

**NEDHO MEETING MINUTES:
Omni Penn Hotel - Pittsburgh
June 14th, 2004: 4:30 – 6:00pm**

1. NEDHO members and guests assembled and meeting was convened.
2. Agenda for the meeting and past meeting minutes were approved.
3. Gil Brown, NEDHO treasurer, provided his report (Attachment). Paul Turinsky will succeed Gil as Treasurer, since Gil will become Chair of NEDHO this year. Because of our NEDHO balance, Gil Brown, John Lee and Ali Haghghat acted as a NEDHO subcommittee to make recommendations to the NEDHO chairs as to how to productively use these funds (see below). Based on the discussion the group consensus was:
 - a. Dues will be collected this year as well as past dues from prior years.
 - b. NEDHO funds continue to be used for leadership, special studies and projects.
 - c. Consideration for other acceptable NEDHO activities will be discussed by a subcommittee of Gil Brown, Ali Haghghat and Don Steiner.
4. Ann Winters reviewed current NANT scholarships & fellowships (wintersad@inpo.org).
5. John Gutteridge reviewed the department university programs. The Congress Energy and Water conference committee is being considered at \$21m for FY05. A NEDHO chair subcommittee (Brown; Corradini; Stubbins; Klein) contacted Congressional delegations in February to solicit an increase in funds by \$6.2m for university programs (below).
6. Mike Corradini discussed potential NSF support of nuclear science and engineering with Dr. Arden Bement. We were informed that appropriate NE proposals will be considered by NSF, but no new topical areas will be created for nuclear engineering at the NSF.
7. Andy Klein (NERAC member) was appointed the chair of a NERAC task force. The concern expressed by some industry representatives has been that NE programs may not be producing engineers with training optimal to the needs of certain sectors of the power industry. The task force examined the NE curricula and found that the concern was unfounded. The NERAC issued this report and Prof. Klein has distributed it. He did note that a major improvement to curricula would be a coop or intern experience for students.
8. Prof. Haghghat presented an updated survey and status of enrollment & employment opportunities for NE majors. After a discussion, Prof. Haghghat will send a spreadsheet to each department chair to be filled out that will track enrollments and recent hiring history. John Gutteridge will use these survey results for DoE uses also.
9. Prof. Gil Brown and Dr. Alan Waltar presented a report of the WNU meeting. After an extended discussion, Gil will send the NEDHO chairs the final draft of the WNU current proposal. The WNU proposal has now been reorganized to focus on an eight-week summer school that focuses on international nuclear technology issues. Specifics will be addressed in the proposal. Gil will continue to be the person to follow developments.

NEXT NEDHO MEETING: ANS Winter Meeting in Washington DC in Nov.

NEDHO MEETING ATTENDANCE – JUNE 2004

| NAME | AFFILIATION | EMAIL |
|-------------------------------|-----------------------------------|--|
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(Accepted – June 14th, 2004)
NEDHO Dues Committee Report
June 1, 2004

Members: Gil Brown, Ali Haghghat, and John Lee

The following is a summary of the conclusions of a teleconference held on May 20, 2004.

Background

Minutes from the New Orleans meeting (Nov 2003) stated:

Because of our NEDHO balance, Gil Brown, John Lee and Ali Haghghat have been established as a NEDHO subcommittee to make recommendations to the NEDHO chairs as to how to productively use these funds.

- NEDHO funds, which now total over \$11,000, is anticipated to grow at the current dues structure by over \$2,000 per year.

One of the main NEDHO activities is meeting, primarily in DC, with various policy makers and funding agencies to address issues related to NE research and education. NEDHO funds have been used in the past, although none have been expended for this effort in the last several years.

- NEDHO funds have been expended for special projects. Most recently, funds were used to for a NEDHO representative to attend the WNU inaugural meeting last September. In the past funds were used to support dissemination of various reports.
- Generally, no funds are expended during our NEDHO meetings held twice a year at ANS (or at ASEE) meetings.

Recommendations

1] NEDHO dues should continue to be collected.

2] NEDHO funds should be used for the following activities:

- Leadership visits to DC and other venues to support the NEDHO mission. Continue visits to Capitol Hill committees and departments as appropriate (e.g. DOE, NSF, NIH, NASA, DOD, DHS.)
- Special Studies. e.g. Enrollment/Employment
- Special Projects: e.g. WNU

3] Consideration for NEDHO support should be given to:

- A more programmatic involvement with NEI and attendant meeting participation.
- NEDHO representation at other relevant meetings, seminars, and conferences beyond ANS national meetings. For example, a NEDHO presentation was made at the ANS Executive Conference on workforce issues (at no expense to NEDHO).
- Support award for “Best Paper” at annual student conference. Proposed area is in the area of “outreach activities”.
- NEDHO meeting snacks
- Training workshop for NE Department heads

FY05 Funding Request for the Nuclear Science and Engineering Programs

In light of the national and international energy situation, the U.S. has become keenly aware of the importance of secure and affordable energy supply for the present and future well-being of the nation. Nuclear energy will play a crucial role in stabilizing and reducing energy prices, and in meeting the energy needs of the country; as emphasized in a number of Congressional bills and in speeches by Secretary Abraham, Vice President Cheney and President Bush. Significant concerns have been raised, however, regarding the maintenance of the workforce required to retain our nation's nuclear energy option. Inadequate student enrollments in nuclear science and engineering (NSE) programs, despite modest improvements over the past few years, remains a cause of concern as well as improving the university reactor infrastructure for education and research. The Nuclear Engineering Department Heads Organization (NEDHO) and the National Organization of Test, Research, and Training Reactors (TRTR) request that the FY05 Department of Energy funding for the University Reactor Infrastructure and Education Assistance (URI&EA) Program be increased by \$6.2M from the FY05 request of \$21M to a total of \$27.2M.

Although the FY04 URI&EA funding increased from the funding level of \$18M in the past three years, it remains significantly below the need identified in past energy research studies and associated legislation (e.g., FY03 HR238, FY04 S2095). There is an urgent need for increased FY05 funds for University Nuclear Infrastructure (specifically URR Centers – INIE - Innovations in Nuclear Infrastructure and Engineering) from the FY05 request of \$12.2M to \$16.3M (i.e., a \$4.1M increase for INIE), and an increase in the NEER grants from the FY05 request of \$4.9M to \$7M (i.e., \$2.1M increase) as indicated below:

| <u>Budget Category</u> | <u>FY03</u> | <u>FY04</u> | <u>FY05</u> | <u>FY05 (needed)</u> | <u>Increase</u> |
|---|-------------|-------------|-------------|--------------------------|-----------------|
| NS&E and HP Fellowships | 1.2 | 1.2 | 2.2 | 2.2 | |
| Nuclear Engineering Education Research | 4.74 | 5.0 | 4.9 | 7.0 | +2.1 |
| Other academic programs | 0.68 | 0.7 | 0.7 | 0.7 | |
| DoE/Industry Matching Grants Program | 0.8 | 0.8 | 1.0 | 1.0 | |
| <u>Univ. Nuclear Infrastructure (includes INIE)</u> | <u>10.6</u> | <u>15.8</u> | <u>12.2</u> | <u>16.3</u> | <u>+4.1</u> |
| Total Funding (\$M) | 18.02 | 23.5* | 21.0 | 27.2 | +6.2 |

[*\$23.5M is the original FY04 before a rescission and fund reduction of \$0.6M from UNI line of support.]

The INIE funding increase is consistent with the Congressional priorities in the FY05 authorizations. The FY05 funding request of \$12.2M provides only partial support for the six INIE university consortia and we need an additional funding of \$4.1M to approach the required funding, assuring geographical access across the nation to URRs. The number of URRs has decreased from a peak number of 65 to 25 currently. In the longer term, we will need an annual INIE budget of \$14M to meet the continuing needs and goals of the University Nuclear Infrastructure program and fully fund all of the INIE consortia teams.

Other increases are needed to support the Nuclear Engineering Education Research program, which has remained at or below the \$5.0M funding level for many years. This program has been highly effective in engaging universities in research activities vital to the development of innovative aspects of nuclear energy. It broadly involves faculty and students in nuclear engineering degree programs and university research reactor programs to meet its goals. In addition, the NE Fellowship program has funding increases planned to draw the best and brightest students into the nuclear energy field. Both of these programs have had a major impact and a particularly positive influence on the developing new students who are drastically needed to meet the scientific manpower shortages in the nuclear arena. The NEER program needs an increase of \$2.1M to \$7.0M to modestly expand this successful program in FY05.

Funding increases in recent years have reversed the declining enrollments in nuclear engineering, but this still cannot satisfy the needs of the nuclear industry: i.e., national labs, utilities, private companies, government, universities. We respectfully request that **a Total funding of \$27.2M for FY05 be appropriated for the University Reactor Infrastructure and Education Assistance Programs in the DOE Office of Nuclear Energy, Science and Technology; i.e., a \$6.2M increase - \$4.1M in INIE and \$2.1M in NEER.** Strengthening both academic programs in nuclear science and engineering and university research reactors is essential in guaranteeing the nation secure energy sources for the future and in enhancing scientific, medical, and industrial applications of nuclear science and technology for the nation.