Members present:
W. Barletta (Chair), J. Phillips (Chair Elect), F. Houle (Vice Chair), R. Jaffe (Past Chair), L. Greene, M. Beasley (virtual), M. Linak, S. Bare, S. Case, R. Cote, P. Coyle, E. Gates, D. Ginley, W. Goldstein (virtual), M. Marder, W. McCurdy, S. Pratt, M. Rosenthal, A. Taylor, P. Taylor, J. Wells

Advisors/Staff present:

Call to Order
R. Jaffe called the meeting to order at 8:01 AM.

Welcome, Approval of Minutes
Introductions were made around the table. Conflict of Interest forms were collected. There was a discussion regarding the POPA Subcommittees and the expectation that members will participate. A call for recommendations was made for 2016 POPA membership.

MOTION: To accept the October 2014 minutes, as presented.
(Barletta/Phillips)
ACTION: The motion passed, unanimously.

Update on Helium Brokerage & E-cycling Activities
POPA has been involved in helium issues for the past 20 years. The helium brokerage (APS-ACS Liquid Helium Program) was founded in partnership with the American Chemical Society. Together APS & ACS have joined forces with the U.S. Defense Logistics Agency (DLA) to establish a helium group-purchasing pilot program to pool academic users, with the goal of negotiating better pricing and more reliable delivery. Seven pilot program members were chosen, representing a diversity of needs and geography. The brokerage was designed to handle the immediate concerns and near-term issues associated with liquid helium supply. Longer term issues remain and will be considered in the proposed helium study on today’s meeting agenda.

A follow-on e-cycling activity, derived from the 2011 APS Energy Critical Elements (ECE) report, was designed to invite undergraduate physics majors interested in working at the interface of science and policy to apply for a unique joint internship with the APS Office of Public Affairs and the University of Michigan’s Physics Department during the 2015 Winter Semester. The internship is for credit and centers on advancing policy goals recommending in the ECE report, including recycling of consumer electronics and taking steps to improve recycling rates. Two students were offered the internship. They have held meetings with their state senators, one of whom has drafted a bill that includes similar language to California’s cell phone recycling legislation. The Michigan legislation will be introduced in April. The potential for expanding this program to other campuses and states is strong.
**Proposed Helium Study**

APS Staff provided an overview. The idea for a liquid helium study is an extension of the Energy Critical Elements report. The proposed study would investigate the economics of transitioning open-venting systems to closed circuit systems. POPA agreed that a classic market analysis would make for a very interesting study. The target audience would be NSF, DoD, and DoE program managers. The APS Division of Condensed Matter Physics has demonstrated interest and the Energy & Environment Subcommittee supports moving forward and is accepting suggestions for Chair.

**MOTION:** To adopt the proposal with the proviso that today’s feedback is taken into consideration. The POPA Steering Committee will review the amendments made to the proposal; it should include a list of study group participants.

(Barletta/Phillips)

**ACTION:** The motion passed, unanimously.

**Education Study/Survey Update**

An idea for a study on the shortages of qualified physics teachers at the high-school level was presented at the October 2014 meeting and conditionally approved by POPA. The study Chair indicated that authoring of the survey is nearing completion. The questions posed have been left open-ended to take into account the variety of barriers graduates/teachers face when making the choice to teach high-school level STEM courses. Next steps will include consideration of organizations that can deploy the survey and collect & analyze the data.

**MOTION:** To move the conditionally approved study to an officially approved study with a budget of $25K.

(Barletta/Wells)

**ACTION:** The motion passed, unanimously.

**Proposed Ploughshares Study**

A representative from the Ploughshares Fund approached POPA at its final meeting of 2014 with a proposal for a study on the non-weapons science being conducted at Lawrence Livermore National Laboratory. The POPA National Security Subcommittee was tasked with taking the idea under consideration and investigating questions posed at the October POPA meeting. The Subcommittee has (1) revised the proposal to include the three NNSA laboratories, as opposed to focusing solely on LLNL; (2) cleaned up incorrect & misleading terminology; (3) removed assumptions; and (4) highlighted the benefits to APS of conducting the study. After review, more questions were posed by POPA regarding the motivation behind the study, the audience, potential political controversy, and the ability to provide an unbiased assessment of the labs.

**MOTION:** To send the proposed study back to the POPA National Security Subcommittee to clarify the relationship with Ploughshares and to consider the comments and suggestions shared today. The Subcommittee should be prepared to report back to POPA at the June 2015 meeting.

(Jaffe/Houle)

**ACTION:** The motion passed. (20 in favor, 1 abstention)
There are three proposed statements in line for commentary by the membership. These include the Statement on Earth’s Changing Climate, the Statement on Civic Engagement of Scientists, and the Statement on the Status of Women in Physics. POPA will recommend to the Board of Directors that the Statement on Earth’s Changing Climate be presented to the membership first, followed by the other two statements.

There are several active APS statements up for review in 2015. Each Subcommittee was given a list of the statements that fall within their scope and were asked to report back at the June meeting with a recommendation on whether each should remain current, undergo full review, or be archived for posterity.

### Update on Proposed APS Statement on Earth’s Changing Climate

APS Council was presented with the draft statement at their November 2014 meeting and solicited for feedback. The reception was positive; only one suggestion was made - to change the word “increased” to “sustained”

**MOTION:** To change the word “increased” to “sustained” in the draft Statement on Earth’s Changing Climate, as suggested by the APS Council.

*(Phillips/Ginley)*

**ACTION:** The motion passed. (20 in favor, 1 opposed)

The APS Board of Directors will receive the draft statement in late February 2015; if they vote to approve the statement it will be sent to the APS Membership for a thirty-day comment period.

**MOTION:** To insert the word “now” (in quotations) to modify when actions should be taken to increase society’s resilience to a changing climate.

*(Rosenthal/Coyle)*

**Amendment:** Remove the quotations around “now”.

*(Coyle; accepted by Rosenthal)*

**Amendment:** To table the suggested addition of the word “now” (with or without quotations) until such time as the statement has been returned to POPA for further modification by the APS Board of Directors.

*(McCurdy/T. Taylor)*

**ACTION:** The amended motion passed. (19 in favor, 2 abstentions)
Proposed Carbon Audit Activity
As a possible follow-on activity to the APS Statement on Earth’s Changing Climate, the Energy & Environment Subcommittee urges POPA to recommend the Society undertake a review of its carbon footprint; a greenhouse gas inventory. APS would be among the first scientific societies to attempt such an effort. If POPA agrees that this is an action APS should consider, Board of Directors approval would be necessary prior to commencement of the project. There are several levels of inventory that could be conducted. A full scope would include the carbon emissions associated with the Society’s largest meetings, including associated travel.

MOTION: To present the draft proposal to the APS Board of Directors with the recommendation that POPA is in favor of the Society conducting a carbon audit. (McCurdy/Gates)

ACTION: The motion passed. (20 in favor, 1 abstention)

European Workshop Update
Given that Russia has recently indicated withdrawal from Ukraine, a workshop on the topic of tactical nuclear weapons might keep the channels of communication open. Engagement from the right individuals from Russia and the U.S. would be necessary. We’d need to find a way for DoE lab professionals to participate.

ACTION: The National Security Subcommittee will continue to assess the situation and report back to POPA when the time seems right to proceed.

New Business
It was brought to POPA’s attention that we may want to hear from someone regarding the integration of Cuban physicists into the North American scientific community, now that the U.S. has restored diplomatic ties and is normalizing relations with the country. This is an item of interest to the APS Committee on International Scientific Affairs (CISA) and the APS Department of International Affairs, headed by Amy Flatten.

ACTION: POPA will invite Amy Flatten and/or other guests to present to POPA. CISA should be notified that POPA is aware of this issue and would like to help in any way.

Intersessional Minutes
➢ Subcommittee teleconferences were held to progress work on proposed and ongoing projects and to conduct the annual review of active APS statements.
➢ The APS Board of Directors approved the draft Statement on Earth’s Changing Climate at their February 2015 meeting; the statement was sent to the APS Membership for comment. All comments have been reviewed by the Energy & Environment Subcommittee.

Next Meeting
The date for the next POPA meeting will be June 5th, 2015.

Adjournment

ACTION: W. Barletta adjourned the meeting 2:23 PM