

**US Burning Plasma Organization**  
**Meeting of the Council**  
**April 17, 2009, 12:30-2:30 EDT**  
**held by videoconference**

**Council Members in attendance:**

C.S. Chang  
Martin Greenwald  
Rich Hawryluk  
Amanda Hubbard – *Chair*  
Martin Peng  
John Sarff  
Tony Taylor  
Mike Ulrickson  
Mike Zarnstorff – *Vice Chair*

**Ex-officio participants in attendance:**

Erol Oktay – *USDOE*  
Jim Van Dam – *USBPO Director and  
US ITER Chief Scientist*

**Others in attendance:**

Chuck Greenfield – *USBPO Deputy  
Director*  
Nermin Uckan – *USBPO Asst. Director  
for ITER Liaison*  
Emily Hooks – *past USBPO  
Administrator*  
Rita Wilkinson – *USBPO  
Administrator*

**Unable to attend:**

Stan Milora – *US ITER Chief  
Technologist*  
Gene Nardella – *OFES/BP Technology  
Program Manager*  
Bill Nevins  
Ed Synakowski  
George Tynan

**NOTES**

**1. Roll Call**

The meeting was called to order at 12:35 EDT and began with a roll call. Attendance was as noted above.

**2. Introduction of new USBPO Administrator, Rita Wilkinson, and thanks to Emily Hooks**

Chair Amanda Hubbard introduced Rita Wilkinson, who began serving as USBPO Administrator in February 2009. She also thanked Emily Hooks for her valuable service to Council as the outgoing USBPO Administrator. Several attendees added their personal thanks. The following motion was made by Tony Taylor, seconded by John Sarff and unanimously adopted:

*On motion, the Council of the US Burning Plasma Organization resolved to express its sincere gratitude to Emily Hooks for her outstanding service as the USBPO Administrator during the past two years. She has kept the Council, Research Committee and Executive Committee organized, and provided excellent communication to the fusion community through the e-news and other announcements. Improvements to the BPO website, and input to the first Council*

*election process are but two of her many lasting contributions to USBPO. The Council has appreciated most highly her extremely valuable work. We wish her well in her future endeavors.*

### **3. Review of minutes from prior meeting**

Draft minutes from the previous meeting, on November 18, 2008, were reviewed and accepted. These will now be posted on the Council web page.

### **4. Update on Coordination of International Tokamak Activities**

Michael Zarnstorff, in a brief presentation and extended discussion with Council members, gave an update on a new USBPO working group on international collaborations, which had been briefly introduced at the end of the previous Council meeting. The charter for the group is “*Evaluate and prioritize the opportunities for US collaboration on EAST, KSTAR, JET, and JT-60SA to prepare for US participation on ITER and to address the issues and gaps discussed in the recent report "Issues, Gaps, and Opportunities: Towards a Long-Range Strategic Plan for Magnetic Fusion Energy", DOE-SC-0102. Report before the Resource Needs Workshop, planned for June 2009.*” Current members, in addition to Zarnstorff, include E. Synakowski, T. Luce, D. Whyte, S. Milora, C. Kessel, D. Humphreys and S. Sabbagh.

This group is in a formational stage and had its initial meeting in conjunction with the Theme I and II Research Needs Workshop in March. Providing input and information on international collaboration opportunities to ReNeW is a near-term goal, and the working group includes members of many ReNeW panels. Material on international programs has been posted on the USBPO web site for the use of the ReNeW panel leaders.

Another near-term focus is on US-KSTAR collaborations. A joint collaboration group and workshop are being set up, though Korean members have not yet been named. Among other topics, KSTAR has expressed interest in US assistance with a new Lower Hybrid Current Drive System.

In the longer term, it is anticipated that the working group will address a wide spectrum of international collaborations, for example, participation in the EU-JA Broader Approach program, including JT-60SA. Technology will be an important part of collaborations. Erol Oktay commented that this new working group should enable a more coherent response to international requests for collaboration, strategic planning and appropriate allocation of collaboration resources.

In a related item, C.S. Chang mentioned that KSTAR is organizing a summer school on RF waves and has requested US help. The Executive Committee Council decided that this should not be a USBPO activity, although it encouraged Council members to send suggestions for lecturers to C.S. Chang.

## **5. Nominating committee for the 2009 Council election**

Council member Martin Peng has agreed to lead the nominating committee for the 2009 Council elections. Other members of the committee are Tony Taylor and Research Committee members Tom Rognlien and Chris Hegna.

Peng reported briefly on the progress and plans for this committee. A solicitation for nominations has been drafted and will be sent to USBPO members, allowing about two weeks for responses. The committee will then consider them, mainly by email, and announce a slate of candidates to Council. Electronic polling will occur in late May or early June. This year, a three-week period for voting will be allowed, since this period will overlap the Research Needs Workshop in June.

Council members suggested that the names of outgoing and continuing members be added to the solicitation, and that outgoing members of the Research Committee be considered as potential candidates for the Council slate. Hubbard thanked Peng and the committee for taking on this task at a busy time for the fusion community.

## **6. Update on USBPO activities and ITER developments**

Jim Van Dam gave a brief overview of the many recent USBPO activities, in particular in support of ITER. He referred Council members for details to the USBPO annual report, and his recent talk to the US ITER Project Office Technical Advisory Committee (Oak Ridge, April 14-15) on *ITER Physics Initiatives & ITER Research Plan*, both of which were distributed before the Council meeting and are available on the USBPO web site.

Some key points mentioned include:

- The ITER team has recently sent solicitations to the USIPO and other Domestic Agencies for a number of tasks on which results are needed more quickly than ITPA can provide. USBPO has been asked to help. It is distributing details of the solicitations to its members. Van Dam feels that having USBPO review proposals would be inappropriate, but some comments are being given.
- USBPO continues to arrange expert input and briefings in advance of STAC meetings. The next briefing is scheduled for May 4, in preparation for a STAC-6 meeting May 25-27. Presentation of the updated ITER Research Plan is expected to be a key agenda item, with a number of modifications due to STAC requests, and a proposed ITER schedule change, being addressed.
- US scientists continue to be strongly engaged in the ITPA, with strong linkages to USBPO topical groups. A joint meeting of the IEA and ITPA was held in December at MIT to discuss and coordinate the many joint activities proposed by ITPA topical groups. Amanda Hubbard represented USBPO. These activities include many joint experiments, but are being broadened to include coordinated modeling.

- ITER has set up a new Test Blanket Module Program Committee. Rob Goldston (PPPL) will be one of the US members. Close communication with a USBPO task group on TBMs led by Nermin Uckan is expected.
- ITER has also set up a new Integrated Modeling Expert Group. Lang Lao (GA) and Don Batchelor (ORNL) have agreed to participate from the US.
- Van Dam is serving as a liaison to his counterparts in other ITER parties through the newly established “chief scientist” group, which had its second, more focused, meeting in December. He also represents USBPO on the US Fusion Facilities Coordinating Committee, which includes leaders of the main US facilities.
- USBPO and US scientists have been asked to collaborate with EU counterparts in the areas of tungsten divertors, and Lower Hybrid Heating and Current Drive where F4E (Fusion for Energy) is setting up task forces. Other topics may arise in the future.
- USBPO membership is increasing, with 300 members and 450 *e-News* subscribers.
- USBPO members are very strongly involved in ReNeW. For example, Van Dam chairs Theme I on *Achieving and Understanding the Burning Plasma State in ITER*. Hubbard and Greenfield are chair and deputy chair for Theme II on Creating Predictable High-Performance Steady-State Plasmas. Zarnstorff is deputy chair for Theme V on Optimizing the Magnetic Configuration. Most Council and Research Committee members are involved, many in leadership roles. This is positive, but has tended to limit time available for USBPO activities.

There was extended discussion of ITER developments, with Council members interested to learn about possible changes being considered to the ITER schedule and the design of the ITER vacuum vessel.

## **7. Report on Research Committee, proposed leadership changes**

Chuck Greenfield reported on activities of the Research Committee (RC). As noted, RC members are heavily engaged in ReNeW. Hence, the frequency of RC meetings has been reduced to every four weeks. The Task Group on the ITER research plan is ready to help the US members of the ITER Research Plan international working group as needed.

About half the topical groups are due to rotate leadership this summer, according to the Bylaws and the schedule established in 2008. Five RC members (Dennis Whyte, Cynthia Phillips, Nermin Uckan, Dave Humphreys and Chuck Kessel) are scheduled to rotate out of TG leadership, though Uckan will continue attending RC meetings in her role as Assistant Director for ITER Liaison. However, Tim Luce, Deputy Leader of the Integrated Scenarios Topical Group, has found it difficult to participate due to his other commitments and has indicated his need to step down now. To avoid a complete change in leadership for this topical group, it was proposed to ask Kessel to stay on for a further year, or possibly two, and to appoint John Ferron as a replacement for Luce.

In discussion, Council agreed with this. It was noted that for the remaining vacant positions, it is important that Topical Group members be asked to give suggestions or volunteer. Greenfield agreed to arrange this and encouraged Council members to also make suggestions. He and Van Dam will then propose a slate of candidates for Topical Group Leaders and Deputy Leaders, and ask Council for feedback.

Looking ahead, BPO leaders have been thinking about ways to involve members of the Topical Groups more actively. This will be a topic for the next Council meeting and Council input would again be appreciated.

#### **8. Any other business**

No other topics were raised. The meeting was adjourned at 2:17 pm EDT.