Memo to Cesar Conda and Jim Sims

From Jim Lucier

Wall Street's views on the energy crisis

From my daily conversations with institutional investors around the country, I believe the investment community is ready-in principle-to enthusiastically embrace a sound national energy strategy. There is only one important proviso, which is that investors and the investing public have to see a clear connection between the "top-line" policy proposals and the "bottom-line" issues of economic growth and value creation.

Having worked with Wall Street investors for two years now, I have come to realize that investors see the fundamental problem of an energy crisis in ways that are fundamentally different from those of an energy industry CEO or those of a strictly Washington-based policy analyst, such as I used to be.

Wall Street filters everything through market cap and growth potential. They want to know where the value is, and where new value is being created. That is part of the business of allocating capital to the most efficient users. Wall Street investors are not interested in the fate of a particular industry per se - even an industry that seems big to Washington, such as "coal," "oil," or "nuclear."

Rather, what they will find most attractive about the national energy strategy is 1) moving the whole domestic economy to a higher state of efficiency and 2) creating a new generation of energy companies that will meet the nation's needs in hitherto unrealized ways.

An efficient economy is good for stock valuations across the board. Ending restrictions that inhibit today's energy companies from combining, operating, and deploying new concepts in ways that meet market demand could unleash an enormous new round of value creation.

The Wall Street mindset implies a set of do's and don'ts in presenting the National Energy Strategy to institutional investors. I will start with the don'ts, before getting to the more obvious do, which is the absolute mandate of explaining how a coherent set of policies, maintained over an extended...
period of time, will in fact open the door to significant - if not enormous - new investment opportunities.

1. First, don't forget that Wall Street cares about large publicly traded companies. This may seem obvious, but Washingtonians may not realize its full import. Wall street defines large in terms of market cap. Coal companies may be large employers, large in significance to regional economies, and large in their importance as fuel suppliers to electric utilities, but they are not large in terms of market cap. Likewise, independent oil producers may be important as a group, but most IPAA companies have near-zero presence on Wall Street. The integrated oil companies do have a large presence on Wall Street, but it is much diminished from their days of glory, plus the sense from investors is that they are so large, and so exposed to global markets, that domestic U.S. policies won't have a major impact on them. The U.S. refining industry is enjoying an Indian summer of sorts, with a brief period of high margins and favorable prices in what is normally a low-margin business with little potential, due to regulatory constraints, to attract and reward new investments in the longer term.

2. Second, investors dislike anything that looks like direct intervention in the marketplace with a potential to distort market outcomes. Tax incentives and subsidies for uneconomic activities are especially unpopular. There is a sense that with natural gas prices, in particular, at the current levels, companies should have all the incentives to produce they need. Investors worry that too much reliance on tax preferences will lead to a classic boom and bust cycle in the subsidized industries, in which overbuilding ultimately leads to a collapse in valuation.

3. Taking points one and two together, you have a very serious problem in perceptions of what the National Energy Strategy is all about. In the press, investors read only about oil and the Arctic National Wildlife Refuge. When investors look at the legislation in Congress, they see their lights, mostly a hodge-podge of special interest legislation from the oil-patch states operating in cooperation with the coal states. In other words, investors see what appears to them as a confusing mass of junk that isn't directly relevant to the energy problem as they define it, which is creating 1: a fully integrated, deregulated, diversified national market for energy; 2: the infrastructure necessary to support such a market; and 3: growth opportunities for firms that produce and distribute energy, which is implied in the possibility these firms can offer new services and site new facilities.

4. Investors would welcome opening ANWR to drilling in an environmentally
responsible way. However, they are much more concerned with drilling for natural gas in the continental U.S. There is a sense of confusion about how much land is off-limits for drilling and why, which you could profitably address. However, there is a definite sense that reserves are not growing, and that new wells being drilled are not as productive as the older wells were in the prime, largely because the new wells are not in the most promising areas. Making some kind of coherent statement about federal lands irrespective of ANWR would serve you well.

5. Another theme that resonates with investors is the need to reverse thirty years' chronic under-investment in facilities and infrastructure of all kinds. Investors want to know what you are going to do about the pipelines and electric transmission lines needed to support the national marketplace they look forward to. No one I have ever talked to has the slightest sympathy for the fecklessness of the state of California: they can't believe Davis won't do the obviously right thing (as far as they are concerned) and let retail electricity prices float. You have an opportunity to make a powerful case that some kind of long term, market oriented plan is needed to allow private investment flows to build the new facilities.

6. Now you can see we are getting to some of the do's. A key variable in the equation for stock valuations is the potential for future growth. The way the equation works, even a little increased growth can mean sharply higher price-multiples. But the energy industry has had to deal with physical constraints on growth (no new drilling, siting allowed, etc.) and financial constraints on growth due to regulatory costs. Though companies have consistently increased their efficiency over time, and grown earnings despite limited upside in revenues; by cutting costs and increasing productivity, these incremental cash flows have been eaten up by higher regulatory costs. As a result, the "g" factor in the P/E equation has been near zero. The investment community will therefore take note if you can make a credible case that 1) you will permit the industry to build out and expand capacity subject to undistorted market forces over an extended period of time and 2) you will do something about regulatory cost creep, so that companies which can meet or exceed environmental standards while cutting costs and improving productivity can actually return that increased "delta" to their shareholders. Our analysts believe that such a policy shift would allow a rise in energy industry P/E's across the board.

In summary, claiming that P/E's should go up or attempting to jawbone their increase is something the White House should absolutely not do on its own. But if you provide reasonable, credible, and reliable basis that your policies will allow capacity growth, earnings growth, and efficient new combinations, Wall Street analysts can connect the dots and perform the requisite calculations on their own.
So cut through the clutter. Don't make us think the entire energy policy is about ANWR, stripper wells in Texas, and employment in Appalachia. These are all important concerns, but things which investors consider to be second tier elements of a package that should properly focus on capacity and distribution, natural gas and electricity, and ending unjustified constraints on growth.

PS-It wouldn't hurt to tell us more about what a "hemispheric" energy policy means, because if an integrated national marketplace is a good thing, an integrated hemisphere would seem to be even better.

PPS-We would like to hear about the "comprehensiveness" of your energy policy in terms that recall the way businesses have undergone comprehensive restructurings and reorganizations in the context of a six-sigma or total quality management plan.
From: Dana Contratto [dcontratto@msn.com]
Sent: Thursday, March 01, 2001 8:54 AM
To: Kelliher, Joseph
Subject: RE: TVA

Importance: High

Joe,

Thanks much. I will follow up with John Fenzel. Second, I am
surprisingly
here all of next week. Please let me know what time (anytime for my
purposes) would be convenient for me to come visit with you on the
subject
of TVA reform.

Dana

-----Original Message-----
From: Kelliher, Joseph [mailto:Joseph.Kelliher@hq.doe.gov]
Sent: Thursday, March 01, 2001 8:17 AM
To: 'Dana Contratto'
Subject: RE: TVA

I am handling electricity and energy policy at DOE. Andrew Lundquist
and
Karen Knutson are handling energy policy for the Task Force. We could
sit
down next week. With respect to Andrew and Karen, I suggest you call
John
Fenzel, emphasize that the Valley delegation strongly supports the TVA
title, mention that we are meeting, ask for a meeting with Andrew and/or
Karen (Andrew is the head, Karen is number #2). John’s number is
456-7953.

If the direct approach does not work, let me know and I will recommend
they
meet with you. If that does not work, then have a member of the
delegation
request the meeting.

-----Original Message-----
From: Dana Contratto [mailto:dcontratto@msn.com]
Sent: Thursday, March 01, 2001 12:42 AM
To: Kelliher, Joseph
Subject: TVA
Importance: High

Joe,

This is a business matter. As you know, I represent Memphis and
Knoxville
on TVA matters. Also, and of course, Mr. Murkowski has now introduced
the
Republican energy policy bill, actually two bills with one being a tax
bill;
Mr. Dingman has introduced a Democrat alternative; and there is the
Administration – DOE and the Vice President’s energy policy task force.
So, my simple-minded question is who should I be talking to in either
DOE or
the VP’s task force to at least present my most persuasive arguments as

11961

DOE016-1713

Obtained and made public by the Natural Resources Defense Council, March/April 2002
to
why there should be a TVA title in whatever is proposed?

Any guidance you can give me would be greatly appreciated.

Dana
Obtained and made public by the Natural Resources Defense Council, March/April 2002
Obtained and made public by the Natural Resources Defense Council, March/April 2002
From: Kelliher, Joseph  
Sent: Tuesday, July 03, 2001 8:24 PM  
To: Tripodi, Cathy  
Subject: FW: Recommendations on National Energy Policy  

Importance: High

--- Original Message ---
From: Jim Ford (mailto:fordj@api.org)
Sent: Tuesday, March 20, 2001 2:51 PM
To: Kelliher, Joseph
Subject: Recommendations on National Energy Policy

Hi, Joe. As we discussed, attached are a set of papers on national energy policy recommendations. Much of it is designed to be self-explanatory. The last document is a suggested executive order to ensure that energy implications are considered and acted on in rulemakings and other executive actions. This draft has DOE as the coordinator. Probably also need to make energy a major portfolio item for a senior White House aide.

Let me know if you have questions or additional info needs. Thanks.

[Signature]

1

DOE016-1718

Obtained and made public by the Natural Resources Defense Council, March/April 2002
Congress of the United States
House of Representatives
Washington, DC 20515-3306
FAX TRANSMISSION

TO: Secretary Abraham
FAX: 580-7144
FROM: Rep. Strickland
DATE:

PHONE: (202)225-5705
FAX: (202)225-5907

PAGES TO FOLLOW (not including this cover page): 5

COMMENTS:

2001-012302 May 15 p 4:47

If any portion of this transmission is not clear, please call (202)225-5705.
This document is confidential and is intended only for the use of the recipient listed above.

11991
DOE016-1743

Obtained and made public by the Natural Resources Defense Council, March/April 2002
The Honorable Richard Cheney  
Vice President of the United States  
The Old Executive Office Building  
Washington, DC 20501  

Dear Mr. Vice President:

I am disturbed by early reports that the Energy Task Force recommendations fail to recognize the need to include a path forward for assuring that this country is capable of providing a reliable and economic source of nuclear fuel for commercial nuclear reactors. As you know, nuclear power is the second largest supplier of electricity generation in the country. Unfortunately, it is not unreasonable to expect that the U.S. could have an OPEC-like dependency on foreign sources of nuclear fuel supplies in the near future. To prevent such a situation, the U.S. needs to deploy cost competitive uranium enrichment technology or do we will rely on foreign supplies to meet nearly one quarter of our electricity needs.

There have been adverse consequences to the nation’s energy security as a result of the privatization of the United States Enrichment Corporation (USEC) in July 1998. USEC is the only domestic supplier of uranium enrichment services in the U.S. When it was privatized, USEC operated two gaseous diffusion plants located in Piketon, Ohio and Paducah, Kentucky. However, last June, USEC made the decision to cease operations at the Piketon Gaseous Diffusion Plant (GDP) ignoring the advice of the Departments of Energy and Treasury. The targeted date for turning the key to the “off position” is June 1, 2001.

A Department of Energy report issued on January 19, 2001 describes the need for the U.S. “to be able to reliably meet the continually increasing demand for approximately 11,000 metric tons of enriched uranium per year.” However, the Paducah plant can only produce approximately 4.5 million SWU per year in an economic manner. The balance of requirements comes from 5.5 million SWU derived from blended down weapons grade uranium imported from Russia under the U.S.-Russia HEU Agreement and some European supplies. It is evident that the operation of a single enrichment plant in the country, coupled with a history of five interruptions in the delivery of enriched uranium under the Highly Enriched Uranium Purchase Agreement with Russia, raises questions about the vulnerability of the U.S. to a disruption in the supply of enriched uranium.
The Honorable Richard Cheney
May 15, 2001
Page Two

This supply mix may change even further to the detriment of energy security. First, an August 2000 Nuclear Regulatory Commission report on USEC’s viability suggests that USEC is unlikely to enrich uranium profitably at the Paducah plant beyond 2003. Second, USEC is trying to expand U.S. dependency on Russian nuclear fuel supplies beyond the 5.5 million separative work units (SWU) that it imports each year as Executive Agent under the U.S.- Russia HEU Agreement. USEC has been proposing additional imports of commercial enriched uranium through Tenex, the Russian export agent. One interim solution to maintain insurance against nuclear fuel supply disruptions from Russia is through a cold standby operation for the Piketon, Ohio enrichment plant. I am pleased that Secretary Abraham has taken the steps to provide for cold standby through fiscal year 2002. However, this standby plan must be linked to deployment of cost-competitive technology, such as gas centrifuge technology, and must be extended until the new technology is fully deployed. I fear there has not been adequate attention given to what happens beyond fall 2002 and this is particularly troubling because the Department of Energy’s testimony before the Energy and Air Quality Subcommittee on March 27, 2001 indicates that after five or six years of cold standby there would be significant degradation to the Piketon plant.

I am aware that the Europeans have competitive centrifuge technology, and I understand that the Oak Ridge National Laboratories have a plan to develop cost-competitive U.S.-origin centrifuge technology within a three year time period. However, at present, there is virtually no effort toward domestic self-sufficiency in enrichment services, no clear path forward for deployment from the private sector, and no government policy in effect to address the matter. Privatization has failed to deploy the advanced laser enrichment technology (AVLIS) that received nearly $2 billion in federal R&D. Indeed, two years have passed since USEC announced it was terminating the AVLIS Program and nothing has emerged to replace the WW-II era gaseous diffusion plants in the next decade. Indeed, USEC’s impaired credit ratings make it unlikely that they could obtain financing to deploy any technology.

Given the short-term nature of the Administration’s cold standby plan and the absence of any long-term strategy to utilize the Piketon facility and deploy next generation enrichment technology, the plan for Piketon presently falls well-short of the commitment made by President Bush during the campaign. In an enclosed October 4, 2001 letter to Ohio Governor Bob Taft, then-Governor Bush expressed his concern about USEC’s decision to cease operations at the Piketon plant. He stated, “I am concerned that the closure of the Piketon site, which would leave only one uranium enrichment plant operational in the United States, would compromise our long-term national security interest in a continued safe supply of enriched uranium for our defense and energy needs.” He further committed in that letter, “If I am elected President, my Administration will aggressively explore how the workforce and facilities at the Piketon site can continue to serve our national interest. I believe that our nation must continue to pursue research and development of new technologies for use in uranium enrichment.” Release of the Energy Task Force report is the best opportunity for the Administration to follow through on its commitment to the Piketon community and our nation’s nuclear energy security.
The Honorable Richard Cheney  
May 15, 2001  
Page Three

The need for a secure, domestic uranium enrichment supply is underscored by the fact that nuclear power is enjoying improved operating economics and increased average efficiency of reactors. Demand is likely to remain stable or grow, as approximately 40% of the domestic nuclear reactors are currently seeking license renewals. During a hearing on nuclear power before the Energy and Air Quality Subcommittee on March 27, 2001, there was discussion about building the next generation nuclear reactors in the not-so-distant future. These next generation reactors will require 8-10% U-235 enrichment, compared with the 4-5% levels required for the current generation of boiling water reactors. It is troubling that USEC is closing the Piketon facility which is the only U.S. enrichment plant that is licensed to enrich uranium to 10% assay, when there is a trend toward higher assay fuel.

During the March 27, 2001 Energy and Air Quality Subcommittee hearing, testimony was offered which stated:

"USEC utilized only about 29% of its nameplate GDP capacity in 2000, and over the next year will supply a majority of its customers needs from Russian and U.S. HEU blending."  
(Testimony of John R. Longenecker, former USEC official).

Mr. Longenecker further states:

"USEC is finding it more profitable to operate as a trader of blended HEU rather than as a primary producer. This approach appears to lead inevitably to USEC exiting the market as a primary producer. As a result, constructing replacement enrichment capacity in the U.S. should be the key focus for the decade ahead."

In addition, during a June 8, 2000 hearing before the Commerce Subcommittee on Energy and Power, testimony was submitted stating that the front end of the nuclear fuel cycle is endangered:

"Since 1998, expenditures for uranium exploration and mine development have declined by 59%; three uranium processing facilities have closed during 1999 (two in Texas and one in Louisiana); employment in U.S. uranium exploration, mining, milling and process has decreased by almost 30%. Last year, production at ConverDyn, the sole remaining uranium converter in the U.S. was cut back by 25% and employment was reduced by over 12%." (Testimony of Mr. James Graham, President and CEO of ConverDyn).

If this nation's energy policy is going to place a greater emphasis on nuclear power, it must do so in a comprehensive fashion. An energy policy that ignores the reliability of the front end of the domestic nuclear fuel industry falls short of assuring needed energy security in this country. I urge you to carefully consider the needs of the entire nuclear fuel cycle as you prepare
The Honorable Richard Cheney
May 15, 2001
Page Four

to issue your recommendations for a national energy strategy. I know you will agree that Americans would find it unwise and unacceptable to depend on foreign sources for the second largest supplier of U.S. electricity generation, nuclear power.

Thank you for your attention to this important matter.

Sincerely,

[Ted Strickland]
Tod Strickland
Member of Congress

cc: The Honorable Spencer Abraham
    The Honorable Bob Taft
    The Honorable Mike DeWine
    The Honorable George Voinovich
    The Honorable W. J. "Billy" Tauzin
    The Honorable John Dingell
    The Honorable Joe Barton
    The Honorable Rick Boucher

11995
DOE016-1747

Obtained and made public by the Natural Resources Defense Council, March/April 2002
October 4, 2000

The Honorable Bob Taft
Governor, State of Ohio
77 South High Street, 24th Floor
Columbus, Ohio 43215-0117

Dear Governor Taft:

I am writing regarding my growing concerns over the events surrounding the decision by the United States Enrichment Corporation (USEC) to shut down the Portsmouth Gaseous Diffusion Facility at Piketon. As you know, on September 29, 2000, USEC gave notice to the United States Department of Energy (DOE) to cease its contract for electric power. As the current congressional appropriation process for fiscal year 2001 comes to a close, I am further concerned that the DOE has yet to evaluate a plan for future clean-up and use of the site in Portsmouth, as well as for that of more than 2,500 employees at the Portsmouth facility.

I am concerned that the closure of the Piketon site, which would leave only one uranium enrichment plant operational in the United States, would compromise our long-term national security interest in a continued safe supply of enriched isotopes for our defense and energy needs. The Clinton-Gore Administration has not articulated a robust and aggressive plan for the highly skilled workforce and the highly specialized equipment at the Piketon plant. This demonstrates a lack of leadership relative to a key national security issue that I will not tolerate as President.

If I am elected President, my Administration will aggressively explore how the workforce and facilities at the Piketon site can continue to serve our national interest. I believe that our national must consider to pursue research and development of new technologies for use in uranium enrichment. Furthermore, I will ensure that the facilities that have been committed by Congress for Decommissioning and Decontamination (D&D) of the site will be available at a timely manner. Finally, I will direct the DOE to explore other research opportunities that will continue to utilize the resources at Piketon. Simply stated, if I am elected President, I will work with Congress to help the Piketon workforce remain productive, ensure federal D&D obligations are met and ensure new opportunities for D&D are explored.

I know you are actively working at the state level to ensure opportunities for the workers at Piketon and their families. I look forward to working with you on this critical Ohio issue in the future.

Sincerely,

George W. Bush

11996

DOE016-1748

Obtained and made public by the Natural Resources Defense Council, March/April 2002
HAND DELIVERED

The Honorable Richard B. Cheney
Vice President of the United States
Washington, D.C. 20502

Dear Mr. Vice President:

The Business Roundtable strongly commends this Administration for forming a special White House energy task force that will address critical energy issues. We encourage the development of a coherent and comprehensive strategy that effectively responds to the daunting economic, technological and environmental challenges ahead.

Below, the BRT outlines the long-term goals that should shape this strategy, and we offer some short-term recommendations. We are guided by three principles. First, a diverse energy supply promotes energy security and supports economic stability. Second, the Federal Government and private sector should engage in science and technology R&D to address long-term energy and environmental concerns. Third, processes should be developed and followed to align energy and environmental policies.

National Energy Security and Economic Stability is a goal that is now at risk. The wrong policy actions, such as unnecessary federal land use restrictions, popular consumer price caps, and casual opening of national emergency energy reserves, only exacerbate the energy supply and demand problem and undermine market mechanisms. For the most part, this can, and should, be corrected through promoting diverse energy supplies; vigilantly maintaining competitive markets; avoiding price controls; and minimizing or eliminating regulatory, tax and trade disincentives to improving energy efficiency and spurring technology innovation.

April 25, 2001

Patricia Hanahan Engman
Executive Director

An Association Of Chief Executive Officers Committed To Improving Public Policy

11997

DOE016-1749

Obtained and made public by the Natural Resources Defense Council, March/April 2002
Energy Technology Research and Development is a goal that should be actively pursued by the Federal Government. The U.S. has substantial human resources dedicated to technological innovation, public and private. Public resources should be applied to productive and diverse energy technology R&D, including broad climate change R&D of emission reductions, carbon sequestration and adaptation technologies. These resources should be deployed in collaboration with business to assure that new and existing energy supply and energy conservation technologies are accepted by global markets. However, the government should avoid “picking winners and losers,” therefore, transparent processes should be established which develop and prioritize an energy technology R&D agenda and which continually assess and improve returns on government R&D investments.

Energy and Environmental Policy Alignment is imperative in the current energy crisis. The Federal Government should better align energy and environmental policies and the associated regulatory processes with a view to optimizing the synergies between these areas in policy decision-making. Risk-based analytical methods should be used across Federal agencies to compare, assess and communicate energy technology benefits and human health and environmental risks. Furthermore, ongoing risk analysis can point to the challenges and opportunities for long-term technological innovation, and perhaps, help avoid accelerating and/or escalating, crisis-like swings and clashes.

Finally, the BRT makes the following short-term strategy recommendations.

- Review regulations and regulatory processes both to identify and remove unjustifiable barriers to bringing energy technologies and services to market and to develop incentives that will not only enhance the functioning of the marketplace for energy, but also, achieve greater environmental results. In particular, rationalize and streamline Clean Air Act new source review requirements to produce a simpler, more workable permitting program – one that will not impede the ability of businesses to apply technology to increase process and operational efficiency and improve environmental performance.

- Develop energy and environmental policies that are fully informed by our historical experience with, and understanding of the consequences of, using market interventions such as price caps, natural resource management bans and mandates.

- Establish a balanced and transparent science and technology advisory process of government, industry and academia to identify and prioritize energy and environmental risks and recommend an R&D agenda.

- Bring these actions into a realistic global perspective. National energy independence does not, and will not, exist for the foreseeable future. Such a goal would distort markets and misallocate global resources. Meeting our national energy security needs necessitates supply diversification within a global energy market. Efforts to impose unilateral trade sanctions should be avoided. Foreign direct investment by the U.S. in prospective oil producing countries will be essential to meet future U.S. energy requirements.

11998

DOE016-1750

 Obtained and made public by the Natural Resources Defense Council, March/April 2002
The Business Roundtable has long been studying these issues. We have several publications (www.brt.org) that address many of our goals. These include: "Unleashing Innovation: The Right Approach to Global Climate Change," "Environmental Blueprint 2001," "Towards Smarter Regulation," and several others on subjects such as climate change and information management. Please know that we are committed to thoughtfully and constructively engaging these issues and stand ready to participate with you in shaping and executing a strategy that addresses the serious energy problems that confront us.

Sincerely,

Earnest Deavenport
Chairman & CEO
Eastman Chemical Company
Chairman, Environment, Technology &
The Economy Task Force
The Business Roundtable

William Cavanaugh
Chairman, President & CEO
Progress Energy, Inc.
Chairman, Energy Committee
The Business Roundtable

cc: The Honorable Spencer Abraham
    The Honorable Joe M. Allbaugh
    The Honorable Josh Bolten
    The Honorable Mitchell Daniels
    The Honorable Donald L. Evans
    The Honorable Lawrence Lindsey
    The Honorable Norman Y. Mineta
    The Honorable Gale Norton
    The Honorable Paul Henry O'Neill
    The Honorable Colin L. Powell
    The Honorable Donald H. Rumsfeld
    The Honorable Ann M. Veneman
    The Honorable Christine Todd Whitman
    Mr. Ruben S. Barrales
    Mr. Andrew D. Lundquist

Enclosures (3)
Tripodi, Cathy

From: Kelliher, Joseph
Sent: Tuesday, July 03, 2001 7:35 PM
To: Tripodi, Cathy
Subject: FW: Bi-annual Potential Gas Resources Report (Advance Copy) & follow up on DG info.

--------Original Message--------
From: Charles M. Smith@ovp.eop.gov
Sent: Wednesday, April 04, 2001 4:27 PM
To: Kelliher, Joseph
Subject: Bi-annual Potential Gas Resources Report (Advance Copy) & follow up on DG info.

-------------- Forwarded by Charles M. Smith/OVP/EOP on 04/04/2001 04:26 PM --------------

Andrew D. Lundquist
04/04/2001 01:37:45 PM

Record Type: Record
To: Charles M. Smith/OVP/EOP
cc: Subject: Bi-annual Potential Gas Resources Report (Advance Copy) & follow up on DG info.

-------------- Forwarded by Andrew D. Lundquist/OVP/EOP on 04/04/2001 01:37 PK --------------

Embedded
Image moved "Henry, Darrell" <DHenry@aga.org>
to file: C4/03/2001 02:37:42 PM
PIC07094.PCX)

Record Type: Record
To: Andrew D. Lundquist/OVP/EOP
cc: "Shelby, Rick" <Rshelby@aga.org>, "Watson, Kate" <KWatson@aga.org>
Subject: Bi-annual Potential Gas Resources Report (Advance Copy) & follow up on DG info.

Andrew,

We wanted to give you a head's up that we have sent the attached embargoed press release to Karen this morning, and we will be forwarding the whole report over to her this afternoon. The report will be released tomorrow morning. We are also sharing this information with the Senate and House energy committees and Secretary Abraham's office. Per your request, you will find that on page 8 of the report is a map of the major natural gas transmission lines in the United States, and those leading to Canada and Mexico. We can make this available to you if you would like to use it in your report.

You may also note on page 66 & 67, reference access restrictions and the impact of Clinton's roadless initiative. A study showed that "modifications of less than 5% of the designated roadless areas would greatly reduce the amount of natural gas potential that would be lost."

Please let me know if the materials on distributed generation that we provided were adequate for your purposes?? We can make any modifications or provide additional information.

Darrell Henry
Director, Public Affairs
American Gas Association
430 N. Capitol St., NW
Washington, DC 20001
202-824-7219
dhenry@aga.org

Obtained and made public by the Natural Resources Defense Council, March/April 2002
DRAFT
Embargoed until 9:00am April 4, 2001

Daphne Magnuson  April 4, 2001
(202) 824-7205  PR – 14

Potential Gas Report Shows Ample Natural Gas Resources —
But America Must Develop Infrastructure to Produce and Deliver It,
American Gas Association Says

Washington, D.C. – The U.S. natural gas resource base is estimated to be even larger than
previously thought, but the size of the resource base is immaterial unless the nation can access
supplies and can build the infrastructure needed to deliver it, the American Gas Association
(AGA) said today. AGA’s comment followed the release of the Potential Gas Committee’s
(PGC) biennial report on long-range supplies of natural gas, released today.

The Potential Gas Committee’s report showed 1,258 trillion cubic feet (Tcf) in total natural gas
resources in the United States at the end of 2000, the equivalent of a 63-year supply of natural
gas at current rates of production. The size of the resource base actually increased since the
committee’s last report at year end 1998, even though 38 Tcf of natural gas have been drawn
down through production of natural gas since that time. The PGC has increased its estimate of
the U.S. natural gas resource base with each successive report over the last 10 years. This year’s
increase is attributable to 4 percent growth in traditional reservoirs and 10 percent growth in coal
bed methane resources.

“These figures are a testament to the sustainability of future natural gas production at even
greater annual rates,” said Roger Cooper, executive vice president of AGA. “That’s great news,
since more homes, businesses and power facilities are looking to natural gas because it is
cleaner-burning, efficient, reliable and available in abundance here in the United States.”

Cooper praised the natural gas provisions of Sen. Murkowski’s energy policy bills (S.399/389)
and Sen. Bingaman’s Energy bills (S.597/597), as well as the effort currently underway by the
Administrations’ energy task force. “All the increases in the world don’t add up to much if we
can’t transport those supplies to market,” Cooper said. “It’s vital to gain greater access to our
tremendous resource base, expand our pipeline delivery system and support development of
energy-efficient technologies,” he said. Cooper said that AGA supports the passage of a
comprehensive balanced energy bill this year, one that uses all energy sources to the best
advantage.

- more -
The Potential Gas Committee consists of more than 170 volunteer members from the natural gas industry, government agencies and academic institutions. The committee functions independently, but with the guidance and technical assistance of the Potential Gas Agency of the Colorado School of Mines. The committee receives financial support from AGA, the Gas Technology Institute and other companies, organizations and individuals.

For information on purchasing the full report by the Potential Gas Committee, please call (303) 273-3886, fax (303) 273-3574. Information about the Potential Gas Committee's previous publications can be found at www.mines.edu/research/pgc.

The American Gas Association represents 185 local natural gas utilities that provide natural gas to nearly 50 million homes and businesses in all 50 states. Additional information is available on the AGA web site at www.aga.org.

- AGA -
Potential Gas Committee Natural Gas Resource Estimates
(as of December 31, 2000)

The Potential Gas Committee (PGC) reports gas resource estimates biennially in categories of decreasing certainty: Probable, Possible and Speculative. For each category, a minimum, most likely, and maximum resource volume is estimated for each of 89 geological provinces. The mean values shown on the following table were calculated by statistical aggregation of the minimum, most likely and maximum values for each category of potential resource. This procedure allows for direct comparison of PGC's estimates with gas resource assessments made by other organizations.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>1998</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Mean Values, Tcf)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Traditional Resources:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probable resources (current fields)</td>
<td>207.0</td>
<td>216.0</td>
<td></td>
</tr>
<tr>
<td>Possible resources (new beds)</td>
<td>322.2</td>
<td>293.0</td>
<td></td>
</tr>
<tr>
<td>Speculative resources (tens)</td>
<td>365.7</td>
<td>396.1</td>
<td>+4.4%</td>
</tr>
<tr>
<td>Subtotal Traditional</td>
<td>895.8</td>
<td>896.1</td>
<td>+4.4%</td>
</tr>
<tr>
<td><strong>Coalbed Methane:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probable resources</td>
<td>16.3</td>
<td>14.4</td>
<td></td>
</tr>
<tr>
<td>Possible resources</td>
<td>.543</td>
<td>43.5</td>
<td></td>
</tr>
<tr>
<td>Speculative resources</td>
<td>84.6</td>
<td>83.6</td>
<td></td>
</tr>
<tr>
<td>Subtotal Coalbed Methane</td>
<td>155.2</td>
<td>141.4</td>
<td>+9.7%</td>
</tr>
<tr>
<td>Proved Reserves (DOE estimates)</td>
<td>167.4</td>
<td>1670</td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>1394</td>
<td>1204.5</td>
<td>+4.5%</td>
</tr>
</tbody>
</table>

Note: Totals subject to rounding and slight differences due to statistical aggregation of distributions.
The PGC reports these estimates in three categories: Probable, Possible and Speculative for 89 assessed provinces that are grouped into seven geographic areas for traditional resources and coalbed methane.

The comparison of the statistically aggregated mean values for these seven areas for 1998 and 2000 are as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>(Mean Values, Tcf)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic</td>
<td>103.9</td>
<td>103.9</td>
</tr>
<tr>
<td>North Central</td>
<td>22.2</td>
<td>22.2</td>
</tr>
<tr>
<td>Gulf Coast</td>
<td>250.4</td>
<td>265.5</td>
</tr>
<tr>
<td>Mid-Continent</td>
<td>124.4</td>
<td>122.1</td>
</tr>
<tr>
<td>Rocky Mountain</td>
<td>176.6</td>
<td>150.0</td>
</tr>
<tr>
<td>Pacific</td>
<td>55.0</td>
<td>37.2</td>
</tr>
<tr>
<td>Alaska</td>
<td>193.8</td>
<td>193.8</td>
</tr>
<tr>
<td>Coalbed Methane (all areas)</td>
<td>153.2</td>
<td>141.4</td>
</tr>
<tr>
<td>Proved Reserves (DOE Estimates)</td>
<td>171</td>
<td>167.0</td>
</tr>
<tr>
<td>Total U.S.</td>
<td>1554</td>
<td>1204.5</td>
</tr>
</tbody>
</table>

Note: Totals subject to rounding and slight differences due to statistical aggregation of distributions.
The Potential Gas Committee today also released the latest in a series of reports comparing five sets of natural gas resource estimates published by various U.S. natural gas industry and government organizations. The report, *A Comparison of Estimates of Ultimately Recoverable Quantities of Natural Gas in the United States (Gas Resources Studies No. 8, March, 2001)*, examines the results, assumptions and methodologies of each of the sets of estimates. The report concludes that, while different organizations do not estimate the same precise categories of natural gas under the same set of assumptions, there is a consensus that a large, accessible potential gas resource exists which backs up the current inventory of U.S. proved reserves and is available to make a larger contribution to our Nation's energy supply.

The PGC report, *Potential Supply of Natural Gas in the United States (December 37, 2000)* and the estimates comparison report are now available and may be ordered as a set from the Potential Gas Agency, Colorado School of Mines, Golden, CO 80401-1887, for $295 ($315 for foreign shipment), if payment accompanies the order.

For additional information about ordering these and previous reports, contact John B. Curtis, Director, jcurtis@mines.edu or Linda D'Epagnier, ldpeagnier@mines.edu Program Assistant, at the Potential Gas Agency, telephone 303-273-3886, fax 303-273-3574.