

**Minutes of the ANS  
Fusion Energy Division  
Executive Committee Meeting**

**November 14, 1999**

**Room 102A  
Long Beach Convention Center  
Long Beach, CA**

Members Present: C. Martin, C. Wong, K. McCarthy

Members Present via TeleCon: S. Brereton, M. Bourham

Others Present: D. Dudziak, G. Miley, K. Schultz, J. Stubbins

Executive Committee Members Absent: L. Cadwallader, W. Houlberg, G. Logan, S. Milora, R. Santoro, Y. Seki, B. Hogan, J. Blanchard, S. Willms

**1. Call to Order** C. Wong

C. Wong, Chair, called the meeting of the ANS/FED to order at 3:05 p.m. The meeting agenda is provided in Attachment A. A list of the current ANS officers and EC members is provided in Attachment B.

**2. Approval of the Previous Meeting's Minutes** S. Brereton

The June/99 meeting minutes were reviewed, and approval was recommended by members present and by those on conference call.

**3. Treasurer's Report** S. Brereton

S. Brereton summarized the status of the FED budget. 1999 income includes \$6233 of carryover and \$612 from member dues. Expenses so far in 1999 are \$1442, and include:

- \$1000 for awards: N. Ghoniem claimed his Outstanding Achievement award (\$500) given in 1998, and \$500 was allocated to the Teller Award Endowment
- Conference calls: \$138 for the 11/98 call, \$304 for the 6/99 call.

The current balance is \$5403. S. Brereton noted that J. Wesley still hasn't claimed his Outstanding Technical Achievement award (\$500), given in 1998. Details of the budget are provided in Attachment C.

S. Brereton commented that this conference call would be quite expensive. We will have to pay \$215 for the phone in the meeting room and a phone line, plus the conference call expenses. It was suggested that next time, conference call participants (other than those participating in the meeting room) pay for their own phone tab (and get reimbursed through their institution). The conference call will be set up in this manner next time.

#### **4. Support for Student Conference**

D. Dudziak

Don Dudziak had requested financial support from FED for the eastern US ANS student conference, planned for March 2000. The request had been reviewed previously by J. Kulcinski, C. Wong, K. McCarthy, and S. Brereton. The consensus was to approve support, but the amount had not been agreed upon. After some discussion, it was agreed that \$300 would be provided for the student conference, in March 2000. Amy Presson, the student in charge will email S. Brereton, requesting a contribution. The FED would like to stipulate that this contribution be used for something related to fusion.

#### **5. Policy and Guidelines for Student and Other Support**

K. McCarthy

K. McCarthy led the discussion on policy and guidelines for determining how FED should allocate funds for various things the division would like to support. She suggested the following points for discussion:

- 1- We need to determine the amount of money available per year to support these types of things
- 2- We need to evaluate all requests at the same time, so they all get equal consideration, and so that we provide a useful amount of money to those requests that we feel are most important.

FED would like to support people giving fusion papers at the two student conferences each year, and at the fusion topical every two years. It was agreed that the \$300 contribution decided on in the previous discussion (agenda item 4) would be a useful amount to provide to future student conferences. With two of these a year, our annual contribution to student conferences would be \$600.

At the topical meeting, we have provided a cash award for the best student paper. We would also like to support student travel to the topical. Rather than agreeing on a specific amount for the October 2000 topical, FED would like the topical organizing committee to decide how they would like student support to be handled, and then submit a request to FED.

FED would like to have some guidelines on how to evaluate requests for support. K. McCarthy agreed to draft some guidelines for deciding how to allocate funds. She will provide them to others on the executive committee for review.

## **6. Progress on 2000 Fusion Topical in Park City**

K. McCarthy

The 14<sup>th</sup> fusion topical is set for October 15-19, 2000, in Park City UT. K. McCarthy indicated that we hope to get final approval this week. The budget for the meeting has been approved, and the first announcement has gone out on email to everyone on the FED newsletter distribution. Everything seems to be proceeding well.

K. Schultz brought up the 2002 topical. He mentioned that the next International Symposium on Fusion Nuclear Technology (ISFNT) will conflict with the ANS topical. He suggested that we think about combining the meeting when they occur in the US, as is the case in 2002. The 2002 topical will take place in March or April, in San Diego. K. Schultz was hoping to get backing from the FED for his suggestion of combining the meetings. The FED agreed. He will now approach the organizers of the next ISFNT to see if they are interested in combining the meetings. K. McCarthy mentioned that the ANS national program committee may have difficulty approving another stand-alone topical for FED.

## **7. Fusion and Accelerator? Technology Journal**

C. Wong, K. Schultz, G. Miley

C. Wong had received an email from Warren Funk (Accelerator Technology Division), asking us to reconsider combining with them in a journal. Fusion Technology would be renamed Fusion and Accelerator Technology, and the content of the journal would be expanded to include accelerator technology. K. Schultz indicated that so far he had heard no objection from any of the journal editors to this proposal. However, the technical divisions involved would need to support this action. At the same time, Warren will have to get approval from his division. A question was raised about the possibility of the divisions being forced to combine, if they are combined in a journal. The consensus was that this would be unlikely. Currently, Fusion Technology is the only journal that serves only one division. It was suggested that we contact the editor of Nuclear Technology to let him know of the proposal to expand the content and rename Fusion Technology.

From our last meeting, we had an action to establish a liason to the Accelerator Technology division. It was suggested that Jim Anderson would be excellent in this role. C. Wong agreed to contact J. Anderson about this.

M. Bourham asked about the type of papers that would be acceptable for the new journal. Would pure accelerator papers be acceptable, or just papers on accelerator applications? K. Schultz said that the division focuses on the applications, but that it would be reasonable to include accelerator technology papers within the scope of the journal.

A new editor for the journal will be identified by mid-2000. G. Miley thought that it would be useful to make the change in the journal name and scope as soon as possible so that this would be clear for the new editor.

The Accelerator Technology division was planning a special issue of Nuclear Technology. Perhaps, instead, this could be the introductory issue of Fusion and Accelerator Technology. This would break the ice and get people interested. We need to identify someone from the Accelerator division as soon as possible to let them know of this suggestion.

C. Wong asked if there was any objection by the FED to combining with Accelerator Technology into one journal, and changing the journal's name. There was none. G. Miley indicated that there was nothing further for the division to do. The details of this change would be worked out by those directly involved with the journal.

#### **8. FED newsletter**

L. El Guebaly

Laila again has done a great job with the newsletter. C. Wong asked if anyone had comments on the draft newsletter. There were none. C. Wong noted that there still is time to provide comments. These should be given to Laila by November 26.

K. Schultz mentioned that there had been a further 15% drop in library subscriptions to Fusion Technology. He suggested that we add something to the newsletter asking members to encourage their library to maintain their subscriptions and also for individuals to take out a subscription.

#### **9. Report on President's meeting**

C. Wong

C. Wong reported on the President's meeting. Viewgraphs from the meeting are provided in Attachment D. The meeting addressed issues ANS is working on, including the strategy plan, how to respond to the Kyoto conference on CO<sub>2</sub>, budget, and the national nuclear energy strategy. Public policy was also discussed. The FED public policy statement provided by W. Hogan and W. Houlberg was accepted by the ANS public policy committee.

There was some discussion about the role of the divisions. According to the President, the divisions are to support technical exchanges by sponsoring sessions at the national meetings, and are also a resource for technical support.

ANS is working on how to dispose of weapons grade material, which may be nuclear waste. Fusion neutrons could be used for disposal of plutonium.

The fusion division still has the problem of an identity crisis: we are not purely a science or purely an energy program. We are a science program

working towards energy for the future. This was recognized by the ANS President.

Infrastructure 3 was discussed. ANS approved all the recommendations provided by the task force. The most significant part of this for FED was the third recommendation on financial incentives. It is actually voluntary for a division to participate in the incentive program. We need to be aware of this, as future topicals are planned. There was concern that this recommendation might reduce our income. To avoid this possibility, there was a suggestion that we try to jointly sponsor a session with another division at the next national meeting. That way we'd get some credit for participating in the ANS national meeting. If we elect to do this, we will have to make an effort to drum up papers. The next national meeting is in June, 2000, in San Diego. Some general papers on the status of fusion, recent results, etc. could be given.

C. Wong also reported on a second meeting where the national nuclear energy strategy was discussed. The ANS President has proposed a workshop on this subject, currently planned for March, 2000. It will be one week long, and will be similar in nature to the Snowmass meeting. It will address nuclear energy as a whole. In the near term (1-10 years), the energy strategy will involve existing plants. In the intermediate term (5-18 years), the energy strategy will rely on generation IV fission plants (the goal is to compete with natural gas). In the long term (14-40 years), the strategy will focus on sustainable nuclear energy plants – this would include fusion. C. Wong asked the committee if it would be politically wise to get involved. It was thought to be a good idea to participate and project what can be done in the future with fusion as an energy source. The down side is that not everyone views fusion as an energy program at the present time. A new energy strategy will be developed each year, so there will be opportunities to participate in the future. However, it was agreed that it would be good to participate now. FED would be treated as an equal, and we would be more integrated into ANS. To participate, we would need to provide experts from around the world, in government, environment, planning, EPRI, industry, etc. The meeting would be similar to Snowmass, in that it would not have a particular goal, other than to bring the community together. C. Wong indicated that he would contact John Sheffield (FESAC Chair), and lab directors to let them know that this was happening. He would work from there to select a few representatives and prepare material to represent fusion at the workshop. He thought there would not be a lot of work involved, as we already have a roadmap of our own, and we would just need to integrate it into the nuclear energy roadmap.

The ANS President had also recently sent a letter to Warren Funk of the Accelerator division, requesting him to review the DOE roadmap on accelerator-based transmutation of nuclear waste. This could end up being a very large program. Kadak had a number of questions that he was hoping Funk would be able to address. One of these was related to alternatives that

could solve the fission reactor waste problem and be less costly. FED could support Funk in developing the discussion on alternatives, by providing input on what fusion could do. The time frame is very short – he was only given until the end of the year. It would be difficult to provide good input in the short timeframe. However, it was agreed that some brief input on what has been done in this area, and what in addition needs to be done, would be a good thing to do.

## **10. FESAC activities**

C. Wong

In the FED newsletter, C. Wong summarizes the recent FESAC activities.

There was some discussion on the possibility of using existing accelerators at LANL for developing fusion materials. A reasonable neutron fluence for testing could be obtained from these devices. C. Wong would like to make a personal recommendation to J. Sheffield to get a subpanel of FESAC to look into this possibility. Once the subpanel has done a technical review, it will be provided to the full FESAC for a recommendation. The LANL accelerators only recently became available for this sort of thing, as they used to be dedicated for APT applications.

It was also noted that there is an international group advocating accelerator based nuclear testing (IFMIF). They are proposing using D-Li targets, with liquid Li coolant. They would get a few hundred dpa over a long time, 60 dpa/yr, but the target size is small (0.5 L is the total volume). The projected cost of the facility is about \$500 million. A decision for US participation will be based on whether ITER will be built or not.

## **11. Status of Candidates for next election**

W. Houlberg

W. Houlberg has attempted to identify candidates for the next election. Candidates have been identified, but there are no alternates yet. They are:  
Jim Stubbins for Vice Chair  
Rene Raffray for Secretary/Treasurer  
Chris Hamilton (GA), Jeff Latkowski (LLNL), and Dennis Youchison (Sandia) for the Executive Committee.

The list of candidates is due 11/16. It was agreed that we need to announce that we are seeking candidates earlier, and encourage nomination to the nominating committee. This will hopefully address our shortage of candidates. C. Wong asked for anyone who has suggestions for candidates to contact Wayne Houlberg, before November 16. It was suggested that next year, the nominating chair have two additional people to help identify candidates.

### **13. Other Business**

None.

The meeting was adjourned at 4:50.

**Attachment A**

**ANS Fusion Energy Division  
Executive Committee Meeting**

**November 14, 1999**

**Room 102A  
Long Beach Convention Center  
Long Beach, CA**

- 1- Call to order – C. Wong
- 2- Approval of minutes, June 1999 FED Executive Committee meeting – S. Brereton
- 3- Treasurer's Report – S. Brereton
- 4- Support for Student conference – D. Dudziak
- 5- Policy and Guidelines for Student and Other Support – K. McCarthy
- 6- Progress on 2000 Fusion Topical in Park City – K. McCarthy
- 7- Fusion and Accelerator? Technology– C. Wong, K. Schultz, G. Miley
- 8- FED newsletter – L. El Guebaly
- 9- Report on President's meeting – C. Wong
- 10- FESAC activities – C. Wong
- 11- Status of Candidates for next election– C. Wong, W. Houlberg
- 12- Other business
- 13- Adjournment



## Attachment B

### ANS/OFE Officers and Executive Committee List

Chair: Clement Wong (99-00) wongc@gav.gat.com  
Vice-Chair: Kathryn McCarthy (99-00) KM3@inel.gov  
Secretary/Treasurer:  
Sandra Brereton (99-00) brereton1@llnl.gov

#### Executive Committee Members:

James Blanchard	(99-02)	blanchard@enr.wisc.edu
Mohamed Bourham	(98-01)	bourham@ncsu.edu
Lee Cadwallader	(99-02)	lcc@inel.gov
Grant Logan	(97-00)	logan1@llnl.gov
Charles Martin	(98-01)	charlesm@dnfsb.gov
Stan Milora	(98-01)	miloras1@ornl.gov
Robert Santoro	(97-00)	santorr@ornl.gov
Yasushi Seki	(97-00)	sekiy@naka.jaeri.go.jp
Scott Willms	(99-02)	willms@lanl.gov

#### FED Standing Committee Chairs:

Nominating Committee	Wayne Houlberg (Chair)
Program Committee	Steve Herring (Chair) K. McCarthy (member)
Honors/Awards Committee	Gerald Kulcinski (Chair)

#### FED Special Committee Chairs:

Membership Committee	Ken Schultz
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#### FED Representatives at National Committees:

ANS Publications	Ken Schultz
ANS Public Policy	Bill Hogan

#### Editors:

Fusion Technology Journal	George Miley
Newsletter	Laila El-Guebaly
Web site maintenance	Mark Tillack

#### Liaisons to other Organizations:

MS&T Division	John Davis
ATD	TBD
IEEE	George Miley