

# PENN STATE NUCLEAR ENGINEERING SOCIETY

## MEETING MINUTES – OCTOBER 1, 2015 – PSNES Teleconference Meeting 11:30 am to 1:00 pm

### Participants:

#### PSNES Officers & Directors

James Stover – Interim President / President Elect  
Pat Loftus – Interim Vice President and proxy for Tom Richard, Secretary / Treasurer and Hilary Neal,  
At-Large Director  
Arthur Motta – NucE Program Chair (with vote)  
Candace Davison – Representative and proxy for Kenan Unlu, RSEC Director and Current Nuclear  
Engineering Faculty Representative (with vote for each)  
John Atchison – At-Large Director  
Eric Beaumont - At-Large Director  
Duane Karchner – At-Large Director  
Joe Sholtis – At-Large Director  
Jim Tusar – At-Large Director  
Douglas Wood – At-Large Director

#### Others

Matt Wargon – PSNES Member

General note: Action items have been **bold highlighted** to facilitate identification and followup.

### OPENING

James Stover called the meeting to order at 11:30 am and thanked everyone for attending. Doug Wood took roll call and confirmed that a quorum was present to conduct business. Due to Arthur Motta's availability during only the first 30 minutes, his reports and discussion items were moved forward in the meeting, although they appear in the order of the agenda in the meeting notes.

### OLD BUSINESS

#### Approval of Minutes

The minutes of the business meeting of July 29, 2015 were approved without corrections for inclusion in the PSNES records (Motion-Wood; 2<sup>nd</sup>-Loftus). Approved minutes can be accessed on the PSNES Website (<http://www.mne.psu.edu/PSNES/Minutes.html>).

#### Financial Report

Dr. Motta reported the PSNES account balances as follows:

<u>PSNES Funds</u>	<u>July 2015 balance</u>
General	\$2740.26 *
Award	not reported

\* Excludes \$99.18 expenditure for Reactor 60th Anniversary Celebration

#### PSNES Presentation - Breazeale Nuclear Reactor 60th Anniversary Celebration

Doug Wood reported that PSNES made a proclamation as part of the Breazeale Nuclear Reactor 60<sup>th</sup> Anniversary Program in the Thomas Building Auditorium on the afternoon of August 18, 2015. A framed copy of the proclamation, in the form of a resolution adopted by the PSNES Board of Directors

was presented to Dr. Kenan Unlu, Director of the Radiation Science and Engineering Center by Douglas Wood on behalf of the PSNES. A report that includes a transcript of the PSNES remarks, the full text of the proclamation (which was also documented in the July 29, 2015 minutes), a photo of the presentation, and the August 10, 2015 Board motion and approval via e-mail is included as Addendum A to these minutes.

### **NucE Student Orientation Update, PSNES Mentoring Program, and Fall Career Fair**

Duane Karchner represented PSNES in supporting the Nuclear Engineering Program at an on-campus orientation for Nuclear Engineering students. The orientation was held on Sunday, August 23, 2015, the day before the beginning of Fall Term classes. After Dr. Motta provided his expectations to the students, Duane Karchner introduced them to PSNES and the mentoring program. In addition, one of the NucE students (Ramon Cruz) that had experience with PSNES mentoring shared his experiences with the other students.

The following key points regarding the PSNES mentoring program were then discussed during the October 1 meeting:

- Duane had followup mentoring inquiries from two additional students resulting from his participation in the orientation. These were facilitated by Arthur and the PSNES mentor resumes on the Angel website, which is available to staff and students.
- Several PSNES mentors (Karchner, Wood, Sholtis, Tusar, Beaumont) have been contacted by Ramon Cruz (the grad student that spoke at the orientation).
- Strengthening PSNES interaction with the PSU Student ANS chapter seems to be a good way to leverage mentoring opportunities. **Matt Wargon and Jim Tusar offered to talk to the student ANS chair (and possibly faculty sponsor) about coordinating our activities to maximize interaction between alumni and students, including mentoring opportunities.** It was observed that the student ANS plans week-to-week and that perhaps the best way of interacting is to let them know when an alumnus will be on campus and let them plan their activities around those visits.
- The senior seminar series is also an opportunity for PSNES members to interact with students and cultivate mentoring opportunities.
- RSEC's Candace Davison (Advisor to PSU Student Women In Nuclear) reported that PSU Women in Nuclear organization currently has 20 member and is now more active. She indicated that PSU WIN might also benefit from some contact with PSNES. **Jim Tusar and Pat Loftus offered to contact Candace to follow up on WIN.**
- Candace Davison mentioned that posting to the PSNES LinkedIn group may be a convenient way to encourage students (and perhaps alums, although not a priority) to take advantage of the PSNES mentors. She mentioned LinkedIn was not constrained with privacy issues like some of the university resources. After the recent ANS Student Conference, student LinkedIn membership and use has increased.

Both Duane Karchner and Jim Tusar had the opportunity to participate in the Fall Career Fair as nuclear employer recruiters two weeks ago. Both observed that the quality of the NucE students, their internship experience, and their resumes were of high quality, and they continue to be of interest to recruiters. J. Tusar noted that Exelon has 7 nuclear related internships and about half are filled with PSU NucE students.

### **Beecher-Loftus Service & Leadership in Nuclear Engineering Award Committee Report**

Jim Tusar provided a summary of the endowed award, reported on the present makeup of the committee, and the award milestones for 2015.

The Endowment is in place for the award in perpetuity. No funds are required from the PSNES awards fund. The financial disbursement from PSU goes directly to the Student winner (transferred into the student's account). The award amount is approximately \$1K per year.

The committee consists of five (5) members including Jim Tusar (Chair), Pat Loftus, John Atchison, Matt Wargon, and a PSU MNE member (TBD). For now, Dr. Motta is acting as the MNE member. The reason for an odd number of committee members is to prevent a tie in the selection process. PSNES member Matt Wargon was recently added to the committee after expressing interest in supporting this committee.

The following 2015 timeline and responsibilities have been jointly developed by the Award Committee and Arthur Motta of the Nuclear Engineering Program:

- Call for nominations, Sept 25 (Arthur Motta) – already completed
- Return of nomination forms, Oct 23 (Student Candidates)
- Review of nomination forms, Oct 26-Nov 4 (Award Committee)
- Final award selection, Nov 5 (Award Committee)
- Award recipient notification, Nov 5 or Nov 6 (Arthur Motta)

### **Nuclear Engineering Student Networking & Mentor Program Feedback**

Student ANS President Jeremy Barnhart was not in attendance, so there was no direct report from them. See separate discussions regarding suggestions as to how PSNES can increase collaboration with the student ANS in the areas of mentoring, social media, the Joint NucE Program Reception at the ANS Winter Meeting, and a possible PSU NucE shirt sale. **Matt Wargon offered to talk to Jeremy Barnhart about him and/or Catherine Perego being a PSNES liaison with the student ANS Chapter.** (Matt and Catherine were both recent past student ANS Presidents and were co-chairs of the Penn State ANS Student Conference).

## **NEW BUSINESS**

### **Department & Program Update**

Arthur Motta provided an update on the status of the Program, including the following highlights:

- The Breazeale Nuclear Reactor 60<sup>th</sup> Anniversary celebration on August 18 was very successful. Susan Eisenhower, President Eisenhower's granddaughter was the keynote speaker at the afternoon program and Dr. Forrest Remick, Professor Emeritus from the Nuclear Engineering Program, was the keynote speaker at the dinner. Visit the PSNES Linked-In Group or the PSU Mechanical and Nuclear Engineering Facebook page for additional details.
- There have been some recent faculty changes. Professor Ivanov left this fall to accept the position as NC State Nuclear Engineering Program Chair. A search for his replacement is underway. Michael Tonks (materials science) and Marek Flaska (radiation detection) are recent additions to the Nuclear Engineering faculty.
- The NucE program is heavily enrolled and the classes are large. Penn State continues to have the largest undergraduate Nuclear Engineering program in the US, graduating 85 last year.
- The RSEC purchased a reactor simulator, and Jim Turso (controls background) has joined the RSEC staff (PSU NucE PhD).
- The NucE Program and PSNES Awards Committee have developed a 2015 timeline for the Beecher-Loftus Service & Leadership Award, with the recipient notification in early November (see separate report on this subject). The request for nominations is already out. The award was fully endowed in time for last year's award to be paid from the endowment fund (not PSNES or Program).
- Dr. Motta and Duane Karchner of PSNES spoke to the NucE students during the August 23 orientation the day before Fall term classes began.
- The Nuclear Engineering Program is looking forward to the new MNE student lounge in the Reber Building, including the PSNES Time Capsule. The time capsule has been purchased, some content is in the capsule already, but additional items or suggestions are welcome. Due to the uncertainty in the student lounge construction timeline and the present lack of space to devote to the time capsule or its contents, the time capsule is not an immediate priority to the Program. [see separate discussion in PSNES Priorities and Focus Areas regarding other time possible capsule activities]

- As for his expectations of and need for PSNES support to the Nuclear Engineering Program, Arthur would like PSNES to enhance student/alumni contact and relationships in any way possible. Mentoring is an obvious area.

### **RSEC Update & Suggested PSNES Priorities**

Candace Davison provided this report for Kenan Unlu and represented the RSEC in the ensuing discussion of PSNES priorities and expectations. Highlights are as follows:

- The RSEC greatly appreciated the Proclamation presented to the RSEC at the Breazeale Nuclear Reactor 60<sup>th</sup> Anniversary celebration during the afternoon program on August 18, 2015. Approximately 200 people attended public tours of the RSEC that day.
- Jim Turso has returned to the RSEC as a staff member and recently taught the NucE 451 lab class.
- The east portion of the facility is presently undergoing Phase 2 of its planned renovations.
- The Penn State Women in Nuclear (WIN) chapter is active and has about 20 members.
- Candace reiterated Dr. Motta's objective to enhance the contact between students using the facility and PSNES (Nuclear Engineering alumni).

### **Student ANS Priorities & Suggested PSNES Priorities**

Jeremy Barnhart, ANS Student President, was not in attendance, so there was no direct discussion of their needs and expectations. **Matt Wargon agreed to contact Jeremy to see if he could offer any specific priorities and focus areas from PSNES.**

### **PSEAS & Suggested PSNES Support Needs**

James Stover reported that he and Jim Stavely are participating in PSEAS periodic telephone calls, but he has nothing to report to PSNES at this time.

### **MNE Website/Social Media Initiatives & PSNES Social Media Report**

Pat Loftus briefly discussed certain capabilities and logistics associated with the MNE/PSNES website, the existing MNE Facebook page, the PSU ANS Student Chapter Listserve, and the LinkedIn PSNES Private Group. Addendum B to these minutes provides the details of that discussion as well as reference materials (website links, etc.). Highlights of that discussion are as follows:

- Shea (Winton) Bracken is the MNE Communications Strategist. She is redesigning the MNE website as part of a larger College of Engineering website redesign, and through Pat, has asked PSNES for a volunteer to work with her to ensure that the information on the PSNES Alumni page is up-to-date. **Joe Sholtis and Pat Loftus volunteered for that support role.**
- Shea also controls an MNE Facebook page, and has offered to share MNE Facebook content of interest to PSNES via posts to the PSNES Linked-In Groupe.
- In addition to being outside the control of Penn State, the PSNES LinkedIn Group is a private group, meaning that your online request to join must be approved by the "Group Manager" who is Tom Richard, one of our Directors. Hillary Neal is the "Group Owner" that has done an excellent job of assisting our members get PSNES content posted to the PSNES LinkedIn group.

The Website/Social Media report was followed by a discussion of the following priorities and associated volunteer opportunities

- Grow the LinkedIn group size/reach. Each PSNES member in the group is requested to send a personal e-mail to encourage fellow NucE Alumni/Friends of the Program in their network to join the group. Currently the group has 109 members. There are nearly 430 PSNES members per the MNE webmaster as of July 2015.
- It was recognized that LinkedIn (and other social media for that matter) have a built-in capability to keep track of their members as their jobs and contact information change. There is a huge potential benefit to having students join LinkedIn while still in school since they can realize immediate benefits as well as benefits after graduating. **The Social Media Committee represented by Hilary Neal (Pat Loftus proxy) agreed to work with Matt Wargon to contact the student ANS president to see if he was willing to promote PSNES LinkedIn membership among the NucE students.**

- PSNES group members to provide new content or posts with NucE news including upcoming events, and links to new PSNES and NucE Alumni communications.
- Volunteers are needed to participate on the PSNES Social Media Team.
- PSNES group members to provide ideas via e-mail or post in linked-in group discussion: What can PSNES do to help, support and advance connections to the MNE Department/NucE Program, RSEC, PSU Student ANS, and NucE Alumni via social media?

### **2015-16 PRIORITIES AND KEY FOCUS AREAS**

The following activities and priorities were discussed as candidates for 2015-16 PSNES priorities and Key Focus Areas:

- PSNES – What can PSNES do to help, support, and advance the PSU NucE Program, RSEC, and Student ANS?
  - Enhance student/alumni contact and relationships in any ways possible. Mentoring is an obvious area. This applies to both the Program and RSEC.
  - For the student ANS chapter, **Matt Wargon offered to talk to Jeremy Barnhart about him and/or Catherine Perego being a PSNES liaison with the student ANS Chapter.**
  - **For the PSU Student WIN, Jim Tusar and Pat Loftus will work with Candace Davison to identify needs and next steps.**
- PSNES membership growth & outreach
  - Expand membership in the PSNES LinkedIn group, both alumni and students
  - Turn ANS Winter Meeting Joint Nuclear Engineering Reception into a student/alumni networking event and membership drive by passing out cards showing how to join PSNES and the PSNES LinkedIn group. **Pat Loftus and Doug Wood offered to set up a separate call of Pat, Doug, Matt Wargon, & Catherine Perego to discuss what could be done for this event.**
  - Submit a short call for membership to the hard copy Penn State Engineering magazine that is sent out to alumni. **James Stover agreed to write and submit this article.**
- Student Mentoring/Networking
  - See ANS Winter Meeting Reception item above.
- PSNES 2016 Election - Fall 2015 Call for Nominations (All)
  - **Submit validated or self-nominations for open Officer (all) and Director (3) positions by November 6, 2015 to the Nominating Committee** (James Stover & Pat Loftus). Nominations must be accompanied by a candidate bio. **Doug Wood agreed to send the meeting distribution the bios that were used for the 2013 election.**
- NucE Time Capsule time table (content completion, dedication preparation)
  - The time capsule needs a decal to identify what it is. **Matt Wargon agreed to approach the ANS student chapter to see if they might take responsibility for that, working with Joe Sholtis.**
  - PSNES to continue to follow content and integration into the new MNE student lounge design, commensurate with renovation timeline.
- PSU NucE Shirt Sale
  - An alumnus approached Doug Wood after the 60<sup>th</sup> Anniversary Proclamation presentation to see if PSNES or Student ANS was interested in again offering PSU Nuclear Engineering oxford and polo shirts for sale to students, alumni, and staff. From PSNES perspective, it makes the most sense for the Student ANS to take this on as a fundraiser and extend the offer to PSNES members.
  - **Matt Wargon agreed to approach the Student ANS chapter to stimulate interest in doing this.**

### **ROUNDTABLE**

- Joe Sholtis – The Pluto – New Horizons recent flyby of Pluto and its moons was brought to the attention of the Board. This space mission, which is powered by a radioisotope power system

(RPS), could not have been accomplished without nuclear energy. Several PSU NucE and other engineering alums have played a significant role in space exploration over the years. Candace Davison asked **Joe to compile a list of PSU engineering alums that have participated in space exploration missions, which could be the basis for a future event, meeting, or magazine article. John Atkinson has access to personnel involved in the INL RPS Program, and agreed to compile a similar list.**

- As part of an ANS initiative, Candace Davison will prepare a request/template that NucE alumni can complete highlighting the diversity of career paths.

### **UPCOMING EVENTS AND MEETINGS**

- Award Committee (see timeline in report above – recipient notification Nov 5 or 6, 2015)
- ANS Winter Meeting (Wardman Park Marriott) Joint NucE Program Reception (Nov 9, 2015)
- PSNES Next Meeting (November after nomination deadline and ANS Reception)
- PSNES Election (January - March, 2016 so results can be announced and new officers installed at Annual Meeting)
- Spring 2016 MNE Senior Recognition Banquet (date?)
- Spring 2016 PSNES Annual Meeting (Blue/white Weekend or not? **James Stover agreed to survey Board to see if there was a preference to meet Blue/White weekend or avoid it.** The 2016 Blue/White game is April 16, 2016)

### **Adjournment**

The meeting was adjourned at 1:10 pm.

## Addendum A

### **PSNES 60<sup>th</sup> Anniversary Proclamation and Presentation – August 18, 2015**

The Penn State Nuclear Engineering Society (PSNES) made a proclamation as part of the Breazeale Nuclear Reactor 60<sup>th</sup> Anniversary Program in the Thomas Building Auditorium on the afternoon of August 18, 2015. A framed copy of the proclamation, in the form of a resolution adopted by the PSNES Board of Directors was presented to Dr. Kenan Unlu, Director of the Radiation Science and Engineering Center by Douglas Wood on behalf of the PSNES.

Following is a transcript of the PSNES remarks and presentation:

*I'm Doug Wood, a Penn State Nuclear Engineering graduate from the class of 1973. Today I am representing all of the Penn State Nuclear Engineering alumni through the Penn State Nuclear Engineering Society, an affiliate of the Penn State Engineering Alumni Society. It is an honor and privilege to share this podium today.*

*I offer a couple of personal comments and observations to take away today:*

- *First. I have fond memories of time spent at the nuclear reactor as an undergraduate, and we were so fortunate to have the reactor available as part of our study program. I can attest that the hands-on experience I had at the reactor left an indelible mark on my education and my career in the Commercial Nuclear Power industry.*
- *Second. Notwithstanding the outstanding capabilities of the brick-and-mortar facility and credentials of its faculty and leaders, I would like to recognize the Breazeale Nuclear Reactor staff responsible for its public outreach mission. As a result of your tireless efforts over the decades, you, your predecessors, and the reactor itself have become the face of Penn State to countless young students, scouts, science teachers, elected officials, and other members of the public.*

*Now it is my pleasure to present a Proclamation from the Penn State Nuclear Engineering Society, in the form of the following Resolution adopted by our Board, to Dr. Kenan Unlu representing the Breazeale Nuclear Reactor. It reads as follows:*

#### Resolution

*The Penn State Nuclear Engineering Society hereby honors and recognizes the Penn State Breazeale Nuclear Reactor for its outstanding contributions to society through nuclear education, research, outreach and service.*

*Whereas, The Penn State Breazeale Nuclear Reactor has safely and continuously operated for a period of sixty years, and*

*Whereas, The Penn State Breazeale Nuclear Reactor is a leading national resource making significant contributions in safety and security, education, innovative research, and service, and*

*Whereas, The Penn State Breazeale Nuclear Reactor's dedicated staff and faculty remain committed to safety, excellence, quality, and innovative research while focused on inspiring and educating future generations of engineers, technologists, and scientists;*

*Therefore Be it Resolved, That the Penn State Nuclear Engineering Society honors the Penn State Breazeale Nuclear Reactor and its dedicated faculty and staff for its continued leadership in education, research, outreach, and service, and pledges continued support of its mission.*

*Adopted By This Society August 10, 2015*

*The PSNES Board of Directors on behalf of your many students, colleagues and friends.*



Photo by Andrew Bascom

#### August 10, 2015 PSNES Board Motion Approval

Motion:

- to approve presenting a resolution made on behalf of the PSNES to the Penn State Breazeale Nuclear Reactor in commemoration of its 60th Anniversary (draft attached)
- to approve the expenditure of funds from the PSNES general fund in the amount not to exceed \$250 to print, matte, and frame the approved resolution. (there is sufficient balance in this fund to cover this expense)

Approved via E-mail Vote: Heath, Wood, Loftus, Beaumont, Stavely, Richard, Atchison, Stover, Karchner, Neal, Sholtis, Pantano

Opposed: 0

Final Actual Expenditure: \$99.18



## Addendum B

### MNE Website/Social Media Initiatives & PSNES Social Media Report

- MNE/PSNES Website
  - Status: Shea (Winton) Bracken (MNE Communications Strategist) is redesigning the MNE website as part of a larger College of Engineering website redesign.
  - Volunteer Support Request: Shea is seeking a PSNES volunteer to work with her to ensure that the information on the PSNES Alumni page is up-to-date.
  - Contact Information: E-mail: [szw101@psu.edu](mailto:szw101@psu.edu). Office Phone: (814) 865-0058
  - MNE/PSNES Website: <http://www.mne.psu.edu/PSNES/>
- MNE Facebook Page
  - Visit Penn State Mechanical and Nuclear Engineering page (<http://www.mne.psu.edu/>) to see real-time posts on Department /Program News.
- PSU ANS Student Chapter Listserv
  - Visit the ANS Student Chapter website and sign up to receive real-time news.
  - **Link:** <http://php.scripts.psu.edu/clubs/up/ans/mailling.php>
- PSNES Linked-In Group News
  - **Navigation Instructions**
    - Log in to Linked-In.
    - Select "Interests"
    - click on drop down "Groups" , "find a group" and enter Penn State Nuclear Engineering Society (PSNES).
    - To request membership to this private group, click Join and your request will be reviewed by the group manager.
  - **Group Description:** The Penn State Nuclear Engineering Society (PSNES) is a group of Penn State nuclear engineering alumni as well as other Penn State alumni and friends of the nuclear engineering program like Radiation Science and Engineering Center staff and current and prior NucE faculty. The purpose of this society is to promote fellowship and communication among the alumni, faculty and students of the Nuclear Engineering program in order to work for the improvement of the program, the Department of Mechanical and Nuclear Engineering and the College of Engineering. Another primary focus of PSNES is to provide mentorship and networking opportunities for current students.
  - **Group Owner & Group Manager:** Hilary Neal (Group Owner) is doing a great job spearheading this effort with support from Tom Richard (Group Manager), the MNE Department Communications Strategist (selected posts from Facebook) & a few PSNES Member contributors (Pat Loftus, Doug Wood).
  - Note: This is a key outreach vehicle for Nuc E Alumni/Friends of the NucE Program to communicate among ourselves
- Contact Information:
  - Hilary Neal: [hilaryneal01@gmail.com](mailto:hilaryneal01@gmail.com)
  - Pat Loftus: [patricia.loftus1@gmail.com](mailto:patricia.loftus1@gmail.com)