



Go Nuke!

A newsletter from the North American Young Generation in Nuclear

Spring 2010

Making the Most of the 2010 Annual Workshop By Misha Swanson, Communications Chair

In a few weeks we expect about 400 of you to invade San Francisco, CA for the 2010 annual workshop. A dedicated Professional Development committee has been working hard since the last workshop to pull together an excellent program with interesting speakers under the theme of, "Leading the Change: Go Green." Here is my guideline as an experience attendee of the NA-YGN Workshop to get the most out of the workshop. Some of this comes from personal experience, the rest from other's OE. Don't think I will identify which is which.

Plan on attending everything NA-YGN offers. The three day event will kick off with a Sunday Morning NA-YGN Conservation Committee Team Building Event. Wear anything that says nuclear. (This goes for anytime you do community service with your chapters.) Sometimes changing the face of nuclear in the eyes of nuclear is the public can have the biggest impact. Team building is the best time for Peer networking. Peer networking is the biggest part of our workshop, but also the least tangible, as its affects may not be felt for several years. You can never be sure how the person you met while volunteering or doing a scavenger hunt will influence your career in 3, 6 or 20 years.

Mike Kurzeja, our President will open the Workshop with his Presidential Welcome. His reign will end at the close of the workshop, however he will become a voting member of the NA-YGN Core as he fills the position of Past President. Are you thinking about running next year? **Take the time to meet the officers-** old and brand new. Find out what they do and how they make their volunteer position work within their full time job. **Talk to them about committees.** Committees are the best way to start getting involved with NA-YGN on a national scale and are excellent leadership development positions with both short and long term commitments..

NA-YGN is going green and won't be handing out attendance lists, so before you leave check it out online and **determine who to seek out.** Reconnect with people you haven't seen since last year and solidify that relationship. Look for employees at your own company, but who work at another site. If you haven't dealt with them in the past over the phone or email, there is a good chance you might in the future. Look for titles of attendees that are similar to your

own. Our industry loves a good benchmark. And as we always encourage taking charge of your own career, look for titles of people who are in positions of where you want to be and ask them about their career path. There is no reason a mentor has to be within your company. Our industry is too small to think small.

Coordinate with your co-workers. Divide up the sections of the Trip Report. (Yes, **write a trip report.** See Page 5). **Make sure you attend any and all sessions that involve your own leadership.** Not only is it the right thing to do to show your company support, it is the smart thing to do. You may learn how leadership views your company, issues the industry faces or our generation. If the speaker is outside of your management chain, it is a great opportunity to learn about a different side of your company and possibly spark a career interest. Attending these sessions gives you an opener when you see them during breaks or at the reception. Try, "Thank you for taking the time to speak to us and show us that you value what NA-YGN does for our company and the industry."

Networking at the NEA reception, attended by the CNOs, occurs on Monday night. Know who you want to talk to and what impression you want to leave. [And since we are talking about impressions, I will take a moment and address open bar + industry events. A former colleague told me alcohol had a positive influence on his golf game; however it was a window between no influence and negative influence. Everyone knows his or her own window. Operate in that window for the entire reception. Or the no influence window as I am in no way advocating you to imbibe.] A majority of industry leadership recognizes the value of NA-YGN and views those in attendance as the leadership of the future. Prove them right. If you haven't heard of the concept of **elevator speeches**, type it into your favorite search engine and commence prepping your own. I realize that I am addressing a large percentage of engineers who take things literally, so NO, the NEA reception won't be held in an actual elevator.

Before you leave San Francisco or in the airport **make notes on the business cards** you've collected. Jot down the date you met them or what you discussed to help jog your memory after you return home and are suffering from jet lag.

Political Climate

Political Climate

The Office of the President: Instrument for Change Management By Christine Csizmadia, D.C. Chapter Chair

After just crossing the one-year mark as President of the United States, Barak Obama has proven to be an instrument of change management. Although it seems the healthcare debate has saturated the advocacy market place and consumed the political arena, the climate debate is patiently waiting in the wings and building momentum. President Obama has made great strides in his support for nuclear power in the United States and has warmed the political climate in Washington, D.C. towards nuclear power.

- President Obama's appointment of Steven Chu to Secretary of Energy started his presidency on a pro-nuclear note.
- In February 2010, the President announced his support for the \$8.3 billion in loan guarantees for new reactors on Georgia's Vogtle site. The President's decision to commit to the Georgia project has stirred up political debate across the country on the implications of new nuclear.
- In his State of the Union Address, President Obama stated "to create more of these clean energy jobs, we need more production, more efficiency, more incentives. And that means building a new generation of safe, clean nuclear power plants in this country." One of the few bi-partisan standing ovations followed this statement.
- The President is clear about his concern over job development. All over Capitol Hill, discussions of possible provisions for the President's Jobs Bill are underway. The nuclear energy industry's interest is largely focused on including clean energy manufacturing tax credits and the Clean Energy Deployment Administration (CEDA).
- The President released his FY 2011 Budget announcing a \$36 billion increase to expand the Department of Energy's loan guarantees for nuclear power facilities. The total loan guarantee volume would rise to \$54.5 billion, including the existing \$18.5 billion. Included in the same budget proposal, the President announced Yucca Mountain is not a "workable option" for a nuclear waste repository. The President has appointed a Blue Ribbon Commission to investigate and determine a suitable alternative. The Commission is populated with industry representatives, academics and experts.
- In April of 2010, President Obama plans to invite 44 heads of state to Washington, D.C. for a Security Summit to discuss non-proliferation issues. Never in history has a United States President hosted so many heads of state. The planning for the event is very preliminary.
- Congress began hearings on the President's three Nuclear Regulatory Commission nominations: George Apostolakis, William Magwood, and William Charles Ostendorff in February. The Senate Committee on Environment & Public Works held a confirmation hearing February 9th for all three nominees and voted to approve all three on March 4, 2010. Full confirmation is currently stymied due to an objection made on one or the full slate of nominees (as of March 19, 2010).

On the verge of a heavy election season in November 2010 with 435 House, 36 Senate, and 36 Governors' seats opening up, the President has the potential of losing his majority support in Congress and will have to continue to bridge the gaps between parties to bring resolution to debates. One way for him to do this is to continue to push issues with bi-partisan support like nuclear energy. If the President intends to continue being an instrument of change in climate space, including nuclear in his proposal for clean, reliable, safe energy is his best bet to attract republican support and pass meaningful legislation.

President's Corner

By Mike Kurzeja



I am thrilled to announce on behalf of NA-YGN and the Professional Development committee the theme of this year's NA-YGN annual workshop is "Leading the Change: Go Green." Having just finished a large-scale re-engineering project, the topic of change management is near to my heart. Our industry is undergoing change. Nearly a third of the entire workforce in the nuclear industry will be retirement eligible in the next five years. Nuclear science and technology is being embraced worldwide to meet a variety of social needs from water desalination to food preservation and medicine. The U.S. is in the process of designing and building a new fleet of nuclear reactors that will power our future. Surely, we will all feel the impact of these vast changes that will shape our industry in years to come.

If the only constant is change, leading and managing change will be the hallmark of success in all things. Rules change, people change, situations change and navigating these waters successfully takes a sense of purpose and courage. Yet, despite the efforts of talented individuals and high resource allocation, John Kotter estimates that two-thirds of TQM efforts and 70% of reengineering efforts fail (1).

While many of our daily lives are dominated by changes brought on by work-life balance, multi-generational workplaces, career opportunity, and advancement, we should take a moment to reflect on our impact and the changes we have led and managed. Ten years ago, a group of nine individuals came together and formed this organization. Through all of our work over the past ten years, NA-YGN has grown to 80 chapters in North America.

Our efforts have had an impact in all venues. Whether in an elementary school classroom, the Halls of Congress, or our workplaces, we have made change by coming together and sharing our passion for this industry with each other. We have attended countless public meetings, stood in front of hundreds of classrooms, developed our professional skill set, recruited for the industry, and engaged our politicians. We are creating the environment in which we want to work through our leagues, social gatherings, and meetings. In doing so, we have moved this organization from an unknown entity to an asset in the eyes of the industry.

And it is with that history of success that we must look to the future to help lead the change that will surely come. Nuclear science and technology, with its many applications, can help solve a variety of issues that our global society faces. I have no doubt that the same energy that pushed the growth of NA-YGN to 80 chapters will play a major role.

Reference: "Leading Change: Why Transformation Efforts Fail" by John Kotter. Harvard Business Review, March-April 1995.

What Happened to My Budget?

By Kristin Zaitz, U.S. Affairs Chair

Is the budget cut issue facing your local chapter? With the current state of the economy, many companies have been tightening their belts. Since NA-YGN local chapters often receive funding from their parent companies, this economic strain is affecting some local chapters. The US Affairs Chair and the Regional Leads have conducted a survey of all local chapters to determine how serious this budget crunch is for our local chapters.

Approximately 25% of the local chapters surveyed have faced a reduction in their budgets. Most of those same chapters responded that they expect to have some difficulty operating their chapters throughout 2010 with their reduced budgets. Although this will be challenging, the good news here is that the majority of local chapters have not reported significant budget problems. This says a lot about the value of NA-YGN local chapters and our continued support from the industry.

If your chapter is facing budget issues, here are some interesting tips that were submitted by local chapter leaders:

- Is it possible for you to request funds for specific activities (including attendance of conferences) through your department's budget instead of your NA-YGN budget? Some chapters have successfully used this strategy.
- Has your chapter grown significantly or achieved significant accomplishments since the time when the chapter budget was originally established? Use this to your advantage! Even in this economic climate, some companies are increasing funding for their NA-YGN chapters due to chapter growth or performance.

Out of the local chapters that forecasted budget issues in the year ahead, most of these chapters are expecting that the hardest hit activities will be chapter attendance of conference and meetings. Approximately 50% of local chapters report that they will have to get creative in order to fund their members' attendance to the NA-YGN annual workshop in May 2010. Even given this metric, the astounding growth of NA-YGN over the last year (over 30 new local chapters in 2009!) is leading us to expect record attendance of this year's workshop.

So how can you make sure that your chapter's budget issues do not hinder your conference attendance? Here are some points to consider:

- The 2010 workshop hotel room rates have been negotiated to be lower than previous years' rates.
- The 2010 workshop will be longer and more content-filled than previous workshops, so attendees will get more for their money. Use this point to your advantage when you are requesting budget for attendance!
- Think creatively about reducing travel expenses. For example, do not rent a car in San Francisco! It is unnecessary, and parking is very expensive. Also, consider doubling-up on rooms if your company allows it.

43% of the local chapters provided input to this survey. Thank you to all of the local chapter leads who responded to the survey –your participation is appreciated! Please contact the US Affairs Chair (usa@na-ygn.org) or your Regional Lead if you would like more details on the local chapter budget survey, or if you have questions.

Why Trip Reports Are Important

By Brent Williams, Past President

The NA-YGN annual workshop is the most important event in the NA-YGN Calendar. The PD Committee has hundreds of hours invested in coming up with the theme, designing the sessions, working with session chairs, getting sponsors, and working with the NEI to arrange the logistics. The result is consistently excellent; sessions on current issues, networking opportunities with some of the most amazing people in the industry and let's not forget the fun.

So you heard about this workshop and went to all the effort of filing a travel request and got your manager, her manager, his manager (your VP), his manager (your EVP), and the CEO [I'm from Canada: my CEO has to clear all international travel] to sign it. You booked the tickets, booked the hotel, registered, packed your stuff, you went to the conference, met some cool people, learned some cool stuff, went to some cool receptions, and then you flew home.

And went back to work and forgot about it. Right?

Wrong. Because when you got back, the first thing you did was write your trip report. Why?

Think back to how you got involved in NA-YGN. Unless your membership number is less than 10, you heard about it from someone who was excited about it. You heard NA-YGN is an organization for newer/younger members of the industry, run by those same members. You heard NA-YGN is as good an opportunity as we make it, and we make it good. You heard that we are working to solve real issues with our industry to make it better for everyone.

Think about what your company is getting by sending you to the workshop. Not only are they

gaining the benefit of being represented by you at an international conference, they are gaining the knowledge you gained from the workshop. When you write your trip report for the 2010 annual workshop, they will get the key points from sessions on things like how to lead change. They also get a reinforcement of why sending you to the conference was a good idea.

Even better, when you present about the workshop to your work group and department, you share the key points and your excitement with them. Your manager and co-workers get the key points from your written report reinforced, and you get the development opportunity of presenting to them.

And think about what your local NA-YGN Chapter gains by having you represent them at the workshop. You attend the chapter workshops and chat with other members about what their chapters do. You find out how that chapter at Westinghouse got 1600 entries to the Poster Contest last year, and you meet the person inside the "Roddy Nuclear" mascot. You bring this information back and try some of these ideas at your chapter. You present your ideas to your chapter at a general meeting, and everyone in your chapter benefits from your being at the conference.

And think about what you gain by all this. Instead of being seen as a party with some speakers, you prove the workshop is an event that benefits you, your company, and your chapter. You take advantage of the opportunity and create an excellent professional development opportunity for yourself.

When you do good trip reports, everyone wins.

Do You Know Green???

1. If just the state of California changed its 4 million traffic lights to light-emitting diodes, the state would
A. \$50 million each year.
B. \$95 million each year
C. \$25 Million each year
D. None of the above
2. If the U.S. were to reach Japan's levels of energy efficiency, it would save an additional \$220 billion each year.
A. True
B. False
3. How many degrees would you have to raise your thermostat setting during the summer to save 10 percent on cooling costs?
A. 2 degrees
B. 4 degrees
C. 6 degrees
D. 8 degrees
4. Which tactic is a more efficient method of saving electricity in terms of air conditioning?
A. Raising temperature to 85 degrees
B. Keeping a constant 75 degree temperature
C. Turning off the air conditioner
D. None of the Above
5. Photovoltaic power means what?
A. Sunspots
B. Electricity from solar panels
C. Electricity from plants
D. Electricity from coal
6. If U.S. homes replaced all of the 500 million incandescent bulbs with compact fluorescent ones, the U.S. would instantly become an energy-exporting nation.
A. True
B. False
7. Who, in 1839, discovered the "photoelectric effect", which makes deriving electricity directly from sunlight possible?
A. Edmund Becquerel
B. Albert Einstein
C. Werner Heisenberg
D. Thomas Edison?
8. On average, about much of the energy in fossil fuels is lost when converting it to electricity?
A. One fourth
B. One third
C. Half
D. Two-thirds
9. What percentage of the energy used in a typical home annually is used for heating and cooling?
A. 10%
B. 30%
C. 45%
D. 80%
10. How long does it take light to travel from the Sun to the Earth?
A. Less than 1 second
B. About 34 seconds
C. About 3 minutes
D. About 8 minutes
11. Solar electric cells generate electric energy for calculators, wristwatches, yard lights, remote water pumps, and even homes and businesses. Approximately how much of the sun's energy (the energy in the amount of sunlight falling on the area of the cell) do today's cells convert into usable electricity?
A. 1-5%
B. 8-18%
C. 50-75%
D. 100%

Answers on Page 8

Local Chapter Highlight: Energy Northwest

By Kyle Sponholtz, 2010 Energy Northwest NA-YGN Chairperson

On Wednesday, October 28, 2009, the Energy Northwest (EN) North American Young Generation of Nuclear Chapter hosted the Lynchburg-Charlotte AREVA NA-YGN Chapter for a tour of Columbia Generating Station. The Lynchburg-Charlotte group comprised 9 members ranging from multiple disciplines including Structural Engineers, Mechanical Systems Engineers, New Plant Engineers, Project Managers, and other disciplines.

The group came to the Pacific Northwest to tour the AREVA Fuel Site at Richland, Washington along with the Wildhorse Wind Farm and Bonneville Dam along the Columbia River. The visiting AREVA employees also spoke with the young generation employees at the local AREVA site about starting a local chapter. The tour of Columbia was arranged through initial collaboration with Energy Northwest's Public Affairs Department and an AREVA NA-YGN member who used to work at the Richland site who organized the group's itinerary.

EN's NA-YGN chapter was approached about supporting the event and jumped at the opportunity to offer a tour of our nuclear power plant. EN NA-YGN members acted as guides for the tour of Columbia, which focused on showing plant production up close. The group walked from the reactor all the way through the system finishing with the cooling towers. The New Plant Engineers were especially amazed at the structures and how the buildings were created around certain components. They stated having the opportunity to see the constructability of a working nuclear power plant greatly influenced their own knowledge of building new nuclear plants.

Upon completion of the tour, the EN tour guides were joined by other EN NA-YGN members and the two groups shared a networking lunch which gave the groups the opportunity to benchmark differences and similarities between their respective companies as well as their local NA-YGN Chapters. Commonalities were discovered, such as issues with creating a chapter and getting complete buy-in from their respective companies.

At the end of the day, a good relationship was formed between the two groups and contacts from both groups continue to network and share ideas. The tour also helped create a relationship between EN and employees from the Richland AREVA office interested in starting a NA-YGN chapter at their site. The EN NA-YGN chapter will be working with the local AREVA office to assist in their chapter kickoff and looks forward to doing joint events with AREVA in the coming months.



What You've Been Doing



Go Nuke Quiz Answers:

1. B
2. A-True, which is equal to nearly \$1,000 for every man, woman and child
3. A-2 degrees, going from 78-80 degrees can save as much as 10% on cooling bills
4. A-Raising the temperature to 85 degrees or higher
5. B-Electricity from solar panels
6. A-True.
7. A- Edmund Becquerel. The photoelectric effect is applied in modern photoelectric cells, in which photons dislodge electrons from the top layer to the bottom layer. When the electrons can't return through the cell to rebalance electrical charges, they travel back to the top layer through an electrical circuit (a wire), creating useful direct current (DC) electricity.
8. D- About two thirds. About 65 percent of the energy in fossil fuels is released up the smokestacks of electric power plants and never becomes electricity. Another 3 percent is lost during transmission and distribution of electricity to homes and businesses.
9. C- Year-round, we use about 45% of their energy on heating and cooling.
10. D- Traveling at about 186,000 miles per second, light takes about 8 minutes to reach the Earth from the Sun. When we use solar energy, we use the energy in sunlight at the very moment it arrives on Earth. When we use wind energy, we are really using solar energy that is a few hours or days old, since it's the sun's uneven heating of the Earth that is responsible for wind. When we use the energy stored in fossil fuels, we are really using stored solar energy that came to Earth millions of years ago, enabling plants to grow - the same plants that eventually decayed and were transformed by geologic forces into fossil fuels.
11. B- Today's solar electric cells convert about 8-18% of the sun's energy into usable electricity. Most good-quality photovoltaic cells on the market today can operate at an efficiency of around 13-15% under ideal conditions. Some recent cells have achieved 18% in the lab. And there are still plenty of low-grade cells being produced that have lower efficiency.

***Sources- Texas State Energy Conservation Office- InfinitePower.org
California Local Government Commission- lgc.org

Regional Reports

Regional Reports

Northeast (Regional Lead Erin West, northeast@na-ygn.org)

Planning is still underway for the regional event. It will be August 13th in Worcester, MA. Most of this region's chapters have just completed elections and are holding their first meetings of the year. Three chapters- Exelon East, PSEG, and Shaw had a very successful networking event in Philadelphia.

National Nuclear Science Week took place January 25 - January 29, 2010. In celebration, 8 members of the New England Chapter of NA-YGN (Jessica Tatarczuk, Allison Dee, Dave Flahive, Rob Odell, Felix Meissner, Eric Borreson, Ashley Mossa, and Nataliya Povroznyk) traveled to the Children's Museum in West Hartford, CT to give presentations to visitors about nuclear power and its benefits. The students, mostly ranging in age from 1st through 4th grade, enjoyed the presentations which included a hands-on ping-pong ball demonstration of a fission reaction as well as an appearance by NA-YGN mascot, Roddy Nuclear, the fuel pellet.

Atlantic (Regional Lead Muhammad Fahmy, atlantic@na-ygn.org)

The Atlantic Region chapters are also holding their first meetings and leadership changes. Local chapter lead meetings were set for the second Tuesday of the month. The Virginia Chapters held their Engineers Week Engineering Banquet. DC United held a fundraiser for Haiti in February, which was well attended.

Carolinas (Regional Lead Jonny Abendano, carolinas@na-ygn.org)

The Areva Chapter recently held their Engineers Week. Fluor NA-YGN also participated in the Discover E. Program for Fluor's National Engineers Week, February 14-20, 2010. The Discover E. Program is where volunteers visit local middle and high schools to introduce young people to engineering in a fun and interesting way. The goal is to improve student interest in technology, science, and mathematics by showing how knowledge in these subjects can be used in real world applications. The Fluor NA-YGN visited a local Middle School and presented to seven classes that introduced 185 students to the world of engineering with specific interest in Nuclear Energy. The Midlands Chapter built a nuclear float for the Annual St. Patrick's Day Parade in Columbia, S.C.

Charlotte was officially chosen as the city for NA-YGN to bid to host the 2012 International Youth Nuclear Congress (IYNC). NA-YGN Members from Charlotte and across the country are diligently working to pull together a bid to wow the Executive Committee during the July 2010 IYNC meeting in South Africa.

Southeast (Regional Lead Chris Hearn, southeast@na-ygn.org)

The Southeast Chapter is in process of holding their first meetings of the year.

Midwest (Regional Lead Sean Tanton, midwest@na-ygn.org)

The Midwest is in the process of deciding the details for a regional event. Chapters are in the process of holding their 2010 kick off events. Braidwood NA-YGN held a Haiti Relief event Thursday, March 4 which included held a Bags (Cornhole) Tournament and Hot Dog eating contest. Prizes they acquired locally through donations, including a new, LCD HDTV (with DVD player), as well as 4 100-level (floor level) Bulls tickets.

West (Regional Lead Virginia Cleary, west@na-ygn.org)

Sandia Chapter recently worked with the National Museum of Nuclear Science and History in support of the first ever national nuclear science week:

The National Museum of Nuclear Science and History hosted the first Nation Nuclear Science Week. The Sandia ANGLE (NAYGN) section developed activities for three of the five days for the week. Wednesday's focus was Energy Generation day. We had a nuclear power plant setup made out of Legos, a Wiffle Ball activity to show students how water is turned into steam and then generates energy, a Fission Game where students were able to be an atom in a nuclear reactor and see how a chain reaction works and a Steam Generator which showed the water being heated up and travel through a set of pipes to move to a generator to turn on a light bulb. Thursday's focus was Safety Day where the students were able to participate in a Geiger Counter activity, dawn the Protective Clothing and determine their Personal Annual Radiation Dose. Friday's focus was Career Day. We had 20 professional from Sandia National Laboratories come and discuss their jobs.

EVENTS

March 25

Local Chapter Leads Call

usa@na-ygn.org

March 31 – April 4

National Society of Black Engineers Annual Convention

Toronto, Canada

<http://national.nsbe.org/>

April 4 – 11

ANS Student Conference – Career Awareness

Ann Arbor, MI

<http://committees.ans.org/students/>

April 29

Local Chapter Leads Call

usa@na-ygn.org

May 16 – 18

NA-YGN Annual Workshop

San Francisco, CA

<http://www.nei.org/newsandevents/conferencesandmeetings/naygn>

July 3 – 6

ASCA – Career Awareness Booth

Boston, MA

<http://www.schoolcounselor.org/files/boston.pdf>

July 12 – 18

International Youth Nuclear Congress

Cape Town, South Africa

www.iync.org

NA-YGN ANNUAL WORKSHOP!!!

SAN FRANCISCO, CA

MAY 16 - 18, 2010



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North American Young Generation in Nuclear

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