DRAFT AGENDA – OPEN SESSION
FY24 BOARD OF GOVERNORS MEETING
Westin Long Beach
Centennial Ballroom B, 3rd Floor
Sunday, June 2, 2024 - 9:00 am to 2:00 pm (PDT)

BREAKFAST (8:00 am - 9:00 am)

1. Opening of the Meeting (Start Time 9:00 am)
   1.1. Call to Order
       Tom Kurfess
   1.2. Adoption of the Agenda ACTION
   1.3. President’s Remarks (10 minutes)
       Tom Kurfess INFORMATION
   1.4. Executive Director/CEO’s Remarks (10 minutes)
       Tom Costabile INFORMATION
   1.5. Consent Items for Action ACTION
       Identification of items to be removed from Consent Agenda
       Consent Items for Action are items the Board is asked to take action on as a group.
       Governors are encouraged to contact ASME Headquarters with their questions prior to
       the meeting as it is not expected that consent items be removed from the agenda.
       1.5.1. Approval of Minutes of April 17, 2024
       1.5.2. Proposed Appointments
       1.5.3. Proposed Changes to By-Law B5.4
       1.5.4. Changes to Society Policies P-4.5 and P-4.6

2. Open Session Agenda Items
   2.1. YTD Financial Report (15 minutes)
       Bill Garofalo INFORMATION
   2.2. H & H Update (10 minutes)
       Elisabeth Deeb INFORMATION
   2.3. Sector Reports (60 minutes)
       Nicole Dyess, Lester Su, Bob Stakenborghs, Tom Vogan
       And Rick Cowan INFORMATION

BREAK (15 minutes)
2.4. Committee on Sustainability Report (30 minutes)  
Sean Bradshaw

2.5. ECLIPSE Intern Project Presentation (30 minutes)  
Class of FY24 Interns

LUNCH

2.6. Comments from Outgoing Board Members, (45 minutes)  
Senior Vice Presidents and ECLIPSE Intern  
Andy Bicos, Tommy Gardner, Sam Korellis, Wolf Yeigh, Nicole Dyess, Lester Su, and Nicole Salloum

2.7. Reflections on the Past Year (10 minutes)  
Tom Kurfess

3. New Business

4. Open Session Information Items

4.1 Dates of Future Meetings

<table>
<thead>
<tr>
<th>DATE</th>
<th>DAY</th>
<th>TIME</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 4, 2024*</td>
<td>Tuesday</td>
<td>8:30 am – 4:00 pm</td>
<td>Long Beach, CA</td>
</tr>
<tr>
<td>July 9-12, 2024*</td>
<td>Tuesday-Friday</td>
<td>9:00 am – 4:00 pm</td>
<td>Florence, Italy</td>
</tr>
<tr>
<td>October 1, 2024*</td>
<td>Tuesday</td>
<td>1:00 pm – 3:00 pm</td>
<td>Virtual Meeting</td>
</tr>
<tr>
<td>November 17, 2024*</td>
<td>Sunday</td>
<td>8:30 am – 3:00 pm</td>
<td>Portland, OR</td>
</tr>
</tbody>
</table>

*FY25 Board of Governors

5. Adjournment – Open Session

List of Appendices

1.5.2. Proposed Appointments
1.5.3. Proposed Changes to By-Law B5.4
1.5.4. Changes to Society Policies P-4.5 and P-4.6
2.2. H&H Update
2.5. ECLIPSE Intern Project Presentation
ASME Board of Governors
Agenda Item
Cover Memo

Date Submitted: May 9, 2024
BOG Meeting Date: June 2, 2024

To: Board of Governors
From: Committee on Organization and Rules
Presented by: Emily Boyd
Agenda Title: Proposed Appointments

Agenda Item Executive Summary:

Proposed appointments reviewed by the COR on May 9, 2024.

Proposed motion for BOG Action:

To approve the attached appointments.

Attachments: Document attached.
The Committee on Organization and Rules recognized that Mr. Stakenborghs also serves as the Senior Vice President of the Technical and Engineering Communities, but did not see there was a conflict of interest with serving on the Standards and Certification Council, as well.

### JUNE 2024 PROPOSED APPOINTMENTS TO EXTERNAL ORGANIZATION

<table>
<thead>
<tr>
<th>Internal Unit</th>
<th>Nominee</th>
<th>Appointment Position/Title</th>
<th>Appointment Term/Category</th>
<th>Appointment Type</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear Research Institute</td>
<td>Derrick Black</td>
<td>Representative</td>
<td>July 2024-December 2026</td>
<td>Initial</td>
<td>25 years experience with gearing. He has no ASME Committee History.</td>
</tr>
</tbody>
</table>
Date Submitted: May 9, 2024
BOG Meeting Date: June 2, 2024
To: Board of Governors
From: Committee on Organization and Rules
Presented by: Emily Boyd
Agenda Title: Proposed Changes to By-Law B5.4

Agenda Item Executive Summary:

The Standards and Certification Council proposed changes to B5.4 reflecting the new name of the Board on Nuclear Clean Energy, Power and Facilities Codes and Standards and the designation of Chairs and Vice Chairs of its Boards.

Proposed motion for BOG Action:

To adopt changes to By-Law B5.4.

Attachment(s):

Document attached.
B5.4 STANDARDS AND CERTIFICATION SECTOR

B5.4.1 The Standards and Certification Sector, under the direction of the Board of Governors, is responsible for the activities of the Society relating to codes and standards, including related conformity assessment programs. The Standards and Certification Sector will maintain a current Sector Operation Guide that will contain operational details of the Standards and Certification Sector that are not in these By-Laws.

B5.4.2 The Standards and Certification Sector shall be led by a Council on Standards and Certification (CSC) that consists of the following voting membership: a Senior Vice President as Chair; a Vice Chair; no more than twelve members-at-large; and the Chairs of the Boards that report to the Council, see B5.4.5. The nonvoting membership of the Council shall include ASME staff as appointed by the Executive Director/CEO.

B5.4.3 The incoming Senior Vice President of Standards and Certification shall be nominated by the Standards and Certification Sector Council for appointment by the Board of Governors for a term of three years.

B5.4.4 The twelve members-at-large and the CSC Vice Chair shall be appointed by the Board of Governors, as recommended by the Council on Standards and Certification. The term of each member-at-large and the CSC Vice Chair shall be three years, with the terms of one-third of the members-at-large ending at the close of the second Business Meeting of the fiscal year.

B5.4.5 The following Boards will report directly to the Council on Standards and Certification:

B5.4.5.1 The Codes and Standards supervisory Boards including the Boards on Standardization and Testing; Nuclear, Clean Energy, Power and Facilities Codes and Standards; Pressure Technology Codes and Standards; Safety Codes and Standards; and Conformity Assessment shall supervise the development of codes and standards within their respective charters, including the development of conformity assessment criteria for applicable codes and standards. The Board on Conformity Assessment shall also supervise the administration of conformity assessment programs.

B5.4.5.2 The Technical and Strategic Advisory Board, under the direction of the Council on Standards and Certification, will consider and evaluate products and services and make recommendations to the relevant Boards and business units while collaborating with the Strategy Office.

B5.4.5.3 The Board on Council Operations shall approve on behalf of the Council, matters of procedures and personnel, and shall advise the Council on operational matters, including honors, information services, legal considerations, continuous improvement, and planning.

B5.4.5.4 The Board on Hearings and Appeals shall be a forum for appeals resulting from
grievances related to procedural due process in codes, standards, accreditation, registration, and certification activities.

B 5.4.6 The Boards that report to the Council shall each consist of a Chair; one or more Vice Chairs, and a membership, as determined by the Council on Standards and Certification.

B 5.4.7 The Chair of the Board on Council Operations shall be the Vice Chair of the Council on Standards and Certification. The Chair of the Board on Hearings and Appeals shall be the Vice Chair of the Board on Council Operations.
<table>
<thead>
<tr>
<th>Date Submitted:</th>
<th>May 9, 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOG Meeting Date:</td>
<td>June 2, 2024</td>
</tr>
<tr>
<td>To:</td>
<td>Board of Governors</td>
</tr>
<tr>
<td>From:</td>
<td>Committee on Organization and Rules</td>
</tr>
<tr>
<td>Presented by:</td>
<td>Emily Boyd</td>
</tr>
<tr>
<td>Agenda Title:</td>
<td>Changes to Society Policies P-4.5 and P-4.6</td>
</tr>
</tbody>
</table>

Agenda Item Executive Summary:

Society Policy P-4.5 calls for travel reimbursements for volunteers instead of travel contributions, which have a daily cap. If approved, the existing Society Policy P-4.6 can be sunset.

Proposed motion for BOG Action:

To approve changes to Society Policy P-4.5 and to sunset P-4.6.

Attachment(s): Society Policy changes.
SOCIETY POLICY  
TRAVEL EXPENSE REIMBURSEMENT

I. PREFACE

A. By-Law B4.4.6 states, "All payments for expenditures shall be made by the office of the Chief Financial Officer upon proper authorization, in accordance with the budget adopted by the Board of Governors."

B. This Society Policy applies to categories of volunteer travel that may either be ASME business specific or related to ASME internal administration.

C. As a learned technical society, ASME expects that members who participate in the activities of the Society will normally be responsible for the expenses that they incur as part of their participation. In return, member participation contributes greatly to the professional growth of the engineers. Employers of ASME members benefit greatly by the professional growth of their employees. Because of these benefits to both employer and employee, it is expected that the member will be able to obtain travel costs from his or her employer, his or her own funds, or from other sources.

D. This Society Policy permits travel reimbursement for volunteers to those units where funding is available in the budget.

E. ASME has developed this Society Policy to take care of those cases related to certain specific activities of the Society for which the member is not able to obtain funding for travel from his or her employer or other sources.

II. PURPOSE

A. To explain the budget and expense reimbursement relationship.

B. To list the limits of expense reimbursement.

C. To establish the rules of qualification for an expense reimbursement.

D. To list the eligibility for travel expense reimbursements.

III. POLICY

A. The budget and expense reimbursement relationship.

1. Funding for travel expense reimbursement shall be included in the annual budget of the Society. In selecting the timing and location of meetings, consideration shall be given to the travel cost to ASME, the travel cost to the member or their employer, and the time away from home required of the member. Meetings which can be scheduled to take advantage of low air travel rates shall be encouraged.
2. Control of travel expenses to ASME under this Society Policy is achieved by careful attention to the budget. During the preparation of the budget, each unit requests a certain amount of travel support for the activities under its control. When the budget is approved by the Board of Governors, ASME travel support for the specific unit activities is established for that budget year.

B. Permissible travel expenses

1. Transportation:
   People travelling to ASME authorized meetings are encouraged to find the least expensive practical means of travel, where alternative fares are available.

   a. Travel by air: Large discount fares with penalties are encouraged where the probability of cancellation is low. Penalties for cancellation will be paid where authorized by the unit leader. Otherwise, round-trip coach should be utilized if available. When traveling internationally, an upgrade to the next class of travel is acceptable if flying over 5 consecutive hours in a single segment, and if it is budgeted. Pre-approval by the ED/CEO is required. If working under United States government contract, a United States-flag air carrier should be used when practical. Airfares will be reimbursed. Reasonable local fares between the airport and the meeting site will be reimbursed. An original itemized airline receipt, an e-ticket receipt or an internet receipt/statement is required for reimbursement. The receipt must show the traveler’s name, the method of payment, and indicate that payment was made.

   b. Travel by public ground transportation: Round-trip rail and/or bus fare will be reimbursed. Local fares between the transportation terminal and the meeting site will be reimbursed. Original receipts are required for rail, taxi, bus, and other modes of transportation if costs are $25 or more for each occurrence.

   c. Travel by private automobile: The mileage reimbursement rate for travel by private automobile is in accordance with United States Internal Revenue Service Guidelines, plus tolls and parking. Under non-emergency travel conditions, round-trips by private automobile shall not exceed 1600 kilometers or 1000 miles, unless it can be shown to be the most economical means of travel.
d. Travel by rental car: To be reimbursed at the same rate as for travel by private automobile. However, full costs may be included if no other transportation means are available. **Carpooling** should be encouraged. **Commercial rental vehicles as a primary mode of transportation are authorized only if the rental vehicle is more economical than any other type of public transportation, or if the destination is not otherwise accessible.** Vehicle rental at a destination city is reimbursable. Original receipts are required for reimbursement. The rental agreement must clearly show the date and the points of departure/arrival, as well as the total cost. Drivers must adhere to the rental requirements, and restrictions must be followed.

2. Lodging & Meals

Actual reasonable **sustenance** and hotel room expenses for each day or major part of a day at the meeting or on official Society business. Approval may be given for additional days if this results in an overall reduction in travel reimbursement.

Where ASME has contracted a room block, the room charge, plus sales/use taxes related to the room itself, will be added to the master account and fully paid for by the sponsoring business unit and its budget.

Lodging required during any other meetings will be reimbursed at a reasonable rate, if permitted by the budget. Not reimbursed are Airbnb or similar organizations providing accommodations.

Reasonable expenses for meals and **sustenance** that are not offered during the meeting or conference are permitted. Original itemized receipts are required for expenditures over $25.

C. Rules for reimbursing a travel expense,

1. A travel expense may be **reimbursed** by ASME under the following conditions:
   a. The person is not able to obtain funding elsewhere.
   b. The person is among those eligible to receive a travel expense reimbursement because the activity they have completed is a budgeted activity.
c. A request for a travel expense reimbursement is submitted on an official ASME form and in accordance with the rules related to that form.

d. The Travel Expense Reimbursement Form is approved by a member of the ASME staff authorized to approve it. Final approval of the reimbursement is subject to the approval of the Executive Director/CEO.

e. The Travel Expense Reimbursement Form must be filed within 90 days of the completion of the activity. If the activity occurs at or near the end of the fiscal year, the volunteer must notify their staff support before the end of the fiscal year they intend to file a report so that the staff member can file an accrual for the expense.

2. Every effort will be made to keep the unit and those eligible for travel reimbursement apprised of the status and availability of travel reimbursement funds for that activity for that period. Travel reimbursement cannot be made after the unit and those eligible have been notified that the travel budget has been committed and/or expended. All persons at the meeting in question shall be considered on the same basis, with the date the expense report is submitted not being a factor.

D. Eligibility for travel expense reimbursement.

Persons participating in the types of activities described as follows may be eligible to receive a travel expense reimbursement whenever travel funds are available in the budget. The budget will be the deciding factor in determining what activities have funding; each unit is encouraged to keep a list of desired activities to budget travel reimbursement in its Operation Guide. Final approval of the reimbursement is subject to the approval of the Executive Director/CEO.

1. Board of Governors meetings, retreat and indoctrination meetings as determined by the President and available in the budget.

   Guests who are specially invited by the President, the Board or the ED/CEO to attend a meeting of the Board of Governors, except guests representing a unit of ASME, who shall be eligible for travel expense reimbursement from the travel budget of the represented unit.

2. Meetings of the Standing Committees of the Board of Governors, as defined in the Society By-Laws as determined by the Board of Governors as available in the budget.

3. Other travel authorized by the President, the Board of Governors, ED/CEO, as available in the budget.
4. All Sector Meetings as determined by the appropriate Senior Vice President as available in the budget.

5. Nominating Committee.
   - Voting Members, Alternates, Consultants (Past Chair and Past Vice Chair or designee), Past President Advisors to the Nominating Committee, as available in the budget.

6. Other organizations.
   - Representatives or delegates to other organizations as authorized by the President, Board of Governors, or the ED/CEO as available in the budget.

Responsibility: Committee on Finance

Adopted: May 7, 1974

Renumbered from P-2.4: March 24, 1978

Deleted: 5.

Deleted: ASME representatives to the Accreditation Board for Engineering and Technology to attend meetings of the Accreditation Board for Engineering Technology as determined by the Public Affairs and Outreach Senior Vice President as available in the budget.

6. New members of the ASME/Accreditation Board for Engineering Technology Ad Hoc Visitors List to accompany the ASME member as an observer on one accreditation visit as determined by the Public Affairs and Outreach Senior Vice President as available in the budget.

Deleted: 7.

Deleted: Members designated by the Committee on Ethics to serve on ad hoc ethics investigations committees as determined by the Chair of the Committee on Past Presidents as available in the budget.

8. Representatives to National Council of Examiners for Engineering and Surveying and the Exam writers to National Council of Examiners for Engineering and Surveying problem writing workshop sessions as determined by the Student and Early Career Development Senior Vice President as available in the budget.

9. The representative to the National Institute for Engineering Ethics as determined by the Chair of the Committee on Past Presidents as available in the budget.

Deleted: 10

Deleted: Secretary

Deleted: Alternate Members who have specific assigned duties, incoming Voting Members and Alternates of the Nominating Committee to attend organizational meetings as available in the budget.

Deleted: 11. Old Guard Committee.

Old Guard Committee Members to attend the meetings of the Old Guard Committee as available in the budget.

Old Guard judges, contestants and contest winners at Old Guard Contests held during the Congress as available in the budget.

12. ASME Auxiliary.

Officers to attend the Board meetings of the Auxiliary as available in the budget.
Revised:

April 28, 1978 (editorial change, 6/99)
June 25, 1980
June 16, 1982
   (editorial changes, 8/83)
March 21, 1984
June 20, 1986
   (editorial changes, 6/87)
December 18, 1987
June 16, 1988
   (editorial changes, 11/88)
March 15, 1989
   (editorial changes, 4/89)
December 14, 1989
June 6, 1990
   (editorial changes, 3/91)
March 15, 1991
December 5, 1991
   (editorial changes, 17/92)
March 17, 1992
   (editorial changes, 10/92)
March 11, 1993
March 17, 1994
June 9, 1994
September 11, 1994
November 10, 1994
June 14, 1995
September 17, 1995
November 16, 1995
March 15, 1996
   (June 12, 1996)
September 20, 1996
March 14, 1997
June 11, 1997
September 19, 1997
March 13, 1998
   (responsibility reassigned, 11/98)
   (editorial change, 3/99)
July 1, 1999 (revised at March 12, 1999 Meeting)
April 14, 2021

June 7, 2000
November 10, 2000
June 12, 2002
November 22, 2002
   (editorial changes, 3/01)
   (editorial change, 3/03)
   (editorial change, 9/02)
   (editorial change, 9/03)
   (editorial change, 6/04)
   (editorial changes, 8/83)
   (editorial change, 6/87)
   (editorial changes, 9/02)
   (editorial change, 3/01)
   (editorial change, 3/03)
   (editorial change, 9/03)
   (editorial change, 6/04)
   (editorial changes, 11/88)
   (editorial changes, 4/89)
   (editorial changes, 9/03)
   (editorial changes, 6/04)
   (editorial changes, 17/92)
   (change to amounts in Ill.B.2, 1/17)
   (editorial change of COF's name (6/20)
   (editorial change, 11/88)
   (editorial change, 6/99)
   (editorial change, 3/01)
   (editorial change, 3/03)
   (editorial change, 9/02)
   (editorial change, 9/03)
   (editorial change, 6/04)
SOCIETY POLICY

TRAVEL EXPENSE REIMBURSEMENT

I. PREFACE

A. By-Law B4.4.6 states: "All payments for expenditures shall be made by the office of the Chief Financial Officer upon proper authorization, in accordance with the budget adopted by the Board of Governors."

B. This Society Policy applies to a category of travel which traditionally has been considered as an ASME expense item and is reimbursed more nearly in full than the volunteer travel covered by Society Policy P-4.5, Travel Expense Contribution.

II. PURPOSE

A. To explain the budget and expense reimbursement relationship.

B. To list the limits of expense reimbursement.

C. To establish the rules of qualification for an expense reimbursement.

D. To list the positions of eligibility for travel expense reimbursement.

III. POLICY

A. The budget and expense reimbursement relationship.

1. Funding for travel expense reimbursement shall be included in the annual budget of the Society.

2. The extent of this travel is governed primarily by administrative decision and budget over-runs due to this travel are handled in the same manner as budget over-runs due to other expenses.

3. In contrast, volunteer travel under Society Policy P-4.5 is by the budget amounts and that travel is no longer supportable when there are no more funds available in the budget.

B. Basis for travel expense reimbursement.

1. Transportation.

   a. Travel by air: Large discount fares with penalties are encouraged where the probability of cancellation is low. Penalties for cancellation
will be paid where authorized by the unit leader. Otherwise, round trip coach should be utilized if available. Local fares to and from terminals will be reimbursed. When traveling internationally while working under United States government contract, a United States-flag carrier should be used when practical.

b. Travel by public ground transportation: Round trip rail and/or bus fare and local fares to and from terminals.

c. Travel by private automobile: Mileage at the maximum allowable rate under current Internal Revenue Service guidelines, plus tolls and parking. However, for round trips in excess of 1600 kilometers (1000 miles), the contribution shall not exceed $550.00 under non-emergency travel conditions.

d. Travel by rental car: To be reimbursed at the same rate as for travel by private automobile. However, full costs may be included if no other transportation means are available. Car-pooling should be encouraged.

2. Other expenses.

Actual subsistence and hotel room expenses and other normal travel expenses, if reasonable and necessary, for each day or part of a day on ASME business. Approval may be given for additional days if this results in overall reduction in travel contribution.

C. Rules for paying a travel expense reimbursement.

1. The person is among those eligible to receive travel expense reimbursement as defined later in this Society Policy.

2. A request for travel expense reimbursement is submitted on an official ASME form and is in accordance with the rules related to that form.

3. The travel expense reimbursement request form is approved by the Chief Financial Officer or by a member of the ASME staff authorized to approve it.

D. Eligibility for travel expense reimbursement.

1. The following listed persons are eligible to receive travel expense reimbursement.

   a. The President of the Society for all travel related to their service to the Society.
b. The Spouse or partner of the President to attend the Society-Wide Meetings, and other meetings where spouses and partners are normally expected to attend.

c. A Past President, or other Society member, who is requested to represent the President at a meeting of another organization or at any other special function.

d. Members of a trial board to attend meetings related to the investigation of charges of misconduct or unethical behavior which have been brought against an ASME member as approved by the President.

e. Public interest representatives to attend meetings of the Standards and Certification Sector, and its boards and committees; codes and standards representatives to attend international codes and standards meetings; members and designated participants of the Standards and Certification Sector, its boards and committees to attend leadership and training conferences focusing on the legal implications of Standards, and Certification to the Society; all of the above as approved by the Standards and Certification Sector.

Responsibility: Committee on Finance

Adopted:  June 16, 1982

Revisions:
- (editorial changes 4/85)
- (number of Policy changed from P-4.8 to P-4.6)
- (editorial changes 6/87)
- (editorial changes 4/89)
- (editorial changes 9/89)
- September 13, 1990
- December 5, 1991
- March 17, 1994
- (responsibility reassigned 11/98)
- (editorial changes 6/1/05)
- (editorial changes 5/14)
- (editorial changes 1/20/15)
- June 5, 2019
- (editorial change of COF’s name in 6/20)
- April 19, 2022
## Board of Governors Meeting

### Agenda Item

#### Cover Memo

<table>
<thead>
<tr>
<th>Date Submitted:</th>
<th>May 6, 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOG Meeting Date:</td>
<td>June 2, 2024</td>
</tr>
<tr>
<td>To:</td>
<td>Board of Governors</td>
</tr>
<tr>
<td>From:</td>
<td>William Garofalo, Chief Financial Officer</td>
</tr>
<tr>
<td>Presented by:</td>
<td>William Garofalo</td>
</tr>
<tr>
<td>Agenda Title:</td>
<td>YTD Financial Report</td>
</tr>
</tbody>
</table>

### Agenda Item Executive Summary:

A YTD financial report will be provided.

### Proposed motion for BOG Action:

**None**

### Attachment(s):

**None**
**Board of Governors Meeting**  
**Agenda Item**  
**Cover Memo**

<table>
<thead>
<tr>
<th>Date Submitted:</th>
<th>May 13, 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOG Meeting Date:</td>
<td>June 4, 2024</td>
</tr>
<tr>
<td>To:</td>
<td>Board of Governors</td>
</tr>
<tr>
<td>From:</td>
<td>Elisabeth Deeb</td>
</tr>
<tr>
<td>Presented by:</td>
<td>Elisabeth Deeb</td>
</tr>
<tr>
<td>Agenda Title:</td>
<td>H&amp;H Update</td>
</tr>
</tbody>
</table>

**Agenda Item Executive Summary:**

A brief update will be provided regarding the History & Heritage Committee.

Proposed motion for BOG Action: None

Attachment(s): PowerPoint
ASME’S
HISTORY & HERITAGE
COMMITTEE
committee members

1. Elisabeth Deeb
2. Nikhil Menezes
3. Joseph Radik
4. Maya Ruslan
5. Julie Kulik
To preserve, celebrate, and promote the rich history and heritage of engineers and innovations, and their impact on society. We inspire current and future generations of engineers. We are committed to ensuring that our historical narrative reflects the diversity of engineers who have contributed to ASME's legacy.
The ASME History and Heritage Committee envisions a world where the impact of engineering excellence is recognized and cherished by the public, and the contributions of ASME and its members to the advancement of engineering knowledge and technology are recognized and appreciated by all. We aim to foster an understanding of the historical context of engineering achievements and their significance in shaping our world, emphasizing the diverse voices that have shaped our field. Through education, archival efforts, and engaging storytelling, we aspire to ensure that the proud history of ASME and the engineering community continues to inspire and inform engineering leaders of tomorrow, while fostering a sense of pride, belonging, and equity among our current members.
Activities to Date

January 2024
H&H 1st meeting with CPP

February - June
Planning for FY25 & Beyond
Outstanding Landmarks

Bentley Nevada
Landmark Non-Contacting Eddy Current Sensors

Karen Ohland
attending May 16th

Ottawa Combined Cycle Power Plant

DATE TBD
• Possible collaboration with SECD on EFEST virtual platform & digital passport, building on virtual landmarks and online museum.
• Podcast - Featuring historians speaking on historical landmarks and or People in ME.
• Video work featuring section, people and companies.
• Landmarks aligned to ASME’s DEI initiatives, more consumer product landmarks.
• Leverage ETHW partnership.
Thank you
Board of Governors Meeting
Agenda Item
Cover Memo

Date Submitted: May 6, 2024
BOG Meeting Date: June 2, 2024
To: Board of Governors
From: Senior Vice Presidents
Presented by: Nicole Dyess, Lester Su, Bob Stakenborghs, Tom Vogan & Rick Cowan
Agenda Title: Sector Reports

Agenda Item Executive Summary:

In lieu of written reports, each Senior Vice President will give a short presentation during the open session of the BOG meeting providing an update on sector activities.

Proposed motion for BOG Action: none

Attachment(s): none
<table>
<thead>
<tr>
<th>Date Submitted:</th>
<th>May 14, 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOG Meeting Date:</td>
<td>June 2, 2024</td>
</tr>
<tr>
<td>To:</td>
<td>Board of Governors</td>
</tr>
<tr>
<td>From:</td>
<td>Board of Governors</td>
</tr>
<tr>
<td>Presented by:</td>
<td>Sean Bradshaw</td>
</tr>
<tr>
<td>Agenda Title:</td>
<td>Committee on Sustainability - Report</td>
</tr>
</tbody>
</table>

Agenda Item Executive Summary:

Sean Bradshaw, Chair, Committee on Sustainability (CoS) will provide an overview of the proposed implementation plan related to the ASME Climate Strategy.

Proposed motion for BOG Action: None

Attachment(s): None
Date Submitted: May 13, 2024
BOG Meeting Date: June 2, 2024
To: Board of Governors
From: Royonah Marble, Program Manager, Student and Early Career Engagement
Presented by: ECLIPSE Class of 2023-2024
Agenda Title: Preparing ASME for Generation Z (& Beyond)

Agenda Item Executive Summary:
The ECLIPSE interns will deliver a presentation on their group project for the 2023-2024 program year. The topic they will be presenting on is “Preparing ASME for Generation Z (& Beyond).”

Proposed motion for BOG Action:
None

Attachment(s):
PowerPoint
Preparing ASME for Generation Z (& Beyond)

ECLIPSE Group Project
Class of 2023 - 2024
Introducing The Team

Luke Placzek - SECD
Pacific Northwest National Lab

Richard Hollenbach III - S&C
Exponent Consulting

Paul Kummannoor Benny - TEC
ASML

Nicole Salloum - BOG
La Javaness

Louisa Avellar - PAO
SLB

Lovepreet Singh - SES
Wood Mackenzie
Executive Summary

• As ASME approaches its sesquicentennial anniversary, it needs to stay relevant to the newer generations of mechanical engineers

• Many ASME offerings are more relevant to the Baby Boomer generation than to Gen Z, Millennials, and even Gen X

• ASME’s programs and activities are largely centered on academia

• The value proposition to engineers from industry who are highly technical – both employers and employees – is not always clear

• These factors may be contributing to ASME’s high average member age and declining YoY membership numbers and challenges with industry engagement

• This high-level analysis takes a closer look into making ASME relevant and ready for the engineers from Generation Z and Beyond
Outline

- **Past**
  - How has ASME served the engineering field?
  - The Mechanical Engineering industry through the years

- **Future**
  - Emerging Industries
  - Embracing AI
  - Shifting Worker Preferences

- **Present**
  - State of the ME Industry
  - Current State of the Organization
Past: How has ASME served the engineering field?

- ASME ... to discuss the concerns brought by the rise of industrialization and mechanization.
- Started developing the B&PV codes in 1911 and released in 1915.
- Technology development post-WWII during the Space Race and the rapid expansion of the Oil & Gas industry helped grow membership, attract quality engagement, and strengthen ASME's position in industry.
- **This strong technical portfolio** was a driving factor in making ASME relevant to its members as well as the wider engineering field.
Prominent mechanical engineering industries by economic and employment share since 1880.

1880
- Railroad
- Textile
- Machine Tool
- Agriculture
- Machinery
- Steel
- Steam Power
- Textile
- Machine Tool
- Automobile
- Shipbuilding
- Steel
- Textile
- Machine Tool
- Automobile
- Steel
- Construction
- Electrical Equipment

1900
- Railroad
- Machine Tool
- Automobile
- Shipbuilding
- Steel
- Automobile
- Construction
- Oil
- Electrical Equipment

1920
- Automobile
- Steel
- Construction
- Oil
- Electrical Equipment
- Steel
- Automobile
- Construction
- Oil
- Electrical Equipment

1940
- Automobile
- Aircraft
- Shipbuilding
- Weapons and Machinery Production
- Power Generation
- Steel
- Automobile
- Construction
- Oil
- Electrical Equipment

1960
- Automobile
- Aerospace
- Nuclear Power
- Construction
- Chemical
- Automobile
- Aerospace
- Nuclear Power
- Construction
- Chemical

1980
- Automobile
- Aerospace
- Nuclear Power
- Construction
- Chemical
- Automobile
- Aerospace
- Nuclear Power
- Construction
- Chemical
- Automobile
- Aerospace
- Nuclear Power
- Construction
- Chemical

2000
- Advanced Manuf.
- Automation
- Medical Devices
- Wind
- Solar
- Nuclear
- Medical Robotics
- Semiconductors
- Thermal management for electronics
- 3D Printing and Additive manuf.
- Biosensors and wearables
- Robotics
- Alternative Energy
- Integration and Efficiency
- UAVs
- AI
- Semiconductor

2030 + beyond
- Advanced Robotics and Automation
- Grid Modernization and Advanced Energy Storage Solutions
- EVs and Autonomous Vehicles
- Sustainable Infrastructure and Construction
- Healthcare Robotics and Bioprinting
Prominent mechanical engineering industries by economic and employment share since 1880.

Is our technical portfolio up to date with these trends?

*Yellow = New Industries

Source: US Census Bureau, BLS etc.
Outline

- **Past**
  - How has ASME served the engineering field?
  - The Mechanical Engineering industry through the years

- **Future**
  - Emerging Industries
  - Embracing AI
  - Shifting Worker Preferences

- **Present**
  - State of the ME Industry
  - Current State of the Organization
The BLS predicts there will be roughly 19,200 ME job openings in the US per year for the next ten years.

In 2022 there were 32,891 ME Bachelor degrees granted in the US (from ASEE).
Future of Mechanical Engineering: Embracing AI

Generative AI is impacting all fields, even outside of simply text generation: (from The State of Generative AI in the Enterprise, Deloitte)

- Text – 83%
- **Code** – 62%
- Audio – 56%
- Images – 55%
- Video – 36%
- 3D Models – 26%

- On the other hand, big data and AI **need to be monitored and verified**
- ASME can play a role in writing **codes and standards** governing the use of AI
Future of Mechanical Engineering: Embracing AI

Training by Mechanical Engineers for Mechanical Engineers... not necessarily just on Mechanical Engineering
Future of Mechanical Engineering: Embracing AI
Shifting Worker Preferences

1. Increased openness to **changing employer**

2. **Salary Levels** as a decision factor and a source of worry

3. High priority & importance to job **security & flexible** locations/hours

4. **Work-Life Balance** (& Burnout) becomes as important as Salary

5. **Diversity, Equity & Inclusion (DEI)** initiatives highly valued by GenZ

6. Dissatisfaction with available **training opportunities** across age ranges

*Themes 1 & 6 are ideal areas for ASME to develop content of interest to GenZ & Beyond*
Increased openness to changing employer

**Top Reasons why workers stay at their job**

- Career development potential
- Adequate total compensation
- Meaningful work
- Workplace flexibility

- GenZ (18-24)
- Older Generations (45+)
- Everyone

**Workers actively explore opportunities at different companies**

- 40%

**Workers do not see themselves at their current employer in 2 years**

- 25%

**Top Reasons why workers left their previous job**

- Lack of meaningful work
- Inadequate total compensation
- Lack of career development potential

**Top Reasons why workers took a new job**

- Adequate total compensation (Top 1 for older generations)
- Career development potential (Top 1 for GenZ)
- Meaningful work
- Workplace flexibility
Dissatisfaction with **available training opportunities** across age ranges

**TRAINING DEMAND**

- Lack of career development training -> Top 1 reason for job change.
- GenZ MEs are trying to gain multidisciplinary expertise.
- GenZ MEs are looking for tailored trainings.

**WHAT IF ASME BRIDGES THIS GAP?**

- Trainings for MEs
- Networking & Mentoring
- Soft skills trainings

**TRAINING SUPPLY**

- 57% of workers pursue training outside of work because company training
A Macro Trend that is disrupting all engineering-reliant sectors is Green Transition.

**IMPACTED SECTORS**

- Energy Sector
- Materials Sector
- Infrastructure Sector

**Key Sectors adopting Environmental Management Tech**

1. Oil & Gas
2. Transportation
3. Chemical & Advanced Materials
4. Production of Consumer Goods

**DRIVERS OF JOB CREATION**

- Public & Private investment* in Green Transition
- Broader application of ESG Standards
- Climate Change Adaptation

**IMPACT**

- **30 Million Jobs** created globally by 2030 in clean energy, efficiency, and low emission technologies
- Environmental Management Technologies will be one of the top job creators in 2023-2027

*Since the pandemic, $1.8 trillion spent globally on green stimulus (vs $650 billion inflation-adjusted in response to 2008 financial crisis)
Outline

- **Past**
  - How has ASME served the engineering field?
  - The Mechanical Engineering industry through the years

- **Future**
  - Emerging Industries
  - Embracing AI
  - Shifting Worker Preferences

- **Present**
  - State of the ME Industry
  - Meeting the Needs of ASME Members
### Present State of the ME Industry

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Number of employees in 2014 (177K/350K)</th>
<th>Number of employees in 2021 (257K/350K)</th>
<th>Delta (%) 2014 to 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace products &amp; parts manufacturing</td>
<td>3620</td>
<td>1781</td>
<td>-103</td>
</tr>
<tr>
<td>Aircraft &amp; parts manufacturing</td>
<td>3328</td>
<td>10679</td>
<td>89</td>
</tr>
<tr>
<td>Architectural, engineering &amp; related services</td>
<td>20812</td>
<td>30092</td>
<td>31</td>
</tr>
<tr>
<td><strong>Computer Systems Design</strong></td>
<td><strong>1117</strong></td>
<td><strong>3107</strong></td>
<td><strong>64</strong></td>
</tr>
<tr>
<td>Construction</td>
<td>4048</td>
<td>7051</td>
<td>43</td>
</tr>
<tr>
<td>Construction, &amp; mining &amp; oil &amp; gas field machinery manufacturing</td>
<td>10452</td>
<td>11475</td>
<td>9</td>
</tr>
<tr>
<td>Electric lighting &amp; electrical equipment manufacturing, &amp; other electrical component manufacturing, n.e.c.</td>
<td>2015</td>
<td>2691</td>
<td>25</td>
</tr>
<tr>
<td>Electric power generation, transmission &amp; distribution</td>
<td>2059</td>
<td>2151</td>
<td>4</td>
</tr>
<tr>
<td><strong>Electronic component &amp; product manufacturing, n.e.c.</strong></td>
<td><strong>5188</strong></td>
<td><strong>7304</strong></td>
<td><strong>29</strong></td>
</tr>
<tr>
<td>Engine, turbine, &amp; power transmission equipment manufacturing</td>
<td>6394</td>
<td>8610</td>
<td>27</td>
</tr>
<tr>
<td>Machinery manufacturing, n.e.c. or not specified</td>
<td>28546</td>
<td>42243</td>
<td>32</td>
</tr>
<tr>
<td>Medical equipment &amp; supplies manufacturing</td>
<td>4133</td>
<td>7201</td>
<td>43</td>
</tr>
<tr>
<td>Metalworking machinery manufacturing</td>
<td>5682</td>
<td>6183</td>
<td>8</td>
</tr>
<tr>
<td>Miscellaneous fabricated metal products manufacturing</td>
<td>6560</td>
<td>7802</td>
<td>16</td>
</tr>
<tr>
<td>Motor vehicles &amp; motor vehicle equipment manufacturing</td>
<td>62824</td>
<td>90240</td>
<td>30</td>
</tr>
<tr>
<td>National security &amp; international affairs</td>
<td>2803</td>
<td>5828</td>
<td>52</td>
</tr>
<tr>
<td>Navigational, measuring, electromedical, &amp; control instruments manufacturing</td>
<td>2566</td>
<td>4832</td>
<td>47</td>
</tr>
<tr>
<td>Scientific research &amp; development services</td>
<td>2696</td>
<td>4426</td>
<td>39</td>
</tr>
<tr>
<td>Structural metals, &amp; boiler, tank, &amp; shipping container manufacturing</td>
<td>2757</td>
<td>3094</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: datausa.io, BLS, US Census Bureau

Content needs to be reflective of the industry
### Present State of the ME Industry: Where do Graduates Go?

<table>
<thead>
<tr>
<th>MIT</th>
<th>Purdue</th>
<th>Univ. of Michigan</th>
<th>Carnegie Mellon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace &amp; Defense</td>
<td>Aerospace &amp; Defense</td>
<td>Automobiles &amp; Parts</td>
<td>Aerospace &amp; Defense</td>
</tr>
<tr>
<td>Consulting</td>
<td>Automotive</td>
<td>Aerospace &amp; Defense</td>
<td>Consulting</td>
</tr>
<tr>
<td>Computer Software</td>
<td>Energy</td>
<td>Transportation</td>
<td>Internet &amp; Software</td>
</tr>
<tr>
<td>Energy</td>
<td>Consulting</td>
<td>Civil &amp; Construction</td>
<td>Automotive</td>
</tr>
<tr>
<td>Automotive/Transportation</td>
<td>Heavy Equipment</td>
<td>Computer Hardware</td>
<td>Computer Hardware</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Biomedical</td>
<td>Healthcare</td>
<td>Medical Devices</td>
</tr>
<tr>
<td>Education</td>
<td>Manufacturing</td>
<td>Consulting</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Engineering</td>
<td>Consumer Products</td>
<td>Software &amp; Computer</td>
<td>Consumer Goods</td>
</tr>
<tr>
<td>Pharma</td>
<td>Food &amp; Nutrition</td>
<td>Consumer Goods</td>
<td>Investment Banking</td>
</tr>
</tbody>
</table>

*Data is collected via post-graduation surveys of Mechanical Engineering undergraduate students at respective schools between 2020-2023.*
Is ASME Meeting the Needs of Its Members?

<table>
<thead>
<tr>
<th>Organization</th>
<th>Membership</th>
<th>Revenue (Mil US$)</th>
<th>Offerings Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASME</td>
<td>78k</td>
<td>99</td>
<td>3 Free Online Courses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>115</td>
<td>Paid Online Courses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25 Conferences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Local Section Engagement</td>
</tr>
</tbody>
</table>

- 300+ Conferences (incl. sub-conferences)
- 25 Conferences
- Local Section Engagement

<table>
<thead>
<tr>
<th>ABA</th>
<th>400k</th>
<th>146</th>
<th>1600+ Free Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>98</td>
<td>Webinars (free - $10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 Annual Meeting</td>
</tr>
</tbody>
</table>

- 2023 IMECE 1532 attendees, >85% academics

<table>
<thead>
<tr>
<th>IEEE</th>
<th>460k</th>
<th>406</th>
<th>IEEE Learning Network</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>566</td>
<td>Webinars ($10 - $40)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>300+ Conferences</td>
</tr>
</tbody>
</table>

- (incl. sub-conferences)

<table>
<thead>
<tr>
<th>SWE</th>
<th>43k</th>
<th>8</th>
<th>1 Annual Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>13</td>
<td>Local Section Engagement</td>
</tr>
</tbody>
</table>

Are our course offerings meeting the needs of all professional engineers?

- 3 courses available now for free:
  - B31.1 Power Piping Code Overview
  - B31.3 Process Piping Code Overview
  - Introduction to Selection of Valves
  - Other courses $$$-$$$$

Is our conference attendee mix representative of the industry mix?

- Why are there more SWE mechanical engineers than ASME women mechanical engineers?

- 16k attended SWE22
  - Significant portion of membership
- 18.97% of members are Mechanical Engineers
  - 7980 SWE Mechanical Engineers > 6700 ASME Women Engineers
Conclusion

- In the past, ASME thrived by uniquely serving rapidly expanding industries
- ASME could modify its offerings to better serve and engage in developing technical areas which attract younger members
- The preferences of young engineers need to be considered to create compelling and valuable content they want to engage with
- Many ME-focused industries are undergoing rapid growth and are not well represented in ASME’s portfolio
- We need to invest to update our offerings to catch up and re-position ASME as a strong technical leader
Ideas to Better Serve the Future Mechanical Engineering Industry and Stay Relevant to GenZ and Beyond

1. Prioritize a diverse leadership mix to include professionals from industry, government, and academia.
2. Proactively respond to new and emerging technologies such as AI, ML, Green Tech, etc.
3. Publish a State of the ME industry report highlighting industry trends, with tools for engineers to stay competitive in the labor market.
4. Provide soft skills trainings to keep members employable.
5. Incorporate AR/VR into trainings to stay on top of the new technologies used in engineering.
6. Make ASME technically strong by revitalizing the TEC Sector to be positioned as a strong technical leader.
7. Offer high-quality hybrid conference experiences.
8. Recruit students and early career members and give them exposure to Technical Divisions.
9. Work with ABET to introduce Standards and Codes in college curriculum in more depth.
10. Create a S&C crash course for professors to better support their students who aspire to join industry.
Thank you!

ECLIPSE Intern Class of 2023 - 2024