

DOCUMENT RESUME

C2452 - [A1672672]

[Comments on H.R. 6831, "The National Energy Act"]. EMD-77-05; B-179851. June 8, 1977. 6 pp. + 3 enclosures (9 pp.).

Report to Rep. Jack Brooks, Chairman, House Committee on Government Operations; by Elmer B. Staats, Comptroller General.

Issue Area: Energy (1600); Transportation Systems and Policies (2400).

Contact: Energy and Minerals Div.

Budget Function: Natural Resources, Environment, and Energy: Energy (305); Commerce and Transportation: Ground Transportation (404).

Congressional Relevance: House Committee on Government Operations.

Authority: National Energy Act; H.R. 6831 (95th Cong.).

Comments on two sections of the proposed "National Energy Act" (H.R. 6831) dealing with national energy goals and Federal vanpooling were requested. Findings/Conclusions: Based on the Administration's own estimates, with few exceptions, the plan will fall short of its goals, even if fully implemented. The conservation provision of the plan will not much reduce energy demand, nor significantly stimulate domestic energy production. The most significant items in terms of energy impact are the oil and gas pricing actions and the oil and gas users' tax. The effect of the pricing provision would be to transfer a large amount of oil use to natural gas, and the users' tax would shift large amounts of industrial oil and gas use to coal. Natural gas would be shifted from industry to residential/commercial use. The largest impact will be the residential conservation tax credit coupled with the utility insulation service program. Voluntary actions in the residential sector will be hard to achieve and sustain. Vanpooling seems to be desirable, but could be more effective if extended beyond Federal vehicles to the private sector. Recommendations: The plan should be redesigned to provide a reasonable opportunity of achieving the stated goals. Congress should require that the Administration establish milestones on which to judge the rate of progress. (DJM)

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

IN REPLY
REFER TO: B-179851

JUN 8 1977

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The Honorable Jack Brooks
Chairman, Committee on Government
Operations
House of Representatives

Dear Mr. Chairman:

This is in response to your letter of May 10, 1977, requesting our comments on H.R. 6831, "The National Energy Act." As you know, in an earlier request, Chairman Dingell of the House Subcommittee on Energy and Power asked us to prepare a report to the Congress comparing the Administration's proposals with past and current GAO energy work. That assignment is now in progress. We expect that report to be completed by the end of June and will provide you a copy.

Your staff informed us that your principal interests are in those sections of H.R. 6831 referred to your Committee, i.e., sections 2-4, which include National Energy Goals, and section 701 on Federal Vanpooling. Those sections are discussed in this letter report. All sections of the bill will be discussed in the comprehensive report to the Congress requested by Chairman Dingell.

Administration's Energy Goals

We generally agree with these goals and believe that they can form the basis for developing a national energy policy between now and 1985. On the basis of our prior work, we believe that there is a serious energy problem and that the goals proposed in the National Energy Plan provide a useful way to address this problem. One fact that has not been widely recognized, however, is that the Administration did not design its energy Plan to achieve the stated goals without unspecified voluntary actions or further mandatory actions not specifically identified except by example. Based on the Administration's own estimates, with a few exceptions, the Plan will fall short of the goals--even if the Plan is fully implemented.

EMD-77-45

<u>Administration's proposed energy goals for 1985</u>	<u>Administration's estimate of what the Plan can accomplish through 1985</u>
1. Reduce total energy growth to below 2%/year	Reduction to 2.2%
2. Reduce oil imports below 6 million barrels/day	Reduction to 7 million barrels/day
3. Reduce gasoline consumption by 10% from 1977 levels	Reduction of 10% from 1977 levels
4. Increase coal production by at least 400 million tons over 1976	Increase by 565 million tons
5. Insulate 90% of all buildings	Insulate approximately 60%
6. Use solar energy in 2.5 million homes	Use solar energy in 1.3 million homes
7. Acquire Strategic Oil Reserve of 1 billion barrels of oil	Acquire 1 billion barrels of oil

As you can see, many of the actions are expected to fall short of the goals. We believe that it is somewhat incongruous to ask the Congress to establish a set of National Energy Goals, and then propose a National Energy Plan that is not expected to achieve them. To meet the goals, the Administration admittedly is counting on voluntary conservation actions over and above those called for in the Plan. If such actions are not forthcoming, the Administration says that, additional, mandatory conservation actions will have to be instituted. Since under the best of circumstances, plans designed to meet goals often fall short, we believe that the plan should be redesigned to provide a reasonable opportunity of achieving the stated goals.

In addition, we believe that the gap between the goals and what the Plan can accomplish is greater than the above figures indicate for two of the goals. These are the goals of reducing total energy growth to below 2% per year and of reducing gasoline consumption by 10% from current levels.

The Administration has calculated the estimated effect of the Plan in these areas from a base which is as of the end of 1977 and

includes a projected 1977 growth rate for each of the items of 5% over 1976. The actual growth rate that will be experienced in 1977 is, of course, unknown at this point but, based on past experience, 5% would be on the high side. If 1976 is used as the base, the Plan only reduces the energy growth rate to 2.5% per year and gasoline consumption by only 5%.

We believe it would be better to establish a goal which is based on the latest actual experience for a full year, i.e., 1976. This eliminates the problem of starting from an estimated base.

The Administration is proposing a biannual report to the Congress on progress towards the goals. However, there are no proposed milestones on which to judge the rate of progress. We strongly urge that the Congress require that the Administration establish such milestones; not only as a basis for evaluation, but also as a trigger mechanism for making any necessary adjustments in the Plan.

Again, based on the Administration's estimates, it does not appear that the conservation provisions of the Plan will cause much reduction in energy demand. The Administration projects that if no action is taken, energy demand will grow by 31% between 1976 and 1985, while demand would still grow by 25% with the Plan fully implemented. This equates to a reduction of roughly 1.9 million barrels of oil/day, or only 4% of total demand after nine years. The major impact of the Plan, as proposed, seems to be reducing oil imports by shifting to coal rather than by conserving energy. This is illustrated by the figures on enclosure I which show the Administration's estimate of the impact of the specific actions in the Plan over what would be expected if no actions were taken.

We will comment more fully on the goals and overall thrust of the program in our forthcoming report. However, the figures in the enclosure also reveal several other interesting facts.

--With the exception of coal, which is assumed to be demand limited and for which a substantial supply response is anticipated (see enclosure II), the program is not expected to stimulate significant additional amounts of domestic energy production; only .2 million barrels of oil/day and the equivalent of .6 and .1 million barrels of oil/day of natural gas and nuclear power, respectively. The Administration contends

that this is all the incremental oil and gas production that can be expected by 1985 and that higher prices would not elicit significant increased additional supplies from conventional sources. Others disagree with this contention.

- By far, the most significant items in terms of energy impact are the oil and gas pricing actions and the oil and gas users tax. The Plan is designed to achieve oil import savings by means of conversion from other fuels to coal. It appears to us that the effect of the oil and gas pricing section would be to transfer a large amount of oil use to natural gas. This would be accomplished by keeping the price of natural gas below the Btu equivalent of oil. The oil and gas users tax would appear to shift large amounts of industrial oil and gas use to coal. Another effect of these combined actions would be to shift natural gas from the industrial sector to the residential/commercial sector.
- The largest impact from any one conservation action is expected from the residential conservation tax credit coupled with the utility insulation service program. This is expected to save the equivalent of .5 million barrels of oil/day. All other actions result in smaller savings. Unfortunately, as well, the vast majority of the actions in the residential area are deliberately designed to be voluntary. Work which we are completing on past energy conservation actions shows pretty clearly that voluntary actions in the residential sector are hard to achieve and difficult to sustain over a long period of time.
- The standby tax is not included in the estimated impact of the Plan, because the Administration assumes that it will not have to be implemented. If it were initiated, an additional savings of .4 million barrels of oil per day would be expected.

Vanpooling

We have not had time to assess quantitatively the costs and benefits of the proposed Federal vanpooling program, but we do agree with the program in concept. Some obvious benefits of the program should be

- reduced energy consumption,
- reduced air and noise pollution,
- reduced traffic congestion around government offices and installations, and
- reduced demand for parking facilities.

In addition, the Federal Government would be setting an example for the Nation by establishing such a program.

One question we do have deals with the provision in Sec. 701, which stipulates that each person operating a van under an authorized Federal vanpooling program "shall maintain the van in good and safe working order." The responsibilities of the van operator are not made clear by this statement. The Committee may wish to clarify this section to indicate whether (1) the operator is financially responsible for the maintenance of the van (including tune-ups, overhauls, replacement parts, etc.) or (2) the operator is merely required to make the van available for maintenance at Government expense. If the former is intended, then a question arises concerning the condition in which the operator is required to keep the van, which would be government property, and what the consequences would be if the van is not properly maintained. If the intention is the latter interpretation, then many operational and logistical questions arise. We suggest that this issue be resolved before final approval of the proposal.

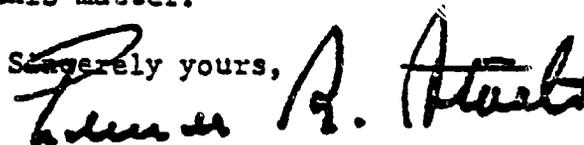
While we believe it is useful for the Federal Government to be involved in this program, it could be a more effective program if it were extended beyond Federal vehicles to cover the provision of incentives to encourage vanpooling by the private sector. There are several ways this could be accomplished such as providing incentives or grants to participating organizations. This could be developed within the framework of the Energy Policy and Conservation Act of 1975 which requires that a State must promote vanpooling before its Energy Conservation plan can be eligible for Federal funding.

Finally, while vanpooling is a desirable program, it is the only section of the Administration's energy program which addresses urban mass transit. We feel the broader issue of mass transit and its role in energy policy must be addressed in any effective energy conservation program.

B-179851

We are sending copies of this letter to the Chairmen of the energy-related Committees in enclosure III. In addition, we have been requested to testify before the Subcommittee on Government Affairs and Transportation on June 8 and plan to present additional comments on section 701 at that time. We appreciate the opportunity to have been of assistance to you in this matter.

Sincerely yours,

A handwritten signature in black ink, appearing to read "James A. Stewart". The signature is written in a cursive style with a large initial "J" and "S".

Comptroller General
of the United States

Enclosures.

NATIONAL ENERGY PLAN SAVINGS ESTIMATES

	MMBOE/D	TOTAL SAVINGS	MMBOE/D	OIL SAVINGS
<u>TRANSPORTATION 1/</u>	-.18	•Auto gas guzzler excise tax.	-.18	•Total savings in transportation are in the form of oil.
	-.12	•Truck gas guzzler excise tax and mandatory standards.	-.12	
	-.10	•Wellhead oil excise tax savings in the transportation sector. •Federal auto standards <u>2/</u> . •Federal Vanpooling <u>2/</u> . •Auto efficiency standards <u>2/</u> . •55 mph speed limit <u>2/</u> . •Expand use of highway trust fund <u>2/</u> . •Removal of 10 percent excise tax on intercity buses <u>2/</u> . •Tax on aviation and marine fuel <u>2/</u> .	-.10	
<u>BUILDINGS . .</u>	-.52	•Programs for retrofit of existing residence: residential energy tax credit and financing and increased funds for weatherization of low-income homes.	-.18	
	-.11	•Energy conservation program for schools and hospitals.	-.03	

OIL SAVINGS

MECE/D

TOTAL SAVINGS

FMBOE/D

BUILDINGS
(continued)

<p>--.40</p>	<p>More stringent HUD mandatory standards for new buildings, promulgated 1 year earlier and implemented more widely through new building performance standards grants to states. *Business energy tax credit for commercial buildings. *Solar tax credit. *Executive Order to upgrade efficiency of Federal buildings. *Wellhead oil excise tax savings in the commercial sector. *Secondary market for energy conservation loans 2/. *Emphasis on energy conservation in Commerce public works program 2/. *Solar energy in Federal buildings 2/.</p>	<p>--.08</p>	<p>*These programs reduce oil and electricity use in buildings. Savings include direct oil use and oil used to generate electricity.</p>
<p>--.05</p>	<p>*Business energy tax credit for commercial buildings.</p>	<p>--.02</p>	<p>*These programs reduce oil and electricity use in buildings. Savings include direct oil use and oil used to generate electricity.</p>
<p>--.04</p>	<p>*Solar tax credit.</p>	<p>--.02</p>	<p>*These programs reduce oil and electricity use in buildings. Savings include direct oil use and oil used to generate electricity.</p>
<p>--.08</p>	<p>*Executive Order to upgrade efficiency of Federal buildings.</p>	<p>--.02</p>	<p>*These programs reduce oil and electricity use in buildings. Savings include direct oil use and oil used to generate electricity.</p>
<p>--.05</p>	<p>*Wellhead oil excise tax savings in the commercial sector. *Secondary market for energy conservation loans 2/. *Emphasis on energy conservation in Commerce public works program 2/. *Solar energy in Federal buildings 2/.</p>	<p>--.05</p>	<p>*These programs reduce oil and electricity use in buildings. Savings include direct oil use and oil used to generate electricity.</p>

APPLIANCES

<p>--.22</p>	<p>*Energy efficiency standards for consumer products other than autos.</p>	<p>--.03</p>	<p>*These standards reduce use of oil and electricity in appliances. Savings include direct oil use and oil used to generate electricity.</p>
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	MMROE/D	TOTAL SAVINGS	MMROE/D	OIL SAVINGS
SUBTOTAL FOR CONSERVATION*	1.9*		1.1*	
<u>DECREASED SNG USE</u>		*No effect.	-.26	*Increased availability of natural gas decreases synthetic gas production. Savings consist of oil used to manufacture SNG.
<u>OTHER INITIATIVES</u>		*Coal R&D 2/ *Nuclear power 2/ *Hydroelectric 2/ *Solar energy 2/.		
<u>FUEL SWITCHING DUE TO REDUCTION IN DEMAND</u>		*No effect.	-.39	*Energy conservation measures increase the availability of gas. This gas is used to substitute for oil in high priority uses; includes minor amount of substitution of other fuels for oil.
<u>FUEL SWITCHING</u>		*No effect.	-.92	*Oil consumption taxes, rebates, and regulatory provisions replace industrial oil use with coal.

MMBOE/D	TOTAL SAVINGS	MMBOE/D	OIL SAVINGS
<u>FUEL SWITCHING</u> (continued)			
--Oil to Coal: Utilities	*No effect.	-.70	*Oil consumption taxes, rebates, and regulatory provisions replace utility oil use with coal.
--Oil to Coal: Synthetic Gas	*No effect.	-.15	*Wellhead oil excise taxes replace oil with coal for synthetic gas production.
--Oil to Gas	*No effect	-1.08	*Gas consumption taxes, rebates, and regulatory provisions replace low priority industrial and utility gas use with coal. This gas substitutes for oil in high priority uses.
TOTAL*	-1.9	-4.5	

* Does not add due to rounding.

1/ Standby gasoline tax savings of -.35 not included, since tax may not be imposed if voluntary measures are taken.

2/ No measurable energy impact.

3/ Represents the most conservative estimate. Other estimates indicate savings of up to .3 MMBOE/D of total energy and .4 MMBOE/D of oil through national electric utility regulatory policies.

Source: Executive Office of the President, Office of Energy Policy and Planning.

INCREASES IN DOMESTIC SUPPLY
RELATIVE TO 1976 PROJECTED
IN NATIONAL ENERGY PLAN
(MILLIONS OF BARRELS OF
OIL EQUIVALENT PER DAY)

	Without Plan <u>(1)</u>	With Plan <u>(2)</u>	<u>(2) - (1)</u>
Oil	0.7	0.9	0.2
Gas	-1.3	-0.7	0.6
Coal	4.3	6.6	2.3
Nuclear	2.7	2.8	0.1
Other	0.2	0.2	-0-
Refinery Gain	<u>0.5</u>	<u>0.2</u>	<u>-.3</u>
Total	<u>7.1</u>	<u>10.0</u>	<u>2.9</u>

Source: Executive Office of the President, Office of Energy Policy and Planning.

Copies of this letter are being sent to:

The Honorable Edmund S. Muskie
Chairman, Committee on Budget
United States Senate

The Honorable Warren G. Magnuson
Chairman, Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Henry M. Jackson
Chairman, Committee on Energy and Natural Resources
United States Senate

The Honorable Lee Metcalf
Chairman, Subcommittee on Public Lands and Resources
Committee on Energy and Natural Resources
United States Senate

The Honorable Floyd K. Haskell
Chairman, Subcommittee on Energy Production and Supply
Committee on Energy and Natural Resources
United States Senate

The Honorable J. Bennett Johnston
Chairman, Subcommittee on Energy Conservation and Regulation
Committee on Energy and Natural Resources
United States Senate

The Honorable Frank Church
Chairman, Subcommittee on Energy Research and Development
Committee on Energy and Natural Resources
United States Senate

The Honorable Jennings Randolph
Chairman, Committee on Environment and Public Works
United States Senate

The Honorable Gary Hart
Chairman, Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate

The Honorable Russell B. Long
Chairman, Committee on Finance
United States Senate

The Honorable John Sparkman
Chairman, Committee on Foreign Relations
United States Senate

The Honorable Abraham A. Ribicoff
Chairman, Committee on Governmental Affairs
United States Senate

The Honorable John Glenn
Chairman, Subcommittee on Energy, Nuclear Proliferation,
and Federal Services
Committee on Governmental Affairs
United States Senate

The Honorable Robert N. Giaimo
Chairman, Committee on the Budget
House of Representatives

The Honorable John Dingell
Chairman, Subcommittee on Energy and Power
Committee on Interstate and Foreign Commerce
House of Representatives

The Honorable Leo J. Ryan
Chairman, Subcommittee on Environment, Energy, and
Natural Resources
Committee on Government Operations
House of Representatives

The Honorable Morris Udall
Chairman, Committee on Interior and Insular Affairs
House of Representatives

The Honorable Abraham Kazen, Jr.
Chairman, Subcommittee on Mines and Mining
Committee on Interior and Insular Affairs
House of Representatives

The Honorable Lloyd Meeds
Chairman, Subcommittee on Water and Power Resources
Committee on Interior and Insular Affairs
House of Representatives

The Honorable Harley O. Staggers
Chairman, Committee on Interstate and Foreign Commerce
House of Representatives

The Honorable Clement J. Zablocki
Chairman, Committee on International Relations
House of Representatives

The Honorable John E. Moss
Chairman, Subcommittee on Oversight and Investigations
Committee on Interstate and Foreign Commerce
House of Representatives

The Honorable Olin E. Teague
Chairman, Committee on Science and Technology
House of Representatives

The Honorable Walter Flowers
Chairman, Subcommittee on Fossil and Nuclear Energy
Research, Development, and Demonstration
Committee on Science and Technology
House of Representatives

The Honorable Mike McCormack
Chairman, Subcommittee on Advanced Energy Technologies
and Energy Conservation, Development, and Demonstration
Committee on Science and Technology
House of Representatives

The Honorable Al Ullman
Chairman, Committee on Ways and Means
House of Representatives

The Honorable John M. Murphy
Chairman, Ad Hoc Select. Committee on Outer Continental
Shelf
House of Representatives

The Honorable Richard Bolling
Chairman, Joint Economic Committee
House of Representatives

The Honorable Thomas L. Ashley
Chairman, Ad Hoc Committee on Energy Policy
House of Representatives