

North American Young Generation in Nuclear

“Lead the Change: Go Green”
2010 Professional Development
Conference Summary
San Francisco, CA
May 16-18



On behalf of North American Young Generation in Nuclear, we kindly thank all of the dedicated volunteers and organizations that helped make this event successful!

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I. Welcome and Opening Remarks

Outgoing President, Michael Kurzeja, opened the 2010 Professional Development Conference by highlighting the past year, which marks the ten year anniversary for the existence of NA-YGN. Ten years ago nine young people got together and created this organization to express their passion for an industry which was just beginning to emerge from the decades long fog after the Three Mile Island accident. Kurzeja pointed out that ten years, 6000 members, and 80 chapters later he believes our organization is more than what the founders imagined. Our organization, which was once an afterthought in the industry eyes is today viewed as an important asset. And it is viewed that way due to the passion and dedication that our membership has displayed.

“Whether we realize it or not, our industry and the world is relying on us today. Nuclear science and technology, with its many applications from the creation of medical isotopes and power to water desalination and food irradiation, can help solve a variety of issues that our global society faces. And they need answers now. They need us to engineer solutions and products to solve many complex issues, develop innovative maintenance and project management practices, and safely and reliably operate fleets of reactors supplying clean electricity for all. They need us to leverage what our generation does best, a keen ability to incorporate technology into our work and life, shared and collaborative learning from each other, and an unrelenting drive to succeed.”

II. Changing Leadership in the Nuclear Industry

Panelists:

- Mark Fecteau, Managing Director, GG&I Strategic Project Development, Westinghouse Electric Co
- Dennis Goin, Executive Engagement Leader, Kotter International
- *Facilitator:* Carrie Copenhafer, Westinghouse Electric Company

Summary

Mr. Fecteau and Mr. Goin discussed change leadership, the 8-step innovation model crafted by John Kotter and the application of this model at Westinghouse.

Mr. Fecteau began the presentation by emphasizing the importance of change leadership in the nuclear energy industry. He discussed his positive experience with change leadership at Westinghouse and the complexities of leading change at a large company.

Mr. Fecteau noted that change is often resisted because people want control over their lives and destinies. This makes upfront communication essential to any change leadership effort. “Employees should not feel that change is being done to them, but with them and for them,” he said.

Mr. Fecteau concluded by outlining the factors driving the impending nuclear renaissance, and recommending the Kotter 8-step model as an effective methodology for leading an entity into any rapidly changing environment.

Mr. Goin began his presentation by discussing the rapid pace of change our generation will experience as we navigate our professional lives. Leading this change is “all about perspective,” according to Mr. Goin. He highlighted the importance of leading change by example - focusing on how you can exemplify and model change, rather than how to make others conform to a new bureaucratic process.

Next, Mr. Goin provided discourses on managing change vs. leading change, and the nature of leading change in the nuclear industry.

“In change, managers tend to focus on what they know. Leaders tend to focus on where they want to go,” Mr. Goin commented. “Leading change means taking your company to where it has never been before. This is risky,” he continued.

Mr. Goin noted that in our industry, the word “nuclear’ means stop,” and the industry has traditionally provided excuses as to why it is beneficial to avoid change. He conducted multiple experiments with the audience emphasizing the notion that “all change can be uncomfortable,” but “change works off a clear step-by-step process that occurs in our brains,” and if led properly, an entity’s ability to embrace change can be a source of incredibly strength.

Mr. Goin outlined Kotter’s 8-step change leadership process:

1. Establish a sense of urgency
2. Create a guiding coalition
3. Develop a vision and strategy
4. Communicate the change vision
5. Empower employees for broad-based action
6. Generate short term wins
7. Consolidate gains and produce more change
8. Anchor new approaches in the culture

Mr. Fecteau returned to the podium to discuss the implementation of Kotter’s model at Westinghouse.

Westinghouse’s needs included:

- Sustaining excellence in operating fleet support
- Growth
- Talent management
- Acquiring systems and processes capable of supporting growing global operations

The journey manifested many challenges, including:

- Global implementation with different businesses, priorities and people
- Mid-stream recognition of the need for change leadership
- Modifying initial approach to change (stand-alone corporate team)
- Managing mounting complexities as effort progressed
- Difficulty measuring payback, especially for systems improvement

Mr. Fecteau offered the following key takeaways:

- Change leadership is critically important
- Creating a sense of urgency is fundamental
- Guiding coalitions are most effective when members feel a sense of direct ownership of the process
- Change vision is needed for each change initiative
- The importance of communicating with employees – early and often – cannot be overstated.

Westinghouse learned from operating experience. Through perseverance and mastering of the change leadership process, Westinghouse has captured significant value.

Mr. Fecteau offered some general tips:

- This process is best applied to cases of “transformational change”

- Change leadership is only possible when you're engaged with your whole heart and mind, and without the need for additional compensation
- Senior leadership must be totally aligned around your "big opportunity" in order to create "effective urgency"
- You must learn to run an effective meeting (strict agenda and time conscious).

Session takeaways – CHANGE LEADERSHIP WORKS

- This approach is customizable and lends itself to creativity
- Creates a "want to" environment vs. a "have to" environment
- Focuses the organization on where we want to go rather than on what we know
- Empowers a diverse cross-section of leaders within the culture to make change happen
- Sustains changes in the environment

III. Nuclear Power as a Component of a Green Energy Portfolio

Panelists:

- Alex Flint: Senior Vice President of Governmental Affairs, Nuclear Energy Institute
- Bill Levis: President and Chief Operating Officer, PSEG Power LLC
- John Conway: Senior Vice President and Chief Nuclear Officer, Pacific Gas & Electric Company
- *Facilitator:* Kristin Murray-Zaitz: U.S. Affairs Chair, NA-YGN

Mr. Flint discussed the current and future political landscape in regards to nuclear, as well as other issues NA-YGN members should be informed on. He began by discussing "Obama's Nuclear World." Using video clips from the president's State of the Union address and the recent loan guarantee announcement, Mr. Flint pointed out that President Obama is moving in the right direction by calling for the building of new nuclear plants and highlighting job potential.

Carol Browner, Director of the White House Office of Energy and Climate Change Policy, is a more vocal proponent of nuclear. When speaking about the industry, Ms. Browner talks about "jumpstarting nuclear power," participating in the global market, and opportunities for domestic manufacturing. And, because she influences the president's policies and NEI has good access to her, there is tremendous opportunity to move new nuclear forward with her in this position.

Mr. Flint stated that he believes the American Power Act proposed by Senators Kerry and Lieberman will not pass, in part because of the BP oil spill and the recent tide of incumbent Congressional members losing their seats. Mr. Flint predicted that Republicans will gain more seats in the mid-term election, making it more difficult to initiate new climate change legislation in the near term. He predicts that new climate change legislation will emerge after the 2013 presidential election.

Finally, Mr. Flint touched on a number of political, environmental and economic issues that NA-YGN members should be aware of, including price of carbon, continued global interest in new nuclear, cost of natural gas, and financial system reform.

Mr. Levis discussed the need for transparency and trust in building support for nuclear power. He began with the differing viewpoints on climate change and recommended coming to agreement on three key points: one, the world will run out of fossil fuels at some point; two, less pollution is better; and three, nuclear is *part* of the solution, not *the* solution. There are no clear answers to very complex questions, so the goal when communicating with stakeholders should be to educate them on the facts and issues and let them come to their own conclusions. Conversations with stakeholders must be respectful and reflect an understanding of the other person's viewpoint. When discussing nuclear in

particular, Mr. Levis stressed the importance of transparent communication and operational excellence, citing the fallout from BP's mismanagement of the oil spill.

Mr. Levis emphasized that the nuclear story is a good one, and NA-YGN members play a major role in sharing it, even informally with friends and neighbors. He pointed to three key highlights about nuclear power: one, it is a carbon-free source of electricity. He cited the disproportionate amount of energy used in the United States and its growing demand globally. He also touched on the challenges associated with increasing generation from renewables, namely cost and intermittency. Second, the nuclear industry is operationally strong. Despite lasting negative impressions from Three Mile Island and Chernobyl, nuclear stations have been performing well since. In addition, new nuclear is growing globally, and the U.S. should have a seat at the table to determine how the technology is used. Finally, nuclear is cost competitive, providing inexpensive, baseload electricity.

Mr. Conway provided a perspective on clean energy in California. The state's climate plan focuses on being leader in developing a green economy and reducing greenhouse gas emissions. Mr. Conway discussed Assembly Bill 32, which calls for greenhouse gas emission reductions of 80 percent of 1990 levels by 2050. This driving piece of legislation is in jeopardy, however, because the state's unemployment bill threatens to halt the climate bill until unemployment gets below five percent. PG&E support AB32 because of its cost containment consideration, meaning that emission reduction progress can be made without shutting down the economy and remaining flexible to future legislation. Another regional cap and trade program, the Western Climate Initiative, is also at risk due to the country's economic challenges.

PG&E is committed to California's Renewable Portfolio Standard requirement, which does not include generation from nuclear plants, large hydroelectric facilities, or rooftop solar arrays. The company is also determining the feasibility of compressed air energy storage, pumped storage, and carbon capture and storage for natural gas. Although 40 percent of PG&E's carbon-free generation comes from nuclear power, the state has a moratorium on new build until there is a solution to waste storage. Until then, Mr. Conway believes efficiency and demand response is the most effective way to reduce emissions. He also asserted the need for more renewables and more transmission, as a result. The widespread deployment of hybrid / electric vehicles may be a game-changer in the need for more baseload power, introducing an opportunity for new nuclear in the U.S. While the industry stands ready to build, Mr. Conway asserts the politics need to change first.

Q&A Highlights:

- Mr. Conway: Need to get off the "Renewables Discussion" and get on the "Clean Energy Discussion."
- Tips for communicating with others about nuclear:
 - Mr. Levis:
 - Find common ground
 - Understand others' viewpoints
 - Talk about the benefits and risks of nuclear power, but put it in perspective
 - Ensure timely communication about issues and commit to take action
 - Don't make promises about new nuclear
 - There is an opportunity every day to talk about nuclear
 - Mr. Conway: The approval rating for nuclear is at a high, so be confident in conversations with stakeholders.
 - Mr. Flint: The notion that Congress opposes nuclear is outdated. Actually, the biggest issue is Senator Reid's opposition to Yucca Mountain – which is not opposition to nuclear. He noted that even the American Power Act contains nuclear.
- Mr. Flint: President Obama's Blue Ribbon Commission on America's Nuclear Future is populated by credible individuals, and their report will hold weight. He predicts their report will not select a new

location for a long-term repository but may include a program and/or milestones for reprocessing used fuel. Some Congressional members are beginning to support the “French Solution” to used fuel, without even understanding the technology behind it, only the public support that seems to come with it. Mr. Flint expects a solution to the waste issue post the 2013 presidential election.

- Mr. Levis: The price of carbon must be known if broad-scale new nuclear build can begin in the U.S. Until then, companies will keep their options open, using the early site permit process for new nuclear, investing in natural gas, and exploring offshore wind.
- Mr. Flint: Although modular nuclear reactors have been met with enthusiasm, he predicts there will not be a market for them until large new nuclear has shaken out. Mr. Levis added that the regulatory and financial processes for modular reactors are not yet in place. Mr. Conway noted that future water shortages may make modular reactors more popular because they do not require water for cooling.

IV. Drive Change in the Workplace

Panelists:

- Mike Kurzeja, Maintenance Supervisor, Exelon Corporation
- Ed Halpin, President and CEO, STP Nuclear Operating Company
- Randy Edington, CNO, Arizona Public Service Company
- *Facilitator:* Katelin Gossman, AEP

Summary:

Drive Change in the Workplace was one of two sessions that kicked off the 2010 NA-YGN Annual Conference breakout sessions. NA-YGN Professional Development Committee member Katelin Gossman facilitated the session which offered attendees an opportunity to learn from panel members sharing real world experience and insights related to change in the workplace.

Mike Kurzeja, NA-YGN Past President and Maintenance Supervisor at Exelon Nuclear presented a discussion titled “Leading Change Without the Grays”. Mr. Kurzeja shared experiences from a re-engineering project within Exelon’s PowerLabs division in which he served as project lead. In addition to offering details about the project and some of its results, Mr. Kurzeja also shared his four keys for success including having a history of success, building coalitions, challenging assumptions by asking why, and listening to your leaders. One of the underlying themes of Mr. Kurzeja’s presentation was that you can lead change regardless of your age or position in your organization and that motivated individuals should seek opportunities to get involved with change.

Ed Halpin, President and CEO of the South Texas Project (STP) Nuclear Operating Company shared his thoughts in a presentation titled “Knowledge Retention”. Mr. Halpin discussed strategies for knowledge retention and discussed why the topic is of great importance to STP. Mr. Halpin emphasized vicarious experiences as key components of the knowledge transfer process. Recognizing that opportunities for vicarious experiences are not always present, storytelling by persons who had the experience was presented as an alternative to consider. Mr. Halpin advocated time and hard work in a supportive environment with mentees who want to learn and are capable of learning and being mentored as essential components of a successful knowledge transfer program.

Randy Edington, Executive Vice President – Nuclear and Chief Nuclear Officer shared various personal insights on career success gained throughout his experience. Mr. Edington challenged attendees to recognize that the young generation will own the industry within the next decade and to not wait passively for the change. Key themes in Mr. Edington’s presentation include understanding:

- what is heard is more important than what is said,
- being right and being effective in change don’t always go hand in hand,

- take a long term perspective when making decisions,
- use knowledge to avoid unconscious choices, and
- recognize your past, to understand where you are going, and why.

Applying those concepts can help lead to lasting results which matter but how you got the results also matters.

The session concluded with audience questions in which the panel addressed challenges to finding time for people to participate in mentoring programs, specific questions related to corporate hiring strategies to address a transitioning workforce and suggestions for how to obtain vicarious experiences.

V. New Green Energy Technology and Nuclear Generation Impacts

Panelists:

- Hal LaFlash, Director of Resource Planning at Pacific Gas and Electric
- Anndria Gaerity, Sustainability Director at PSEG Power
- Vanderheyden, President and CEO of Unistar Nuclear Energy
- *Facilitator:* Elizabeth McAndrew, President-Elect, NA-YGN

Summary:

This session was aimed at sustainability and renewables in the energy industry and demonstrated how nuclear plants can be used in this movement. To start off, Hal LaFlash, Director of Resource Planning at Pacific Gas and Electric, explained the efforts of California to meet their “33% by 2020” goal. PG&E holds the title of “Greenest Utility in America” due to their blend of low carbon resources including 3600 MW hydro, 2300 MW nuclear, and minimal coal usage.

All states in the nation have set goals for their energy consumption in the future. Most states have set a “25% by 2025” goal. The percentage refers to the amount of renewable energy a state consumes in relation to non-renewables. Unfortunately, nuclear does not fall on the list of eligible renewable energy technologies. Though California will not be building any new nuclear facilities in the near future, the state has made over 100 contracts for new energy. These contracts include such technologies as solar thermal, solar PV, small hydro, geothermal, wind, and bioenergy. Southern California Edison is working on transmission lines for a 4600 MW wind plant in Tehachapi.

Though wind has potential in terms of megawatts, the variation in wind energy makes flexible gas plants imperative to make up the grid. For this reason, and since wind is typically most available during night hours, solar is being most heavily pursued by California. Solar is also variable and requires flexible gas plants but has the advantage of being most available during the peak hours of the day. Currently about 36,000 customers have solar panels on their rooftops due to incentives by California that produces approximately 315 MW.

Anndria Gaerity, Sustainability Director at PSEG Power gave a compelling speech on “walking the talk” when it comes to sustainable buildings. She was casual, professional, and spurs intelligent and inspiring conversation about sustainable offices and problems that face us everyday. She explained how we can use our knowledge and passion to create small changes that will make a big difference in the sustainable movement.

Gaerity has cleverly used the slogan “Clean Air Energy” as a starting point to converse with the public and to convince the stakeholders that nuclear facilities care about clean air for society today. “But nuclear power isn’t an eligible renewable technology, how can we be more sustainable?” you might be asking. Gaerity came to answer that question in full, jaw-dropping, eye-opening detail.

For her first staggering statistic, Gaerity informed us that in the United States, buildings account for 72% of electricity consumption, 39% of total energy use, 38% of CO2 emissions, and 40% of raw materials. We're not the only ones who are consuming an exorbitant amount of energy in our buildings. China, for example, is adding the equivalent of Brazil in all new buildings to their grid every two years due to population growth. Sustainable building design reduces the use of natural resources, limits environmental impacts, and reduces operation costs. Sustainable designs can reduce energy use by as much as 50% in new buildings and by as much as 30% in existing buildings and can reduce water usage by 20-40%.

The first step in making your office building sustainable is reducing energy usage. Energy costs currently account for approximately 30% of typical office building operating costs. Examples of ways to reduce energy usage she provided were:

- Setting high-efficiency standards for all equipment;
- keep all electronic equipment in good repair;
- Ensure that lights are off when nobody is in the area,
- turn off and unplug all equipment over the weekends
- Keep the sun out by using cool roofs and shading windows with southern exposure.

Since she's so good at it, Gaerity threw out a couple more shocking statistics for us to absorb. According to her research, Americans throw away enough office paper each year to build a 12-foot wall from LA to NY, and 2.5 million plastic bottles every hour. By making it easy to recycle and going paperless in our office buildings, nuclear facilities could make a huge impact on the environment. Adding more recycling bins and cutting back on trash cans is something trivial but has an enormous impact on workers' everyday lives. Imagine searching your whole office for a trash can and all you can find is recycling, or going to the kitchen and finding a composter instead of a trash can!

By setting the proper expectations, building awareness through education and communication, making it easy to do the right thing and hard to do the wrong thing, measuring and managing, you can make a difference and promote sustainability in all our nuclear facilities. By doing these trivial tasks, you can ensure reduced operating costs for your facility, more MWs on the grid, credibility as part of the energy solution, support from environmental groups and lively, intelligent conversations with the community.

The last speaker for this session was George Vanderheyden, President and CEO of Unistar Nuclear Energy. Vanderheyden's main focus was on the new design for Calvert Cliffs Unit 3 (CC3) and the use of desalinization at nuclear facilities. He demonstrated how nuclear energy is part of the clean energy solution for the future. "More than 1 billion people in the world do not have safe drinking water and by 2025, 2/3 of the world's population will not have clean water if things continue as they are today" said Vanderheyden. At the CC3 site, a desalination plant will be installed and will provide all the fresh water use for the unit and reduce the impact on the quickly shrinking area aquifer. Incorporating the desalination facility will provide the unit with potable water and possibly provide the surrounding residential units with potable water as well. With Vanderheyden's philosophy, not only will new nuclear provide us with cleaner air, electricity, and more jobs, but it now has the possibility of supplying more water to areas in need.

VI. Issue in Change by Welcoming Those "New to Nuke"

Panelists:

- Ryan Holland – Senior Engineer, Progress Energy
- Sean Tanton – Mechanical Design Engineer, Exelon Corporation
- Craig Albers – I&C Systems Engineer, Fluor Corporation

- *Facilitator:* Brent Williams – Past President, NAYGN

Summary:

The main focus of this session was to teach best practices on welcoming those new to the nuclear industry. The problems new employees face range from feeling inadequately prepared to being lost in the cubicle realm. The session was an open format, leading to great discussions and good insight from both the speakers and the audience. To help solve these problems, we have to attack them before they arise. Early networking, mentoring programs can aid with this. These answers will give the necessary face to face time needed to help with questions and to allow the new hire to understand this unique environment.

Sean Tanton brought up a simple, but effective way to look at this problem...“Do you remember what it is like to be a new hire?” He challenged us to think back and remember the concerns and questions we had. What was helpful? What would have been beneficial? What are the misconceptions we had of this industry?

Getting involved quickly is key to a successful start. Some organizations use orientations, info packets, groups (such as NA-YGN). Through this, we can adequately manage the expectations of the new hire. We must remember to inform them that this industry is not taught overnight, but more of a marathon. And we must play the role of a mentor, a coach, and a supporter during this transition.

VII. Environmental Impact and Waste Management Strategies

Panelists:

- Kathy Yhip, Senior Project Manager, NEI
- Berg, Manager Environmental Leadership Program Development, Cameco Corporation
- Kevin Morris, QA Engineer, Transnuclear Inc.
- *Facilitator:* Maurice McCaney, Publications Chair, NAYGN

Summary:

Ms. Kathy Yhip, Senior Project Manager at Nuclear Energy Institute spoke on ground water contamination. As a result of ground water contamination at several plants (Braidwood 2006, Indian Point 2005, Salem 2002) as well as the past and expected decommissioning of plants an initiative was launched to improve the management of releases into ground water. An NEI Taskforce was formed November 2005. This resulted in an NEI lessons learned. An NRC Taskforce formed in March 2006. The NRC released its report on the topic in September 2006. Based on the historical data provided by the Licensees the NRC experts determined that these releases did not result in any appreciable dose to the public. In February 2007, the industry held a workshop with the NRC and other stakeholders to capture lessons learned from implementing a voluntary industry program. Following the workshop, the industry formed a task group to redraft industry guidance on the program to incorporate the lessons learned. In August of 2007, NEI 07-07 was issued as guidance. NEI 08-08 was later issued for new plants. This included the buried piping integrity initiative. This was required due to inconsistent definitions of buried piping. Take away from session– Perception is important in being considered green power.

Mr. Brent Berg, Manager Environmental Leadership Program Development, Cameco Corporation spoke on Mining and Waste management. Key Lake Mill is the largest, high-grade uranium mill in the world. This facility is licensed to produce over 18 million pounds of U3O8. The ore is transported 80 km from McArthur River for milling. Work is underway to improve environmental performance at Key Lake. New facilities are being built to supply reagents used in the milling process. These facilities will produce

the sulphuric acid and oxygen used to dissolve uranium in the ore. The new plant will reduce SO₂ emitted by 94%. The advantages of open pit mining are in-pit tailings disposal and deployment of advanced water treatment technology for mine ground water treatment. The advantages of underground mining are; no large openings, less waste rock generated and minimal overburden removal, and a smaller surface footprint. Decommissioning plans are submitted before the mine opens. The mine is not allowed to open if it cannot be closed correctly. Reclamation and decommissioning plans are fully funded. Cameco uses reverse osmosis to treat water before release. Cameco maintains wildlife management programs to lessen the impact on the environment surrounding its facilities.

Mr. Kevin Morris, QA Engineer, Transnuclear Inc. presented on Storage and Reprocessing of Spent Nuclear Fuel. The US NRC recognizes two types of storage; Wet storage in spent fuel pools and dry storage in casks. In the 1980s reprocessing of used nuclear fuel was terminated. Spent fuel pools at reactors are not designed to hold all used fuel for life of reactor. Licenses have been extended but pools remain the same size. The Yucca mountain project is not ready to receive spent fuel. 10CFR Part 72 ensures that no radioactive elements are released into the environment. Transnuclear goes beyond Part 72 by carefully placing ISFSI to avoid environmental impact. Instead of storage of spent fuel, Areva's goal is to reprocess the fuel. In fresh fuel 5% is fissile material. The rest is fertile material. In spent fuel its about 1-2% plutonium, 5% fission, 1% U-235, and the rest is U-238. All the fission products from spent fuel can be reused. Reprocessing reduces the need to mine fresh uranium, recycles depleted uranium and reuses fissile material that would otherwise be stored. Waste that is to be stored long term requires stabilization into a form which will not react, nor degrade for extended periods. This can be done through vitrification where the waste is mixed with sugars to produce a stable glass compound.

VIII. Leadership Expectations for YPs Create Opportunities for NA-YGN

Panelists:

- Jim Scarola ,SVP and CNO, Progress Energy
- Kelle Barfield, VP Public Affairs, Entergy Nuclear
- Jacques Besnainou (President, AREVA Maurice McCaney, Publications Chair, NAYGN
- *Facilitator:* Rick Rodriguez, Program Chair, NA-YGN
-

Summary:

Panel participants Jim Scarola, Kelle Barfield, and Jacques Besnainou answered a series of questions on leadership expectations and the associated opportunities within NA-YGN posed by facilitator, Rick Rodriguez. The following presents a selection of some of the Q&A from the session, as well as questions from session attendees:

Q: Please speak of the similarities and differences that you see for YPs today from when you started your own career.

- **KB** – The biggest change is the need for constant exploration and innovation. Coming out of college, we needed to shape the first wave of nuclear build-out. You need to shape the second wave. The difference is that industry today is much more diverse, and technology has advanced tremendously, which reduces the limitations you face in applying creativity.
- **JB** – I started in this industry right before Chernobyl. In a way, it was the beginning of the end [of the first wave]. Today, you stand at the beginning of the beginning. Opposition to nuclear has become practical, rather than ideological. As a result, opportunities are opening up domestically and internationally.

Q: Why is development of new employees important to the development of the industry as a whole?

- **KB** – It is fundamental. YPs need to think of development not just in terms of conferences or participation in NA-YGN. You need to consider taking rotational assignments and participating in new projects to gain new skills. Development takes many forms.

Q: How has your company benefitted from its involvement with NA-YGN?

- **JB** – Retirements in the workplace mean that we need you. AREVA has hired 25,000 new workers in the last few years, but our average age is still 50 years old. We need young talent.
- **KB** – There are numerous internal benefits to Entergy. Nuclear can be a tough life, and it is important to generate morale. NA-YGN generates energy and enthusiasm in the workplace.
- **JS** – In my career, there have been very few times when I made an original mistake. The more you know your peers, the more your knowledge grows and the fewer mistakes you are likely to make. NA-YGN brings fresh ideas, different perspectives and an ability to communicate, not only among NA-YGN members, but externally among the community as well.

Q: How would you sell NA-YGN support to companies that may not see the direct benefits?

- **JB** – Human capital is absolutely essential, and NA-YGN is one way to garner this. But, I caution NA-YGN not to become an echo chamber. Be brave and go outside of our internal community into the greater community. We must engage in debate with the broader world, and NA-YGN is a great way to foster this.

Q: What employee behaviors and attitudes do you want to see reinforced through NA-YGN?

- **JS** – You will have a lot of challenges, and the first behavior is to do what is right. That is the first thing you need to commit to. Professionalism and teamwork are also critically important behaviors to reinforce.

Q: Millennials are noted as a generation that craves constant feedback. Can you comment on the impact of this?

- **JB** – Our organizations do a good job of identifying gaps to excellence. We are good in the critical, but weak in identifying and reinforcing the positive.

Q&A from Audience:

Q: As your career progresses, what keeps you motivated?

- **JB** – there are very few instances when you can do well and do good. Our industry presents this opportunity. To quote Jim Rogers, you need “cathedral thinking.” We have the opportunity to work on something bigger than ourselves every day, and what we build will outlast us.

Q: What recommendations do you have for us in our careers?

- **JS** – Attitude is everything. Keep your attitude up. You have you make your own opportunities and your attitude will be noted by everyone. Attitude is followed by commitment and initiative. There are opportunities all around you. You should also remember that this business is a marathon not a sprint, so don't forget to find balance between work and the rest of your life.

Q: How do you deal with failure?

- **JS** – It's not whether you fail, it's how you respond when you do. If you respond positively, failures can end up being the accelerating factors in your learning and your advancement.

IX. Awards Ceremony

- *Facilitator:* Phil Benavides, Awards Chair

The NA-YGN mission of promoting nuclear science and technology could not be achieved without the efforts of the members. The energy from all of our members is what makes local chapters, committees and the core successful. Phil, on behalf of his committee thanked everyone for all of their support whether it is on a Local, Regional, North American or even a world wide level.

Excellence Award

The Excellence Award honors an individual for dedicated service to NA-YGN in Leadership, Service, Education, Recruiting and Retention or Professional Development. A measureable achievement must have occurred during 2009 that was a direct result of the recipient as an individual or as part of a team.

The recipients are:

Allison D. Barber
Sandia National Laboratories
Excellence in Public Education

Allison played a significant role in the Sandia's chapter effort to educate local 4th and 5th graders about nuclear science during this year's drawing contest. Allison spoke to over 200 kids about nuclear science and was a positive role model for them. Allison's efforts helped the Sandia chapter increase the number of 4th and 5th graders they reached out to by a factor of 10.

Adam H. Borcz
USEC Inc.
Excellence and Support of the Atlantic Region of NA-YGN

Adam led the 2009 NA-YGN Atlantic Regional Event which was a run-a-thon that raised funds for disabled marines and their families. The NA-YGN Fueled by Atoms 5k event raised over \$9000 on behalf of the Semper Fi Fund for injured Marines. This event amplified NA-YGN's mission to provide public information about nuclear science and technology but also advertised NA-YGN by having 400 non-nuclear runners wearing pro-nuclear clothing.

Adam H. Borcz
USEC Inc.
Excellence in Recruiting and Retention

As the chair of the Career Awareness Committee of NA-YGN, Adam helped to modify this committee's mission in 2009. In an effort to strengthen the strategy, Adam's team decided to partner with industry to provide NA-YGN members the opportunity to educate stakeholders about the benefits of working in the nuclear industry. Adam has also worked with volunteers to develop a "game" for attendees to boost their visitation of other nuclear recruitment booths which led to over 200 resumes collected from the two events held in the fall of 2009. Additionally, Adam insured that volunteers were available for the remaining four career fairs situated at strategic conferences.

Jennifer Gutshall
Exelon Corporation
Excellence and Support of the Exelon East Chapter of NA-YGN

Jennifer is being recognized for her efforts as the Three Mile Island Site Representative. During her tenure as Site Representative, the TMI site has supported many events including judging the North

Museum Science Fair and organizing site tours for students from Penn State Harrisburg. Under Jennifer's leadership, the TMI site has increased Professional Development by over 1000 hours.

Ginger Jones
Exelon Corporation
Excellence and Support of the Exelon West Chapter of NA-YGN

Ginger is being recognized for her efforts as the Communications Chair of the Exelon West Chapter of NA-YGN. During her tenure, Ginger has traveled to Washington D.C. to facilitate the exchange of knowledge between various groups, to bring the message of clean, reliable nuclear energy.

Raymond J. Jun
Sandia National Laboratories
Excellence in Public Education

Raymond played a significant role in the Sandia's chapter effort to educate local 4th and 5th graders about nuclear science during this year's drawing contest. Raymond spoke to over 90 kids about nuclear science and was a positive role model for them. Raymond's efforts helped the Sandia chapter increase the number of 4th and 5th graders they reached out to by a factor of 10.

Matthew Loula
Exelon Corporation
Excellence and Support of the Exelon West Chapter of NA-YGN

Matt is being recognized for his efforts as the Braidwood Site Representative. During his tenure as Site Representative, the Braidwood site has supported many items including the 2009 NA-YGN poster contest and maintaining the Braidwood portion of the Exelon West NA-YGN website.

Tricia Mattson
Exelon Corporation
Excellence and Support of the Exelon West Chapter of NA-YGN

Tricia is being recognized for her support of the Exelon West Chapter of NA-YGN. In 2009, Tricia helped to organize many events including Exelon West Fleet event which gave the Exelon West Chapter members access to many Exelon executives. These executives spoke about many topics including leadership and sustaining excellence.

Jay B. Mehta
Westinghouse Electric Company
Excellence in Public Education

Jay Mehta is being recognized for his efforts with the 2009 National Chemistry Week participation at Carnegie Science Center which led to the successful advocacy of the nuclear industry to approximately 800 people.

Bobby Middleton
Sandia National Laboratories
Excellence in Public Education

Bobby played a significant role in the Sandia's chapter effort to educate local 4th and 5th graders about nuclear science during this year's drawing contest. Bobby spoke to over 45 kids about nuclear science

and was a positive role model for them. Bobby's efforts helped the Sandia chapter increase the number of 4th and 5th graders they reached out to by a factor of 10.

Jake Murphy
Exelon Corporation
Excellence and Support of the Exelon West Chapter of NA-YGN

Jake is being recognized for his efforts as the Dresden Site Representative. During his tenure as Site Representative, Jake has revitalized the Dresden website to communicate events and ideas to all members of the site. Jake's efforts have contributed to increased participation from security, maintenance and operation members.

Eduardo Padilla
Sandia National Laboratories
Excellence in Public Education

Eduardo played a significant role in the Sandia's chapter effort to educate local 4th and 5th graders about nuclear science during this year's drawing contest. Eduardo spoke to over 90 kids about nuclear science and was a positive role model for them. Eduardo's efforts helped the Sandia chapter increase the number of 4th and 5th graders they reached out to by a factor of 10.

Curtis D. Peters
Sandia National Laboratories
Excellence in Public Education

Curtis played a significant role in the Sandia's chapter effort to educate local 4th and 5th graders about nuclear science during this year's drawing contest. Curtis took responsibility for contacting all the local schools in Albuquerque and scheduling all the presentations. Curtis also made sure that all of the drawings were collected and submitted for the NA-YGN contest. Curtis' efforts helped the Sandia chapter increase the number of 4th and 5th graders they reached out to by a factor of 10.

Christine Reid
Exelon Corporation
Excellence and Support of the Exelon East Chapter of NA-YGN

Christine is being recognized for her efforts as the Three Mile Island Site Representative. During her tenure as Site Representative, the TMI site has supported many events including the creation of a video for the site's INPO visit and organizing site tours for students from Penn State Harrisburg.

Nicole Stadelman
Westinghouse Electric Company
Excellence and Support of the Pittsburgh Chapter of NA-YGN

Nicole is being recognized for her support of the Pittsburgh Chapter. Nicole's efforts contributed to many successes including the 30th anniversary observation of the TMI accident and a fundraising event which raised over \$2400 for the United Way.

Eric Steckhan
Exelon Corporation
Excellence and Support of the Exelon West Chapter of NA-YGN

Eric is being recognized for his support of the Exelon West Chapter. As the Communications Lead at the Braidwood site, Eric has written newsletters and helped the site representative make improvements to the Braidwood website.

Danny A. Tran
Exelon Corporation
Excellence and Support of the Exelon West Chapter of NA-YGN

Danny is being recognized for his support of the Exelon West Chapter. Danny has educated local elementary school children for the NA-YGN poster contest and organized tours at the Clinton site for students from Rose-Hulman and Urbana High School.

Erin West
PSEG Nuclear
Excellence and Support of the Northeast Region of NA-YGN

Erin has served NA-YGN in a variety of different ways this year without sacrificing the quality of her work. As Northeast Regional Lead, Erin West has done a fantastic job of organizing and facilitating conference calls between the local chapter leads in her region. Erin's leadership has helped to keep the region connected while providing a great example of NA-YGN values. In addition, Erin orchestrated a timely and successful gathering of end-of-year metrics from all of the local chapters.

Chapter Achievement Awards

The Chapter Achievement Award recognizes the efforts of local NA-YGN chapters for services related to the growth of members through social, community service and professional growth activities. This award salutes chapters for overall excellence in supporting NA-YGN's mission.

The 2009 Chapter Achievement Award recipient is the Pittsburgh Chapter of NA-YGN.

In 2009, the Pittsburgh Chapter had successfully increased their membership while maintaining a connection with the chapter's other locations. This membership has been active on many fronts completing an impressive 5,614 hours of service.

Some of the Pittsburgh Chapter's major accomplishments include:

Presentations to 27 schools for the NA-YGN drawing contest which collected thousands of drawings. Two of these posters were selected as contest winners. Additionally, the Pittsburgh Chapter awarded prizes to six lucky students.

Pittsburgh Chapter also recognized the 30 year anniversary of the Three Mile Island Unit 2 accident by organizing an event to educate 700 Westinghouse employees on the event. This event included panelist that ranged from engineers to executives all of whom were directly involved in the fall out of the TMI accident.

These major events were done on top of raising money for charities, hosting events such as ice skating and providing opportunities for members to attend conferences.

Melanie Fici accepted on behalf of the Pittsburgh Chapter of NA-YGN.

Founder's Award

In 1999, Seven people set forth to create an organization that embodied the spirit of young professionals in the nuclear industry. Their goal was to provide an organization that united these young professionals who believe in nuclear science and technology and are working together throughout North America to share their passion.

This is the highest award given by NA-YGN. It is presented to a member of NA-YGN who exemplifies the efforts of the organization's Founders and it was presented to Michael Stuart, Dominion.

Since 2003, Michael Stuart has been involved in all aspects of proving that the nuclear industry is "alive and kicking". In the spirit of the NA-YGN Founders, Michael's actions have brought information about the nuclear industry, specifically nuclear power, to the masses. His leadership in the area of community outreach has continued on through those he has educated.

Michael has contributed to the industry in many ways. Here is a condensed list of his accomplishments:

In 2004, Michael helped to organize a pro-nuclear voice to attend various anti-nuclear meetings held by local activist group PACE. At that time, anti-nuclear meetings were publicly announced and publicly held. As a result of constant pro-nuclear presence at these meetings, it was difficult for PACE to add members to their organization. The meeting announcements eventually ceased and PACE was forced to hold their meetings privately.

In February 2005, Michael helped to design and print 'Nuclear Power YES! Because we care about the air!' stickers for pro-nuclear events. These stickers are used industry wide to show support at public meetings.

In March 2005, Michael helped to organize the first-ever pro-nuclear rally for the NRC Early Site Permit meeting for North Anna in Virginia. The pro-nuclear demonstrators greatly outnumbered anti-nukes. As a result of these efforts, news coverage of the event showed definitive favorability towards nuclear power.

Michael also organized pro-nuclear rallies in April 2005 with Exelon for the Clinton ESP meeting and in June 2005 with Entergy and ANS for the Grand Gulf ESP meeting. Michael spoke to radio and television at both events which resulted in news coverage showing overwhelming favorability towards nuclear power.

April 2005 - Elected Public Information Chair for NA-YGN.

In November 2005 – Michael participated in a debate at William and Mary University against the state's most vocal nuclear critics. When pressured on the issue, an anti-nuclear spokesperson actually admitted during the debate, "An accident like Chernobyl cannot happen in the United States". These actions resulted in nuclear power being presented favorably.

In December 2005, Michael was presented the "Correspondent of the Day" award by the Richmond Times Dispatch for article highlighting the benefits of nuclear energy.

In June 2006, Michael presented at IYNC on public education and outreach efforts in the United States. He highlighted success stories and how to effectively engage the media and the public.

Michael has conducted similar workshops with companies including Diablo Canyon, Areva and Constellation Energy and other organizations highlighted by his 2007 presentation at the World Nuclear Association Symposium in London.

In August 2006, Michael was at it again helping to organize the pro-nuclear rally at North Anna in support of new reactor build.

In the fall of 2007, Michael was invited by the BBC to participate in a live international debate on nuclear power.

In the fall of 2008, Michael was an invited speaker at PowerShift 2008. PowerShift 2008 was a workshop that focused on moving away from fossil fuels and towards clean energy sources. Although nuclear was not initially included in this workshop, this did not deter him from participating.

Today, Michael continues to present at local schools and teacher workshops on energy sources and the importance of nuclear power.

Michael Stuart not only has accomplished a lot of public information activities, but he's the leader who defined what the role of NA-YGN was going to be with regard to public information. He is the living embodiment of what NA-YGN strives for in public information.

Phil closed by saluting Michael this way, "When I think of Michael Stuart and what he has meant to NA-YGN, I think of a quote from Sir Isaac Newton. 'If I have seen a little further it is by standing on the shoulders of Giants.' Anyone who has written a blog, attended a public meeting, or spoken to a group on behalf of NA-YGN should thank Michael for providing the inspiration for these activities. After all, he is the Giant on which all NA-YGN members are standing on."

X. President's Closing Remarks

With a bang of the gavel, Elizabeth McAndrew-Benavides closed the Conference and ushered in the new 2010-11 officers and started her year as President.

She highlighted what is ahead of us for the year. The sustainability committee has been asked to work with the Board of Directors to develop a new mission statement that reflects the changes in the nuclear industry over the past 10 years. Once developed, the entire board will work on developing a 10 year plan to meet that vision.

In support of this vision, the Core has taken on several new initiatives this year.

First, NA-YGN understands the value we bring to the industry when it comes to professional development. We will continue to coordinate national and regional workshops, but we want to expand our webinar series. Bringing experts to each of our members via the internet has shown us we can touch up to 1,200 members at one time. These free webinars can be incorporated into local chapters meetings. Our goal is to have at least two webinars each quarter with a hope that some of you in this room will volunteer to present during these sessions.

Since we are in our twelfth year, many of our original NA-YGN members have graduated out of our organization. But graduated to where? Many of our sister societies and industry organizations have not seen an uptick in their membership or participation by younger members.

These communities of practice are where the industry solves problems together, benchmarks key activities and where innovation is created. If NA-YGN members aren't introduced to their correct community of practice while this generation's experts are still participating, how will we have successful knowledge transfer? NA-YGN wants to see the industry be successful, so we announced a new initiative yesterday that we are calling "**Plus One.**" Plus One symbolizes the concept that every young professional, after having completed their qualification training and practicing their leadership skills with NA-YGN, should find the right community of practice to join and actively participate. This could be anything from a standards committee at ANS to the communicators committee at INPO. NA-YGN will be working with industry organizations to help NA-YGN members identify and join their communities of practice.

NA-YGN also wants to help solidify its place as upcoming leaders in the global arena. The International Youth Nuclear Congress (IYNC) is the global organization for young professionals. Every other year, they host a conference to bring young professionals together and allow young professionals the opportunity to present technical content. NA-YGN is bidding to host the 2012 conference in Charlotte. Not only is the goal to bring 200 international young professionals to North America to highlight our expertise in nuclear science and technology, but also to bring the world's young professionals together to develop a vision of what our generation wants to accomplish. The bid proposed not only to host the international conference, but we want to use the two year planning period to develop a Global Nuclear Strategic Platform that lays out the goals of our generation for the next 30 years. By the end of the 2012 IYNC we want to have a ratified vision statement of what we want to accomplish as a world in the arena of nuclear science and technology. Something every young professional organization in the world can take home and use to help shape their own nation's nuclear energy strategic goals.

Achieving challenging goals like these isn't easy for a volunteer organization with limited resources. For the past 11 years, NA-YGN has solicited for contributions to sponsor our specific activities and raised operating funds from NA-YGN shirt sales on our website. On average, even though NA-YGN raises tens of thousands of dollars for sponsored events, our operating budget has been around \$300. The bottom line is that great ideas outside of the continental conference had to find a sponsor to implement them. Because most of our sponsors already provided generous support for the conference, it was a struggle to fund new activities. The new operating model for NA-YGN will function more like our industry. With the help of our executive advisory committee, the board of directors has developed a strategic plan for this upcoming year that includes a budget. In 2011, companies and organizations will be asked to sponsor NA-YGN as an organization instead of for specific events. NA-YGN will then use these sponsorship funds to execute the strategic plan for the year.

XI. Managing Change Within Your Chapter

Panelists:

- Rick Garcia, Licensing Engineer, Energy Northwest
- Duncan Robinson, Supervisor PWR Core Design, Constellation Energy Nuclear Group
- Mike Mudawar, Senior Engineer, Westinghouse Electric Company
- *Facilitator:* Craig Albers, Fluor

Summary:

This session focused on maintaining your NA-YGN chapter while change is happening, specifically turnover of past executives after elections have been held.

Rick Garcia assisted his chapter in successfully holding a core turnover retreat in 2010, which was a first of its kind for his chapter. Rick suggested that the challenge we face is to ensure our organizations

remain viable and vibrant through change so that transition goes smoothly; and to do this we must be proactive. Rick's fairly new chapter suffered from strained working relationships within the core, difficulty maintaining momentum and feelings of frustration and non appreciation amongst other members. The idea of a retreat was spread among members who helped define what the retreat would entail, gave support, and helped to develop the idea. Some of the major steps in development of the retreat are as follows:

- Engage Key Players – sell the idea of a retreat to your management and core members
- Define an Agenda – make the agenda specific and do a walkthrough
- Decide Location – weigh the pros and cons of conducting the retreat offsite so that attendees are not distracted by work, but note that people may not be able to attend far away locations
- Scheduling – the more people, the more difficult schedules are to coordinate, consider partial participation

Overall, the retreat was a big success. The offsite location chosen by the core made it easy for participants to focus on NA-YGN and a management provided charge number encouraged managers to allow participation by employees.

Mike Mudawar started off his presentation with an activity to demonstrate the importance of leaving good instruction. This symbolized the turnover of core members and leadership within an NA-YGN chapter. In order to minimize the negative effects of change, Mike suggested the following:

- Define term limits in chapter bylaws as well as position description with roles and responsibilities, an election process. Don't hesitate to review this every couple years.
- Overlap events and terms of executive positions and don't hesitate to have co-chairs for positions.
- Shared online databases and websites are helpful to share information across sites and provide continuity for reoccurring events.
- Awards, recognitions, feelings of privilege, participation of ideas and activates all help to maintain interest in the chapter.

Duncan spoke from his experience leading the NA-YGN Pittsburgh chapter, during which he reinforced many of the same points as Mike Mudawar, while providing some new points such as budget and people. Duncan said to look for creative solutions to a small budget and recognize that NA-YGN is a volunteer organization. Always find an interested volunteer a position and remember that a larger executive board spreads our responsibilities. Don't let your chapter get stuck in a rut, but always try new ideas and don't feel guilty about giving up ideas that don't work.

The three presenters all encouraged face to face communication when possible and providing a personal touch to your organization. It is important to get people involved and allow them to participate in whatever way they are able.

XII. Creating a Chapter/Fleet/Mixed-Membership NA-YGN Budget

Panelists:

- Rick Rodriguez, Program Chair, NA-YGN/ Progress Energy,
- Christine Csizmadia, Manager – Grassroots Outreach, NEI
- *Facilitator:* Adam Strange, Treasurer, NA-YGN

Summary:

Mixed-Fleet Budget

Rick Rodriguez is the treasurer for Progress Energy's mixed-fleet which is comprised of four different chapters (with four separate sets of officers) all managed under a common budget.

There are several different strategies for funding a mixed fleet:

- Dues – each member pays an annual membership fee
- Present a yearly budget to management outlining activities and expenses

Progress Energy's Mixed-Fleet has a common budget that is laid out before managers and spells out all potential expenses and activities throughout the year. It is managed by the treasurer and money is allocated to each chapter.

Single Chapter Budget

Adam Strange, NA-YGN treasurer and member of the Duke Energy Chapter spoke about Duke's experience with a single chapter budget. Their chapter has all the typical leadership positions and also one site rep for each location who organizes local activities (i.e. lunch and learns).

They create a yearly budget that is presented to management focusing on:

- Management expectations (make sure you meet them)
- Public Information

Each year they show their management the importance of their activities to justify the business incentive for continuing to fund their chapter.

Mixed-Membership Budget

Christine Csizmadia spoke about the D.C. chapter which is made up of members from different companies. There is no specific yearly budget for this group and they fundraise as needed through events. Specifically, this year they raised money through the Fuel 4 Life race and for a professional development fair.

XIII. Conference Attendance Justification/Reporting

Panelists:

- Eric Danner, Structural Engineer, Areva Inc.
- Mimi Limbach Partner, Potomac Communications Group Inc.
- Morgan Davis, Public Information Chair NA-YGN
- *Facilitator:* Jennifer Varnedoe, Professional Development Chair NA-YGN

Summary:

Jennifer Varnedoe opened the session on Conference Attendance Justification/Reporting by explaining that the session was to provide extra skills for our tool box including how to prepare trip reports and justify the reason and most importantly, the money, involved with sending yourself, to not only this conference, but any professional development conference.

The session provided three steps to the successful justification and conference reporting back to your respective organization. Eric Danner provided an outline for the trip report, Mimi Limbach provided the thought process and mindset for critically writing into the outline of a trip report and lastly, Morgan Davis provided the tools to quickly and effectively pare your experiences into 'Elevator Speeches' for those who are interested in your personal attendance and learning experiences.

Eric Danner presented several good points to the attendees on how to create a trip report. One of the better tips Eric stressed was including pictures in the trip report. This allows readers to see attendees participating in the conference and provides visual aid. Additionally, Eric stressed the importance on keeping the reports short for management, but to provide more details when you share with fellow members of your local NA-YGN organization. Eric provided the outline Areva uses for trip reports:

- Intro/Summary
 - Theme
 - Attending Members
- General Schedule
- Main Events
 - Knowledge gained
 - Relationship to your position
- Networking Info
- How can our chapter / company improve the way we do things?

Mimi Limbach explained the basic mindset you need to write a trip report- that of a journalist. You present the most important information up front then move to ancillary details of the conference. The bottom line is justifying to your manager why it is a good investment to send you. If the report is over one page, include an executive summary. Mimi provided the details on paragraph form for journalistic writing for your trip report.

- The first paragraph should have who, what, when, where, and why.
- The second paragraph should explain what you expect to gain from attendance.
- The third paragraph should have other reasons it is a good investment.
- The fourth paragraph should be what you will deliver to your management on your return.

Morgan Davis spoke on the use of an elevator speech to convey your conference learning and experiences to those not reading the trip report. She emphasized that elevator speeches should be 30-60 seconds and have a maximum of 3 key points. These points should include what you've learned and how that fits in with any future personal or group goals. If it applies, you can explain to your listener how they can become involved. Morgan provided a handout that had the following bullet points on successful elevator speeches.

- **Don't** ramble. If you memorize your three points you are less likely to ramble.
- **Do** tailor your message to your audience. Avoid using industry jargon or acronyms that your listener may not comprehend.
- **Don't** forget to include your competitive advantage (ex. How you can perform better than anyone else, why NA-YGN is different than other organizations). Use *specific* examples.

XIV. Reach Out and Connect With Other Chapters

Presenters:

- Kristin Zaitz, US Affairs Chair, NA-YGN
- Muhammad Fahmy, Bechtel
- Kathryn Hallman, Coordinator II, INPO
- *Facilitator*: Erin West, Incoming Professional Development Chair, NA-YGN

Summary

Kristin Zaitz began this session by discussing the topic of "How to Connect...for 'Geographically Challenged' Chapters." After a summary of NA-YGN chapters around North America and getting an approximate headcount of what chapters were represented in the room, Kristin mentioned examples of regional activities chapters could pursue such as socials, mini-conferences, and PI support. This led

into the “1-2-3 of Making it Happen” also known as the three M’s. The first of these is **Motivation** to connect with other chapters. Chapters need to ask themselves what they want to accomplish by getting together and more importantly what does the chapter sponsor want to accomplish. This should be a key part of the decision making. The second is **Money** which is, of course, the funding to hold a conference and to get attendees. A business case should be prepared and presented in an effort to receive funding. The final M is **Manpower**, which deals with the fact that NA-YGN is a volunteer organization and finding stakeholders from each chapter is key. There should be a planning/implementation committee for any planned event, with the host site usually taking the reins in that effort.

Muhammad Fahmy discussed “The Challenges and Your Role” for connecting with other chapters. The first of these challenges is overcoming the perceived NA-YGN Hierarchy. He explained that it is a myth that NA-YGN is a top down organization limiting the empowerment of the NA-YGN members. It should be stressed that anyone in NA-YGN has the power to plan events, not just the Core or Regional Leads. This empowerment should lead members to reach out to others and communicate your interest. The second hurdle Muhammad discussed deals with “Contacts and Interest.” Contacts can be local, regional, or even national/international members and these relationships should be established at events such as conferences. It is important to communicate your interest as well as building these relationships to make it easier to plan multi-chapter events. To emphasize the importance of establishing relationships, a networking activity involving all session attendees was performed where each attendee was allowed 3 or 4 minutes to talk with 5 people and exchange information.

The final speaker of the session was Kathryn Hallman who discussed the additional hurdles. “Ideas, Excitement and Planning” emphasized that there should be a way to keep excitement going after the conference and new contacts are made. Keeping in touch with contacts is important in fostering these new relationships and building on the excitement that comes with a conference. In the planning stage, it is important to pull in all resources at your disposal, such as those graduated out of NA-YGN who could help with ideas and ways to foster excitement. “Corporate Support” stresses effective communication with management to build support which will lead to the required funding. Lastly, “Successful Event Execution” to focus on attendance, representation from different chapters, and using lessons learned to improve on future events. Kathryn summed up the session as a whole by mentioning relationships and communication as the two main themes when trying to reach out and connect with other chapters and that as members we should use the resources we have to build relationships and create excitement for NA-YGN.

XV. Steer Your Career by Welcoming Change Breakout Sessions- Plant I

Panelists:

- Ryan Holland, Sr Engineer, Progress Energy
- Rob Szollosy, Operations Supervisor at Farley, Southern Nuclear
- *Facilitator:* Alyson Fuqua, Southern Nuclear

XVI. Steer Your Career by Welcoming Change Breakout Sessions- Plant II

Panelists:

- Susan Landahl, Sr Vice President, Midwest Operations, Exelon Corporation
- Maria Korsnick, Chief Operating Officer, Constellation Energy Nuclear Group
- Micah Van Bogelen, Talent Acquisition Manager, PG&E
- *Facilitator:* Bill Buchanan, Reactor Engineer, Constellation Energy Nuclear Group

Summary:

The nuclear industry has a wealth of experience and knowledge at the disposal our generation. Peer presentations offer the opportunity to learn from those who have been in your position and learned to excel to the point where they can be considered an industry leader. This progression does not happen overnight, but takes many years, and often, many career changes to implement. The Plant/Utility Professional II session featured a collection of three speakers with three different approaches to the industry. Each spoke of their career and how they got to where they are today.

Susan Landahl started off the group by encouraging the attendees to welcoming change and work outside your comfort zone. Susan made a number of lateral moves throughout her career, often working in areas of the company that were new to her. By expanding her experience, she was able to expand her marketability in the company. Her one piece of advice was to be great at what you are doing today while not getting too far ahead of yourself. Susan credited a lot of her success to her experience in the Operations department, which gave her an opportunity to learn the inner workings of the plant and become more comfortable in the nuclear industry. Through integrity, commitment, passion and optimism, comes leadership to drive the nuclear industry into the new era of energy production.

Maria Korsnick followed with a similar experience in Operations. Maria, like Susan, held a variety of roles within Constellation Energy, ranging from Operator to site Vice President of Ginna Nuclear. Maria expressed the idea that you should not let your failures get you down, rather to reflect on them and keep pushing until you get where you want to be. She recalled her initial denial from Senior Reactor Operator class. Rather than dwell on it, she continued to work towards being accepted for the next class of senior operators. Though her career was far from smooth, opportunities presented themselves. Her advice is to get involved, even if it means diving into unknown circumstances. Maria sees much opportunity for our generation of professionals through embracing fleet perspectives, the building of new nuclear plants, the upcoming second license renewal, and the ever-present maintenance of public confidence.

The final speaker was Micah Van Bogelen. Micah currently works as the Talent Acquisition Manager for PG&E after a long career that includes a variety of positions in a variety of fields. Micah encouraged the crowd to learn through life, not just through work. Micah's career took many turns as he followed his heart and ventured outside his comfort zone. He did so until he found a job that fit him. Through taking ownership for his career and using relationships and his reputation as a hard worker, Micah climbed his way through a number of careers. Micah feels there are many opportunities in the nuclear industry if you are motivated in seeking them out. He urged us to participate on and lead matrixed project teams, seek out leadership roles, find a mentor, and know that it is never too late to go back to school.

XVII. Steer Your Career by Welcoming Change Breakout Sessions- Vendor

Panelists:

- Joe Belechak, Senior Vice President of Nuclear Fuel for Westinghouse Electric Company
- Brian Reilly, Principal Vice President and Manager of Operation for Bechtel Power Corporation
- Kevin Walsh, Senior Vice President of Nuclear Fuel Cycle for GE Hitachi Nuclear Energy
- *Facilitator:* Melanie Fici, Westinghouse

Summary:

Throughout his presentation, Joe Belechak emphasized the importance that "knowing yourself" is an indispensable key to deciding what you want to do throughout your career. Know whether you want to lead or follow, serve or be served, have fame or fortune, security or adventure; all of which are personality traits that dictate the type of career each individual will choose. Mr. Belechek pointed out that there is no silver bullet throughout a career, rather career change is a fluid process with no specific time or reason to make a change and for many, it will take time to find your passion. To put that in

perspective, Mr. Belechek states that, “as an engineer you must try not to ‘engineer’ your career, just go with the flow.” Mr. Belechek further explained that any change in your career should be given thought; allow time to make a decision. He gave two important tips for when an individual is considering a career change: (1) if the change is something that makes you change who you are, don’t do it; and (2) don’t look back once you have made a change. In closing Mr. Belechek reiterated that you must always stay true to yourself, be active and make your own way, find your “fit” by trusting your gut, and lastly, enjoy the journey!

“Decisions will shape your life, all the way through your career.” Brian Reilly of Bechtel began by explaining that although moving to a new project under the same position is a change, the best example of change is making a move that is career altering or life altering. As a young professional, Mr. Reilly states that you should learn that change doesn’t have to be dictated by others. You should not hesitate to advocate for yourself and learning how to manage yourself. He explains that “a dead body will flow with the current” and that you have to be the key played in your career. Career change should be welcomed: It allows you to acquire new skill sets, such as managerial skills, that will help you grow and change. Moreover, Mr. Reilly believes you can welcome change by “increasing circles” of contacts and friends, and by getting out and doing something outside of your comfort zone. He shared a personal experience where he was asked by senior management to take a position on a fossil job despite his 20 year nuclear experience. Reflecting on his decision to take the position and step outside of his comfort zone, Mr. Reilly is very glad with his decision as it afforded him the opportunity to learn a different business line. His personal experience also exemplified his next point: You have to take advantage of opportunities as it is hard to know exactly what you want to do in 5 years. Mr. Reilly’s final advice to the audience was that when you take a new position; always ask yourself and those that want you to change, why and what will happen after.

Kevin Walsh is an advocate of whatever changes you make throughout your career, make sure it is what interests you. And synonymously, Mr. Walsh states, “whatever it is you do, do it with a passion!” He continued by saying that an important trait to develop is the ability to set boundaries. A successful career will be filled with challenges and opportunities to step out of your comfort zone, but to make it last a lifetime, you must set boundaries with work life and personal life; you must be flexible, but balance it with your family. As Mr. Walsh explains, taking a risk and doing something that others wouldn’t do can prove to be beneficial, as long as it is of interest and you like it. Mr. Walsh left the audience with a few points to always consider as they go through their career: (1) have a desire to do a good job and have a positive attitude; (2) take risks; (3) always be willing to follow direction; (4) understand the importance of leadership; (5) humility is very important. It is a whole team that will be successful, not just you.

XVIII. Steer Your Career by Welcoming Change Breakout Sessions- Govt/ Industry

Panelists:

- John Parmentola, Senior Vice President for Energy and Electromagnetic Systems at General Atomics
- T. James Symons, Senior Physicist at Lawrence Berkeley National Laboratory
- Pete Lyons, Principal Deputy Assistant Secretary, Office of Nuclear Energy, Science, and Technology, U.S. Department of Energy.
- *Facilitator:* Virginia Cleary, Sandia National Labs
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Summary:

Dr. Parmentola discussed his career path and hunger for knowledge. He grew up in the Bronx and never dreamed of being a Nuclear Physicist. After completing high school, he worked in a department

store for a year before enrolling in a trade school for graphic arts. He quickly discovered he did not belong at a trade school and enrolled in the Polytechnic Institute of Brooklyn where he studied mechanical engineering. He took a physical chemistry course and decided to switch his major to Chemistry. During his first organic chemistry class he concluded chemistry was not for him. He took a physics course and became enthralled with physics – so much so that he changed his major to physics and wrote an undergraduate thesis. From here he went to MIT and is now a theoretical physicist. Dr. Parmentola was primarily motivated throughout his career by two things: curiosity and boredom. The more he understood things, the more bored he would become and move on to something else. He has been involved with the Department of Defense, Human Rights issues in the Scientific Community, and the Department of Energy. He now works for General Atomics.

Dr. Symons grew up in England and obtained his Bachelor of Arts and doctorate degrees from Oxford University. He moved to Berkeley in 1977 and has been employed by Lawrence Berkeley National Lab (LBNL) ever since. LBNL is a major DOE lab operated by the University of California. The lab is home to 11 Nobel laureates and 13 National Academy of Science Members. Its mission is to support the DOE program in nuclear physics research. The lab is a basic research lab and does little applied research projects. The lab currently operates an 88 inch cyclotron. The process of researching and developing experimental instrumentation is time-consuming and fund-limited. Funding has recently increased due to national security concerns and the global energy conundrum. Throughout his career, Dr. Symons has experienced several changes: Country, Family Life, and Career Goals. Dr. Symons recommends that NA-YGN members be flexible about career choices and have a sense of urgency.

Dr. Lyons served as a staff member for many years to a Senator on Capitol Hill. He is currently the Principal Deputy Assistant Secretary of the Office of Nuclear Energy, Science, and Technology. He has published more than 100 technical papers and holds three patents. Prior to working on Capitol Hill, Dr. Lyons worked at Los Alamos for more than 30 years. He quickly learned on Capitol Hill that technical knowledge is not as valuable as the ability to communicate. He was fortunate to work for a senior senator who was respected by both parties. As he worked with other staff members, he was amazed at the lack of technical training. Many other staff members sought his advice and technical expertise for a wide variety of issues. The best way to get involved on Capitol Hill is by completing a summer internship. These programs are available through organizations such as ANS.

XIX. Fuel the Fire: Leading and Motivating Your Team

Panelists:

- Van Ton-Quinlivan, Director – Workforce Strategy, PG&E
- Susan Landahl, Sr Vice President Midwest Operations, Exelon
- David Williams, Sr Director, Sales & Marketing, Fluor Power Nuclear
- *Facilitator:* Will Pietkiewicz, Fluor

Summary:

Van focused on the Power Pathway Program that she started in 2008 and became an industry best practice. She described what motivation tactics she used to get her team behind one cause. These tactics included using a quote from the book, “The Three Laws of Performance.” The quote, “People’s performance is a function of how things occur to them,” led her to get an extraordinary effort out of normal people. She stated you must find out what motivates and interests your team and relate these interests to the job at hand.

Susan began her presentation, “Creating an Inclusive Environment to Encourage Teamwork and Relationships” by telling the history of the LaSalle Nuclear Facility that she helped improve. She

described how she took an average-level plant and made it into one of the more efficient plants in the nation. She stressed that the first step in accomplishing a goal, such as the first sub-20 day outage at the LaSalle plant, is to first believe it can be accomplished. She emphasized the point “you gotta believe” to her employees by placing that statement on posters, signs, and even M&M’s within the plant.

David started by describing the three leadership styles: autocratic, democratic blend, and free reign. He said that a combination of the three is how a true leader leads. He referred to how Paul Azinger changed the way the Ryder Cup teams were picked and with great success, a victory against the Europeans.

Q&A Highlights:

Q: What are the traits of a good leader?

A: Van-You have to have a high energy level and good judgment. You must give up who you are to be what you want to be

Susan- You must care about your workers. You can’t be “all about me.”

Q: Ways to lead as a young person?

A: Dave- Lead by example, then delegate work. This leads to others trusting you.

Susan- Respect the older ones, Van-Bridge the personal relationships

Q: What are some techniques to use to lead those you used to work alongside with?

A: Susan-The biggest risk is with your closest friends. To deal with the risk, you must be fair to all employees and not show favoritism

Dave-You have to reach out to those people and talk about the new situation. Make it clear that you still want them as your friends

XX. Cross-Generational Connections

Panelists:

- Angie Howard, President, Howard-Johnson Associates
- Rick Rodriguez, Nuclear Fuel Supply Engineer, Progress Energy
- John McGaha, Sr Vice President, Entergy Nuclear
- *Facilitator:* Christine John, Canadian Affairs Chair, NA-YGN.

Summary:

The topics discussed were concerning the four different generations in today’s workplace; this is the most ever at one time. With this diverse work force everyone is part of a mixed generational group. Everyone must also work together to help bridge the gaps between the generations.

John McGaha opened his discussion by talking about “fighting the good fight” for the young generation. As a board member of the American Nuclear Society, he is working to breathe new life into the organization by integrating the ANS with the young generation and the rest of the industry. He mentioned that the “future of our industry is the young generation,” and that ANS has evolved from its bureaucratic and institutionalized organization to better appeal to the young generation. By engaging the young generation, the members can take advantage of the tools and benefits provided by the ANS.

Rick Rodriguez also discussed cross generational relationships. The three focus areas that he mentioned were Recruitment, Retention, and Integration. Rick also discussed how the young generation is seen by seasoned employees as “Ninjas” and we receive preferential treatment. They

often resent the young generation and mistrust the management. However, Rick did mention a few ways and opportunities to close the gaps between the generations such as presenting recognition awards to the experienced peers and sponsors, hosting events to include the entire site, and negotiating company discounts. He encouraged the young generation to spend time with those from the older generations, invite them to meetings and events, and to build relationships with them. Other ideas included publishing articles, sponsoring plant tours for new employees, and assisting in the hiring in process.

Angie Howard discussed the differences in generations. The Traditionalist (Retiring) generation was hard working and the people were always looking for a better life than what their parents could give. The Baby Boomer generation was the most educated and was always striving for the good life. This generation was hard working and the people were used to working through their own issues and obstacles. Generation X lived through the 90's recession and the people found no meaning in their work. They love to travel and find joy in extreme sports. The fourth, Generation Y, are people who often search for meaning in their work. These people have been coached all of their lives, always go in groups, work well in teams, and can easily give and receive feedback. The people from this generation have advanced technical skills and know the latest technology. With this advantage, those from this generation can reverse mentor and teach the older generations new things. The differences between the generations come from how the people from each generation were raised.

In summary, there is value in all generations. Young professionals should learn to appreciate these differences. In doing so, the young generation should get involved, work together, listen, be eager, and reach out to the older generations. Understanding and asking questions can lead to "constructive manipulation" and cultivating relationships. This industry is demanding and time consuming; we, as young professionals, need to find a balance and learn to look and all opportunities that may come our way. We all have to be successful as a whole in order to make the industry successful. This is done by building relationships, professionalism, integrity, appreciation and understanding of others.

XXI. World Fuel Cycle Strategies Activity

During the 2010 National NA-YGN Conference, nearly 150 participants engaged in an activity called the World Fuels Cycle Dynamic Learning Activity. The activity was not a lecture or seminar, but rather an interactive demonstration aimed at illustrating the process and international relations that affect the infrastructure development of the nuclear fuel cycle. By the end of the activity participants walked away with a sense of the complex economic and political factors that affect nuclear fuel cycle development.

As participants entered the room, they were directed to sit at one of 14 tables and instructed not to talk or sit at a table with someone they knew. The tables had placards with different colors to denote countries, such as Blue, Red, White, and Green. Once all participants were seated, the facilitators introduced the activity and gave a briefing explaining the basic rules of the activity. Each table, or country, was given a packet of information describing its resources that could be used to develop nuclear energy and the number of plants that needed to support their country's energy demand. Each country had different resources and amounts of capital, as well as different energy requirements to achieve a complete nuclear fuel cycle.

Aside from money, the teams had to balance seven unique factors in order to achieve a single Nuclear Fuel Cycle: Raw Uranium Ore, Ore Conversion, Uranium Enrichment, Fuel Fabrication, Plant Construction, Plant Operations, and End-Of-Cycle Back End Capabilities. No country had all the necessary components to complete an entire nuclear fuel cycle, so the teams had to purchase, trade, and even establish alliances with neighboring countries to procure the necessary resources to meet their energy needs. Teams were given guidance on their political relations existing with each respective

country prior to the simulation. Political relations were described as friendly, neutral, or poor. These political factors added another level of complexity to the simulation to provide as much real-world feel. This political component added an additional level of complexity to the simulation that made the simulation a realistic representation of global fuel cycle dynamics.

At the end of the activity, participants discussed with facilitators some of the issues the teams encountered while trying to develop a fuel cycle for their countries. This served to emphasize the real-world factors that affect the coordination, negotiation, and regulation countries face when trying to meet their energy needs by developing nuclear power. At the end of the exercise, participants came away with a better knowledge of how the nuclear fuel cycle operates.

XXII. Regional Meetings

Members from each Region met separately in order to have time to discuss activities going on in their region and if necessary prepare for a Regional Event.



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