition to earlier ones funded by DOE that are well-established in the marketplace, such as electronic ballasts for lighting, advanced energy efficient windows, and a new refrigerator compressor.

Draft; 5/26/00; 5 pm; Gibson/Minsk/Ballentine

Energy Policy Speech
June 1, 2000

Thank you for that kind introduction.

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I asked the President if he had any tips for how I should handle myself before such an august gathering.

He said, "John just give them something light, not too complicated, not too intellectual.

"Don't worry, I've heard you speak before, I know you can do it."

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As we all know, that performance has been nothing short of amazing:

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- Since 1993, the economy has produced over 21 million new jobs and unemployment is nearly the lowest its been in three decades;
- Real wages have gone up five consecutive years and counting – the longest such increase since the 1960s;
- And we've gone from an era of record deficits to record surpluses that are now being used to help pay off the national debt.

Perhaps even more remarkable is that we are using proportionately less energy even as the economy booms.

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The economy has grown 35% since 1990.

Yet, in that time period, the overall energy intensity of the economy – the amount of energy used ~~per~~ unit of economic output – has declined by 40%. Our use of oil has declined as well. In 1974 we used 15 barrels of oil for each $10,000 of GDP. Today we use only 8 barrels of oil to produce that same amount of economic output.

These figures ~~The data~~ prove why a sound energy policy requires a balanced approach: one that not only not only focuses on obtaining more energy to run the economy, but one that also emphasizes the efficient use of those our energy resources. Just as technology has helped us achieved significant economic gains through increased worker productivity, it is also an important part of helping us achieve economic growth while protecting our environment through increased efficiency in our production and use of energy.

Steady, reliable, ~~affordable~~ energy ~~has literally~~ fueled the ~~economic boom.~~

And sound, smart energy *policies*– policies that rely on the power of the marketplace and further our values that ~~account for their~~ environmental ~~consequences~~-- have allowed us to maintain economic growth while improving the health of our environment.

The challenge for America now is to ensure that we continue to meet our energy needs in a manner that is affordable, reliable, and safe – Safe for our environment and safe for the health of our citizens.

There are essentially two visions before the American people about how we can meet this challenge.

First, there is the balanced, forward-looking approach – an energy policy *for the future*.

This approach seeks to diversify our energy supply;

Both to protect us against the vagaries of international oil ~~diplomacy;~~ markets

And to get us ahead of the curve in developing cleaner, next-generation energy technologies that we know will play a big role in the 21st century.

The balanced, forward-looking approach seeks to infuse our energy sector with both efficiency and competition;

It takes into account values such as clean air, clean water, public health and preserving America's natural beauty when we make our energy choices.

And it seeks to cushion America against emergencies in the energy market.

Does it sound like I am announcing a new policy? As you know, in speeches like this we usually announce "deliverables" like new policies. Well, I am sorry to disappoint, but this policy I have just described is the policy the Clinton-Gore Administration has been pursuing these past seven years.

~~The competing~~ second, competing vision of an energy policy is not an energy policy for the future, but an energy policy *from the past.* This competing policy is a shortsighted, backward approach.

This approach looks only at the supply side of the energy equation.

And on the supply side it looks almost exclusively on resource exploitation.

Its main – if not only focus – is drilling more holes in the ground and the ocean bottom.

This approach says, "Never mind whether or not more drilling is the wisest way to meet our needs;

"Never mind how ecologically sensitive the area is that we want to drill in;

"Never mind the environmental consequences of exploiting resources and burning unlimited quantities of fuel;"

It says, "Never mind investing in advanced, more efficient, cleaner technologies;

"Never mind the enormous economic opportunities for consumers and businesses that can come from energy efficiency."

"Never mind that the single largest untapped source of energy in world is the energy we waste everyday."

And it says, "Never mind preparing our country in case of emergencies in energy markets."

This is the approach favored by the Republican leadership in Congress.

I am here to tell you today that the President and the Vice President are not going to yield to the Congressional Republican "rear view mirror" vision of America's energy future.

I am here to tell you that he believes passionately that building a broad, balanced, forward – looking energy future – one that focuses on both supply and demand and one that promotes our values about the environment and public health – is absolutely critical to America's future.

He is willing to fight for it.

And for the remainder of this Congressional session he *will* fight for it.

Let's look at the particulars of this Administration's energy policy and compare it directly with the policies, actions – and *inaction* – of the Republicans in Congress.

First, the Administration's policies.

It is very common for us to speak of a monolithic "energy sector" but what we are really talking about is two separate, but related markets.

First, there is the market for power or electricity.

This is what we use when we turn on the lights, air conditioners, and televisions in our homes.

Then there is the market for transportation fuels – what we use when we turn off the lights, leave the house, and get in our cars.

In each of these markets, the Administration has proposed a balanced package of investments, tax incentives, and regulatory measures that focus on both sides of the market equation –

Both on expanding our supply base;

And curbing demand through cost-effective energy efficiency measures that save money for consumers and businesses and that literally expand our energy supply.

The Administration's policies have real accomplishments to show –

Accomplishments for our economy, our energy security and reliability, and accomplishments for our environment and public health.

And much more progress is possible – if Congress would act on proposals we have on the table.

Consider the power sector.

On the supply side, this Administration understands that we need to invest in traditional fuels for our power plants – such as environmentally sound uses of coal, natural gas, nuclear and hydro resources.

That is why, for example, we are investing in advanced technologies for burning coal and natural gas cleaner and more efficiently, with less pollution and less greenhouse gas emissions. Already, advanced pollution control technologies developed by the Department of Energy – DOE – in partnership with industry have been widely deployed in coal-fired power plants across the nation.

The result? Over the past decade coal use is up 17 percent, but emissions of SO2 and NOx have declined significantly, as has the cost of electricity. But we can do better. Think about this: the energy we throw away as waste in our production of electricity every year is more than the total energy consumption of Japan.

With adequate funding of the President's budget request, we will do more.

While getting the most out of traditional sources is important,

But this Administration also understands the need for a balanced, dual-track approach that it is simply common sense for us to also invest in 21st century technologies for renewable energy sources, such as wind, solar, and geothermal energy.

Over the past 20 years, Federal R&D has helped slash the price of solar power by 80% and wind power by almost 90%. With continued public-private partnering, we will have the price of wind power competitive with conventional sources by the middle of this decade.

In the process, we are

If we keep going, we can make these technologies truly competitive in a wide range of geographic areas, diversifying our power supply base, increasing America's energy security, fighting climate change and helping the global environment.

That is why between FY 1994 and FY 2000 the Clinton Administration requested a total of nearly $2 billion in increases for wind, solar, and other forms of renewable energy and energy efficiency.

Congress appropriated increases totaling one tenth of that.

For FY 2001, the President has proposed more than $410 million for renewables.

He's also proposed a package of tax and regulatory incentives to spur the growth of solar power, wind power, distributed generation, and electricity produced from biomass and methane from landfills.

To date, Congress has failed to act on this package.

Perhaps even more unfortunate has been Congress' failure to act on comprehensive legislation to restructure the nation's electricity industry.

A more competitive electricity industry will provide real benefits to consumers and lay the foundation for sustained economic growth.

The Administration's bill would lower electricity prices, providing American families some $20 billion in annual savings.

It will strengthen the reliability of the nation's electrical grid – reducing the likelihood of summer brownouts and blackouts. [more reliability discussion?]

It will also build in market incentives for energy efficiency, reward plants that wring as much energy as possible out each unit of fuel, and give consumers the power to vote with their wallets for green power.

Overall, it will cut greenhouse gas emissions by 40 to 60 million tons annually by 2010.

But Congress has made no real progress on electricity restructuring legislation for over two years, and investment in new capacity is stalled while the industry waits for Congress to establish the rules of the new world in which the industry will operate.

On the demand side, the Clinton Administration recognizes that spurring greater energy efficiency is just plain common sense.

In fact, for American families and businesses it is even simpler – it's about dollars and cents.

We have created a public-private partnership to invest in R&D to make homes 50 percent more energy efficient within a decade.

To accelerate the deployment of ~~these~~ technologies, the President has proposed tax credits for energy efficient homes and appliances, such as electric heat pump water heaters, natural gas heat pumps, and fuel cells.

We are trying ~~to~~ expand efforts to help low-income households weatherize their homes and cut their energy bills.

We are accelerating efforts to set new federal efficiency standards for appliances.

And we are working in partnership with industry to see that over 3,400 high efficiency consumer products – from computers to refrigerators – carry the Energy Star label.

These are real, concrete measures that will translate into real savings for families, businesses and the economy as a whole – if the Congress works with us

Every low-income weatherized home means $200 a year in energy bill savings.

New efficiency standards for water heaters, air conditioners, fluorescent lamp ballasts, and clothes washers will reduce electricity use in 2020 by an amount equal to 17 large power plants; they will save enough energy to heat 72 million homes, and save consumers $50 billion on their energy bills.

If all the nation's households used our most efficient refrigerators, it would eliminate the need for about 10 large power plants.

If everyone used Energy Star products throughout their homes, the United States would save about $100 billion in energy bills over the next 15 years.

One would think that these potential savings from our energy policy are too big to ignore.

But the Congress has done just that. I suspect that you have heard precious little from the other side of the aisle about the importance of energy efficiency.

Unfortunately, we see the same pattern in the transportation sector: we are creating the future, while the Republican Congress and its special interest allies cling to the past.

This Administration has employed a broad array of tools, recognizing the importance of both traditional and non-traditional, cleaner fuels.

And, again, we focus on both the demand and supply sides of the equation.

We have an aggressive R&D program that has lead to major technological advances, helping domestic oil producers find more oil, at greater depths, both on and off-shore.

The President supports an aggressive set of proposals to give domestic producers more favorable tax treatment for exploration and development costs and delay rental payments.

This Administration has reengineered and streamlined the Department of the Interior's royalty system;

And supported responsible drilling on federal lands and in federal waters – from the Gulf of Mexico to the North Slope of Alaska

And although our overall oil imports have increased over time, our sources have diversified.

So, in fact, we actually import less from OPEC nations today than we did 20 years ago. Our imports from OPEC nations represent only ___ percent of our imports, down from _____ percent in _____.

Over this same time period, OPEC's world market share has dropped from 49 percent down to 41 percent.

And, Secretary of Energy Richardson's adroit energy diplomacy has helped dampened upward price pressure on oil, and this is showing results *today*.

Meanwhile, under our balanced approach, we are also investing in the transportation and fuel technologies of *tomorrow*.

DOE's Ultra-Clean Fuels Initiative is mobilizing industry and our national laboratories to develop and demonstrate technologies for making clean fuels compatible with today's fueling infrastructure.

The President has also proposed tax incentives and $289 million in the FY 2001 budget to help us develop new, cleaner bio-fuels for our cars, using agricultural and forestry waste products.

Meeting the President's goal of tripling our use of bioenergy and biofuels by 2010 will save an amount of oil equal to that used by 70 million cars – that translates into 1,700 oil supertankers – all the oil we import from _____ in a year.

And on the demand side, as well ~~once again~~, the President's vision has been met with Congressional inaction.

The President has proposed tax incentives of up to $4,000 for drivers who buy qualified electric, fuel cell, and hybrid vehicles. But Congress appears uninterested.

And the Partnership for A New Generation of Vehicles is working with Detroit to deliver attractive, affordable cars that get up two to three times the fuel efficiency of today's cars, and we're now working at extending these technologies to both light and heavy trucks. Think about that. The Republican leadership only a few months ago had a "solution" to high gas prices: repeal a four-cent tax. But if we can give people the cars they want with double the efficiency, that is the same as cutting gas prices *in half*, and we would reduce our oil consumption by 3.8 million barrels of oil a day – about 40 percent of our daily oil imports.

And consumers would save more than $350 annually in fuel costs -- $450 if you drive an SUV.

But Congress has failed to fund [get some stmt from OMB.]

And once again, despite the fact we are facing supply bottlenecks and higher prices at the pump? the Congress has prohibited the Administration from even *thinking* about requiring greater fuel economy for our cars.

Where is the sense in that, given that even increasing the average fuel economy for cars and light duty vehicles by just 3 miles per gallon would save almost a million barrels of oil a day.

For those of you keeping score at home, that is how much oil the proponents say we could expect to get from the Arctic National Wildlife Refuge by 2015 if we opened it for production tomorrow. And guess what – it is the same people who want to open up ANWR who won't even let us think about increasing fuel efficiency standards.

But certainly the immediate reality is that our Nation imports a sizeable portion of the oil we consume.

To mitigate against the risks that arise from this fact– and to guard against both cold and hot weather energy emergencies – the President supports:

Reauthorization of the Strategic Petroleum Reserve – which expired at the end of March;

The creation of regional home heating oil reserve for homes in the Northeast and New England;

And an immediate replenishing of the Low Income Home Energy Assistance emergency fund, which was exhausted last winter and may be needed again if it is unusually hot this summer.

The Administration's energy policies have accomplished much.

But much remains to be done.

We have proposals up on the Hill right now that will help keep us on the path of affordable, reliable energy supply;

And keep us on the road to a cleaner energy future.

The ball is in Congress' court.

And right now, unfortunately,

Under Republican leadership, Congress has:

Failed to enact the President's proposed tax incentives to support domestic oil production and promote renewable energy;

Failed to adequately-fund efforts to invest in 21st century clean energy technologies;

Failed to move on electricity restructuring legislation;

Failed to enact tax incentives for more efficient homes and cars;

Failed to extend authorization of the Strategic Petroleum Reserve;

Failed to create a regional home heating oil reserve;

Failed to replenish the Low Income Home Energy Assistance Program Emergency Fund.

And they have loaded up a host of spending bills with anti-environmental, anti-common sense riders that throw a wrench into formulation of forward-thinking energy policy.

Every one is talking about the new Disney movie, "Dinosaur."

But if you want to see a really scary fossil, it's the Republican energy policy now stalking the halls of Congress. Or, switching metaphors, I agree with one commentator's description of the Republican's new energy proposals unveiled a few weeks ago: "They are Building a Bridge to the 19th Century".

And just like the energy attitudes of the 19th Century, the Republican energy policies focus only on the supply side energy equation and only a narrow part of the supply side – extraction of fossil fuels.

Their answer for every energy question is the same: more holes in ground.

More drilling in Arctic National Wildlife Refuge;

More drilling on Federal lands;

More drilling offshore.

B

They simply do not seem to understand the nature of the challenges we face.

The issue is not, for example, whether we are running out of oil – we are not.

But we didn't move out of the Stone Age because we ran out of stones.

We did it because we found better ways.

We must have more than a Stone Age energy policy.

We need a balanced policy that makes the best use of traditional energy sources while promoting the energy sources and practices of the future. The President and Vice President have done that just.

Thank you.

Draft; 5/25/00; 6 pm; Gibson

Energy Policy Speech

June 1, 2000

(3268 words – goal: 2400)

Thank you for that kind introduction.

As you know, as White House Chief of Staff I don't often venture before the public to give a speech – let alone put myself directly into the line of fire of the national press corps.

I asked the President if he had any tips for how I should handle myself before such an august gathering.

He said, "John just give them something light, not too complicated, not too intellectual.

"Don't worry, I've heard you speak before, I know you can do it."

Unfortunately for you, my topic here today is *not* light and it *is* complicated.

I'm here to talk about our national energy policy.

Energy is the very lifeblood of America's economic performance over the past decade.

As we all know, that performance has been nothing short of amazing:

- The United States is now enjoying the longest economic expansion in its history – 109 months and counting;
- Since 1993, the economy has produced over 21 million new jobs and unemployment is nearly the lowest its been in three decades;
- Real wages have gone up five consecutive years and counting – the longest such increase since the 1960s;
- And we've gone from an era of record deficits to record surpluses that are now being used to help pay off the national debt.

Perhaps even more remarkable is that we are using proportionately less energy even as the economy booms. ~~the fact that we have enjoyed the fruits of this booming economy, even as we have also taken serious steps to improve the environment.~~

~~A lot of people don't think you can grow the economy, improve air and water quality, and position the economy to tackle challenges like global warming all at the same time.~~

~~But~~ Look at the record:

The economy has grown 35% since 1990.

~~But air pollution is down -- sulfur dioxide emissions, for example, are down by around 20%.~~

~~Thanks to cleaner air, there will be 23,000 fewer premature deaths by the year 2010, almost 70,000 fewer hospitalizations for respiratory and cardiovascular illness, and over 4 million fewer lost work days.~~

~~And carbon dioxide emissions – the leading greenhouse gas – are up by only ___%, and they've been relatively flat the past ___ years.~~

Yet, in that time period ~~In fact~~, the overall energy intensity of the economy – the amount of energy used per unit of economic output – has declined by 40%. Our use of oil has declined as well. In 1974 we used 15 barrels of oil for each $10,000 of GDP. Today we use only 8 barrels of oil to produce that same amount of economic ~~input~~ output.

The data ~~are starting to~~ prove why ~~that~~ a sound energy policy requires a balanced approach: one that not only not only focuses on obtaining more energy to run the economy, but one that also emphasizes the efficient use of those our energy resources. Just as technology has helped us achieved significant economic gains through increased worker productivity, it is also an important part of helping us achieve economic growth through increased efficiency in our use

Reactor Japan 2 ?

of energy. ~~what the President has been saying is right: we really do live in a fundamentally new era where the Big Idea of the industrial revolution – that you had to pollute more to grow more – just isn't true if you make wise policy choices.~~

~~Central to both these sets of accomplishments – record economic growth and real environmental progress – are sound energy policies.~~

Steady, reliable, affordable energy has literally fueled the economic boom.

And sound, smart energy *policies*-- policies that rely on the power of the marketplace and that account for their environmental consequences -- have allowed us to maintain economic growth while improving the health of our environment.~~keep both the boom and the environmental progress going at the same time~~.

The challenge for America now is to ensure that we continue to meet our energy needs in a manner that is ~~have access to energy that is~~ affordable, reliable, and safe –

Safe for our environment and safe for the health of our citizens.

There are essentially two visions before the American people about how we can meet this challenge.

First, there is the balanced, forward-looking approach.-- a policy for the future

This approach seeks to diversify our energy supply;

Both to protect us against the vagaries of international oil diplomacy;

And to get us ahead of the curve in developing cleaner, next-generation energy technologies that we know will play a big role in the 21st century.

The balanced, forward-looking approach seeks to infuse our energy sector with both efficiency and competition;

It takes into account values such as clean air, clean water, public health and preserving America's natural beauty when we make our energy choices.

And it seeks to cushion America against emergencies in the energy market.

This is not a new policy that I am announcing today --

This is the approach the Clinton-Gore Administration has been pursuing these past seven years.

Second, there is the short-sighted, backward approach. -- an energy policy not for the future but from the past

This approach looks only at the supply side of the energy equation.

And on the supply side it looks almost exclusively on resource exploitation.

Its main – if not only focus – is drilling more holes in the ground and the ocean bottom.

This approach says, "Never mind whether or not more drilling is the wisest ~~most efficient~~ way to meet our needs;

"Never mind how ecologically sensitive the area is that we want to drill in;

"Never mind the environmental consequences of exploiting resources and burning unlimited quantities of fuel;~~effects on public health, air quality, water quality, or the greenhouse gas emissions most scientists believe are causing global warming.~~"

It says, "Never mind investing in advanced, more efficient, cleaner technologies;

"Never mind the enormous economic opportunities for consumers and businesses that can come from energy efficiency."

And it says, "Never mind preparing our country in case of emergencies in energy markets."

This is an approach favored by Republicans in Congress.

Never mind that the single greatest untapped source of energy is the energy we waste, ..

I am here to tell you today that the President is not going to yield to the Congressional Republican vision of America's energy future.

I am here to tell you that he believes passionately that building a broad, balanced, forward – looking energy future – one that focuses on both supply and demand and one that integrates our concerns about the environment and public health – is absolutely critical to America's future.

His is willing to fight for it.

And for the remainder of this Congressional session he *will* fight for it.

Let's look at the particulars of this Administration's energy policy and compare it directly with the policies, actions – and *inaction* – of the Republicans in Congress.

First, the Administration's policies.

It is very common for us to speak of a monolithic "energy sector" but what we are really talking about is two separate, but related markets.

First, there is the market for power or electricity.

This is what we use when we turn on the lights, air conditioners, and furnaces in our homes.

Then there is the market for transportation fuels – what we use when we turn off the lights and get in our cars.

In each of these markets, the Administration has proposed ~~in place a~~ a package of investments, tax incentives, and regulatory measures that focus on both sides of the market equation –

Both on expanding our supply base;

And curbing demand through cost-effective energy efficiency measures that save money for consumers and businesses. are that literally expand our energy supply.

The Administration's policies have real accomplishments to show –

Accomplishments for our economy, our energy security and reliability, and accomplishments for our environment and public health.

And much more progress is possible – if Congress would act on proposals we have on the table.

Consider the power sector.

On the supply side, this Administration understands that we need to invest in traditional fuels for our power plants – such as environmentally-sound uses of coal, natural gas, nuclear and hydro resources.

That is why, for example, we are investing in advanced technologies for burning coal and natural gas cleaner with less pollution and less greenhouse gas emissions.

Already, advanced pollution control technologies developed by the Department of Energy – DOE – in partnership with industry have been widely deployed in coal-fired power plants across the nation.

The result? Over the past decade coal use is up 17 percent, but emissions of SO2 and NOx have declined significantly, as has the cost of electricity.

With full funding of the President's budget request, we know we can do more.

23 Quads of Energy wasted in production of electricity. all energy use of Japan.

But this Administration also understands the need for a balanced, dual-track approach – that it is simply common sense for us to also invest in 21st century technologies for renewable energy sources, such as wind, solar, and geothermal energy.

Over the past 20 years, Federal R&D has slashed the price of photovoltaic energy systems by more than a ~~83~~ and wind by almost 90%.

If we keep going, we can make these technologies truly competitive in a wide range of geographic areas – diversifying our power supply base, increasing America's energy security, and helping the global environment.

That is why between FY 1994 and FY 2000 the Clinton Administration requested a total of nearly $2 billion in increases for ~~solar~~ wind, solar, and other forms of renewable energy and energy efficiency~~conservation~~.

Congress appropriated increases totaling one tenth of that.

For FY 2001, the President has proposed more than $410 million for renewables.

He's also proposed a package of tax and regulatory incentives to spur the growth of solar power, wind power, distributed generation, and electricity produced from biomass and methane from landfills.

To date, Congress has failed to act on this package.

Perhaps even more unfortunate has been Congress' failure to act on comprehensive legislation to restructure the nation's electricity industry.

A more competitive electricity industry will provide real benefits to consumers and lay the foundation for sustained economic growth.

The Administration's ~~proposed~~ bill would lower electricity prices, providing American families some $20 billion in annual savings.

It will strengthen the reliability of the nation's electrical grid – reducing the likelihood of summer brownouts and blackouts.

It will also build in market incentives for energy efficiency, reward plants that wring as much energy as possible out each unit of fuel, and give consumers the power to vote with their wallets for green power.

Overall, it will cut greenhouse gas emissions by 40 to 60 million tons annually by 2010.

But Congress has made no real progress on electricity restructuring legislation for over two years, and investment in new capacity is stalled while the industry waits to Congress to establish the rules of the new world in which the industry will operate.

On the demand side, the Clinton Administration recognizes that spurring greater energy efficiency is just plain common sense.

In fact, for American families and businesses it is even more simple – its about dollars and cents.

We are investing in R&D to make homes 50 percent more energy efficient within a decade.

To accelerate the deployment of these technologies, the President has proposed tax credits for energy efficient homes and appliances, such as electric heat pump water heaters, natural gas heat pumps, and fuel cells.

We are trying to expand efforts to help low-income households weatherize their homes.

We are accelerating efforts to set new federal efficiency standards for appliances.

And we are working in partnership with industry to see that over 3,400 high efficiency consumer products – from computers to refrigerators – carry the Energy Star label.

These are real, concrete measures that will translate into real savings for families, businesses and the economy as a whole.

Every low-income weatherized home means $200 a year in energy bill savings.

New efficiency standards for water heaters, air conditioners, fluorescent lamp ballasts, and clothes washers will reduce electricity use in 2020 by an amount equal to 17 large power plants; they will save enough natural gas to heat 72 million homes, and save consumers $50 billion on their energy bills.

If all the nation's households used the most efficient refrigerators, it would eliminate the need for about 10 large power plants.

If everyone used Energy Star products ~~throughout~~ in their homes, the United States would save about $100 billion in energy bills over the next 15 years.

one would think that potential from our energy policy

These savings are too big to ignore, ~~and in the Administration's energy policies, we don't.~~

But you have heard precious little ~~from the other side of the aisle~~ in Congressional leadership has done just that about the importance of energy efficiency.

You see the same pattern in the transportation sector: while our opponents are special interest allies clung to the past. we are creating the future

This Administration has employed a broad array of tools, recognizing the importance of both traditional and non-traditional, cleaner fuels;

And we focusing on both the demand and supply sides of the equation.

We have an aggressive R&D program that has lead to major technological advances, helping domestic oil producers find more oil, at greater depths, both on and off-shore.

The President supports an aggressive set of proposals to give domestic producers more favorable tax treatment for exploration and development costs and delay rental payments.

This Administration has reengineered and streamlined the Department of the Interior's royalty system;

And supported responsible drilling on federal lands and in federal waters – from the Gulf of Mexico to the North Slope of Alaska

And although our overall oil imports have increased over time, our sources have diversified.

So, in fact, we actually import less from OPEC nations today than we did 20 years ago. Our imports from OPEC nations represent only ___ percent of our imports, down from ___ percent in ___.

Over this same time period, OPEC's world market share has dropped from 49 percent down to 41 percent.

And ~~over the past several years~~, Secretary of Energy Richardson's adroit energy diplomacy has helped ~~keep worldwide production up, and~~ dampened upward price pressure on oil. ~~pressures for further price increases.~~ This is showing real benefits today.

under our balanced approach

Meanwhile, this Administration's energy policies are also investing in the transportation and fuel technologies of tomorrow.

DOE's Ultra-Clean Fuels Initiative is mobilizing industry and our national laboratories to develop and demonstrate technologies for making clean fuels compatible with today's fueling infrastructure.

The President has also proposed tax incentives and $289 million in the FY 2001 budget to help us develop new, cleaner bio-fuels for our cars, using agricultural and forestry waste products. – all to be produced domestically --

Meeting the President's goal of tripling our use of bioenergy and biofuels by 2010 will save an amount of oil equal to that used by 70 million cars – that translates into 1,700 oil supertankers. – all the oil we import from ____ in a ____.

And on the demand side, once again, the President's vision has been met with Congressional inaction.

The President has proposed tax incentives of up to $4,000 for drivers who buy qualified electric, fuel cell, and hybrid vehicles. But Congress appears uninterested.

And the Partnership for A New Generation of Vehicles is working with Detroit to deliver attractive, affordable cars that get up to three times the fuel efficiency of today's cars. think about it-- we people are understandably concerned about 10 and 25 ¢ increases in gas prices. I'd gave them the cars they want with even 2 times the efficiency that is the gas cuts gas prices in half.

We're now working at extending these technologies to both light and heavy trucks.

If all our cars and light trucks got just twice the fuel economy they do today, we would reduce our oil consumption by 3.8 million barrels of oil a day.

That represents about 40 percent of our daily oil imports.

And consumers would save more than $350 annually in fuel costs -- $450 if you drive an SUV. But Congress has failed to fund [get some stmt from OMB.]

And once again, the Congress has prohibited the Administration from even *thinking* about requiring greater fuel economy for our cars.

Where is the sense in this at a time when we are facing supply bottlenecks and higher prices at the pump?

Increasing the average fuel economy for cars and light duty vehicles by just 3 miles per gallon would save almost a million barrels of oil a day.

For those of you keeping score at home, that is equal to rate of output we could expect to get from ANWR by 2015 if we opened it for production tomorrow.

Yet despite the promise of these initiatives, tax credits for alternative fuel cars, investments in high efficiency cars, and examination of the costs and benefits of increasing the efficiency of all cars by just a few miles per gallon, the promise that they would help sustain economic growth, help protect the environment, and help improve our energy security, Congress chosen not act.

Again, Republicans and their special interests cling to the energy economy of the past.

These investments in advanced technologies – both in power and the transportation sectors – are not pie-in-the-sky boodogles.

They are the keys to our energy and economic future.

But don't take it from me – take it from [Sir John Brown]/[Jack Ford]/[other] who said: [looking for best quote].

~~[comment from Janet – can/should we say anything on mass transit?]~~

But the fact remains that our Nation imports a sizeable portion of the oil we consume.

To mitigate against the risks that arise from this – and to guard against both cold and hot weather energy emergencies – the President supports:

Reauthorization of the Strategic Petroleum Reserve – which expired at the end of March;

The creation of regional home heating oil reserve for homes in the Northeast and New England;

And an immediate replenishing of the ~~full funding of the~~ Low Income Home Energy Assistance emergency fund, which was exhausted last winter and may be needed again if it is unusually hot this summer.~~program.~~

The Administration's energy policies have accomplished much.

But much remains to be done.

We have proposals up on the Hill right now that will help keep us on the path of affordable, reliable energy supply;

And keep us on the road to a cleaner energy future.

The ball is in Congress' court.

And right now, ~~all we hear is the sound of a big whiff, as Congress seemingly abrogates its responsibilities through delay and inaction.~~unfortunately,

Under Republican leadership, Congress has:

Failed to enact the President's proposed tax incentives to support domestic oil production and promote renewable energy;

Failed to ~~fully~~-fund efforts to invest in 21st century clean energy technologies;

Adequately

Failed to move on electricity restructuring legislation;

Failed to enact tax incentives for more efficient homes and cars;

Failed to extend authorization of the Strategic Petroleum Reserve;

Failed to create a regional home heating oil reserve;

Failed to replenish the Low Income Home Energy Assistance Program Emergency Fund.

And they have loaded up a host of spending bills with anti-environmental, anti-common sense riders that throw a wrench into formulation of forward-thinking energy policy.

Every one is talking about the new Disney movie, "Dinosaur."

But if you want to see a really scary fossil, ~~you ought to take a look~~ it's at the Republican energy policy now stalking the halls of Congress. Or, switching metaphors as one commentator labeled the Republican energy proposals, "building a body for the 19th Century"

The Republican energy policies focus only on the supply side energy equation and only a narrow part of the supply side – extraction of fossil fuels.

Just like the energy policies of the 19th Century,

Their answer for every energy question is the same: more holes in ground.

More drilling in Arctic National Wildlife Refuge;

More drilling on Federal lands;

More drilling offshore.

They simply do not seem to understand the nature of the challenges we face.

The issue is not, for example, whether we are running out of oil – we are not.

But we didn't move out of the stone age because we ran out of stones.

We did it because we found better ways.

We must have more than a stone age energy policy.

We need a balanced policy that makes the best use of traditional energy sources while promoting the energy sources and practices of the future.

The President's energy policies are focused on what we need for the 21st Century.

The Republican plans seem aimed at building a bridge to the 19th Century.

Our plan relies on a broad-based and balanced to maxize America's opportunities for affordable energy;

Their plan puts all our eggs in one basket – resource exploitation – and ignores other critical steps we need to take.

Our plan puts money in Americans' pockets from more competition and more energy efficiency.

Their plan ignores these opportunities.

Our plan protects our most precious wilderness areas;

Their plan would declare open season on them;

Our plan keeps us on the path to cleaner air and water, and puts us in position to tackle long-term threats like climate change.

Their plan ignores these problems or doesn't recognize that they exist~~believe in them~~.

~~Let us look at some specific challenges and specific issues that are likely to arise over the course of the next few months.~~

~~First, CAFÉ standards.~~

~~Once again, the Congress has prohibited the Administration from even *thinking* about requiring greater fuel economy for our cars.~~

~~Where is the sense in this at a time when we are facing supply bottlenecks and higher prices at the pump?~~

~~Increasing the average fuel economy for cars and light duty vehicles by just 3 miles per gallon would save almost a million barrels of oil a day.~~

~~For those of you keeping score at home, that is equal to rate of output we could expect to get from ANWR by 2015 if we opened it for production tomorrow.~~

~~[Conclusion to CAFÉ section???]~~

~~Next topic, riders.~~

~~This Administration has long stated its opposition to legislating broader public policy through the appropriations process.~~

~~This year's crop of anti-environmental riders is particularly troublesome, however.~~

~~And right now they are littering numerous bills, including . . .~~

~~One of my personal favorites is something called the Knollenberg Amendment which seeks to prevent the Administration from spending any money on the Kyoto Protocol on global climate change.~~

~~And Mr. Knollenberg has made clear that what he means by this is – no more negotiation on the treaty to make it more cost-effective and make it more inclusive of developing countries.~~

~~Now it is true: some people believe that climate change is not a serious problem meriting serious action.~~

~~Some want to tie the Administration's hands so it cannot negotiate the best treaty it can, knowing this could make ultimate ratification more difficult.~~

~~The Administration cannot – and will not – "implement" a treaty without Congress' approval.~~

~~But Congress should not sabotage the negotiation process or undermine legitimate efforts to curb greenhouse gases.~~

~~And by seeking to prohibit us from working on treaty's flexible, cost-cutting mechanisms, Mr. Knollenberg has shown the Republicans' true colors on this issue:~~

~~That they are not only behind the American public;~~

~~They are only behind the scientific community;~~

~~They are, in fact, behind corporate America who urged us to include these measures in the treaty in the first place.~~

~~[Again, conclusion to section needed]~~

[Budget in general]

[Reliability]

[CONCLUSION – not yet written]

Department of Energy
Washington, DC 20585

OFFICE OF ENERGY EFFICIENCY
AND RENEWABLE ENERGY

Facsimile Cover Sheet

To: Roger

From: Dan R

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Number of pages (including cover):

Comments:

Per our conversation

The slide w the map of Japan is older -

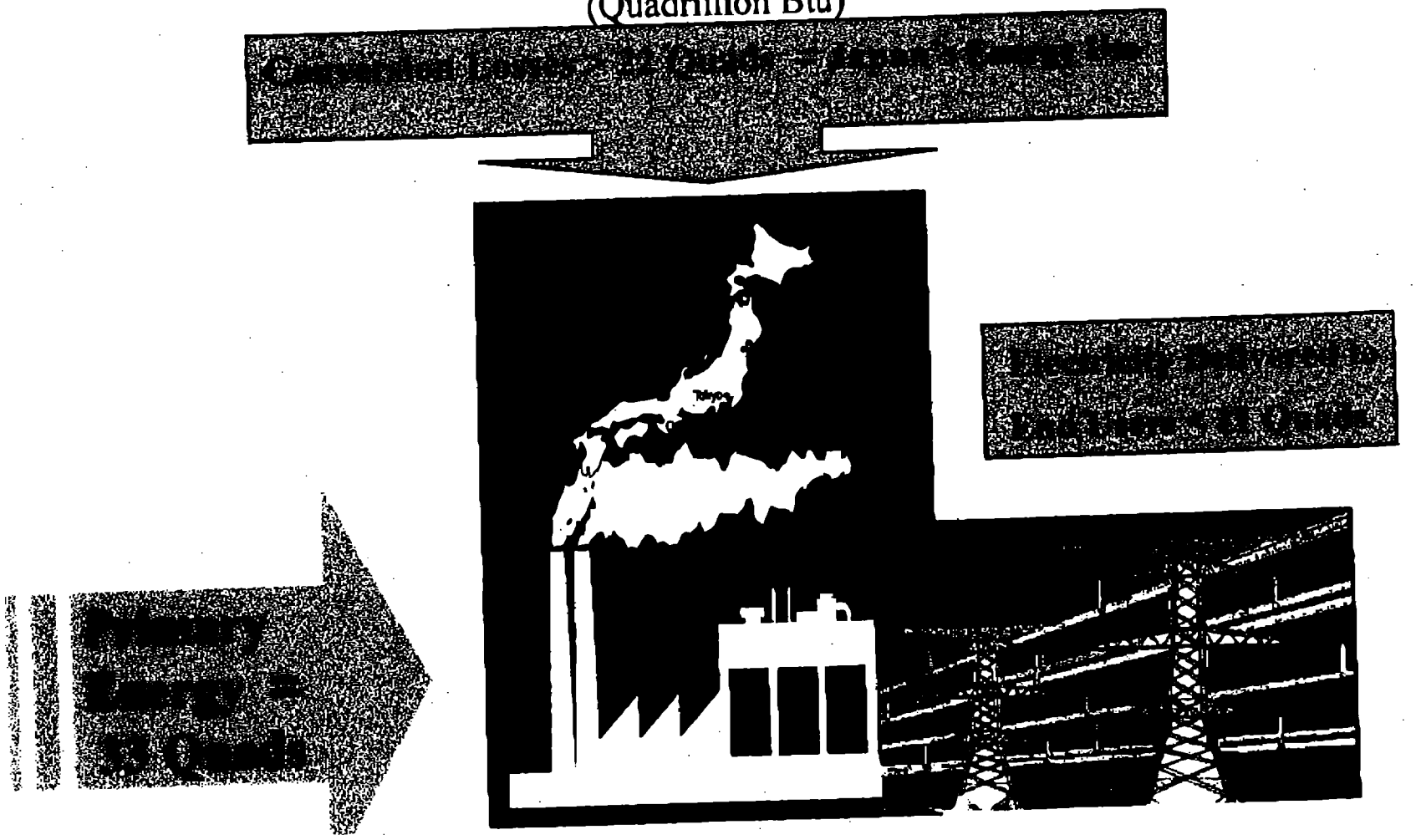
Note: The #'s are not inconsistent between the two slides - rather they represent different years.

ENERGY

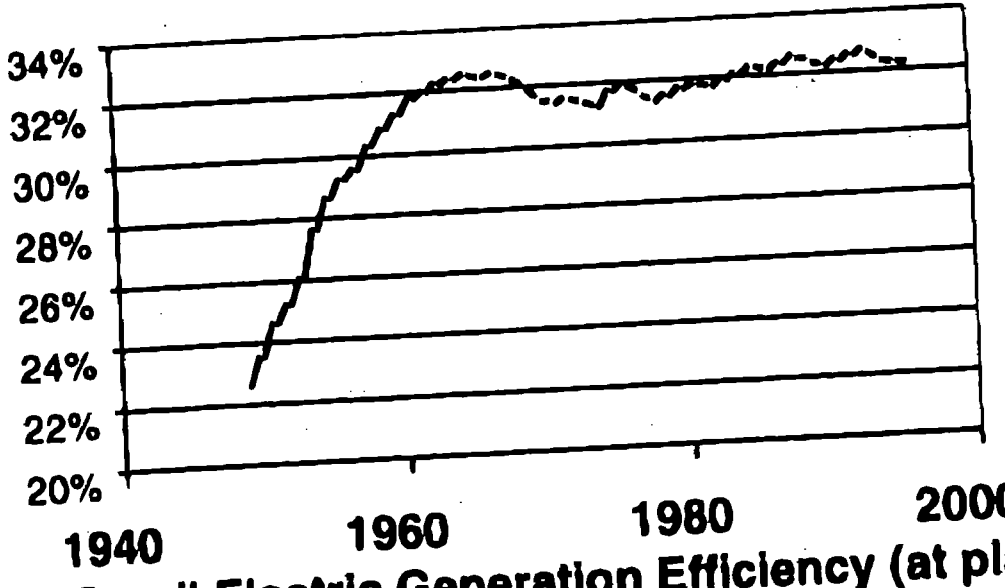
New Directions in Clean Air, Clean Energy Policy

Power Generation — Input and Output

(Quadrillion Btu)



Stagnant Efficiency of U.S. Electric System



Fossil Electric Generation Efficiency (at plant, W/O T&D)

Source: EIA, Annual Energy Review 1996

U.S. electricity conversion losses totaled 23.4 quads in 1998, enough energy to fuel Japan.

PRESIDENT CLINTON AND VICE PRESIDENT GORE'S ENERGY POLICY

June xx, 2000

President Clinton and Vice President Gore believe that ensuring access to affordable, and environmentally responsible energy is central to maintaining our unparalleled economic growth and prosperity, and to protecting the health of both our environment and our citizens, and that high levels of oil imports undermine our energy security. Unlike Congressional Republicans, however, they recognize the importance of a balanced approach.

The Republican's response to increasing dependence on imported oil is to promote ever-increasing levels of drilling for oil in the pristine wilderness of Alaska, on other Federal lands, and off-shore. In sharp contrast, the President and Vice President support a comprehensive approach to enhancing our energy security including responsible oil and gas development, combined with support for alternative and renewable sources of energy, efforts to increase the energy efficiency of the economy, and efforts to improve the efficiency and reliability of the Nation's energy infrastructure. For instance, they support policies such as the Administration's Bioenergy Initiative, which would reduce oil consumption by _____, greater that the volume of oil available in the Arctic National Wildlife Refuge at peak production, and comprehensive electricity restructuring, which would promote the development of clean efficient power plants while reducing consumer costs by over $20 billion annually.

Key Components of Clinton/Gore Energy Policy:

I. Developing and Promoting Traditional, Renewable and Alternative Sources of Energy
II. Spurring Greater Energy Efficiency and Reducing Consumer Costs
III. Enhancing Infrastructure Reliability and Increasing Efficiency Through Comprehensive Electricity Restructuring
IV. Furthering Our Ability to Respond to Energy Supply Emergencies

I. Developing and Promoting Traditional, Renewable and Alternative Sources of Energy: To meet our need for energy from traditional sources, the Administration actively supports a balanced package of investments, tax incentives, regulatory and administrative actions to promote the exploration and development, where appropriate, of traditional energy sources, while striving to protect the sensitive environments that are an important part of our natural heritage. The President and Vice President have proposed and supported:

- Investments and tax incentives to support the domestic energy industry;
- Investments and tax incentives to spur the development of renewable and alternative sources of energy;
- Investments to develop clean coal technologies and to extend the life of nuclear power plants;
- An Ultra-Clean Fuels Initiative to develop cleaner fuels that can be produced by existing refineries;
- Responsible Drilling on Federal Lands and in Federal Waters;,
- Improvements in the system to collect royalties from oil and gas production on Federal land and in Federal water, thereby lowering costs incurred by the industry;
- Investing over $400 million (FY 2001 budget) to support development of domestic sources of renewable energy, including wind, photovoltaics and geothermal energy;
- Investing over $289 million (FY 2001 budget) in a bieoenergy initiative that will help us develop new fuels for our cars that will reduce U.S. oil consumption; and,
- Tax credits to promote wind, solar and biomass energy.

II. Spurring Greater Energy Efficiency and Reducing Consumer Costs: Increased energy efficiency has significantly enhanced our energy security by reducing our demand for imported oil. For example, in 1974, we consumed 15 barrels of oil for each $10,000 of GDP; today we only consume 8 barrels of oil per unit of GDP. To take full advantage of these opportunities, the President and Vice President have proposed policies to promote energy security by accelerating the research, development, and deployment of alternative and more efficient energy technologies:

- Investments to develop technologies to make homes and buildings more energy efficient;
- Weatherizing low income homes, reducing homeowners' energy costs and the demand for oil;

- Making America's Vehicles More Efficient. The Partnership for a New Generation of Vehicles is on track to deliver attractive, affordable cars that get up to three times the fuel efficiency of today's cars. (Increasing the average fuel economy for cars and light duty vehicles by just three miles per gallon would save almost a million barrels of oil per day, the equivalent to the amount of oil we could expect to produce by 2015 if we opened ANWR for production tomorrow.);
- Creation of a new Clean Air Partnership Fund to help States and localities become more energy efficient;
- Tax Credits For Electric, Fuel Cell, and Qualified Hybrid Vehicles;
- Tax Credits for Efficient Homes and Buildings. Increasing the efficient use of power;
- Reducing energy demand in Federal buildings, cutting energy costs by 35 percent costs by 2010 compared to a 1985 baseline; and,
- Energy Star® product and building partnerships, to provide consumers with information to purchase more efficient products and work in more efficient buildings.

III. Increasing Infrastructure Efficiency and Reliability Through Comprehensive Electricity Restructuring: Enactment of the Administration's proposed legislation will lower electricity prices, clean the environment, encourage innovation and new services, and increase the reliability of our nation's power supply grid. It will also enhance energy security by enabling us to operate our economy on less fuel. The President and Vice President's proposed legislation, which Congress had failed to act on for over two years would:

- Provide $20 billion in annual savings to America's families, saving typical family of four $232 per year;
- Strengthen Reliable Service by requiring all participants in electric transactions on the grid to comply with mandatory reliability standards developed by a reliability organization; and,
- Improve the environment, through both market mechanisms and policies that promote investments in energy efficiency, renewable energy, distributed power and combined heat and power technologies.

IV. Furthering Our Ability to Respond to Energy Supply Emergencies: Notwithstanding our best efforts to promote a diverse and secure supply of energy, the fact remains that we import a sizeable portion of the oil we consume. In order to mitigate that risk, and to address emergencies created by unusually cold or warm weather, the Administration supports:

- ontinued authorization of the Strategic Petroleum Reserve;
- The creation of a Northeast/New England Home Heating Oil Reserve; and,
- Full funding of emergency fund in the Low Income Home Energy Assistance Program (LIHEAP).

Republican Complaisance on Energy Policy: Under Republican leadership, Congress has failed to responsibly address critical elements of the Administration's comprehensive agenda. In fact, Congress has abrogated its responsibility to prepare the Nation for energy emergencies, to support modernizing and enhancing the reliability of the electrical grid, to promote a balanced energy policy by ignoring opportunities to reduce demand through increased efficiency, and to move towards alternative fuels that enhance energy security while protecting the environment. Instead, Congress has:

- Failed to extend authorization of the Strategic Petroleum Reserve;
- Failed to create a home heating oil reserve;
- Failed to replenishing the Low Income Home Energy Assistance Program Emergency Fund;
- Failed to enact comprehensive electricity restructuring;
- Failed to enact tax incentives to support domestic oil industry and to promote renewable energy;
- Failed to enact tax increases to support development of efficient cars;
- Prohibited the Administration from even examining an increase of auto fuel efficiency standards.

Republican Priorities: Instead of promoting a balanced approach, Republican leaders in energy policy have focused their enthusiasm on efforts to support:

- More drilling for oil in the Arctic National Wildlife Refuge, the greatest pristine wildlife reserve in the Nation;
- More drilling on Federal lands; and,
- More drilling off-shore.

PRESIDENT CLINTON'S ENERGY POLICY

June xx, 2000

Among the most important challenges America faces is ensuring that we have access to secure, affordable, and environmentally responsible energy. The "first principle" of the Administration's energy policy has been a reliance on free markets as the best means of informing supply and demand, and getting the most for the American consumer. Our commitment to this principle has been central to maintaining unparalleled economic growth and prosperity, and to protecting the health of both our environment and our citizens. Over the past decade, energy demand, while increasing, has been out-paced by the dramatic economic growth achieved by the Clinton/Gore Administration. We have met this growing demand through a combination of measures designed to both increase energy supplies and improve the energy efficiency of our homes, autos and industry. This proven track record demonstrates that through wise policy choices and informed, targeted investment of public dollars, we can sustain strong economic growth fueled by relatively affordable energy, while at the same time protecting the environment and public health.

The Clinton/Gore Administration has published two statements of its national energy policy in recent years: Sustainable Energy Strategy (July 1995) and The Comprehensive National Energy Strategy (April 1998). Both documents provide a guide to energy policies proposed and implemented by the Administration, and seek to ensure that energy policy is well integrated into the Nation's economic and national security policies. The Department of Energy is currently in the process of updating the CNES and should be releasing this update shortly.

Key Components of the Clinton Energy Strategy

- **Developing and Promoting Traditional, Renewable and Alternative Sources of Energy**
- **Spurring Greater Energy Efficiency and Reducing the Consumer Costs**
- **Increasing Infrastructure Efficiency and Reliability Through Comprehensive Electricity Restructuring**
- **Furthering Our Ability to Respond to Energy Supply Emergencies**

The Clinton/Gore Administration's comprehensive energy policy seeks to harness the power of the marketplace to promote the development of reliable, affordable, and cleaner energy necessary to maintain our economic growth. At the same time, the Administration has developed policies and initiatives that recognize the importance of balancing our efforts to increase the supply of energy with a concerted effort to increase the energy efficiency of the economy, thereby enhancing our energy security by reducing our reliance on imported energy and insulating our economy from short-term market fluctuations in energy prices.

Recognizing that over forty percent of the nation's energy bill is spent on electricity, the Clinton/Gore Administration's comprehensive electricity restructuring proposal will break new ground in extending the role of competition into the electricity sector. By injecting more competition, restructuring will reward more efficient, more reliable, cleaner uses of electricity throughout our economy. Finally, the Administration supports the establishment and maintenance of programs to respond to temporary energy supply shortages (e.g., Strategic Petroleum Reserve, home heating oil reserve, Low Income Home Energy Assistance Program Emergency fund).

Developing and Promoting Traditional, Renewable and Alternative Sources of Energy

The Administration believes that America must both continue to develop traditional sources of energy, even while we actively support the development of renewable and alternative sources of energy that will enhance our energy security and protect our environment. The Administration has promoted and implemented a package of investments, incentives, and regulatory and administrative policies in support of this dual-track approach to energy supply.

I. Traditional Sources of Energy

The Administration recognizes the critical role that traditional sources of energy play in our energy portfolio. Currently, over _____ percent of our current energy comes from traditional sources of energy, and it is expected that we will continue to rely on these sources for years to come. To meet our need for energy from traditional sources, the Administration actively supports a balanced package of investments, tax incentives, regulatory and administrative actions to promote the exploration and development, where appropriate, of traditional energy sources, while striving to protect the sensitive environments that are an important part of our natural heritage.

A. **Investments to Support the Development of Traditional Energy Sources:** The U.S. energy industry faces higher exploration and development costs for traditional fossil fuels relative to other countries. To address this, the Administration has invested in a portfolio of technologies designed to lower these costs, and to produce hard-to-find oil in more mature fields. In large part because of the joint research and development efforts of government and industry, the domestic petroleum business has transformed itself over the past three decades into a high-technology industry.

- Oil Reservoir Class Program: A single project in DOE's $118 million reservoir Class Program has already added 4.5 million barrels of new reserves on the 40-acre property, and the technology has already been transferred to other field areas.
- 3-D Seismic Advances: DOE has developed advances in fracture imaging and advanced drilling technologies in cooperation with the Gas Research Institute. These advances led to record breaking natural gas production in a horizontal well in the Greater Green River Basin in southwestern Wyoming.
- Coiled Tubing Horizontal Drilling Systems: Models developed by DOE led to increased coiled-tubing drilling efficiency and reliability. These systems have a 50 percent smaller footprint and reduce drilling costs by almost 40 percent.
- Four-Dimensional Seismic: This improved exploration approach integrates multiple 3-D seismic surveys, and has been commercially applied to 61 Gulf of Mexico fields after it was developed by the program in 1994.
- Nuclear Plant Life Extension Program: Nuclear plants currently generate 20 percent of the nation's electricity. The Administration proposed spending $5 million in the FY 2001 budget for the Nuclear Plant Optimization program to promote extended operation of existing nuclear power plants through research and development on advanced technologies to improve plant availability, reliability and productivity. The Administration proposed in funding for this program in FY 1998 and FY 1999, which Congress rejected; Congress finally funded the program in FY 2000.
- Cleaner Coal and Natural Gas: The FY 2001 budget requests $232 million to support DOE's aggressive research and development effort to develop next-generation technologies for the combustion of coal and natural gas. This work will lead to ultra-high efficiency plants with significantly lower emissions.

B. **Tax Incentives to Preserve the Productive Capacity of the Domestic Oil Industry:** The oil and gas industry is the beneficiary of numerous tax policies designed to promote the

development of domestic oil and gas. For instance, percentage depletion and special percentage depletion for marginal wells allow producers to exclude from income up to fifteen percent of gross income from a producing property. Favorable tax treatment is also available for intangible drilling expenses and development costs, enhanced oil recovery expenses, and the cost of tertiary injectants, among other tax policies. In order to provide additional assistance to support new domestic exploration and production, and to lower the business costs of producers when oil prices are low, the President supports additional targeted tax incentives for the industry.

- Supporting Responsible New Domestic Exploration and Production: Major technological advances in oil exploration, such as three- and four-dimensional seismic drilling, are helping us to find more oil, at greater depths, on and off-shore. At the same time, these technologies have reduced the environmental footprint left by exploration and production to 1/10th the size it was 25 years ago. We need to encourage the use of these advanced technologies at the same time we support exploration for oil and gas.
  - ✓ Expensing of Geological and Geophysical ("G&G") Costs: The President supports allowing industry to expense all geological and geophysical (exploration and development) costs. Current law states that they may only be deducted if exploration activity was unsuccessful. The change will encourage discovery of new reserves and, according to DOE, will add 25,000 barrels of oil a day to domestic production.
  - ✓ Allowing Expensing of Delay Rental Payments: The President supports allowing producers to expense all "delay rental payments" -- an amount paid by a lessee to the lessor of a petroleum resource when the lessee does not begin producing commercial quantities of oil or natural gas as soon as was agreed to. This more favorable treatment -- which was in effect prior to 1993 -- will lower the cost for producers doing business on Federal lands.

C. **Regulatory and Administrative Actions to Support Development of Traditional Sources of Energy:** To complement these investments and proposed tax incentives, the Administration also supports an array of administrative, regulatory and legislative actions to support the development of traditional energy sources.

- Alaska North Slope (ANS) Exports: In 1993, the Administration pledged to undertake the first serious examination of lifting the 20-year ban against ANS crude oil exports. An Energy Department-led study showed that removing the restriction would boost energy production and encourage economic growth without raising retail petroleum product prices. President Clinton signed legislation ending the prohibition on ANS exports in 1995. The Administration's action has created jobs for Americans and slowed the decline in domestic oil production by approximately 100,000 barrels per day.
- Selling Elk Hills: The 1998 sale of the Elk Hills Naval Petroleum Reserve underscored the Administration's commitment to getting the government out of the oil business. Elk Hills produced oil for naval warships in WWI, but subsequently produced strictly to generate government revenue. The government's competition with the private sector ended with the sale of the Reserve in 1998.
- Royalty Fairness: The "Federal Royalty Simplification and Fairness Act of 1996" reformed the royalty program for oil and gas production from on- and off shore federal lands. It required the government to pay interest on overpayments, established a statute of limitations for royalty obligations, and removed the two-year limit on refund applications from industry for Outer Continental Shelf (OCS) royalty overpayments. It also simplified record-keeping and reporting requirements, and expanded the royalty-related activities that may be delegated to states.

- Royalty Reengineering: Since 1997, the Department of the Interior has been working with major mineral companies and state and tribal governments to reengineer its royalty system for **[minerals, including coal? Or also oil and gas???].** Some of the expected improvements include: annual cost savings and efficiencies for both industry and the government; improved timeliness and accuracy of payments; streamlined regulatory reporting with substantial savings to industry; revenue increases of $15 million annually; reduction in the business cycle from 6 to 3 years; and modern, efficient, and cost-effective information systems.
- Royalty-in-Kind: The Department of the Interior is aggressively pursuing a policy of collecting oil and gas royalties in kind, as opposed to cash, under those circumstances where it makes good business sense in the management of the public's royalty assets. This reduces companies' administrative burdens and provide greater certainty on the fulfillment of royalty obligations, while maintaining or enhancing government revenues. The Administration is also using RIK oil to help fill the Strategic Petroleum Reserve.
- Supporting Access to Gulf of Mexico Deepwater: The Deep Water Royalty Relief Act (DWRRA), passed in 1995, provided strong incentives for industry to increase exploration and development in the deepwater area of the Gulf of Mexico. In particular, the Act's mandatory suspension of royalties for leases issued between 1995 and 2000 in deep water provided a dramatic increase in leasing and industry plans for exploring and developing this area. The Administration is exercising its authority under the Act to extend such incentives beyond 2000 so that industry can continue to responsibly develop the deep water Outer Continental Shelf (???) -- an area that is now has now one of the world's leading oil and natural gas areas and a major contributor to our domestic oil and gas supplies.
- Ultra-Clean Fuels Initiative: DOE recently launched the Ultra-Clean Fuels Initiative, to address the need for cleaner fuels within the context of the current refining infrastructure. This initiative will mobilize industry and DOE's national laboratories to develop and demonstrate technology for making large volumes of clean fuels which enjoy high levels of compatibility with the existing infrastructures and could provide environmental benefits due to their suitability for use in advanced, high-efficiency vehicles.
- Supporting Responsible Drilling on Federal Lands and in Federal Waters: The Department of the Interior administers the leasing program for both onshore and offshore Federal lands. While domestic production of oil overall has gone down since 1989 largely due to the price of oil on the world market, production on Federal and Indian lands has increased and, as of 1998, accounted for 34 percent of domestic production, up from 16.3 percent in 1989.
  - ✓ Off-Shore Oil and Gas Development: Since 1994, oil production in the Gulf of Mexico has increased more than 50%. Deepwater leases currently account for about half of oil production and over half of the proven reserves in the Gulf. Currently, approximately one out of every ten barrels of oil produced in the United States comes from a deepwater field in the Gulf. The Administration has supported the environmentally responsible leasing and development of promising areas of the outer continental shelf. In fact, the number of tracts and acres leased under the Clinton-Gore Administration exceeds that which occurred under previous administrations. (More that the Reagan Administration and nearly 250 percent as many tracts as the Bush Administration.) Moreover, by improving the leasing process, the Administration leased the tracts in fewer sales than previous Administrations.

- ✓ On-Shore Oil and Gas Development: The Bureau of Land Management (BLM) has taken a number of actions to encourage production on Federal onshore leases. Since 1993, BLM has:
  - Issued over 28,000 leases and approved over 15,000 permits to drill;
  - Completed an integrated activity plan/environmental impact statement for the northeast portion of the National Petroleum Reserve - Alaska. In 1999, the BLM held a lease sale offering 425 tracts on 3.9 million acres; the first such sale for the reserve since 1984. Oil companies paid more than $104 million in bids for the high potential oil and gas area.
  - Implemented legislation changing competitive lease term from 5 years to 10 years, allowing lessees greater flexibility in exploration without endangering the lease.
  - Concentrated its efforts on areas of greatest potential. Accordingly, BLM expects to process more than 1000 applications for permits to drill in the Powder River Basin this year.
  - Refocused its planning efforts to meet industry's exploration and production demands. Reassessing and revamping its planning documents will provide greater certainty of access while reducing economic risks and potential for litigation. The revised BLM Planning Efforts will include rewriting its planning guidance to prescribe how stipulations will be determined and refocusing its efforts on ensuring quality, certainty and timeliness.

  BLM has developed policies that sought to provide economic relief to onshore operators who have suffered during prolonged periods of low oil prices. BLM has:
  - Provided royalty rate reductions for operators producing heavy crude to offset high costs of production.
  - Provided royalty rate reductions for operators of stripper oil properties (leases producing less than 15 barrels per day) to provide an economic incentive to keep these properties in production. In 1998, a team representing BLM, MMS and DOE completed a study and recommended continuation of the program.
  - Agreed with the Forest Service to use one bond to cover liabilities for operations on Forest Service lands, eliminating the requirement that operators buy separate bonding for BLM and the Forest Service.

  Moreover, BLM had undertaken these initiatives while taking the necessary steps to protect sensitive areas and resources from inappropriate activities, resulting in a policy that has balanced the nation's need for energy with a clean environment.
- Research and Development to Develop Clean Fossil Fuel Power Plants
  - Environmental Compliance At Existing Coal-fired Power Plants: DOE has conducted research, in partnership with the private sector, to develop advanced technologies for the control of regional pollutants, like SO2 and NOx. These advanced technologies have been more reliable, more effective, and less than one-half the cost of earlier technologies for reducing such emissions. These technologies are now widely deployed and are projected to save consumers several billions of dollars per year by 2010. Coal use by power plants has increased 17 percent over the past 10 years, but emission rates of SO2 and NOx have declined significantly, as has the cost of electricity. Fifty-six percent of all electricity in the United States is currently is generated from coal.
  - Developments in Natural Gas Power Generation: The DOE advanced turbine program has resulted in much lower emission, much higher efficiency gas power plants, which cost 10 percent less than previous technologies. Ninety percent of the projected additions in U.S. generating capacity over the next 20 percent is projected to come from these advanced turbines.

- Future Powerplant Technology: DOE's R&D goal for 2015 is near-zero emission power plants from coal and natural gas, at prices lower than today's power plants. In addition to resolving issues of regional pollution, these advanced electric power systems will include technology to sequester CO2, a greenhouse gas. The advanced technologies developed under the "Vision 21" program will include modular systems which can accommodate multiple fuels, and produce not only electricity, but also transportation fuels, chemicals, and hydrogen, depending on the local market. Key to meeting the program's super-high efficiency targets will be development of advanced, low cost fuel cells.

II. Alternative and Renewable Sources of Energy

While we currently rely on traditional sources of energy for the majority of our energy needs, the President and the Vice President recognize that the full development of renewable and alternative fuels must supplement traditional fuels and is essential to addressing long-tem environmental concerns and to enhance our energy security. Thus, they have actively developed and promoted a package of investments, tax incentives and regulatory policies aimed at spurring the development and use of our use of renewable and alternative sources of energy.

A. **Investments Renewable and Alternative Sources of Energy:** Between FY 1994 and FY 2000, the Clinton Administration requested a total of nearly $2 billion in increases for solar and renewable energy accounts, and for energy conservation, but Congress only appropriated increases totaling one tenth of that. Our budgets would have provided more than $8 billion for renewables and energy conservation over those seven years.
   - Investments to Promote Clean Renewable Energy: The President's FY 2001 budget proposes $410 million for DOE efforts to develop domestic sources of renewable energy, including wind, photovoltaics and geothermal energy. Research and development to date has dropped the price of photovoltaic (PV) energy systems from about $1 per kWh in the early 1980s, to 20 cents to 30 cents today, economically competitive in many remote locations. Wind electricity prices have fallen from about 40 cents/kWh in 1979 to 4-6 cents today.
   - The President's Bioenergy Initiative. In 1999, the President announced a new $289 million bieoenergy initiative that will help us develop new fuels for our cars that will reduce U.S. oil consumption, create new income opportunities in rural America, and meet environmental challenges, such as climate change. The Initiative goal is a threefold increase in the use of bioenergy by 2010 -- which would save an amount of energy equal to 1,700 oil supertankers, the amount of oil consumed by 70 million cars in a year. **[John, can you make sure these numbers, which Janet supplied, are for 2010.] [NEED TO CHECK W/OMB ON HOW MUCH, IF ANY, OF THIS IS DOUBLE COUNTED WITH THE $410 MILLION ABOVE].**

B. **Tax Credits to Promote Renewable and Alternative Sources of Energy: [COULD USE STRONGER INTRODUCTORY TEXT HERE]** To promote the development of a broad portfolio of energy sources, the President has proposed:
   - Tax Credits For Solar Energy Systems. A 15 percent tax credit will encourage the purchase by consumers and businesses of solar energy systems. The maximum credit would be $2,000 for rooftop photovoltaic systems and $1,000 for solar water heating systems.
   - Tax Credits For Wind Power. Current law encourages the production of electricity from wind through a tax credit of 1.5 cents per kilowatt hour (adjusted for inflation after

1992). The current tax credit covers facilities placed in service before January 1, 2002. The President proposes a 2.5-year extension of this tax credit.

- Tax Credits For Electricity Produced From Biomass. Biomass refers to trees, crops and agricultural wastes used to produce power, fuels or chemicals. This package of credits would:
  - ✓ Extend Tax Credits For Closed Loop Biomass: Extend current "closed-loop" biomass credit of 1.5 cents per kilowatt hour for 2.5 years.
  - ✓ Provide Tax Credits For Open Loop Biomass: Expand the availability of the biomass credit of 1.5 cents per kilowatt hour to include "open-loop" biomass (certain forest-related resources and agricultural and other sources) for facilities placed in service from 2001-2005, and provides a 1.0 cent credit for electricity produced from 2001-2003 from facilities placed in service prior to January 1, 2001.
  - ✓ Provide Tax Credits For Cofiring Biomass: Add a 0.5 cent per kilowatt hour tax credit for electricity produced by cofiring biomass in coal plants from 2001-2005.
- Tax Credits For Methane from Landfills: Adds a 1.5 cent per kilowatt hour credit for electricity produced from landfills not subject to EPA's 1996 New Source Performance Standards/Emissions Guidelines (NSPS/EG) and 1.0 cent per kilowatt hour for landfills subject to NSPS/EG. Qualified facilities would be facilities placed in service after December 31, 2000 and before January 1, 2006.

C. Regulatory and Administrative Policies to Support Alternative and Renewable Energy: [ONCE AGAIN, MORE INTORDUCTORY TEXT]

- Clean Air Credits for Renewables and Efficiency. States currently spend in excess of $150 billion per year on pollution controls. **[WHO ACTUALLY SPENDS THIS MUCH $. COMPANIES???, CERTAINLY NOT THE STATES.]** By encouraging states to use efficiency and renewable energy strategies, emissions of multiple ambient pollutants can be avoided at much less cost than traditional "end-of-pipe" control strategies.
- International Clean Energy Program. The Administration's International Clean Energy Program seeks to overcome market constraints to the global use of U.S. renewable and clean energy technologies, providing early market opportunities for emerging energy resources. **[YOU COULD ALSO PUT THIS UNDER INVESTMENTS – $100 MILLION]**
- Distributed Generation. The Distributed Energy Resources Task Force has as its goal meeting 20 percent of new capacity additions (30 gigawatts) with distributed energy resources. **[RICH GLICK, CAN YOU BEEF UP THIS POINT, WHERE IS THIS TASK FORCE, WHO IS IN IT, WHAT ABOUT DIST GEN DEPRECIATION IN THE ELEC BILL]**
- Renewable Portfolio Standard: The Administration's Comprehensive Electricity Competition legislation proposes to establish a market-based credit trading system that establishes a goal that 7.5 percent of all electricity generated by 2010 comes from non-hydroelectric renewable resources (e.g., biomass, solar, wind and geothermal).

Spurring Greater Energy Efficiency

Energy security cannot be realized simply by producing an ever-increasing amount of energy. It also requires an ongoing commitment to use available resources as effectively as possible. Accordingly, the President and Vice President have proposed policies that will further promote energy

security by accelerating the research, development, and deployment of alternative and more efficient energy technologies.

I. Investments to Increase the Efficiency of the Economy: [Need some intro text here]

A. Making Homes and Buildings More Efficient: The Administration is committed to supporting development of technologies to make offices, homes, and appliances 50 percent more energy efficient within a decade and has proposed $275 million in the budget to help do so. People understand what that means for their heating oil, electricity and natural gas bills. Overall, meeting this goal would save consumers $11 billion a year in energy costs. **[DOE EERE does not recognize these numbers, Could someone, OMB/Melanie look into them.]**

B. Weatherizing Low Income Homes: The President has proposed expanding DOE's Weatherization Assistance Program, which helps low-income households make their homes more energy efficient. These are the Americans that most need to reduce monthly energy costs, but lack the resources to do so. This program, with additional funds from the Low Income Heating Energy Assistance Program and state allocations, has already weatherized almost 5 million low-income homes. Each weatherized home reduces energy demand and saves homeowners $200 per year in energy costs. With funding from DOE and the States, the Administration plans to add more than 150,000 homes to the list in the next year, saving more than an additional 800,000 barrels of oil per year. DOE's budget seeks $154 million for this important program for next year and an additional $19 million for the current year in the FY 2000 supplemental appropriation.

C. Making America's Vehicles More Efficient: More than 65 percent of our oil consumption is for transportation, making vehicle fuel efficiency a ripe target for reducing the consumption side of the net import equation.

- Increasing the average fuel economy for cars and light duty vehicles by just three miles per gallon would save almost a million barrels of oil per day
- That represents the equivalent to the amount of oil we could expect to produce by 2015 if we opened ANWR for production tomorrow. **[This number is not clear. Can Interior OMB and CEQ look at it and refine, verify. Further, is 2015 a peak or post-peak year for ANWR production? How would production start tomorrow?]**
- Investing in fuels and more fuel-efficient vehicles could substantially reduce our reliance on imported oil at the same time it contributes to a cleaner, healthier environment.

Without trivializing the importance of increased oil production, it is clear that even a small commitment to greater vehicle efficiency can help reduce our reliance on imported oil without compromising pristine environmental ecosystems. The Administration's *Partnership for a New Generation of Vehicles* is on track to deliver attractive, affordable cars that get up to three times the fuel efficiency of today's cars.

- If all cars and light trucks had twice the fuel economy as they do today, we would reduce our oil consumption by 3.8 million barrels per day. That represents about 40 percent of the oil we import.
- A typical consumer would save more than $350 a year in fuel costs and SUV owners would save more than $450 a year (with gas selling at an average of $1.30 per gallon).
- By 2010, DOE research with the vehicle companies, if successful, could lead to the development and commercialize of fuel efficiency and alternative-fuel technologies that reduce oil consumption by nearly 700,000 barrels per day. By 2020, these technologies will reduce oil consumption by nearly 1.5 million barrels per day.

D. **Helping States and Localities Become More Efficient.** The President's budget proposes $85 million for the creation of a new Clean Air Partnership Fund. The Fund will provide grants to states, localities, and tribes to support efforts that achieve reductions in both greenhouse gas emissions and ground-level air pollutants. In many instances, these efforts will include aggressive programs and policies to reduce energy consumption and increase efficiency. First proposed as part of last year's FY 2000 budget, the Fund will be administered by the Environmental Protection Agency under existing authority.

II. **Tax Incentives to Increase the Energy Efficiency of the Economy:** In order to enhance our energy security and insulate the economy from the effects of future energy price increases, the United States needs comprehensive and balanced package of tax incentives. This comprehensive approach must include incentives to continue expanding renewable energy and increasing the energy efficiency of our economy. **[WRAP UP THIS INTRO TEXT]**

A. **Tax Credits For Electric, Fuel Cell, and Qualified Hybrid Vehicles:** Cars and light trucks (including minivans, sport utilities, and pickups) currently account for about 40 percent of the Nation's oil consumption. Tax credits for electric, fuel cell, and hybrid vehicles will help to move advanced technologies that use less or no oil from the laboratory to the highway. President Clinton has called on Congress to:

- Extend the current tax credit for electric vehicles and fuel cell vehicles. Under current law, a 10 percent credit, up to $4,000, is provided for the cost of qualified electric vehicles and fuel cell vehicles. The credit begins to phase down in 2002 and phases out in 2005. The President's proposal would extend the tax credit at its $4,000 maximum level through 2006.
- Pass tax credits for hybrid vehicles. The President proposes a $500 to $3,000 credit, depending on the vehicle's design performance, for all qualifying hybrid vehicles, including cars, minivans, sport utility vehicles, and pickup trucks.

B. **Tax Credits for Efficient Homes and Buildings.** Increasing the efficient use of power will reduce our reliance on fossil fuels. To encourage energy efficiency, the President has called on Congress to pass tax incentives that will promote the use of energy efficient practices and technologies in our homes and buildings.

- Tax credit for new energy efficient homes. To encourage the purchase of new energy efficient homes, the President proposes a tax credit of between $1,000 and $2,000 for new energy efficient homes.
- Tax credit for energy efficient equipment in new and existing homes or buildings. To encourage the purchase of electric heat pump water heaters, natural gas heat pumps, and fuel cells, the President proposes a tax credit equal to 20 percent of the cost of the investment, subject to a cap, for equipment purchased between 2001 and 2004.

III. **Other Initiatives to Promote Efficiency:** In addition to supporting budget investments and tax incentives to spur efficiency and the development of alternative and renewable fuels, the Clinton/Gore Administration has also taken administrative step and entered into public/private partnerships to enhance energy efficiency throughout the economy.

A. **Greening the Government through Efficient Energy Management:** On June 3, 1999, President Clinton signed Executive Order 13123 promoting Government-wide energy efficiency and renewable energy. The new Executive Order strengthens the Government's efforts to pursue energy and cost savings, and raises the energy savings goal to a 35 percent reduction in energy consumption per square foot in nonexempt Federal buildings by the year 2010 compared to a 1985 baseline.

- The federal government has reduced energy use in its buildings by 20 percent since 1985. This achievement, which saved taxpayers over $2 billion in energy bills in fiscal year 1999 alone, is one year ahead of the schedule.

B. Energy Star® Partnerships: The Energy Star partnership programs remove market barriers to the purchase of energy efficient products, services, and technologies in residential, commercial and industrial buildings.

- **Energy Star Products:** The Energy Star Product Program allows manufacturers of selected energy efficient products to promote their products with the Energy Star label. This allows consumers to easily identify products that help save them both energy and money.
  - ✓ More than 3,400 models of Energy Star products (made by more than 1,000 manufacturers), ranging from computers to refrigerators to central air-conditioning units, currently are available to consumers.
  - ✓ If everyone -- consumers, businesses and government -- all used Energy Star products, the United States would save about $100 billion in energy bills over the next 15 years.
  - ✓ It currently takes, for example, six power plants just to provide enough electricity to power all U.S. televisions and VCRs when they are turned off. Using Energy Star televisions and VCRs would cut that amount in half.
- **Energy Star Buildings Partnership:** The Energy Star Buildings Partnership encourages individual building owners, developers, and managers to install energy efficient lighting and undertake a five-state strategy to capitalize on system interactions that maximize energy savings at minimum cost.
  - ✓ Buildings representing more than 13 percent of U.S. commercial square footage have signed up for the program. Among them are the Empire State Building, World Trade Center and Chicago's Sears Tower.

C. Energy Efficiency Standards for Equipment and Appliances: To save energy and reduce consumer utility bills, the U.S. government develops test procedures and national minimum energy efficiency standards for equipment and appliances, such as heating and cooling equipment, water heaters, lighting, refrigerators, clothes washers and dryers, and cooking equipment. Through 1997, residential appliance standards had saved consumers a cumulative $13.3 billion. By 2010, the currently enacted standards will have saved consumers almost $50 billion.

- In the upcoming year, the Administration expects to publish standards for clothes washers, water heaters, fluorescent lamp ballasts, and central air conditioners. In 2020, the implementation of these four new standards will reduce electricity use by an amount equal to 17 large power plants and have provided cumulative savings to U.S. consumers of more than $50 billion (1999 dollars).

Increasing Infrastructure Efficiency of Through Comprehensive Electricity Restructuring

The Clinton/Gore Comprehensive Electricity Competition Plan embodies the overall agenda of the Administration to expand the economy and improve the environment. A more competitive electricity industry will provide significant benefits to individual consumers and will help lay the foundation for sustained economic growth. Enactment of the Administration's proposed legislation will lower electricity prices, clean the environment, encourage innovation and new services, increase

the reliability of our nation's power supply grid, and provide support to rural communities and Indian tribes. The President and Vice President's proposed legislation:

- **Provides $20 Billion in Annual Savings to America's Families:** The Administration estimates that retail competition will save consumers at least $20 billion a year. When factoring in both lower electric bills and the reduced cost of goods and services, the typical family of four could save $232 per year.

- **Strengthens Reliable Service:** The President's proposal will establish a framework that requires all participants in electric transactions on the grid to comply with mandatory reliability standards developed by a reliability organization operating under the oversight of the Federal Energy Regulatory Commission (FERC). Reliability will be further strengthened by our proposals to give FERC the authority to require utility participation in independent regional transmission organizations and to facilitate state formation of regional organizations for transmission planning.

- **Improves the Environment:** Restructuring will also produce significant environmental benefits through both market mechanisms and policies that promote investments in energy efficiency, renewable energy, distributed power and combined heat and power technologies. The President's proposal will:
  - ✓ reduce greenhouse gas emissions by 40 to 60 million metric tons annually by 2010;
  - ✓ unleash competitive forces that will create a more efficient, leaner and cleaner industry, because a generator that wrings as much energy as it can from every unit of fuel will be rewarded by the market;
  - ✓ provide opportunities for consumers to vote with their wallets for green power and facilitates the marketing of energy efficiency services along with electricity;
  - ✓ promote renewable energy through the introduction of a renewable portfolio standard and public benefits funding;
  - ✓ remove market barriers to the use of combined heat and power technologies, complementing the effects of competition itself in advancing technologies that reduce energy waste.

- **Makes Available New Products and Services:** Restructuring will also spark innovation in the American economy, creating new industries, jobs, products and services just as telecommunications reform spawned cellular phones and other new technologies. For instance, restructuring will allow competing energy service companies to provide a variety of energy management services and technologies in addition to the traditional gas and electric service offered by utilities today.

Furthering Our Ability to Respond to Energy Supply Emergencies

Notwithstanding our best efforts to promote a diverse and secure supply of energy, the fact remains that we import a sizeable portion of the oil we consume. Although we obtain oil from a diverse group of suppliers around the world, we recognize that the oil market is a world market, and that a temporarily disruption of oil, even from countries from whom we obtain no oil, may disrupt traditional supply patterns. As a result, the United States is potentially at risk from disruptions in any part of the world.

In order to mitigate that risk, and to address emergencies created by unusually cold or warm weather, the Administration supports the continued maintenance of the Strategic Petroleum Reserve, a creation of a Northeast/New England Home Heating Oil Reserve, and full funding of emergency fund in the Low Income Home Energy Assistance Program.

- **Maintaining the Strategic Petroleum Reserve**: The Strategic Petroleum Reserve (SPR) is the nation's first line of defense against an interruption in oil supplies. This emergency supply of crude oil can be supplied quickly and efficiently to the nation's refineries if commercial supplies of crude oil are shut off. With approximately 570 million barrels in storage, the Reserve is a national "insurance policy," the largest strategic stockpile of crude oil in the world. Given the interdependence of world oil markets, the U.S. and its allies are at risk of economic instability and strategic vulnerability from any disruptions in the global supply. A strategic oil reserve is the best way to protect the nation from this risk and its very existence serves as a visible deterrent to any potential threat. Over a seven year period ending in 2000, the Administration spent $328 million to completely modernize and streamline all of the surface facilities of the Reserve, assuring its readiness for another 25 years. The President has called on Congress to immediately extend Titles I and II of the Energy Policy and Conservation Act.
  - ✓ Current Authorization of the Strategic Petroleum Reserve and to participate in the International Energy Program with other oil consuming nations expired on March 31st.
  - ✓ Title I authorizes the SPR and provides the President with the ability to use the Reserve in an emergency. Title II authorizes our participation in the International Energy Program so that the United States acts in concert with our allies in responding to an international emergency to protect the growth of the United States.

- **Establishing A Regional Home Heating Oil Reserve**: The President remains concerned about the effect that future shortages of home heating oil may have on consumers of home heating oil, particularly in the Northeast and New England. In order to reduce the likelihood that future shortages will harm consumers, the President has called on Congress to authorize the creation of a home heating oil reserve with an appropriate trigger in the Northeast to combat future product shortages. In the event of home heating oil shortages, heating oil can be sold from the reserve in order to increase the supply on the market.

- **Low-Income Home Energy Assistance Program**: The Low-Income Home Energy Assistance Program (LIHEAP) helps families by paying heating and cooling costs, preventing energy cutoff in crisis situations. LIHEAP also helps them pay to weatherize and insulate their homes in order to lower their energy costs. Through LIHEAP, Congress sets aside emergency funds to help States meet urgent home heating or cooling needs in response to unusually cold or hot weather. The President determines when an emergency warrants the release of these funds. In FY 2000, the President used all $300 million in the emergency fund to respond to energy-related damage caused by Hurricane Floyd and to high home heating oil prices in the Northeast and New England.

Patricks

STATEMENT

OF

MELANIE KENDERDINE

ACTING DIRECTOR OF POLICY

U.S. DEPARTMENT OF ENERGY

BEFORE THE

SUBCOMMITTEE ON

ENERGY AND POWER

OF THE

COMMITTEE ON COMMERCE

U.S. HOUSE OF REPRESENTATIVES

MAY 24, 2000

THE CLINTON/GORE ADMINISTRATION'S ENERGY POLICY

The Administration's "First Principle": Reliance on Market Forces

Mr. Chairman and members of the Subcommittee, I am pleased to be here today to discuss the Administration's National Energy Policy with the Subcommittee.

Sound energy policy is not only important to the day-to-day functioning of our society, it is essential to the continued improvement in our standard of living. Energy is a key economic driver and a strategic global commodity. Energy has significant impacts on the environment at the same time it offers real market opportunities.

The "first principle" of the Administration's energy policy has been a reliance on free markets as the best means of informing supply and demand, and getting the most for the American consumer. Our commitment to this principle has given the nation its longest period of sustained economic growth in modern times.

The unprecedented economic expansion under this Administration has pushed the overall unemployment rates to 30-year lows, led to increased labor productivity, generated extraordinary gains in the nation's stock markets, given us the first federal budget surpluses in several decades, and helped to significantly reduce poverty rates, all while maintaining low levels of inflation.

This does not mean there will not be market failures. When markets are insufficiently flexible to address critical national challenges . . . market transformations require market pushes and pulls. . . or groups of individuals or businesses are threatened by market disruptions or dislocations. . . this Administration has not hesitated to take appropriate action.

Examples of interventions in the energy arena include: the release of emergency LIHEAP funds during last winter's home heating oil crisis; ongoing investments in energy research and development; support for a home heating oil reserve in the Northeastern United States; support for tax incentives to increase domestic oil and gas production; and a range of environmental policies and technologies.

Economic Growth, Energy Use and Environmental Protection are Not Mutually Exclusive

At the same time the economy has been steadily growing, many of the environmental consequences of energy use have been reduced -- this point is clearly made by Chart # 1 which plots growth in GDP against certain emissions associated with energy use.

There is good news:

- Since 1990, at the same time the US economy has grown by 35 percent, sulfur dioxide emissions have declined by around 20 percent
- In today's dollars, gasoline prices are 20 percent lower than they were in 1985.
- The energy intensity of our economy -- the amount of energy used per unit of

economic output -- has declined by 40%.

- In 1974, we consumed 15 barrels of oil for every $10,000 of gross domestic product -- oday we consume only eight barrels for every $10,000.

Energy use, while increasing, has been out-paced by the dramatic economic growth achieved by the Clinton/Gore Administration. Also, increased energy efficiency – in homes, businesses and manufacturing – has helped insulate the economy from short-term market fluctuations in energy prices. The point of all of this: through wise policy choices and informed, targeted investments of public dollars, we can have an extremely robust economy fueled by relatively inexpensive energy, at the same time we are protecting the environment and the health of our citizens.

Policy Framework for our Energy Strategies

The Clinton/Gore Administration has published two statements of its national energy policy in the last several years: *Sustainable Energy Strategy* (July 1995) and *The Comprehensive National Energy Strategy* (CNES, April 1998). Both documents provide a guide to energy policies proposed and implemented by the Administration, and seek to ensure that energy policy is well integrated into the Nation's economic and national security policies. We are currently in the process of updating the CNES and should be releasing this update shortly.

In addition, the President's Committee of Advisors on Science and Technology has completed two scientific reviews of energy related technology development, *Federal Energy Research and Development for the Challenges of the 21st Century*, in 1997 and, more recently, *Powerful Partnerships* in 1999. These two documents provide an analysis of the Department's energy technologies, and make recommendations on how to best utilize these technologies both domestically and internationally.

Finally, the Department over the last several years, has engaged in numerous roadmapping exercises with industry/government/academic stakeholder groups, and two extensive energy portfolio exercises, in which we matched our energy R&D investments against larger strategic goals. This process, followed by an analysis of the portfolio, has helped us to identify gaps in our portfolio and opportunities for additional investments in energy technology.

The *Comprehensive National Energy Strategy,* which DOE released in 1998, identified five overarching energy goals:

- Improving the efficiency of the energy system;
- Ensuring against energy supply disruptions;
- Promoting energy production and use in ways to protect human health and the environment;
- Expanding future energy choices, and;
- Cooperating internationally on energy issues.

The Nation's Energy Challenges

In addition to identifying five energy goals, the CNES highlighted three major energy challenges

for policy-makers. These are:

- Maintaining America's energy security in global markets;
- Harnessing the forces of competition in restructured energy markets, and;
- Mitigating the environmental impacts of energy use

While each of these challenges warrants different Government actions, there is a need to invest in the development of alternatives and longer-term technologies to meet our future energy needs. This leads us to add a fourth challenge as we update our national energy strategy:

- Ensuring a diverse set of reliable and affordable energy sources for America, now and in the future.

I now want to summarize how the Clinton/Gore energy policy utilizes market forces, policies, and investments in research and development to address each of these challenges.

◆ Challenge # 1: Maintaining America's Energy Security in Global Oil Markets

The United States remains heavily dependent on crude oil, in spite of the growth in use of other fuels such as natural gas and coal. Since 1985, domestic crude oil production has declined by 34 percent, while domestic oil consumption has increased by more than 22 percent. In 1974, net imports of crude oil and products supplied about 35 percent of U.S. consumption. In 1999, net imports supplied about 50 percent of U.S. consumption.

The Administration's response to the continued role of oil in our economy and the increase in net imports recognizes the following:

- Demand for oil continues to grow.
- The cost of oil production in the U.S. is high relative to other producing nations.
- The price of oil is a *world* price. High or low prices of oil worldwide will mean high or low prices domestically.
- Reducing volatility in oil prices will spur investment and match supply to demand.
- Global capacity must be increased if we are to meet domestic and international demand for oil.
- Increasing net imports are not only an indicator of flat or declining domestic production, but a reflection of increased domestic *consumption*.
- More than 60 percent of our oil is used for transportation.

To spur domestic production and lower the costs of doing business – without imposing quotas on imported oil, which would raise costs to consumers – the President has proposed tax incentives for 100 percent expensing of geological and geophysical costs, and allowing the expensing of delay rental payments. G& G expensing will encourage exploration and

production. Delayed rental expensing will lower the cost of doing business on federal lands.

The Administration has also supported and promoted virtually all significant energy legislation passed by the Congress over the last seven years. This includes: Deepwater Royalty Relief; lifting the ban on the export of Alaska North Slope Oil; the Royalty Simplification Act; legislation to increase the life of certain oil and gas fields by privatizing the Elk Hills Naval Petroleum Reserve, and Naval Oil Shale Reserves One and Three; the 1997 Balanced Budget Act which included AMT and percentage depletion tax relief for small operators; and legislation creating a guaranteed loan program for small domestic oil and gas producers.

To address higher US finding and production costs relative to other countries, we have invested in a portfolio of technologies designed to lower the costs of exploration and production, and to produce hard-to-find oil in more mature fields. In large part because of the joint R&D efforts of government and industry, the U.S. petroleum business has transformed itself over the past three decades into a high-technology industry.

The United States is a mature oil-producing region. While an estimated two-thirds of all U.S. oil remains in the ground, much of it is located in deep, complex reservoirs or environmentally-sensitive areas. Development of advanced oil and gas technologies is essential to efficiently maximize the production of domestic resources while preserving the environment.

A single project in DOE's five-year, $118 million government/industry Oil Reservoir Class Program has already added 2.4 million barrels of oil from one field and produced an additional $12.7 million in taxes and royalties. The final outcome of this project is expected to produce an additional 31 million barrels of oil and $160 million in federal revenues.

The Department of Energy conducted the initial design of the polycrystalline drill bit, now used in about 40 percent of drilling worldwide, with annual industry sales in excess of $200 million. Innovations such as horizontal drilling have revitalized oil production from the Austin Chalk region of Texas to the Dundee formation of Michigan. New imaging technologies developed by DOE laboratories are revealing large untapped hydrocarbon supplies beneath the ocean floor salt formations in the Gulf of Mexico. Secondary gas recovery technologies have led to a new surge in gas production from south Texas and the mid-continent. In Alaska, oil is now being produced from wellpads that are as small as one tenth the size of those 30 years ago.

Industry and the Department of Interior estimate that new discoveries in the Gulf of Mexico may yield as much as 18 billion barrels of oil — more than Prudhoe Bay. Technological innovations in subsalt imaging, reservoir characterization, and drilling technologies will enhance our ability to economically produce these reserves.

To ensure that we are not overly reliant on imports from a single region of the world, we have

diversified our sources of supply. Although our oil imports have increased, our *sources* of these imports have changed significantly over the last two decades. Last year, we imported 4.85 million barrels of oil per day from OPEC, down 22 percent from the 6.19 million barrels of oil per day we imported from OPEC in 1977. Our imports now come from over 40 countries around the world.

During this same period, OPEC's share of the world market has dropped from 49 to around 41 percent. In 1970, the top six producers in the world controlled 68 percent of the world's production; this figure is now down to 45 percent.

I note that just recently, a significant oil find was made in the Caspian Basin which is thought have potential reserves equaling or surpassing the North Sea. The Administration has invested in a significant diplomatic effort to encourage oil development in this region, as well as to encourage the investment of U.S. energy firms in the Caspian.

To help the world develop its oil resources and increase world capacity, Secretary Richardson has pulled together the nations of the world and traveled to major oil producing countries to encourage investment and development of the world's energy resources. Most notably, Secretary Richardson has held two international energy summits — the Western Hemisphere Energy Summit in New Orleans and the African Energy Summit in Tucson, to discuss energy issues and plot a course for global energy development and future uses. In addition, the Secretary has traveled to virtually all the major energy producing regions of the world — the Caspian, Russia, the Middle East, Nigeria, Norway, Mexico, and Venezuela — to encourage energy production and business for U.S. energy companies.

To increase the coverage provided by our "national energy insurance policy," the Strategic Petroleum Reserve, we are adding 28 million barrels of oil to fill the Reserve back to the 590 million barrel level, its approximate size prior to the revenue-raising sales directed by the Congress in 1996 and 1997. The replacement of this oil in the Reserve was also done through a unique royalty-in-kind payment, with no outlays for the government. In addition, we have completed upgrades for the Reserve -- to make it safer and to extend the useful life of the facility. This seven-year project was completed ahead of schedule and under budget.

To address volatility in world oil markets, we have strengthened our ties with the world's oil producing nations, worked closely with oil consuming nations through organizations such as the International Energy Agency, and launched a campaign to improve the collection, dissemination and understanding of world oil supply and demand data. Last January, prominent industry analysts and data experts met at a DOE-sponsored forum in Houston to discuss how the quality, timeliness and availability of oil data might be affecting volatility in oil prices. DOE will be

co-hosting an international conference in Spain this summer as a follow-on to the earlier meeting. There is significant international interest in this issue and consensus that the world needs better and more timely data for producers and consumers of oil to more accurately gauge world oil supply and demand.

We are also investing in reducing net oil imports by focusing on demand side technologies and policies. More than 60 percent of our oil consumption is for transportation, making vehicle fuel efficiency a ripe target for reducing the consumption side of the net import equation. Specifically, the Department's transportation program is:

- developing an 80 mile-per-gallon prototype sedan by 2004 through our Partnership for Next Generation Vehicles Program;
- improving light truck fuel efficiency by 35 percent while meeting newly issued EPA Tier 2 emission standards by 2004;
- developing technologies to increase fuel economy of the largest heavy trucks from 7 to 10 mpg (nearly 50 percent) by 2004, and;
- increasing domestic ethanol production to 2.2 billion gallons per year by 2010.
- supporting tax credits for hybrid vehicles.

Let me illustrate just how important these investments are. As you can see on Chart #2, over the past decade, vehicle manufacturers have focused on increasing horsepower at the expense of miles per gallon, the exact opposite of what occurred in the 1970's when auto manufacturers were more focused on fuel-efficient vehicles.

Increasing the average fuel economy for cars and light duty vehicles by just three miles per gallon would save almost *a million barrels of oil per day*. This represents over 15% of current U.S. daily production. Investing in fuels and more fuel-efficient vehicles could substantially reduce our reliance on imported oil at the same time it contributes to a cleaner, healthier environment. Without trivializing the importance of increased oil production, it is clear that even a small commitment to greater vehicle efficiency will net significant gains in reducing net oil imports, without compromising pristine onshore or offshore environmental ecosystems.

♦ Challenge #2: Harnessing the Force of Competition in Restructured Energy Markets

As I have noted, the Clinton/Gore approach to energy policy is built around the principle of market-oriented approaches to energy supply and use. A reliance on markets is not unique to our Administration – it spans both Republican and Democratic Administrations.

Natural gas is a clear area of success for market-driven energy policies for recent Administrations. With deregulation, natural gas has emerged as a plentiful, national energy resource. In the mid-1970's, a labyrinth of outdated and counterproductive pricing regulations

had handcuffed America's natural gas industry, stifling exploration and production and conveying the false impression that America's natural gas supplies were on the wane.

Today, the onerous regulations of the 1970's have been replaced by a restructured and highly competitive gas market, and natural gas is now one of the most plentiful energy resources available to meet the Nation's future energy and environmental needs. The decontrol of natural gas prices, the advent of competition in interstate gas transportation, and the ability of industrial customers (and increasingly residential consumers) to contract directly for their own gas supplies has clearly provided major benefits to both producers and consumers.

Electricity restructuring is the biggest prize of all. The Clinton/Gore Administration is seeking to extend the role of markets and competition into the electricity sector– well over 40 percent of the nation's energy bill goes for electricity. With over $200 billion in annual sales, electricity is the lifeblood of our economy, and the reliable supply of electricity is vital to our economy and to the health and safety of all Americans.

At one time, the debate surrounding electricity restructuring focused on the pros and cons of doing away with the vertically-integrated monopoly utility that generated, transmitted and distributed the power consumed in a state-designated monopoly service territory. That debate is over. As a result of the Energy Policy Act of 1992 and the efforts of the Federal Energy Regulatory Commission (FERC), utilities are now buying power from competing generators and marketers at competitive rates rather than building plants on their own, and independent power producers are gaining an increasing share of the generation market.

Restructuring and competition are not, of course, limited to the wholesale markets. Twenty-five states have now adopted electricity restructuring proposals that allow for competition at the retail level. Almost every other state has the matter under active consideration.

These are positive developments -- competition, if structured properly, will be good for consumers, good for the economy and good for the environment. Companies that had no incentive to offer lower prices, better service, or new products are now being required to compete for customers. Consumers will save money on their electric bills. Lower electric rates will also make businesses more competitive by lowering their costs of production. By promoting the use of cleaner and more efficient technologies, competition will lead to reduced emissions of greenhouse gases and conventional air pollutants.

Securing a Competitive Future Requires State and Federal Action. We believe that the full benefits promised by competition can be realized only within an appropriate Federal statutory framework. What we do at the Federal level, and when we do it, will have a profound impact on the success of wholesale competitive markets, as well as on state and local retail markets. Federal action is necessary for state restructuring programs to achieve their maximum potential. Electrons do not respect state borders. Electricity markets are becoming increasingly regional and multi-regional. Actions in one state can and do affect consumers in other states.

States alone can't ensure that regional power and transmission markets are efficient and competitive. They can't provide for the continued reliability of the interstate bulk power grid. And states can't remove the Federal statutory impediments to competition and enable competition to thrive in the regions served by Federal utilities. Clearly, some states are considering retail competition proposals at a less rapid pace than others. Nevertheless, Federal action is equally important to all states. If wholesale markets, which transcend state boundaries, are not working efficiently, the impediments to the flow of power between states will cause rates to go up and reliability to be endangered.

The Clinton/Gore Administration encourages Congress to pass comprehensive electricity restructuring legislation. In 1998 and again in 1999, the Administration presented the Congress with a comprehensive legislative blueprint of changes needed for updating the federal statutory framework to support the advent of competition in electricity markets. Indeed, this bill was a featured element of the Comprehensive National Energy Strategy the Administration sent to Congress in April, 1998.

A well-structured electricity bill is a centerpiece of the Administration's energy policy, and we look forward to working in a bipartisan manner with both the House and Senate to pass this or similar legislation. Mr. Chairman, we recognize the efforts of this subcommittee, which reported an electricity bill last October. We urge this Congress to replicate the earlier bipartisan successes with natural gas and oil deregulation and pass a comprehensive restructuring bill this summer.

Ensuring the reliability of the energy grid is a growing focus of the Administration's R&D efforts. While the electricity system powers other infrastructures, it will also be increasingly dependent on natural gas as a fuel source for both central power stations and small, distributed generation. The Annual Energy Outlook, 1999, projects the annual growth for the use of natural gas for electricity generation will be 6.8% through 2020.

In addition, our energy delivery systems are becoming increasingly reliant on telecom-munications and computing systems for fast, efficient operation. These trends will likely result in increased efficiencies and a range of new consumer products, but will also likely increase physical and cyber threats to our energy infrastructure.

To ensure the reliability and security of the electricity and natural gas infrastructures, the Administration has proposed a new Energy Infrastructure Reliability initiative with three components:

- electric reliability which will focus on regional grid control, distributed resources and microgrids, information system analysis, and high capacity transmission;
- natural gas infrastructure reliability to include storage, pipeline and distribution R&D, and;
- secure energy infrastructures, which will conduct vulnerability assessments,

interdependency analysis, risk analysis, and the development of protection and mitigation technologies.

- **Challenge #3: Mitigating the Environmental Impacts of Energy Use**

The production, transport and conversion of energy is fundamental to our way of life and continued economic prosperity, but energy has more significant effects on the environment than any other economic activity. To reduce these adverse effects, the federal and state governments have imposed environmental restrictions on energy, from production to end-use.

These restrictions have, as noted earlier, resulted in dramatic reductions in energy-related pollution and environmental damage, and have been achieved without substantial increases in energy prices, disruptions in energy supplies or other adverse economic impacts. This achievement is due, in part, to the constructive role that the Department of Energy has played in the development of environment-friendly energy technologies and the adoption of regulatory policies that have enabled the energy industry to minimize costs and avoid supply disruptions.

We cannot, however, stop with the successes achieved to date. Domestically, one of the leading challenges facing us now is further reducing the environmental impacts of energy use in the transportation and power generation sectors. We want to minimize the negative effects of fossil fuel combustion in ways that do not increase prices or price volatility, or decrease reliability. Other domestic environmental challenges that will require careful monitoring include: assuring the continued access of the energy industry to new resource areas, in a manner that protects our natural heritage; and ensuring that any further regulation of the energy sector is based on good science and is cost-effective.

Internationally, responding to the threat of climate change is the greatest challenge facing the energy sector. While our understanding of the likely effects of increasing atmospheric concentrations of greenhouse gases is not perfect, it is clear we must begin now to limit their emissions. It is also clear that preventing atmospheric concentrations from more than doubling — or tripling -- during the next century will require an unprecedented global commitment.

We must continue to build international support for the use of the flexibility mechanisms identified in the Kyoto Protocol. Only through the full use of market-based emissions trading and related mechanisms, can we substantially slow or halt the growth in global greenhouse gas emissions without imposing unacceptable costs on the United States. The anticipated use of these mechanisms will also provide the economic incentive for developing countries to make meaningful commitments to greenhouse gas emissions reductions.

Sound science is the cornerstone of DOE's work on energy-related environmental issues. The Department has been a partner with EPA and other regulatory agencies in developing science-based regulations. This was seen recently in DOE's work with EPA on coal ash; and last

year in our work with EPA on coal combusters of fossil fuels containing cobalt or vanadium, for which a DOE analysis revealed that the bioaccumulation potential of these two metals was insignificant for plants and animals.

These are two examples it was demonstrated, through science, that regulations of the energy industry were *not* needed. Our work on climate change on the other hand, is part of the substantial body of scientific evidence that demonstrates the impacts of carbon emissions on the global environment, supports the Administration's commitment to mitigating the impacts of greenhouse gas emissions on the atmosphere and human health, and strongly suggests that significant and timely action to mitigate climate change *is* needed.

Cost is a key consideration. Once the need for government action has been clearly established, the costs and benefits of alternative approaches must be weighed. To the extent feasible, the costs of reducing adverse environmental impacts should be shared fairly among all of the contributors to an environmental problem, not borne primarily by a small subset of industries or, in the case of global climate change, a small subset of countries.

Most recently, the Department of Energy helped develop the economic analysis for treating small refiners as a separate class of businesses under the recently released Tier II gasoline sulfur rule. This treatment for small refiners will give them additional time and flexibility in meeting the requirements of the rule. We are similarly engaged with other agencies in the government on proposed low sulfur rules for diesel fuel and for MTBE.

An important element of the Administration's energy policy is support for the development of energy technologies to reduce environmental impacts of energy use by:

- promoting technologies to produce cleaner conventional fuels;
- increasing the efficiency of conventional energy sources, primarily fossil fuels, and;
- developing alternative sources of energy.

Cleaner Conventional Fuels. On the transportation side of fuel use, vehicles currently account for a large portion of urban pollution, including 77 percent of carbon monoxide, 49 percent of nitrogen oxides, and 37 percent of volatile organic compounds. The transportation sector also generates over one third of U.S. carbon emissions. In coming decades, increasing public health and environmental concerns will likely lead to new environmental regulations that may be difficult or impossible to meet with current fuels.

The President's *Bioenergy and Biobased Products Initiative* is intended to address this growing need. Recent scientific advances in bioenergy and biobased products have created enormous potential to enhance U.S. energy security, help manage carbon emissions, protect the environment, and develop new economic opportunities for rural America. This nation has abundant biomass resources (grasses, trees, agricultural wastes) that have the potential to provide power, fuels, chemicals and other biobased products. The President has set a goal of tripling

U.S. use of biobased products and bioenergy by 2010, which would generate as much as $20 billion a year in new income for farmers and rural communities, while reducing greenhouse gas emissions by as much as 100 million tons a year – the equivalent of taking more than 70 million cars off the road.

DOE has also launched a new initiative this year, the *Ultra-Clean Fuels Initiative*, to address the need for cleaner fuels within the context of the current refining infrastructure. The Ultra-Clean Fuels Initiative will mobilize industry and DOE's national laboratories to develop and demonstrate new technologies for making large volumes of clean fuels from our diverse fossil energy resource base. In the nearer term, ultra-clean transportation fuels can be produced from improved refinery upgrading technology, and new bio-fuel blends. In the mid-to-longer term, ultra-clean transportation fuels can be developed through biotechnology, or from natural gas and coal, which enjoy high levels of compatibility with the existing infrastructures and could provide environmental benefits due to their suitability for use in advanced, high-efficiency vehicles.

On the power side, fossil fuel-fired power plants emit about one third of the nation's carbon dioxide and significant amounts of NOX, SOX and particulates. These plants also account for 70 percent of all U.S. electricity generation and are projected to dominate power generation for the foreseeable future.

Sulfur dioxide scrubbing technologies for coal-fired power plants, developed by DOE, have resulted in improved performance at a fraction of its original cost. Coal is used to generate almost 55 percent of the nation's electricity and scrubbers are now deployed on one-third of U.S. coal plants. Our partnerships with industry have resulted in rapid development of low cost NOx technologies to address both near term needs and future environmental challenges. The near term challenge has been met in the retrofit of low-N0x burner technology retrofits on virtually all coal-fired boilers, and the more stringent technologies will be installed on a substantial portion of coal units. These technologies are 50-90 percent cheaper than options available just 10 years ago.

To address pollution from coal and natural gas power systems, DOE has a program — *Vision 21* — with a goal of near-zero emissions from power generation and 60 to 70 percent generation efficiencies. The fleet of large, high-efficiency power systems envisioned by this program would produce emissions well below New Source Performance Standards for SOX, NOX, and particulates, with most advanced systems achieving near-zero emissions for regulated pollutants.

DOE's *Carbon Sequestration Program* is designed to develop technologies and practices to sequester carbon that: are effective and cost-competitive; provide stable, long-term storage, and; are environmentally benign. Increased carbon emissions are expected unless energy systems reduce the carbon load to the atmosphere. Accordingly, carbon sequestration — carbon capture, separation and storage or reuse — must play a major role if we are to continue to enjoy the economic and energy security benefits which fossil fuels bring to the nation's energy mix.

Increasing the Efficiency and Efficient Use of Conventional Fuels It is particularly important to

develop and deploy higher efficiency technology for fossil energy power generation since 85% of America's energy currently derives from oil, gas and coal. In electricity generation alone, energy efficiency potentially could be doubled through cogeneration and the application of advanced technologies.

To use energy more efficiently, we are working to develop "intelligent building"control systems, more efficient appliances, and fuel cells to power commercial buildings. DOE's advanced turbines -- fueled by natural gas or biomass, and capable of reducing NOX emissions and producing steam together with low-cost electricity —are already approaching efficiencies of 60 percent.

High efficiency electric power systems, where fuel cells are joined with combined cycle plants, could improve efficiency as much as 70 percent. Industrial resource recovery could be dramatically improved with the development of technologies such as an integrated gasification combined power technology, which would convert coal, biomass and municipal solid wastes into power and products.

Standards to improve the energy efficiency of flourescent lighting in commercial and industrial applications, proposed this March, are expected to save between 1.2 and 2.3 quadrillion BTUs of energy over a 30-year period, or enough energy to supply 7 to 15 million homes in the U.S. for one year. We have recently proposed an update to the efficiency standards for water heaters, and expect to issue proposals for clothes washers and central air conditioners in the near future -- each of which are likely to produce even greater energy and environmental benefits.
If the Department's energy efficiency programs were fully funded, we could likely:

- reduce industry energy consumption per dollar of output 25 percent below its 1990 level;
- increase the average fuel efficiency of new cars and light trucks by 20 percent by 2010;
- reduce the annual energy consumed by buildings by 5 percent relative to the level forecast for that year, and;
- by 2010, reduce energy consumption in federal facilities by 35 percent relative to the 1985 consumption level, saving taxpayers $12 billion from 2000-2010.

These reductions in energy demand will result in comparable reductions in greenhouse gas emissions, as well as reductions of other environmental impacts associated with energy use.

Investing in Alternative Fuels. Renewable resources such as wind, solar, photovoltaics, geothermal, biomass, hydrogen, and hydroelectric, are abundant. These alternatives are used for power generation and their primary advantage is that they produce virtually no emissions or solid wastes. Their primary disadvantages are the cost of producing power (except hydro) compared to coal and natural gas, and the need to create an infrastructure required to deliver this power to market.

To take advantage of the environmental benefits of renewable power, the Department has focused on decreasing its costs and tackling infrastructure issues. The most feasible approach to lowering cost and delivering renewable power appears to be through distributed generation — alternatives to central power stations, where power is generated locally or on-site. Distributed generation technologies are a major R&D focus at DOE.

In addition, *the Department is working on improving the performance of specific kinds of renewable energy*. Wind, for example, is the fastest growing source of energy in the world. Dramatic improvements in wind turbine technology has helped spur a 25 percent increase in wind-generating capacity over the last decade.

Last year, the President issued an *executive order directing agencies to expand their use of renewable energy*. Meeting the goals of this order will reduce greenhouse gas emissions by 2. 4 million tons and save taxpayers over $750 million a year. It will also expand markets for

renewable technologies, reduce air pollution, and serve as a powerful example to businesses and consumers who can reap substantial benefits from environmentally-friendly energy sources.

- **Challenge #4: Ensuring a Diverse, Reliable and Affordable Set of Energy Sources for the Future**

The energy options within our portfolio are oil, gas, coal, energy efficiency, renewables, hydropower, fission, and fusion. We must strategically manage energy R&D with this understanding about the energy world as we know it: there is no single silver bullet which will solve all our energy needs, making science and technology -- and a broad-based energy R&D portfolio -- key to meeting our long term energy needs..

Without energy technologies, a ton of coal, a barrel of oil, a cubic foot of natural gas, a ton of uranium ore, a stiff breeze, or the sun's warmth cannot directly contribute to the prosperity of modern society. With the very best technologies, however, society can use energy resources efficiently and responsibly and with great economic and environmental gain. While economic and security challenges continue to demand investment in a robust energy research and development (R&D) program, environmental challenges provide additional impetus for increased focus on energy-related science and technology during the coming years.

Technology development plays a strong supporting role in the Department's pursuit of all of its energy policy objectives. It supports improvement in the competitiveness of the energy system; the development of more efficient transportation, industrial and buildings technologies as a key objective; our goal of reducing the environmental impacts of the energy sector, and; the further development of technologies that reduce the environmental impacts of energy production.

The requirements for near term returns on investment, limited resources and the risk averse nature of many industries warrant a special role for government in the support of technology development, especially when new technology can help address national concerns not fully

reflected in the marketplace. Consequently, the development of new energy technologies has been the central mission of the Department of Energy's energy programs since the 1970's. At DOE , we focus on maintaining a strong national knowledge base as the foundation for informed energy decisions, new energy systems, and enabling technologies of the future, and developing technologies that expand long-term energy options.

Ensuring the success of the Department's research and development efforts has been a constant challenge, especially during periods of stable or declining energy prices, when market incentives for technology development and adoption are at their lowest. In addition, the unpredictability of technology development process and the continual changes in scientific knowledge, social priorities and market demands pose additional challenges to government efforts to effectively spur technology development.

I have already discussed many of DOE's energy technologies and technology investments and successes. I would now like to discuss our energy portfolio more broadly, and then focus specifically on natural gas as a transition fuel.

DOE's energy resources R&D portfolio is organized in three broad strategic areas: reliable and diverse energy supply ($170 M, FY01 request); clean and affordable power ($542M, FY01 request), and; efficient and productive energy use ($437M FY01 request). In addition, the Department has a basic science portfolio ($1.2B FY 01 request) which supplies the foundation for much of the applied R&D in the energy areas.

A number of reviews and studies have been conducted that provide valuable information on the adequacy and focus of this portfolio. Overall, these studies have confirmed that our energy portfolio is generally well-focused on the nation's strategic energy goals. However, the studies also have identified a number of deficiencies in how fully these goals are addressed by the portfolio and made a number of recommendations for important portfolio changes or additions, including:

- Significantly enhanced R&D funding
- Renewed emphasis on electric power systems reliability
- A Nuclear Energy Research Initiative
- Carbon management R&D
- Increased bioenergy R&D
- Methane hydrate R&D
- Hydrogen R&D
- Clean fuels R&D
- Integration of fuel cell R&D efforts
- An international RDD&D effort

The Administration strongly supports the increased use of natural gas. Several of these recommended changes or additions to our portfolio relate directly or indirectly to natural gas — power systems reliability, carbon management, methane hydrates, clean fuels, and fuels cells all involve the development of technologies to increase the supply, improve the delivery of, or improve the environmental performance of natural gas.

Also, as I mentioned earlier, because it is abundant and relatively clean, natural gas will be the fuel of choice to meet the nation's future power generation needs. Of the 1000 powerplants EIA projects the U.S. will need by 2020, 900 of them will likely be natural gas power plants. If we are able to produce the gas to meet this need, we will need the means to distribute it safely and efficiently. Right now there are 85 proposed pipeline projects *just* for the years 2000 through 2002, at the same time significant impediments exist for pipeline and storage siting.

Investments in natural gas R&D are critical to meet future energy needs. The Clinton/Gore Administration has invested roughly $1.5 billion dollars in natural gas R&D. DOE's joint efforts with industry have helped produce the fuel cells, microturbines, reciprocating engines, and other enabling technologies to power the gas industry of the future. DOE's request for natural gas R&D funding in FY 2001 is around $200 million and, as I mentioned earlier, includes an initiative for energy infrastructure reliability. The natural gas portion of this initiative specifically focuses on methane leakage, aging and corroding pipelines, and natural gas storage, to improve the safety and reliability of the natural gas distribution network.

Last December, Secretary Richardson established *DOE's newest national laboratory — the National Energy Technology Laboratory,* co-located at Morgantown, WV, and Pittsburgh, PA. This laboratory is dedicated to providing the nation with clean and affordable fossil energy and will house a new *Center for Natural Gas Studies*, in order to give added focus and emphasis to natural gas policy and "bore hole to burner tip" research and development.

Presidential Decision Directive 63 — *Critical Infrastructure Protection — establishes safety and security of the natural gas infrastructure as a national security priority.* In addition, the Administration also envisions a substantial role for natural gas as the transition fuel for a cleaner environment, and in reducing greenhouse gases. The President's *Executive Order on the Greening of the Government* promotes total efficiency in federal buildings, acknowledging that there are substantial efficiency gains to be made by measuring energy from the source, not just at the site. Natural gas is the natural winner in this scenario.

The Administration's *Comprehensive Electricity Restructuring bill* will benefit natural gas as well by providing for more rapid market penetration of innovative technologies on both sides of the customer's meter. End-use distributed generation technologies, for example, have a critical role to play in a restructured energy future. Along with new uses for natural gas, these technologies promise relatively high efficiencies, low emissions, increased flexibility and reliability, and cost-effective alternatives to the traditional utility grid infrastructure.

To further develop natural gas power systems for the 21st century, DOE will be focusing on

advanced combustion science and technology; interconnect devices and parameters for standard interconnect designs to enable distributed generation; low temperature catalysts for emissions control; inexpensive sensors for emissions monitoring, and; carbon dioxide separation and sequestration technology. For natural gas storage, we will be investing in developing non-damaging fluids for drilling, and methods for controlling reservoir damage caused by drilling and perforating fluids.

We need to encourage increased natural gas supply. The National Petroleum Council's recent study on natural gas projects increased demand for natural gas of 29 TCF in 2010 and 31 TCF by 2015. At the same time, EIA estimates that in 1998, reserve additions of natural gas were only 83 percent of production. To meet this demand, we will need to ensure that we have an adequate supply of natural gas.

Several pieces of legislation I described earlier — specifically the deepwater royalty relief and the guaranteed loan program for small oil and gas producers — will benefit natural gas production, as will the G&G and delayed rental tax credits supported by the President. In addition, our energy supply R&D programs, designed to lower the costs of oil and gas production, will help add to the nation's supplies of natural gas. These include:

- a *Diagnostics and Imaging Program* to cost-effectively locate and produce oil and gas reserves;
- the *Advanced Drilling, Completion and Stimulation Systems Program* which focuses on the development of sophisticated drilling technologies and methodologies;
- the *Gas Hydrates Program* to help turn potential methane hydrates into gas reserves, and;
- the *Low Quality Gas Upgrading Program* to purify gas reserves containing high levels of contaminants.

Clearly, much remains to be done if we are to meet significant increases in demand for natural gas over the next two decades. We look forward to working with Congress in a bipartisan effort to increase the nation's supplies of natural gas.

FEDERAL INTERVENTION IN ENERGY MARKETS

Before closing, I'd like to say a few words about the role of specific federal interventions in energy markets. While the word "subsidy" has a negative connotation, in the context of federal interventions in energy markets, we use the word "subsidy" to describe three things: 1) direct payment assistance such as LIHEAP; 2) tax incentives, such as tax credits for clean fuels or enhanced oil recovery and; 3) federal R&D investments.

Just how much does the Federal Government subsidize energy? The answer to this question helps us understand, in part, the extent to which government programs intentionally seek to influence the allocation and pricing of energy resources. It also helps us to assess whether our tax and investment policies are consistent with our energy goals. Finally, because each of these

subsidies requires a Congressional appropriation or authorization, the existence and extent of the subsidies is an indication of Congressional direction on energy policy.

According to the EIA, the 1999 estimated value for all energy subsidies was about $6.2 billion. Generally, these subsidies are small relative to the energy economy as a whole, representing slightly more than one percent of total annual expenditure on energy in the United States. Fossil fuels received by far the largest share of these subsidies, nearly half of the total. Led by the ethanol excise exclusion, renewables came in second and received about $1.1 billion , or about 18 percent of total subsidies. Nuclear, electricity and end-use programs each accounted for about 10 percent of the total. Conservation programs received about 4 percent of the total. Total energy subsidies have declined nearly 16 percent since 1992. LIHEAP expenditures declined about 27 percent and R&D spending about 13 percent. Other declines have occurred in Weatherization Assistance and State Energy Programs.

EIA notes that the largest tax expenditure in 1992 — excess of percentage over cost depletion — exhibited the greatest decline in absolute and percentage terms, dropping from $1.2 billion in 1992 to $.3 billion in 1999. This decline, however was accompanied by a significant reduction in oil prices and does not reflect any change in Administration or Congressional policy.

Certain subsidies, however, display noteworthy changes not attributable to macroeconomic changes or changes specific to energy markets. R&D funding for gas and end-use activities was significantly higher in 1999 than in 1992, whereas funding levels for programs for nuclear R&D, coal R&D, and direct expenditures for DOE's two conservation programs were significantly lower. The drop in coal R&D is a simple reflection of the maturing of the Clean Coal Technology Program, in which almost all pre-authorized projects are now funded. The decline in nuclear R&D reflects significant budget cuts in the Radioactive Waste Office budget at DOE, responsible for the Yucca Mountain site and disposal of high-level nuclear waste.

PROSPERITY AND SECURITY ARE "ENERGY DEPENDENT"

Energy plays a vital role in our economy. Somewhere between six and seven percent of our Gross Domestic Product— about $600 billion per year—is attributable to energy consumption. Over $200 billion per year is spent on transportation fuels. Approximately $200 billion per year is spent on electricity – to power our factories, to light, heat, and cool our homes, offices and schools, and to increasingly power the electronically-based New Economy. The electric bill for the nation's industrial sector alone is around $100 billion annually.

Clearly, energy is the engine that drives our economy. At the same time, it represents a substantial cost to consumers and businesses -- its fundamental importance to the nation's economic and environmental health has warranted investments by this and previous Administrations in a set of policies and a portfolio of technologies to produce more energy, to

use it more efficiently, to reduce its impacts on the environment, and to find alternative sources of supplies.

These policies and investments have paid big dividends. Over the 20-year history of the Department of Energy, we have made a great deal of "energy progress." In today's dollars, we are paying substantially less for a gallon of gasoline than in 1980. We have diversified our suppliers of imported oil to the point where three out of four of our top importers are countries in the Western Hemisphere.

We have, by far, the largest petroleum reserve in the world. Relatively recent policy changes and technological advancements have spurred oil and gas production on the Outer Continental Shelf and extended production on Alaska's North Slope. Significant technology improvements have lowered oil and gas exploration and production costs dramatically and reduced the environmental footprint of energy production to one tenth the size it was twenty years ago.

In addition, the rapid development of energy efficient technologies and practices and the restructuring of our industrial sector has enabled the United States to decrease its energy use per dollar GDP by around 40 percent since 1973, representing an annual energy cost savings of over $400 billion. Between 1970 and 1990, the average fuel efficiency of automobiles went from 13 miles per gallon to 20 miles per gallon. The efficiency of gas turbines for electric power generation is approaching 60 percent and wind energy and biomass show tremendous promise for cost-competitive power generation from alternative energy sources.

Despite this track record, the potential for increased energy savings in the U.S. economy remains enormous — and to meet growing energy demand, it remains essential. In the utility industry for example, only one third of all thermal energy from coal or gas is actually transformed into electricity in a typical power plant. In the transportation sector, which accounts for 60 percent of the nation's demand for oil, the fuel economy of passenger vehicles has actually declined in recent years due to the increasing market share of SUVs and minivans. Net imports of oil continue to increase and domestic oil production has declined.

The Clinton/Gore Administration is proud of its record on energy policy and on our progress in achieving the nation's energy goals. Clearly, however, much remains to be done. Secretary Richardson has called on the Congress to work with us in a bipartisan fashion to pass legislation for those energy incentives and programs which require Congressional action, namely comprehensive electricity restructuring, tax incentives for oil and gas production, energy efficiency and alternative fuels, the reauthorization of EPCA, the creation of a home heating oil reserve in the Northeast, and a supplemental appropriation to replenish emergency LIHEAP funds before we enter the summer power season.

We look forward to working with you in the days ahead. If we are going to meet the nation's energy needs of the 21st century, we have neither the time – nor the energy -- to waste.

Refrigerators and Air Conditioners:

Energy efficiency improvements in residual refrigerators and air conditioners, as a result of new standards, are expected to eliminate the need for eight 500 megawatt power plants(8 GW). Tax credits could accelerate the savings by increasing the demand for more efficient products in advance of the effective date of the standards. In addition, tax credits can stimulate demand for products with higher efficiencies than required by standards.

If half the new homes meet PATH goals, then ten 500 megawatt plants can be avoided(5 GW). The administrations tax credit could increase consumer demand for PATH houses.

Power Plants:

A one percent reduction in the US electricity consumption would result in avoiding power generation in eleven 500 megawatt power plants(6.5 GW).

Given total US generating capacity of 740 GW, the summer peak requirement could exceed the generating capacity by 10-14 GW

In California, with a generating capacity of 54 GW, the summer shortage may reach 4% or 2.2 GW

Hoover dam - 2000 megawatts

These #'s don't add up.

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Hoover dam - 2000 megawatts

Generating Capacity

780,000 mw's — Nationally

7800 mws from 1% eff.

= 7 or 8 nukes, or
14 or 15 coal plants

Consumption

Refrigerators use 2% of elec.
(15,000 + mw's)
— 30 coal plants, or
— 15 nukes

inefficient

~~Air conditioners~~ 30% increase/equals
2,500(?) ~~5,000~~ mw's
new capacity.

5 big Nukes/

—

☆ 30% ↑ increase in efficiency of refrigerators would be equivilent to adding
3/10 ~~10~~% capacity
~~2,500~~ 3,500 ~~5,050~~ MWS } 3 big plants.

5 ~~[illegible]~~ dams on Snake River
-8

☆ clothes washers
1,500 MWS
40% [illegible]

Draft; 5/25/00; 9 a.m.; Gibson

Energy Policy Speech Outline

I. Introduction. U.S. now enjoying the longest economic expansion in its history. Fueling – literally – this booming economy has been a steady, reliable supply of affordable energy. Challenge for America now is to ensure that we continue to have access to energy that is affordable, reliable, and safe -- both for our environment and the health of our citizens. There are essentially two visions about how we can meet this challenge.

- **First, there is the balanced, forward-looking approach.** This approach seeks to:
  - Diversify our energy supply;
  - Infuse our energy sector with both efficiency and competition;
  - Protect our environment and the health of our citizens;
  - Protect our citizens against emergencies in the energy market.
  - This is the approach Administration has been pursuing these past seven years.
- **Second, there is the short-sighted, backward approach.** This approach:
  - Looks solely at the supply side of the equation;
  - Main - if not only focus - is drilling more holes in the ground & the ocean bottom;
  - It says never mind whether or not this is most efficient way to meet our energy needs, or how ecologically sensitive the area;
  - Never mind the lost opportunities in efficiency for consumers and businesses;
  - And never mind preparing America for emergencies;
  - This is approach favored by Republicans in Congress.

Here to tell you that the President and Vice President are not going to accede to Republican vision. They believe passionately that building a sound energy future – one that integrates economic and environmental concerns – is absolutely critical to America's future. And they are willing to fight for it.

II. The Administration's Comprehensive, Forward-Looking Energy Policy. The Administration has in place a package of investments, tax incentives, and regulatory measures to expand our supply base; slow the growth of demand; and protect the environment. We have accomplished much – and have proposals on the table that will allow us to accomplish still more.

A. Power Sector

Supply Side

- Investments to develop clean coal technologies, expand life of nuclear plants, environmentally sound hydro resources.
- Investments & tax incentives to spur development of wind, solar & geothermal
- Restructuring legislation to promote competition, efficiency, reliability. Would provide $20 billion in savings to American families while helping the environment.

Demand Side

- Investments in R&D to make homes and buildings more energy efficient
- Weatherizing low-income homes, reducing homeowners costs and reducing demand

Specifics??

- Tax credits for energy efficient homes
- Reducing Federal energy use
- Raising Federal appliance standards
- Promoting Energy Star products and buildings
- Proposed Clean Air Partnership to help communities become more energy efficient

B. Transportation Sector

Supply Side

- Energy diplomacy to expand supply base
- Investments and tax incentives to support the domestic oil industry
- Responsible drilling on Federal Lands and in Federal Waters
- Improvements in royalty collection system for oil and natural gas (lowering costs)
- $289 million in proposed investment in bioenergy initiative that will help us develop new, cleaner fuels for our cars
- Tax incentives for bioenergy production
- Ultra-Clean Fuels Initiative aimed at producing cleaner fuels in existing refineries

Demand Side

- Investments for making vehicles more fuel efficient (PNGV & 21st Century Trucks)
- Tax incentives for electric, fuel cell, and hybrid vehicles

CAFE – "3mi/galon"?=___

C. Preparing for Emergencies. Despite our best efforts, fact remains that we import a sizeable portion of the oil we consume. To mitigate risks that arise from this, Administration supports:

- Continued authorization of Strategic Petroleum Reserve
- Creation of Northeast/New England Home Heating Oil Reserve
- Full funding of emergency fund in the Low Income Home Energy Asst. Program

D. Integration of Environmental Concerns. Because the Administration's energy policy takes a balanced approach – looking at supply and demand; looking at cutting edge technologies – we have been able to integrate environmental concerns into our energy policy. Many of the initiatives I've discussed have obvious environmental benefits, but also look at big picture:

- Since 1990, economy has grown 35%
- But emission of pollutants, like SOx and NOx, are down.
- Even carbon emissions – leading ghg – has grown by considerably less (___%) than the economy.

Data starting to prove the President right. We live in a fundamentally new era where the Big Idea of the industrial revolution – that you had to pollute more to grow more – just isn't true any more if you make wise policy choices.

III. The Energy "Policy" of the Republican Congress. Administration's energy policies have accomplished much. But much also remains to be done. We have real proposals on host of critical energy issues that are before the Congress right now – and the ball is in their court.

A. Under Republican leadership, Congress has failed act responsibly:

- Failed to extend authorization of Strategic Petroleum Reserve
- Failed to create a home heating oil reserve;
- Failed to replenish Low Income Home Energy Assistance Program Emergency Fund;
- Failed to enact comprehensive electricity restructuring
- Failed to enact tax incentives to dupport domestic oil industry and promote renewables;
- Failed to enact tax incentives to support development of more efficient cars.
- Loaded up spending bills with anti-environmental, anti-common sense riders that throw a wrench into formulation of forward-thinking energy policy.

B. Republican Priorities. Every one is talking about the new Disney movie, Dinosaur. But if you want to see a really scary fossil, you ought to take a look at the Republican energy policy now stalking the halls of Congress. Republicans focus only on the supply side and only a narrow part of the supply side – the fossil side.

- More drilling in Arctic National Wildlife Refuge
- More drilling on Federal lands
- More drilling offshore
- President's energy policy is aimed at 21st century. Republicans is aimed at building a bridge to the 19th century.
- The issue is not whether we are running out of oil – we're not. But we didn't move out of the stone age because we ran out of stones. We did it because we found better ways. We must have more than a stone age energy policy. We need a balanced policy that makes the best use of traditional energy sources while promoting the energy sources and practices of the future.

C. Choices Are Clear

- Our plan maximizes America's opportunities to continue receiving affordable energy; their plan puts all our eggs in one basket and ignores other critical steps we need to take.
- Our plan improves the energy efficiency of our economy; their plan ignores these opportunities.
- Our plan puts us in a position to continue making progress on near-term environmental threats such as protecting wilderness and cleaning up our air and long-term threats like climate change; their plan ignores these threats or doesn't believe they are real.

[need more here]

IV. Where This Leaves Us. Thanks to the delay, inaction, and obstructionism of the Congress, America has been left unprepared or only half-prepared for many of the energy challenges of both today and tomorrow. Specifically:

- Reliability
- Riders
- CAFÉ
- Knollenberg/Emerson
- Budget

[need to flesh these out – need language on reliability from Ron/DOE]

V. Conclusion.

THE WHITE HOUSE

WASHINGTON

NEC OIL/ELECTRICITY PRINCIPALS MEETING

Thursday May 25, 2000
4:00pm; Roosevelt Room

AGENDA

capacity - generation
" - transmission
- cuts to efficiency

I. Update on Oil/Gasoline Markets and Electricity

II. U.S. Approach to Upcoming OPEC Meeting

III. Department of Energy Plan to Address Electricity Outages

IV. Review of Energy Message and Messenger

DETAILS OF THE CLINTON/GORE ACTIONS TO ENHANCE AMERICA'S ENERGY SECURITY

Energy-Efficiency Enhances Energy Security And Strengthens The Economy: The strong performance of our economy over the past year, despite oil price rises, underscores the dramatic improvements in energy efficiency and reliability over the past quarter century. While past oil shortages have taken a significant toll on the U.S. economy, the recent increases in oil prices have yet to have a major impact on the U.S. economy. Increased energy efficiency – in cars, homes, and manufacturing – has helped insulate the economy from these short-term market fluctuations. In 1974, we consumed 15 barrels of oil for every $10,000 of gross domestic product. Today we consume only 8 barrels of oil for the same amount of economic output. But we can do even better.

President Clinton And Vice-President Gore Today Announced Important Steps To Promote Energy Security & Efficiency In America. These Steps Include:

I. Establishing A Regional Home Heating Oil Reserve: The President remains concerned about the effect that future shortages of home heating oil may have on consumers of home heating oil, particularly in the Northeast and New England. In order to reduce the likelihood that future shortages will harm consumers, the President will:

- Support The Establishment of a Regional Reserve: The President supports the creation of a home heating oil reserve with an appropriate trigger in the Northeast to combat future product shortages. In the event of home heating oil shortages, heating oil can be sold from the reserve in order to increase the supply on the market.

- Direct DOE To Undertake Necessary Environmental Reviews: The President has directed the Department of Energy to begin the appropriate environmental reviews for the creation of a home heating oil reserve in the Northeast.

- Call on Congress to Establish Reserve Through Legislation: The President calls on Congress to pass legislation that authorize the creation of a regional product reserve, and includes an appropriate trigger. The President reserves his right to establish a reserve under his existing authority, subject to the outcome of the environmental reviews, in the event that Congress fails to act.

II. Reauthorizing the Strategic Petroleum Reserve: Current authorization to operate the Strategic Petroleum Reserve expires on March 31st, even as OPEC oil ministers will be meeting in Vienna to discuss production quotas. In order to ensure that the President maintains the ability to use all available tools to respond to the needs of the United States economy, he will call on Congress to immediately reauthorize Titles I and II of the Energy Policy and Conservation Act, which authorize the Strategic Petroleum Reserve and the International Energy Program at the Department of Energy.

III. Enacting A Comprehensive Tax Incentive Package: In order to insulate the economy from the effects of future energy price increases, the United States needs comprehensive and balanced package of tax incentives. This comprehensive approach includes support for domestic oil producers to reduce our reliance on oil imports and must include incentives to continue expanding renewable energy and increasing the energy efficiency of our economy. These tax proposals are either paid for in the President's budget or will be paid for with offsets.

A. Preserving Productive Capacity of the Domestic Oil Industry: In addition to calling for steps to decrease our demand for oil through increased efficiency, the President is proposing new steps to support new domestic exploration and production, and to lower the business costs of producers when oil prices are low. These tax proposals will cost less than $1 billion over ten years. The Administration will also continue examining opportunities to preserve marginal well production.

- **Support New Domestic Exploration and Production**: Major technological advances in oil exploration, such as three- and four-dimensional seismic drilling, are helping us to find more oil, at greater depths, on and off-shore. At the same time, these technologies have reduced the environmental footprint left by exploration and production to 1/10th the size it was 25 years ago. We need to encourage the use of these advanced technologies at the same time we support exploration for oil and gas.

✓ Expensing of Geological and Geophysical Costs: The President is proposing to support domestic exploration and production by adjusting the treatment of the costs of exploration and development -- geological and geophysical costs -- in the tax code. Under current law, geological and geophysical costs may be deducted in current year if exploration activity was unsuccessful, but must be capitalized if the exploration activity was successful. By allowing the industry to expense these costs, we will be encouraging the discovery of new reserves. The Department of Energy estimates that G&G will add 126,000 barrels of oil a day to domestic production.

- **Allowing Expensing of Delay Rental Payments**: A "delay rental payment" is an amount paid by a lessee to the lessor of a petroleum resource when the lessee does not begin producing commercial quantities of oil or natural gas as soon as was agreed to. The delay rental payment is intended to compensate the lessor for the royalties he does not receive while production is delayed. Currently, the Federal tax code requires delayed rental expenses to be capitalized to the depletable base of the property to which they relate if the property is being held for development. Prior to 1993 all delayed rental payments were allowed to be expensed in the year incurred. Allowing producers to expense delay rental payments will lower the cost of doing business on Federal lands.

- **Examining Measures to Preserve Marginal Production**: The Administration will continue to examine measures to preserve marginal well production, which accounts for over 20 percent of on-shore oil production in the lower-48 states.

B. Improving the Energy Efficiency of the Economy: Any tax package to improve the energy security of the country must include incentives to improve energy efficiency and promote the use of renewable energy. The President has proposed:

• **Tax Credits For Electric, Fuel Cell, and Qualified Hybrid Vehicles.** Cars and light trucks (including minivans, sport utilities, and pickups) currently account for about 40 percent of the nation's oil consumption. Tax credits for electric, fuel cell, and hybrid vehicles will help to move advanced technologies that use less or no oil from the laboratory to the highway. President Clinton is calling for Congress to:

✓ Extend the current tax credit for electric vehicles and fuel cell vehicles. Under current law, a 10 percent credit, up to $4,000, is provided for the cost of qualified electric vehicles and fuel cell vehicles. The credit begins to phase down in 2002 and phases out in 2005. The President's proposal would extend the tax credit at its $4,000 maximum level through 2006.

✓ Pass tax credits for hybrid vehicles. The President proposes a $500 to $3,000 credit, depending on the vehicle's design performance, for all qualifying hybrid vehicles, including cars, minivans, sport utility vehicles, and pickup trucks.

• **Tax Credits for Efficient Homes and Buildings.** Increasing the efficient use of power will reduce our reliance on fossil fuels. To encourage energy efficiency, the President is calling on Congress to pass tax incentive that will promote the use of energy efficient practices and technologies in our homes and buildings.

✓ Tax credit for new energy efficient homes. To encourage the purchase of new energy efficient homes, the President proposes a tax credit of between $1,000 and $2,000 for new energy efficient homes.

✓ Tax credit for energy efficient equipment in new and existing homes or buildings. To encourage the purchase of electric heat pump water heaters, natural gas heat pumps, and fuel cells, the President proposes a tax credit equal to 20 percent of the cost of the investment, subject to a cap, for equipment purchased between 2001 and 2004.

C. Enacting Tax Credits To Diversify Fuel Sources in the Economy: The President's Council of Advisors on Science and Technology, in its 1997 report to the President recommended that the federal government invest in developing a broad portfolio of energy sources. To promote the development of these new energy sources, the President has proposed:

• **Tax Credits for Efficient Non-Petroleum Based Sources of Power:** In support of the PCAST recommendation, the President has proposed, and calls on Congress to pass tax credits to promote innovative and sustainable sources of energy supply including:

✓ Tax Credits For Solar Energy Systems. A 15 percent tax credit will encourage the purchase by consumers and businesses of solar energy systems. The maximum credit would be $2,000 for rooftop photovoltaic systems and $1,000 for solar water heating systems.

✓ Tax Credits For Wind Power. Current law encourages the production of electricity from wind through a tax credit of 1.5 cents per kilowatt hour (adjusted for inflation after 1992). The current tax credit covers facilities placed in service before January 1, 2002. The President proposes a 2.5-year extension of this tax credit.

✓ Tax Credits For Electricity Produced From Biomass. Biomass refers to trees, crops and agricultural wastes used to produce power, fuels or chemicals. This package of credits would:

- Extend Tax Credits For Closed Loop Biomass: Extend current "closed-loop" biomass credit of 1.5 cents per kilowatt hour for 2.5 years.
- Provide Tax Credits For Open Loop Biomass: Expand the availability of the biomass credit of 1.5 cents per kilowatt hour to include "open-loop" biomass (certain forest-related resources and agricultural and other sources) for facilities placed in service from 2001-2005, and provides a 1.0 cent credit for electricity produced from 2001-2003 from facilities placed in service prior to January 1, 2001.
- Provide Tax Credits For Cofiring Biomass: Add a 0.5 cent per kilowatt hour tax credit for electricity produced by cofiring biomass in coal plants from 2001-2005.

✓ Tax Credits For Methane from Landfills: Adds a 1.5 cent per kilowatt hour credit for electricity produced from landfills not subject to EPA's 1996 New Source Performance Standards/Emissions Guidelines (NSPS/EG) and 1.0 cent per kilowatt hour for landfills subject to NSPS/EG. Qualified facilities would be facilities placed in service after December 31, 2000 and before January 1, 2006.

IV. Making Common Sense Investments In Promoting Energy Efficiency And Alternative Energy Technologies. In addition to providing tax credits to promote domestic oil production and energy efficiency, the President and Vice President have already presented budget requests for appropriations that will further promote energy security. They have proposed a budget that includes over $1.4 billion next year to accelerate the research, development, and deployment of alternative and more efficient energy technologies.

- **$275 Million To Make America's Homes and Buildings More Efficient**: The Administration has proposed funding for research to make offices, homes, and appliances 50 percent more energy efficient within a decade and has proposed $275 million in the budget to help do so. People understand what that means for their home heating bill. Overall, meeting this goal would save consumers $11 billion a year in energy costs.

- **$173 Million To Weatherize Low Income Households**: Our budget proposes expanding DOE's Weatherization Assistance Program, which helps low-income households make their homes more energy efficient. These are the Americans that most need to reduce monthly energy costs. This program has already weatherized almost 5 million low-income homes and is saving 3.0 million barrels of oil each year. With funding from DOE and the states, we plan to add more than 150,000 homes to the list in the next year – which will save more than an additional 91,000 barrels of oil per year. Our budget seeks $154 million for this important program for next year and an additional $19 million for the current year in the FY 2000 supplemental appropriation.

- **$255 Million To Make America's Vehicles More Efficient**: Our *Partnership for a New Generation of Vehicles* is on track to deliver attractive, affordable cars that get up to three times the fuel efficiency of today's cars. A car that gets twice the fuel economy of today's comparable

vehicle is the equivalent of cutting the price of gas in half for the American driver. A typical consumer would save more than $300 a year in fuel costs and SUV owners would save more than $400 a year. By 2010, DOE plans to develop and commercialize fuel efficiency and alternative-fuel technologies that reduce oil consumption by nearly 700,000 barrels per day. By 2020, these technologies will reduce oil consumption by nearly 1.5 million barrels per day. Our budget seeks $255 million for PNGV.

- **$410 Million To Promote Clean Renewable Energy:** The President's FY01 budget proposes $410 million for DOE efforts to develop domestic sources of renewable energy, including wind, photovoltaics and geothermal energy. In addition, the President's Bioenergy Initiative will help us create new fuels for our cars that will reduce U.S. oil consumption, create new income opportunities in rural America, and meet environmental challenges, such as climate change.

- **Studies on Diversifying Fuels in the Northeast and New England:** The Northeast and New England are disproportionately reliant on home heating oil as a fuel to heat and power homes, businesses and industry. On February 16th the President directed Department of Energy to undertake a study of ways the region could diversify its energy sources thereby minimizing the effect of a volatile home heating oil market on the regional economy. The Department is also studying the effects of interruptible natural gas contracts on the home heating oil market in the region.

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Summary of Richardson Actions/Recommendations

Oil/Gasoline/Heating Oil Supply

- Ongoing discussions with producing nations
- Hill briefings for Oil and Gas Caucus, Northeast/Midwest Coalition
- IEA briefing
- International Oil Data Transparency Conference this summer, recently supported by APEC nations.
- Legislation on energy tax incentives. Should include marginal well tax credit and possible permanent extension of the SPR/RIK program.
- Update of Comprehensive National Energy Strategy

Home Heating Oil Reserve/EPCA Reauthorization

- DOE legislation to Hill by end of week
- EPCA letter to Hill today or tomorrow
- Op ed on Heating Oil Reserve (NYT?)

Gasoline Supply

- Process for/granting of RFG waivers over summer
- Periodic hill briefings on supply situation
- Approach members to see if MTBE compromise is possible
- Ask EPA – without delaying consideration of the proposed diesel fuel – to step back and reassess the cumulative impacts of the gasoline and diesel rules, the MTBE ban, new source review enforcment actions, and the Unocal patent, on gasoline and diesel prices and see if there is anything EPA can do to provide some relief.

60 Day Study

- Get through interagency as quickly as possible
- Reconsider provisions to remove disincentives in the tax code to utility conversions

Electric Reliability

- Possible meeting of utility CEOs with President
- Release of plan to reduce electricity use in federal buildings and at federal water projects during emergencies
- Table top power outage exercise
- Office of Energy Emergencies established
- FERC and state utility commission tariffs to reduce electricity demand
- Use of backup generators to reduce grid load
- Confidentiality agreement with industry to gain access to real time information
- Public service information campaign to save electricity

Congressional Vulnerabilities

- Have not passed comprehensive restructuring legislation
- Cuts in energy efficiency and renewables budget
- No EPCA reauthorization
- No tax bill passed/no oil, gas, efficiency and renewable tax credits
- No supplemental to replenish LIHEAP and increase weatherization funds
- Question as to whether appropriators will fund reliability, clean fuels, international clean energy and carbon sequestration initiatives
- No Heating Oil Reserve bill

THE WHITE HOUSE

WASHINGTON

OIL & ELECTRICITY MEETING
May 16, 2000

I. Update on Oil and Gasoline Markets

II. Report of Recent Conversations with Oil Producing Nations

III. Administration Legislative Issues Regarding Oil/Gas

IV. Update of Electricity Outlook

V. Options for Administration Actions
   A. Summary of Internal DOE Actions
   B. Actions Requiring Assistance/Cooperation of Other Agencies

VI. Legislative/Communications Strategy

- Next OPEC mtg June 21, We need 1.35 Mbarrel increase. We might be able to get 500,000 at that time.
- Murkowski/Lott bill introduced today. -- no efficiency; no demand side
- Restructuring bill
  - specifics
- Conservation vs. efficiency
- Long term increases in efficiency

Energy Speech Q&A

Q: The U.S. imports a greater percentage of foreign oil today than it did during the 1973 energy crisis. What specific measures does the Administration support to reduce our dependence on foreign oil?

A:

Q: Last week a Department of Energy report found that Alaska's Arctic National Wildlife Reserve contains more than 10 billion barrels of oil, which is about half the proven reserves of the rest of the U.S. combined. Given the sheer volume of oil on the Alaska's North Slope, is it realistic to think this source won't eventually need to be tapped?

A:

Q: Citing the failure of the President to veto a rider preventing EPA from raising fuel economy standards requirements, many environmental groups say that the Administration is not really dedicated to improving automotive fuel economy in the US. How do you respond to that charge? Does the Administration advocate raising fuel economy standards or not?

A:

Q: For years we've heard that new technologies--solar power, wind power, fusion--were going to provide cheap and clean domestic energy sources. Yet here we are in the 2000 still relying on oil, coal and nuclear energy. What leads you to believe that these new technologies you've discussed will really be viable in the marketplace?

A:

Q: Some oil industry analysts are blaming currently rising gasoline prices not on OPEC production levels but on bottlenecks in the gasoline refining process caused by new federal environmental requirements. What are you doing to help industry address these bottlenecks?

A:

S. 2557 – National Energy Security Act of 2000

TITLE 1 ENERGY SECURITY ACTIONS REQUIRED BY SECRETARY OF ENERGY

- Annual Report on Energy Independence.
- Forward National Petroleum Council Report to the President.
- Establish Interagency Work Group on Natural Gas to produce biannual report setting forth a policy and strategy.

TITLE 2 AMENDMENTS TO THE ENERGY POLICY AND CONSERVATION ACT AND ACTIONS AFFECTING THE STRATEGIC PETROLEUM RESERVE

- SPR Extension through December 31, 2003 (S. 1051).
- No SPR drawdown until President agrees with the Secretary of Defense that a drawdown will not impair national security and Secretary of Energy finds that a drawdown won't adversely affect the domestic petroleum industry.
- Establish an Interagency Panel on the Strategic Petroleum Reserve to produce a report on oil markets and SPR.

TITLE 3 PROVISIONS TO PROTECT CONSUMERS AND LOW-INCOME FAMILIES AND ENCOURAGE ENERGY EFFICIENCY

- Changes to the Weatherization Program to increase eligibility (S. 2429).
- Establishes a Summer Fill and Fuel Budgeting Program for State-led education and outreach program to encourage consumers to take actions to avoid seasonal price increases and minimize fuel shortages, including better use of storage (S. 2224).
- Authorizes an Energy Efficiency Science Initiative within the Department of Energy.
- Authorizes the Secretary of Energy to Establish a Northeast Home Heating Oil Reserve.

TITLE 4 PROVISIONS TO ENHANCE THE USE OF DOMESTIC ENERGY RESOURCES

- Requires an inventory and a report from the Secretary of the Interior and the Secretary of the Army on use of Federal facilities to generate hydroelectric power. Also, requires a FERC report on expediting hydroelectric licensing procedures.

- Requires an Nuclear Regulatory Commission report on the status of the nuclear power industry, including relicensing. Also, establishes an Office of Spent Nuclear Fuel Research within DOE to coordinate research on treatment, recycling, and disposal of spent nuclear fuel.

- Requires a report from the Secretary of Energy on the status of coal-fired power plants, including recommendations for a research, development, demonstration and commercial application program on coal technologies.

- Authorizes a Coal Liquifaction grant program within Department of Energy.

TITLE 5 ARCTIC COASTAL PLAIN DOMESTIC ENERGY SECURITY ACT

- Establishes a Leasing Program within the Department of the Interior for lands within the Arctic Coastal Plain (S. 2214).

TITLE 6 IMPROVEMENTS TO FEDERAL OIL AND GAS LEASE MANAGEMENT

- Authorizes States to take over regulation of oil and gas leases on Federal lands and requires efforts to streamline Federal oil and gas leasing and reduce costs. It also includes Federal royalty certainty and royalty reinvestment at certain prices (S. 1049).

TITLE 7 FRONTIER ROYALTY RELIEF

- Provides royalty relief in order to encourage oil and gas exploration in the remote OCS areas.

TITLE 8 TAX MEASURES TO ENHANCE DOMESTIC OIL AND GAS PRODUCTION

- Provides tax relief for oil and gas produces from marginal wells. It also allows expensing of oil and gas exploration costs and the delay of rental payments not otherwise chargeable to capital accounts (S. 2265).

- Allows 5-year carryback for losses attributable to independent oil and gas producers.

TITLE 9 TAX MEASURES TO ENHANCE THE USE OF RENEWABLE ENERGY RESOURCES, IMPROVE ENERGY EFFICIENCIES, PROTECT CONSUMERS AND CONVERSION TO CLEAN BURNING FUELS

- Expands tax credit for renewable energy sources to include wind and biomass facilities, and electricity produced from steel cogeneration.

- Promotes the use of natural gas by removing tax disincentives to utility connections.

- Allows expensing of costs associated with home heating oil storage.

- Provides a tax incentive for residential use of solar power.

S. 2557 – National Energy Security Act of 2000

Goal

- Decrease America's Dependency on Foreign Oil Sources to 50% by the Year 2010 through Enhancing the Use of Renewable Energy Resources, Conserving Energy Resources, Improving Energy Efficiencies and Increasing Domestic Energy Supplies.

Protect Energy Security

- Secretary of Energy, in consultation with the Secretary of Defense and the heads of other Federal agencies, must annually report to the President and the Congress on the progress which has been made to meet the goal of 50% dependency on foreign oil by 2010.

- Secretary of Energy must immediately review the National Petroleum Council Report on natural gas, report to the President by June 15, 2000 with recommendations, and establish an Interagency Work Group on Natural Gas to develop a comprehensive policy for the use of natural gas.

- Reauthorize and Amend EPCA to require a Secretary of Defense finding that any withdrawal from the Strategic Petroleum Reserve will not endanger national security.

Protect Consumers and Low Income Families

- Expand and improve the weatherization program.

- Create a State-led education and outreach program to encourage consumers to take actions to avoid seasonal price increases and minimize fuel shortages, including better use of storage.

- Authorizes the Secretary of Energy to Establish a Northeast Home Heating Oil Reserve and provides tax incentives for the construction and rehabilitation of home heating oil storage.

Increase Domestic Energy Supplies

- To enhance hydroelectric and nuclear power, requires reports on capacity and generation potential and recommendations to decrease the cost and time of relicensing. To enhance coal power, requires report on existing coal-fired plants and recommendations on a coal technology program. Establishes an Office of Spent Nuclear Fuel Research.

- Authorizes a Energy Efficiency Science Initiative and Coal Liquifaction grant program within the Department of Energy.

- To enhance domestic oil and gas supply: opens up the Arctic Coastal Plain, provides royalty relief for exploration in frontier areas, takes actions to streamline oversight of onshore Federal oil and gas leases, provides tax incentives for production from marginal wells and tax relief for independent oil and natural gas producers.

- To enhance the use of renewables and waste energy, extends tax credits for the production of electricity from biomass, including wood waste; electricity cogeneration from coke, iron ore or steel production; and provides tax credits for residential use of solar power.

- Promote the use of natural gas by removing disincentives to utility connections.

TO: ROGER

FROM: DAVID

RE: ELECTRICITY RELIABILITY

May 2, 2000

This summer a number of areas of the country are going to experience shortages of electricity leading to brownouts and possibly blackouts. Without a more substantial effort from the White House, Congress will blame us for failing to put in place appropriate energy policies to avert these shortages just as they did when oil prices rose sharply. Indeed, the Congress will link the two events to say that we really don't know what we are doing on energy policy.

Secretary Richardson has been taking some actions on this issue. His Power Outage Study Team (POST), after reviewing 1999 electricity reliability problems, has prepared 12 recommendations for action. He has held a series of regional reliability summits. He has also been urging Congress to pass electricity restructuring legislation with strengthened CERC authority to regulate reliability to ease reliability problems. Absent White House involvement, these activities have not received much visibility in the national press and may not be enough to inoculate us against charges that we have inadequate energy policies.

There could be a stronger White House role on this issue aimed at both stepping up government-wide policy on reliability and accelerating and improving communications about the problem and what all parties can do about it. On the policy front, many of the most significant measures that can make a difference are closely related to climate change, such as reducing electricity demand through building energy efficiency and promoting distributed generation like fuel cells. The reliability problems would give us another opportunity to show that Congress is failing to adopt our tax and budget package which would alleviate reliability problems. We should also advance new policy proposals. We should, for example, accelerate the distributed generation field – solar, wind, fuel cells – by supporting the adoption of a uniform standard for how these devices connect to the electricity grid, currently a major barrier that is preventing them from expanding their market as rapidly as possible.

Timing is critical. If the President is going to move on this issue, it is important to anticipate the problem and move ahead before we get into the peak summer air conditioning season when these shortages will occur. It's worth raising with John Podesta, Gene Sperling, and the Secretary to see how to proceed.

Reliability

Gloom and Doom

New Rules, Demands Put Dangerous Strain On Electricity Supply

Partial Deregulation Breeds Confusion in Industry; Summer Shortage Feared

Oracle Builds Its Own Bunker

By Rebecca Smith
Staff Reporter of The Wall Street Journal

Here's a sobering thought for the first summer of the new millennium: America is running short of electricity.

In pockets of the country, from New York to New Orleans, and from Chicago to San Francisco, shortages are likely to strike as the days lengthen and the temperatures rise. The East Coast got a taste of what's coming when a surprise heat wave hit this week just as many power plants were shut down for spring maintenance. Utilities and grid operators temporarily cut voltages, called on big industry to conserve and asked homeowners not to open their refrigerators too often.

"There will be outages and brownouts this summer," says Energy Secretary Bill Richardson. "America is a superpower, but it's got the grid of a Third World nation."

Consumption and Confusion

A decade-long economic boom is one reason for the strain. Americans have spent heavily on juice-guzzling appliances, boosting demand for electricity faster than capacity is being added. The other big reason is deregulation. Loosening the rules that governed how power is generated, supplied and sold was supposed to spur competition and efficiency. But the four-year-old deregulation process has spawned more confusion than improvement so far.

The numbers are stark. The U.S. has generating plants capable of cranking out 780,000 megawatts of electricity on a summer's day. But it will take a minimum of 700,000 megawatts to power the nation this summer, according to estimates by the Department of Energy. That leaves little surplus, and in any event, the power can't always get where it's needed most. The buffer of surplus electricity has been whittled by 60% over the past decade.

In the old days, utilities generated electricity and delivered it to customers in exclusive territories. To protect consumers from gouging, rates were regulated. The result was tremendous reliability but also inefficiency and waste.

Deregulation, now under way in 24 states, upsets that structure and allows new players – some affiliated with utilities, some not – to build power plants and sell electricity. Prices are set by competitive markets; risks are borne by investors, not ratepayers. At the same time, utilities are surrendering control of long-haul transmission lines to new nonprofit operators whose job it is to ensure fair access to the grid – the multistate system of high-voltage lines.

The result: a national electricity system that is vulnerable to disruptions caused by equipment breakdowns and human error as newly established regional grid operators assume responsibility for much larger areas than those formerly overseen by individual local utilities. For big energy users, who expected deregulation to bring lower prices, not lower reliability, it has been a worrisome experience.

Oracle Corp., for one, isn't taking any chances. Shaken by a huge power failure in August 1996, the big software company has spent more than $6 million to build its own electrical bunker, complete with a substation and generators capable of supplying thousands of servers with electricity at its headquarters in Redwood Shores, Calif. While giant manufacturers have done this for decades, other commercial users are starting to follow suit.

"What's the self-sufficiency worth to us?" asks Jeffrey Byron, Oracle's energy director. "Millions of dollars per hour. It's so important, you almost can't calculate the value, to us and to our customers."

The problem facing Oracle and others isn't likely to go away soon. The incomplete nature of deregulation has produced planning paralysis that could have long-term consequences. Old-line utilities shied away from adding capacity, worried they wouldn't be able to recoup their investments in a truly competitive energy market. Independent generators, who were supposed to fill the need, mainly held back until they could figure out which markets would be the most lucrative. Regulators, who were often confused as to whether they should be enforcing the old rules or helping tear them down, let things slide.

The upshot, today, is plenty of power plants on the drawing board, but few actually built. Roughly 162,000 megawatts of new generation has been announced – including a doubling of New England's power-plant capacity – but much of it will never get built, and it will be years before enough is added to have a substantial impact.

Utilities in states that haven't deregulated earn their return based on the amount of equipment they put into service. The joke used to be that the utility industry was the only one where you could boost profits by buying new furniture for your office.

The incentive system has changed in deregulated states. In some, such as California, some generators receive subsidies for remaining on standby even when their power isn't needed. But these kinds of deals are considered temporary and companies that want to build new plants can't be sure that they will benefit from similar arrangements.

That means new plants primarily are getting built where the markets look most profitable. That's not necessarily where needs are the greatest, since an elaborate system of price caps sometimes suppresses the rising prices that signal scarcity.

One City's Problems

San Diego is a good illustration of how deregulation isn't working out as expected. The flourishing city, home to cell-phone supplier Qualcomm Inc. and a slew of other high-tech firms, doesn't have enough local generating plants to meet its growing needs. It also is poorly connected to plants elsewhere in the region. The transmission lines simply aren't numerous enough to allow San Diego Gas & Electric Co., a unit of Sempra Energy Inc., to import enough juice, according to California Independent System Operator, a nonprofit corporation that manages the state's electric grid.

That leaves San Diego dependent on the two existing generators, Dynegy Inc. and Duke Energy Corp., that recently bought the plants from San Diego Gas & Electric. More plants are needed, but many generators want a special price zone set up before they will build within San Diego, because its transmission problems limit their ability to sell power outside the area. Economists believe, however, that such a small market wouldn't have enough bidders to produce competitive prices, says Severin Borenstein, director of the University of California Energy Institute at Berkeley.

Because demand for electricity isn't as price-sensitive as it is for most commodities, generators could raise prices by almost 30-fold whenever demand peaks, while still staying within a statewide price cap. That's because the generators would know that little electricity could flow in from the outside and drive down prices, Mr. Borenstein says.

Other generators say prices are just one of San Diego's problems. Under California's tough environmental rules, every molecule of nitrous oxide emitted by a new industrial source must be offset by nitrous-oxide reductions from an existing source. PG&E Corp., the only company that is trying to build a new plant in San Diego, has rummaged around for such offsets for the past two years.

What it has come up with is pretty extreme. Since San Diego has little in the way of smokestack industry, PG&E is negotiating with private transport companies and the city government to convert dozens of garbage trucks and harbor boats from diesel to cleaner-burning liquid natural gas. That should produce enough offsets for it to build a 500-megawatt plant a few miles from the Mexican border.

"This'll work for us, but barely," says Chris Iribe, president of the western region for PG&E's National Energy Group. "I have no idea what the next guy is going to do when he wants to build a plant. There's nothing in the air-quality rules that sees any special value to a power plant. It's treated like any other factory."

While the situation in San Diego is tough, it isn't unique. Under the old system, energy surpluses provided a good buffer against occasional mistakes. But now, what would have been a minor setback in the past can be devastating.

A 10-Year Snapshot

Take weather forecasting. Entergy Corp., a New Orleans-based utility for four Southern states, belatedly jettisoned a software program based on 30-year averaging that understated the effects of global warming. Expecting cooler weather than what it experienced last year, Entergy was

caught flat-footed when nine of its generation plants wilted in the heat. The company wasn't able to buy enough electricity from the spot market to make up the deficit.

Outages throughout Entergy's four-state territory ensued. The new forecasting model takes a 10-year snapshot, revealing a trend toward hotter summers, spurring the company to secure better sources of emergency power.

What Entergy and others are finding out is that the U.S. has become a country in which demand climaxes in the summer and at ever-higher levels. That wasn't always the case. Up until a few years ago, demand was heaviest in winter because of heating. Experts say the shift to summer peaking stems from a population shift to warmer climates, insistence on air-conditioned comfort—especially for finicky computer equipment—and the fact that it simply takes more energy to cool a room than to heat it.

Forecasting errors of a different sort rattled the mid-Atlantic region last summer, also a legacy of more relaxed times in the power patch. The grid operator there, PJM Interconnection LLC, misjudged the potential output of electricity plants in five states and the District of Columbia. That's because it relied on the "nameplate rating" of the plants, the amount of electricity the manufacturer says the plant can produce.

PJM found that 54 generators were cranking out only 70% of what was expected—a shortfall equivalent to the output of 18 big power plants. The grid operators' demand projections weren't much better. A 10% underestimation of need by PJM resulted in voltage disruptions that produced brownouts.

The system can't absorb miscalculations very gracefully anymore. "Make a mistake, and you're using your spare tire—reserves—pretty quick," says Paul Elbert, executive vice president of Commonwealth Edison in Chicago.

Weak Links

While forecasting is expected to be better this year around the country, other problems are tougher to fix. One is the design of the country's transmission system. The U.S. is generally well-wired, but some of the fastest-growing parts of the country, such as San Diego, are virtual islands in the vast electricity grid. San Francisco, Long Island and Florida all have inadequate links to larger regional electric networks. Mr. Richardson, the energy secretary, says he doesn't even like identifying the regions at greatest risk because, as he puts it, he's afraid of "causing public panic."

Fixing transmission's weak links won't be easy. San Diego Gas, for example, wants to hook up a second transmission line to Southern California Edison's system. But the 25-mile line has been talked about for a decade, and San Diego Gas still hasn't filed a formal proposal with regulators. That frustrates even some of deregulation's staunchest backers. "New power lines in Southern California? Good luck. Forget it," says Jessie Knight, the executive director at the San Diego Chamber of Commerce and a former member of California's Public Utilities Commission. "Nimbyism is too strong here."

But when it comes to the not-in-my-backyard syndrome, it's tough to beat Florida, where the power of old-line utilities hasn't been touched by deregulation. That leaves local utilities with monopoly powers despite looming shortages and the country's highest wholesale power prices for the coming summer season.

Duke Energy wants to build a 514-megawatt plant at New Smyrna Beach on property offered by a municipal utility. But the three biggest utilities in the state have gone to court to stop the project. In April, the Florida State Supreme Court sided with them, ruling that Florida law prohibits construction of merchant plants—which sell electricity on the wholesale market—by outside generators.

Looking to Neighbors

When shortfalls occur, more and more states are looking to their neighbors for relief, setting the stage for intraregional conflict. The nation's two most populous states, California and New York, have become net importers of power, at peak times. If the summer is exceptionally hot, California could be short 4,000 megawatts beyond what it is able to beg or buy from other providers.

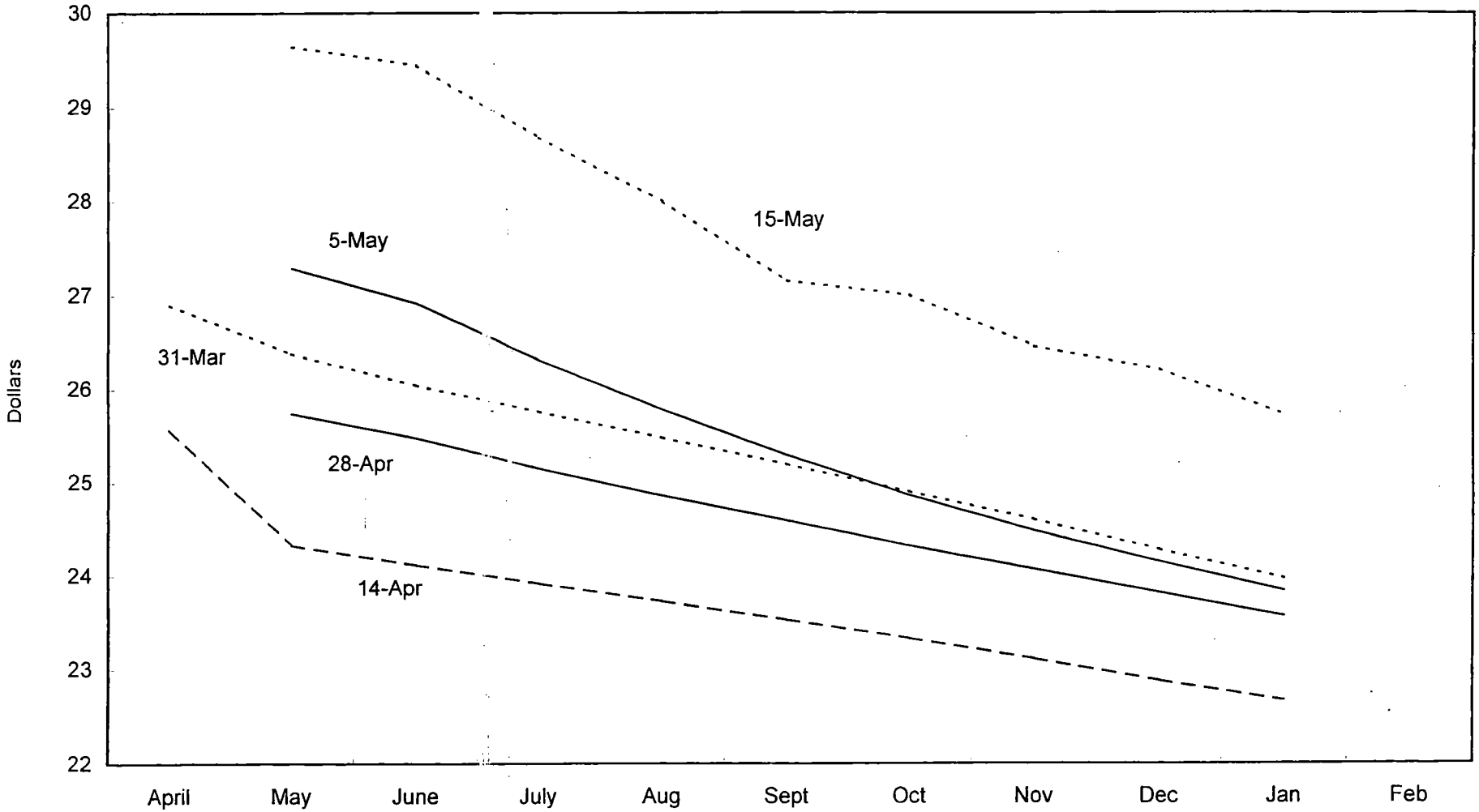
Terry Winter, chief executive of the grid-operating California Independent System Operator, doesn't want to cut off consumers involuntarily. So the operator has put in place a plan to pay big users up to $1,000 for every megawatt hour of electricity they forgo during peak hours this summer. One of them—the city of San Francisco—figured it might as well get paid if it was probably going to have to shut down some nonessential services anyway. But even with the financial incentives, admits Mr. Winter, the firm is still short of the commitments necessary to get California smoothly through a really hot summer.

All of these problems, especially in a nation that prides itself on finding solutions to complex engineering problems, is resulting in some serious soul-searching. Mr. Richardson, who has been barnstorming the country warning of the shortages, is now pushing the idea of deregulation legislation at the federal level and the creation of a kind of uber-regulator to oversee a cohesive national energy policy. In the interest of harmony, Mr. Richardson is proposing that the Federal Energy Regulatory Commission take the lead, stripping away some powers from state legislators.

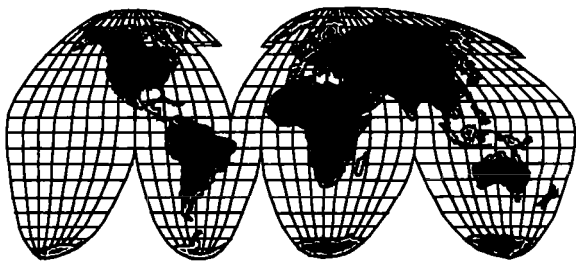
That doesn't sound like a bad idea to Oracle's Mr. Byron. "The digital economy depends on uninterrupted supplies of the highest-quality electricity," he says. "Something has got to be done."

2/2

Future Market Projections of Spot Oil Price
April 2000 - Jan 2001



Oil Market Overview



May 16, 2000

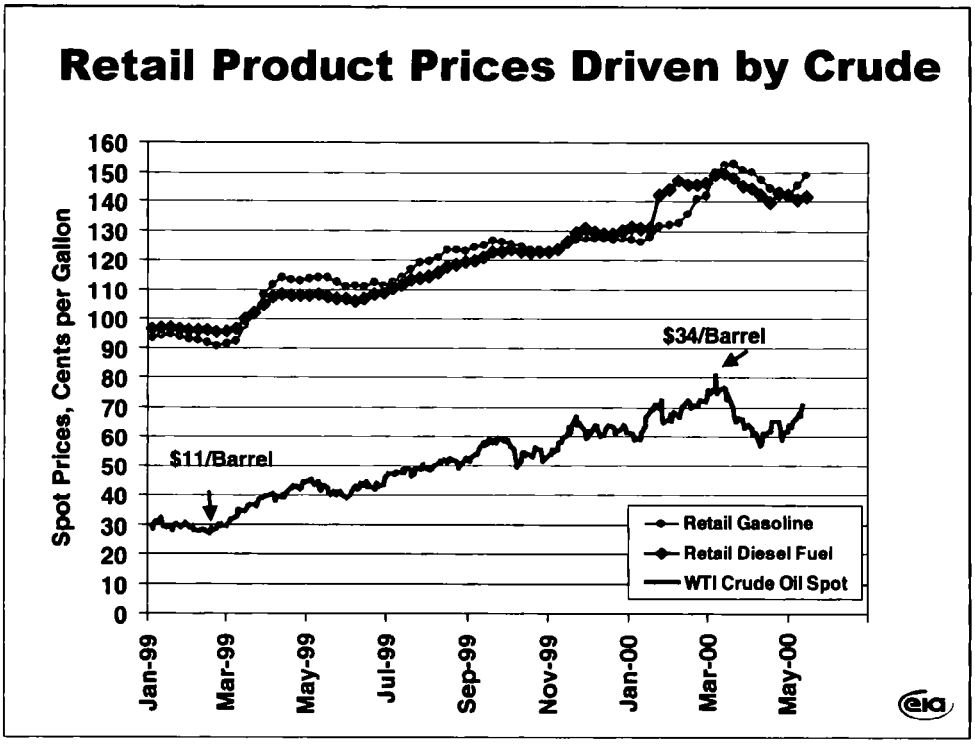
Energy Information Administration

www.eia.doe.gov

♦Even under the assumptions behind EIA's short-term forecast (relatively weak demand growth, a non-OPEC production increase of 700 thousand barrels per day in 2000, significant increases in Iraqi production, and a small increase in OPEC-10 production in the fourth quarter), WTI prices are expected to remain above $25 per barrel on a monthly basis for the rest of 2000.

♦Without additional oil in the third quarter, as well as the fourth quarter, OECD oil inventories are expected to end the year at the low levels seen in 1999.

♦To get OECD stocks back to more normal levels by the end of 2000, world oil supply would need to be about 1.3-1.5 million barrels per day higher over the second half of the year than is currently being forecast, even assuming high Iraqi crude oil production.



♦**Retail prices for both gasoline and diesel fuel reached historic levels this spring, driven mostly by the rise in world crude oil prices to their highest levels since the Persian Gulf War.**

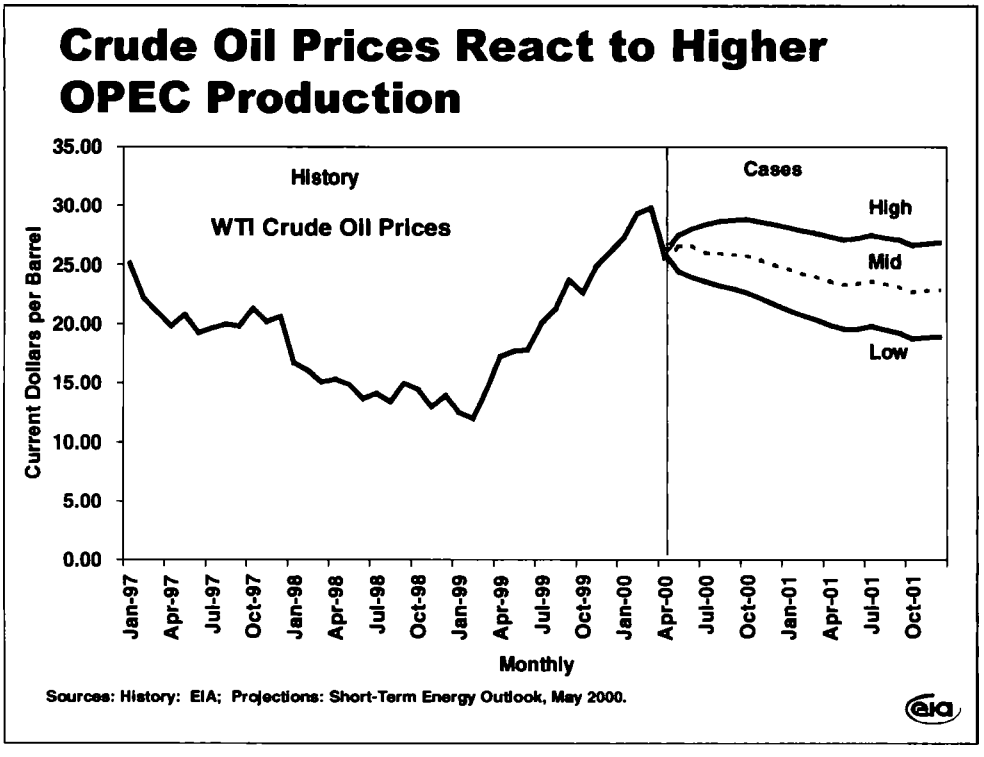
–The U.S. average retail gasoline price reached a peak of 152.9 cents per gallon on March 20, then retreated for 6 straight weeks before turning upward again on May 8, in response to several weeks of increases in spot crude oil and gasoline prices.

–Similarly, retail on-highway diesel fuel prices peaked at 149.6 cents per gallon on March 13, and have declined since, with the exception of a brief uptick during the week of April 24 and again the week of May 15.

♦While movement in underlying crude oil prices has been the major driver for prices of both products, seasonal factors and the U.S. supply/demand balance for each have also had significant influence.

–Gasoline prices have recently been pushed upward by concerns over the adequacy of summer supplies, including the uncertainties surrounding ability of import refineries to make Phase II summer RFG and the Unocal RFG patent issue.

– Diesel fuel prices, by comparison, rose sharply starting in late January due to low inventories and high demand for heating fuels. While they have recently softened, thanks to the end of the heating season, diesel prices may turn upward again if crude oil prices remain high. Strong demand this summer in combination with low stocks would also put upward pressure on prices this summer.



♦Current WTI prices of about $29 per barrel reflect uncertainties in supply, on top of inventories that are still low, despite some recent improvements.

♦**World oil prices are expected to show a gradual decline as increased oil production from OPEC and others enters the world oil market, although the actual path may not be as smooth as that shown on the graph.** The average price of WTI was almost $30 per barrel in March, but dropped to $26 in April as the market responded to the additional OPEC production. However, prices have strengthened again in the beginning of May, as growing gasoline production needs pull on the crude market in the face of low crude oil and gasoline stocks. EIA expects adequate OPEC supplies to be introduced into the market throughout the rest of the year to bring WTI crude oil price down to about $25 per barrel by year end.

♦**The falloff in crude oil price results in regular gasoline prices declining from about $1.52 in March to about $1.30 by the end of the year.**

♦These crude oil price projections reflect:

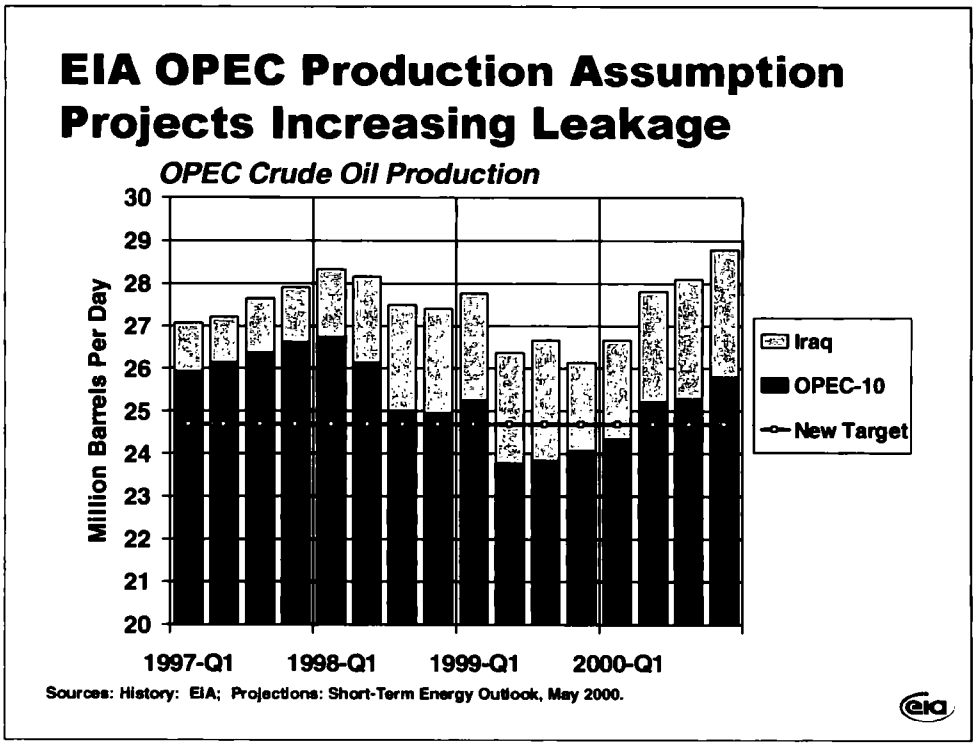
–Fairly low world demand growth during 2000 of 1.6 percent, or 1.4 million barrels per day.

–Non OPEC production growth during 2000 of 700 thousand barrels per day.

–Growth in Iraqi production of 700 thousand barrels per day from Q1 to Q4 2000. Iraqi production is estimated at 3.0 million barrels per day in the fourth quarter 2000.

–Growing OPEC leakage over the current OPEC target.

♦The usual STEO uncertainty range would have the price of WTI somewhere between $22 and $28 by the end of 2000.



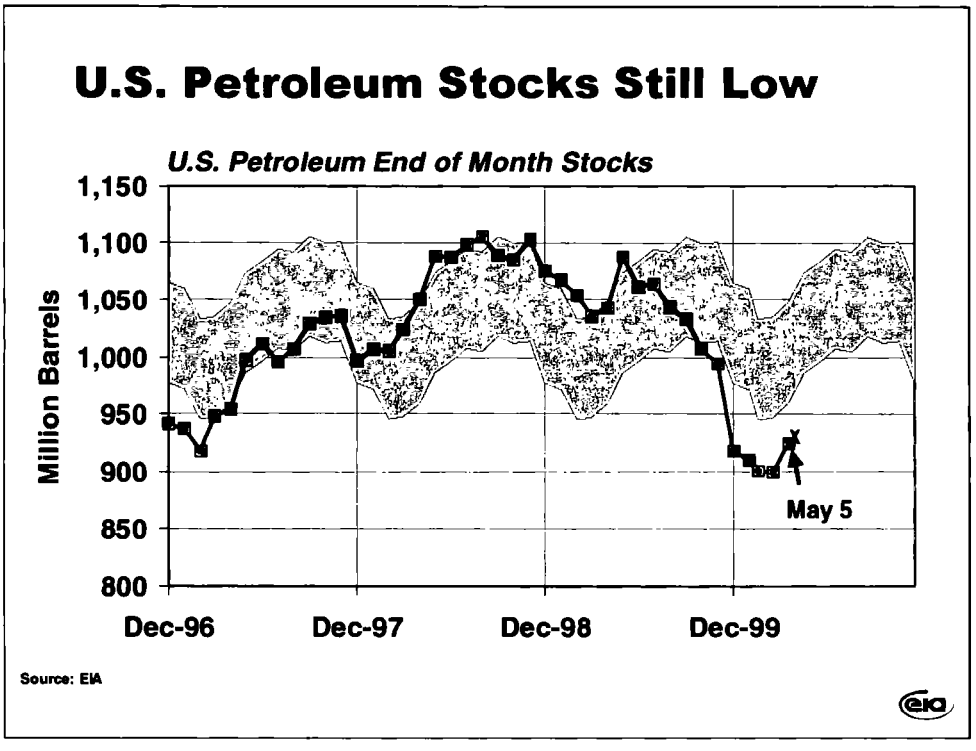
♦Production levels for all of OPEC (including Iraq) are assumed to rise about 2.2 million barrels per day from the first quarter to the fourth quarter this year.

♦The EIA base case assumes OPEC-10 production (excluding Iraq) will increase about 1.5 million barrels per day from first to fourth quarter, putting them almost 1.1 million barrels per day over their new quota by the end of 2000.

–In the second quarter, OPEC-10 production is assumed to exceed the new quota by 0.5 million barrels per day.

–OPEC-10 production in the third quarter is assumed to be close to second quarter production, and production in the fourth quarter is assumed to rise about 0.5 million barrels per day over second quarter.

♦Iraqi production is assumed to increase almost 0.7 million barrels per day from first to fourth quarter, which could be optimistic depending on their ability to keep their infrastructure intact.



♦In spite of recent OPEC production increases, current data show U.S. stocks to be very low, exposing the U.S. markets to an increased potential for volatility.

–End of April U.S. total stocks are about 35 million barrels or 4% lower than the low end of the normal range, while total stocks have improved some over the last several weeks, most of that is normal seasonal change.

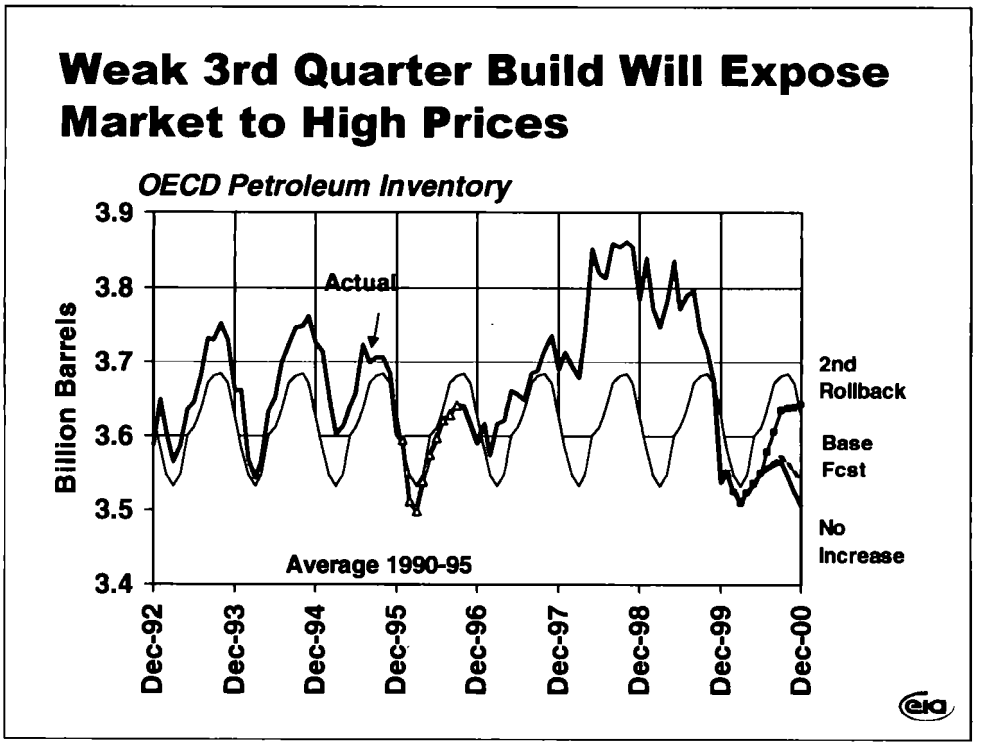
–EIA does not expect U.S. stocks to recover quickly, since refiners will be running close to capacity just to meet demand this summer.

♦In particular, the current U.S. inventory levels for crude oil and gasoline stocks are low, but improved in March and April.

–While crude oil inventories are still below normal levels, they have increased about 18 million barrels, or 6 percent, since the end of January. Nevertheless, much of the crude stock build is seasonal, with little gain relative to normal.

–Gasoline stocks at the end of February had dropped about 5 percent below the low end of the normal range. However, during March, they rose slightly, instead of dropping further as they normally would do. This allowed gasoline inventories to re-enter the low end of the normal band, where they seem to be holding.

♦The U.S. inventory data, which is accurate and timely, will be an important price barometer to watch. While the inventory situation is improving, it remains low, leaving little cushion to absorb unexpected events such as refinery or logistical disruptions.



♦Not only are U.S. stocks low, but world stocks are also low and expected to remain low this year. Even with EIA's assumed OPEC leakage increases and rising Iraqi production, supply is not sufficient in the base case for a normal stock build in either the second or the third quarter.

–The year 1996 provides an interesting comparison. In 1996, OECD stocks began the year very low, similar to this year, but in 1996 we saw close to a normal build through second and third quarters and prices declined from an April peak.

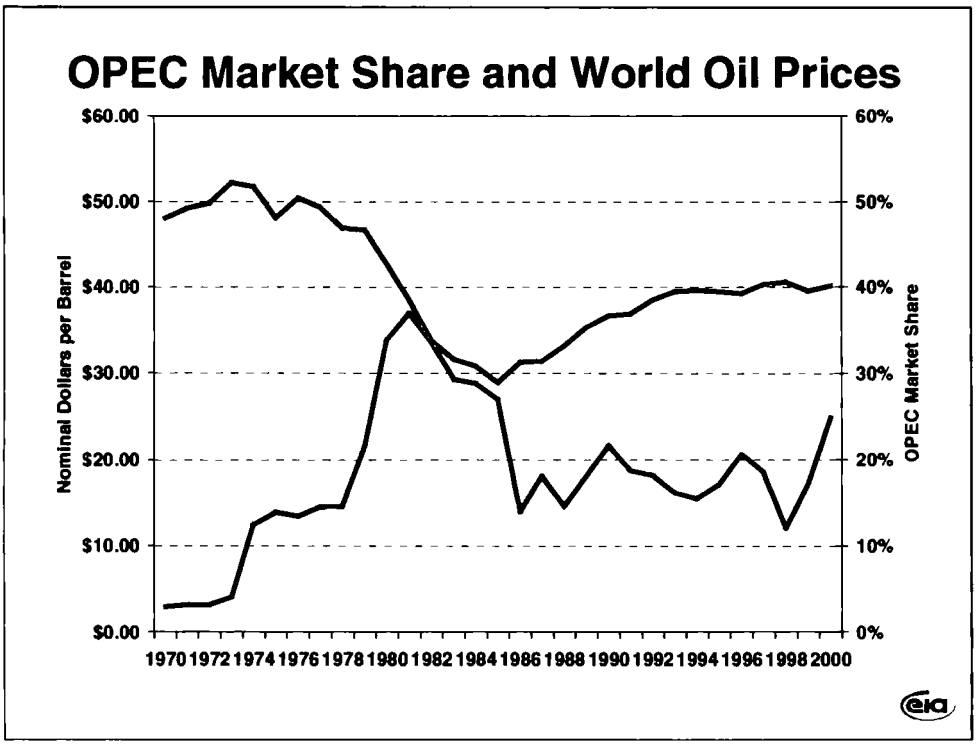
♦This year, prices fell with April's increase in OPEC production, but recently rebounded to earlier high levels. However, even if prices fall again for the remainder of the second quarter, they may turn back up in the third quarter, depending on the weakness of the third quarter stock build.

–Normally OECD product and crude oil stocks build during the second and third quarters, but the second quarter build could remain weak with few consequences.

–If there is little OECD product stock build during the second quarter, both U.S. and other OECD countries will have to build stocks by more than 1 million barrels per day during the third quarter.

♦If we progress through the third quarter with a weak build, speculation may again push prices upward, even before the fourth quarter draw gets underway. The low stock scenario shown on the chart illustrates the impact of no OPEC production increases in the third and fourth quarters. It represents movement towards a volatile environment, with prices in the $25-$30 range, possibly higher.

♦Should OPEC increase production 1.3 million barrels per day during the second half of the year over second quarter production, stocks would likely recover to more normal levels by year end, with prices in the low end of the $20-$25 range.



♦ **Since OPEC has become a dominant force in the world oil market, there has been an inverse relationship between large movements in oil prices and OPEC's share of world oil production**.

–For example, as oil prices rose dramatically in the 1970s, non-OPEC production increased, thus reducing OPEC's market share.

–But as prices fell back to about $20 per barrel (in nominal terms), OPEC's market share rebounded to about 40 percent of the world's oil production.

♦**In recent years, OPEC's share has remained at about 40%, but if OPEC succeeds in maintaining elevated prices over the midterm, non-OPEC production could again erode OPEC market share.**

– In the short term, OPEC's share might not change much, since there are only a few non-OPEC production areas which show promise for any large increase in production (offshore Brazil and offshore West Africa) in the next few years. Also, some major non-OPEC production areas (United States, parts of Russia, and possibly the North Sea) are either in sustained production decline or are not expecting large increases over the next couple of years as production stabilizes.

–However, this would be expected to change over a longer period as high prices relative to marginal costs would eventually spur higher investment levels.

DRAFT

Improving America's Energy Efficiency: Part of a Long-term, Common Sense Energy Policy

"What I want to do, because I think it's important for our long-term security, is get America in a position where the fuel efficiency of our vehicles is so great -- or our ability to use alternative-fuel vehicles, or dual-use vehicles, biofuels, mixed electric and gasoline-fuel vehicles that have automatically regenerating batteries -- that our capacity to do that is so great that we will not be reliant on the ups and downs of supplies, and the increases that might come in the future would have a much more limited impact on us."
-- President Clinton, February 16, 2000.

As America considers its long-term energy future, and as we deal with short-term market fluctuations, we must consider the fundamental benefits of becoming more energy efficient and using alternative energy. By pursuing an energy policy that allows us to get more from a barrel of oil, we can help shield the economy and consumers from future energy price shocks, while at the same time creating new job opportunities and reducing air pollution and greenhouse gas emissions.

This Administration has an energy policy to achieve this. The President and the Vice President have put in place or proposed a broad array of common-sense policy, budget, and tax initiatives to further these goals. Our policies and initiatives will accelerate the research, development, and deployment of clean and efficient energy technologies. The initiatives span the major energy using sectors of the economy: buildings, transportation, industry, and electricity.

While some believe that the way to respond to market fluctuations is to unbalance the budget and hurt the environment, the President and Vice President have a policy that rejects this false choice and that is putting us on a path to a more self-reliant energy future that will save Americans' money and protect our environment.

MAKING AMERICA'S HOMES AND BUILDINGS MORE EFFICIENT

- **R&D for Energy Efficient Homes.** *Partnership for Advancing Technology in Housing* is a partnership between the Federal government and building industry to develop and deploy affordable, safe housing technologies to make new homes 50 percent more energy efficient and to make at least 15 million existing homes 30 percent more energy efficient within a decade. Meeting PATH's goals would save consumers $11 billion a year in energy costs. The President's FY 2001 budget for building efficiency efforts, such as PATH, Energy Star, and Building America totals $275 million.

- **Tax Credits for Energy Efficient Homes.** Buyers of new homes that are 50% more energy efficient than current standards would receive a tax credit of $2000. Buyers of new homes that are 30% more efficient would receive a tax credit of $1000. A home that is 50% more efficient reduces demand for energy for both heating and cooling. This provides a double benefit -- consumers get a tax credit when they purchase their home, as well as the ongoing savings of reduced energy bills.

- **Labeling Energy Efficient Buildings.** Buildings in the top 25 percent of energy efficiency qualify for EPA's and DOE's "Energy Star Buildings" label. In 2001, EPA's buildings programs (both residential and commercial) will help reduce energy consumption by more than 70 billion kilowatt hours, resulting in over $5.5 billion in energy savings to participating consumers and businesses. By 2010, the savings will reach more than $30 billion per year.

- **Energy Efficient Appliances and Products.** Various DOE and EPA programs aim to promote the dissemination of energy efficient appliances and products:

  -- DOE is accelerating its program to establish **energy efficiency standards** for commercial heating and cooling, water heaters, and electrical distribution transformers, and will begin efforts to harmonize international energy-efficiency standards and test methods to promote exports of efficient U.S. products.

  -- EPA and DOE's **Energy Star Products** program saves consumers money and reduces greenhouse gas emissions at the same time by promoting the use of energy efficient products – everything from computers to refrigerators to central air-conditioning units. Proposed new funding will support the launch of new Energy Star product lines and will promote the Energy Star labeling program in 6-10 export markets. If we all used Energy Star products, America would reduce its energy bill by *$100 billion over the next 15 years!*

- **Federal Government Leadership in Energy Efficient Buildings.** On June 3, 1999, President Clinton issued Executive Order 13123 that requires each Federal agency to improve its energy efficiency in its buildings by 35% relative to 1985 levels by 2010. The Federal government is the largest energy consumer in the United States, and spends more than $4 billion annually to heat, cool, and power 500,000 buildings. Federal agencies have already reduced energy consumption 19 percent per square foot relative to 1985 levels. The President's action will also reduce greenhouse gas emissions equal to taking 1.7 million cars off the road, and save taxpayers more than $750 million a year.

- **Low-Income Weatherization.** DOE's Weatherization Assistance Program delivers home energy efficiency services, such as insulation, to low-income U.S. households, reducing energy consumption and costs. Since 1976, 4.8 million low-income homes have been weatherized. Some 75 million gallons of oil have been saved in the half a million weatherized homes heated by oil. Over 900,000 homes will be weatherized from 2000 to 2005, more than 10 percent of which use fuel oil for heating, saving an additional 15 million gallons of oil.

MAKING AMERICA'S VEHICLES MORE EFFICIENT

- **R&D for Energy Efficient Cars and Trucks.** *Partnership for a New Generation of Vehicles* is a government-industry effort that aims to develop attractive, affordable cars that meet all applicable safety and environmental standards and get up to three times the fuel efficiency of today's cars. In January 2000, the auto-industry partners unveiled their PNGV

"concept cars", keeping the program on schedule for meeting its 2004 goal. Similar government-industry efforts are aimed at developing cleaner, more efficient diesel engines for both light and heavy trucks. The President's FY 2001 budget includes $255 million for PNGV-related work. A new car which gets twice the fuel economy of today's average car would save customers more than $300 a year in fuel costs; SUV owners would save more than $400 a year. *By 2010, DOE will help develop and commercialize fuel efficiency and alternative-fuel technologies that reduce oil consumption by nearly 700,000 barrels per day. By 2020, these same technologies will reduce oil consumption by nearly 1.5 million barrels per day.*

- **New Tax Credits for Energy Efficient Cars.** The President's proposed tax package extends the current tax credit (of up to $4000) through 2006 for qualified electric and fuel cell vehicles and also includes a credit of $500-3000 for the purchase of a qualifying hybrid vehicles from 2003-2006.

PROMOTING CLEAN RENEWABLE ENERGY

- **R&D for Clean, Renewable Energy.** Over the past 20 years, Federal R&D has resulted in a 90 percent cost reduction in solar photovoltaics and wind power. The President's FY 2001 budget proposes a total of $410 million for DOE's solar and other renewable energy programs. The package includes expanded efforts in key renewable technologies, such as wind, bioenergy, photovoltaics, and geothermal energy.

  -- In 2001, U.S. wind-power generating capacity (using many technologies developed by DOE) will increase to 3,000 megawatts on-line (up from 2,000 megawatts in 1999). Under the *Wind Powering America* initiative, DOE will accelerate research on next-generation wind technologies with a long-term goal of supplying 5 percent of U.S. electricity needs by 2020.

  -- DOE's *GeoPowering the West* initiative seeks to supply at least 10 percent of the electricity of the American West with geothermal energy by 2020, with 20,000 megawatts of capacity installed.

  -- DOE is continuing research on low-cost hydrogen production and storage, prerequisites to the widespread use of hydrogen in Proton-Exchange Membrane fuel cells for hybrid vehicles and buildings, which will be ready within 5 years.

- **Bioenergy & Bioproducts.** On August 12, 1999, President Clinton issued Executive Order 13134 coordinating Federal efforts to accelerate the development and deployment of technologies that convert trees, crops and other biomass into a vast array of fuels and products. The President specifically called for tripling U.S. use of bioenergy and bioproducts by 2010. Meeting the President's goal would reduce U.S. oil consumption, create new income opportunities in agricultural communities, and meet environmental challenges, including global warming. To follow through on that commitment, the President is proposing $289 million to accelerate the development of bioproducts and bioenergy.

- **Tax Credits for Clean Electricity Production.** The President proposes to extend the current 1.5 cent per kilowatt hour tax credit for production of electricity from wind and closed-loop biomass and to provide new credits for electricity produced from open-loop biomass facilities, coal-biomass cofiring, and methane from landfills. These efforts will reduce demand for oil to produce electricity.

- **Electricity Restructuring.** The Administration's proposal to restructure the electricity industry will make the industry more competitive, save consumers at least $20 billion annually on their electricity bills, improve energy security, and reduce air pollution and greenhouse gas emissions. The Administration's proposal includes a requirement that utilities open up their distribution and transmission wires to all qualified sellers; a renewable portfolio standard to increase the use of renewable energy; a $3 billion per year Public Benefits Fund to spur greater investment in energy efficiency and renewable energy technologies; and a labeling requirement to inform consumers about clean energy options.

MAKING AMERICA'S INDUSTRY MORE EFFICIENT AND COMPETIVE

- **Industrial Combined Heat and Power (CHP) Systems.** DOE is developing new industrial CHP systems to capture thermal heat that would otherwise be wasted. These systems are expected to be 15 percent more energy efficient and 80 percent cleaner than conventional power systems and cut electricity costs by 10 percent. In addition, EPA and DOE are also working to eliminate barriers to the rapid dissemination of combined heat and power technology.

- **Voluntary Industrial Partnerships.** EPA is proposing to expand a host of industrial partnership programs that help businesses develop and implement win-win strategies for cutting energy use, saving on energy costs, and reducing both air pollution and greenhouse gas emissions.

- **Industries of the Future.** This DOE program works cooperatively with the nation's most energy-intensive industries – such as aluminum, glass, chemicals, forest products, mining, petroleum refining, and steel – on developing technologies that increase energy and resource efficiency. By 2010, industrial energy intensity (energy consumption per unit of output) will be reduced 25 percent below 1990 levels, increasing the competitiveness of U.S. industries through $30 billion in reduced energy costs (from 2000 to 2010) and saving 1.4 Quads of energy.

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release March 18, 2000

RADIO ADDRESS BY THE PRESIDENT TO THE NATION

The Oval Office

THE PRESIDENT: Good morning. In recent months, we've seen a rapid increase in the price of oil, and many are concerned about the effect on our economy. It's important to remember that while prices are higher now than they have been for some time, our overall economy is still the strongest it's ever been. Inflation and unemployment remain at historically low levels. But high oil prices are causing hardship for many Americans -- Americans on modest incomes that have to drive a long way to work, independent truckers that have big fuel costs.

We need to take action now for both the short and the long term, to protect consumers and strengthen America's energy security. In the short term, I'll continue to work with foreign countries to help close the gap between production and consumption. Several important oil-producing countries already have expressed their support for aproduction increase. But we also need to take a longer view -- one that rejects environmentally damaging alternatives, like drilling in the protected and treasured natural habitats of Alaska.

Today, I am announcing important new steps to reduce our reliance on foreign oil and fossil fuels, to protect our environment and to keep our economy strong. First, to reduce the likelihood that future heating oil shortages will harm consumers as they did this winter, I am proposing the creation of an environmentally sound home heating oil reserve in the Northeast that could supply additional heating oil to the market in the event of a future shortage.

Second, to insure that we have all available tools in the event of a crisis, I'm calling on Congress to immediately reauthorize the Strategic Petroleum Reserve, a critical part of our nation's insurance against national emergencies caused by interruptions in the supply of oil.

Third, for over two years, Congress has refused to pass common-sense tax credits I've proposed to promote fuel-saving cars of the future and energy-efficient homes, buildings and equipment. I'm proposing a comprehensive package of tax incentives to improve the energy efficiency of our society, to promote the use of alternative fuels, and to support increased domestic oil production. I call on Congress to act now and pass these critical measures without further delay.

Finally, it's long past time for Congress to fully fund the more than $1 billion I've requested to accelerate the research and development of more efficient energy technologies, including the use of alternative and more efficient fuels. We have to be clear: There's no overnight solution to this problem. Instead of taking short-sighted and risky steps now we might regret later, we should use this opportunity to start down the right path toward real, long-term energy security.

At the dawn of the 20th century, Theodore Roosevelt defined America's central task as leaving this land even a better land for our descendants than it is for us. If we take responsible action on energy security now, we can meet Roosevelt's challenge. We can also protect our environment and grow our economy well into the 21st century.

Thanks for listening.

END

Clinton/Gore Administration's Energy Efficiency and Clean Energy Policy

- As America considers its long-term energy future, and as we deal with short-term market fluctuations, we must consider the fundamental benefits of becoming more energy efficient and using alternative energy. The President and Vice President believe that we should be in a position where the American people are protected from energy price shocks while having access to the energy and fuel they need. *We can do this by increasing our energy efficiency and diversifying our fuel supply base.*

- Some believe that the way to respond to market fluctuations is to unbalance the budget and hurt the environment. *The President and Vice President reject that false choice and have a plan to put us on a path of a more self-reliant energy future that will save Americans money, create new job opportunities, and protect our environment.*

- *This Administration has already presented the Congress an energy policy to achieve this.* For example, the President and the Vice President have proposed a budget that includes over $1 billion next year to accelerate the research, development, and deployment of alternative and more efficient energy technologies, as well as $4.0 billion in tax incentives over five years to benefit our energy-reliant consumers and businesses.

- *This Administration has a tax-cut plan to provide long-term benefits.* Our common sense tax package on clean energy and energy efficiency provides tax credits for the purchase of energy-efficient homes, cars, and appliances.

    - President and Vice President has proposed tax credits of $1000 to $2000 for homes that are 30% to 50% more energy efficient. *Americans understand that a home that is 50% more efficient can cut their heating bill in half.* So under this proposal, consumers get a double benefit – a tax credit as well as ongoing savings from reduced energy bills.
    - We have proposed tax credits ranging from $500 to $4000 for energy efficient cars, such as electric, fuel cell, and hybrid vehicles. That's money in Americans' pockets right now for cars that will cost them less at the pump.
    - And, we have proposed, tax credits for clean energy production – such as, wind, biomass, and methane from landfills – that will reduce demand for oil to produce electricity.
    - *These are the kinds of tax cuts that will make a real difference in our energy future, and will save consumers more money in the long run than a small break on the gas tax.*

- *We Are Making America's Homes and Buildings More Efficient*:

    - The Administration has proposed $275 million in R&D efforts next year to make offices, homes, and appliances 50% more energy efficient within a decade. People understand what that means for their home heating bill. *Overall, meeting this goal would save consumers $11 billion a year in energy costs.*
    - We are accelerating efforts to establish energy efficiency standards for appliances and encouraging more Americans to use Energy Star Products. *If we all used Energy Star products, America would reduce its energy bill by $100 billion over the next 15 years!*
    - The President's recent Executive Order 13123 has made the Federal Government a

leader in building energy efficiency, saving taxpayers $750 million annually.

- We are expanding DOE's *Weatherization Assistance Program* that helps low-income households make their homes more energy efficient. These are the Americans that most need to reduce monthly energy costs. *This program has already weatherized almost 5 million low-income homes and is saving 3.0 million barrels of oil each year.* With funding from DOE and the states, we plan to add more that 150,000 homes to the list in the next year – *which will save more than an additional 91,000 barrels of oil per year.* Our budget seeks $154 million for FY 2001 and an additional $19 million for the current year in the FY 2000 supplemental spending bill.

- *We Are Making America's Vehicles More Efficient:*

  - Our *Partnership for a New Generation of Vehicles* is on track to deliver us attractive, affordable cars that get up to three times the fuel efficiency of today's cars. *A car that gets twice the fuel economy of today's comparable vehicle is the equivalent of cutting the price of gas in half for the American driver* and would save a typical consumer more than $300 a year in fuel costs; SUV owners would save more than $400 a year.
  - *By 2010, DOE will help develop and commercialize fuel efficiency and alternative-fuel technologies that reduce oil consumption by nearly 700,000 barrels per day.* By 2020, these technologies will reduce oil consumption by nearly 1.5 million barrels per day.

- *We Are Promoting Clean Renewable Energy*:

  - The President's FY01 budget proposes $410 million for DOE efforts to develop key renewable technologies, including wind, photovoltaics and geothermal energy.
  - The President's Bioenergy Initiative will help us create new fuels for our cars that will reduce U.S. oil consumption, create new income opportunities in rural America, and meet environmental challenges, such as climate change.
  - The Administrations has proposed restructuring electricity industry to make it more efficient and cleaner, while saving consumers at least $20 billion annually on their electricity bills.

- *We Are Helping Make America's Industry More Efficient and Competitive:*

  - Our plan helps industry implement win-win strategies for cutting energy costs.
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  - We are finalizing an agreement with industry that will lead to dramatic increases in fuel efficiency for heavy trucks.

- *We Need the Congress to Stop Playing Politics Over Energy Policy and Pass Our Long Term Plan, so We can Give the American People the Energy Security they Deserve without Unbalancing the Budget and Harming the Environment.*

DETAILS OF THE CLINTON/GORE ACTIONS TO ENHANCE AMERICA'S ENERGY SECURITY

Energy-Efficiency Enhances Energy Security And Strengthens The Economy: The strong performance of our economy over the past year, despite oil price rises, underscores the dramatic improvements in energy efficiency and reliability over the past quarter century. While past oil shortages have taken a significant toll on the U.S. economy, the recent increases in oil prices have yet to have a major impact on the U.S. economy. Increased energy efficiency – in cars, homes, and manufacturing – has helped insulate the economy from these short-term market fluctuations. In 1974, we consumed 15 barrels of oil for every $10,000 of gross domestic product. Today we consume only 8 barrels of oil for the same amount of economic output. But we can do even better.

President Clinton And Vice-President Gore Today Announced Important Steps To Promote Energy Security & Efficiency In America. These Steps Include:

I. Establishing A Regional Home Heating Oil Reserve: The President remains concerned about the effect that future shortages of home heating oil may have on consumers of home heating oil, particularly in the Northeast and New England. In order to reduce the likelihood that future shortages will harm consumers, the President will:

- Support The Establishment of a Regional Reserve: The President supports the creation of a home heating oil reserve with an appropriate trigger in the Northeast to combat future product shortages. In the event of home heating oil shortages, heating oil can be sold from the reserve in order to increase the supply on the market.

- Direct DOE To Undertake Necessary Environmental Reviews: The President has directed the Department of Energy to begin the appropriate environmental reviews for the creation of a home heating oil reserve in the Northeast.

- Call on Congress to Establish Reserve Through Legislation: The President calls on Congress to pass legislation that authorize the creation of a regional product reserve, and includes an appropriate trigger. The President reserves his right to establish a reserve under his existing authority, subject to the outcome of the environmental reviews, in the event that Congress fails to act.

II. Reauthorizing the Strategic Petroleum Reserve: Current authorization to operate the Strategic Petroleum Reserve expires on March 31st, even as OPEC oil ministers will be meeting in Vienna to discuss production quotas. In order to ensure that the President maintains the ability to use all available tools to respond to the needs of the United States economy, he will call on Congress to immediately reauthorize Titles I and II of the Energy Policy and Conservation Act, which authorize the Strategic Petroleum Reserve and the International Energy Program at the Department of Energy.

III. Enacting A Comprehensive Tax Incentive Package: In order to insulate the economy from the effects of future energy price increases, the United States needs comprehensive and balanced package of tax incentives. This comprehensive approach includes support for domestic oil producers to reduce our reliance on oil imports and must include incentives to continue expanding renewable energy and increasing the energy efficiency of our economy. These tax proposals are either paid for in the President's budget or will be paid for with offsets.

A. Preserving Productive Capacity of the Domestic Oil Industry: In addition to calling for steps to decrease our demand for oil through increased efficiency, the President is proposing new steps to support new domestic exploration and production, and to lower the business costs of producers when oil prices are low. These tax proposals will cost less than $1 billion over ten years. The Administration will also continue examining opportunities to preserve marginal well production.

- **Support New Domestic Exploration and Production:** Major technological advances in oil exploration, such as three- and four-dimensional seismic drilling, are helping us to find more oil, at greater depths, on and off-shore. At the same time, these technologies have reduced the environmental footprint left by exploration and production to 1/10th the size it was 25 years ago. We need to encourage the use of these advanced technologies at the same time we support exploration for oil and gas.

✓ Expensing of Geological and Geophysical Costs: The President is proposing to support domestic exploration and production by adjusting the treatment of the costs of exploration and development -- geological and geophysical costs -- in the tax code. Under current law, geological and geophysical costs may be deducted in current year if exploration activity was unsuccessful, but must be capitalized if the exploration activity was successful. By allowing the industry to expense these costs, we will be encouraging the discovery of new reserves. The Department of Energy estimates that G&G will add 126,000 barrels of oil a day to domestic production.

- **Allowing Expensing of Delay Rental Payments:** A "delay rental payment" is an amount paid by a lessee to the lessor of a petroleum resource when the lessee does not begin producing commercial quantities of oil or natural gas as soon as was agreed to. The delay rental payment is intended to compensate the lessor for the royalties he does not receive while production is delayed. Currently, the Federal tax code requires delayed rental expenses to be capitalized to the depletable base of the property to which they relate if the property is being held for development. Prior to 1993 all delayed rental payments were allowed to be expensed in the year incurred. Allowing producers to expense delay rental payments will lower the cost of doing business on Federal lands.

- **Examining Measures to Preserve Marginal Production:** The Administration will continue to examine measures to preserve marginal well production, which accounts for over 20 percent of on-shore oil production in the lower-48 states.

B. Improving the Energy Efficiency of the Economy: Any tax package to improve the energy

security of the country must include incentives to improve energy efficiency and promote the use of renewable energy. The President has proposed:

- **Tax Credits For Electric, Fuel Cell, and Qualified Hybrid Vehicles.** Cars and light trucks (including minivans, sport utilities, and pickups) currently account for about 40 percent of the nation's oil consumption. Tax credits for electric, fuel cell, and hybrid vehicles will help to move advanced technologies that use less or no oil from the laboratory to the highway. President Clinton is calling for Congress to:

✓ Extend the current tax credit for electric vehicles and fuel cell vehicles. Under current law, a 10 percent credit, up to $4,000, is provided for the cost of qualified electric vehicles and fuel cell vehicles. The credit begins to phase down in 2002 and phases out in 2005. The President's proposal would extend the tax credit at its $4,000 maximum level through 2006.

✓ Pass tax credits for hybrid vehicles. The President proposes a $500 to $3,000 credit, depending on the vehicle's design performance, for all qualifying hybrid vehicles, including cars, minivans, sport utility vehicles, and pickup trucks.

- **Tax Credits for Efficient Homes and Buildings.** Increasing the efficient use of power will reduce our reliance on fossil fuels. To encourage energy efficiency, the President is calling on Congress to pass tax incentive that will promote the use of energy efficient practices and technologies in our homes and buildings.

✓ Tax credit for new energy efficient homes. To encourage the purchase of new energy efficient homes, the President proposes a tax credit of between $1,000 and $2,000 for new energy efficient homes.

✓ Tax credit for energy efficient equipment in new and existing homes or buildings. To encourage the purchase of electric heat pump water heaters, natural gas heat pumps, and fuel cells, the President proposes a tax credit equal to 20 percent of the cost of the investment, subject to a cap, for equipment purchased between 2001 and 2004.

C. Enacting Tax Credits To Diversify Fuel Sources in the Economy: The President's Council of Advisors on Science and Technology, in its 1997 report to the President recommended that the federal government invest in developing a broad portfolio of energy sources. To promote the development of these new energy sources, the President has proposed:

- **Tax Credits for Efficient Non-Petroleum Based Sources of Power:** In support of the PCAST recommendation, the President has proposed, and calls on Congress to pass tax credits to promote innovative and sustainable sources of energy supply including:

✓ Tax Credits For Solar Energy Systems. A 15 percent tax credit will encourage the purchase by consumers and businesses of solar energy systems. The maximum credit would be $2,000 for rooftop photovoltaic systems and $1,000 for solar water heating systems.

✓ Tax Credits For Wind Power. Current law encourages the production of electricity from

wind through a tax credit of 1.5 cents per kilowatt hour (adjusted for inflation after 1992). The current tax credit covers facilities placed in service before January 1, 2002. The President proposes a 2.5-year extension of this tax credit.

✓ Tax Credits For Electricity Produced From Biomass. Biomass refers to trees, crops and agricultural wastes used to produce power, fuels or chemicals. This package of credits would:

Extend Tax Credits For Closed Loop Biomass: Extend current "closed-loop" biomass credit of 1.5 cents per kilowatt hour for 2.5 years.

Provide Tax Credits For Open Loop Biomass: Expand the availability of the biomass credit of 1.5 cents per kilowatt hour to include "open-loop" biomass (certain forest-related resources and agricultural and other sources) for facilities placed in service from 2001-2005, and provides a 1.0 cent credit for electricity produced from 2001-2003 from facilities placed in service prior to January 1, 2001.

Provide Tax Credits For Cofiring Biomass: Add a 0.5 cent per kilowatt hour tax credit for electricity produced by cofiring biomass in coal plants from 2001-2005.

✓ Tax Credits For Methane from Landfills: Adds a 1.5 cent per kilowatt hour credit for electricity produced from landfills not subject to EPA's 1996 New Source Performance Standards/Emissions Guidelines (NSPS/EG) and 1.0 cent per kilowatt hour for landfills subject to NSPS/EG. Qualified facilities would be facilities placed in service after December 31, 2000 and before January 1, 2006.

IV. Making Common Sense Investments In Promoting Energy Efficiency And Alternative Energy Technologies: In addition to providing tax credits to promote domestic oil production and energy efficiency, the President and Vice President have already presented budget requests for appropriations that will further promote energy security. They have proposed a budget that includes over $1.4 billion next year to accelerate the research, development, and deployment of alternative and more efficient energy technologies.

- **$275 Million To Make America's Homes and Buildings More Efficient:** The Administration has proposed funding for research to make offices, homes, and appliances 50 percent more energy efficient within a decade and has proposed $275 million in the budget to help do so. People understand what that means for their home heating bill. Overall, meeting this goal would save consumers $11 billion a year in energy costs.

- **$173 Million To Weatherize Low Income Households:** Our budget proposes expanding DOE's Weatherization Assistance Program, which helps low-income households make their homes more energy efficient. These are the Americans that most need to reduce monthly energy costs. This program has already weatherized almost 5 million low-income homes and is saving 3.0 million barrels of oil each year. With funding from DOE and the states, we plan to add more than 150,000 homes to the list in the next year – which will save more than an additional 91,000 barrels of oil per year. Our budget seeks $154 million for this important program for next year and an additional $19 million for the current year in the FY 2000 supplemental appropriation.

- **$255 Million To Make America's Vehicles More Efficient:** Our *Partnership for*

a New Generation of Vehicles is on track to deliver attractive, affordable cars that get up to three times the fuel efficiency of today's cars. A car that gets twice the fuel economy of today's comparable vehicle is the equivalent of cutting the price of gas in half for the American driver. A typical consumer would save more than $300 a year in fuel costs and SUV owners would save more than $400 a year. By 2010, DOE plans to develop and commercialize fuel efficiency and alternative-fuel technologies that reduce oil consumption by nearly 700,000 barrels per day. By 2020, these technologies will reduce oil consumption by nearly 1.5 million barrels per day. Our budget seeks $255 million for PNGV.

- **$410 Million To Promote Clean Renewable Energy:** The President's FY01 budget proposes $410 million for DOE efforts to develop domestic sources of renewable energy, including wind, photovoltaics and geothermal energy. In addition, the President's Bioenergy Initiative will help us create new fuels for our cars that will reduce U.S. oil consumption, create new income opportunities in rural America, and meet environmental challenges, such as climate change.

- **Studies on Diversifying Fuels in the Northeast and New England:** The Northeast and New England are disproportionately reliant on home heating oil as a fuel to heat and power homes, businesses and industry. On February 16th the President directed Department of Energy to undertake a study of ways the region could diversify its energy sources thereby minimizing the effect of a volatile home heating oil market on the regional economy. The Department is also studying the effects of interruptible natural gas contracts on the home heating oil market in the region.

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Talking Points on Energy Efficiency and Clean Energy Policy

- As America considers its long-term energy future, and as we deal with short-term market fluctuations, we must consider the fundamental benefits of becoming more energy efficient and using alternative energy. The President and Vice President believe that we should be in a position where the American people are protected from energy price shocks while having access to the energy and fuel they need. *We can do this by increasing our energy efficiency and diversifying our fuel supply base.*

- Some believe that the way to respond to market fluctuations is to unbalance the budget and hurt the environment. *The President and Vice President reject that false choice and have a plan to put us on a path of a more self-reliant energy future that will save Americans money, create new job opportunities, and protect our environment.*

- *This Administration has already presented the Congress an energy policy to achieve this.* For example, the President and the Vice President have proposed a budget that includes over $1 billion next year to accelerate the research, development, and deployment of alternative and more efficient energy technologies, as well as $4.0 billion in tax incentives over five years to benefit our energy-reliant consumers and businesses.

- *This Administration has a tax-cut plan to provide long-term benefits.* Our common sense tax package on clean energy and energy efficiency provides tax credits for the purchase of energy-efficient homes, cars, and appliances.

    - President and Vice President has proposed tax credits of $1000 to $2000 for homes that are 30% to 50% more energy efficient. *Americans understand that a home that is 50% more efficient can cut their heating bill in half.* So under this proposal, consumers get a double benefit – a tax credit as well as ongoing savings from reduced energy bills.
    - We have proposed tax credits ranging from $500 to $4000 for energy efficient cars, such as electric, fuel cell, and hybrid vehicles. That's money in Americans' pockets right now for cars that will cost them less at the pump.
    - And, we have proposed, tax credits for clean energy production – such as, wind, biomass, and methane from landfills – that will reduce demand for oil to produce electricity.
    - *These are the kinds of tax cuts that will make a real difference in our energy future, and will save consumers more money in the long run than a small break on the gas tax.*

- *We Are Making America's Homes and Buildings More Efficient*:

    - The Administration has proposed $275 million in R&D efforts next year to make offices, homes, and appliances 50% more energy efficient within a decade. People understand what that means for their home heating bill. *Overall, meeting this goal would save consumers $11 billion a year in energy costs.*
    - We are accelerating efforts to establish energy efficiency standards for appliances and encouraging more Americans to use Energy Star Products. *If we all used Energy Star products, America would reduce its energy bill by $100 billion over the next 15 years!*
    - The President's recent Executive Order 13123 has made the Federal Government a leader in building energy efficiency, saving taxpayers $750 million annually.

- We are expanding DOE's *Weatherization Assistance Program* that helps low-income households make their homes more energy efficient. These are the Americans that most need to reduce monthly energy costs. *This program has already weatherized almost 5 million low-income homes and is saving 3.0 million barrels of oil each year.* With funding from DOE and the states, we plan to add more that 150,000 homes to the list in the next year – *which will save more than an additional 91,000 barrels of oil per year.* Our budget seeks $154 million for FY 2001 and an additional $19 million for the current year in the FY 2000 supplemental spending bill.

50% cut → 1995
250,000 homes not done.

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  - The President's Bioenergy Initiative will help us create new fuels for our cars that will reduce U.S. oil consumption, create new income opportunities in rural America, and meet environmental challenges, such as climate change.
  - The Administrations has proposed restructuring electricity industry to make it more efficient and cleaner, while saving consumers at least $20 billion annually on their electricity bills.

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