U.S. Climate Policy: Toward a Sensible Center
June 24, 2004
Excerpt: James Woolsey, Vice President, Booz Allen Hamilton

MR. WOOLSEY: Well, thank you very much, Nigel.

I was, of course, deeply honored when Brookings asked me to be with you today, but to tell you the truth, until I went straight a couple of years ago and went with Booz Allen, I spent 22 years as a Washington lawyer. And I spent some time in the Clinton administration out at the CIA. So I'm actually pretty well honored to be invited into any polite company for any purposes whatsoever.

Let me see if I can in a few minutes here bring together the Talbott issues and the Claussen issues, because in terms of what we need to do, I don't think they're that different.

We have an opportunity, I believe, today to be extremely effective and to preside over a favorable confluence of ways to deal with these two sets of issues. And that's what I want to talk to you about because I think that those who think that neither of these sets of issues is all that important need to stand aside to those of us who think both are extremely important.

We live in the most technologically sophisticated society the world has ever seen. It's a society of dozens, really hundreds of complex networks of all sorts: oil and gas pipelines, the Internet, food production, delivery, on and on. And those who work in fields such as chaos theory and network theory talk in terms of these networks about butterfly effects. Of course, a butterfly flutters its wings on one side of the world. The ecosphere is a very complex system. You get a tornado on the other side of the world. It seems sort of fanciful until you realize that last August a tree branch fell in Ohio, and the complexity of the electricity grid is such that some 50 million consumers in Canada and the United States were out of power for up to a week.

Butterflies to the contrary notwithstanding, I think that one could reasonably characterize terrible results from those sorts of surges on interactions in complex networks as metastasis, a disturbance of we know not what source creating a terrible result.

But metastasis in the sense of a non-planned occurrence is not what happened to us two years ago September. What happened to us two years ago September with respect to the air transport network was different. It was that a group of--I'll use the President's word--evil men got together a couple of years ahead of time, probably in Malaysia, and said something to the effect to themselves: Well, let's see, the foolish Americans let short knives through baggage checks, they're polite to hijackers, and they have flimsy cockpit doors on their airliners. All of those are great, but flimsy cockpit doors are particularly wonderful because that will let us take over the aircraft, fly them into buildings, and kill thousands of them.

Now, that's not metastasis. That's war. That's someone getting inside your head and figuring out what your weaknesses are and going after you. And in that rather important morning, a tragic one, I think it's important for us to realize that it's not just that 15 of those 19 hijackers were from Saudi Arabia. It's that what underpins much of the, I'll call it, malevolent--as distinct from malignant--the malevolent interference that has occurred and will come again and again with our networks is fueled heavily by our dependence on the Middle East.

It is important, I think, that in 1979 the Saudis got both--the royal family got both terribly frightened and terribly rich. At the beginning of the decade of the 1970s, they were earning some $2 billion a year from foreign oil sales. By the end of the decades, it was $20 billion, headed up to $40 billion. And in 1979 they saw the Shah fall and an Islamist Shi`ite

regime take over in Tehran, and they also saw the great mosque in Mecca seized by Sunni Islamists, to a great loss of life.

They control well over half of the world's surge capacity in oil, and the Middle East itself controls the Persian Gulf, something on the order of two-thirds of the world's proven reserves. To put mildly, this is not a stable region these days. This audience may believe that had we not moved into Iraq--or some portion of this audience--we would not have serious problems of instability. Whatever one thinks about the war in Iraq, I would beg to differ. We were not in Iraq the morning of September 11, 2001.

I believe that we will be facing dangers, serious dangers, from terrorism in the Middle East targeted against oil supplies, including Bob Baer's scenario of a 747 being flown into the sulphur processing towers in northeastern Saudi Arabia's big refinery complex, putting some several million barrels of oil out of circulation in the world's economy for a number of months and creating a huge international economic crisis, to the possibility of even coups in the kingdom and of a takeover at some point by factions within the royal family, such as Prince Nayif, who are extraordinarily hostile to the West and all its forms. Prince Nayif, by the way, is the Interior Minister of Saudi Arabia, and he still believes that it was the Jews who did 9/11.

So in relying on our overall infrastructure and the natural disturbances that it can create, and the potential for malignancy, and malevolent interference, we have a serious problem--two sets of serious problems. One that I think should be front and center for all of us is what we have been called here to discuss in the large. Certainly global warming is a perfect example of a malignant interference in the system, in the world's ecosphere. We, by buying Hummers in this country, are not trying to sink Bangladesh beneath the waves. But we are contributing to that through the increased emission of greenhouse gases.

What we need to concentrate on, I believe, is policies that can both help us make our system in the West as a whole, not just in this country, more resilient against malevolent interference and also deal with the problems of malignancy in the overall system of fuel and the ecosphere, such as global warming. The important thing is not to believe we have to choose, not to believe that we have to deal with one of these to the extent of ignoring or putting the other in second place. We have to deal with both.

If you are, for example, a heavy smoker, you are contributing to the likelihood that you will get lung cancer. If you are standing at your bedroom window having a last cigarette for the day and you glance down and see a cigarette company executive carrying a .45 entering your basement as a burglar, you have two problems, not one. And the sum total of your response should not be, you know, I really ought to stop smoking. You need to deal with the burglar and with what you're doing to yourself with respect to malignancy. We need to deal with the intentional threats from the Middle East and with those that we are helping to create through our own behavior.

Now, I think that there are two major energy issues that are relevant to both of these questions. I see several of my colleagues from the Energy Commission here, and they've heard me on this before. I will only touch on one briefly because I think you're going to spend a good deal of time with it over the course of the next day and a half.

It's important the way we generate electricity and what fuel we use, and I'm a big fan of renewables and, increasingly, under the tutelage of John Holdrin (ph), whom many of you know well, on our commission of integrated gasification combined cycle, for coal with carbon sequestration. Certainly more R&D needs to be done and costs lowered for sequestering carbon by that process, but I believe it offers an extraordinary promise,

particularly given the coal reserves in the United States, renewables will be able to do a great deal as well.

With respect to the electricity grid, there are important security issues having to do with the vulnerability of transformers and the vulnerability of the supervisory control and data acquisition systems, the SCADA systems, which we don't really have time to deal with today. They've been dealt with very well by a superb National Academy of Sciences report two years ago.

I want to move, however, past talking about the electricity grid for just a moment to talk about transportation, because transportation infrastructure is, I think, at the heart of what we need to deal with in order to deal both with the malignancy that we are fostering on the world in terms of our gas guzzling, and with potential malevolence.

First of all, two principles. Let us try to do whatever we possibly can with the existing infrastructure. When I heard the President a year ago talk about it may be possible for a child born this year someday, once they get a driver's license, to drive a fuel-cell vehicle, I did a quick calculation. Sixteen years is more than four World War II's for the United States. We were in World War II for three years and eight months. Within the first six months, the dollar-a-year men who had been brought on board by Franklin Roosevelt had completely shifted Detroit from building consumer product vehicles to building tanks and military trucks. Six months. And we are talking about over four World War II's in the future maybe someone being able to drive an economical fuel-cell vehicle.

I would suggest that the proper response to that is a yawn. The most important thing to do is to concentrate on what we can do with the existing infrastructure. There are all sorts of reports now about the relative advantages of hybrids and in a new generation plug-in hybrids so that one can drive for short trips entirely on electric energy but still have the advantages of having a gasoline tank and being able to use gasoline effectively and efficiently in the way that hybrids do.

Roughly speaking, the 50- to 60-mile-per-gallon Prius that I drive today--it finally came through--if it were operating on E-85--and when I talk about the ethanol component of E-85 here, I'm speaking of ethanol from biomass--I'll say it three times--not corn, not corn, not corn, not a subsidy to ADM, not a subsidy to ADM, not a subsidy to ADM.

[Laughter.]

MR. WOOLSEY: If one is driving an E-85 vehicle and it gets 50 to 60 miles a gallon anyway, and 85 percent of the fuel is coming from waste products such as rice straw that have been fermented into ethanol, one is getting approximately 300 miles per gallon of gasoline. That's not bad. And most of the recent pieces I have seen in Scientific American and National Academy of Sciences and elsewhere rather stress the substantial advantages of plug-in hybrids over fuel-cell vehicles. And the former hybrids are here. Plug-in hybrids are close. Fuel-cell vehicles of the sort that people have been talking about I think are a substantial distance in the future.

The second key principle is to use waste. Waste often has tipping fees associated with it, in some other countries more than here. In Europe, for example, dead cow bodies, if you haul them away from farms, you are paid over $100 a ton. The new process of using biological waste called thermal depolymerization--it's written up in the current issue of Discover magazine and is now commercially producing for ConAgra and a small company out at Carthage, Missouri, using turkey offal from a turkey plant--that process, the head of that joint venture tells me, if it were transported as is now--no R&D, as it is now--to Europe and you used dead cows instead of turkey offal, since there is a $100 tipping fee associated

with dead animals in Europe, $100 a ton, you can give away the diesel that the process produces and still make money.

Capital is a coward, and the edge to get over into things like using genetically modified biocatalysts to produce ethanol from waste and processes like thermal depolymerization is to recognize that there's a social value in getting rid of waste.

So if one can move in those two directions, emphasizing existing infrastructure and existing technologies, like hybrids, emphasizing waste disposal as a key component of generating either cellulosic ethanol or diesel or other fuels of the sorts that some of these processes are beginning to do, one can see a multiplicative effect; and instead of talking about 50-mile-per-gallon vehicles in terms of what we care about, one can talk about vehicles getting hundreds of miles per gallon. And that ain't bad as far as these objectives that we have been talking about are concerned.

Now, I think the important point--and I'll conclude with this--is that we have here the possibility of those who care about the environment, both air pollution and global warming, those who care about developing economies in the Third World because using waste at a village level to generate transportation fuel is something that is ready-made for the substantial share of the world's population that lives on less than $1 a day; also a third group that should be of interest to many of us is those who want to make our society far more resilient against threats from the Middle East and, indeed, to undermine some share of those tens of billions of dollars a year that are being shipped there and some of them shipped back to us in the form of terrorism; and, finally, rural America. It is not irrelevant that we export $2 billion a week to the outside world to pay for our imported oil habit and that many of these processes I have described are processes which in this country and in other countries could help resuscitate not only agriculture and move subsidies perhaps from places where they're not needed in the agricultural world to things like doing away with waste, but can also mean jobs for small towns, rural parts of the United States and other countries.

If I had to characterize this generally, I would say what we have here is a potential coalition between tree huggers, do-gooders, cheap hawks, and soil busters. Now, since my wife and I have recently acquired a small farm, I now consider myself a member of all four of those categories. I would suggest to those of you who are sympathetic to such notions that you consider yourselves part of that coalition as well.

Thank you.

[Applause.]