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THE NUCLEAR NEWS INTERVIEW

Lisa Shell: An activist on the pronuclear side

isa Shell has been an avid fan of nuclear power since she declared her major in nuclear engineering as a college student in the early 1990s. Now, with a successful career under way at Dominion Generation, she has begun taking her passion to the battleground to go head-tohead with antinuclear activists intent on bringing down the technology.

Through their involvement in North American Young Generation in Nuclear (NA-YGN), Shell and other members of NA-YGN's Virginia section have become active in promoting a pronuclear agenda. The Virginia section has hosted a pronuclear rally, organized a letter-to-the-editor campaign, and made a point of attending antinuclear events in order to counter "untruths" made about nuclear power.

Shell, who is also a member of the American Nuclear Society, served as vice president of the international NA-YGN for the past year and will be named its president this month (May). Since NA-YGN was established in 1999, it has attracted more than 1000 members and today has more than 300 active members. Shell has been instrumental in organizing or participating in local

Young nuclear professionals take to the field to let their voices be heard about the benefits of nuclear power.



Shell: "My work as an activist is purely voluntary."

NA-YGN events such as science teacher workshops, Earth Day activities in Richmond, Va., special programs for women engineers at Old Dominion University, in Norfolk, Va., and career seminars for high school students highlighting nuclear science and technology.

Shell, a nuclear engineer based in Richmond, works in Dominion Generation's Nuclear Analysis and Fuel department, which supports the company's three power plant sites (Millstone, in Waterford, Conn.; North Anna, in Mineral, Va.; and Surry, in Gravel Neck, Va.). Previously, she worked for the federal Defense Nu-

clear Facilities Safety Board, in Washington, D.C. She received her B.S. in nuclear engineering in 1994 from the University of Missouri–Rolla and her M.S. in nuclear engineering in 1997 from the Massachusetts Institute of Technology.

Shell talked about her pronuclear activities with Rick Michal, *Nuclear News* Senior Editor.

How did you become a pronuclear activist? My family and close friends would tell you that I've been an activist ever since I declared my nuclear engineering major at the University of Missouri–Rolla in 1991. That's about how long I've been telling them more than they ever wanted to know about nuclear power. I was an active member of UM-Rolla's ANS student section, as well.

More recently, though, since the Virginia section of NA-YGN was founded in 2001, I and other members of that section have been busy with public outreach activities. We've gone to schools to talk with students about nuclear power and careers in nuclear science and technology, and we have participated in community events such as Earth Day and science fairs. Many of us in the local NA-YGN are also members of the ANS Virginia Section, and the two organizations work together on some events.

Then, after Dominion submitted its application to the Nuclear Regulatory Commission in September 2003 for an Early Site Permit at North Anna, antinuclear activists descended on our state. We in the local NA-YGN were disturbed that their misinformation and scare tactics were beginning to dominate the public debate on new nuclear power. We wanted to counter their message. When a local antinuclear group called People's Alliance for Clean Energy (PACE) advertised that it would be hosting an information session in Louisa County, where North Anna is located, I suggested that a few of us attend to see what they were saying and also to speak to concerned citizens about the benefits of nuclear power.

After that meeting, a handful of us decided to attend other events hosted by antinuclear groups, and we began our own campaign. Several of our members began writing letters to local newspapers. We put together our own information sheets and began planning to host our own events. In fact, as the NRC's hearing on the draft Environmental Impact Statement for North Anna drew near, we planned a pronuclear rally. The NRC hearing and our rally was held on February 17 this year and the event drew about 300 people. About one-third of them were pronuclear, and the rest were antinuclear. For our first try at participating in such an event, I think it went well.

How do your pronuclear activities mesh with your work activities?

My work as an activist is purely volun-

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tary. Dominion has its own public relations department, and I'm paid to be an engineer, not a spokesperson.

That's true for all the local NA-YGN members, whether they are employed by one of the many nuclear-related organizations located in Virginia, such as Dominion, Framatome, and the National Aeronautics and Space Administration, or are independent consultants. We have been very careful to ensure that our pronuclear activities are separate from our professional lives working for our employers.

Word of your pronuclear activities certainly has spread in your workplace. Are your coworkers supportive of the activities?

Prior to recent events like the February 17 rally, the local NA-YGN and ANS sections had rather quietly gone about their public outreach activities. But when NA-YGN began to plan the rally, we worked hard to drum up the support of our colleagues. Many were supportive but were a bit skeptical that we could make a difference.

After the success of the rally, however, and the printing of several positive articles in local newspapers, more and more coworkers and people from the community started congratulating and thanking us for our actions. We hope to inspire more people to make their pronuclear voices heard, and I think we are succeeding.

How does your work management feel about your activities?

My activist work is done on my own time. In general, though, as long as I'm doing my engineering job to the best of my ability, management is cautiously supportive. They are as concerned as we are that NA-YGN and ANS remain independent of Dominion. *Could you describe what goes on at a pronuclear rally?*

Well, in preparation for our February rally, we prepared banners, posters, stickers, and informational handouts. We borrowed a popcorn machine and rented a helium tank for balloons. The night of the rally, we arrived early at the location where the NRC hearing was to be held, which was the Louisa Middle School, near the North Anna plant. We set up our two large banners outside the school and staged our signs, the popcorn machine, and other ma-

terials. We also set up a table inside the school, just outside the hearing room. People arriving at the hearing couldn't miss us.

Prior to the event, I also took the advice of Laura Hermann, of ANS headquarters' Outreach Department. When

newspaper reporters had written articles about other events, I was always misquoted. Laura suggested that I contact the reporters beforehand and give them our message. I did that, and it worked. The result was that after the rally, several media outlets carried our main message, which is, "Nuclear power is safe, clean, and reliable, and an important part of a balanced energy mix." During the rally, newspaper and TV reporters interviewed me and other NA-YGN members, and the result was that most of the reports were pretty well balanced.

The antinuclear activists were surprised to see such a large pronuclear crowd there. A few of the antinukes said some rude things to us, but we kept our composure. The good news is that concerned citizens asked us questions, and we distributed some of our materials to them.

So, you have seen more fairness in reporting from the media?

Yes, for the most part. The only complaint I would have with the media in general is that a couple of reporters have shown their bias by not mentioning our presence at some of the meetings we have attended. These reporters print quotes only from the antinuclear side.

What happens when an open-minded layperson hears your message?

When people are willing to listen to us, they are usually receptive to what we have to say. Unfortunately, the antinuclear extremists have done a much better job at communicating their message to the public than the nuclear industry has over the years. People are consistently surprised to learn that 20 percent of our nation's electricity is produced by nuclear power and that the radiation dose I received working a year at the Surry power plant was negligible compared with what a person receives from natural sources, medical diagnostics, or cigarettes. They are interested in learning how a nuclear power plant works and are astonished to learn how well we contain the fuel and any waste.

I think that in the past some in the industry had assumed that John Q. Public wouldn't understand us, but we have found that if we respect a person's intelligence and explain the concept in layman's terms, we are able to demystify nuclear energy. When the mystery is gone, people are less susceptible to the scare tactics of antinuclear extremists.

What happens when, in front of an openminded audience, an antinuclear person is confronted with the truth about the technology?

It depends on the person. One who has simply been fed lies and misinformation may be willing to engage in a discussion. In our experience, though, the hardcore extremists will backtrack, change the subject, revert to some gross overgeneralizations, or even attack the integrity of the person who confronted their statement.

Was there apprehension on your part the first few times you appeared at rallies, especially if there was a vocal antinuclear side?

I've been to only one rally, but I have attended several events organized by antinuclear activists. The first few times, we on the pronuclear side were very apprehensive, but we have become less so. We've learned a few things: First, we know that we are not going to change the minds of hardcore activists, and we agree that our mission is to reach those who haven't made up their minds. Second, we research what the other side is saying and agree on our core message. We keep our message positive. Third, we don't go to the events alone. And, most important, we keep our composure no matter what is said. I've found that we score points with the "fence sitters" when the other side goes on the attack and we stay calm. We don't say, "You are lying through your teeth." Instead, we say, "I'd have to question the source of that information."

Do any events stand out, such as where something happened that you didn't expect?

One event from earlier this year does stand out in my mind. Those of us who attend these events have become instantly recognizable to the local leaders of antinuclear groups. We have realized for quite a while that with all of their talk about how nuclear power plants poison people and the environment, and that the corporate giants don't care as long as they are making money, they were insinuating that those of us employed in the industry are too stupid to realize the risks or that we know the risks but choose our paychecks over safety.

What I didn't expect was for an antinuclear extremist to actually verbalize such an accusation. But that actually happened. At a small meeting where I had said nothing and was only taking notes, one woman turned, addressed me directly, and accused me of either ignorance or greed. I responded to her right then and there, and also brought up the issue in the remarks I made at the public hearing. Here is what I said:

For several months now, I've listened to antinuclear extremists claim that severe accidents can happen at power plants at any time, and that nuclear power poisons the public and the environment. I've realized that they are implying one of two things. They are implying either that all of us who work in the nuclear industry are clueless idiots that blindly go about our own sinister jobs, or that we are all greedy mercenaries in collusion with the corporations for which we work.

In fact, last Saturday, at a meeting organized by PACE, Public Citizen, NIRS [Nuclear Information and Resource Service], and BREDL [Blue Ridge Environmental Defense League], the leaders explicitly charged me with either ignorance or greed. Either they are insulting my intelligence and education, or they are insulting my character and integrity. Either way, I am personally offended. My health and safety and that of my family and friends *always* come first. I also believe that we as a society must be good stewards of the environment. I would not work in this industry if it violated these principles, and I beDoes your specific job with Dominion help you get your message out, or could anyone with a nuclear background do the same thing?

There is a group of about 10 of us at Dominion and more with other companies in Virginia that have been particularly active in pronuclear activities, and we all have different backgrounds. The common thread is that we are passionate about the benefits of nuclear science and technology. So, yes, I think anyone interested in promoting nuclear power could do what we have done.

With next-generation plants being planned, will opponents get more aggressive, or will the general public become more supportive because they will realize the need for nuclear, or both?

I think the opponents will become more aggressive, but I am seeing hopeful signs. First, we seem to be inspiring our colleagues in the industry. We've been asked to share our experiences in various forums. I gave a presentation at the ANS Winter Meeting last November in Washington, D.C., and Todd Flowers will be giving an update at the ANS Annual Meeting in San Diego in June.

We also seem to be inspiring many others who don't even work in the nuclear industry to make their voices heard. We were delighted to find that some students have written letters to newspaper editors in support of nuclear power. The son of Joe Montague, of his own accord, was moved to speak at one of the local events. And several concerned citizens have thanked us for providing balance to the issue and asked us to put all of our information on a Web site. Sama Bilbao y Leon and Brian Mays are working on that, and the site should be up soon.

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lieve I speak for most if not all of the nuclear professionals here tonight.

So, we've basically begun to address the issue head-on. We don't support nuclear power because we work in the nuclear industry, we work in the industry because we support nuclear power.

Does the "job" get easier the more you do it?

We have definitely become more confident and less apprehensive.

Newspaper editors are regularly printing our letters, and Kelly Taylor and Sophie Gutner are working to better organize this campaign.

And we've even forced the antinukes to retract some of their statements. Delbert Horn, Michael

Taylor, and Addison Hall have been particularly effective at debunking the "statistics" claimed by antinuclear groups. In fact, after a recent local hearing, BREDL removed an error-filled press release from its Web site because of the work done by our members. By the way, all the people I've named here are local NA-YGN members.

So, we won't be changing the minds of antinuclear extremists, but I think the opportunities are ripe to reach reasonable citizens who have yet to make up their minds about nuclear power.