

The Washington Energy Track- Looking in from the Outside:

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Over the past few weeks, Newton-Evans Research *in the person of the author* has been represented at two Washington D.C. energy-related conferences dealing with energy policy issues. The U.S. Energy Association (USEA) was the sponsor of the *Fourth Annual State of the Energy Industry* conference held at the National Press Club on January 16th. USEA was also a co-sponsor for the February 5th *Powering Our Low Carbon Future* conference along with the U.S. Department of Commerce. Three more upcoming Washington conferences also appear to merit our attention and we will be reporting on each of these conferences.

Next week, I will report to our readers following the *2008 National Electricity Delivery Conference* sponsored by the National Association of Regulatory Utility Commissions (NARUC). Early in March, Newton-Evans will report from the *Washington International Renewable Energy Conference*. In early April, the Department of Energy's Energy Information Administration (EIA) will sponsor its *Annual Energy Conference* and Newton-Evans will be represented as well at this important DoE analyst conference.

Fourth Annual State of the Energy Industry:

Mr. David Manning, EVP of National Grid USA, kicked off the January 2008 briefing with introductory remarks on the current state of the energy industry in the U.S.A. This topical, timely and well-received talk segued into the panel discussion of "*Energy Issues Overview for 2008*" with three leading energy association CEO's (Tom Kuehn from the Edison Electric Institute, American Petroleum Institute and the American Gas Institute). These officials summarized several of the various energy issues confronting the U.S. today (*from global warming, to the role of renewables, to the ability for the U.S. to gain some degree of independence and energy security in the future*).

Following this concise overview of energy issues, speakers from four organizations (Electric Power Research Institute, the Alliance to Save Energy, the National Mining Association and the Nuclear Energy Institute) tried to respond to some of the energy issues and challenges thrown out by the previous speakers. Each provided a view from the perspective of the energy industry mix represented by their associations or institutions.

The final afternoon panel discussion focused on climate change and other legislative and regulatory issues. The CEOs from the American Public Power Association, Center for LNG, Natural Gas Supply Association, Solar Energy Industries Association, Interstate National Gas Association, and Electric Power Supply Association all spoke on climate

change, legislative issues and changes in regulatory policy affecting their members, and indirectly, the country's energy consuming public.

A few takeaways from this conference included points brought up by one or more energy industry influencers during the session:

1) The current energy legislation is really not an energy bill but a climate bill and EEI is not supportive of this approach. The most important thing we can do immediately is to educate the public regarding energy issues confronting the nation and the world. No one is doing this yet. This should be part and parcel of a national energy policy.

2) The oil component of the energy mix does not have any sense of impending energy independence in its future. The percentage of oil imports from the Middle East is 15% and Canada is far more vital to us. According to Newton-Evans findings based on DoE information, this is certainly the case for natural gas, but not so currently for crude oil. While Canada provides the single largest country source for both imported gas and oil, OPEC "owns us" for imported oil, being responsible for about one third of our total demand (principally from Saudi Arabia, Nigeria, Venezuela and the Gulf States). Non-OPEC is slightly larger – about 40% (Canada, and Mexico principally), with Norway, Russia and Bolivia also important, while the US produces the remainder. We could probably change this scenario – perhaps dramatically - with a redesign or retrofit of our current oil refining facilities to accept oil sands from Canada, as suggested by the API speaker.

3) Coal is growing as percent of the base load of electricity production. Again, a "surprising" observation to us. However, if we can get clean coal technologies out of the lab, and available at a reasonable cost, this statement could be realized.

4) *The U.S. has 27% of the world's coal reserves,* which is enough for the next 200+ years, in most views.

5) By 2050 EPRI expects to be able to fully decarbonize electricity production. I think that is pretty optimistic. We should be able to without a doubt... but the bigger questions are, "Will the federal energy policy sustain such developments as this?" and, "Will the coal generators be able to adopt the technology and live with the costs of doing so while complying with CCS mandates? Who will drive this to fruition?" Not the private sector. . . not on its own . . . not without guidance, prodding and legislative action! There are simply too many viewpoints with vocal advocacy representation . . . each with deep pockets for their constituents.

6) A reading of the EISA dictates a 5% reduction in CO2 by 2020 as well as an electricity demand reduction of 4% by 2020. Is this a demand reduction from current levels? If so, it really means a substantial demand reduction in our energy future overall. That is simply because our demand and planned new electric energy needs continue to rise at the rate of 2 -4% per year. Who will implement this and who will ensure that it is

on track? DoE? How about a strong and forceful national energy policy that provides direction on how to achieve this objective.

7) EERS – Energy Efficiency Resource Standards are going to be very important to our energy security in the near future. Hmmm, no argument here. Who will serve as the get-tough, take-charge implementers of such standards? Why not consider a public-private sector team arrangement.

8) The nation is going to require a large number of new nuclear plants to meet energy demands by 2030. This could mean as many as 35 new nuclear plants and/or 240 gas plants coming on line over the next 20-25 years. Quoting here: “All U.S. nuclear waste from the dawn of the nuclear age until today would fit onto a football field, with waste accumulating as high as the goal post cross-bar.” (Source: NEI) That doesn’t seem like much waste to me for 50 years of excellent service. Just think about how much garbage and trash we heave out each week at home. Oh, just a thought, but who is controlling access to the nuclear football stadium on game day and on off-days so a knowledgeable bad guy doesn’t go and try to grab *just a handful* of nuke material? Yucca Mountain is still the best and most logical site. When first conceived, the site was in the middle of nowhere. We have spent billions of tax dollars developing the facility. Now we have to contend with the NIMBY crowd of urban Nevadans, as the waste situation continues to deteriorate and cries out for a more permanent solution.. We can’t afford a situation analogous to let’s say, what a New York City garbage strike’s effects are on the streets after only three days.

9) Solar energy industry will become the low cost energy resource option by 2017. Photovoltaic solar growth reached 70% in 2007 over 2006. There is a great deal of interest in solar power industry investments. Why can’t we just produce more silicon dedicated to solar use to lower the primary materiel cost and get solar moving faster? Why don’t we consider building a federally-operated plant to provide the semi-finished materials needed. . . sounds like a national initiative worthy of consideration!

10) Gas is seen as the “bridging fuel” for power production until renewables become a higher percentage of base load. What will *that* development do for natural gas consumers at the residential level? We will require a few million TOU meters or real-time pricing incentives for the U.S. natural gas customers.

Powering Our Low Carbon Future Conference.

This one-day symposium was held in the Rotunda of the magnificent Ronald Reagan Building and International Trade Center just down Pennsylvania Avenue from the White House. About 150-175 people attended the full-day session including some energy industry heavyweights, from the various Washington energy-lobbying organizations (which prefer to be called by the more endearing term “*the Washington energy advocacy community*”), Department of Commerce officials, Congressional aides, and some executives from various industrial organizations (such as Fluor, Caterpillar, GE, Chevron

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and IBM) and only a very few major utilities (PEPCO and National Grid, as well as maybe one or two others).

Following opening remarks by Mr. William Sutton, Assistant Secretary for Manufacturing and Services at the U.S. Department of Commerce, and by Mr. Jamie Estrada, Deputy Assistant Secretary for Manufacturing at Commerce, Dr Larry Makovich provided some eye-opening information about critical energy choices confronting not only America, but also the world community. Dr. Makovich is the Managing Director of Cambridge Energy Research Associates, a prominent Boston-area think tank for strategic energy issues. CERA has worked with many clients in both the private and public sector and has a large staff of top-notch research associates available to conduct comprehensive global energy policy studies. The newest CERA study, *Crossing the Divide*, focused on the possibilities for a low carbon energy future. The findings from this study served as the basis for the keynote address

The morning panel sessions followed the CERA talk, with an initial panel discussion held among several important stakeholders in low carbon energy futures, including speakers from Chevron, Credit Suisse, Suez Energy and National Grid US. The second panel session included speakers from the manufacturing sector (GE, Ace Clearwater) and two energy associations (the Nuclear Energy Institute and the Solar Energy Industries Association).

- *Little known factoids: Chevron is the world's leading producer of geothermal energy. Further, the United States is the world's largest producer of geothermal energy. Source: Chevron.*

The luncheon keynote on U.S. competitiveness was delivered eloquently from prepared text, even if no earth-shattering new pronouncements were provided in the speech delivered by Mr. Carlos Gutierrez, Secretary, U.S. Department of Commerce.

The afternoon speakers included Mr. David Bohigian, Assistant Secretary for Market Access and Compliance at the Commerce Department, and Mr. James Connaughton, the Chairman of the White House Council on Environmental Quality. Both speakers spent time describing the critical role of the private sector in coming up with solutions to achieve a low carbon energy future. They argued for no federal interference, no roadblocks in the way of the private sector working to resolve this critical issue by coming up with optimal solutions.

I was left with nagging doubts about the efficacy of a “hands off” approach on the part of the federal government. Just look at the ongoing confusion over deregulation and restructuring which has resulted in the balkanization of the power industry with 51 different playing fields and some states moving away from deregulation to re-regulation of the industry. It sometimes appears to me that there are mysterious undercurrents - probably no more than the “do nothing” attitudes sometimes prevalent in D.C. - that are directing our lack of energy policy so that the private sector will solve the problem in a

market-oriented approach. Well, if deregulation is any indication of the success of such muddled thinking, then we have a real energy leadership problem in our nation.

For once, I think eminent domain regarding a long-term national energy policy has to take hold at the federal level. “States’ rights” may have to be overridden to help the country establish a more egalitarian energy playing field and marketplace. One just has to look at the opposition that has risen over the national transmission corridor siting plans. When first announced, it seemed as if this was a logical and necessary development and no one could possibly argue against the merits of the proposed siting arrangements. Well, I was wrong. Strong opposition has come up even from states like West Virginia and others having lots of wide open space available for transmission line siting. Such opposition may defer or totally thwart this obvious energy security requirement.

The rest of the afternoon was divided up into two ninety-minute time periods during which three tracks of concurrent sessions were held. Session topics included energy research, development and demonstration; market adoption and deployment, and financing the deployment of clean power. The second period sessions covered regulatory issues, public acceptance issues and smart grid topics.

Summary of Observations

At the Low Carbon Energy Future conference, Mr. Tim Richards, a senior government relations manager with General Electric Energy, stated one aspect of the nation’s policy dilemma well when he said what the country needs is “policy continuity” for energy. He was referencing the need to have long-term energy policies in place (similar to the European Union) to encourage suppliers to invest in R&D and for large energy users to have an opportunity to “buy in” to new energy technologies with certainty they were on the right path. None of the panelists took umbrage with this and most of the audience seemed to agree.

However, we need not only policy continuity; we need a cohesive, coherent national energy strategy and policy, and that cannot and will not come out of the private sector. There are simply too many special interests; many of whom truly believe they have the best or most appropriate solutions and so they won’t budge or compromise. Others will play the waiting game for their friends in high places to help them get their points of view across in a beneficial manner (to themselves and their organizations).

The end of the session meant time for the commute back to Baltimore. So for the second time in this still young new year, for our readers across the country and around the world, I retraced my route, taking the Metro subway back to Union Station to catch a train from the “dark suits” of Washington D.C. back to relatively blue-collar Baltimore, a city though only 30 miles distant from the nation’s capitol, is well outside the purview of the beltway banditos). Mulling over what I had heard from the dozens of speakers at these two very informative (at the strategic and policy levels) Washington conferences so far this year, I could not help but think about our seeming national lack of vision regarding energy policy at this late date.

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These first two 2008 Washington conferences had included speakers with outstanding public speaking skills, (an absolute requirement in Washington circles) and provided knowledgeable overviews of the current top level issues confronting the energy industry. There remain a great number of open issues, technology development concerns, and unresolved policy issues facing the energy industry. This is the situation whether one has a stake as an energy producer: utility generator, merchant producer, or industrial co-gen; an energy sourcing perspective: fossil, nuclear, renewables; or an energy consumer: industrial, commercial, residential.

Now that I have recovered from attending the first two Washington conferences of 2008, I am preparing for the next three conferences which are coming up shortly. This week I will attend and report from the *National Electricity Delivery Conference*, sure to be two days of important discussions with the lineup of regulators, utilities and associations that will be speaking. The theme for this conference is: “The role of electricity delivery infrastructure in addressing climate change, demand growth and energy security”. Sounds like a great time ahead doesn’t it? But then I am a fellow who travels the world and takes snapshots of electric power substations along the way.