

# Insight

SEPTEMBER 2009

## New Nuclear Plants Vital to Fight Climate Change, Studies Agree

Significant expansion of nuclear energy will be required if Congress and the Obama administration are to be successful in reducing greenhouse gases, according to several scientific studies.

The National Academy of Sciences (NAS) and the Electric Power Research Institute (EPRI) are the most recent studies that identify increased use of nuclear energy as part of a broad portfolio of low-carbon electricity supply technologies. Other necessary parts of the portfolio should include energy efficiency technologies, expanded use of renewable energy sources and cleaner coal plants that capture and store carbon dioxide, according to both studies.

Recent studies by the U.S. Environmental Protection Agency, the U.S. Energy Information Administration, Business Roundtable, the

International Energy Agency and Cambridge Energy Research Associates also recognize that nuclear energy will play a vital role in a low-carbon approach to electricity production.

*Business-as-usual approaches for obtaining and using energy will be inadequate for achieving the needed transformation ... to a more sustainable and secure energy system."*

— National Academy of Sciences

The House of Representatives approved legislation in June intended to reduce carbon dioxide

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## G8 Statement Supports Nuclear

In the build up to international climate negotiations in Copenhagen this December, the Group of Eight (G8) nations have called for international cooperation in nuclear energy.

G8 leaders say that a growing number of countries have expressed interest in nuclear energy programs as a means to address climate change and energy security concerns.

"In the opinion of these countries, nuclear energy can play an essential role as it meets the dual challenge of reducing greenhouse gas emissions and lowering fossil fuel consumption," the leaders said.

The G8 includes the leaders of the United States, Britain, France, Germany, Italy, Japan, Canada and Russia.

This pro-nuclear message, stronger than last year's, demonstrates increasing recognition of nuclear energy's environmental and energy security benefits by world leaders. The G8 resolution added that a "fundamental prerequisite for nuclear energy expansion" is a continuing "international commitment to safeguards, nonproliferation, and safety and security." The leaders said they would work closely with the International Atomic Energy Agency "to promote the development and implementation of robust international treaties, stan-

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### Analyses Recommending Expanded Use of Nuclear Energy

<b>Electric Power Research Institute</b>	A full portfolio approach to reducing CO <sub>2</sub> emissions by 41 percent from 2005 levels by 2030 includes 45 new nuclear reactors.
<b>National Academy of Sciences</b>	Five to nine new reactors by 2020, 3 to 5 per year from 2020 to 2035, and 5 to 10 per year between 2035 and 2050.
<b>Energy Information Administration</b>	Basic scenario projects that the U.S. would require 96 gigawatts of new nuclear capacity, almost 70 reactors, by 2030.
<b>U.S. Environmental Protection Agency</b>	Core policy scenario for reducing greenhouse gas emissions would require a 150 percent increase in nuclear power generation, or 180 new reactors, by 2050.
<b>Organization for Economic Cooperation and Development/International Energy Agency</b>	Stabilizing atmospheric concentrations of CO <sub>2</sub> at 450 parts per million would require nearly doubling nuclear energy capacity by 2030.

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emissions 42 percent from 2005 levels by 2030 and 80 percent by 2050. Similar legislation is pending in the Senate.

EPRI's new report updates a 2007 analysis of the potential carbon reductions from different sectors of the electricity industry and the optimum mix, or portfolio, of electricity sources. It suggests that the electricity sector could reduce annual CO<sub>2</sub> emissions by 41 percent from 2005 levels by 2030 if the United States "aggressively" deploys a "full technology portfolio." This includes the addition of 45 new nuclear plants in the next 20 years, advanced coal plants, significant energy-efficiency measures, a fourfold increase in renewable energy, and the use of 100 million plug-in hybrid electric cars.

A more "limited" scenario, which assumes no new coal plants or electric cars and only a continuation of the existing 104 commercial reactors, would make up the difference with natural gas-based plants.

Regardless of the portfolio implemented, EPRI warns that energy costs will rise. However, the cost of not choosing the full portfolio scenario will be far higher, as much as \$1 trillion more by 2050.

Meanwhile, the findings of a new National Academy of Sciences study parallel EPRI's recommendation of achieving greenhouse gas reductions using a full-portfolio approach.

This would involve deploying energy efficiency and renewable technologies, as well as demonstrating the viability of carbon capture and storage for coal plants and advanced nuclear energy technologies. NAS recommends the construction of at least five new nuclear plants in the next decade, concluding that renewables and cleaner coal alone would be "unlikely to provide all the U.S. electricity demand for 2035, even with gains in efficiency."

In order to address greenhouse gas emissions in a meaningful way, the report says, "... our nation must fundamentally transform the ways in which it produces, distributes and consumes useful energy."



PHOTO COURTESY OF G8 SUMMIT

**The G8's statements demonstrate increasing recognition of nuclear energy's essential role in reducing greenhouse gas emissions and lowering fossil fuel consumption.**

## G8 Statement from page 1

dards, recommendations and monitoring procedures."

The leaders say that a "global green recovery" is one way of recovering from the current economic crisis. They noted that fiscal stimulus packages are "increasingly investing in measures encouraging the creation of green jobs and low-carbon, energy efficient and sustainable growth."

The leaders also said they are committed to reaching a "global, ambitious and comprehensive" climate change agreement in Copenhagen.

The statement from G8 leaders followed earlier statements from two other groups that encouraged the development of nuclear energy—scientists from the National Academies of the G8 nations plus those from Mexico, Brazil, China, India and South Africa, and the G8 energy ministers.

The statement from the National Academies, the leading scientific research institutions of their respective countries, called for the emergence of a global low-carbon economy, including the "development of nuclear power plants that are safe and secure, and ensure the secure long-term management and disposal of waste."

Among the strategies for mitigating climate change, the G8+5 statement directly called on all governments to adopt a "long-term global goal that

will halve carbon emissions from 1990 levels by 2050. In order to reach this goal, the scientists urged international cooperation on the development of "safe and secure nuclear power capacity, the safe disposal of nuclear waste and the reduction of the risk of proliferation."

The G8 energy ministers in their statement encourage "all countries interested in the civil use of nuclear energy to engage in constructive international collaboration."

The Intergovernmental Panel on Climate Change, in a 2007 assessment of climate change issues, said that nuclear energy is a key mitigation technology and lists it among the portfolio of energy options available to significantly reduce greenhouse gases. In the United States alone, nuclear energy prevents the emission of 680 million metric tons of carbon each year.

These declarations of support for nuclear energy's climate mitigation potential are drawn from an increasing body of independent analysts. Most recently, both the Environmental Protection Agency and the Energy Information Administration confirmed this in their analytical modeling of proposed climate legislation. Both studies found that restricting the growth of nuclear energy makes it harder to meet climate goals and increases the cost of doing so.

# Nuclear Plants Are Good Neighbors

People who live near nuclear power plants overwhelmingly like having them for neighbors, a new study shows.

The biennial survey included interviews with adults who live within a 10-mile radius of one of the country's 64 nuclear power plant sites. The nationwide survey is sponsored by the Nuclear Energy Institute.

The survey revealed that nine out of ten residents near nuclear energy facilities have a favorable impression of them; of these, 63 percent said they were "very favorable." Similar percentages see the nearby plant as a boon to the local economy.

Nuclear plants get high marks for their generation of clean, emission-free electricity, their stewardship of the environment and their contributions to local communities. In addition to the goods and services they purchase in the local community, companies employ, on average, about 400 full-time employees at each nuclear power plant.

The results were generally more favorable to nuclear power plants and their operations than



PHOTO COURTESY OF CONSTELLATION ENERGY

**Nuclear plants like this one at Calvert Cliffs on the shore of the Chesapeake Bay near Washington, D.C., are popular with local residents.**

those from surveys conducted in 2005 and 2007.

Other findings include:

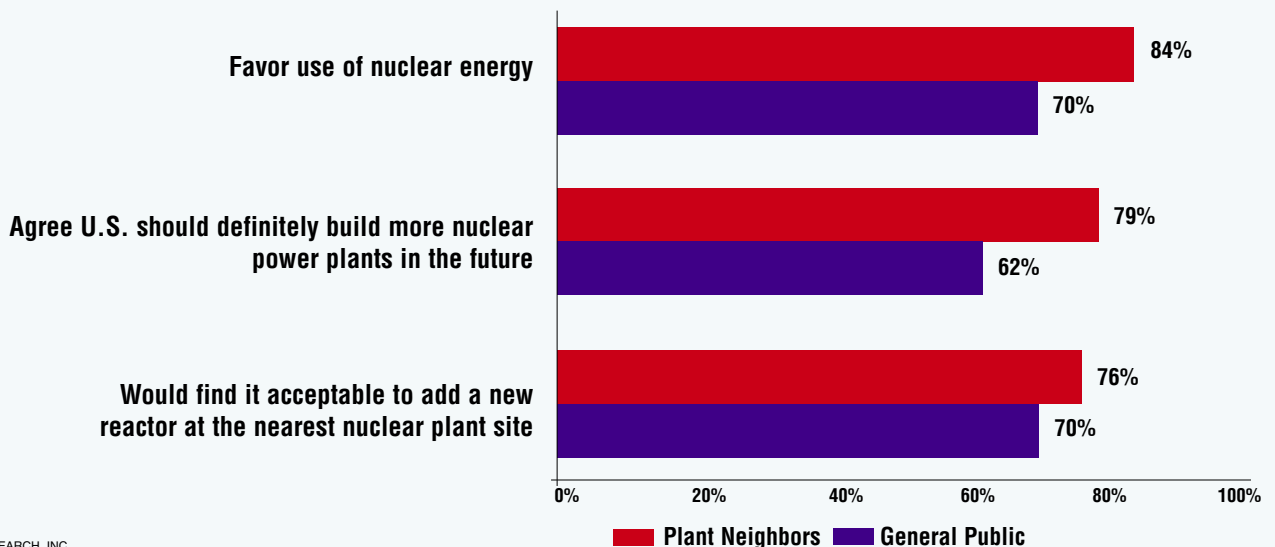
- 88 percent consider their nearest nuclear power plant to be safe.
- The most highly-rated source for information about the plant are the safety, radiation and environmental experts at the plant.
- 84 percent favor the use of nuclear energy as one of the ways to provide electricity in the United States, 14 points higher than the national public.
- 87 percent think that U.S. electric utilities should prepare now so new nuclear plants could be built if needed in the next decade, 11 points higher than the national public.

■ 76 percent of respondents said it would be acceptable to add a new reactor at an existing nuclear power plant site, six percentage points higher than the national public.

The survey, conducted in July 2009 by Bisconti Research Inc., included interviews with 1,152 adults. The margin of error is plus or minus three percentage points.

"Once again, the vast majority of people living in the communities around nuclear power plants support these plants," said Ann Bisconti, president of Bisconti Research Inc. "They are comfortable with the plants and the companies that operate these plants."

## Support for Nuclear Energy Higher With Nuclear Plant Neighbors Than the General Public



SOURCE: BISCONTI RESEARCH, INC.

**Surveys of 1,000 U.S. adults, March 2009; and 1,152 residents within 10 miles of U.S. reactors, August 2009. Respondents are not family of electric company employees.**

# Filling the Pipeline

## Nuclear Education On the Rise

**M**ore and more, the nuclear industry is using internships to help meet its future work force needs.

With a growing need to replace retirees among the baby boom generation, internships introduce students to the industry and get new recruits in the pipeline for full-time employment.

Students in internship programs spend a portion of their summer or academic year working in the field, often gaining college credit.

Exelon Nuclear says its internship program “creates meaningful opportunities, provides hands-on experience and career awareness,” and is an opportunity for students to gain practical work experience to complement their academic experience. Students can apply knowledge gained in the classroom to the workplace, while exploring their interest in various fields as they rotate through different positions.

Exelon’s internship program has become “a vital pipeline for full-time employment.” Exelon’s interns learn from qualified operations, maintenance and radiation-protection technicians. Its 2009 program managed to convert 136 of about 190 interns to full-time employees. This 75 percent conversion rate is three times that of last year.

Exelon hires students from academic fields such as nuclear, mechanical, civil and electrical engineering, and from technical programs in radiological health physics, instrumentation and control technology, electronic automated systems and process operations.

Lisa Stiles, project manager for nuclear work force planning at Dominion Power’s Resources



LISA STILES

Services, says that Dominion has had positive experiences working with Central Virginia Community College (CVCC) in Lynchburg, Va. The two-year college is part of the region’s highly successful “Grow Your Own” initiative to train middle and high school students for local



PHOTO COURTESY OF ANNA GOMEZ

*NEI’s internship and co-op program gives participants valuable experience in various aspects of the industry—and they go on to exciting and rewarding careers in the nuclear field.*

technical jobs. CVCC’s other local corporate partners are AREVA NP and Babcock & Wilcox. CVCC recently was awarded a grant from the Nuclear Regulatory Commission to provide scholarships and support for the college’s nuclear radiation technologies degree programs.

Joseph Klos, an intern in the Dominion/CVCC program, said that without the program he would not have known that the nuclear field was open to him. He is looking forward to a long career at Virginia’s North Anna nuclear power station. “This is the best overall training and mentoring process I have seen so far,” he said.

Pam Johnson, human resources director at Southern Nuclear Co., explains that her company has both internship and co-op programs with 24 colleges and universities throughout the Southeast United States. The difference between these programs, she said, is that while interns generally just work through the summer, co-ops alternate semesters between work and school and are typically required to go through at least three work rotations—and up to six. Co-ops are considered to be employees while on work rotation, accruing health benefits, vacation and service time. Southern Nuclear co-ops and interns may gain experience at the company’s Farley, Hatch and Vogtle nuclear plants. Southern Co. attempts to convert many of its interns and co-ops to permanent positions.

When nuclear plants shut down to refresh

their loads of nuclear fuel, typically for about a month every two years, short periods of worker shortages frequently arise. During these times, worker supply companies provide specially trained technicians in such fields as radiation protection and health physics.

Jerry Hiatt, chief technical officer for Bartlett Nuclear in Plymouth, Mass., says his company



JERRY HIATT

has partnered with Linn State Technical College in Missouri since 2005 to place interns during the fall and spring refueling outages at nuclear plants. “Over 90 percent of our temporary placements go on to take permanent positions,” he says.

Hiatt explains that a technical college graduate with nuclear coursework from the Uniform Curriculum (see story on page 5) typically qualifies for one year of practical experience. Temporary assignments provide an excellent avenue for these students to gain the two years of additional experience required for a permanent position.

Hiatt says he is proud of the role his company plays in developing the nuclear work force pipeline. “The nuclear industry is in a growth phase and opportunities abound for qualified individuals in areas such as radiation safety, operations, maintenance, skilled trades and engineering,” he says.

## Building a Uniform Curriculum

Training a new generation of nuclear plant workers is a priority for electric utilities. New plants are expected to be on-line in a few years—and much of the work force at existing plants is nearing retirement age.

From images in movies and TV, nuclear power plants may seem to be run solely by engineers in lab coats, running the control room and checking off items on a clipboard. But it isn't so. A plant needs a full range of workers, like any other industrial operation.

Consider the jobs at a plant that may not seem immediately obvious: chemistry technicians, health physics technicians and maintenance per-

sonnel for operating nuclear facilities. Then consider that working at a nuclear energy plant really is not a stretch for most students. The need for these and many other jobs will only expand as plants start staffing up.

The nuclear industry recognized this need and, working with community colleges, has created a way to fill it. The goal is to provide students with training for a job and the means to earn an associate's degree—and to provide the industry with a well-trained work force.

The partnerships between the industry and community colleges have expanded to 40, up from only three in 2000. The explosive growth

has led to a need for consistency between far-flung programs.

Florida Power & Light (FPL) took a highly successful approach to this challenge in Florida by partnering with local colleges and the International Brotherhood of Electrical Workers to develop a nuclear apprentice training program with a uniform curriculum.

FPL's chief nuclear officer Mano Nazar says, "In just two years we hired or promoted 72 graduates of this program at our St. Lucie and Turkey Point plants. We are currently replicating the Nuclear Uniform Curriculum program with industry and

**Uniform Curriculum** on page 6



MANO NAZAR

## Nuclear Jobs Attract Nontraditional Trainees

Jeanette Smith was a casualty of the economic recession. After being laid off in 2008, the 47-year-old single mother had a hard time finding work and making ends meet.

"I cannot live off of unemployment. There's no way to get ahead," she said. With a bachelor's degree already under her belt, Smith felt her best alternative was to make herself more marketable—and that meant going back to school.

Smith researched the possibilities. What she wanted was a career that paid well, needed workers and would not require her to relocate. She found an industry with tremendous growth potential—the nuclear industry.

Now majoring in energy systems instrumentation and controls engineering technology at Idaho State University, Smith meets recruiters on a regular basis. "Jobs are coming to us," she said. "That just amazes me because this is what I thought college would be like all along."

Smith has not been the only one to experience the nuclear industry's growth. According to a survey conducted by the Oak Ridge Institute for Science and Education (ORISE), the number of bachelor's degrees awarded in nuclear engineering rose by 10 percent last year and was the highest recorded in 20 years. Master's degrees in the field



PHOTO COURTESY OF ANNA GOMEZ

**Single mom Jeanette Smith is making herself more marketable in an exciting field.**

increased by 15 percent, and doctorate-level degrees were up 43 percent.

"The promise of an imminent nuclear renaissance has undoubtedly helped to drive increasing graduation and enrollment rates in nuclear engineering," said Eric Abelquist, a vice president of Oak Ridge Associated Universities, in a statement released by ORISE. "Nuclear power is a vital component to our country's energy mix and has found renewed favor. Construction of nuclear plants requires thousands of workers, and when the plants are built, several hundred persons are needed to operate them."

In addition to the planned expansion, the nuclear industry also has been preparing for an

exodus of workers—approximately half of the industry's work force will be eligible to retire in the next 10 years. The plans for industry growth and the expected attrition of such a large portion of the total work force have prompted an unprecedented recruitment effort throughout the industry.

Carol Berrigan, NEI's senior director of industry infrastructure, said the industry continues to work with government, educational and other organizations to address its work force needs and is implementing specific policies and programs to develop the future nuclear work force.

For example, in addition to targeting nontraditional labor pools, the industry has fostered development of curricula and educational programs and deployed staff as instructors at community colleges.

"Overall, the industry has been working to identify and fill the growing generation gap among its workers, and those efforts are paying off," Berrigan said. "Early analyses have shown the programs are working and that more engineers and support staff are entering the field each year."

For Smith, the move has not been easy, but it has been rewarding. "Things have been falling into place since I made this decision," she said. "This is going to offer me and my daughter a real living."

# How to Date a Mummy

## Using Radioisotopes in Archaeology and Geology

The development of radiocarbon dating in the 1940s transformed the field of archaeology. Finally, archaeologists could determine the ages of their finds—provided they were organic and between 500 and 50,000 years old.

The technique depends on the existence in nature of different forms, or isotopes, of carbon. The relative abundance of these isotopes can be detected with techniques such as mass spectrometry and used as a kind of atomic clock to tell the age of carbon-rich organisms.

Most carbon on earth is in its stable form, carbon-12, the nucleus of which contains 6 protons and 6 neutrons. However, a very small amount of the radioactively unstable isotope carbon-14 (with 6 protons and 8 neutrons) is constantly being formed in the upper atmosphere by cosmic rays from space interacting with nitrogen. The ratio of carbon-14 thus formed to regular carbon-12 in the atmosphere is only about one part in a trillion. Carbon-14 decays radioactively back to nitrogen with a “half-life” of 5,730 years—a half-life is the time it takes for an unstable radioactive sample to decay to half its original amount.

A living organism constantly takes up carbon from its environment, and the ratio of carbon-14 and carbon-12 in it remains in equilibrium (at about one part in a trillion). However, once the organism dies, the proportion of carbon-14 begins to decline by radioactive decay. For example, a tree that died 5,730 years ago will only have half as much carbon-14 as a modern living tree does. Measuring the ratio of carbon-14 to stable carbon-12 in an organic sample enables the accurate dating of animal and human bones, mummified bodies, deep-sea sediments, and wood and leather artifacts.

Carbon-14 dating is most useful for studying those periods of human civilization prior to written records. The smallest measurable value of car-



PHOTO COURTESY OF THE LOUVRE

**The dates of origin of Egyptian mummies like this one at the Louvre Museum in Paris can be precisely determined using radiocarbon techniques.**

bon-14 is about 0.2 percent of the “modern” amount, equivalent to just over 50,000 years—to the dawn of humankind.

For periods further back than this, scientists make use of radioisotopes with slower decay periods—that is, longer half-lives. Uranium, thorium and their various isotopic decay chains are as useful to geologists as radiocarbon is to archaeologists. The solidification of a rock from its molten

state fixes the ratios of fresh radioactive uranium and thorium in it and starts the “decay clock,” the same as the death of a carbon-based organism fixes the uptake of radiocarbon. These radioisotopes and others—such as potassium-40 and rubidium-87—have enabled accurate radiometric dating of the age of various rock strata (including any fossils bracketed between them), geologic processes and the origin of the earth itself.

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college partners in other areas around the country where we have nuclear power plants. It's a win-win situation—the apprentice program provides a pipeline of skilled workers for our plants, and students have the opportunity to begin a career in an industry that provides high-tech, high-paying jobs.”

Colleges also tout the goals of the program and the benefits it brings students. New Jersey's Salem Community College (SCC) makes the link between industry and academia explicit in its materials: “The SCC program focuses on maintenance of instrumentation and controls—the area of nuclear energy that has the greatest job demand in this region.”

The reason for that focus, according to the

program description, is that “PSEG is investigating the possibility of expanding its Salem County nuclear operations, leading to additional job openings. Presently, New Jersey is experiencing a shortage of qualified nuclear energy technicians. Consequently, these trained workers are and will continue to be in high demand for years to come—both locally and nationally.” And it lists the median salary: \$72,000.

Randy Etter, project director at the University of Missouri research reactor, said industry involvement is a key factor in the success of the program—from grant and funding information to recruitment.

“Once you get one success story from one student, enrollment increases,” Etter said.

# Q&A With Patrick Moore, CASEnergy Coalition Co-Chair

**P**atrick Moore, one of the founders of Greenpeace, saw the value of nuclear energy and changed from an opponent to an enthusiastic supporter. Now, as co-chair of the Clean and Safe Energy Coalition, Moore is briefing policymakers and giving speeches on nuclear energy's vital role in our energy mix. Insight recently had an opportunity to interview him.

**Q: What are some reactions to what you've been doing with the Clean and Safe Energy Coalition and changes you are seeing in the public's view toward nuclear energy?**

**Moore:** Recently, it's hard to find a media person who's against nuclear energy anymore. There's been a big switch there. The second important thing is the mainstream environmental groups are not making a big push against nuclear energy.

**Q: You have had a chance to have conversations with members of Congress. What do you see happening with climate change legislation?**

**Moore:** It strikes me that there are only two approaches to this. One is to move to restrict carbon by increasing its price, which pushes the market towards clean, more expensive technologies. The other is to incentivize clean technologies and forget about punishing carbon.

**Q: How do you see public support manifested in the policy discussions about nuclear energy?**

**Moore:** In the relicensing meetings I've been in, including some like Indian Point in New York and Vermont Yankee, there's a lot of pro-nuclear sentiment that comes out.

In upstate New York, they are clamoring for a new nuclear plant. Even in California, there's a slim majority of Californians in favor of nuclear power. So the meter has moved considerably in the last three years. I think the public's support is becoming more a matter of fact now.

**Q: What are the drivers for that?**

**Moore:** For a lot of people, it is climate change.



PHOTO COURTESY OF GREENSPIRIT STRATEGIES LTD.

**Moore sees the public debate on climate change and clean energy leading to increasingly favorable perceptions toward nuclear energy.**

A lot of people see that connection between nuclear energy and reducing greenhouse gases. [and] that nuclear power is nearly 75 percent of the U.S.'s clean electricity and is the most important carbon-free technology.

It's clear to me that the big change that needs to be made is in clean electricity, which means reducing the use of fossil fuels and increasing nuclear energy, with a bit of wind power in the mix. The clean energy can then be used to run geothermal heat pumps in all our buildings, eliminating fossil fuels for heating, cooling and hot water. The clean electricity can also be used to charge batteries in plug-in electric hybrid cars that are coming along soon. If we actually did just those

three things, we could move into a far less carbon-intensive world without huge economic pain.

**Q: What would you do to change the public's perception of the nuclear energy industry?**

**Moore:** I think we're on the right track in changing public opinion and understanding with the CASEnergy Coalition and with the other public education initiatives that are going forward. People are learning at a very fast rate. It's just about straightforward communications to the public. There's no substitute for that.

The full version of this interview can be found at NEI's Insight Web Extra at [www.nei.org](http://www.nei.org).

## Now Hear This ...

***I agree with Senator McCain that nuclear power has to be part of the mix. It's clear that if we want to respond to climate change, nuclear energy has to be part of the solution.***

—Sen. Mark Udall (D-Colo.)  
August 24

***New nuclear generation, which has almost no carbon contribution and a tiny footprint on habitat, must be significantly increased.***

—Boone and Crockett Club  
Climate change position statement  
July 20

# NEI, Washington Capitals Promote Clean Air Message to Fans

As representatives of a sport that has more to gain than most from the continued wintertime health of ice ponds and lakes, the National Hockey League has taken up the call to combat global warming.

From Vancouver to Vermont, the ponds that hockey players grow up playing on are freezing later in the year and melting sooner. That's why the NHL and the NHL Players Association have worked to raise public awareness of the effects of climate change through various partnerships.

As an official energy partner of the Washington Capitals, NEI is teaming up with the Caps to promote the clean air benefits of nuclear energy to sports fans via multiple media, including signage at the Verizon Center, print and radio ads and on the Capitals' Web site.

"The power and high energy of the Capitals'

successful franchise is a good fit with the large-scale power and clean air benefits of nuclear energy," said Scott Peterson, NEI vice president of communications. "The Capitals' success here in Washington provides a terrific branding opportunity for the industry as Congress and the Obama administration tackle important energy and environmental issues—all of which will benefit from America's investment in nuclear energy."

Caps fans will see NEI's "Nuclear: Clean Air Energy" message in a prominent location near the goal both at the team's Kettler Capitals Iceplex practice facility in Ballston, Va., and at the Verizon Center in Washington, D.C.

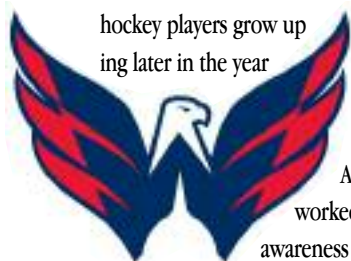
NEI also will air 30-second radio commercials during coverage of all 82 games on WFED 1500 AM, which will be streamed online at [www.washbcaps.com](http://www.washbcaps.com). NEI will have video and display ads on the Capitals' Web site and full-page advertisements in the game programs.

NEI will arrange for members of the Capitals team to visit a nuclear power plant in Virginia or Maryland. Nuclear energy, which doesn't produce any greenhouse gases, generates 35 percent of Virginia's electricity and 31 percent in Maryland. In the District of Columbia, 34 percent of electricity used is nuclear.

Other corporate sponsors are tying together climate change, nuclear energy and hockey. The Toronto Maple Leafs are supported by Canada's Bruce Power, which operates six reactors in Ontario.

Xcel Energy sponsors the Minnesota Wild's youth incentive program and also works with the Colorado Avalanche to promote energy saving ideas, conservation and renewable energy efforts in Colorado.

For more information on nuclear energy's clean air benefits and the Capitals, visit [www.nei.org/caps](http://www.nei.org/caps).



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