Overview: U.S. Oil and Natural Gas Supply Situation

Energy has not been an overriding government priority for some time. The energy problems of the past year have showcased the price we are having to pay for the failure to develop an effective national energy policy. Time is not on our side. U.S. energy concerns must have a place at the decision-making table and the energy impact of government decisions must be carefully weighed.

Crude Oil

The Department of Energy has forecast U.S. energy consumption between 1999 and 2020. While natural gas rises from 23 percent of consumption in 1999 to 28 percent in 2020, oil stays about the same (40 percent in 1999 and 39 percent in 2020). Seventy percent of petroleum consumed in the U.S. is for transportation. Most recent energy studies agree that this share is likely to continue well into this century – even with strong increases in energy efficiency and a rapid infusion of new technology.

However, under the best of circumstances, the U.S. will become more and more dependent on oil imports. This dependency now amounts to about 57 percent of U.S. oil demand. DOE projects that 64 percent of oil demand will be met by imports in 2020. In order to ensure reliable and secure sources of oil, we have no choice but to diversify the sources of our supplies, both domestic and foreign, and increase both. The U.S. oil and natural gas industry has the advanced technology needed to find and produce oil and gas in an environmentally safe manner.

However, domestically, access to federal government lands has become an acute problem. For example, from 1983 to 1997, access to federal lands in eight Western states declined by more than 60 percent – and that does not reflect major land withdrawals since 1997. At the same time, the U.S. oil and gas industry’s ability to compete for opportunities abroad have been threatened by two U.S. policies: the alarming tendency to use unilateral economic sanctions against oil producing countries as an instrument of foreign policy -- despite the evidence that they don’t work -- and the adverse tax treatment of foreign source income of U.S. oil and gas companies.

-- Refinery Capacity and Utilization. Even if we obtain all the oil we need, our energy supply would still be under an enormous strain. While environmental requirements now in place are giving us the most environmentally-sensitive fuels ever manufactured, these requirements have drastically reduced refinery flexibility and further tightened the U.S. supply situation.

The U.S. refinery system is basically maxed out. Capacity utilization averaged 92.6 percent in 2000. At peak levels of seasonal demand, it topped 95 percent. This compares to an average capacity utilization rate in other industries of 82 percent. Refinery capacity utilization is high because our capacity is below what it was 20 years ago. Recent increases have not kept up with the growth in demand -- so we’ve had to import products. But we cannot import much more, because tightening fuel specifications and the proliferation of so-called boutique fuels make it much more difficult for foreign producers to meet the U.S. demand for refined products.

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DOE008-1071

Obtained and made public by the Natural Resources Defense Council, March/April 2002
-- **Regulatory Burden.** Increased regulation of fuels and refineries is a major reason why refinery capacity has not kept up with demand. We haven’t built a major new refinery in this country in 20 years. Moreover, complex, time-consuming permitting requirements greatly limit the ability of refiners to increase capacity. They also inhibit efforts to increase pipeline capacity. The pipeline system in the U.S. was designed decades ago to handle some 70 percent of liquid fuel transportation, but the increased demand and proliferation of fuels is making this system increasingly inadequate.

-- **Boutique Fuels.** The Clean Air Act Amendments require state implementation plans (SIPs) under which individual metropolitan areas can create their own fuels to meet clean air requirements. There are 15 different types of gasoline now in use because of clean air requirements. This balkanization of fuels greatly reduces refinery flexibility. The reduced flexibility means that relatively minor disruptions and down-time for maintenance can have a much more disruptive impact on the flow of supply.

**Natural Gas**

Natural gas is a clean, safe, efficient and reliable fuel. Consequently, demand is rising, particularly as the fuel of choice for new power plants. Approximately 85 percent of the natural gas consumed in the U.S. is produced domestically. Most of the remainder comes from Canada. The landmark natural gas study issued a year ago by the National Petroleum Council – a DOE advisory committee – projected that producers would have to invest about $658 billion between 1999 and 2015 to meet the growth in gas demand.

The growing demand for natural gas underscores the urgent need for increased access to potentially gas-rich government lands. However, most government lands with the best prospects for new gas discoveries are off limits to development: 100 percent of resources offshore on both coasts; 56 percent of the eastern Gulf of Mexico resources; and 40 percent of the Rocky Mountain region resources.

**Needed: A National Energy Policy**

What is needed from government decision-makers is a serious effort to address U.S. energy problems and shape a fair and effective national energy policy. That is why API welcomes the energy policy initiatives now underway in both Congress and the Administration. However, it took some 25 years to get into today’s energy situation – and the problems will not be solved overnight. So it is extremely important that energy be fully represented at the government decision-making table and that the energy impact of environmental and other decisions be fully considered.

After more than two decades of inaction, the American public can no longer afford the luxury of not coming to grips with U.S. energy needs, while maintaining a clean environment. The nation can do both. Meeting U.S. energy needs and protecting the environment are both critical to our nation’s continued economic growth – and to achieving the future prosperity and well-being we all seek.
Available Administrative Actions on National Energy Policy in the Oil and Natural Gas Sectors:

Require Executive Branch agencies to avoid significant adverse energy consequences in proposing regulatory and other administrative actions.

Require Executive Branch agencies to review existing rules and policies and revise them as necessary to eliminate significant adverse energy consequences.

Make energy policy a key assignment for a senior White House aide.

Direct the Interior Department, in consultation with other federal land management agencies and the Energy Department, to complete the inventory of federal oil and natural gas resources mandated by the 2000 amendments to the Energy Policy and Conservation Act.

Direct the Energy Department, in consultation with the federal public land management agencies, to identify administrative barriers to timely exploration and development of federal oil and gas resources and take steps to remove those barriers.

Provide a "strike force" to complement existing staff of public land management agencies to immediately reduce the tremendous backlog of pending applications for permits to develop federal oil and gas leases, to revise resource management plans, and to complete required environmental analyses. Ultimately, provide adequate staffing/resources to maintain and expedited timetable for these activities.

Direct the Interior Department to expand royalty-in-kind (RIK) programs onshore and offshore, with any RIK oil to be transferred into the Strategic Petroleum Reserve.

Maintain the December 2001 schedule for OCS Lease Sale 181.

Grant California's request to the Environmental Protection Agency for a waiver from the Clean Air Act's oxygen mandate for reformulated gasoline.

Ensure that the first annual report from the advisory group to EPA on technological feasibility (equipment and construction resources) of the on-road diesel sulfate rule includes meaningful conclusions and recommendations that the agency can use quickly to decide whether modifications should be made to avoid adverse fuel supply and price consequences.

Direct the Labor Department, in consultation with the Energy Department, to develop recommendations for a job-training program designed to fill employment needs in the oil and natural gas industry.

Direct the Office of Management and Budget to determine whether fiscal 2001 funds could be reprogrammed to increase grants to states for low-income heating and weatherization assistance.

Direct OMB to determine whether funds could be reprogrammed to ensure full funding of U.S. Coast Guard nautical charting programs and Corps of Engineers harbor maintenance activities to ensure that tankers can move needed petroleum products safely and expeditiously.
Tripodi, Cathy

From: Kelliher, Joseph
Sent: Tuesday, July 03, 2001 8:32 PM
To: Tripodi, Cathy
Subject: FW: Nuclear power plant safety

Importance: High

----Original Message----
From: KANE, John [mailto:jek@nei.org]
Sent: Tuesday, May 01, 2001 10:31 AM
To: Kelliher, Joseph
Subject: Nuclear power plant safety
Importance: High

Joe:

Following up on our conversation this morning, I am forwarding a paragraph on nuclear safety and a good graphic representing the dramatic increases in safety margins the industry has been able to produce over the last decade.

Certainly we have much more detailed information if you need it, but this is pretty crisp and concise and would likely fit for the energy report.

Please call me if I can be of any further help.

John
Nuclear power plant safety

In 2000, the nuclear power industry had a record year for safety and electricity production. In fact, there has been a steady improvement in nuclear power plant safety for several years, as demonstrated both by NRC and industry plant performance indicators. This outstanding safety record has set the stage for the NRC’s transition to a new nuclear power plant oversight process. This process will focus attention on those areas of the plant most important to ensuring safety, as indicated by a regular NRC inspection program based on 19 plant performance indicators.

Throughout the 1990s, capacity factors for nuclear power plants increased from 65 percent to 90 percent as a result of improved operating practices and maintenance, training and reduced plant outage time. Safety performance—measured in several areas by the Nuclear Regulatory Commission—has improved in parallel with this economic performance. For example, 18 “unusual events” at nuclear power plants were reported to the NRC by the industry in 2000, an all-time low (see attached chart). Improved safety is due to better industry management of the plants and to a new NRC nuclear plant oversight process that focuses on those areas of the plant most important to safety. At one time, critics of nuclear power argued that reactor operators would be pressured to cut corners on safety in pursuit of greater economic return. The industry’s record, however, has proven that safety and operational excellence go hand-in-hand.

Nuclear plants are designed according to a "defense in depth" philosophy that requires redundant, diverse, safety systems. Two or more safety systems perform key functions independently so that even if one fails, there is always another to back it up, providing continuous protection.

Physical barriers safely contain radiation and provide emergency protection if needed. First, the fuel pellets are sealed inside rods made of special metal designed to contain fission products. Next, the fuel rod assemblies are contained within a large, thick steel reactor vessel. Lastly, the reactor vessel and extensive safety and steam generation equipment are enclosed. in turn, in a massive, reinforced steel and concrete structure, the "containment," whose walls are three to four feet thick. The containment ensures that the Chernobyl accident of 1986 a substantial radiation leak could not occur in the United States.

The nuclear energy industry maintains a comprehensive system of training and qualification for all key positions at nuclear power plants. Workers involved in operations, maintenance, and other technical areas undergo continuous training and assessment. For example, reactor operators spend every fifth week in training—a more rigorous schedule that the airline industry. Each plant training program must renew its accreditation every four years. In addition, the NRC routinely monitors plant training programs.
Steady Improvement in Safety
(Number of Unusual Events Reported to NRC)
Subject: RE: DOT Comments

Michelle

Margot

Margot

 joe and Margot,

Here are some comments from DOT policy staff on your chapters. Since our systems don't always talk to each other, I'll paste them below into this email as well as attaching a document. Please let me know if you have questions, and I'll run them down with the folks who have offered these suggestions.

Jeremy, Joe and Margot.

Thanks,

Michelle

Chapter 3

Page 1

Chapter 6

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DOE008-1077
Obtained and made public by the Natural Resources Defense Council, March/April 2002
From: Ande
rson, Margot

Sent: Sunday, March 25, 2001 1:29 PM

To: 'Poche, Michelle'; Kelliner, Joseph

Cc: 'Symons, Jeremy(a)EPA.gov'

Subject: RE: DOT Comments

Michelle,

Margot,

-----Original Message-----
From: Poche, Michelle [mailto:Michelle.Poche@ost.dot.gov]

Sent: Saturday, March 24, 2001 4:18 PM

To: Kelliner, Joseph

Cc: Anderson, Margot; Symons, Jeremy(a)EPA.gov

Subject: DOT Comments

Joe and Margot,

Here are some comments from DOT policy staff on your chapters. Since our systems don't always talk to each other, I'll paste them below into this email as well as attaching a document. Please let me know if you have questions, and I'll run them down with the folks who have offered these suggestions.

Jeremy, Joe and Margot.

Michelle


Chapter 3

Chapter 6

Rewrite of Transportation Section, Page 4

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DOE008-1081

Obtained and made public by the Natural Resources Defense Council, March/April 2002
Obtained and made public by the Natural Resources Defense Council, March/April 2002
From: Anderson, Margot
Sent: Sunday, March 25, 2001 1:15 PM
To: 'Poche, Michelle'
Cc: Kelliher, Joseph
Subject: RE: DOE comments/edits

Michelle,

-----Original Message-----
From: Poche, Michelle [mailto:Michele.Poche@ost.dot.gov]
Sent: Saturday, March 24, 2001 2:49 PM
To: Anderson, Margot
Subject: RE: DOE comments/edits

Margot,
Michelle,

Here's a nice graphic to use in chapter 9 on pipelines. We'll be sending more to you Monday. Hope our edits you received from Charlie were useful.

Margot

--- Original Message ---
From: Charles_M._Smith@ovp.eop.gov%internet
[mailto:Charles_M._Smith@ovp.eop.gov]
Sent: Friday, March 23, 2001 8:27 AM
To: Michelle.Poche@OST.DOT.Gov%internet;
Karen.Y.Knutson@ovp.eop.gov%internet
Subject: DOE comments/edits

Michelle:

Some suggested comments/edits on your chapter from DOE.

(See attached file: energyinfrastructure2.doc)
From: Anders
Sent: Monday, March 26, 2001 2:30 PM
To: Kelliher, Joseph
Subject: FW: NEP

More useful comments on your list.

-----Original Message-----
From: Paik, Inja
Sent: Monday, March 26, 2001 1:17 PM
To: Anderson, Margot; Friedrichs, Mark
Cc: Marlay, Robert
Subject: NEP

Margot/Mark:

The following are my comments on NEP policy issues.

Inja
Kelliher, Joseph

From: Anderson, Margot
Sent: Monday, March 26, 2001 2:00 PM
To: Kelliher, Joseph
Subject: FW: quick comments on list of policies

Comments from one of PO's office directors alerting you on some controversial items on the list.

-----Original Message-----
From: Breed, William
Sent: Monday, March 26, 2001 1:29 PM
To: Anderson, Margot
Subject: quick comments on list of policies

Margot: here are some notes on what may be controversial and what may be missing from this mornings handout -- Bill
From: Andeson, Margot
Sent: Monday, March 26, 2001 12:14 PM
To: Kelliher, Joseph
Subject: FW: Comments on NEP Goals & Actions

Importance: High

From Paul Carrier. Might be helpful.

--- Original Message ---
From: Carrier, Paul
Sent: Monday, March 26, 2001 12:02 PM
To: Friednichs, Mark; Anderson, Margot
Cc: Conte, John
Subject: Comments on NEP Goals & Actions
Importance: High

Obtained and made public by the Natural Resources Defense Council, March/April 2002
Kelliher, Joseph

From: Anderson, Margot
Sent: Monday, April 02, 2001 1:48 PM
To: Kelliher, Joseph
Subject: RE: energy efficiency one-pager

Joe,

Margot

-----Original Message-----
From: Kelliher, Joseph
Sent: Monday, April 02, 2001 12:19 PM
To: Anderson, Margot
Subject: RE: energy efficiency one-pager

-----Original Message-----
From: Anderson, Margot
Sent: Monday, April 02, 2001 10:51 AM
To: Kelliher, Joseph; Symons.Jeremy@epamail.epa.gov
Cc: Kolevar, Kewn
Subject: RE: energy efficiency one-pager

Joe,

How do you want to proceed on this? Have you drafted a revised?

Margot

-----Original Message-----
From: Kelliher, Joseph
Sent: Friday, March 30, 2001 6:48 PM
To: Anderson, Margot; Symons.Jeremy@epamail.epa.gov
Cc: Kolevar, Kewn
Subject: RE: energy efficiency one-pager
---Original Message---
From: Anderson, Margot
Sent: Friday, March 30, 2001 5:40 PM
To: "Symons.Jeremy@epamail.epa.gov"
Cc: Kellner, Joseph; Kolevar, Kevin
Subject: energy efficiency one-pager

<< File: energy efficiency one-pager.wpd >>

Reviewed/edit by EE. PO. Joe and/or Kevin. Problems?

Jeremy, can you let me know if you get this? I am having problems with your e-mail.

Margot
Joe,

How do you want to proceed on this? Have you drafted a revised?

Margot

--- Original Message ---
From: Kelliher, Joseph
Sent: Friday, March 30, 2001 6:48 PM
To: Anderson, Margot; Symons.Jeremy@epamail.epa.gov
Cc: Kolevar, Kevin
Subject: RE: energy efficiency one-pager

Joe,

How do you want to proceed on this? Have you drafted a revised?

Margot

--- Original Message ---
From: Anderson, Margot
Sent: Friday, March 30, 2001 5:40 PM
To: Symons.Jeremy@epamail.epa.gov
Cc: Kelliher, Joseph; Kolevar, Kevin
Subject: energy efficiency one-pager

<< File: energy efficiency one-pager.wpd >>

Reviewed/edited by EE, PO. Joe and/or Kevin, Problems?

Jeremy, can you let me know if you get this? I am having problems with your e-mail.

Margot
From: Anderson, Margot
Sent: Tuesday, April 03, 2001 5:47 PM
To: Kripowicz, Robert; Kolevar, Kevin
Cc: Kelliher, Joseph; Braitsch, Jay
Subject: RE: Integrating GHG Reduction into the NEP

Bob

Margot

Original Message

From: Kripowicz, Robert
Sent: Tuesday, April 03, 2001 5:33 PM
To: Kolevar, Kevin
Cc: Anderson, Margot; Kelliher, Joseph; Braitsch, Jay
Subject: FW: Integrating GHG Reduction into the NEP
Importance: High

Kevin - Based on previous e-mails I offer the following: