

NUCLEAR ENERGY INSTITUTE

Moderator: (Jason Grumet)
September 23, 2008
12:00 p.m. CT

Operator: Welcome to the North American Young Generation in Nuclear Obama Energy Policy Teleconference.

North American Young Generation in Nuclear is an association of young professionals 35 and under who work in different sectors of nuclear science and technology. With over 4,100 members and 63 local chapters, the organization's focus is on professional development, public information, recruitment and retention, and knowledge transfer within the nuclear industry.

With us today representing the Obama campaign's energy policy is (Jason Grumet), Chairman of the Energy and Environment Committee of the Obama campaign. For (Jason's) benefit, the excitement over this opportunity has been overwhelming within the North American Young Generation in Nuclear organization. Currently, there are 95 sites dialed into this call with an approximately 1,200-plus number of individuals listening in. Our question moderator will be Elizabeth McAndrew-Benavides, U.S. Affairs Chair for North American Young Generation in Nuclear.

In order to ensure the technology is adequate to handle a group this size, only (Jason) and (Elizabeth's) lines are activated for transmitting purposes. Everyone else will only be able to listen during the duration of today's call. Elizabeth has collected questions from North American

Young Generation in Nuclear members and will ask them of (Jason) once he has given the group an overview of Senator Obama's energy policy.

With that quick overview, I would like to introduce (Jason Grumet). Please go ahead, sir.

(Jason Grumet): Thank you very much. Want to thank the organization for setting this up. And know that folks in the nuclear industry are known for being prompt, and so thank you all for jumping on the phone on time so we can spend a good half hour together. What I am going to try to just do is jump right in, give you a little bit of an overview of Senator Obama's energy priorities and policies, and then focus in on the issue that I know you all care deeply about which is nuclear power, and then look forward to questions.

So, just to kind of launch in, you know Senator Obama gets energy policy. The very first speech he gave when he came to D.C. was a speech on energy policy. It was actually where I got to meet him. And I'm just going to tell you about it for a minute because I think it really kind of reveals the way he thinks about these issues. This was in 2005. Oil was about \$75 a barrel. People were freaking out, yet despite that fact that you know many members of Congress wanted to give the big rhetorical flourish of energy independence, none of them were willing to step up and talk about the tough issues that really had to be addressed. And from a petroleum side, clearly the fact that we had not increased fuel economy standards for literally 30 years in the country was one of those issues.

And Senator Obama wanted to give a speech on CAFE standards. And at that point, you know even the environmental community had backed away from using the word CAFE standards, and most people in Congress saw it as a career-shortening proposition, but Senator Obama said that you know he didn't come to Washington to sweat the tough stuff and you know if the law hadn't been changed for 30 years, you know we were all smart people, we should be able to make some

intelligent changes that would allow us to strengthen the efficiency of cars while protecting the domestic auto industry.

He went and gave a speech that was neat. About seven months later, President Bush sent a letter to Congress calling on Congress to give the administration new authority to reform fuel economy standards. The way that they were constrained to be set, the administration thought was going to undermine safety. And the (reflexor) reaction from Capitol Hill across the board, Senator Reed and others, most of the Democrats, was just to say this is the President passing the buck, you know Congress has done everything it needs to do and the White House should just you know step up on its own.

Where you know most politicians kind of fell quickly into the polarized deep bruise that had been so undermining to energy policy over the last few decades, Senator Obama saw an opportunity. He got together with Dick Lugar, who he works with often, wrote a letter back to the President, saying, "Mr. President, we embrace your call upon Congress to reform and strengthen – he slipped that in – fuel economy standards because it's impossible to have a sincere national security or energy security program that does not address fuel economy. We're going to work together in a bipartisan fashion to give you that authority."

And then they did it. They rounded up a dozen members of the Senate from both parties including Senator Biden, Senator Specter, Senator Coleman and others, and they introduced the Obama-Lugar Fuel Economy Reform Act. This was the first time that we had had a serious bipartisan effort on CAFE standards in you know a decade and it totally broke open the debate. And finally about 16 months later, legislation that many of you I'm sure are familiar with passed the Congress in 2007 which for the first time in 30 years strengthened fuel economy standards by about 40 percent.

And you know that's kind of why I'm on the call with you because I had a chance to see Senator Obama take on one of the most entrenched divisive issues in the Congress, the issue that really had become in many ways the symbol of our dysfunctional energy policy, bring some smart people together, bring the interest groups together, come up with a principled compromise and get it done. And it seems to me that the nuclear issue on climate change and energy security, those are exactly the skills that we've been lacking in Washington.

So to give you kind of a quick overview of the general policy and then I'll kind of hone in on the nuclear issue. You know Senator Obama understands that the challenge here is to ensure reliable, reasonably priced energy while dealing with two structural challenges that are different in scope and scale than almost anything we've faced before, those being energy security with the focus on oil dependence and climate change. And let me say a few words about supply issues, climate, and security.

As it comes to supply, and this I think is true in the nuclear issue as well, you know the McCain campaign has tried to kind of paint Obama into a totally inappropriate corner, suggesting that he is not engaged and enthusiastic about increasing clean and secure domestic supply. Senator Obama understands that the U.S. is the third-largest oil and gas producer in the world, that two-thirds of all the wells drilled anywhere in the world have been drilled right here in these United States, recognize that there are some significant opportunities especially with natural gas in the (Bocket) and Barnett Shale, and has also said that he would support Outer Continental Shelf drilling if it was part of a comprehensive package.

You know, Senator McCain is opposing the deal that's been pushed forward in the Senate that had this combination of increased drilling and increased investment in a host of clean energy resources including nuclear power.

So Senator Obama, you know, thinks that we need an all of the above strategy but that fundamentally we have to pivot from a century that was based upon coal and oil, which was profoundly productive economically, to the next century which is going to be based on domestically produced, secure, non-carbon forms of energy, one of the main reasons there is climate change. He believes that climate change is you know a profound challenge that we have to take on directly, recognizes that it's a global challenge that's going to require participation by all major emitting countries, but you know believes that we are a great nation and great nations are you know willing to take on great problems.

He sees us as having a tough clock, both ecologically – the need to get started, but also the fact that the next global deal is supposed to be worked out by December of 2009, giving the next president you know a little more than 11 months to get it together. And he understands that when you send a president overseas to negotiate an international treaty without a domestic policy consensus, it goes very poorly.

So he believes that we need to move on climate change in a sincere, serious bipartisan way by the G8 meeting which is going to be in Italy in July, recognizes it's not going to be easy, believes that nuclear is going to be a key part of that solution, both politically and substantively. And he has also supported I think a very strong platform that matches the science, seeks an 80 percent reduction by 2050 of greenhouse gas – greenhouse gasses, supports 100 percent auction of those permits because he believes that we share the air and everybody should have to pay for the right to use it – you all recognize that having a complete auction is going to provide the greatest benefit to non-carbon forms of energy.

He also supports supplementary policy. He supports investing \$150 billion in new technology, new infrastructure. He supports renewable portfolio standards, increases in energy efficiency, additional focus on CAFE and clean fuel standards. So he sees us needing to have a comprehensive approach on climate.

Lastly, to say a few words about efficiency, Senator Obama recognizes that we need to buy some time. It is going to take a while to create the next infrastructure, you know 20 percent ((inaudible)) infrastructure clean energy, and the fastest thing we can do, the most effective thing we can do to buy that time is to really move forward on energy efficiency. It's going to require some smart policies, it's going to require us you know doing things at the state level where we decouple the profit motive of the power sector from the amount of power it supplies and turn it into a focus on the reliability and security of that power.

But ultimately he believes that the next president's going to have to also use the bully pulpit, going to have to have a conversation with the American people that makes it clear that we have a patriotic obligation to join together in using energy more wisely, not that we necessarily have to sacrifice, but we definitely have to pay attention, and I think Senator Obama's uniquely capable of bringing the country together in that way.

So let me move on to nuclear for four or five minutes and then get into the questions. Senator Obama fundamentally understands the importance of nuclear power and the existing liability of our system, but also the fact that it is 70 percent of our non-carbon energy. And he has said on a number of occasions that he does not believe we will be able to meet the ecologically necessary reductions in greenhouse gas emissions absent nuclear power. And I just want people to focus on that. He is deeply committed to achieving those goals and has said that he doesn't believe that that will happen unless we solve these issues that will enable us to move forward with nuclear.

At the same time, he has a very clear sense of what those issues are, and they're the issues that have prevented the industry from building a new plant for three decades, they are concerns about cost especially with first mover facilities, challenges with waste, concerns about safety, and proliferation. He is basically wants to acknowledge that these are tough, serious issues, but that

government has an obligation to work with the industry to try to solve them. You know this is where I think he (always) differed with Senator Clinton in the primary.

She announced these issues and basically said you know therefore we need to look at other options. He looks at these issues straight-on, clear-eyed, and basically says you know we have to try to overcome these issues just like we have to overcome the significant challenges that face all other non-carbon forms of energy – carbon sequestration, massive scale renewables – those are all going to have equally significant challenges, and he appreciates that you know nuclear has the challenges we know because it's a proven industry that's been around for a long time.

He has worked quite a bit on the proliferation issue with Senator Lugar, believes that that's going to be an area that the government and industry are going to have to be more actively collaborating on if we are going to have a next-generation for nuclear. He also I think has some serious understanding of what it's going to take to move the industry forward. He supported the 2005 Energy Policy Act which, as I'm sure you all know, included tens of billions of dollars of support for nuclear power. It was a tough vote and he certainly has taken some flak for that vote, but he recognized that this was yet another combination, compromise, comprehensive bill that did a tremendous number of things for a significant number of non-carbon and secure forms of energy.

And I want to kind of focus on this for a minute because I think you've all heard, I'm sure – you know Senator McCain's enthusiasm for nuclear power and his assertion that he would like to have 45 nuclear power plants. Well, that's great, but he prides himself on having voted against the 2005 Energy Bill and the specific subsidies for nuclear power, and I have never met anybody who is in the industry, a supporter of the industry, an opponent of the industry, even aware of the industry who believes that these things are just going to pop up like mushrooms. Never met anybody who did not understand that the public and the industry was going to have to join together in a partnership to move these facilities forward.

And so when you talk to Senator McCain's representatives, I suggest you question sincerity of that commitment. If you look at their Lexington Plan which is a pretty you know big (vein) for a two-and-a-half page memo, it offers no specifics whatsoever, no policy mechanisms, no even detailed ideas of how one would move from where we are to 45 facilities and how one can asset that that's a sincere position having opposed the necessary measures to even move towards one or two facilities.

So, yes, I think as I said at the outset, we have suffered in this country for far too long from heroic rhetoric supported by anemic action, and you know when it comes to nuclear power, these are tough issues and they're going to require serious, candid discussion and real policy mechanisms to move them forward. And I think Senator Obama again has a very clear sense of the challenges and is committed, if he is so fortunate to be President of the United States, to using the resources of the government to work with the industry to try to overcome those challenges.

And I will conclude there and happy to chat with you, Elizabeth, about questions.

Elizabeth McAndrew-Benavides: Well, thank you so very much, (Jason). I really do appreciate you being with us here today. Going off of what you said there I think near the end, we – I will start off with a question that I received based off of new nuclear and the recent credit crisis. We had about 85 questions come in from our members, all of which fell within a few major themes, so the questions I'll be reading today are a little bit of a hybrid from those 85 questions that were received.

With the credit – recent credit crisis, what collective actions would be advocated by your campaign to ensure that the large capital credit intensive investments, such as new nuclear power plants, remain viable?

(Jason Grumet): This is a heck of a challenge you know across the board, and Senator Obama believes that we of course have to address this credit crisis, we have to recognize that it is having a significant impact on our economy and on individuals. But we also have to continue to contend with the great challenges facing our country. And we are not going to move out of this economic slump absent energy.

We are not going to move out of this economic slump absent the stimulus of creating new jobs and he believes that the energy policies that he has promoted, his commitment to investing \$15 (million) a year in new technology, his commitment broadly and recognition that clean energy facilities, especially first mover facilities, have a real tough time with risk capital, which will be even harder now, and so he has supported loan guarantees for those in the past.

And so I think that everything just got harder in this country for just about everybody, but we are not going to let those challenges interrupt our need to move forward with a twenty-first century energy system.

Elizabeth McAndrew-Benavides: Wonderful. When it comes to global climate change then, given that nuclear power is the most economic energy supply and does emit zero greenhouse gasses, how many new nuclear plants do you think should begin construction in the next 10 years?

(Jason Grumet): Well, I will respectfully – excuse me – respectfully suggest to you that that's really the wrong question. You know Senator Obama believes that government has a critical role to play in enabling technologies to compete, in helping technologies overcome the risks that face any new major commercial facility, that help with the research and development and deployment that industries are unlikely to do themselves. But ultimately he believes that the marketplace should determine how we power this country.

He thinks if government sets the right goals of significant reduction in greenhouse gasses, preference for secure domestically produced industry, that the technologies that are the most economical, the most robust, the most reliable will prevail. And if that turns out to be nuclear, that will be fabulous and you will see many, many, many nuclear plants. If it turns out, that you know even with those kinds of supports you know nuclear power does not complete economically, then he would be foolhardy to commit himself and the country to a specific number of facilities.

Elizabeth McAndrew-Benavides: Understood. Well, thank you. Some of the other general questions that are group had had to do with the fact the Obama campaign has said recently that their stance on nuclear power has been misunderstood. Could you elaborate a little bit about how Senator Obama's position has been misrepresented and how we could clarify it?

(Jason Grumet): Well, I think that – and I said this you know at the outset, there's been an effort in this campaign to you know do the kind of simple culture war symbolism on energy policy, so you know have the kind of the – you know the drill baby, drill chant and the assertion that Senator Obama was opposed to domestic energy production, which as I walked through quickly at the outset, is absolutely not the case. I think you know Senator McCain, again, has made a very bold, though questionably sincere, pronouncement to nuclear power.

And some have tried to suggest that because Senator Obama wants to take a more responsible path, he is somehow not supportive of the opportunity for nuclear power to play a growing role in the future, which is simply not true. He, as I mentioned, believes that the technologies that can compete in the marketplace, that can provide reasonably priced, secure and clean energy, are the technologies that should and will prevail. And I think he is committed to working with the nuclear power industry to try to see if nuclear power meets those tests.

He also you know believes that we have to work hard on the proliferation issue and he has a history of doing that. He will be thrilled to hear about the Young Nuclear Engineers organization

because one of the concerns that we've heard a number of times is that the average age of folks in the industry is in the you know mid-to-late fifties, and if we're going to have a rejuvenated industry, we're going to have to have the intellectual capital to both build these facilities and operate them.

And so I think Senator Obama's very interested in understanding what the government should be doing in partnership with industry on workforce issues. So he is you know seriously engaged with, interested in, and committed to trying to advance any form of safe, secure, non-carbon energy.

Elizabeth McAndrew-Benavides: Well, I'm going to, for the interests of time because we had a lot of questions come in about Yucca Mountain spent fuel and ((inaudible)) ...

(Jason Grumet): I will try to give shorter answers.

Elizabeth McAndrew-Benavides: ... oh, no, no, no, no. No, I just – I'm going to move to that topic because that's just a – because my – the members were very interested in ((inaudible)) policies.

(Jason Grumet): Yes.

Elizabeth McAndrew-Benavides: We were very excited to hear during Senator Obama's acceptance speech in Denver about his support for harnessing safe nuclear power. Can you – you've done a wonderful job so far expanding upon that already, but Senator Obama has announced also that he has an opposition to Yucca Mountain as a long-term repository for spent fuel. Can you tell us why he opposed Yucca Mountain?

(Jason Grumet): Yes, simply, I think he believes it has not been demonstrated to be a suitable site for permanent waste disposal. You know I don't think it makes sense to try to go into all the nuances

of the thousands of pages of NRC you know decisions and EPA decisions, but you know he's not convinced that that's the right place to store the waste.

And I think he also believes that there's a real equity question about committing all the waste to one state. He recognizes that initially the idea was to have at least two facilities – one on the West Coast and one on the East Coast, and believes that because Nevada didn't use to have a lot of political clout, they basically got squeezed into this position.

And he also you know wonders about permanence. You know forever is a very long time, and I think he believes that we can safely and securely store waste in dry casks. I think he believes that having the waste at you know over a hundred facilities is suboptimal, that trying to put it all in one facility is suboptimal, so that there would be a interest in working with the industry and scientific community about you know looking into engineered interim storage so that we make sure that we have the waste sequestered in a way that is fully safe and secure.

Elizabeth McAndrew-Benavides: So would he support nuclear fuel recycling as an alternative or as an addition to Yucca Mountain?

(Jason Grumet): So the – you know the issue of fuel recycling has been a serious conversation for I would say a number of years. I think Senator Obama believes that in the long-term, and I'm talking you know many, many decades, you know reprocessing the technologies may change and there may be an option. He does not support reprocessing with existing technology for a couple of reasons.

One is the proliferation concern. As we try to deal with you know the desire of some rather dangerous places to acquire nuclear weapons, he doesn't think we should be putting more weapons-grade material into essentially the global marketplace. But I think even more importantly, he's familiar with the MIT study and worked on by the industry which suggests – I

believe the MIT study asserted that to move to reprocessing would make the cost of the plants or at least cost of the waste handling go up by four times compared to the once-through fuel cycle.

And so, you know I think he (just) believes that while the goals of (GNEP) are laudable, this administration is making a real mistake by trying to essentially burden the industry with reprocessing before the technology is ready. He does not believe that that will make the country safer; he does not believe that that will make nuclear power cheaper, and so he doesn't see it as an appropriate near-term focus.

Elizabeth McAndrew-Benavides: So would, then, he see expanded research dollars for the Department of Energy arena towards finding the right type of separation process that would make it appropriate?

(Jason Grumet): Yes, absolutely, absolutely. I think he believes, again, that you know in the long-term, if we were able to create a fuel cycle, recycle that fuel in ways that were both ecologically and from a national security standpoint safe and economical, that would be a wonderful outcome and that the country should continue to be investing research dollars in that activity. It's the focus, though, on near-term commercialization that he thinks is a misdirection.

Elizabeth McAndrew-Benavides: Well, thank you for explaining that to us. We definitely appreciate it. On the security standpoint, we had quite a few questions come in about that. Most studies completed since 9/11 have shown that nuclear reactors are adequately protected against terrorist attacks, yet Senator Obama has expressed concerns about their safety. Can you explain what his specific concerns are in this area?

(Jason Grumet): I have not had a chance to ever speak with him or his other senior advisors about this. I know that one of his concerns is really just the question of public perception. And there's an awareness that I think the perception about nuclear power has been changing and I think the

public is becoming far more comfortable with it than you know I think we'd seen in polling in the last number of years.

And whether that's interest in climate change or the fact that you know the kind of Three Mile Island is no longer you know imprinted upon the minds of many of the public, you know combined with the I think successful safety record of facilities over the last you know couple decades is hard to predict. But I think we're going to have to convince not only our government, but we're going to have to really convince the public at large that living near a nuclear power plant is something they shouldn't be worried about before you're going to see a dramatic increase in new facilities.

Elizabeth McAndrew-Benavides: OK. One last question before we end here today. What qualifications would Senator Obama's administration consider when appointing a new commissioner to the Nuclear Regulatory Commission? And of the person appointed, the Chair of that Commission?

(Jason Grumet): Well, I think you know I can give you a couple of ideas, but again, I think you should understand these are just my ideas. The campaign is very much focused on November 4. There has not been any discussions that I've been involved with on transition or appointments. But you want to find somebody who is both an incredibly good scientist and an incredibly good manager, and those traits don't always coexist in single people.

There are a lot of great scientists who are not always managers; there's a lot of great managers – not always scientists. I think one would have to bring those abilities together for a chairman to really function effectively because you know as the industry tries to site new facilities, the volume of work that the NRC will face is going to be significantly greater than it has in past years. I will note that Senator Obama's committed to making sure that NRC has the resources to staff up as necessary. But it's going to need a Chair who can really help people get stuff done. I know one of the big frustrations of the industry is that the NRC process is not as expedient, efficient as some I think believe it should be.

And so I think we would need an NRC Chair that can really look at that. And finally, the perfect NRC Chair would also have a delightfully savvy political touch since so many of these issues in addition to being technical become very emotional and political, and having someone who can navigate those effectively is going to be I think very important for the future of nuclear power.

Elizabeth McAndrew-Benavides: Well, thank you so much. Before we let you go, I wanted to extend an offer here from NAYGN, as young nuclear professionals, they are very proud of the safety culture and nuclear operations of our facilities and want very much to work with you to answer any questions that you may have. We'd also like to facilitate a trip to a plant for you and/or any of the other – your appropriate staff so you can see our operations firsthand if you haven't already done so. And we know how busy you are, so please just let us know how best to help facilitate this in the future. We would love to do it.

(Jason Grumet): OK. Well, Elizabeth, you and I should stay in touch, and whether that happens before or after November 4, I can't tell, but it definitely will happen.

Elizabeth McAndrew-Benavides: Absolutely understood. And one last thing because I just got a text message from somebody from NAYGN, just wanted to make it very clear that NAYGN's 4,000-plus members are not only nuclear engineers, but nuclear science technology professionals as a whole. We've got numerous plant operators, technicians, support staff, scientists and engineers all working together towards making sure that nuclear science technology is alive and viable here in North America. And we love the fact that you took the time to meet with us today.

(Jason Grumet): Well, I was glad to do it. Being the disembodied you know voice on a call with a thousand people is a first for me. I hope it was not painful for any of you.

Elizabeth McAndrew-Benavides: Well, I appreciate it and because the nuclear industry does like to be timely, we will allow everybody to get back to their very important and safety-conscious jobs. And I would like to say thank you so very much for being with us today.

(Jason Grumet): It's been a pleasure.

Elizabeth McAndrew-Benavides: Thank you so much, (Jason). And I will be in contact with you in the future.

(Jason Grumet): Great.

Elizabeth McAndrew-Benavides: Wonderful. Thank you so much.

Operator: That does conclude today's teleconference. We thank you for your participation and wish you a wonderful afternoon.

END