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Collection/Office of Origin: Science and Technology Policy, Office of (OSTP)
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Stack:	Row:	Section:	Shelf:	Position:
	0	0	0	0

TYPE: ACTION DOCUMENT NUMBER: 9203562
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: STEFFES, Dale W.: PRIVATE ENERGY STABILITY COMMISSION INC.

TO: DR. D.A. BROMLEY

DEC 15 1992

DATE OF
CORRESPONDENCE: 12/04/92

SUBJECT: HE IS WRITING TO SEEK DR. BROMLEY'S SUPPORT FOR HIS
ORGANIZATION.

DIRECTORATE STAFF
ASSIGNED: PHYSICAL SCIENCES ASSIGNED:

ACTION
REQUIRED: AS/IF NECESSARY
STAFF
ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 12/23/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT: 42/22/92

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: PHONE: EXT:

NO RESPONSE NECESSARY.

OSTP RECEIVED: 12/09/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY

CENTRAL FILES:



3562

Private Energy Stability Commission, Inc.

P.O. Box 820228,

Houston, TX 77282,

713 467 4732

December 4, 1992

Dr. Allan Bromley
Office of Science & Technology
The White House NW
Washington, DC, 20500

Dear Dr. Bromley:

This letter was not sent to the chairman of Exxon, but to you, because I believe you are part of the energy strategic elite that understands the national energy dependence dilemma, can make things happen and can influence others.

Since 1985, the U.S.'s oil dependency has been growing 3% a year. The country is currently importing 50% of our oil consumption. By the 1996 presidential election, we will be 60% dependent on foreign oil, unless there is a major national energy policy change.

As a patriotic American, this high rate of oil dependency scares me. Therefore, I am organizing a U.S. "Energy Freedom" Coalition of energy associations, energy companies, elected officials and individuals. See enclosed announcement.

Also, enclosed is my Energy Forecast that describes how the country can and will likely avert this high oil dependency, simply by the President freezing the amount of energy that can be imported to a specific, safe and secure percentage. This is an opportune time for a major energy policy change, because we will have a new administration taking office in January.

With this policy, you will quickly realize that as the market for foreign oil is decreased, the world oil price will also decrease, creating a differential between foreign oil and domestic oil, i.e. the value of the earned import ticket rights. These dollars will transfer to our domestic producers, keeping our domestic energy production up and interfuel competition keeping our consumer energy prices down. **OPEC may own the oil, but the United States owns the market.**

Dr. Bromley, please consider supporting our patriotic "Energy Freedom" coalition for the security, safety, and well-being of the nation.

continued

Page 2

Dr. Allan Bromley

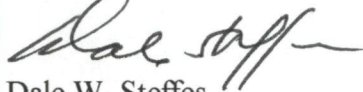
Specific information and tangible benefits for becoming a charter supporter of this pro American energy policy are available via the letterhead address or phone. It would be very beneficial to the cause if we could announce your support for this "Energy Freedom" coalition at the December 11th announcement or soon thereafter.

On the back of the Energy Forecast is an energy resolution on United States Energy Dependence. We are circulating this resolution to associations, media, companies, individuals, etc. for their endorsement. If you want to endorse this resolution, let us know immediately, and we will use your endorsement to further the cause to reduce U.S. dependency on foreign oil.

Our goal is to have an active "Energy Freedom" coalition prior to the new administration taking office. The completed National Energy Stability Policy formal proposal to the new Secretary of Energy should be ready the day he takes office.

At the very minimum, I encourage you or your deputy to attend the 10:00AM briefing Dec. 11th at the University Club, 1135 16th St. NW, in Washington DC to learn more about the operation and financial benefits of supporting this "Energy Freedom" coalition. For an added incentive to attend this briefing, this energy policy will be compared with other proposed energy policies.

Sincerely:



Dale W. Steffes
Founding Director

Enclosures: Organizational Announcement and Coalition Formation
An Energy Forecast with energy resolution on back

RESOLUTION ON UNITED STATES ENERGY DEPENDENCE

Whereas: The United States is becoming dangerously dependent on foreign energy supplies. In the year 2000, even with the recently enacted energy legislation, one third of all energy consumed is forecasted to be foreign produced, up from one fifth today. U.S. oil dependence will be over two thirds at the end of the century, up from half today. This energy and especially oil dependency will make our country highly vulnerable to foreign manipulation.

Whereas: The United States two years ago had to risk the lives of a half million of our finest men and women to secure a foreign oil supply.

Whereas: America's annual energy import bill is about \$50 billion and projected to be over \$100 billion by the year 2000, creating a huge negative balance of trade.

Whereas: The employment in the U.S. oil and gas extraction industry has fallen from 700,000 to 350,000 today. During the same time frame, the U.S. automotive manufacturing industry only dropped from 800,000 to 700,000. The petroleum industry should be at least as critical to the national welfare as the auto industry.

Whereas: The drilling rigs operating in the U.S. is only 800 rigs, about 20% of the all time high of over 4000 rigs in 1981.

Whereas: The administration in Washington has the regulatory authority to set the energy dependence by implementing national security regulations requiring a specific percent of energy consumption be produced from domestic sources.

Whereas: Implementation of this type of policy would effectively have foreign energy producers subsidize domestic energy producers, while the cost of energy to domestic consumers would not increase.

Whereas: This energy policy would provide true domestic energy price signals for both the producers and consumers, allowing both to make individually economically correct energy production and consumption decisions.

Therefore: Be it resolved that the Clinton administration implement a regulation that would limit total energy imports to a specific safe and secure BTU percentage, based on national security considerations, balance of trade considerations and international competitiveness.

For Information: Dale W. Steffes 713 467 4732: Over for description of process.

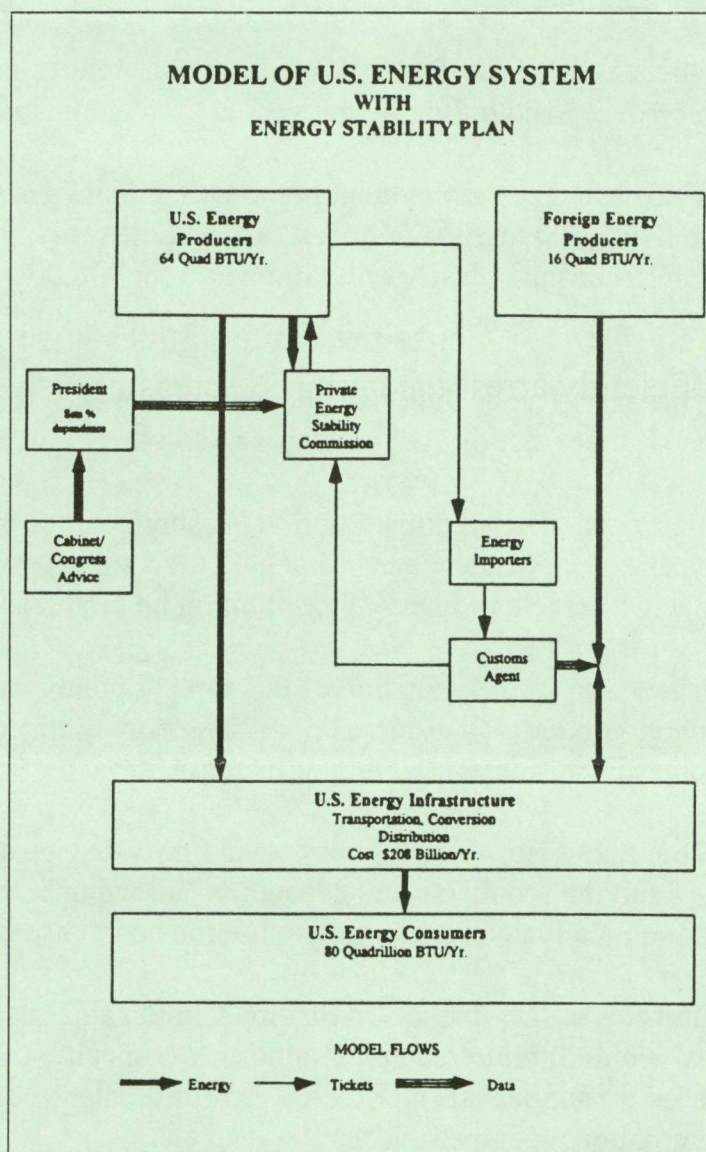
AN ENERGY FORECAST

The incoming Clinton administration Can, Should and Will **freeze** the United States foreign energy dependency at the current percentage, 20% of total energy and 50% of liquid petroleum energy. This Trend Discontinuity forecast will affect all sectors of the world energy industry, especially oil prices.

The United States will be 60% dependent on foreign oil during the 1996 presidential election, unless the administration adopts a policy of *freezing* the energy import level to a specified percentage. Today the United States is 50% dependent on foreign oil, up from 28% in 1986. For the last six years, the U.S. has been increasing its foreign oil dependency over 3% a year.

The President has the legal authority to implement a *freeze* on the energy dependency level in the name of national security. This policy would work in the following manner. See below the Model of the U.S. Energy System for a pictorial import ticket flow.

- President Clinton issues a CFR regulation requiring all energy imported into the U.S. must have an import ticket. Energy imported would be measured in BTU's.
- Import tickets would be earned by producing domestic energy, measured in BTU's
- President Clinton sets maximum percent of energy allowed to be imported, based on considerations of national security, balance of trade and international competitiveness
- Domestic energy producers would report their energy production to the Private Energy Stability Commission (PESC).
- The PESC would issue energy import tickets to the producers proportional to their production.
- The PESC would collect import tickets from the importers for all imported energy.
- This regulatory mechanism would automatically maintain the percent of energy imports, measured in BTU's, at the level designated by the President.



This Trend Discontinuity forecast is by Dale Steffes of Planning & Forecasting Consultants of Houston.

Organizational Announcement and Formation Briefing

University Club, 1135 16th St. NW Washington D.C.

10:00 AM, Friday, December 11, 1992

Founding Director, Dale Steffes, Private Energy Stability Commission

Houston Phone 713 467 4732, Washington DC Phone 202 234 7800

U.S. "Energy Freedom" Coalition

Purpose: The principal purpose of the U.S. "Energy Freedom" Coalition is to recognize and publicize the United States increasing dependency on foreign energy and its economic, social, military, environmental and political ramifications.

Action: Organize a coalition of energy related associations, companies, individuals, elected officials and strategic elite to support this purpose.

Benefit: Cause the United States government to expediently and efficiently arrest the nation's increasing dependency on foreign energy.

Result: Have the new Clinton administration *freeze* the amount of energy imported into the United States at a Presidentially set, safe and secure percentage.

P.S. This energy policy concept was presented to the Interstate Oil & Gas Compact Commission and the Liaison Committee of Cooperating Oil & Gas Associations at their respective meetings in Salt Lake City earlier in the week.

The coalition should be established and functional before the new Clinton administration takes office in January. A detailed National Energy Stability Policy would be delivered to the new Secretary of Energy immediately upon inauguration.

For more background information and benefits, Phone 713 467 4732 or write Box 820228, Houston, TX. 77282, Washington DC Hotel Phone 202 234 7800

"Document Control"

TYPE: INFORMATION DOCUMENT NUMBER: 9203487
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: BISCONTI, ANN S.: USCEA

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 11/23/92

SUBJECT: ENCLOSURES TWO NEW PUBLICATIONS RE: NUCLEAR ENERGY

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS: Complete enclosure to PS&E.

OSTP RECEIVED: 12/01/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-NUCLEAR ENERGY
CENTRAL FILES:

3487



U.S. Council for Energy Awareness

Ann S. Bisconti, Ph.D.

Vice President, Research and Program Evaluation

November 23, 1992

RECEIVED

92 DEC 1 PM 2:14

OSTP
MAIL ROOM

Suite 400
1776 I Street, N.W.
Washington, D.C. 20006-3708
(202) 293-0770

FAX (202) 785-4019
(202) 785-4113

The Hon D. Allan Bromley
Assistant to the President for
Science and Technology
Office of the President
Washington, DC 20506

Dear Dr. Bromley:

On this 50th anniversary of fission, I thought you'd be interested in knowing that a majority of Americans assess nuclear energy's contribution favorably. Two-thirds of the public, according to a recent poll, believe that "America's 110 nuclear power plants have served this country well."

Those results are enclosed along with two new publications.

The first debunks the myth that people treat energy like a horserace. Americans' clear preference for solar energy does not exclude support for nuclear energy. Sixty-six percent support developing both solar energy and nuclear energy, and 74 percent believe we should at least keep the option open to build new nuclear energy plants in the future.

The second publication reports on a national survey of children/teens and their parents. Despite their intense interest in environmental protection, only 15% of the young generation could name a single environmental benefit of nuclear energy. But even without this knowledge, two-thirds of the children and teens believe nuclear energy should play an important role in the years ahead.

It's a bit early, but best wishes for the holidays.

Sincerely,

Ann S. Bisconti

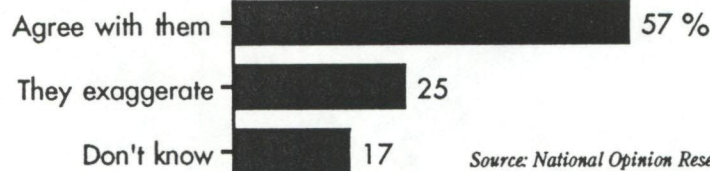
ASB/cjc

Enclosures

The Public and Nuclear Energy

Yesterday...

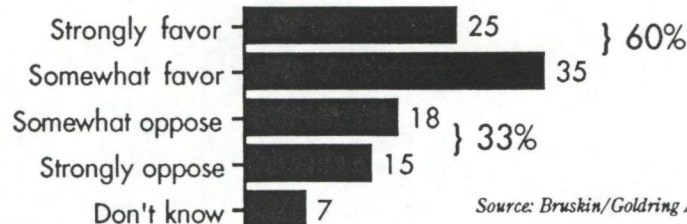
"Some people say that splitting the atom will prove the greatest invention in over a thousand years and will change many of our ways of living. Do you agree with them, or do you think they exaggerate its importance?"



Source: National Opinion Research Center, 1945

Today...

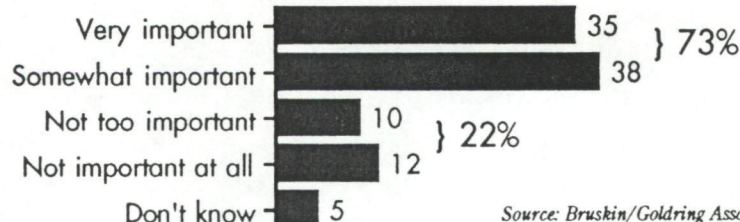
"Overall, do you strongly favor, somewhat favor, somewhat oppose, or strongly oppose the use of nuclear energy as one of the ways to provide electricity for the United States?"



Source: Bruskin/Goldring Associates, 1992

Tomorrow...

"Practically speaking, how important a role do you think nuclear energy should play in meeting America's future energy needs?"



Source: Bruskin/Goldring Associates, 1992

Public Opinion

Prepared by the U.S. Council for Energy Awareness

October 1992

The Competition That Isn't: Late Returns Show Solar, Nuclear Both Winners

Observers often treat energy sources as if they were political candidates. But Americans realistically support an energy mix, and their love affair with solar energy—and strong preference for that source—does not exclude support for nuclear energy.

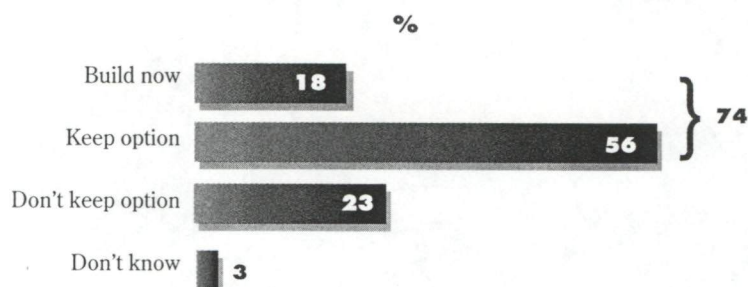
A September 1992 nationally representative poll of 1,000 Americans by Bruskin/Goldring Research (margin of error $\pm 3\%$) finds that, of all energy sources, solar energy is the top-of-mind “most beneficial” (43%, followed by nuclear energy at 25%).
See questions and answers on back.

At the same time, large majorities of Americans:

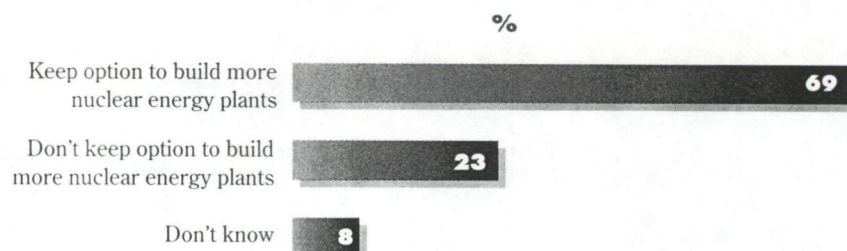
- Believe we should keep the option open to build new nuclear energy plants.
- Would support a candidate who believes we should keep the option open to use more nuclear energy in the future.
- Support developing *both* solar energy and nuclear energy.

These findings hold true for men and women, Bush supporters and Clinton supporters.

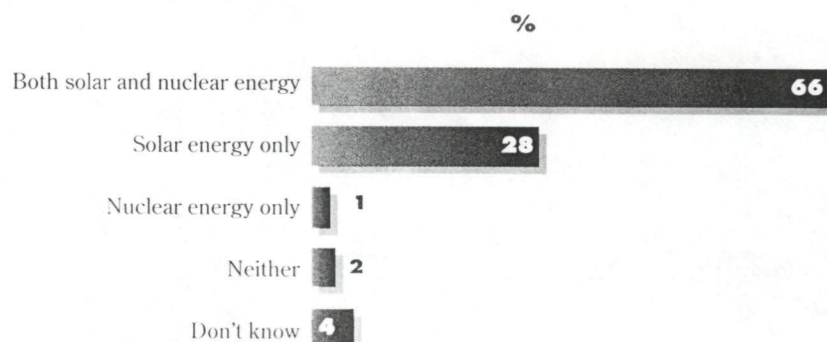
Opinions About Building New Nuclear Energy Plants...



Would Support Candidate Who Believes...



U.S. Should Develop...



Complete poll on back

Public Opinion

Prepared by the U.S. Council for Energy Awareness

November 1992

Nuclear Energy and the Environment: What Do Our Children Know?

Two out of five children and teenagers in a recent study could accurately define the term "biodegradable," but only seven percent knew that the primary source of electricity in our country is coal. Less than one out of five could name any environmental benefits of using nuclear energy to generate electricity.

These findings are from a national study of 504 children (ages 6 to 17) and 504 parents—one for each child. The study, *The Environmental Report: The Power of Children* was conducted by Environmental Research Associates in July and August 1992. Several questions were included for USCEA. The study found a large gap between the environmental awareness and energy awareness of the next generation.

Environment "Biggest Problem"

When children and parents were asked to name the "biggest problems in our country these days," neither group mentioned energy. It did not make the list. For parents, the economy and social issues—drugs, homelessness, poverty, crime, education, and health care—predominated. For children and teens, the environment topped the list, with almost as many

mentions as the diverse social issues combined.

The children were not only concerned about the environment, they were taking action and influencing their parents. Sixty-one percent of the 6 to 10-year olds and 78 percent of the 11 to 17-year olds said they did something to improve the environment over the past year—mostly recycling cans, bottles, and newspapers. Half the parents said they "changed (their) buying or shopping habits for environmental reasons

specifically because of something they learned from (their) children."

Electricity Knowledge Gap

The study also suggests that most of America's children and parents lack basic information on energy issues. For instance, few knew where electricity comes from now or where it will come from ten years from now.

Only seven percent of the children and teens and 18 percent of parents knew that coal is our primary source today. Only two percent of the children and seven percent of the parents thought coal would be used most 10 years from now. Coal today accounts for over half the electricity used in

TABLE 1

"What do you think are the biggest problems in our country these days?"

	Children/Teens %	Parents %
Environment	47	13
Economy	12	56
Drugs	15	26
Homelessness/poverty	14	22
Crime	14	16
Diseases—AIDS	6	9
Government	6	14
Racism	5	7
Health care	0	10

TYPE: ACTION
ORIGINATOR: 02

STATUS I

DOCUMENT NUMBER: 9202923
DIRECTORATE STATUS

FROM: BEERS, John C.

SEP 29 1992

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 09/19/92

SUBJECT: HE IS WRITING URGING THE U.S. TO EXPLORE RENEWABLE
ENERGY SOURCES.

DIRECTORATE STAFF
ASSIGNED: PHYSICAL SCIENCES ASSIGNED:

ACTION STAFF
REQUIRED: AS NECESSARY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 10/12/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT: 10/13/92

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: PHONE: EXT:

Dr. Eib responded.

OSTP RECEIVED: 09/28/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY

CENTRAL FILES:



The White House - Attn: D. Allen Bromley
1600 Pennsylvania Ave., N.W.
Washington, D.C. 20500

Dear Mr. Bromley:

As a concerned American Citizen I am writing you to convince the President to encourage Congress about America's high interest in the greater use of renewable energy sources like wind, solar and biomass to supply more of our national energy needs.

Are you aware that renewable energy sources are RIGHT NOW ready to supply a significant portion of our nation's energy needs?

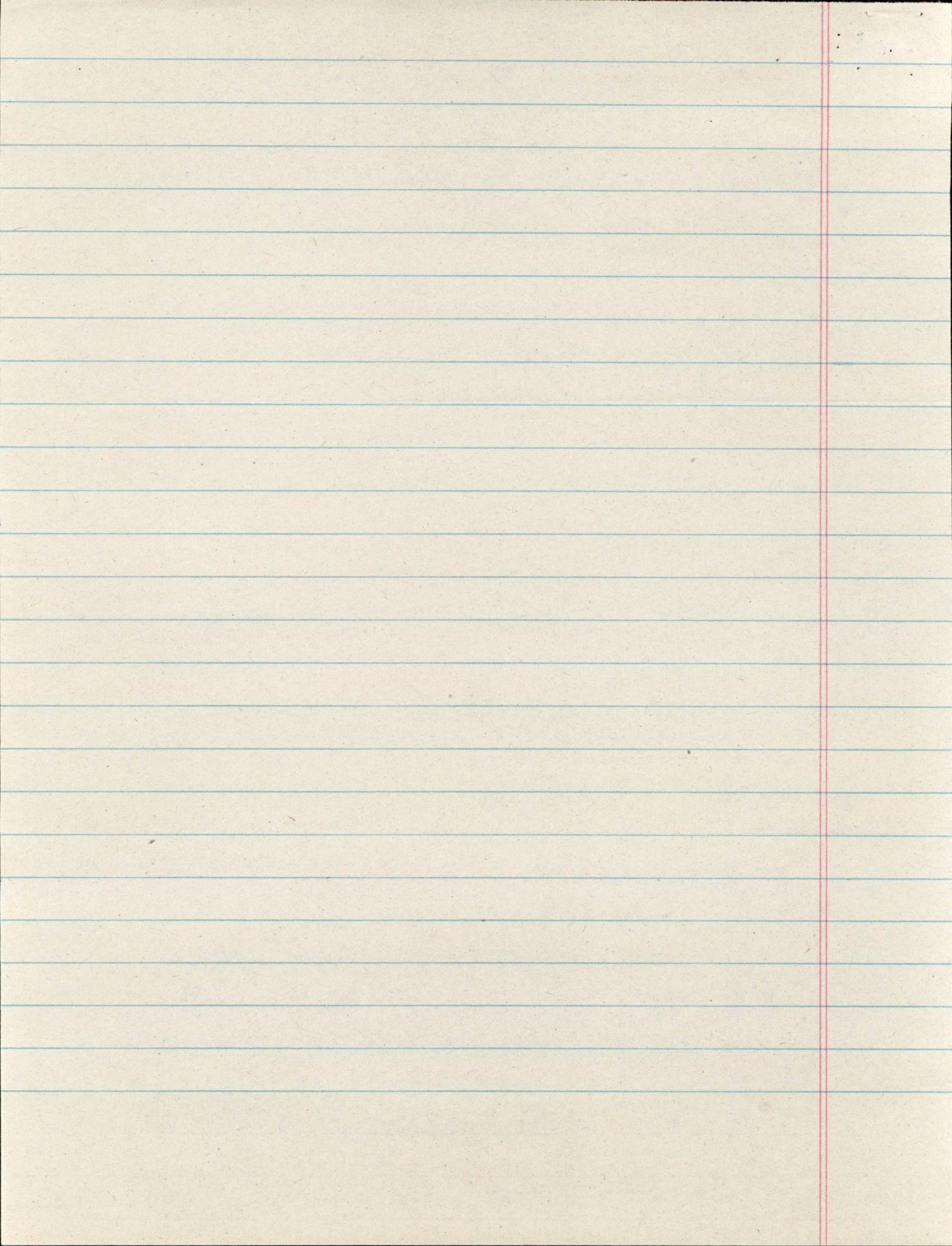
Strong presidential leadership is necessary to promote greater renewable energy use. Some relatively simple policy changes will have a great impact: for example, allocating more research and development funds to renewables, revising our tax structure to remove the penalties against renewables, and legislative incentives and regulations to encourage utilities, businesses and developers to incorporate in their planning.

Sincerely,

John C. Beers - John C. Beers

240 S. Anza St., Apt. P

El Cajon, Cal 92020 (phone 619-442-3843)



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20506

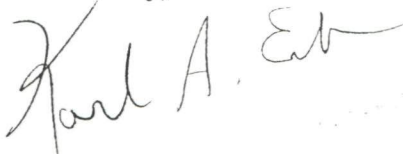
October 13, 1992

Dear Mr. Beers:

Thank you for your letter to the Office of Science and Technology Policy concerning renewable energy sources.

I agree with you that renewable sources are important, and I wish only to point out that they are an important element--together with conservation and with improvements in fossil fuel, transportation, and nuclear energy technologies--in our national energy strategy. Primarily, but not exclusively through the Department of Energy, we are supporting research and development in all of the above areas, in order to ensure that we can meet the nation's future needs for energy. We believe that renewable sources will play an expanded role in the future but that other technologies will continue to be required, especially to ensure the availability of the large blocks of electricity generating capability that will be required.

Sincerely,

A handwritten signature in dark ink, appearing to read "Karl A. Erb". The signature is fluid and cursive, with the first name "Karl" being the most prominent.

Karl A. Erb
Associate Director
for Physical Sciences and Engineering

Mr. John C. Beers
240 S. Anza Street, Apt. P
El Cajon, CA 92020

Further Information on the Billion Pound Diet

*The Billion Pound Diet is sponsored by the Union of Concerned Scientists and Student Pugwash USA.
For further information, contact the national coordinating office: Union of Concerned Scientists,
26 Church Street, Cambridge, MA 02238 (tel. 617-547-5552).*

How We Arrived at the Numbers on the Diet Tally Sheet

The numbers on the diet tally sheet are approximate yearly national averages and are rounded for convenience. Because tens of thousands of people across the nation will participate in The Billion Pound Diet, the use of average numbers will produce an accurate total. However, your personal CO₂ reduction will vary from the national average depending upon your region, the size of your home or apartment, the efficiency of your car and appliances, and your personal habits.

Here is how we computed our CO₂ reductions:

❖ **Automobiles.** Cars produce approximately 20 pounds of CO₂ for each gallon of gas they use. Since the average car on the road gets 20 miles per gallon, it produces one pound of CO₂ each mile. A well-tuned car with properly inflated tires can use up to 20% less gas than a poorly tuned car with underinflated tires.

❖ **Electricity.** A variety of energy sources—coal, water power, oil, natural gas, nuclear power, wind, and solar power—are used to generate electricity. Since only some of these produce CO₂, different electric companies emit different amounts of CO₂. A recent report from the National Audubon Society concluded that, on average, one kilowatt-hour of electricity produces 1.5 pounds of CO₂.

❖ **Recycling.** Industry associations provided data on the energy savings for recycling activities. We used the weight of average-sized cans and bottles.

❖ **Attic insulation.** It takes 600 gallons of oil, 840 therms of gas, or 19,700 kilowatt-hours of electricity to heat the average 6-room house for a year. Attic insulation should save 15% of this.

❖ **Light bulbs.** Our numbers assume that each light bulb is on 4 hours a day and that the average compact fluorescent is 50 watts less than the incandescent it replaces.

❖ **Hot water.** We assumed the average hot-water heater uses 4,000 kilowatt-hours of electricity annually or 240 therms of gas.

How to Figure the Impact of Other Actions You Take

You can use either of two approaches. You can start with the numbers on the tally sheet and adapt them to your proposed action, or you can determine your actual energy savings in gallons of oil, therms of natural gas, or kilowatt-hours of electricity. Then compute the resulting CO₂ reduction. Use the following:

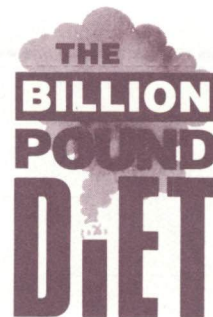
heating oil and gasoline = 20 pounds of CO₂ per gallon

electricity = 1.5 pounds of CO₂ per kilowatt-hour

natural gas = 11 pounds of CO₂ per therm.

If You Plan to Make Major Purchases

By purchasing energy-efficient products, you can make a significant difference in your environmental impact. You will also save money in the long run. For example, a car that gets at least 35 miles per gallon of gas produces 1,560 pounds less CO₂ annually than the average new car, assuming it is driven 10,000 miles per year. A new energy-efficient refrigerator that uses 900 kilowatt-hours of electricity a year produces 900 pounds less CO₂ than a typical 10-year-old refrigerator, which uses 1,500 kilowatt-hours. If you plan to buy a car or refrigerator during the next year, pledge to purchase an energy-efficient model. Then figure your potential yearly CO₂ savings and include this number on your Billion Pound Diet tally sheet.



The Billion Pound Diet

Personal Diet Tally Sheet

By committing to a few of the energy-saving actions below, you can help reduce carbon dioxide (CO₂) emissions by one billion pounds a year. Your actions will not only improve the environment but will also reduce our nation's dependence on foreign oil. The numbers below are approximate yearly national averages; to learn how we arrived at them, see the back of this sheet.

1. Drive and Ride Less. I will:

- ☐ eliminate _____ miles of car travel over the next year.

Total = _____ pounds of CO₂ (= the number of miles of car travel eliminated)

2. Tune Up. I will:

- ☐ tune my car regularly and maintain proper tire pressure.

Total = 1,000 pounds of CO₂

3. Recycle. I will:

- ☐ recycle _____ aluminum cans (typical CO₂ reduction = 34 pounds per 100 cans).
☐ recycle _____ glass bottles (typical CO₂ reduction = 30 pounds per 100 bottles).
☐ recycle _____ pounds of paper (typical CO₂ reduction = 20 pounds per 100 pounds).

Total = _____ pounds of CO₂

4. Insulate. I will:

- ☐ wrap a home hot-water heater (typical CO₂ reduction = 1,200 pounds for electric heaters; 400 pounds for gas heaters).

- ☐ insulate the attic of a house (for a 6-room house, typical CO₂ reduction = 1,800 pounds if oil-heated; 1,390 pounds if gas-heated; 4,430 pounds if electrically heated).

Total = _____ pounds of CO₂

5. Replace Light Bulbs. I will:

- ☐ replace _____ incandescent lights with compact fluorescents (typical CO₂ reduction = 110 pounds per light).
☐ replace _____ high-watt incandescents with lower-watt incandescents (each 10-watt reduction typically eliminates 22 pounds of CO₂ emissions).

Total = _____ pounds of CO₂

6. Reduce Hot-Water Use. I will:

- ☐ wash my clothes in cold water (typical CO₂ reduction = 250 pounds per person with an electric hot-water heater; 110 pounds with gas).
☐ install a low-flow showerhead (typical CO₂ reduction = 225 pounds per person with an electric hot-water heater; 99 pounds with gas).
☐ turn my hot-water heater down 10 degrees (typical CO₂ reduction = 240 pounds with an electric heater; 106 pounds with gas).

Total = _____ pounds of CO₂

7. Other Actions. To calculate the CO₂ savings of other actions, see the back of this sheet.

Total = _____ pounds of CO₂

Total Personal CO₂ Reduction

Name: _____

Address: _____

Impact of my planned action:

- _____ pounds (from #1)
_____ pounds (from #2)
_____ pounds (from #3)
_____ pounds (from #4)
_____ pounds (from #5)
_____ pounds (from #6)
_____ pounds (from #7)

Total = _____ pounds of CO₂



There is a strong consensus within the scientific community that an increasing concentration of heat-trapping gases in the atmosphere will cause the earth's climate to get warmer. The buildup of these gases—carbon dioxide (CO₂), chlorofluorocarbons (CFCs), nitrous oxide, methane, and ozone (smog)—will increase the atmosphere's natural "greenhouse effect," bringing on global warming. Resulting changes in surface temperature, precipitation, sea level, and other aspects of our climate could cause severe disruption of natural and economic systems throughout the world.

Our society uses enormous amounts of energy to heat our homes and offices, to power our industrial economy, and to move us rapidly from place to place. The burning of fossil fuels (coal, oil, and natural gas) to supply this energy is responsible for the buildup of the most common greenhouse gas—carbon dioxide. Fossil-fuel burning releases 5.6 billion tons of carbon—at least 70 percent of total carbon emissions from human sources—into the atmosphere each year. It is also a significant source of nitrous oxide, methane, and ozone.

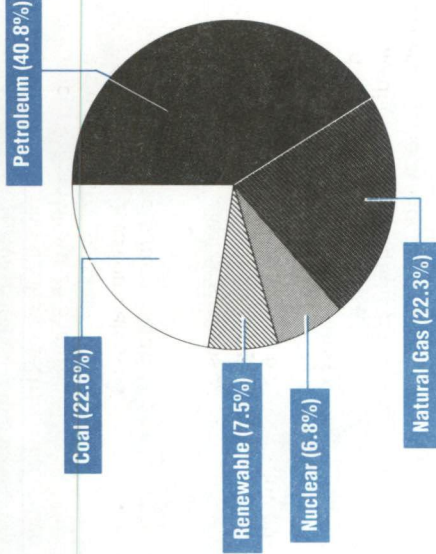
A NATIONAL ENERGY AGENDA

To slow and eventually stop global warming, world emissions of greenhouse gases, particularly CO₂, will have to be cut substantially. UCS supports a 20-percent reduction of CO₂ emissions by 2010, followed by further reductions thereafter. These goals are achievable and should be adopted by the United States and other countries.

To do its part, the United States will need a coherent energy policy focused on two areas: energy efficiency and renewable energy. Major improvements in energy efficiency are necessary to allow the United States to sustain strong economic growth while avoiding increases in energy consumption that would give off more carbon dioxide.

In the long run, fossil fuels will have to be replaced by renewable energy sources, particularly solar, wind, geothermal, and biomass (wood and other plant matter). If developed to their full technical and economic potential, these energy sources could supply a large fraction—perhaps half—of US energy needs by 2020.

US Energy Consumption



Total: 83 quads (1 quad=quadrillion British thermal units) Source: Energy Information Administration, industry sources.

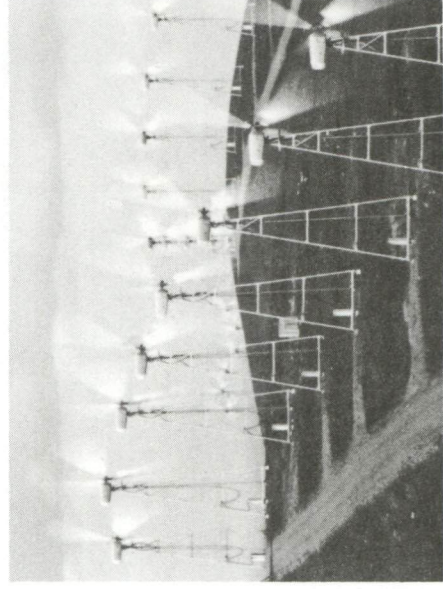
Most solar technologies are much less expensive today than just a few years ago, and they are likely to become more competitive in the next few years. For example, the price of photovoltaic electricity has fallen tenfold since 1976, to about 25-35¢ per kilowatt-hour; in 10 years or less the cost could reach 6-12¢ per kilowatt-hour, low enough to compete with most conventional electricity sources for generating peak daytime power.

Solar-thermal electric systems already produce electricity at a cost of about 10-12¢ per kilowatt-hour, and the cost is expected to drop to 6-8¢ per kilowatt-hour in the 1990s as larger and more efficient plants are built. By the end of the 1990s, a variety of solar-thermal electric designs, including parabolic-trough collectors, parabolic-dish collectors, and central receivers, could be generating electricity at economic prices.

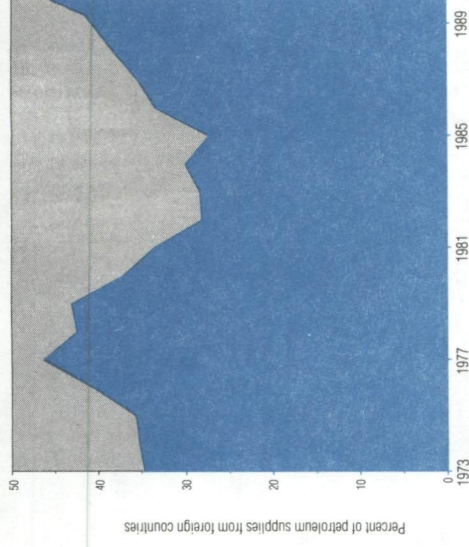
Wind Wind power, one of the oldest and most environmentally benign energy sources, has been one of the most successful in the past 10 years. Between 1981 and 1988, over 15,000 wind turbines with a total peak electric capacity of almost 1,500 megawatts were installed in California—where the vast majority of world wind-power development has taken place—and these turbines now generate on average about as much electricity as San Francisco consumes.

Wind power offers the potential for meeting a large fraction of US electricity needs. Estimates of the total potential vary, but it appears that at least 20 percent of current US electricity demand could be met by wind turbines installed on the Great Plains, along coasts, and in other windy areas.

Wind turbines are among the most economical of the emerging renewable-energy technologies. At a good site, modern turbines can produce electricity at a



US Dependence on Foreign Oil



Renewable energy sources are needed to reduce US dependence on foreign oil, which once again has risen above 40 percent. Source: DOE.

cost of 7-9¢ per kilowatt-hour. Within the next five years the cost will probably fall to 4-6¢ per kilowatt-hour. This would make wind power competitive with a broad range of conventional electricity sources.

Biomass Biomass use—capturing the solar energy in wood and vegetation—now accounts for 4-5 percent of annual US energy consumption. Ultimately, biomass resources could supply 15-30 percent of US energy consumption (at current levels). Agricultural, forestry, and municipal wastes, plus plants and trees grown on "energy plantations," would supply the raw materials.

In the future, biomass is likely to be most important as a source of liquid fuels for transportation. Automobiles and trucks could run on these fuels with some modification to their engines and fuel tanks. (Currently about 8 percent of gasoline sold in the United States contains ethanol, derived from corn or other grains, in a mixture known as gasohol.) In addition, methanol (another biomass-derived gas, also the major constituent of natural gas) can be readily burned in existing natural-gas-fired steam boilers and furnaces.

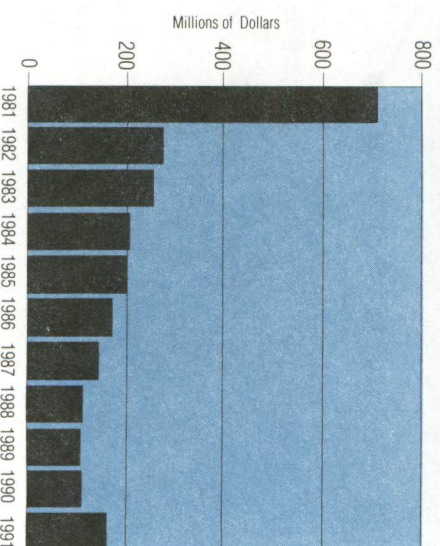
Most biomass fuels are still too expensive to succeed commercially, but their costs are falling steadily, and the Department of Energy projects that biomass fuels could become competitive with petroleum-based fuels around the turn of the century.

As long as biomass that is consumed for energy is replaced by new growth, so that the carbon dioxide released in combustion is reabsorbed, biomass's net contribution to global warming will be negligible. More than most renewable energy sources, however, biomass carries environmental risks, including air pollution, toxic residues and ash, and depletion of soil nutrients. These issues must be studied carefully and appropriate standards and regulations developed.

Geothermal Geothermal energy is heat contained below the earth's surface. Though not strictly renewable—heat in any given volume of rock or underground water is depletable—the total resource is so large that it is usually treated as renewable. Although only 0.3 percent of US energy demand is currently being met by geothermal energy, over 1.2 million quads, or the equivalent of 15,000 years of US energy consumption, is believed to be accessible in the United States. The only type of geothermal energy that has been widely developed is hydrothermal energy, which consists of trapped hot water or steam. Most hydrothermal facilities generate electricity, but a small fraction produce heat for buildings and industry.

Although hydrothermal resources are concentrated in the western states, other geothermal resources are more dispersed. New technologies for exploiting hot dry rock (accessed by drilling deep into rock) and geopressured resources (pressurized brine mixed with methane) should make the earth's heat available at a reasonable cost throughout the country within 10 to 20 years.

US Department of Energy
Renewable-Energy Spending



STIMULATING THE RENEWABLE-ENERGY ECONOMY

The transition to a renewable-energy economy will require the implementation of new energy policies, changes in government programs, and a restructuring of some aspects of our tax system. There are a number of options for action at the federal, state, and local levels that will help to stimulate large-scale commercialization of renewable energy sources.

Federal Funding for Research, Development, and Demonstration Despite massive cuts in the 1980s, federally funded R&D has contributed to continuing gains in solar, wind, and biomass technologies. What is needed now is a steady annual increase of perhaps 20-30 percent in the Department of Energy renewable-energy budget. There is also a need for greater emphasis on near-term commercialization, including cost-sharing efforts with the private sector, demonstration projects, and the purchase of renewable energy in large quantities to supply power to government facilities.

Leveling the "Playing Field" Renewable energy sources are forced to compete in a rigged market because our economic system fails to account for the environmental and social damage caused by energy technologies. If acid rain, air pollution and other hidden costs of fossil fuels were included in their price—rather than in our taxes and health-insurance costs—renewable-energy technologies would be in a far better position to compete with their conventional counterparts.

The playing field can be at least partially leveled through the utility rate-setting procedure (where the "external" costs would be "internalized"); by federal and state support, whether direct or through tax credits, to bring down the costs of renewable energy sources; and by taxes on the use of fossil fuels.

Encouraging Private Investment The short-term focus that has run rampant in the American industrial and financial sectors also places renewable energy sources at a disadvantage. The high initial costs of solar collectors, wind turbines, and other renewable technologies make them more expensive than conventional technologies in the short term, even though their costs in the long run are likely to be lower.

These barriers can be lowered by the use of tax credits for renewable-energy investments and by educational programs on the federal, state, and local levels.

CONCLUSION

The global development of renewable energy sources, along with improvements in energy efficiency, could greatly slow the pace of global warming, cutting the projected temperature increase over the next 100 years by nearly 50 percent, according to a 1989 EPA study. In order to accomplish this, however, government leadership, particularly by the US, will be crucial. The United States must increase its support for renewable energy sources. The relatively minor initial investments required will be more than offset by the long-term economic and environmental benefits.

May 1991

The material in this brochure is adapted from a 1990 UCS report of the same title, available from the UCS Publications Department.

UNION OF CONCERNED SCIENTISTS

The Union of Concerned Scientists is a nonprofit 501(c)(3) organization of nearly 100,000 scientists and other citizens concerned about the impact of advanced technology on society. Its programs focus on national energy policy, national security policy, and nuclear power safety. UCS is a member of the Environmental Federation of America and is certified by the Combined Federal Campaign for workplace giving by federal employees and military personnel.

You may become a UCS Sponsor and receive our quarterly publication, *Nucleus*, by making a tax-deductible contribution of any reasonable amount. For information on UCS and its programs, contact:

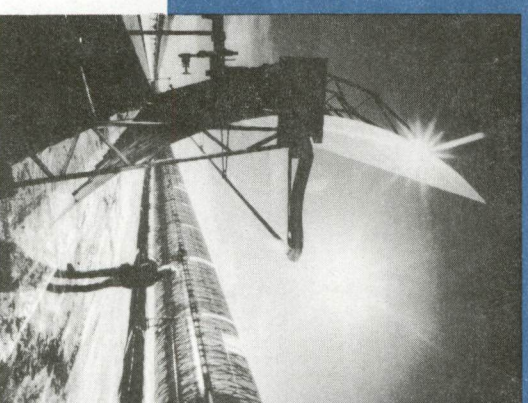
Union of Concerned Scientists
26 Church Street
Cambridge, MA 02238
(617) 547-5552

Cover photo courtesy of Luz International, Ltd.

PRINTED ON RECYCLED PAPER

GOOD ENERGY

THE RENEWABLE SOLUTION TO GLOBAL WARMING



UNION OF CONCERNED SCIENTISTS

"Document Control"

TYPE: INFORMATION DOCUMENT NUMBER: 9202752
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: MURRIN, THOMAS: DUQUESNE UNIVERSITY

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/25/92

SUBJECT: RE: HEATHER GRIBBLE

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: PHONE: EXT:

OSTP RECEIVED: 09/02/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-NUCLEAR
CENTRAL FILES:



DUQUESNE UNIVERSITY

ROCKWELL HALL • PITTSBURGH, PA • 15282

THOMAS J. MURRIN

OFFICE OF THE DEAN

A.J. PALUMBO SCHOOL OF BUSINESS

ADMINISTRATION

TELEPHONE (412) 434-5156

FAX (412) 642-9106

August 25, 1992

D. Allan Bromley
The Assistant to the President
for Science and Technology
The White House
Washington, D.C. 20006

Dear Allan,

The attached may be of interest ...

As you know, Heather helped with our recent visit to Duke.

Most sincerely,

Thomas J. Murrin
Dean

TJM/bf

Enclosure



Westinghouse
Electric Corporation

Energy Systems
Business Unit

N D Woodson
Vice President and
General Manager

Box 355
Pittsburgh Pennsylvania 15230

August 11, 1992

Ms. Heather Gribble
8431 Briar Creek Drive
Annandale, Virginia 22003

Dear Ms. Gribble:

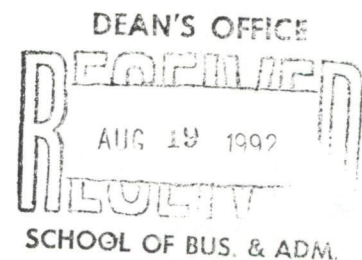
Tom Murrin forwarded your letter of July 27th to Westinghouse for our response. We are happy to be able to provide the following insights into the French nuclear program. Good luck with your senior project.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'N D Woodson'.

NDW/ncm

cc: ✓ T. J. Murrin
T. Stern



Question 1: *In your opinion, is the standardized design a key reason to the success of the nuclear industry? Or, is it more public relations used by the Electricite de France to secure public acceptance?*

Standardization leads to success. In the United States, for example, the nuclear industry, with the full support of the U.S. government and all major nuclear industry groups, is actively pursuing new nuclear plants which have standard designs. The Nuclear Regulatory Commission is reviewing one such design currently, the AP600.

Moreover, two plants in the United States, Callaway and Wolf Creek, were designed as standard plants, called SNUPPS—standard nuclear power plant systems. They are consistently among the best operating units in this country. In 1989, both Callaway and Wolf Creek broke records—Callaway for total production over five years and Wolf Creek for total production that year. In 1989, 1990 and 1991, they were among the most cost-effective nuclear plants in the country. And Callaway is consistently lauded by the U.S. NRC for its outstanding safety performance. When interviewed, the plant managers have endorsed the idea that even more SNUPPS plants should be built.

France, which has many standardized units, enjoys the same benefits that the SNUPPS units have experienced. Although the public relations strategy of Electricite de France is not publicized, the utility would be well-served by taking full credit for the very approach—standardization—which others have found to be so beneficial.

Question 2: *How can the French media objectively transmit information concerning nuclear issues when the state and industry, who have a great interest in the positive perception of this energy source, are so powerful and influential over new agencies and companies?*

The French media, like the media in all countries with a free press, take great pride in their objectivity. Like reporters in all free countries, French journalists seek alternative sources for their information in addition to the public relations sources at Electricite de France and the government. Universities have sources which can confirm or deny the accuracy of technological claims. We feel it is important that universities remain informed and objective. As such, we encourage an open dialogue. The French media transmits objective information by checking with responsible sources outside of government and industry.

Question 3: *Are plant designs simply safer in France?*

French nuclear plants are based on the Westinghouse Electric supplied pressurized water reactor design which meets the stringent standards of the U.S. Nuclear Regulatory Commission, the world's most respected nuclear regulatory body. That same basic PWR design is used throughout the Western world, where PWRs have operated reliably for more than three decades. The French have kept the fundamental plant design unchanged; therefore, their plants are as safe as, but not necessarily safer than, other Western PWRs.

Question 4: *Is the issue of waste merely political or technological as well?*

Nuclear experts believe that safe disposal of nuclear waste is technologically feasible. They cite the Oklo Phenomenon as convincing evidence that stable geological formations are safe for long-term disposal of radioactive wastes. Two billion years ago, natural events operating on a rich, naturally occurring uranium deposit in what is now Gabon, West Africa, led to nuclear fission reactions. This natural nuclear reactor produced the same types of wastes as man-made reactors. Studies of the site show that the fission products have moved less than six feet from where they were formed nearly 20 million centuries ago. That occurrence has convinced scientists that a system of multiple barriers, both engineered and natural, can successfully isolate nuclear wastes. No technological barriers exist.

Question 5: *Why is there so little confidence in the United States for nuclear energy when the environmental, economical, and political merits are so great?*

Recent surveys indicate the strongest level of public and Congressional support for nuclear power that we have seen for the last fifteen years. Confidence in the U.S. Congress has never been higher. When surveyed, approximately three-quarters of the American public have said that they believe that nuclear power should be part of America's energy mix in the future.

Question 6: *Are anti-nuclear groups vocal in France?*

Anti-nuclear organizations such as Greenpeace are active throughout the world. In France, where three-quarters of the electricity is produced using nuclear energy, the opinions of anti-nuclear groups are balanced by several significant factors. First, France has the cleanest air in Europe. Second, France has the lowest electricity costs in Europe. And third, France receives significant revenues from exporting electricity to other power-poor countries in Europe.

Those three factors give pro-nuclear forces annunction to combat the verbal attacks by anti-nuclear groups.

TYPE: ACTION DOCUMENT NUMBER: 9202685
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: BARRETT, Bruce

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 09/02/92

SUBJECT: HE IS WRITING TO EXPRESS HIS CONCERN OVER THE
EXTREME THREAT POSED BY AGING NUCLEAR REACTORS IN
THE FORMER SOVIET UNION.

DIRECTORATE STAFF
ASSIGNED: PHYSICAL SCIENCES ASSIGNED:

ACTION STAFF
REQUIRED: DIRECT REPLY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 09/23/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
INTERNATIONAL/POLICY

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS:

OSTP RECEIVED: 09/09/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY

CENTRAL FILES:

2685

Bruce Barrett
1164 Emerald, # 1
Madison WI 53715

September 2, 1992

Dr. Allan Bromley
Old Executive Office Bldg.
Washington, DC 20500

Dear Dr. Bromley,

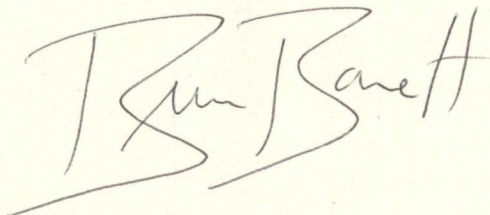
I am writing you today to express my concerns about the extreme threat posed by several aging nuclear reactors in the former Soviet Union. The human and environmental consequences should any of them fail are dire - death, sickness, and hunger on a scale similar to Chernobyl. Graphite-cooled and pressurized-water reactors are inherently unsafe. I do not believe that any means of rebuilding would be adequate to insure the safety of the millions of people living in reactor-endangered areas.

I do not have a detailed plan for supplying the energy needed for powering a modern society. Coal and hydroelectric have their own dangers. However, in my opinion it is imperative that unsafe reactors be shut down, as soon as possible. Support of energy conservation - insulation, public transport, bicycles -, and alternative energy - solar, wind, geothermal, tidal - is essential to any rational plan for the earth's future.

Please lend your support to 1) the closing of unsafe reactors in eastern Europe and the Asian republics, and 2) the development of safe, clean, renewable, locally-controlled sources of energy.

Thank you for your time and consideration.

Sincerely

A handwritten signature in dark ink, appearing to read "Bruce Barrett". The signature is stylized with large, sweeping loops for the first and last names.

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202944
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: CRANBERG, Lawrence

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/20/92

SUBJECT: HE IS WRITING REGARDING THE REVIEW PROCESS FOR THE
ENERGY RELATED INVENTIONS PROGRAM AT NIST.

DIRECTORATE STAFF
ASSIGNED: INDUSTRIAL ASSIGNED:

ACTION STAFF
REQUIRED: DIRECT REPLY ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 10/15/92 STAFF DUE DATE
DATE COMPLETED: 29 DATE COMPLETED/DEPT:

COPIES TO:

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS: PLEASE NOTE: THE DATE OF THE LETTER IS 08/20/92 BUT THE POSTAGE
CANCELLATION NOTES THAT IT WAS NOT MAILED UNTIL 09/28/92.
REASSIGNED TO INDUSTRIAL PER DR. ERB.

*I recommend that either the letter be answered by Dr.
Bromley (because he may be a friend) or*

OSTP RECEIVED: 10/01/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY

CENTRAL FILES:



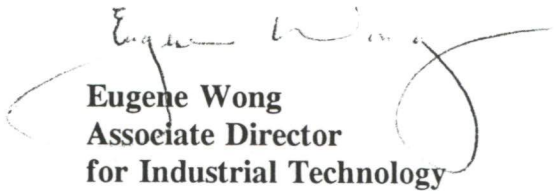
EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20506

October 26, 1992

Dear Dr. Cranberg:

I am responding to your letter to Dr. Bromley, suggesting that the NIST procedures be subjected to peer review. I regret that we have neither the appropriate authority nor the interest to intervene in NIST's process for handling its programs.

Sincerely yours,



Eugene Wong
Associate Director
for Industrial Technology

Lawrence Cranberg, Ph.D.
1205 Constant Springs Drive
Austin, Texas 78746

TYPE: ACTION
ORIGINATOR: 02

STATUS I

DOCUMENT NUMBER: 9202944
DIRECTORATE STATUS

FROM: CRANBERG, Lawrence

OCT 2 1992

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/20/92

SUBJECT: HE IS WRITING REGARDING THE REVIEW PROCESS FOR THE
ENERGY RELATED INVENTIONS PROGRAM AT NIST.

DIRECTORATE
ASSIGNED: PHYSICAL SCIENCES

STAFF
ASSIGNED:

ACTION
REQUIRED: DIRECT REPLY

STAFF
ACTION:

OSTP DUE DATE: 10/15/92

STAFF DUE DATE
DATE COMPLETED/DEPT:

COPIES TO:

WHITE HOUSE TRACKING #:

CONTACT PERSON:
PHONE:

EXT:

REMARKS: PLEASE NOTE: THE DATE OF THE LETTER IS 08/20/92 BUT THE POSTAGE
CANCELLATION NOTES THAT IT WAS NOT MAILED UNTIL 09/28/92.

OSTP RECEIVED: 10/01/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY

CENTRAL FILES:

*Please reassign to Industrial Technology.
(Topic is inventions & commercializing not
research)
nb, Dr Wang has had other correspondence with
Dr Cranberg, I believe Oct 10/11/92*

2947

LAWRENCE CRANBERG, PH.D.
CONSULTING PHYSICIST

1205 CONSTANT SPRINGS DRIVE
AUSTIN, TEXAS 78746

TELEPHONE AND FAX
(512) 327-1794

Dr. D. Allan Bromley,
Science Adviser to the President,
The White House,
Washington, D. C. 20500

Aug. 20, 1992

Dear Allan,

I enclose a copy of the reply from Dr. John Lyons to my protest that the ERIP program, which is supposed to foster innovation, operates without benefit of peer review.

Dr. Lyons' letter confirms that my two proposals were rejected without benefit of peer review. Because that is how things are done at NIST!

I suggest that NIST procedures themselves be subject to peer review. The letters of rejection I received bear every mark of carelessness and of scientific illiteracy. A chain is no stronger than its weakest link, and if the first link in the ERIP chain is as weak as I have found it to be, then the whole chain is worthless.

I responded to each of the rejections with detailed letters explaining to the Staff Analyst, whose qualifications are an enigma wrapped in a mystery, what he plainly failed to understand, and never received a reply.

Is it any wonder that America is falling behind in the international competitiveness race?

Please give this your personal attention. The government has spent more than 60 million dollars on ERIP since 1970, and has precious little to show for it. Most of the funds have been soaked up by administrative costs.

Sincerely yours,


Lawrence Cranberg

c: T. Levinson, Dr. John W. Lyons.

**NIST**

UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899
OFFICE OF THE DIRECTOR

AUG 17 1992

Dr. Lawrence Cranberg
1205 Constant Springs Drive
Austin, TX 78746

Dear Dr. Cranberg:

This is in response to your letter of July 27, 1992, regarding our evaluation process for the joint NIST-Department of Energy (DOE) Energy-Related Inventions Program (ERIP). You had submitted evaluation requests for two separate inventions. The request to evaluate your invention entitled "Pocket Stamp (small size stamp coil and dispenser)" was received on May 21, 1992, by our Office of Technology Evaluation and Assessment; and that for your invention entitled "Texas Fireframe Gas-log Fire" was received on June 29, 1992. Both requests were reviewed in accordance with the enclosed brochure "Synopsis of Evaluation Process."

You will note from the brochure that Item 2 "Disclosure Review and Analysis (DRA)" is the first review step for evaluation requests. As stated in the brochure, disclosures that do not meet the requirements are not accepted for evaluation. Your two invention disclosures were not accepted for evaluation, and therefore did not go through the two-stage evaluation process (which includes peer review).

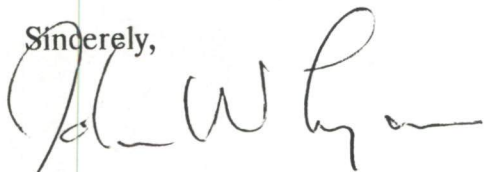
Your invention disclosure "Pocket Stamp (small size coil and dispenser)" was not accepted for evaluation because it does not appear to be sufficiently energy related to justify further action by ERIP.

Your second invention disclosure "Texas Fireframe Gas-log Fire" was not accepted for evaluation because your disclosure did not contain sufficient technical detail to determine if what you propose can compete with conventional primary and supplemental heating systems, considering cost, efficiency and pollution.

If you wish to add to your previous disclosure and resubmit, I can assure you that the ERIP staff will give your inventions every consideration.

We appreciate your interest in our technology evaluation program.

Sincerely,

A handwritten signature in dark ink, appearing to read 'J W Lyons', with a long horizontal stroke extending to the right.

John W. Lyons
Director

Enclosure

cc: T. Levinson

"Document Control"

TYPE: INFORMATION

DOCUMENT NUMBER: 9202894

ORIGINATOR: 02

STATUS C

DIRECTORATE STATUS

FROM: SPERRY, Russell

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 08/14/92

SUBJECT: HE IS FORWARDING A COPY OF HIS LETTER TO PRESIDENT
BUSH REGARDING MASSIVE ENERGY WASTE.

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:
REMARKS:

OSTP RECEIVED: 09/25/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY

CENTRAL FILES:

2894

Bend, Oregon

August 14, 1992

President George Bush
The White House
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

RE: Massive Energy Waste: Incompetence or Fraud?

Dear President Bush:

The new Clean Air Act seems intentionally designed to deceive the American and Canadian peoples. The burning of coal, as carried out by our electric utility, as well as the steel and other industries, spews acids, carcinogens, poisonous heavy metals, etc. into the atmosphere. A law intentionally designed to (only partially) reduce this massive pollution obviously does not solve the problem. A law, designed to intentionally further decrease an already disgracefully inefficient process and cost hundreds of billions of dollars, is an insult to all humanity! Once again, it appears the energy industries have dictated America's energy policies to their perpetuation, regardless of all other considerations.

The following quotes are from our open letter to President Ford, dated January 30, 1975: "Because of waste built into our energy use systems... we are rapidly approaching a zero energy return (ZER) on new production." "The critical situation is, then, that we are expending huge sums of money and non-renewable resources to maintain a (energy) treadmill which returns no useable energy" to the public. Application of your "Clean Air" Act will result in a good example of ZER!

In your photo opportunity in Arizona you praised the installation of scrubbers on two huge coal-fired electric generating plants near the Grand Canyon. These scrubbers are deemed necessary to remove acids and particulates from the flue gasses because the resultant haze threatens the tourist business in the area. We'll overlook for now the health, medical bills, possibly even lives of those unwillingly, even unknowingly, subjected to similar fumes all over the United States.

CNN was there and reported that each scrubber will cost about \$500 million; that for each ton of coal burned they will produce about a half-ton of sludge. The reporter did ask, "What are you going to do with millions of tons of sludge per year?" He failed to note that the sludge will contain nitrates and heavy metals which must not be allowed to leach into water supplies. Obviously, this process results in another extremely expensive waste disposal problem eventually equal to those of city rubbish and nuclear waste; an insulting misuse and abuse of technology.

He also failed to note that energy will be required to build, install, and operate the system. The latter will continually use a lot of electricity which, no doubt, will be generated by burning more coal and so will substantially increased CO₂ emissions from such plants. The public will be forced to pay the bill, estimated at possibly a 30% increased utility rate, but will get ZER for their money. However,

each of the energy industries involved will make a tidy profit from the operation. Predictably, the Bonneville Power Authority has already announced a planned 20% rate hike, which in this case will be inflationary. Just another hidden tax the public pays, and pays, and pays!

The CO₂ is Carbon Dioxide, the "greenhouse" gas the independent scientists have been screaming about for 20+ years. These "environmental extremists", along with most other nations, wish to reduce CO₂ emissions to minimize global warming. Your plan, however, is to intentionally increase CO₂ emissions. Now we see the true scope of your leadership role at Earth Summit '92. You would force all humanity to play Russian Roulette with the biosphere's thermal balances, whether they like it or not. When you suggest that Americans, 5% of the world's population, "have a right" to consume 30% of the world's fossil fuel, you show an arrogant contempt for the rest of mankind. There must be a better way!

It seems surprising that all nations other than OPEC members and obvious associates, such as the U.S. and Britain, did not long ago form a solar energy cartel. Such an organization, free of U.N. oil politics, has the potential to represent up to 80% of the world's population. We could hope the sole objective would be to develop the solar technology required to create an efficient worldwide economy designed for man to live in harmony with nature, not destroy it. A universally acceptable plan might have "3RD world" nations producing fuels from biomass for export to the industrialized nations; besides making them partners in the technological age, improved economies might help them to reduce the drug-exporting business. For any nation to put forth less effort toward developing such a sustainable society than that spent on fossil fuels, or nuclear energy, or space programs, or war machines would seem the ultimate folly, and an insult to future generations.

Back to the "smog" over the Grand Canyon. The Statistical Abstracts show that, on average, our coal-fired plants convert only about 30% of the coal energy to electricity. The remaining 70% is spewed into the atmosphere as waste heat along with moisture, acids, carcinogens, particulates, CO₂, etc. The tremendous amounts of heat and moisture from those two plants may combine with airborne filth from other fossil fuels used in the area, dust particles, etc. to perpetuate the haze even in the absence of the acids removed by the scrubbers. But no doubt your experts guarantee the desired result. If not, what's another trillion added to the national debt?!

Incidentally, all over Europe that "waste heat" is piped throughout cities to deliver hot water and space heating to the buildings, for which it is ideally suited. Those systems, known as "district-thermal-electric", operate at 75-90% efficient use of fuel energy, not 30-40%. Our plants seem to be intentionally built in isolated areas where such cogeneration systems are next to impossible, which allows our energy industries to create maximum ZER.

The extensive use of cogeneration partly explains why Europeans, on average, use less than one-half the energy per capita, while creating more income per capita than we do. And this may also explain why they have guaranteed to reduce CO₂ emissions even further. They can simply increase the rate at which they are expanding their district heating systems. It must be noted that that type of system was invented around 1895 in New York City by one Mr. Edison. The book Energy For Survival, by Wilson Clark, 1974, explains in ugly detail why we don't use those energy efficient systems extensively in the U.S. (It seems Senator Al Gore might benefit from reading that book also.)

Even if those scrubbers work, we all know there is a much more productive answer to that problem. Use the billions you plan to waste on scrubbers to reduce the demand for electricity. Help the

customers install insulation, heat pumps, jackets on hot water tanks, solar heating, energy-efficient lighting, wind generators, fuels from biomass, cogeneration, etc. Done with true leadership we'll be able to shut down one stinking plant after another, save the nation hundreds of billions of dollars, and create millions of useful jobs, and reduce pollution with benefit to all. There probably is no better way to "jump start" the economy, with long-term staying power! But then you and Congress must be fully aware of that. The empty plants would be no problem. Convert them to museums, everlasting monuments to pure GREED! Of course, a few could be converted to clean-burning natural gas to tide us over to the inevitable Solar Age.

Your advisors apparently still claim that growth of the GNP, and thus jobs, are directly dependent on an equivalent increase in energy consumption. When this nation had about a \$5 trillion GNP, the Statistical Abstracts show we consumed about 80 QuBtu of energy, creating about 110 million jobs and a \$250 billion deficit. But that year the electrical utility industry intentionally wasted about 16 QuBtu, or about one-fifth of our total energy consumption! Sixteen QuBtu of energy is the equivalent of about 8 million barrels of oil per day! We import about 8 million barrels of oil per day!! Had that energy also been used productively, the GNP would have increased to about \$6 trillion by your own advisors' reasoning. That would have created about 132 million jobs, so unemployment would have approached zero. Had the IRS collected \$200 billion in increased taxes, the deficit would have been only \$50 billion. Energy conservation aims to use all the energy consumed to maximum economic benefit. But, then, that is simply repeating the message in book after book, article after article, and innumerable appearances before government agencies by scientists, economists, and other "do-gooders" during the past 20+ years. As you and Congress very well know, it's time the people knew the truth; wasted energy creates unemployment, national debt, a major part of our trade imbalance, and huge profits for our energy industries and OPEC nations. They love wasted energy!

Many of the world's leading scientists, Nobel Laureates included, now seem to believe it is already too late to avoid an extreme human catastrophe. They suggest there may not be time to develop a sustainable worldwide economy based on solar energy. You and Congress ignore their warning, despite the fact they were trained to the exact standards as those who claimed they could build an atom bomb, or send men to the moon and back safely, etc., and those asked to develop SDI. Though trained to those same standards, my sole claim to fame is that I am neither so ignorant, nor so arrogant, as to assume I know more than they. Nonetheless, I do believe a return to a vigorous energy conservation program coupled with all-out R&D on solar energy, as was in place prior to Reaganism, will give your and my grandchildren a reasonable chance at having as good a life as we have had. But I must confess I also believe anything less is sheer stupidity born of blind greed!

A final quote from the 1975 letter: "Unless we take direct and effective energy conservation measures now, a total economic collapse will flatten and reverse our consumption curve the hard way." The simultaneous explosion of energy, environmental, social, and economic crises suggests this direct relationship. Today the energy industries themselves use 50% or more of the total energy consumed in this nation. It is not the rest of society, but themselves who are their best customers. This intentional extreme energy inefficiency renders our energy-intensive industries, such as steel and auto, almost helpless against foreign competitors who use energy more efficiently. As automation with electricity increases, obviously energy productivity becomes of vital concern, at some point surpassing that of labor productivity.

Only an unparalleled economic and political power enables the energy industries to benefit from this massive misuse and abuse of technology at the expense of most of our society. The outrage committed against the American people adds up to a minimum of about 150 QuBtu of energy intentionally wasted over just the past 12 years. Since both branches of the U.S. Government were fully informed, (e.g. A Time to Choose - Ford Foundation - 1974) it would almost seem this crime might be defined as collusion to defraud the American people of no less than one trillion dollars! Most crimes are easily defined; the depth and meaning of this crime defies description.

Currently the EPA is claiming the gasoline-powered lawn mower is a significant source of pollution. Agreed, and they use energy at about 50-60% overall efficiency. But the EPA seems to be suggesting electricity for all uses is clean. Since about 60% of our electricity is generated in filthy oil and coal-fired plants at only 20-25% overall efficiency it is obvious that electricity is clean only in the immediate area of use; that overall it is our most polluting and inefficient energy source. That same intentional deception of the American people also applies to the \$5 billion Clean Coal Technology program. The liquification and gasification of coal would be the most energy-intensive and so the most expensive, least efficient, and so most polluting processes ever devised by man. And you and the Congress must know it!

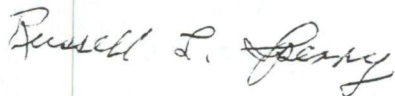
All our lives we've been told that the very foundation of our democratic free-enterprise system is open, full, honest competition among and within industries. Allowing the oil companies to own major coal and uranium interests in addition to oil and gas makes a farce of our anti-trust laws. In essence, the oil companies run this country "lock, stock and barrel", with your and congressional approval and support. Or, as Will Rogers put it, "We have the best government money can buy."

The U.S. uses energy about 1/10 as efficiently as Japan, and 1/3 to 1/2 as efficiently as European nations. By playing power politics with energy policies, both the executive and congressional branches of our government brand the U.S. scientific community as 3RD rate. This is to suggest that all of your energy policies are 3RD rate.

Current discontent throughout our society suggests that the energy industries, acting unilaterally or jointly with the U.S. Government, will either clean up this stinking mess fast, or U.S. style democracy, like communism, may hang in the balance, because no economic system can withstand that kind of abuse for long.

It's your choice! An intentionally misinformed public is helpless, as is an intentionally fractured scientific community!

With justified concern,



Russell L. Sperry
Chemist - Retired*

*REF: American Men of Science
c.c. Unlimited



DR. D. ALLEN BROMLEY
% The White House
Washington, DC 20500

RUSSELL SPERRY
1230 NE THIRD SUITE A-152
BEND, OREGON 97701



"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9202518
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: CANNON, Ralph S.

TO: DR. D.A. BROMLEY

JUL 21 1992

DATE OF
CORRESPONDENCE: 07/06/92

SUBJECT: HE IS WRITING THE USE OF FOSSIL FUELS IN THE U.S.
AND HIS PLAN FOR USING NATURAL GAS.

DIRECTORATE STAFF
ASSIGNED: PHYSICAL SCIENCES ASSIGNED: *Don Pryor* 8/3/92

ACTION STAFF
REQUIRED: DIRECT REPLY, *if appropriate* ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: 08/04/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT: *9/18/92*

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
PHONE: EXT:

REMARKS: *Dr. Erb responded.*

OSTP RECEIVED: 07/21/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY

CENTRAL FILES:



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20506

September 18, 1992

Dear Mr. Cannon:

I am writing in response to your letter of July 6 to Dr. Bromley. Please accept my apology for our late response.

As you correctly note, the President's National Energy Strategy calls for R&D on alternative transportation fuels, including natural gas. In fact, the Department of Transportation has funded the purchase of approximately 800 alternative fuel bases since 1988, which are now being operated by more than 50 local transit authorities. These bases operate on compressed natural gas, methanol and other clean-burning fuels. The Department also has provided \$900,000 for alternative-fuel data collection activities. And in 1991, the Department of Energy established an Alternative Fuels Data Center at its National Renewable Energy Laboratory.

I am sure the Departments of Energy and Transportation would be happy to provide you with additional information on these activities. Our office appreciates your interest in this subject and your suggestion that the public should be better informed of the potential benefits of alternative fuels.

Sincerely,



Karl A. Erb
Associate Director
for Physical Sciences and Engineering

Mr. Ralph S. Cannon
309 Sunrise Ridge Drive
Spruce Pine, NC 28777

2518

Dr. Allan Bromley
Office of Science & Technology Policy
Washington, DC 20506

July 6, 1992

Dear Allan Bromley: I want to share with you this conviction:

WE SHOULD BE FUELING ALL OUR CARS, TRUCKS & BUSES WITH NORTH AMERICAN NATURAL GAS
INSTEAD OF DIRTY GASOLINE & DIESEL OIL MADE FROM CRUDE OIL IMPORTED FROM OVERSEAS!

A trifling notion? No! Neglected? Yes! I've been a mineral industries professional for more than 60 years, and an amateur environmentalist longer than that. Therefore I'm prejudiced on both sides of the fence. And I am keenly aware that this conversion that is slowly starting to happen to our highway transport is unique, unique because it is beneficial both to the economy and to the environment! Beneficial to cleaning up our polluted air, soil & groundwater. Beneficial to our ailing balance of trade! Beneficial to our national energy security! Beneficial to the industrial economy - a jump-start on the long road back to making USA once again an industrial producing nation! Beneficial to pocketbooks of individual users of the highways! And beneficial to the jobless who will prosper from the creation of millions of new jobs!

What has this country been waiting for? Why didn't we start to make this transition when OPEC lowered the boom on us in 1973? This conversion fits right in with the National Energy Strategy which President Bush & Secretary of Energy Adm. James Watkins announced February 20, 1991. How could we miss this God-given chance to lead the world at Rio with a vow to revamp our transportation regimen with this conversion which will dramatically reduce carbon dioxide and other pollutant emissions?

The benefits of converting from dirty fuels made from crude oil bought overseas to much cleaner natural gas from wells here in North America came to my attention about 10 months ago. Learning more continues to fire my interest. At last I've been able to learn that industry has been inching toward this transition - very slowly - since about 1989. By year 2020 industry will have us fueling our vehicles with compressed natural gas (CNG). Too late - 20 years too late! We need to convert now to CNG, just as rapidly as we can, but only as a temporary stopgap until cleaner fuels for our cars can be provided cheaper. Younger folks will be smart enough to make even cleaner transportation fueling feasible and available by 2020!

What is the agenda of the major auto makers for the next 10 years? To this outsider it appears they are preparing the public for exotic electric sports cars. Yet I learn they are very quietly manufacturing & selling a few natural gas vehicles (NGVs) to be used as workhorses for duty in urban commercial fleets. Cart before the horse! We do not yet have the clean electricity to recharge batteries of electric cars. But we do have relatively clean natural gas figuratively flaring out of our ears!

The average citizen is not being alerted that he is going to have to convert or trade his gasoline wheels for an NGV. My goal is to try to find ways to get the word out to the people. One way: inform and convince the youth of this country - they will take care of reeducating their parents! But how to funnel this knowledge to millions of school kids K-12? Here in gas-poor North Carolina, Piedmont Natural Gas has just announced their plan to help Charlotte convert their fleet of school buses to NGVs. When all school buses nationwide run on natural gas, kids will be asking why we don't fuel all cars & trucks with CNG!

How to encourage the administration to give priority to this matter? I mentioned this issue in a letter to President Bush addressed to The White House Jan. 29. Since then, I've been able to learn a lot. Now I'm ready to go public, and I hope to spread our message wherever it may be heard. Enclosed are two alternative 'press releases' with a 'cover sheet'.

Ralph S Cannon
Retired Economic Geologist
309 Sunrise Ridge Drive
Spruce Pine, NC 28777
704/765-7513

Most sincerely,



A few years back The White House rewrote energy history in a single day. On his first day in office President Reagan abolished wellhead price controls on domestically produced crude oil and terminated the 'Carter energy crisis'. Now once again The White House has the opportunity to rewrite energy history.

Memo: TO ALL

June 1, 1992

Whom It Concerns!

"PUBLIC PERCEPTION DRIVES THE MARKET FOR MOTOR FUELS."
That sentence jumped out at me from a recent trade journal. Nine months ago my perception of motor fuels - and yours? - was 'gasoline & diesel'. Except for some publicity about the hope to clean up Los Angeles smog with electric cars - some day. Then I began to learn that compressed natural gas (CNG) and propane (LPG) are alternative motor fuels that are superior to gasoline and diesel. My continuing education reveals that lots of lobbying goes on at both federal and state levels to educate government officials about the need to convert our transportation system to using CNG or LPG to fuel our vehicles. Yet I fail to detect evidence that this information is trickling down to drivers on the streets and highways. As a test, I tried it out on a successful automobile dealer. No glimmer of perception there.

We must recognize the chicken & egg syndrome. You can't afford to build the new cars until there is a ready supply of fuel. And you can't afford to build the new fueling stations until there are vehicles to use the fuel. We also must understand that the practical place to start is for industry and government to convert their fleets of vehicles used in compact areas. But it's going to take a lot of learning before the average guy is eager to give up his gasoline-fueled wheels. Or the truck driver his diesel rig.

Yet public perception is what drives the market! When enough people learn why they need to be driving CNG or LPG-fueled wheels, then lots of people will be clamoring for the new cars & fueling stations. Until then, we the people are the squeaky wheels that aren't getting the grease!

Sent with ² samples of the sort of messages waiting to be broadcast nationwide.

anonymous

a retiring economic geologist

Add this thought. CNG as transportation fuel will demand near-level prices nationwide. Pipeline prices today appear to vary, by factors of 2 or more, with distance from gas-field sources. Here in North Carolina we could use gas wells of our own. And we'll need miles of new pipelines, into every county, as recommended by Gov. Jim Martin. NC has two unexplored prospects for natural gas resources: our continental shelf, and a postulated target deep beneath our western NC mountains. I am told authorization for deep test wells has been blocked. If we do have a major undiscovered gas resource in either of these environments, we need to know about it now - not 50 years hence!

rsc

GET GOING AMERICA!
HIGHWAY FUEL FOR THE 1990'S

The oil we buy from overseas is bankrupting our economy and polluting our air, land & groundwater. An alternative resource is at hand right here in America that can benefit our economy and our environment. Our abundant domestic reserves of natural gas! More than 750,000 cars, trucks & buses run on natural gas on highways worldwide -- only 30,000 of these run on our roads in USA. This nation has an opportunity for a major revolution in transportation. Right now. Probably the most important change in surface transportation since Henry Ford started to mass produce his Model T.

We need to fuel our cars, and all other machinery driven by combustion engines, with compressed natural gas (CNG) instead of gasoline and diesel fuels made from imported crude oil. A transition is starting now. Some urban fleets are already being converted to CNG. But it's going to take lots more Research & Development! CNG will greatly diminish emissions contributing smog, acid rain & global warming! Existing autos can be modified by adding new high-pressure fuel tanks & carburetion. Meanwhile get on with inventing, designing & producing more innovative CNG vehicles! High octane fuel = high compression ratios = high efficiency! Develop a brand new refueling infrastructure! Just when we learn that many older underground gasoline storage tanks are leaking and contaminating our precious groundwater! Jump-start our sluggish economy!

These days the USA spends \$60 billion or more a year for foreign oil. We make our trade imbalance worse by \$60 billion, and rob our domestic economy of \$24 billion that we should have paid domestic producers to buy natural gas and enhance our GDP. The negative impact on our economy adds up to more than \$84 billion a year. How long are we going to shortchange our kids, grandchildren and great grandchildren?

And how would the individual driver on our highways - you and I - fare if we fuel our cars with CNG? We'd expect to get nearly twice as many miles to the dollar! We might have to get an oil change after 50,000 miles! And a new engine after 500,000 miles! And based on European experience with CNG, we might travel the highways (and the race tracks) with greater safety. Let's do it!

Pipelines are the arteries that distribute our domestically produced natural gas. The pipeline network and matching production facilities are the bottlenecks that impede increased utilization. We need to enlarge these distribution systems to funnel more natural gas from gas fields or other sources to energy-hungry sites. Many more electric power plants can be converted from burning dirty oil or coal to cheaper & cleaner natural gas. Development of electric automobiles needs a helpful boost. Cheaper electric power from non-polluting power stations can fuel emission-free electric autos. A branching pipeline network can be developed to feed natural gas directly to stations that refuel CNG vehicles. Maybe a lot of obsolete service stations will be revived.

A statement attributed to oilman George Bush pointed out the way to go:
"Because domestic natural gas is abundant and significantly less expensive than oil on an energy-equivalent basis, its increased use could boost the gross national product, reduce oil imports, and improve the Nation's trade balance."

- President George Bush, February 1991 -

Let's add one more sentence:

'Therefore we should immediately implement a program to convert our highway vehicles to run on CNG instead of gasoline and diesel fuels'.

Such a program contributes immeasurably to national economic & environmental welfare and to national energy security - the three principal goals of the National Energy Strategy which President Bush and Secretary of Energy Admiral James Watkins announced on February 20, 1991. If it gets done without delay, everybody wins!

GET GOING AMERICA - THE BEST HIGHWAY FUEL - NATURAL GAS

This nation has a unique opportunity to launch a major revolution in transportation - NOW! Probably the most important change in surface transportation since Henry Ford started to mass produce his Model T. A change we should have welcomed at the time of the OPEC oil embargo in 1973!

All cars, trucks, and buses, as well as tractors and off-highway heavy equipment, should be fueled with compressed natural gas (CNG)! Electric-power generating facilities should be converted from oil or coal to natural gas! Let natural gas take the place of gasoline and diesel fuels made from imported crude oil! The transition demands accelerated Research & Development! It will greatly diminish industrial and vehicular contributions to smog, acid rain and global warming! Modify existing autos to run on CNG instead of gasoline by adding new high-pressure fuel tank and carburetion. Then we can get on with the job of inventing, designing, and producing more innovative CNG vehicles! And developing a radically new refueling infrastructure! Just at a time when our 30-50 year-old service stations must dig up their leaking underground storage tanks that are contaminating our precious groundwater! Can you think of a more appropriate way to jump-start our stalled economy? Let's do it! We can't afford to underrate the power of public opinion! And we can't afford delay!

We need to enlarge the pipeline distribution system throughout the country to distribute more natural gas from gas-field sources. We need to convert polluting oil-fed power stations into cleaner natural-gas power plants. Cheaper power! The development of electric automobiles already underway needs a helpful technological boost. Cheaper electric power from cleaner natural-gas power stations can fuel totally clean electric cars. And we need to develop a branched distribution network of natural gas to feed CNG-powered transportation vehicles, comparable to yesterday's gasoline service stations.

Has enough Research & Development already been done to get the ball rolling? Indeed yes! Some government fleets and industrial fleets are already being converted to CNG; for example United Parcel Service and Coca Cola. But an industrial revolution of such magnitude will require much, much more Research & Development. This is perhaps where government must help by sponsoring aggressive research to reduce atmospheric emissions and oil consumption. In a recent article Engineer Enoch Durbin proposes that an agency named TERRA be set up to sponsor and oversee research applied to reducing oil consumption and atmospheric emissions.

An important statement attributed to President George Bush pointed out the way we should go: "Because domestic natural gas is abundant and significantly less expensive than oil on an energy-equivalent basis, its increased use could boost the gross national product, reduce oil imports, and improve the Nation's trade balance." - February 1991.

A challenging statement indeed. But it stops short of getting down to the real nitty gritty. A next sentence might add: "Therefore we should immediately begin a program to convert our highway vehicles to run on CNG instead of gasoline and diesel fuels". For nearly a year I have been waiting for this other shoe to drop! Too few US citizens have even heard of using compressed natural gas to fuel our highway vehicles instead of the polluting gasoline and diesel fuels which account for about 2/3 of the crude oil we now consume. Is this some kind of 'trade secret'?

Every time we shell out 165 million hard bucks to buy about 8 million barrels of crude oil from overseas to make gasoline and diesel fuel, just for example, we increase our trade deficit by that amount. That's going to be tough on our kids, and generations to come. But that's only part of the financial handicap we are inflicting on our national economy. Instead of buying oil from overseas we should have been pumping 65 million dollars into our economy, buying 60 billion cubic feet of energy-equivalent natural gas produced in the US. So the negative impact on our US economy

adds up to 230 million dollars at the start, with a lot more additional dollars in related fallout.

But that is just a fraction of what we are really wasting. That is roughly what we are doing each day of the year. So we are actually spending about 60 billion dollars a year for foreign oil, worsening our trade imbalance by that amount, and robbing our domestic economy of 24 billion dollars that we should have paid domestic producers for energy equivalent natural gas. The negative impact on our economy adds up to more than 84 billion dollars per year. How long can this nation afford to shortchange itself like this?

How would the individual driver on our highways - you and I - fare if we were fueling our cars with compressed natural gas? We'd get nearly twice as many miles to the dollar. We might need an oil change after 50,000 miles, new spark plugs at 75,000, and a new engine after more than 500,000 miles. And based on European experience with CNG, we might travel the highways in greater safety. In time, some inventor will figure out a safe way to refuel a car right at our own garage from our own residential gas service. An added incentive to convert our home heating from oil to gas!

What effect would all this have on the global environment? CNG-fueled highway vehicles would help us reach the goals of the Clean Air Act by reducing atmospheric pollution: no sulfur dioxide emissions, far less nitrogen oxides, 99% less carbon monoxide, 18-30% less carbon dioxide, no particulate hydrocarbons and far less ozone-forming hydrocarbons. The rate of global warming could be slowed by 50% or so, allowing time needed to devise an even better way of fueling our vehicles. We would also gradually phase out the pollution of our groundwater by gasoline and diesel oil leaking from underground storage tanks.

If these paragraphs are not a wild pipedream, how come we haven't been hearing that CNG vehicles have been used successfully in Italy for more than 40 years. We cannot count on government to lead the way. And any great industry by its inertia likewise tends to resist change. If an industry is reaping profits, who wants change? If a once-great industry is losing money on a grand scale, who has the guts or the capital to try a radically new approach? The auto and oil industries are dominated by industrial giants, even though they may not be as profitable as they once were. Innovations are usually introduced by entrepreneurs. Where are our US innovators today? More than 750,000 natural gas vehicles operate on highways worldwide. Only about 30,000 of these cars, trucks, and buses run on roads in the US. Nevermind, if we wait long enough, the Japanese will solve the problem for us. They don't have our advantage of vast domestic resources of natural gas. But the Japanese must have some use in mind for the CNG they are already shipping home from the Middle East.

I have never been an industrialist, entrepreneur, politician, lobbyist, financier, PR person, or investigative reporter for the media. But recently I happened to read several wholly independent eye-opening documents on this topic. One is an article comparing the merits and disadvantages of the available alternative transportation fuels by Engineer Enoch J. Durbin. Others gave me additional facts used in this script and let me know that there already is an active Natural Gas Vehicle Coalition. These inconspicuous publications bothered me that I could be so ignorant this late in the Twentieth Century. And I was troubled to think that probably many of my fellow citizens likewise had not previously discovered this important information. I am angry. I need to share this information and anger with you. Demand this solution of our growing problems now! Everyone will win!

May 1992

A Concerned Citizen,
now better informed,
at last!

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9201925
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: KELLY, D.A.: SPACE ENERGY ASSOCIATION

TO: DR. D.A. BROMLEY

MAY 29 1992

DATE OF
CORRESPONDENCE: 05/19/92

SUBJECT: HE IS WRITING REGARDING THEIR ENERGY PROJECT.

DIRECTORATE STAFF
ASSIGNED: PHYSICAL SCIENCES ASSIGNED:

ACTION REQUIRED: AS/IF NECESSARY
STAFF ACTION:
None necessary 108E 5/29 (the incoming letter + attachments are meant to be informational)

SENDER'S DUE DATE:
OSTP DUE DATE: 06/11/92 STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: PHONE: EXT:

OSTP RECEIVED: 05/27/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY
CENTRAL FILES:





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SPACE ENERGY ASSOCIATION-SEA/US

Alternate Energy Systems

P.O. Box 11422

Clearwater, FL 34616

(813) 442-3923

FAX (813) 446-5290

The White House Office
and Executive Office Building
1600 Pennsylvania Avenue,
Washington, D.C., 20500

May 19, 1992

Dr. Allen Bromley,
Presidential Science Advisor

Dear Dr. Bromley:

It is most unfortunate that we see the United States sliding away from a leadership role in science and specifically applied physics, as can be seen from the present harassment and attempted suppression of some advanced work in energy technology!

The enclosed data folder describes two specific case of overt harassment and attempted suppression of promising project work in the area of free energy R & D.

It stands to reason that the groups that have organized this harassment of this new, emerging energy technology must believe that it is presently valid, or will be so in the future, otherwise they would not go to the time, money and effort necessary to mount such a negative, industrial sabotage campaign!!

Over several decades, we have seen far too much of this sort of both covert and overt harassment of hopeful energy technology in the U.S., and have now decided to take our case for F/E to the Far East!

We have already started the preliminary process of advising a dozen R & D groups in Japan, of this present harassment and attempted suppression of this advanced energy work over here, and expect that they will give it a far more objective review and consideration!!

This present information is in the nature of an advisory to you so that you be made aware of the status of this free energy project work in this country, and now why it is time to transfer all of our finding about it to the Far East!!

encl: (1)

Yours truly,

D.A. Kelly
D.A. Kelly



SPACE ENERGY NEWSLETTER

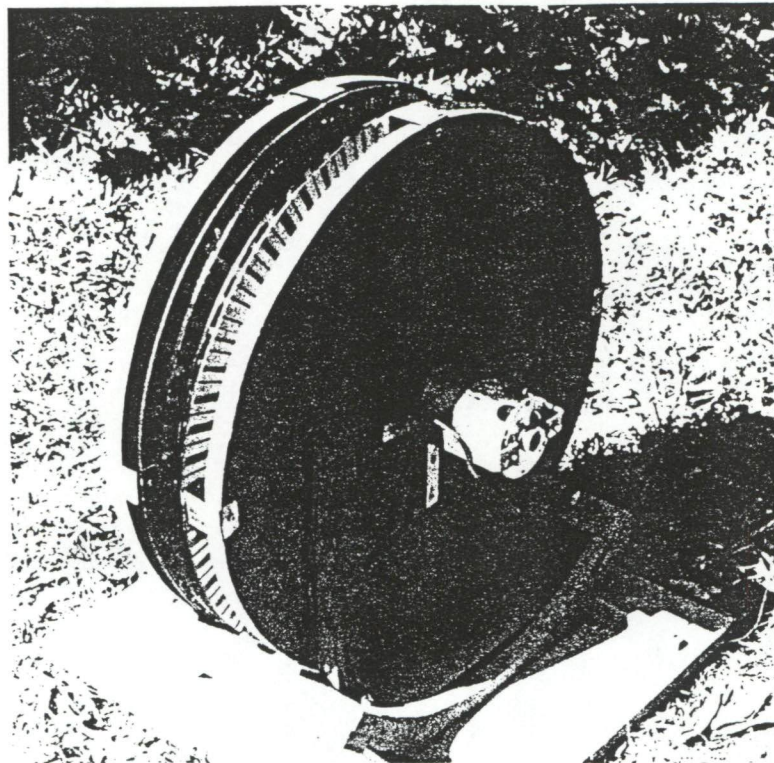
Quarterly—Newsletter

VOLUME III

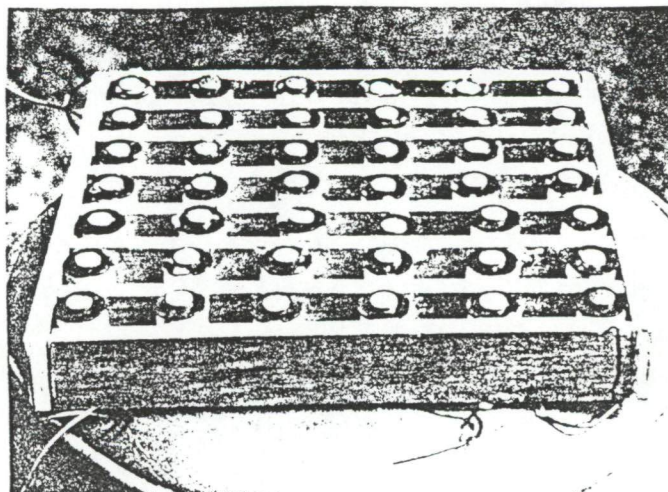
MARCH, 1992 Editors: Donald A. Kelly & Michael M.

The space Energy Association is dedicated to the pioneering work of several and inventors, including Nikola Tesla, Viktor Schauburger, T. Henry T.T. Brown, Alfred Hubbard, T.J.J. See, Erwin Saxi, Hans Coler and other

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SPACE ENERGY NEWSLETTER

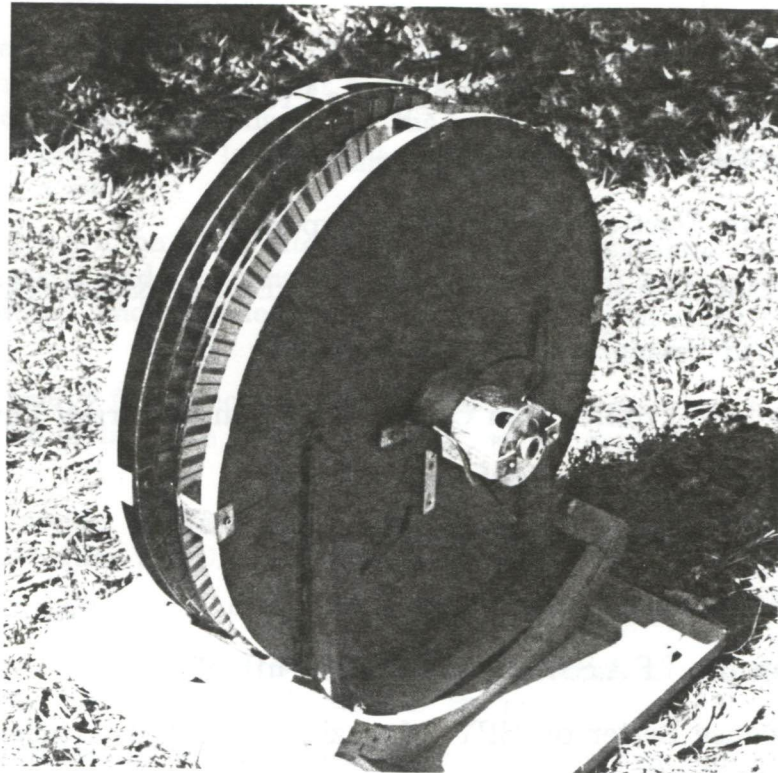
Quarterly—Newsletter

VOLUME III, NO.1

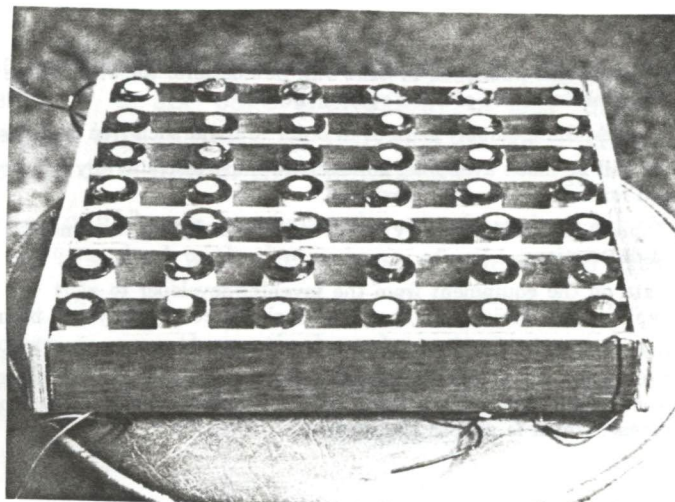
MARCH, 1992 Editors: Donald A. Kelly & Michael Marino

The space Energy Association is dedicated to the pioneering work of several scientists and inventors, including Nikola Tesla, Viktor Schauburger, T. Henry Moray, T.T. Brown, Alfred Hubbard, T.J.J. See, Erwin Saxi, Hans Coler and others.

ENHANCED
ELECTROSTATIC
GENERATOR
SYSTEM



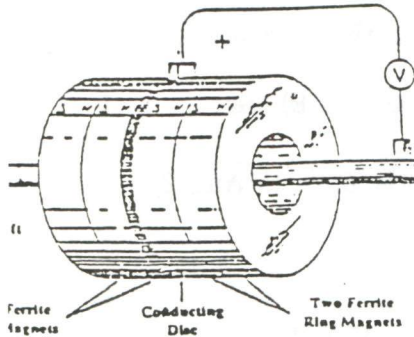
AN
ELECTROMAGNETIC
TO—GRAVITY
FIELD EXPERIMENT



SPACE ENERGY NEWSLETTER

SPACE ENERGY ASSOCIATION
P.O. BOX 11422
CLEARWATER, FL 34616

THE "N" MACHINE



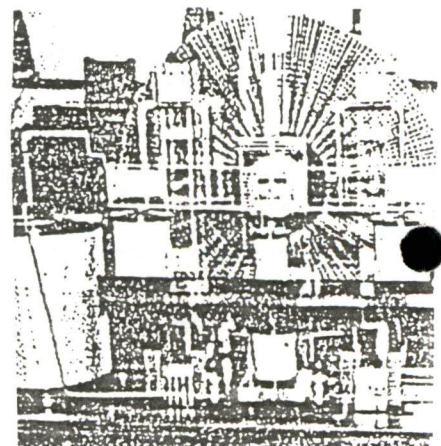
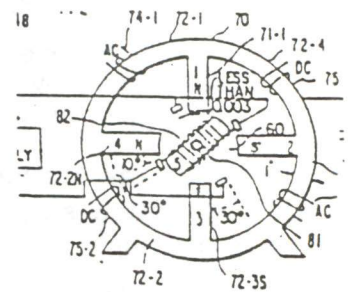
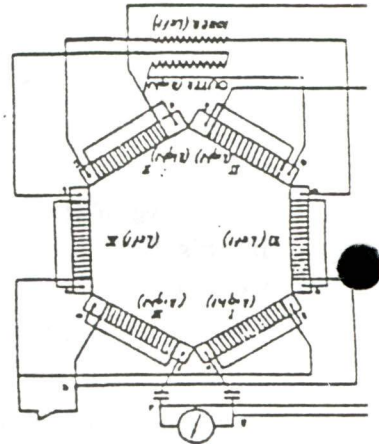
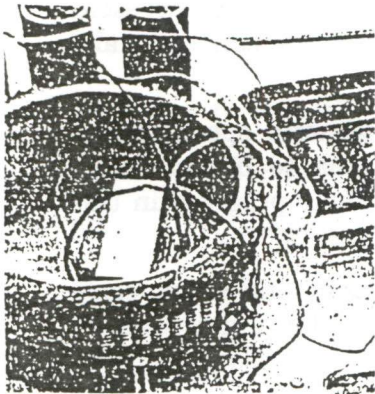
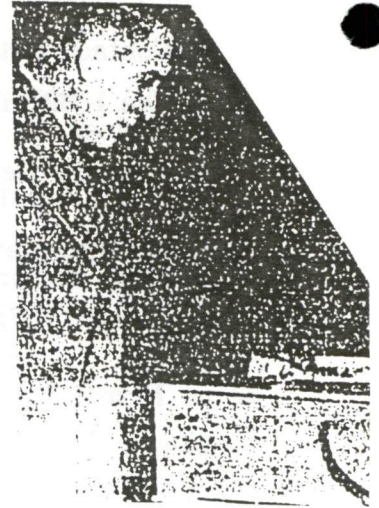
OVERVIEW COMMENTARY ON THE STATUS OF THE FREE ENERGY FIELD

Anyone who now believes that all of the true free energy units or systems shown on this page are fakes or nonsense, must of necessity have a double-digit IQ, and/or should not seek a career in the scientific or engineering fields.

While not many of the F/E units systems shown here are practical for wide usage, they all, in some degree work are proven as O/U/O projects!

The growing body of evidence to support the free energy concept is now overwhelming, although the ugh!, scientific establishment may be underwhelmed about such conclusions!

Either we must have scientific fidelity, in both theory and practice, or we should all move back into the caves from whence we all came!!!!





SPACE ENERGY ASSOCIATION™

P.O. Box 1422 Clearwater, Florida 34615

813-442-3923

→ SEA UPDATE

May 5, 1992

Events and projects in the free energy field are popping-up all over the place, as described in the enclosed items sent for your review and reference at this time.

The four, active free energy projects described in the FAX/copy to the B.B.C. indicate the activity in the field at this time. The B.B.C. is now planning a free energy T/V program scheduled for early 1993, and Tony Edwards is now in the process of collecting information on F/E project/candidates.

The Gammastar- "Pod-Mod" project work continues to be evolved, and they now have their issued U.S. patent with all 16 claims intact. Scott McKie of Gammastar advises that they expect to be in production of the PodMod system this year, 1992.

Win Lambertson's "WIN" F/E project is still being evolved, and the project work now centers on finalizing the switching arrangement. He is now responding to the patent examiner's first action on his pending patent application. He is receiving help on both his patent application and project work from some involved researchers.

The "WIN" system is now being duplicated in Australia and in Germany, by a F/E group and university, respectively.

The Reed Magnetic Motor Co, of Tulsa, OK, expect to have a successful operating prototype P.M.M. by mid-May. They are now planning to produce these magnetic motors in various size ranges, in both single and double digit horsepower ranges.

One of their market targets is for remote power applications, - where it is not economical to bring in electric power lines from the local utilities.

The Swiss M-L Converter redevelopment project continues to be evolved, both here and in Canada, and we are now trying to get other researchers involved in this project work.

The high voltage input sub-system has now been successfully produced, and the project work now is centered on solving the problems involved in the HV conversion, solid-state sub-system.

Apparently, Wm Hyde is still active with his electrostatic generator project, inspite of the harassment that he has been exposed to, as per his enclosed appeal sheet.

Sincerely, *D.A. Kelly*
D.A. Kelly

REFERENCE:

May 10, 1992

AN OPEN LETTER TO ALL WORKING ON ALTERNATE ENERGY

November 1, 1991

Paul Brown
309 S. McLoughlin Blvd.
Oregon City, OR 97045

Greetings,

I have been involved with alternate energy research since 1978 while still a college student. Over the years I have heard many nightmare stories about people who developed something significant only to be persecuted, harassed, prosecuted and even killed. I was sure that these stories were exaggerated or possibly the result of the inventor's own paranoia or such. Further, I met several inventors whom I felt were their own worst enemies which confirmed my beliefs.

As time went on about 1982 I became involved in work of some significance and received some minor criticism and skepticism that I found to be beneficial as well as practical, but no death threats or any of the other forms of persecution. I built experimental devices, learned things unavailable from books, filed for patents and in general felt very satisfied with my life, society and the scientific system.

However, things began to change, slowly and unalarmingly. The more success I had in my endeavors-the more I began to attract dishonest and greedy people (I know this now but was unaware of it then). My life became more uncomfortable as time went on but I was not sure of the problem.

In 1987 we decided it was time to let the world know what we were working on and the results we were getting. It was a proud time for me. I thought we were doing the right thing. But this was the real beginning of the worst.

Since that February 1987 I or my company have been persecuted by the State Dept. of Health; then the Idaho Dept. of Finance filed a civil complaint against the company and myself; my license for handling radioactive materials was then suspended for 6 months; I began to receive threats (i.e., "We will bulldoze your home with your family in it"); securities fraud charges were then filed against my company and myself; then investigation by the Oregon Dept. Finance; then the tax man; then the Securities Exchange Commission; my wife was assaulted; I lost control of my company; my home has been robbed three times and vandalized on four other occasions; twice now I have been accused of drug manufacturing; I lost my home; most recently my mother's car was pipe bombed. With each hardship I strive harder toward successful development of the technologies under my endeavor. But it only seems to get worse.

Someone once said, "Paranoia is only a heightened sense of awareness." He was right! It is hard for the average guy to comprehend these disasters happening to select people. I am here to tell you it is not coincidence. I now understand why some inventors drop out from society.

My advice to you is keep a low profile until you have completed your endeavor; be selective in choosing your business partners; protect yourself and your family; know that the nightmare stories are true.

R.E. McMaster elegantly summarizes the character of the

suffering scientist (The Reaper, Vol. 15, No. 36, 9-4-91), "The history of science and technology, the history of significant breakthroughs for mankind, which has launched him into new eras, is the history of 'tinkerers', of private individuals who have sacrificed their lives, time, money, reputations and families to research and experiment in their garages and basements in search of truths, the applications of which in their hearts they know exist...These are the men of passion, of character and professionalism-great minds, holistic and synergistic minds, blessed with hands-on mechanical skills, working to bring scientific theory and concept into practical, working, useful, productive technology.

These ~~are~~ the men whom a life, love, liberty, law, light-oriented, long-term biased society would lift up. Unfortunately, the character of the modern world is just the opposite of these six 'Ls.' And so much men suffer, are persecuted by the government and culture-at-large. They scramble for funds, are abandoned by their families, suffer the ridicule of their colleagues, are forced to stuff their thoughts and keep their mouths shut. They are lonely. And yet, they drive on in their relentless pursuit of truth to make this scientifically and technologically a better world.

There is something about the non-stop pain of long-term suffering which humbly grounds a man in reality. Under such continuous pressure, men break and either become bitter or better. They neither have the time nor the interest in the air heads who are wrapped up in the materialism, conflict and leisure orientation of today's world. Nor do they belong to the group of intellectual acid-heads who read books, gather facts, and are ever learning and talking, but do not have the hands-on skills or the hearts to help their friends and fellow man when the need arises. Rather, such men are the point men, leading the dangerous platoon of life. They are self-assured and have few good, reliable friends...These are the men who challenge the new frontiers and the old order to make a better tomorrow. These are the loners who have been persecuted by both industry and government, who have endured grave injustices in search of scientific truth." (800-528-0559)

God speed, Good Luck in your endeavors and Never lose The Faith.

Sincerely,
Paul Brown

REFERENCE:

URGENT APPEAL

May 2, 1992

APPEAL TO THE AMERICAN PEOPLE FOR HELP WITH GOVERNMENT AND BIG BUSINESS
SUPPRESSION OF NEW EMERGING ENERGY TECHNOLOGY.

Dear Fellow American;

Let me first introduce myself. I am an independent inventor/engineer working in advanced energy systems. I have been very successful in creating the advanced energy systems that all of us will need if we are to survive and prosper in the coming years. These energy systems use the natural forces of the electric, magnetic and gravitational fields without the need for the environmental damageing fossil fuels, nuclear etc. Some of my work is contained in patent # 4,897,592 Electrostatic Energy Field Power Generating Systems.

The United States Department of Energy and various large corporations have and are attempting to suppress this new emerging energy technology. They use vicious harrassement, death threats, blackmail, extortion and employ people to file frivolous lawsuits to drain off resources to stop developement and manufacture. I have been in court for five years over every conceivable frivolous matter one could think of.

Unless I receive help from the American people, I will not be able to work in this important energy technology area, as the costs of fighting a cabinent level federal beauracracy and billion dollar corporations is prohibitive. My legal costs over the last five years has been over \$35,000. I have lost over 30 foreign patents because of the government action. The politicians wonder why we have no economy, no jobs.

Please help one of America's most talented creative inventors by; calling or writing President Bush and your congressman to stop this outrageous attempt to maintain the "status quo" greedy monopolies that rip you off day after day.

Please send me a short note of your contribution towards this effort with your name and address and I will place you on a mailing list. People on this list will first be offered the stock of the corporation formed to manufacture this new emerging energy technology plus will receive technical updates.

Again, I ask for your help in this important matter. I personally thank all of you in advance for your help. I look forward to hearing from you all.

Sincerely,



William Hyde

1685 Whitney

Idaho Falls, Id. 83402-1768



SPACE ENERGY ASSOCIATION™

P.O. Box 1422 Clearwater, Florida 34615

813-442-3923

May 8, 1992

William Hyde
1685 Whitney
Idaho Falls, ID., 83402-1768

Dear William Hyde:

In reference to your "Urgent Appeal" letter, we are beginning to get some negative feedback from this, and wonder if you have not shot-yourself-in-the-foot, with its tone and thrust!!

Most researchers in this field, and our 180 SEA members have been exposed to this sort of grandious presentation- before, only to have it all fall apart!

The most prominent "free energy fiasco" case in the 1985-87 time frame was the badly flawed project work of Mr. Joseph Newman of Luce-dale, Ms. There were about 3 or 4 duplications of the Newman motor, and not one of them ever indicated over-unity (over 100% Eff.) operation.

There is now a terrible similarity to your present E/S project work and that of the Joe Newman fiasco, and other researchers are now beginning to point this factor out to us!

Most F/E researchers do not like self-aggrandisement, as in your fourth paragraph, and shudder when they are asked to send letters, or contact President Bushwacker, or any other worthless government agency.

While we, and apparently Moray King and lately Dan Dividson, support your E/S generator concept, we feel that you are going to have to clean up your act, if we are going to be of any further help to you, with this E/S technology!

It could be helpful to your cause if you could let us have more complete details on your harassment, as presented in your appeal letter.

We will need the dates of the harassment event, its nature; and if possible letters, and/or correspondence between you and the people involved, and your permission to publish this information.

If you cannot, or will not provide us with this information, we will consider your E/S project work a closed chapter here!

Yours truly,
D.A. Kelly
D.A. Kelly



REFERENCE!

SPACE ENERGY ASSOCIATION™

P.O. Box 1422 Clearwater, Florida 34615

813-442-3923

April 25, 1992

Tony Edwards
c/o B.B.C., Science & Features
Kensington House,
Richmond Way, London, W14-OAX

Dear Tony Edwards:

In response to your FAX message of 4/24, I'm forwarding the addresses that you have requested.

✓ 1) Scott McKie, of Gammastar International, Inc.
4618 3rd Avenue, N.W.
Seattle, WA., 98107 (The "POD-MOD" F/E system)
Phone: (206) 782-0856
FAX: (206) 782-3148

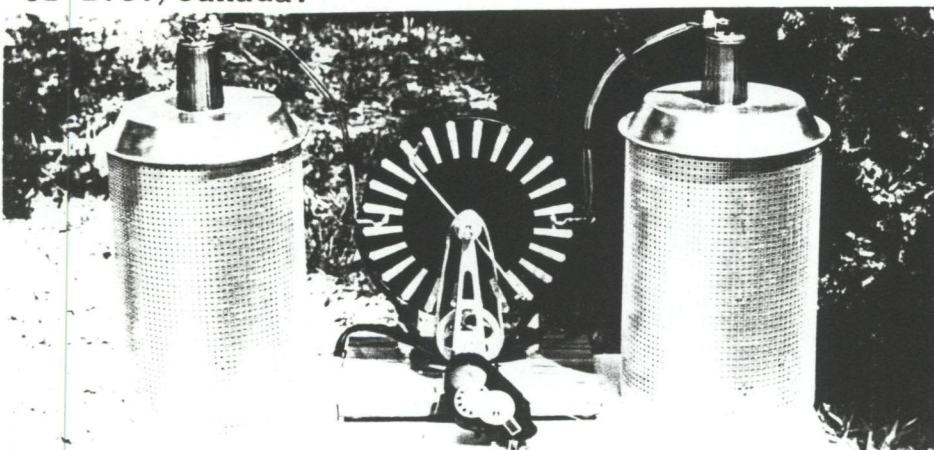
✓ 2) Dr. Wingate Lambertson, and his "WIN"-F/E project
216-83rd Street
Holmes Beach, Florida, 34217
Phone: (813) 778-1274

In addition, you may wish to contact: Reed's of Tulsa OK.

✓ This is the Reed Magnetic Motor Co., Inc, of Tulaa,
Troy & Evelyn ^{Reed}
(918) 743-1112 P.O.Box 471613, Tulsa, OK., 74147-1613

✓ They expect to have a finalized perm.magnet motor prototype completed by mid-May/92. This one could be worthwhile following

The protoprint below shows the progress made on the redevelopment of the Swiss M-L Converter, in conjunction with the Sinclair Tech group of B.C./Canada.



Best Regards,

Don Kelly *DK*



REFERENCE:

SPACE ENERGY ASSOCIATION™

P.O. Box Clearwater, Florida 34615

813-442-3923

March 17, 1992

REFERENCE:

The redevelopment of the Swiss M-L Converter in North America!! ✓

Because of the major progress made by Pierre Sinclaire of Burnaby, B.C., Canada, towards a final solution to the dynamic portion of the Swiss M-L Converter, I've now taken another look and analysis of the solid-state, voltage transformation/amplification portion (sub-system) of the M-L-C.

The enclosed, revised sketch of the two, large capacitive/transformers represents some late thinking of what actually happens within these twin, major s/s components.

The logic behind this present arrangement follows the pattern of the V.T.A. unit with its twin, bifilar windings over Ba-Fe cores, as in the M-L-C, as disclosed by Albert Hauser in his earlier drawings, and specifications.

In this present view of these conversion components it appears that only two plate/cylinders are required to convert the high voltage in the 60 to 80KV range down to a much lower level by voltage division, via the multiple spark gap/jumps, as indicated.

The concept of multiple plate/cylinders in these twin component as described in the Hauser data and drawings does not appear to be true, although his description of this Component No. 6, is subject to interpretation, ie: "concentric acrylic pipes between 3 perforated sheet pipes (metal-coating), and in the center a bifilar coil around a magnet tube."

It can be viewed that the multiple, uniform spark jumps between the inner and outer plate/cylinders are the primary function with the secondary reaction or transformation occurring at the bifilar windings over the Ba-Fe magnet core.

This same general type of action/reaction occurs with the windings of the V.T.A., with the presumption that space/ZPE cohering occurs in the same way in both the Swiss M-L-C and the V.T.A. unit, via P.P.C.M. within the Ba-Fe magnetic cores.

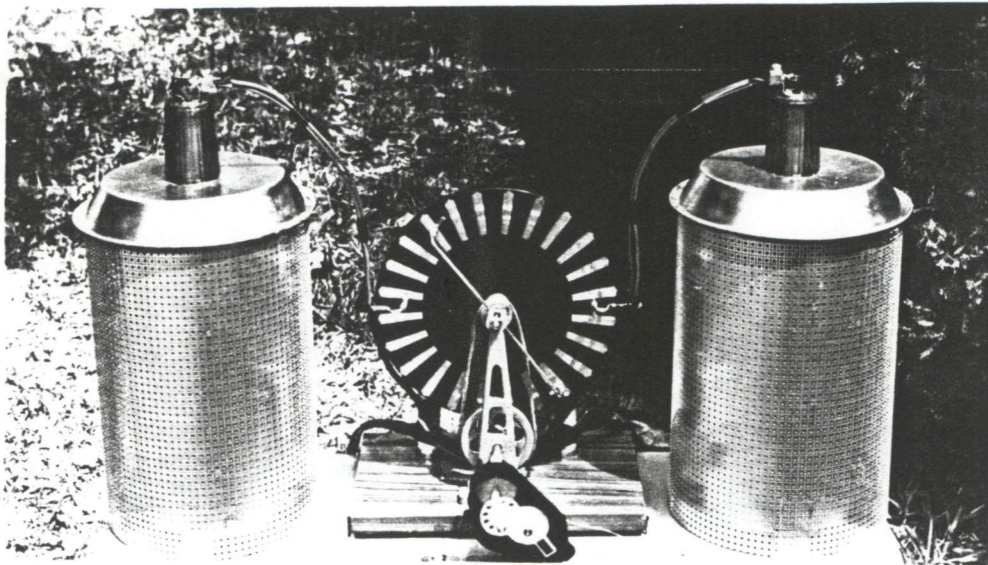
We must now consider and address the basic differences between the V.T.A. and the Swiss M-L-C., which basically comes down to the input excitation, or frequency of the inputs.

The input excitation to the V.T.A. has been stated as 9 V.A.C., at 60 Hertz, while the input to the Swiss M-L-C is high voltage at spark gap frequency of 14 to 15 so that there is a major difference in the voltage and 10 HZ. 10 HZ frequencies for both systems.

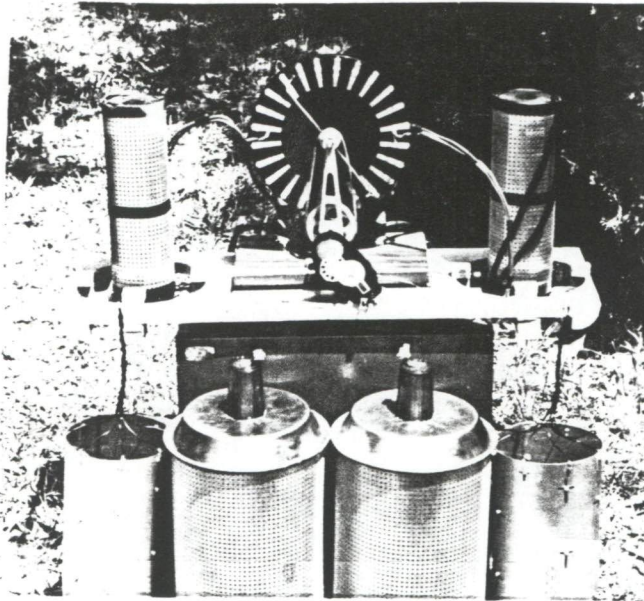
It is now surmised that the high high frequency of operation for the Swiss M-L-C precludes the need to "condition" the Ba-Fe core magnets as in the V.T.A. unit. It also seems logical to believe that the 60 HZ, frequency of the V.T.A. is a very low harmonic of spark gap frequency due to the similarity of their operation!!

Sincerely, Don Kelly

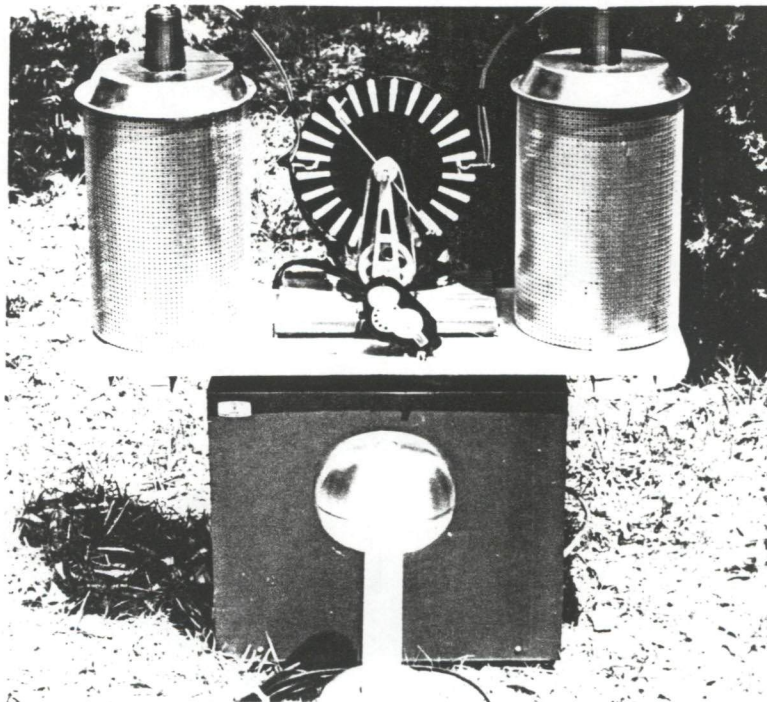
System
Assembly



Twin Housings and
Outer Cylinder/-
plates (2) removed



The System, with
Alternate Van de Graff
E/S Generator, at
base.



SINCLAIRE TECHNOLOGY RESEARCH LTD.
3743 CANADAWAY
BURNABY, BRITISH COLUMBIA
CANADA V5G 1G5

*Left by Pierre
Sinclair on
3/2/92*

FEBRUARY 8, 1992

TO SPACE ENERGY ASSOCIATION
CLEARWATER, FLORIDA

ATT: DON KELLY

DEAR MR. KELLY:

THIS LETTER IS IN REGARD TO SOME OF THE CONCLUSION THAT I HAVE COME-UP WITH AFTER 8 MONTH OF RESEARCH ON THE, 5 KW, M.L. CONVERTER. YOU MAY FIND SOME OF THESE CONCLUSIONS INTERESTING. IF YOU WANT TO PUBLICISE THE INFORMATION IN THIS PAPER YOU ARE WELCOME TO DO SO.

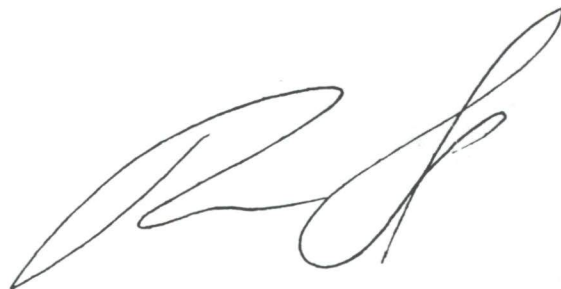
ALL THE INFORMATION IN THIS PAPER IS BASED ON WRITINGS AND DRAWINGS FROM ALBERT HAUSER, DON KELLY, SPACE ENERGY ASSOCIATION, CHRIS CARSON, VIDEO TAPE FROM THE LINDEN MATERNITA GROUP, AND VARIOUS BITS INFO AVAILABLE HERE AND THERE FROM JEAN MANNING. COLUMNIST OF PENTINGTON, CANADA.

MOST OF THE FINDINGS FROM THE ABOVE MATERIEL HAS BEEN TESTED ON THE BENCH IN THE LABORATORY OF SINCLAIRE TECHNOLOGY. TO ENABLE ME TO COMPARE MY FINDINGS WITH THE INFORMATION AVAILABLE. I HAVE BUILT TO SCALE A PROTOTYPE OF THE, 5 KW, ML CONVERTER. I, AS WELL, BUILT TWO SMALLER PROTOTYPE TO DEMONSTRATE A) THE POGENDORF PRINCIPLE AND B) SWISS REPULSION PRINCIPLE. I ALSO HYPOTHESED ON THE POSSIBLE WORKINGS OF THE AREAS THAT I DID NOT HAVE THE TIME TO EXPERIMENT ON. THESE AREA WILL BE DEALT WITH AT THE END OF THIS PAPER.

CONCLUSION

IT IS UNFORTUNATE THAT THE COMMUNITY DO NOT SHOW THE ML ANYMORE. AFTER GIVING THEM A CALL IN JANUARY, 1992 IT WAS CLEAR THAT THEY DID NOT CHANGE THERE POINT OF VIEW. SO IT IS UP TO US TO KEEP LOOKING FOR THE ANSWER BEHIND THIS WONDERFUL MACHINE. IF ANY ONE WOULD LIKE TO SHARE AN OPINION OR AN IDEA ABOUT THE ML CONVERTER PLEASE DO NOT HESITATE TO WRITE TO ME AT:

SINCLAIRE TECHNOLOGY RESEARCH LTD.
ATT: PIERRE SINCLAIRE
3743 CANADA WAY
BURNABY, B.C.
CANADA V5G 1G5
604 432-9910



PIERRE SINCLAIRE

SPACE ENERGY ASSOCIATION-SEA/US

Alternate Energy Systems

P.O. Box 11422
Clearwater, FL 34616
(813) 442-3923
FAX (813) 446-5290

British Broadcasting Company, Ltd.
Kensington House
Richmond Way, London, W14-OAX /U.K.

May 15, 1992

Mr. Tony Edwards
Science & Features

Dear Tony Edwards:

We believe that you need to be made aware of the current overt harrassment that certain free energy researchers are being exposed to, as they try to evolve their various F/E systems.

The enclosed letter/copies to Dr. Inomata, J.P.I. & E.T.L., and Mr. Yokoyama, of Japan's new F/E group describe the major harassment of two key F/E researchers, as noted.

This situation has now become so bad over here that we believe that is now time to play the "Japan Card", so that these Neanderthal bastards will not succeed in their attempts to stop this new, emerging energy technology from taking its rightful place on the World energy scene!

The U.S. has never been a true leader in technology advancements since technical logic over here always takes the back seat to money profits and power! If this were not true, we would never have seen the emergence of nuclear power as a source "too cheap to meter", which turned out to be a pure farce!!

One group of physicists lied, and the peer group swore to it, and thus we installed 20th century fission reactors on to 19th century steam boilers, and proclaimed this as the energy source for the future!

What a fiasco this has turned out to be, but the powers that be, and the public ~~swallowed it~~ hook, line and sinker!!!

So there we are, stuck with all these nuclear power plants, and there unending hazardous waste problem, while the BIMBOS that gave us this problem try to prevent the adoption of a rational and benign new energy means!!

As the past song went; "When will they ever learn, when will they ever learn??

We hope that this information will be useful to you as you plan your free energy T.V program, which we now believe will be cancelled at the last minute by the bigshots!!!

Sincerely,

Don Kelly
Don Kelly

SPACE ENERGY ASSOCIATION-SEA/US

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P.O. Box 11422
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(813) 442-3923
FAX (813) 446-5290

Dr. Shiuji INOMATA
President, J.P.I. &
Sr. Scientist-E.T.L.
1-1-4 Umezono, Tsukuba-shi,
Ibaraki, , T305, JAPAN

May 14, 1992

Dear Dr. Inomata:

We need to clear up some major problems which are now facing the emerging free energy field which must now be addressed, if we are to witness its introduction, as we approach the 21st century!

The two enclosed articles, first the open letter from Paul Brown, and the disclosure of the AWARE material are quite supportive of each other, and provide a very clear picture of the establishment's attitude toward the various emerging new forms of free energy technology.

We must now define the establishment as being the intransigent status-quo industries, mainly auto, oil, chemical and medical, the current stupid academics, and greedy politicians who feed off the system, but contribute nothing of value to it!!

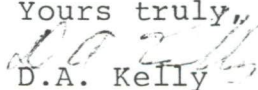
It is now becoming apparent that the ideal paradigm shift in these advanced energy technologies will not come from the Western nations since we are now in a hopeless gridlock brought on by dumb physics and physicists, intransigent industries, and a generally negative political climate, all of which prevent a logical transition to these badly needed new energy technologies!

Your nation has a distinct opportunity in this new, emerging advanced energy area to make a unique and lasting contribution to scientific advancement, since you are not encumbered and harassed by the vested petroleum /energy industries, or bogged down by stupid/bias attitudes in advanced physical concepts!!

Our only present hope of disseminating useful and practical free energy systems over here is via a very far-reaching underground movement which insures that this energy technological gets to the people, and avoids the, ugh! existing establishment as much as possible!!

If we are unsuccessful in setting up a wide underground network to disseminate this free energy technology, then it will probably be necessary for us to pass along everything that we know and have learned about this field to you, so that F/E technology may be actively produced somewhere on the planet, within this century!!

encl: (3)

Yours truly,

D.A. Kelly

SPACE ENERGY ASSOCIATION-SEA/US

Alternate Energy Systems

P.O. Box 11422
Clearwater, FL 34616
(813) 442-3923
FAX (813) 446-5290

Nobuo Yokoyama
205, Takakulabaitu, 5-9
Takakula chou, Hachioji-shi
Tokyo, 192, JAPAN

Dear Nobuo Yokoyama:

We need to advise you of the serious, negative harassment of several free energy projects over here, and say that steps must now be taken to insure that this emerging free energy field does not get stopped before it can be developed for the benefit of all mankind!

The enclosed letter/copy to Dr. Inomata of J.P.I./E.T.L generally outlines the present harassment situation over here, and our present position in seeing to it that this beneficial advanced energy technology does not disappear from the world scene.

The two most violent cases of overt harassment and suppression of free energy projects are:

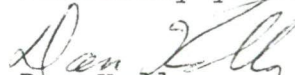
- 1) Paul Brown
309S. McLoughlin Blvd.
Oregon City, OR. 97045
- 2) William Hyde
1685 Whitney
Idaho Falls, ID., 83402-1768

Both of these individuals suffered considerable financial loss, property damage, physical threats to themselves and their families, but continue to press forward with their own development efforts, and are to be greatly admired for their courageous efforts!!

The United States is not the great supporter of technological advancement that it claims to be, but is rather a wild and wooly society where technical logic always takes a back seat to money, power and influence! No where can this attitude be more clearly seen than in the advanced energy and propulsion technologies, along with basic advances in electronic medicine!!

Such a situation in our nation affords JAPAN with a great opportunity to correct the technological mistakes that have been made here, and continue to be made, as we can clearly see from what is now going on over here!

Sincerely yours,


Don Kelly

encl: (1)

REFERENCE:

Physicist to Report Cold Fusion Findings From Japan at MIT's Bastion of Skeptics

By JACOB M. SCHLESINGER

Staff Reporter of THE WALL STREET JOURNAL

OSAKA, Japan — A physicist from this industrial city will walk into an American lion's den today with a report that may well revive the "cold fusion" controversy.

In a lecture at Massachusetts Institute of Technology in Cambridge, Mass., Akito Takahashi of Osaka University will describe a unique cold fusion experiment that for more than two months, he says, has been producing an average of 70% more power as heat than it is consuming in electricity. The experiment already has created a stir among Japanese scientists and in the Japanese press.

"The total amount of heat generated is unbelievably large," says Hideo Ikegami of the National Institute for Fusion Science at Nagoya University. "It shows positive results, and it's reproduced so many times."

Dr. Takahashi may create another stir in Cambridge, albeit of a different sort. From the day cold fusion hit the headlines three years ago, MIT has been a stronghold of physicists who charge that cold fusion claims are nothing but a huge mistake. Before departing for the U.S., Dr. Takahashi showed a visitor letters he has received from U.S. scientists. "I'm afraid they will eat you alive at MIT," one warns.

Fusion physicists skeptical of Dr. Takahashi's results are likely to attack the same weakness that has plagued other cold fusion claims: The nuclear radiations from the experiment are only a tiny fraction of what they should be if known hydrogen fusion reactions are generating the heat.

"I will say what we observed," the soft-spoken, graying nuclear physicist says of his MIT lecture. "That's the only thing I can do."

Dr. Takahashi, along with many other

scientists around the world, thought the dream of unlimited energy from the fusion of hydrogen atoms might have come true in early 1989, when chemists Martin Fleischmann and B. Stanley Pons announced in Utah that they had achieved hydrogen fusion at room temperature in a simple laboratory beaker.

The Japanese physicist tried to duplicate the results, and, like many others who tried, he failed. Most scientists then gave up and declared that Messrs. Fleischmann and Pons were grossly mistaken. But Dr. Takahashi and his group of researchers have persisted for over 2½ years.

This year, his experiments began to register large increases in heat — so much so that in February he was forced to cut the electric current when the water in the experiment started boiling. His caution was prompted by the fact that a month before, a researcher from SRI International in Menlo Park, Calif., had died from an explosion during a cold fusion experiment. But even with the charge reduced, the excess heat continued.

The Osaka experiment differs in significant details from the earlier experiments of Drs. Pons and Fleischmann. The experiment, like most other cold fusion experiments, involves immersing an electrode of palladium, surrounded by an electrode of platinum wire, into a bath of "heavy" water. Heavy water is rich in deuterium, a heavy form of hydrogen. An electric current is applied to what is essentially a water electrolysis apparatus.

Instead of using a slender rod of palladium, however, Dr. Takahashi uses a foil of palladium about an inch square. And instead of applying a steady electric current, he "cycles" the current up and down.

— Jerry Bishop in New York contributed to this article.

Critics of CEO pay are joined by — a CEO

If there's a subject of scorn among many shareholders at annual meetings this year, it's the salaries paid to top executives. Some CEOs are reaping many

millions of dollars, even as the companies they head are doing poorly or cutting people.

Last week, the chairman and chief executive officer of one St. Petersburg company chose to take the issue by the horns.

Jack Critchfield, who runs Florida Progress

CRITCHFIELD

Corp. at an annual salary of \$596,000, volunteered that he thinks executive salaries have been abused.

Critchfield told shareholders at the Florida Progress annual meeting that as a former teacher he had been embarrassed to reveal his salary. He said he started teaching for \$3,000 a year, and more than 20 years later ended his teaching career earning \$50,000.

Times have changed. Last year, Critchfield said he paid four times more in taxes than what his father ever earned in a year.

The utility executive said he wanted to mention the salary issue because it can cause misunderstandings. "I am at peace with myself," he told a room of several hundred shareholders.

4/20/92 — ROBERT TRIGAUX

Business

* Component geometry can
make a difference in
these C/F experiments!

** This is
outrageous,
and must
end!

SPACE ENERGY ASSOCIATION-SEA/US

Alternate Energy Systems

P.O. Box 11422
Clearwater, FL 34616
(813) 442-3923
FAX (813) 446-5290

U.S. Department of Commerce
International Trade Administration
JAPAN Trade Facilitation Committee
14th and "E" Streets, N.W.
Washington, D.C., 20230

May 19, 1992

Director, Japan Trade Facilitation
Committee:

Dear Sirs:

We are enclosing information on the emergence of major new alternate energy means, which is currently being harassed and suppressed, as described in the two specific cases in this data.

Now that we have come to understand that major industrial interests in this country have become Neanderthal Bastards in the suppression of this much needed new energy technology, it would seem appropriate that we try to get a technology transfer going to Japanese interests, so that this energy technology is not lost to the World!

We have already started the preliminary process of advising a dozen R & D groups in JAPAN, of this present harassment and attempted suppression of this free energy technology here in the U.S.

We expect to contact at least, a dozen more technical groups over there in the Far East, to insure that they are made aware of what is now going on over here, and if needed we will be transferring all that we know about project work in this field to them!

It stands to reason that the groups that have organized this harassment and attempted suppression of this new energy technology must believe that it is valid, or will be so in the future, otherwise they would not go to the time, money and effort necessary to mount such a negative, industrial sabotage campaign!!

This present information is in the nature of an advisory to you, and we will be carrying out our advisory process to the Far East, whatever you may decide to do with this information!

encl: (1)

Yours truly,

D.A. Kelly

"Document Control"

TYPE: ACTION DOCUMENT NUMBER: 9201886
ORIGINATOR: 02 STATUS I DIRECTORATE STATUS

FROM: LIDSKY, Lawrence M.: MIT

MAY 27 1992

TO: DR. BROMLEY

DATE OF
CORRESPONDENCE: 05/15/92

SUBJECT: HE IS WRITING TO DISCUSS THEY HAVE BEEN DOING TO
DEVELOP A VERSION OF SAFE REACTORS GEARED TOWARDS
NEAR-TERM LICENSEABILITY.

DIRECTORATE STAFF
ASSIGNED: PHYSICAL SCIENCES ASSIGNED: Lee Schrock 5/29

ACTION
REQUIRED: FOR DAB'S SIGNATURE

STAFF
ACTION: draft letter includes possible visit to OSTP to see KAT
this & then let's discuss. DAB should invite him for a visit to see us, of course. 1CK

SENDER'S DUE DATE: OSTP DUE DATE: 06/09/92
DATE COMPLETED: STAFF DUE DATE
DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: PHONE: EXT:

OSTP RECEIVED: 05/26/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY
CENTRAL FILES:





1886



DEPARTMENT OF NUCLEAR ENGINEERING
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

77 Massachusetts Avenue

Cambridge, Massachusetts 02139-4307

Room:
38-174

RECEIVED
52 MAY 28 AM 10
OSTP
MAIL ROOM

(617) 253-
3808

May 15, 1992

D. Allan Bromley
Science Advisor to the President
Office of Science and Technology Policy
Executive Office of the President
Washington, DC 20506

Dear Dr. Bromley:

I enjoyed your talk last month at MIT. I was particularly taken, of course, by your comments regarding inherently safe reactors and your kind words regarding the work we have been doing here to develop a version geared toward near-term licenseability. There are some issues related to this work that I would like to discuss with you. I thought it would be rather ungrateful to trouble you with these matters when you had come here to give an invited paper, so I deferred until now to raise them.

I am concerned with two matters, one extremely parochial, and the other potentially of great national importance. Naturally, I'll consider the parochial issue first (and at equal length).

Our group here at MIT played a large role in advancing the idea of inherently safe reactors for power generation, focused attention on the potential of the Brayton cycle to utilize the high temperature properties of the HTGR, and finally championed the idea of a system designed for near-term licensing and implementation. During this time, we have been variously ignored, opposed, or grudgingly supported by the Department of Energy. Our very earliest work was supported by a few local utilities and Tokyo Electric Power. DOE reluctantly climbed on board when it appeared that the train would proceed without them, but with dimly disguised lack of enthusiasm. Our budget since then has fluctuated between zero and inadequate. Our total funding for FY92 was \$119,000 out of a total gas-cooled reactor budget of ~ \$150 million (NPR) and a total "commercial" reactor budget of \$16 million. Somehow I don't think their hearts are in it.

I tell you this tale of woe, not because I think that you can do anything directly about it, but because it is another example of DOE's nuclear division following its own agenda, an agenda that might have made sense a decade or more ago, but certainly makes no sense now. The DOE is firmly convinced that the current nuclear program is fine and that it is the public that has failed. I think it is essential that the leadership positions in DOE Nuclear be occupied by people with intelligence and imagination. If we continue to appoint from the LWR/Breeder true-believer

community, the nuclear option will continue to decay. And, with all due respect to the Nuclear Navy, I do not think service therein should be a necessary, or even the only, requirement.

Now for the point of national import. Let us suppose we are correct in our designs. We envisage the construction of nuclear power plants of several hundred megawatt thermal size, with demonstrable inherent safety and concomitant simple operating requirements, and a relatively straightforward proliferation-resistant fuel cycle. These plants will be largely self-contained and constructed in a small number of highly efficient production facilities. Their cost will be competitive with coal, and they will be suitable for operation in the developing world. Because of the world's power needs, several hundreds of these units, at least, will be manufactured every year at cost per unit at several hundreds of millions of dollars.

This market is comparable to, but substantially larger than, the commercial airliner market. We have seen what domination of that market by several U.S. manufacturers has done for our balance of payments, and are aware of the hazards of losing that very large market share. We could take a dominant position in advanced nuclear technology but only if we move reasonably quickly. We currently have a lead in the technologies needed for the MHTGR-GT, because the key technologies are turbomachinery and heat exchanger design but we are losing ground in fuels and material development.

Several other countries are evincing substantial interest in this technology and investing the money in hardware and manpower needed to be ready to take advantage of it. I think the possibility of losing control of a market with potentially enormous economic consequences is worthy of government attention at the very highest levels.

I would like nothing better than to discuss these issues with you and your staff.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lawrence M. Lidsky", written over a horizontal line.

Lawrence M. Lidsky
Professor of Nuclear Engineering
Metcalf Professor of
Engineering and the Liberal Arts

LML:dl

OFFICE OF SCIENCE AND TECHNOLOGY POLICY

STAFFING SHEET

SUBJECT:

ORIGINATOR:**PHONE:**

DATE ORIGINATED:

DATE DUE:

CORR TRACKING NO:

9201886

EXTERNAL COORDINATION:

	COMMENTS	DATE
DIRECTOR		
GENERAL COUNSEL		
EXEC. ASST.		

ACTION REQUESTED:

[illegible]

THE WHITE HOUSE

WASHINGTON

June 8, 1992

Dear Professor Lidsky:

Thank you for your letter of May 15th regarding future options for nuclear power and what is required to realize them. We at OSTP are working in concert with others such as DOE, NRC and OMB in the federal sector; electrical power utilities and vendors in the private sector; and the professional societies to progress toward a future in which nuclear energy continues to play an important role. As you know, these interests do not always have precisely the same agenda and motion is often painfully slow. But there are moments of brightness; for example, we are encouraged that both the House and Senate energy bills contain provisions which will help facilitate the licensing of future nuclear plants. The continuing education of the public and the rebuilding of its trust in this area is, of course, also critical to the future of nuclear power in the United States, now and in the 21st century.

Dr. Karl Erb, Associate Director for Physical Sciences and Engineering, is my principal deputy for nuclear energy at OSTP. He and his staff welcome further discussion with you on these topics and their application to the development of a commercial market in advanced nuclear technology. I have requested that his office get in touch with you so that we can benefit from your suggestions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "D. Allan Bromley", with a stylized flourish at the end.

D. Allan Bromley
The Assistant to the President
for
Science and Technology

Professor Lawrence M. Lidsky
Professor of Nuclear Engineering
Metcalf Professor of Engineering
and the Liberal Arts
Department of Nuclear Engineering
Massachusetts Institute of Technology
Cambridge, MA 02139-4307

"Document Control"

TYPE: INFORMATION

DOCUMENT NUMBER: 9200861

ORIGINATOR: 02

STATUS C

DIRECTORATE STATUS

FROM: BISCONTI, Ann S.: USCEA

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 03/06/92

SUBJECT: SHE IS FORWARDING THE RESULTS OF THEIR SURVEY ON
AMERICANS VIEWS OF NUCLEAR POWER.

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: PHONE: EXT:

OSTP RECEIVED: 03/17/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY
CENTRAL FILES:



U.S. Council for Energy Awareness

Ann S. Bisconti, Ph.D.

Vice President, Research and Program Evaluation

Suite 400
1776 I Street, N.W.
Washington, DC 20006-2495
(202) 293-0770

RECEIVED

92 MAR 17 AM 11:28

OSTP
MAIL ROOM

March 6, 1992

The Hon D. Allan Bromley
Assistant to the President for
Science and Technology
Office of the President
Washington, DC 20506

Dear Mr. Bromley:

As nuclear power emerges as an issue in presidential primary elections, a new national poll has found 60 percent of Americans in favor of using nuclear power, almost twice the percentage opposed. In the same poll, even more Americans — 73 percent — said that nuclear power should play an important role in meeting the nation's future electricity needs.

There were clear differences also between the "strongly held" positions — 25 percent strongly favored nuclear power, and only 15 percent strongly opposed it. On the question of whether nuclear power should play an important future role, there was an even wider gap between the extremes — 35 percent said it should play a "very important" role, compared with only 12 percent who did not want it to play any role at all.

Please let us know if you would like extra copies of the enclosed public opinion flier.

Sincerely,

Ann S. Bisconti

ASB/cjc

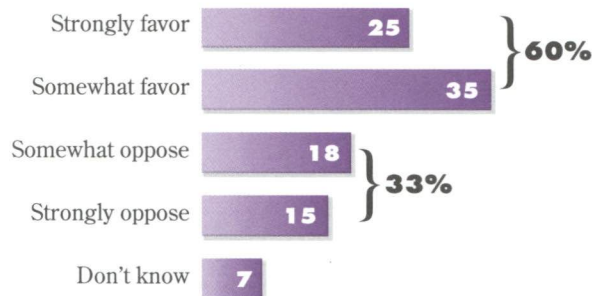
Enclosures

U.S. Public Opinion

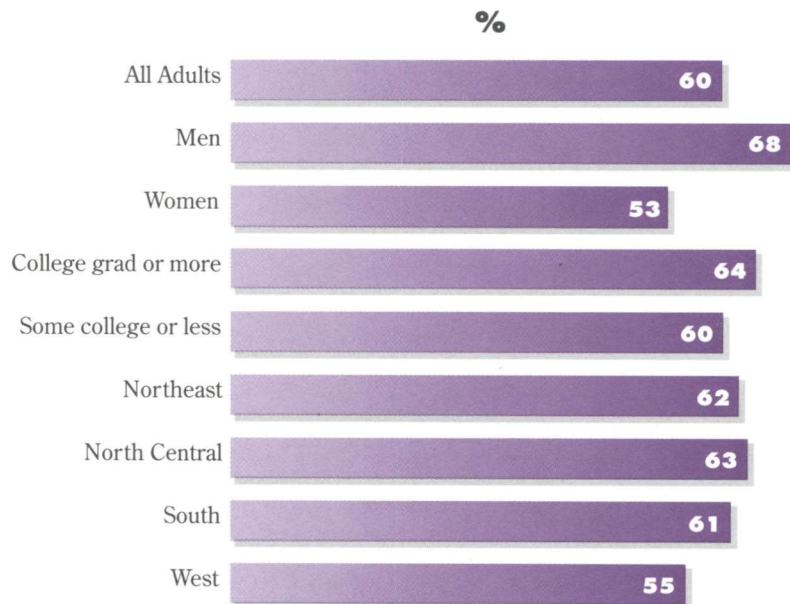
Americans Favor Using Nuclear Energy By Almost 2 to 1

"Do you strongly favor, somewhat favor, somewhat oppose, or strongly oppose the use of nuclear energy as one of the ways to provide electricity for the United States?"

- 60% of Americans favor using nuclear energy.

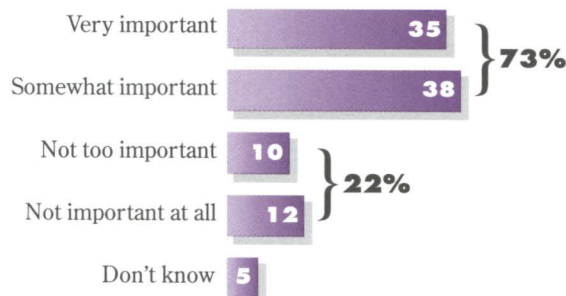


- Support is broad-based across segments of society.



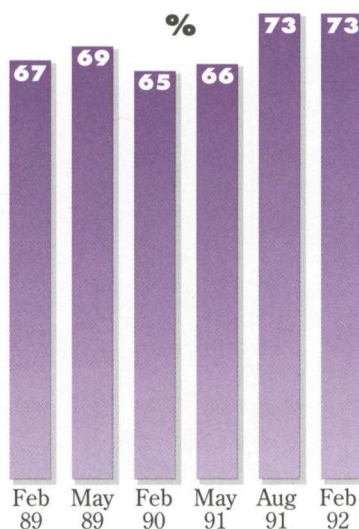
"Practically speaking, how important a role should nuclear energy play in meeting America's future energy needs?"

- 3 of 4 Americans said nuclear energy *should* play an important future role.

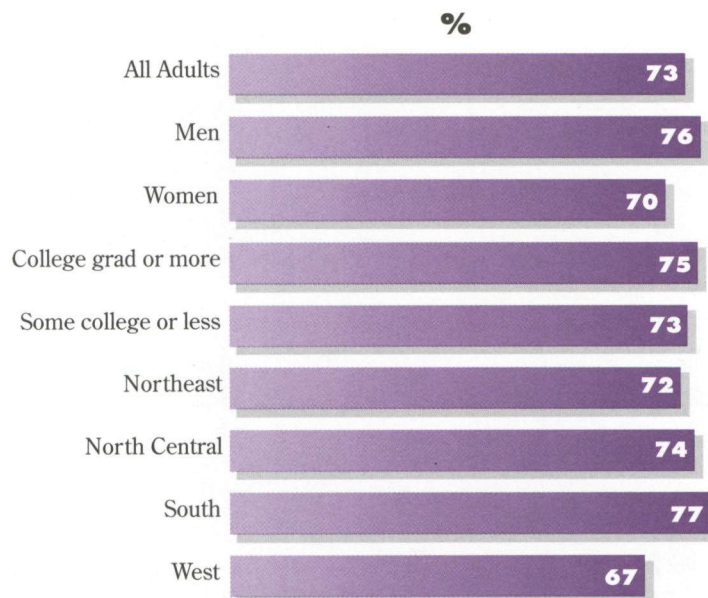


"Practically speaking, how important a role should nuclear energy play in meeting America's future energy needs?"

■ Two-year trend: Consistent level of support.



■ Support is broad-based across segments of society.



Sources: Bruskin/Goldring, January 31–February 2, 1992. February 89–May 91: Cambridge Reports/Research Intl.; August 91: Gallup. For all polls: telephone interviews with 1,000+ nationally representative adults, margin of error $\pm 3\%$.

"Document Control"

TYPE: INFORMATION DOCUMENT NUMBER: 9200582
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: WATKINS, James D.: SECRETARY OF ENERGY

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 02/21/92

SUBJECT: A COPY OF THE "ONE YEAR LATER" REPORT OUTLINING THE
PROGRESS OF THE NATIONAL ENERGY STRATEGY.

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE: STAFF DUE DATE
OSTP DUE DATE: DATE COMPLETED/DEPT:
DATE COMPLETED:

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: ENCLOSURE TO DAB PHONE: EXT:

OSTP RECEIVED: 02/24/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY
CENTRAL FILES:



The Secretary of Energy
Washington, DC 20585

February 21, 1992

The Honorable D. Allan Bromley
Assistant to the President
for Science and Technology
Old Executive Office Building
Washington, D.C. 20506

Dear Allan:

Passage of S.2166 on Wednesday was a fitting way to mark the One Year Anniversary of the President's National Energy Strategy. Within the Administration, we have made significant progress on implementing the NES. Enclosed you will find your copy of the "One Year Later" report outlining that progress. With your help, I look for even greater successes over the coming year.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jim", is written over the typed name.

James D. Watkins
Admiral, U.S. Navy (Retired)

Enclosure

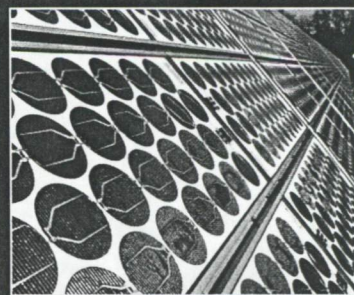
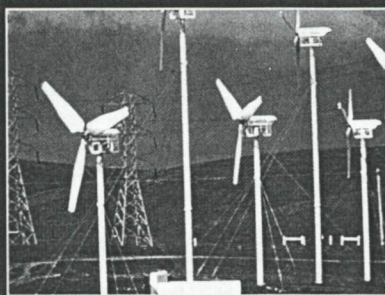
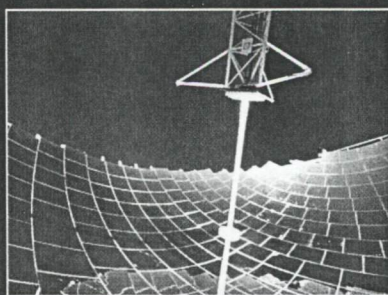
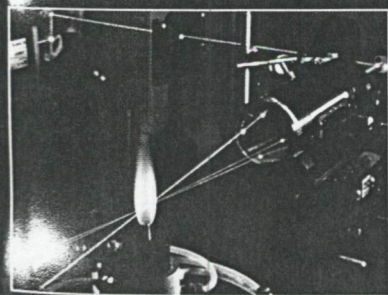
NATIONAL ENERGY STRATEGY

Powerful Ideas for America



One Year Later

February 1992



"Document Control"

TYPE: INFORMATION DOCUMENT NUMBER: 9200583
ORIGINATOR: 02 STATUS C DIRECTORATE STATUS

FROM: WATKINS, James D.: SECRETARY OF ENERGY

TO: DR. D.A. BROMLEY

DATE OF
CORRESPONDENCE: 02/20/92

SUBJECT: RE: THE NATIONAL ENERGY STRATEGY--ONE YEAR LATER.

DIRECTORATE STAFF
ASSIGNED: ASSIGNED:

ACTION STAFF
REQUIRED: ACTION:

SENDER'S DUE DATE:
OSTP DUE DATE: STAFF DUE DATE
DATE COMPLETED: DATE COMPLETED/DEPT:

COPIES TO: D. Allan Bromley
PHYSICAL SCIENCES

WHITE HOUSE TRACKING #: CONTACT PERSON:
REMARKS: ENCLOSURE TO PS PHONE: EXT:

OSTP RECEIVED: 02/24/92 DEPT RECEIVED:
FILE: P-PHYSICAL SCIENCES-ENERGY
CENTRAL FILES:



The Secretary of Energy
Washington, DC 20585

February 20, 1992

RECEIVED

02 FEB 21 P4:33

The Honorable D. Allan Bromley
Assistant to the President
for Science and Technology
Old Executive Office Building
Washington, D.C. 20506

OSTP
MAIL ROOM

Dear Dr. Bromley:

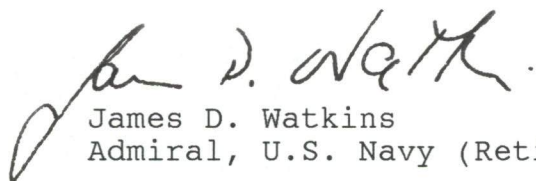
One year ago today, President Bush presented the National Energy Strategy to the American people. The Strategy calls for more than one hundred specific legislative and administrative actions to increase energy efficiency, spur economic growth, improve our environment, and increase our energy security. On this first anniversary of the National Energy Strategy, I am pleased to present a report on our progress in implementing the Strategy's many powerful ideas: National Energy Strategy--One Year Later.

The Administration has moved aggressively to act on the many Strategy initiatives that can be implemented under existing statutory authority. Our list of accomplishments includes energy conservation and efficiency initiatives, regulatory reforms, and significantly increased budgetary emphasis on renewable energy and alternative fuels. We also are devoting significant resources to assist State and local governments in their implementation of Strategy initiatives.

Legislation remains essential to achieving the full objectives of the National Energy Strategy. We are gratified that the United States Senate was acting on comprehensive energy legislation as this report was being completed. We will continue to work with the Congress to achieve enactment of a balanced and comprehensive energy bill.

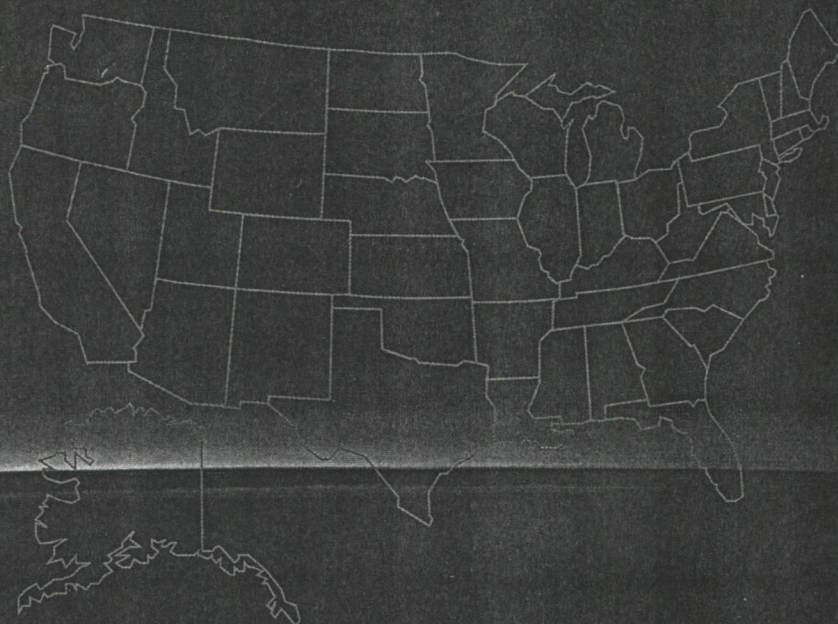
Full implementation of the National Energy Strategy will add more than half a million new jobs to our economy over the next fifteen years, while improving our environment and increasing our energy security. The activities outlined in this report are an impressive beginning. Working together at all levels of government and with the American people, we can achieve a cleaner, more productive, and more secure energy future.

Sincerely,


James D. Watkins
Admiral, U.S. Navy (Retired)

NATIONAL ENERGY STRATEGY

Powerful Ideas for America



One Year Later

February 1992

