

MEETING MINUTES

American Nuclear Society – Thermal Hydraulics Division
Executive Committee Meeting
5:00 – 6:30 pm US Eastern time, Sunday, June 7, 2020
Zoom: <https://us02web.zoom.us/j/88903836511>

Attendees (EC Members, see Appendix A): Wade Marcum (OSU), Elia Merzari (PSU), Bao Wen Yang (DEQD, Delta energy group), Annalisa Manera (University of Michigan), Fan-Bill Cheung (PSU), Dillon Shaver (Argonne National Laboratory), Xiaodong Sun (University of Michigan), Matt Zimmer (NCSU), Igor Bolotnov (NCSU), Lane Carasik (Virginia Commonwealth University), Yassin Hassan (Texas A&M), Robert Martin (BWXT).

Attendees (Other, see Appendix A): Marylin Delgado (Texas A&M), Minghui Chen (University of New Mexico), Jun Wang (UW), Caleb Brooks (UIUC), Guillaume Mignot (OSU), Seungjin Kim (Purdue), Jong Kim (KAIST), Karen Vierow Kirkland (Texas A&M), Jinyong Feng (MIT), Shanbin Shi (RPI), Steve Arndt (NRC), Subash Sharma, David Pointer (ORNL), Ishita Trivedi (NCSU), Mary-Lou Dunzik Gougar (ANS president), Edward Chen (NCSU), Ling Zou (ANL), Jake Weinberg (NCSU).

Proxies (EC Members, see Appendix A): Chul-Hwa Song (KAERI) to Wade Marcum, John Luxat (McMaster University) to Bao-Wen Yang, Hisashi Ninokata (Polimi) to Wade Marcum.

1. Opening Chair

Meeting call to order 5:05 pm. Roll call and quorum met (see **Appendix A**).

2. Approval of Meeting Agenda All

A draft agenda was provided (**Appendix B**).

MOTION: Dr. Carasik moved to approve the agenda, with the items 4 and 5 before 3.

SECOND: Bao-Wen Yang.

No discussion.

APPROVED unanimously

3. Visitors from Student Conferences

The chairs for the 2020 student conference gave a presentation, led by conference chair Ishita Trivedi. Ed Chen (program chair) and Jake Weinberg also participated in the presentation. It was noted that the conference was moved to 2021. The conference will be in Raleigh. The 2020 student conference was cancelled.

The organizers mentioned that the financial; planning for the 2021 conference proceeds speedily. They have retained 86% of sponsorship revenue.

The goal of the organizers is to transition everything done for 2020 to 2021. But the program (paper submission and review) will need to be re-done. The organizers thanked reviewers and judges and good participation from THD. Thermal-hydraulics was one of the most popular with 18 out of roughly 120. It is unclear what will be done with old papers. However resubmittal will be required for presentation at the 2021 conference. The organizers noted that the program required extensive planning and it included 13 panels.

The organizers asked the division to consider financial support or award for best paper. A discussion ensued. It was clarified that THD funding was usually allocated to that, but in this instance they have been used for general fund. It was suggested in the discussion to consider using the 2021 THD student conference allocation for this. The discussion was postponed to the treasurer report stage.

4. Remarks from ANS Executive Committee Kelly

Mary-Lou Danzik Gougar (incoming president) introduced herself. She communicated that the board of directors passed the Change 2020 plan. She noted the appointment of Craig Percy as the CEO and an ongoing review and reorganization of staff at ANS. She mentioned that temporarily the board agreed on 25% (division)-75% (HQ) share for the organization of topical meetings. She also gave a particular thanks to students and young members for being pioneers on the virtual meeting.

5. Approval of Minutes from 2019 ANS Winter Meeting All

The Minutes of the 2019 ANS Winter Meeting are provided in **Appendix C**.

MOTION: Approve the minutes (Bob Martin)

SECOND: Lane Carasik

No discussion

APPROVED unanimously.

6. Action Items from 2019 ANS Winter Meeting

- a. Activity on Subcommittee to Support the NURETH 40th Anniversary Merzari
- b. Proposal on Sehgal's Memorial Award Selection Criteria J. Kim/Schubring
- c. Proposal on Revision of Division Bylaws & Rules and Procedures Merzari/Martin
- d. Proposal on Service Award Merzari
- e. Award Fund Increase to Support TAA Monetary Award B.-W. Yang

Item 6a. The Nominating committee has the action to fill committee. Discussion and motion are postponed to item 13.

Item 6b. Discussion on "Proposal on Sehgal's Memorial Award Selection Criteria" based on document by Honors and Awards Committee provided in **Attachment D (Honors and Awards report)**. The H&A committee did not reach consensus on a proposal due to a lack of consensus on the definition of "early career" requirements. A proposal was prepared at the behest of the THD chair and forwarded to the committee defining "early or mid-career" as within 20 years of the highest degree (see Attachment D.3).

A lengthy discussion followed on the other requirements in the proposal and in particular the publication requirement. Some urged to postpone vote on the award to reconsider the requirements but other expressed a strong desire to approve the award as soon as possible to ensure the first awardee will be at NURETH-19.

MOTION: To accept the award selection criteria proposal as stated in Attachment D.3 (Merzari).

SECOND: Cheung.

AMENDMENT: Modify proposal such as the publication requirement be: "The candidate must have published at least five (5) articles in NURETH, NUTHOS, ATH, ANS Meetings or relevant journals, with articles presented at a minimum of (2) different NURETH meetings." (Carasik)

SECOND: Bob Martin

No further discussion.

Amendment APPROVED unanimously.

Amended motion APPROVED unanimously

Item 6c. The bylaws task force formed of Dr. Song, Dr. Martin, Dr. Sun and Dr. Merzari reviewed the bylaws/rules changes in recent years. It was discovered that several changes were not submitted to the ANS Bylaws and rules committee making them inactive. Moreover some of the changes are poorly documented on the minutes of the division. The task force thus collected recent changes and proposed a comprehensive revision of the bylaws. (**Attachment E**).

MOTION: Modify bylaws as stated in **Attachment E**. (Sabharwall)

SECOND: Sun

No discussion.

APPROVED Unanimously

The bylaws task force also found the procedures of the division are out of date (often by decades). The task force recommended a committee to update the procedures in coordination with the committee chairs of the division.

MOTION: Form a dedicated subcommittee involving all committee chairs with the goal or re-writing entirely the procedures document. (Shaver)

SECOND: Yang

APPROVED Unanimously

ACTION (Nominating committee): Propose committee members.

Finally the bylaws task force prepared a new rule for the establishment of a scholarship committee (**Attachment F**).

MOTION: Motion for new rule 9.6 establishing a scholarship committee as stated in **Attachment F** (Shaver).
SECOND: Hassan

APPROVED unanimously.

Item 6d. The H&A committee prepared a proposal for the selection criteria for the Service award (**Attachment D**). The creation of a service award was already approved at the last meeting.

MOTION: Approve selection criteria for the service award as stated in **Attachment D.1**. (H&A committee)
SECOND: Not required

APPROVED unanimously.

Item 6e. The TAA monetary increase was already voted upon at the last meeting. It has already been approved by ANS as of November 2019.

- 7. Chair Report
 - a. Report from Professional Divisions Workshop Marcum
 - b. Report from President's Meeting with Division Chairs Marcum

Dr. Marcum provided only a brief update given the time constraints. It was pointed out that that a new quarterly meeting of CEO with division chairs is now scheduled. A detailed report is provided in **Attachment G**.

- 8. Treasurer's Report B.-W. Yang
 - a. Status of the Division Finances
 - b. Potential Impact of the ANS Change Plan 2020

The Treasurer (Dr. Yang) discussed the financial situation of the division, that remains healthy. A detailed financial report, extracted from the newsletter, is in **Appendix H**.

MOTION: Adopt proposed budget with the stipulation that the 2500\$ for student support are allocated as follows: 2000\$ for ANS meetings and 500\$ for 2021 student conference funding a best paper award (Merzari).
SECOND: Carasik.

In the discussion it emerged that likely the funded allocated for plaques and awards is insufficient.

AMENDMENT: Amend the budget to Increase plaque and awards amount to 1250\$ (Sun).
SECOND: Sabharwall.

No further discussion.

Amendment APPROVED unanimously.

No further discussion.

Amended motion APPROVED unanimously.

9. Program Committee Report
- | | |
|---|---------------------------------|
| a. 2020 ANS Annual Meeting Program in Phoenix, AZ | Bolotnov |
| b. 2020 ANS Winter Meeting Program in Chicago, IL | Bolotnov |
| c. 2021 ANS Annual Meeting in Providence, RI - Session Planning | Bolotnov |
| d. ATH 2022 Planning | Song/Sun |
| e. NURETH-18 Update | Marcum |
| f. ATH 2020 Update | Benhamadouche /Bolotnov/Merzari |
| g. NUTHOS-13 Update | Ninokata/Sun/Merzari |
| h. NURETH-19 Update | Roelofs |
| i. ICAPP 2020 Update | Sun/Bolotnov |
| j. Motions from the PC Meeting | Bolotnov |

Refer to PC meeting minutes.

10. Membership Committee Report Pointer

The membership committee report is extracted from the newsletter in **Attachment I**.

A Discussion ensued on the membership committee issues, including an unclear rule about the membership of the committee. Dr. Pointer recommended to change the rule to be more reflective of current practice.

ACTION: To write a proposal for a revised rule on membership committee (Merzari)

11. Division Website Report Delgado

Ms. Delgado updated the committee on the status of the website. The committee expressed sincere appreciation for her work.

12. Honors and Awards Committee Report Schubring
- | | |
|--|------------------|
| a. Proposal on Sehgal's Memorial Award | Schubring/J. Kim |
| b. Others | |

Discussed in item 6.

13. Nominating Committee Report Pointer
- | | |
|--|--|
| a. Election for New Division Officers | |
| b. Election for New Division EC Members | |
| c. Candidates for NURETH-20 Conference Screening Committee Members | |
| d. Others | |

Dr. Pointer mentioned the result of the recent ANS elections (**Attachment J – Nominating committee report**). In the nominating committee report it is also mentioned that there is currently an inconsistency between bylaws and rules and the practice concerning the Conference selection committee (SCS). This is related to the issues with the bylaws discussed in item 6. The nominating committee postponed nominations to the CSC

ACTION ITEM (Nominating committee): Nominating committee to work with CSC to define a procedure to populate the committee and be consistent with bylaws.

Regarding program committee membership, the nominating committee brought forward three motions (they do not need a second).

MOTION: Renew the term of the following 29 Program Committee members through 2022.

- | | |
|-----------------------|-----------------------|
| 1. Steven Arndt | 16. Y. Liu |
| 2. Fatih Aydogan | 17. John Luxat |
| 3. Steven Bajorek | 18. Robert Martin |
| 4. Philippe Bardet | 19. Kurshad Muftuoglu |
| 5. Sama Bilbao y Leon | 20. Hisashi Ninokata |
| 6. Lane Carasik | 21. W. David Pointer |
| 7. H. Chang | 22. Shripad Revankar |
| 8. Xu Cheng | 23. Jovica Riznic |
| 9. Fan-Bill Cheung | 24. Piyush Sabharwall |
| 10. Cesar Frepoli | 25. Chul-Hwa Song |
| 11. Yassin Hassan | 26. Xiadong Sun |
| 12. Rui Hu | 27. Brian Woods |
| 13. Jong Kim | 28. Bao-Wen Yang |
| 14. Seungjin Kim | 29. Ling Zou |
| 15. Si Young Lee | |

APPROVED unanimously.

MOTION: Transition the following 12 Program Committee members to the advisory council with the term expiring in 2025.

- | | |
|----------------------|---------------------------|
| 1. David Aumiller | 7. J.-M. LeCorre |
| 2. Emilio Baglietto | 8. Michael Podowski |
| 3. Brian Collins | 9. Pradip Saha |
| 4. Francesco d'Auria | 10. DuWayne Schubring |
| 5. Randall Gaunt | 11. Kune Suh |
| 6. Takashi Hibiki | 12. Karen Vierow Kirkland |

APPROVED unanimously.

MOTION: Appoint following active THD members to Program Committee membership with terms expiring in 2023.

1. Seung Jun Kim (LANL)
2. Guillaume Mignot (Oregon State)
3. Lander Ibarra (ANL)
4. Shanbin Shi (RPI)
5. Rodolfo Vaghetto (TAMU)
6. Jun Wang (Madison)
7. Su-Jong Yoon (INL)
8. Matthew Zimmer (KAPL)

APPROVED unanimously.

Dr. Pointer pointed out that the PC has 55 total members with terms expiring in 2020 (7 members), 2021 (10 members), 2022 (30 members) and 2023 (8 members).

At the November 2019 ANS Winter Meeting, the Executive Committee authorized the creation of a special committee to organize a celebration of the 40th anniversary of NURETH at the November 2020 ANS Winter Meeting. The Nominating Committee brings the following MOTION to the Executive Committee.

MOTION: Appoint the following members to the NURETH 40th Anniversary Celebration Committee.

1. Fan-Bill Cheung, Pennsylvania State University (Chair)
2. Yassin Hassan, Texas A&M University
3. Lane Carasik, Virginia Commonwealth University
4. Dillon Shaver, Argonne National Laboratory
5. Elia Merzari, Pennsylvania State University
6. Igor Bolotnov, North Carolina State University
7. Subash Sharma, University of Massachusetts at Lowell
8. Bao-Wen Yang, Delta Energy Group

In the discussion, Dr. Hassan points out the need to recognize founding members of NURETH and THD in this effort.

APPROVED unanimously.

14. Old Business All

No old business.

15. New Business All
a. Actions from Professional Divisions Workshop Marcum
b. Actions from President's Meeting with Division Chairs Marcum
c. Others All

No new business.

16. Adjournment Chair

MOTION: Adjourn (Yang).

SECOND: Merzari.

APPROVED unanimously.

Meeting adjourned at 7:30 pm.

ATTACHMENT A

List of attendees for roll call.

LIST OF ATTENDEES Roll call

American Nuclear Society – Thermal Hydraulics Division
Executive Committee Meeting
5:00 – 6:30 PM US Eastern time, Sunday, June 7, 2020
Zoom: <https://us02web.zoom.us/j/88903836511>

Executive Committee Members

Name	Organization	Mark as present
Chul-Hwa Song	KAERI	Not Present, proxy to Wade Marcum
Wade Marcum	OSU	Present
Elia Merzari	PSU	Present
Bao-Wen Yang	Delta Energy Group	Present
Yang Liu	VirginiaTech	Present
John Luxat	McMaster University	Not Present, proxy to Bao-Wen Yang
Annalisa Manera	University of Michigan	Present
Hisashi Ninokata	Politecnico di Milano	Not Present, proxy to Wade Marcum
Piyush Sabharwall	INL	Present
Fan-Bill Cheung	PSU	Present
Yong Hoon Jeong	KAIST	Not Present
Dillon R. Shaver	Argonne National Laboratory	Present
Xiaodong Sun	University of Michigan	Present
Matt Zimmer	FMP	Present
Fatih Aydogan	Jacksonville University	Not Present
Igor Bolotnov	NCSU	Present
Lane Carasik	VCU	Present
Yassin Hassan	TAMU	Present
Robert P. Martin	BWXT	Present

LIST OF ATTENDEES
Roll call

American Nuclear Society – Thermal Hydraulics Division
Executive Committee Meeting
5:00 – 6:30 PM US Eastern time, Sunday, June 7, 2020
Zoom: <https://us02web.zoom.us/j/88903836511>

Other attendees

Name	Organization	Email
Marylin Delgado		
Minghui Chen		
Jun Wang		
Caleb Brooks		
Guillaume Mignot		
Seungjin Kim		
Jong Klm		
Karen Vierow Kirkland		
Jinyong Feng		
Shanbin Shi		
Steve Arndt		
Subash Sharma		
David Pointer		
Ishita Trivedi		
Mary-Lou Dunzik Gougar		
Edward Chen		
Ling Zou		
Jake Weinberg		

ATTACHMENT B

Agenda.

PROPOSED AGENDA

American Nuclear Society – Thermal Hydraulics Division
Executive Committee Meeting
5:00 – 6:30 PM US Eastern time, Sunday, June 7, 2020
Zoom: <https://us02web.zoom.us/j/88903836511>

- | | |
|--|-------------------|
| 1. Opening | Chair |
| 2. Approval of Meeting Agenda | All |
| 3. Approval of Minutes from 2019 ANS Winter Meeting | All |
| 4. Visitors from Student Conferences | |
| 5. Remarks from ANS Executive Committee | Kelly |
| 6. Action Items from 2019 ANS Winter Meeting | |
| a. Activity on Subcommittee to Support the NURETH 40 th Anniversary | Merzari |
| b. Proposal on Sehgal's Memorial Award Selection Criteria | J. Kim |
| c. Proposal on Revision of Division Bylaws & Rules and Procedures | Merzari/Martin |
| d. Proposal on Service Award | Merzari |
| e. Award Fund Increase to Support TAA Monetary Award | B.-W. Yang |
| 7. Chair Report | |
| a. Report from Professional Divisions Workshop | Marcum |
| b. Report from President's Meeting with Division Chairs | Marcum |
| 8. Treasurer's Report | B.-W. Yang |
| a. Status of the Division Finances | |
| b. Potential Impact of the ANS Change Plan 2020 | |
| 9. Program Committee Report | |
| a. 2020 ANS Annual Meeting Program in Phoenix, AZ | Bolotnov |
| b. 2020 ANS Winter Meeting Program in Chicago, IL | Bolotnov |
| c. ATH 2020 Update | Bolotnov/Merzari |
| d. ATH 2022 Planning | Bolotnov/Sun |
| e. NURETH-18 Update | Marcum |
| f. NURETH-19 Update | Bolotnov |
| g. NUTHOS-13 Update | Bolotnov/Ninokata |
| h. ICAPP 2020 Update | Bolotnov/Sun |
| i. Motions from the PC Meeting | Bolotnov |
| 10. Membership Committee Report | Pointer |
| 11. Division Website Report | Delgado |

- | | |
|--|------------------|
| 12. Honors and Awards Committee Report | Schubring |
| a. Proposal on Sehgal's Memorial Award | Schubring/J. Kim |
| b. Others | |
| 13. Nominating Committee Report | Pointer |
| a. Election for New Division Officers | |
| b. Election for New Division EC Members | |
| c. Candidates for NURETH-20 Conference Screening Committee Members | |
| d. Others | |
| 14. Old Business | All |
| 15. New Business | All |
| a. Actions from Professional Divisions Workshop | Marcum |
| b. Actions from President's Meeting with Division Chairs | Marcum |
| c. Others | All |
| 16. Adjournment | Chair |

ATTACHMENT C

Minutes.

The official minutes for the EC meeting held in conjunction with ANS winter meeting 2019 are available at:

http://thd.ans.org/wp-content/uploads/2020/06/EC_Minutes_WM2019-Draft-For-Approval.pdf

ATTACHMENT D

Honors and awards committee report.

THD Honors and Awards Committee Report May 31, 2020

Submitted to the THD Executive Committee by Dr. DuWayne Schubring, THD A&C Committee Chair.

There were two action items for consideration by the committee between the 2019 ANS Winter Meeting and the 2020 ANS Annual Meeting.

1. THD service award. The committee has voted to recommend approval of this award as was presented at the 2019 ANS Winter Meeting (Attachment D.1). This motion passes to the THD-EC as a motion and second.
2. Bal-Raj Sehgal Memorial Award. The committee has discussed selection criteria for the award, in consultation with Prof. Jong Kim and Prof. Sehgal's family. Two minimum requirements have been agreed upon:
 - A. The candidate must demonstrate a significant innovative or sustained contribution to the thermal-hydraulics field. A particular focus should be on the application of thermal-hydraulics modeling, experimentation, simulation, and validation to nuclear reactor safety.
 - B. The candidate must have presented at least five (5) articles in NURETH, NUTHOS, ATH, or ANS meetings with articles presented at a minimum of two (2) different NURETH meetings.

The committee has also discussed scored selection criteria, similar to those for the TAA or BPA. These include:

- A. Exceptional and/or innovative contributions to thermal hydraulics field.
- B. Sustained career in thermal hydraulics field, including such metrics as papers published and students mentored.
- C. Participation in NURETH, NUTHOS, ATH, and ANS meetings, with a particular emphasis on NURETH.
- D. Relevance of thermal hydraulics work to nuclear reactor safety.

Prof. Jong Kim offered the following:

I have consulted Prof. Ravinder Sehgal (Prof. Bal-Raj Sehgal's son) and Nam Dinh (Prof. Bal-Raj Sehgal's protégé) and re-confirmed what I had known all along - the spirit of this award which was articulated by the Sehgal family in the past.

They reminded me that Prof. Sehgal was noted for his tireless support and encouragement for young researchers and believe this is the right group this award should target. I am copying Nam and Ravinder on this mail. I also feel that it will be wonderful to establish an award that encourages those who are in their early career trying to establish themselves – we don't seem to have such an award in TH Division.

I would therefore advise the H&A Committee to add a selection criterion to the effect that the candidates should be relatively young and upcoming and should not be senior persons who have already built their castles. I believe your committee should craft an appropriate wording on what constitutes “relatively young and upcoming”. One possibility might be “ranking below full professor” in the case of an academic candidate and “no more than 20 years of professional experience” for non-academic candidates. If you would prefer limiting the age explicitly, I think it may not be unreasonable to limit it to 40 and under. These are merely some ideas that quickly came to mind as I write but I am fully confident that your committee’s collective wisdom will come up with better ideas.

At this point, the committee has not yet agreed how to implement a “relatively young and upcoming” criterion: (a) whether it should be a scored or bright-line criterion and (b) whether age, career stage (title), or years of professional experience be used. Dr. Pointer has recommended age citing precedent of other awards, while Dr. Schubring opposes this on ethical, legal (age discrimination), and logistical grounds.

The decision is therefore referred back to the Executive Committee, with a draft of the award criteria provided (Attachment D.2).

Note of the Secretary: I have also received a variant of the award proposal from Dr. Song with a proposed criterion that implements the wishes of the family (Attachment D.3).

Attachment D.1

Application for new ANS Award established by the ANS Thermal-hydraulics division (THD)

NAME OF AWARD: THERMAL-HYDRAULIC MERITORIUS SERVICE AWARD
SPONSORED AND FUNDED BY: ANS THERMAL-HYDRAULICS DIVISION (THD)
THERMAL-HYDRAULIC MERITORIUS SERVICE AWARD

Description

This award recognizes an individual for sustained and exemplary service to the nuclear thermal-hydraulic profession. Service can be in the form of:

1. Leadership in the thermal-hydraulic division (THD) of ANS.
2. Leadership in national and international research and engineering programs related to thermal-hydraulics,
3. Individual non-technical contributions that lead to the betterment and growth of the profession as a whole.
4. Educational contributions aimed at the next generation of thermal-hydraulic engineers.
5. Advocacy for thermal-hydraulic research and development.

Emphasis is placed on sustained, well-recognized, service contributions over a number of years but single exceptional one-time contributions may also be considered. The award consists of a plaque and \$1000 cash award presented at the ANS Annual Meeting. Costs of the plaque will be covered by the THD award fund.

Background

The thermal-hydraulic division has offered in the past a service award and technical award (the current TAA). The service award was later abandoned in favor of emphasizing the importance of the TAA. Given the recent growth of THD and the increase of individual contributors we believe restarting the service award is in the best interest of our members. In fact, given the large number of participants in the activities of THD this award seem necessary to balance the current award offering of THD which is skewed toward technical contributions. This award highlights the importance of the continued service contributions of our members, aimed at the growth of the thermal-hydraulic profession and forming the next generation of nuclear scientists and engineers.

Selection Method

This award recognizes an individual for sustained and exemplary service to the nuclear thermal-hydraulic profession.

Emphasis is placed on sustained, well-recognized, service contributions over a number of years but single exceptional one-time contributions may also be considered. Nominees must meet the following criteria:

- The candidate must have been a registered THD member in good standing for at least the previous three (3) years.
- The candidate must demonstrate an individual or sustained contribution in one or more of the following areas:
 - o Leadership in the thermal-hydraulic division (THD) of ANS.
 - o Leadership in national and international research and engineering programs related to thermal-hydraulics,
 - o Individual non-technical contributions that lead to the betterment and growth of the profession as a whole.
 - o Educational contributions aimed at the next generation of thermal-hydraulic engineers.
 - o Advocacy for thermal-hydraulic research and development.

Nominations are made with the ANS nomination form accompanied by (1) a narrative summary of about 1,000 words that outlines the nominee's relevant accomplishments and a description of the significance of these accomplishments, (2) a list of ANS---supporting activities (including but not limited to presentations at ANS national and topical meetings, service on division committees, and dates of THD membership), and (3) a resume or CV. Additional letters of support (no more than five) may be provided with the nomination package. The Award recipient is selected by the Honors and Awards Committee of the THD. It is awarded once per year, if an eligible candidate is nominated and selected.

The deadline for receipt of nominations is March 1.

[2] Additional information to be considered by ANS Honors and Awards Committee, Finance Committee, and Board of Directors.

This award will come with a plaque and a \$1000 cash award. Plaque is to be paid for by the ANS THD Award fund and it is already fully endowed.

No funding for travel reimbursement or meeting attendance is anticipated or included in the proposal. That would have to be handled by special exception, if required, by the ANS THD Executive Committee.

DIVISION POINTS OF CONTACT:

Elia Merzari

2019-2020 Secretary, ebm5351@psu.edu

Attachment D.2

Application for new ANS Award established by the ANS Thermal-hydraulics Division (THD)

NAME OF AWARD: BAL-RAJ SEHGAL MEMORIAL AWARD

SPONSORED AND FUNDED BY: ANS THERMAL-HYDRAULICS DIVISION (THD)

Description

This award recognizes an individual for his/her exceptional and/or sustained contributions to the thermal-hydraulics field with a particular focus on the application of thermal-hydraulics to nuclear reactor safety. A highly visible and respected world leader in thermal hydraulics and nuclear safety research, Professor Sehgal was a fixture at the NURETH conferences with which he had a special affinity, regularly invited to deliver keynote or plenary lectures. While he would engage in serious technical discussions with his peers and colleagues, he would often be seen interacting with the younger generations to transfer his considerable knowledge and experience. He was active in TH Division affairs, serving as TH Division Chair and receiving the Thermal Hydraulics Technical Achievement Award.

This new award honors his legacy. It is awarded every 2 years and presented at a nearest NURETH conference to arrive. The award consists of a plaque and a \$2,000 monetary prize. The recipient is expected to deliver a keynote lecture at the NURETH conference at which the award is presented in coordination with the conference organizers.

Background

Born in Peshawar in former British India, Dr. Sehgal moved to New Delhi during Partition and spent his early years there before emigrating to the United States to pursue a doctorate in nuclear engineering at UC Berkeley. What followed was an exceptional career trajectory which led Dr. Sehgal to become a leading global expert in nuclear reactor safety culminating with his professorship at the Royal Institute of Technology in Stockholm where he established the Division for Nuclear Power Safety. Dr. Sehgal was an outstanding scientist and researcher, a great teacher and mentor, a prolific author (360 articles) and a tireless servant to the community. During the course of his career, he was inducted into numerous societies and academies, notably as elected member of the Swedish Royal Academy of Engineering Sciences, the U.S. National Academy of Engineering, and the Lithuanian Academy of Sciences and fellow of the American Nuclear Society and the American Society of Mechanical Engineers. For his wide-ranging and impactful contribution to research and science of nuclear safety, he was recognized with numerous awards, including the Seaborg Medal, the Technical Achievement Award and the Thomson Award for

Reactor Safety from the American Nuclear Society. This award, established in collaboration with his family, honors his legacy.

Selection Method

This award recognizes an individual for exceptional and/or sustained contributions to the thermal-hydraulics field with a particular focus on the application of thermal-hydraulics to nuclear reactor safety. Nominees (non-ANS members also eligible) must meet the following selection criteria :

- The candidate must demonstrate a significant innovative or sustained contribution to the thermal-hydraulics field. A particular focus should be on the application of thermal-hydraulics modeling, experimentation, simulation, and validation to nuclear reactor safety.
- The candidate must have presented at least five (5) articles in NURETH, NUTHOS, ATH, or ANS meetings with articles presented at a minimum of (2) different NURETH meetings.

Candidates will be evaluated according to the following criteria (subject to revision by THD H&A and THD EC):

- Exceptional and/or innovative contributions to thermal hydraulics field (20%)
- Sustained career in thermal hydraulics field, including such metrics as papers published and students mentored (20%).
- Participation in NURETH, NUTHOS, ATH, and ANS meetings, with a particular emphasis on NURETH (20%).
- Relevance of thermal hydraulics work to nuclear reactor safety (40%).

Nominations are made with the ANS nomination form, accompanied by:

- (1) a narrative summary of about 1,000 words that outlines the nominee's relevant accomplishments and a description of the significance of these accomplishments
- (2) a list of ANS activities (including attendance and papers presented at NURETH, additional information can include but not limited to: presentations at ANS national and topical meetings, service on division committees, and dates of THD membership)
- (3) a resume or CV. Additional letters of support (no more than five) may be provided with the nomination package. The Award recipient is selected by the Honors and Awards Committee of the THD. It is awarded once every two years, if an eligible candidate is nominated and selected.

The deadline for receipt of nominations is August 1 (the year before NURETH is awarded)

Additional information to be considered by ANS Honors and Awards Committee, Finance Committee, and Board of Directors:

This award will come with a plaque and a \$2000 cash reward. The plaque and the cash prize are to be paid for by the ANS THD Award fund and it is already fully endowed. The Sehgal family has agreed to donate \$23,000 to fully fund the biennial award.

No funding for travel reimbursement or meeting attendance is anticipated or included in the proposal. Any exception to this rule, if deemed warranted, would have to be handled by the ANS THD Executive Committee.

DIVISION POINT OF CONTACT:

C.-H. Song

ANS 2019-2020 THD Chair – chsong@kaeri.re.kr

Attachment D.3

Application for new ANS Award established by the ANS Thermal-hydraulics Division (THD)

NAME OF AWARD: BAL-RAJ SEHGAL MEMORIAL AWARD

SPONSORED AND FUNDED BY: ANS THERMAL-HYDRAULICS DIVISION (THD)

Description

This award recognizes **an early-career to mid-career individual** for his/her exceptional and/or sustained contributions to the thermal-hydraulics field with a particular focus on the application of thermal-hydraulics to nuclear reactor safety. A highly visible and respected world leader in thermal hydraulics and nuclear safety research, Professor Sehgal was a fixture at the NURETH conferences with which he had a special affinity, regularly invited to deliver keynote or plenary lectures. While he would engage in serious technical discussions with his peers and colleagues, he would often be seen interacting with the younger generations to transfer his considerable knowledge and experience. He was active in TH Division affairs, serving as TH Division Chair and receiving the Thermal Hydraulics Technical Achievement Award.

This new award honors his legacy. It is awarded every 2 years and presented at a nearest NURETH conference to arrive. The award consists of a plaque and a \$2,000 monetary prize. The recipient is expected to deliver a keynote lecture at the NURETH conference at which the award is presented in coordination with the conference organizers.

Background

Born in Peshawar in former British India, Dr. Sehgal moved to New Delhi during Partition and spent his early years there before emigrating to the United States to pursue a doctorate in nuclear engineering at UC Berkeley. What followed was an exceptional career trajectory which led Dr. Sehgal to become a leading global expert in nuclear reactor safety culminating with his professorship at the Royal Institute of Technology in Stockholm where he established the Division for Nuclear Power Safety. Dr. Sehgal was an outstanding scientist and researcher, a great teacher and mentor, a prolific author (360 articles) and a tireless servant to the community. During the course of his career, he was inducted into numerous societies and academies, notably as elected member of the Swedish Royal Academy of Engineering Sciences, the U.S. National Academy of Engineering, and the Lithuanian Academy of Sciences and fellow of the American Nuclear Society and the American Society of Mechanical Engineers. For his wide-ranging and impactful contribution to research and science of nuclear safety, he was recognized with numerous awards, including the Seaborg Medal, the Technical Achievement Award and the Thomson Award for Reactor Safety from the American Nuclear Society. This award, established in collaboration with his family, honors his legacy.

Selection Method

This award recognizes an **early-career to mid-career** individual for exceptional and/or sustained contributions to the thermal-hydraulics field with a particular focus on the application of thermal-hydraulics to nuclear reactor safety.

Nominees (non-ANS members also eligible) must meet the following selection criteria:

- **The candidate must have received her/his highest degree within 20 years of the date of nomination.**

- The candidate must demonstrate a significant innovative or sustained contribution to the thermal-hydraulics field. A particular focus should be on the application of thermal-hydraulics modeling, experimentation, simulation, and validation to nuclear reactor safety.
- The candidate must have presented at least five (5) articles in NURETH, NUTHOS, ATH, or ANS meetings with articles presented at a minimum of (2) different NURETH meetings.

Candidates will be evaluated according to the following criteria:

- Exceptional and/or innovative contributions to thermal hydraulics field (20%)
- Sustained career in thermal hydraulics field, including such metrics as papers published and students mentored (20%).
- Participation in NURETH, NUTHOS, ATH, and ANS meetings, with a particular emphasis on NURETH (20%).
- Relevance of thermal hydraulics work to nuclear reactor safety (40%).

Nominations are made with the ANS nomination form, accompanied by:

- (4) a narrative summary of about 1,000 words that outlines the nominee's relevant accomplishments and a description of the significance of these accomplishments
- (5) a list of ANS activities (including attendance and papers presented at NURETH, additional information can include but not limited to: presentations at ANS national and topical meetings, service on division committees, and dates of THD membership)
- (6) a resume or CV. Additional letters of support (no more than five) may be provided with the nomination package. The Award recipient is selected by the Honors and Awards Committee of the THD. It is awarded once every two years, if an eligible candidate is nominated and selected.

The deadline for receipt of nominations is August 1 (the year before NURETH is awarded)

Additional information to be considered by ANS Honors and Awards Committee, Finance Committee, and Board of Directors:

This award will come with a plaque and a \$2000 cash reward. The plaque and the cash prize are to be paid for by the ANS THD Award fund and it is already fully endowed. The Sehgal family has agreed to donate \$23,000 to fully fund the biennial award.

No funding for travel reimbursement or meeting attendance is anticipated or included in the proposal. Any exception to this rule, if deemed warranted, would have to be handled by the ANS THD Executive Committee.

DIVISION POINT OF CONTACT:

C.-H. Song

ANS 2019-2020 THD Chair – chsong@kaeri.re.kr

ATTACHMENT E

Task force report on bylaws.

The document is attached in all its length due to its importance following this page. The report page numbers are in roman numerals.

Report on Rules & Bylaws

R. Martin, E. Merzari (Secretary) and X. Sun

The team tasked with taking a look at the bylaws, rules and procedures (Dr. Martin, Dr. Merzari and Dr. Sun) has worked to reconstruct all bylaws and rules changes since 2014 (included). We report below on our finding.

Bylaws and Rules

The following has been uncovered:

- None of the rule changes approved by the THD EC between 2014 and 2020 have been submitted to the ANS bylaws and rules committee, and they are therefore inactive.
- The current bylaws are from June 2013.

Moreover:

- Two EC minutes are missing from the THD website and per the ANS HQ records, were never submitted to ANS (Winter 2015 and Annual 2016). They were drafted however and found in the records of several members. These minutes contain several changes to the rules, but the minutes were not approved and do not clearly state the language of the proposed changes.
- Additional changes were made to the practices of the division that require an update to the rules.

The following changes to the rules have been enacted by the EC since 2014:

1. The "conference selection committee" has been renamed "conference screening committee" and rule 9.5 has been substantially updated. The language of this change is not officially reported anywhere. It was obtained from the member who made the original motion, Dr. Schubring. This change was approved in 2015/2016. A verbiage update has been suggested by Dr. Martin, replacing "... members should have previous experience in conference organization" to "Preference is given to members with previous experience in conference organization".
2. Several changes were introduced to the program committee (Annual 2016) but specific language was not documented anywhere (amendment to rule 9.2).
3. A change to position of the Honors and Awards Committee (H&AC) chair was introduced and voted on (amendment to rule 9.4). The change is well documented in the 2018 annual meeting minutes.

Additional changes in practices have occurred but the rules have not been updated:

1. The vice-chair was made responsible for the newsletters but the rules make the secretary directly responsible for the newsletter (amendment to rule 7.3 and 7.4).
2. Several awards were added without making the H&AC directly responsible (amendment to rule 9.4).

While all these changes have been formally approved, they are not active until the ANS National Bylaws and Rules Committee approves them. The task force has compiled a modified version of the rules, including all the changes above. **The secretary seeks a motion from the EC to approve the modified version of the bylaws and rules attached to this report (Attachment A).**

Procedures

The task force also reviewed carefully the procedures of the division. The procedures posted on the THD website are dated from 1988 and are out of date with regards to many aspects. In attachment B, a marked version of the procedures is provided highlighting where the listed procedures are most likely inconsistent with current practice and (on occasion) bylaws/rules.

The procedures need a substantial re-write to be consistent with recent practice and bylaws/rules. It is an opportunity to capture the activities of the division but also to reflect on whether these practices are sound and consistent with the rules and bylaws.

The task force seeks a motion from the EC to form a dedicated subcommittee involving all committee chairs with the goal of re-writing entirely the procedures document.

Attachment A

Modified THD Rules

(starting from next page)

AMERICAN NUCLEAR SOCIETY

Rules for the

Thermal Hydraulics Division

Proposed Changes – 06/07/2020

The Bylaws compared against are the Standard Bylaws adopted by the Thermal Hydraulic Division and approved by the ANS Bylaws and Rules Committee.

Article B1 – Name

1.1 The official designation shall be the Thermal Hydraulics Division of the American Nuclear Society, Incorporated, hereinafter referred to as the Division and Society, respectively.

R1 – Name

1.1 The official name of the Thermal Hydraulics Division of the American Nuclear Society may also be referred to herein as THD.

Article B2 – Objectives

- 2.1 The objectives of the Division shall be consistent with the objectives of the Society, as set forth in its Certificate of Incorporation and in Article B2 of its Bylaws and Rules, principally, the “advancement of science and engineering relating to the atomic nucleus and of allied sciences and arts”.
- 2.2 The Division shall provide, through a group of members of any grades particularly interested in thermal hydraulic technology in the nuclear industry, a means to promote the sciences and arts of that area, within the scope of the Society.
- 2.3 The Division’s area of nuclear science or technology includes: thermal hydraulics, heat transfer and fluid mechanics involved in the utilization of nuclear energy.
- 2.4 To further its objectives, the Division shall:
- a. Hold meetings, or conduct other activities, in accordance with the stated policy of the Society for the presentation and discussion of professional ideas relating to thermal hydraulic technology in the nuclear industry, including heat transfer and fluid mechanics involved in the utilization of nuclear energy.
 - b. Disseminate knowledge and information regarding thermal hydraulic technology in the nuclear industry, including heat transfer and fluid mechanics involved in the utilization of nuclear energy by discussions, communications, and the presentation of papers and other means of information exchange.
 - c. Encourage the formation of closer professional, and, as appropriate, personal relations among the members.
 - d. Cooperate with other scientific and professional groups having related objectives.

R2 – Objectives

2. The THD objectives are set out in the THD Bylaws.

Article B3 – Obligations to the Society

- 3.1 The activities of the Division and its members shall be governed by the provisions of these bylaws which shall be in accord with the provisions of the Certificate of Incorporation and the Bylaws and Rules of the Society. Operation of the Division shall be governed by the laws of incorporation of the Society and their respective Bylaws, Rules, Procedures, and Policies.
- 3.2 In the event of a conflict, the Society’s Bylaws, Rules, Procedures, and Policies shall take precedence over the Bylaws and Rules of the Division.
- 3.3 The Division shall not have authority to act for or in the name of the Society. No action, obligation, or expression of the Division shall be considered an action, obligation, or expression of the Society as a whole. A statement to the effect that the Division assumes sole responsibility for the contents shall be imprinted on any publication regarding an action, obligation, or expression with respect to the Society, issued by the Division. The Division may use its website for this purpose.
- 3.4 The financial affairs of the Division shall be conducted in such manner that the Division shall be financially independent and shall not rely on support from Society funds, except to the limit budgeted by the Board of Directors for each Division. The Division may meet its financial obligations in accordance with the provisions in Article B5.
- 3.5 The Division shall not represent any opinion or position in any matter technical or non-technical as being the official position of the Society or any of its subdivisions without prior approval of the Board of Directors.
- 3.6. The Secretary of the Division shall file with the Executive Director of the Society a copy of

R3- Obligations to the Society

- 3. The THD Obligations to the Society are set out in the THD Bylaws.

the minutes of the Division Executive Committee meetings within thirty (30) days following the meetings date(s) in accordance with B7.3.	
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Article B4 – Membership

- 4.1 Members in good standing in the Society shall be eligible to become members of the Division.
- 4.2 Student members in good standing in the Society shall be voting members and may hold the office of Secretary-Treasurer, Secretary, or Treasurer and serve on the Executive Committee in the Division.
- 4.3 Society members who desire to become members of the Division shall so indicate on the dues billing form issued annually to all Society members by the Executive Director. Society members desiring to join at other times may do so by notifying the Executive Director and paying the associated fee, if necessary.
- 4.4 Society members who desire to terminate their membership in the Division shall so indicate on the annual dues billing form. Society members desiring to resign at other times may do so by notifying the Executive Director. Upon resignation, the member’s name shall be dropped from the Division roster and mailing list.
- 4.5 At the discretion of the Executive Committee, the Division may enroll non-Society members as “Division Participants” for a non-renewable period of up to two years. Division Participants shall be “non-Society” members who qualify by submitting an application and paying a fee for an amount and via a path approved by the Executive Committee of any Professional Division voluntarily choosing to enroll them. Division Participants may be entitled: 1) to receive newsletters and notices of activities of the Division and 2) to participate as non-Society members in Division activities excluding voting and holding elective or appointed offices in the Division. Division Participants shall be encouraged to apply for Society membership.

R4 – Membership

- 4.1 Members of the Division have the right to vote on Division matters.
- 4.2 Student Members of the Society shall be eligible for membership in the Division. Student Members have the right to vote on Division matters. Student Members are eligible to hold positions on the Executive Committee except for the positions of Chair and Vice-Chair.
- 4.5 The THD encourages the involvement of Division Participants. Division Participants need not meet the education and experience requirements that are established for accredited membership in the Society. Unless otherwise specified by the Society, a simple letter of request may suffice as an application for Division Participant status. The Executive Committee shall set dues and conditions of Participant status upon recommendation by the Membership Committee.

Article B5 – Dues, Assessments, and Contributions

- 5.1 The Division may collect dues from its members as provided in the Division Rules. The dues for membership in a Division shall be shown on the annual statement sent to each member of the Society by the Executive Director.
- 5.2 The Division may levy special and reasonable assessments to implement the sponsorship of special or topical meetings when authorized by affirmative vote of not fewer than two-thirds (2/3) of the members present at a regular or special meeting called as provided in these Bylaws.
- 5.3 The Division may also accept non-compulsory financial contributions, but solicitation and acceptance of such contributions shall be subject to the written approval by the Board of Directors and the Executive Director.
- 5.4 The funds derived from these and from any other authorized sources shall be disbursed for the Division by the Executive Director of the Society in response to requests from the Treasurer and Chair and in accordance with the annual operating budget prepared by the Finance Committee of the Division and subject to the limitation stipulated in Article B3.4 of these Bylaws.

R5 – Dues, Assessments, and Contributions

- 5. The THD dues, assessments and contributions statements are set out in the THD Bylaws.

Article B6 – Executive Committee

6.1 The Division shall be managed by an Executive Committee. This Committee shall constitute the governing body of the Division and shall have power to act for the Division in all matters, subject to these Bylaws and to the Certificate of Incorporation and the Bylaws and Rules of the Society.

6.2 The Executive Committee of the Division shall consist of not fewer than six (6) members. The members, elected at large, other than the officers shall have terms not exceeding four (4) years, and the term designated for each shall commence at the close of the Annual meeting of the Society and shall be such as to maintain effective continuity of experience in conducting the affairs of the Division and in performing the duties of the Executive Committee. The Chair of the Division most recently retired shall be an ex-officio member with voting privileges. The Chair of the Professional Divisions Committee of the Society shall be an ex-officio member without vote. The Chair of the Division shall be the Chair of the Executive Committee, and other officers, as defined in Articles B7.2, B7.3, B7.4, and B7.5, shall also serve on the Executive Committee. A quorum shall be a majority of the voting members of the Executive Committee.

6.3 Any vacancy among the officers or on the Executive Committee occurring during their terms shall be filled by appropriate action of the Executive Committee until the next regular election, except that a vacancy in the office of Chair shall be filled by the Vice-Chair (the designated Chair-Elect if there is more than one Vice-Chair), who shall continue also to perform the duties of Vice-Chair until installed as Chair for the following year.

R6 – Executive Committee

6.1 The Executive Committee may empower officers or members of the Executive Committee to act specifically on its behalf in certain matters.

6.2 Composition and Term of Office

a. The Executive Committee of the Division shall consist of not more than twenty (20) members including the Officers, the elected members, and ex-officio members. The elected members shall be elected for three-year terms, for a maximum of two consecutive terms. After serving two three-year terms, a member may be eligible for election again on the condition that a period of three-years lapse before re-obtaining Executive Committee membership.

6.3 Filling of Vacancies:

a. A vacancy among the officers or on the Executive Committee may be declared because of death, resignation, or removal in accordance with Article B6.4.

b. Between elections, a vacancy shall be filled through appointment of an individual by the Chair, with an affirmative vote by two-thirds (2/3) of the Executive Committee members.

6.4 The Executive Committee may remove members missing more than two (2) consecutive meetings, unless appropriate reasons are provided for missing such meetings.

6.5 In order to provide for handling the affairs of the Professional Division, the Executive Committee shall prepare and adopt, in connection with these Bylaws, suitable Rules. Professional Division Rules, and proposed changes to them, must be reviewed for consistency with Society Bylaws and Rules by the Bylaws and Rules Committee of the Society. A copy of such Rules shall then be filed with the Executive Director of the Society. The procedure for amending the Rules shall be specified in the Rules.

6.6 The Executive Committee shall meet at least twice each year, once during the Annual Meeting and once during the Winter Meeting of the Society, or as appropriate. Other meetings (e.g. at Division-sponsored Topical Meetings) or teleconferences, email communications, and by other appropriate medium of the Executive Committee may be called at any time by the Chair, or at the request of any three or more members of the Committee.

c. An individual appointed to fill a vacancy on the Executive Committee shall serve for the remainder of the original term.

6.4 Removal by Executive Committee:

An affirmative vote by two-thirds (2/3) of the Executive Committee members is required to remove, for non-attendance or other good cause, an Officer from office or an elected member from the Executive Committee.

6.5 Amendments to Division Rules:

a. Amendments to Division Rules may be proposed by any member of the Executive Committee during a Committee meeting and approved by a simple majority of the members present.

b. Amendments adopted by the Executive Committee shall be provided to the Society Bylaws and Rules Committee for review and endorsement. The original set of Division Rules, and any amendments to them, must be reviewed by the Bylaws and Rules Committee for consistency with Society Bylaws and Rules.

c. In the event that an approved amendment does not attain a 2/3 vote of the Executive Committee, the Chair may direct the amendment to be put to a Division vote at the next scheduled election.

d. The approved amendments to Division Rules shall become effective upon being filed with the Executive Director of the Society.

e. The Division Secretary shall notify the Division membership of the amended Rules in a printed or electronic newsletter.

6.7 Voting shall be by an appropriate voting system, under the general procedure stipulated for voting and for handling the ballots in the Bylaws and Rules of the Society. The Executive Director shall declare elected to each position the candidate receiving the most votes for that position. If a tie occurs, the Division shall resolve the tie by a vote of the members of the Executive Committee. The elected candidates shall be installed and their terms of office shall commence at the close of the Annual Meeting of the Society

Article B7 – Officers

7.1 The officers of the Division shall be a Chair, at least one Vice-Chair, a Secretary, and a Treasurer. The duties of the Secretary and Treasurer may be combined into a single office (i.e., Secretary-Treasurer). All officers shall hold their offices for a one-year or two-year term or until their qualified successors are elected or appointed.

7.2 The Vice-Chair (or one of them if there is more than one) at the time of election shall be designated Chair-Elect, and at the expiration of that term will automatically succeed to the office of Chair.

7.3 The Secretary or Secretary-Treasurer shall record and file with the Executive Director within thirty (30) days after the meeting date(s) the minutes of the Division Executive Committee meetings. Separate teleconference meetings minutes may be recorded by the Division and do not have to be filed with the Executive Director.

7.4 For Divisions that do not have a Treasurer, the Secretary-Treasurer shall also serve as a member of the Division's Finance committee, and shall be the responsible custodian of any

R7 – Officers

7.1 The officers of the Division shall be a Chair, a Vice-Chair, a Secretary, and a Treasurer. The Vice-Chair shall be designated Chair-Elect. The officers shall hold office for one year concurrently with the term of officers of the Society or until their successors are elected or appointed.

7.2 Chair:

- a. The Chair shall have supervision over the affairs of the Division, subject to the direction of the Executive Committee, and shall be responsible for coordinating the work of the Division with the activities of the Society.
- b. The Chair shall preside at meetings of the Executive Committee and shall have the power to perform such other duties as may be provided in the Bylaws, or in the Rules, or as may be delegated to the office by the Executive Committee.
- c. The Chair shall be an ex-officio member of all committees of the Thermal Hydraulics Division, with voting rights.
- d. The Chair shall be responsible for representing the Division at the meetings of the Society Professional Divisions Committee and Society Board of Directors.

7.3 Designated Chair-Elect and Vice-Chair:

- a. The Vice-Chair shall be the designated Chair-Elect at the time of election and, at the expiration of that term, will automatically succeed to the office of Chair.
- b. The Vice-Chair shall assist the Chair in conducting the duties of the office.
- c. The Vice-Chair shall perform the duties of the Chair if the Chair is unable to serve.
- d. The Vice-Chair shall accompany the Chair in matters related to the Professional Divisions Committee.
- e. **The Vice-Chair shall serve as editor of the Division newsletter.**
- e. f. The Vice-Chair may be assigned other duties by the Executive Committee.

special funds of the Division. The Secretary-Treasurer shall have the same duties as the Treasurer.

7.5 The Treasurer shall send the Division budget to the Executive Director after approval of the Executive Committee.

7.4 Secretary:

- a. The Secretary shall act as custodian of the Society Bylaws and Rules and of the Division Bylaws and Rules.
- b. The Secretary shall record and file with the Executive Director within thirty (30) days after the meeting date(s) the minutes of the Thermal Hydraulics Division, including meetings of the Executive Committee.
- ~~c. The Secretary shall serve as editor of the Division newsletter.~~
- d. ~~c.~~ The Secretary shall arrange for notices to Division members and for publicity releases, and shall be responsible for obtaining a roster of Division members from the Executive Director.
- ~~e.~~ ~~d.~~ In the absence or incapacity of both the Chair and the Vice-Chair, the Secretary (if not a student member) shall be responsible for performing the duties of the Chair.
- ~~f.~~ ~~e.~~ The Secretary shall have other duties as may be assigned by the Executive Committee.

7.5 Treasurer:

- a. The Treasurer shall have fiduciary responsibilities of the Thermal Hydraulics Division and shall provide a direct interface to the individuals of the Society that are charged with financial matters.
- b. The Treasurer shall develop financial statements and present year and out-year budgets to be presented to the Executive Committee at the Annual and Winter Meetings. Upon Executive Committee approval of the present year and out-year budgets, the Treasurer shall send the Thermal Hydraulics Division budget to the Executive Director.
- c. The Treasurer, along with the Vice Chair and Chair, represent the only officers that are empowered to disburse Thermal Hydraulics Division funds to internal and external organizations and individuals, as appropriate.
- d. The Treasurer shall oversee the financial aspects of all embedded and stand-alone topical meetings that are sponsored by the Thermal Hydraulics Division.
- e. The Treasurer shall have such other duties as may be assigned by the Executive Committee.

	<p>f. In the absence or incapacity of the other Officers, the Treasurer (if not a student member) shall be responsible for performing the duties of the Chair.</p>
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Article B8 – Election and Eligibility

- 8.1 The members of the Division Executive committee and the officers (except the Chair) shall be elected as specified in Article B6.2 and B7.1 of these Bylaws, respectively.
- 8.2 Executive Committee members shall be Fellows, Members, Student Members, Emeritus or Honorary Life Members of the Society.
- 8.3 The Nominating Committee shall place in the hands of the Secretary or Secretary-Treasurer and Executive Director no later than the completion of the Winter Meeting (or seven [7] months before the Annual Meeting for Divisions that were unable to meet during the Winter Meeting) the names of candidates for the Executive Committee and for the Division officers. The Executive Director shall prepare and forward to each member of the Division a ballot containing the nominations submitted by the Nominating Committee, and others made by petition of not fewer than ten (10) members of the Division, received in writing either by the Nominating Committee or by the Secretary or Secretary-Treasurer at least twenty-two (22) weeks before the Annual Meeting.
- 8.4 At least one candidate shall be named by the Nominating Committee for each Executive Committee membership expiring or vacated and for each elective office other than the office of Chair, which will be filled by the Vice-Chair. The ballot shall contain spaces for writing in additional candidates.
- 8.5 Ballots, in order to be counted, shall be postmarked as instructed and shall be validated by the Executive Director as having been received from a Division member in good standing. The Division shall be responsive to future electronic voting initiatives introduced by the Society, as appropriate.

R8 – Election and Eligibility

- 8.1 The THD strives to increase international collaboration by nominating international members to the THD Executive Committee
- Other THD Election and Eligibility processes are set out in Bylaw B8. Voting rights are documented in Rule 4.

8.6 Voting shall be by secret ballot under the general procedure stipulated for voting and for handling the ballots in the Bylaws and Rules of the Society. The Executive Director shall declare elected to each position the candidate receiving the most votes for that position. If a tie occurs, the Division shall resolve the tie by a vote of the members of the Executive Committee. The elected candidates shall be installed and their terms of office shall commence at the close of the Annual Meeting of the Society.

8.7 Members, elected at large, shall not be eligible for election to more than two consecutive terms on the Executive Committee, or more than two consecutive terms of office as Secretary, Treasurer, or Secretary-Treasurer. After one full term in office, the Chair shall automatically be succeeded by the Vice-Chair. Except as provided in these Bylaws, no member shall hold more than one office simultaneously.

8.8 No member shall be eligible for the office of Vice-Chair/Chair-Elect until having served on the Executive Committee in any capacity for at least one year except during the initial year of the Division or in the event the office of Chair is declared vacant.

8.9 The retiring Chair shall not be eligible for election as Vice-Chair/Chair-Elect for the term immediately succeeding the term as Chair.

Article B9 – Standing and Special Committees

9.1 A Division may establish Standing and Special Committees.

9.2 A simple majority of the members of the committee shall constitute a quorum at all committee meetings

R9 – Standing and Special Committees

9.1 Nominating Committee – Shall be composed of not less than three (3) members, who shall have the responsibility for nominating candidates for the Division Executive Committee, Division Officers, and all Division Committees. The members will include the previous Division Chair, the current Chair, and the Vice Chair. The most recent available past-Chair should chair the Nominating Committee. The Program Committee Chair is also an ex-officio Nominating Committee member with no voting rights (see Item 9.2.b.4 below).

9.2 Program Committee

a. Responsibilities:

The Program Committee shall be primarily responsible for planning meetings of the Division and sessions sponsored by the Division at national meetings of the Society. The Program Committee shall select session chairs and other meeting officers required for presiding at technical meetings of the Division and at its special sessions of contributed papers at national meetings of the Society. The Program Committee shall, as needed, call on other members of the Division to serve as long-range planning coordinators for particular meetings or special sessions. The Chair of the Program Committee shall be responsible for liaison with the National Program Committee of the Society.

b. Membership:

1. The Program Committee shall be composed of not less than five and no more than ~~fifty (50)~~ **seventy-five (75)** members, of which three members shall be the Vice-Chair of the Division, the Chair of the Division and the immediate past Chair of the Division.
2. Membership is conferred to all currently active members of the Executive Committee. Additional members may be elected by a majority vote of the Executive Committee members.
3. For elected Executive Committee members, the terms of membership to the Program Committee will coincide with the terms of

membership to the Executive Committee plus one year. Members elected by the Executive Committee shall serve a three-year term. The terms designated for each shall expire following a summer Program Committee meeting and shall be such as to maintain effective continuity of experience in the Program Committee. In selecting members an effort will be made to obtain a good representation by discipline, affiliation, and geographic location.

4. The division Nominating Committee will review yearly the Program Committee membership, and will nominate candidates to all positions (including chair, secretary and subcommittee chairs) vacated by rotating-out, resigning, or defaulting members. Recommendations for new Program Committee members will be transmitted to the Nominating Committee by the Program Committee Chair (who is also an ex-officio Nominating Committee member with no voting rights). All appointments will be ratified by the Executive Committee. For untimely vacancies, a Program Committee officer position will be filled by appropriate action of the Executive Committee - such needs shall be forwarded to the Division Chair, by the Program Committee Chair, through the Nominating Committee, which should develop appropriate recommendations.
5. ~~Any Program Committee member who has not attended the Program Committee meeting or organized/chaired any technical sessions sponsored by the Division in more than two consecutive years will be considered non-active.~~ **Any Program Committee member who has not attended the Program Committee meeting or organized/chaired any technical sessions sponsored by the Division in more than two consecutive years or reviewed a total of less than 10 papers/summaries in 2 consecutive ANS meetings, will be considered non-active.** All non-active members, once confirmed by the Program Committee Chair, will automatically be advanced to the Advisory Membership of the Program Committee. The vacancies will be replaced by new Program

Committee members according to the existing Rules for member replacement. An advisory member will serve as a consultant advising the Program Committee Chair on various matters relevant to the operation of the Program, and will serve a fixed term of five years. At the end of his or her term, an advisory member may either retire from the Program Committee or be renewed for another five-year terms based upon the recommendation of the Program Committee Chair with the approval of the Executive Committee. There is no limit on the number of terms that an advisory member may serve.

c. Officers:

1. The Program Committee officers include a Chair, an Assistant Chair, and a Secretary. The Division Secretary serves as Program Committee Secretary. The term of the Program Committee Chair is for three (3) years. The term of the Assistant Program Committee Chair is for three (3) years. A term extension of up to two (2) years may be granted prior to the chair's or assistant chair's term expiration.
2. The Chair shall have the overall supervision of the Program Committee. He/she will be responsible for an effective liaison with the Executive Committee and the Nominating Committee.
3. The Assistant Chair will fill-in for the Chair as necessary and assist the Chair in conducting the duties of the office.
4. The Secretary will keep a record of the proceedings of the Program Committee in each meeting, write the minutes and distribute them to Program Committee members within thirty (30) days after each meeting. A cumulative set of these minutes are posted on the THD website. The Secretary will also maintain a cumulative file (tabular form) of attendance and screen members for good standing (see THD R9 2.b.5).

d. Eligibility and Election:

1. The election of the Program Committee Chair and the Program Committee Assistant Chair will be made by the Executive Committee

on the basis of its Nominating Committee recommendations (see THD R9 2.b.4).

2. As noted above in (c), the Secretary of the Executive Committee shall also serve as Secretary of the Program Committee.

e. Meetings:

1. The Program Committee will meet twice a year. All meetings are open to THD membership. All matters of major significance to the Program Committee shall be put to vote after adequate discussion. All programs developed by the Program Committee are subject to final approval by the Executive Committee and the National Program Committee. The Program Committee Chair is responsible for effective liaison in this regard to both the Executive Committee and the National Program Committee (the latter through the National/Topical Subcommittee Chair who is the Division representative).

2. A quorum for transactions of business at a Program Committee meeting shall be constituted by a majority of the voting members of the Program Committee.

9.3 Membership Committee – Shall be composed of not fewer than three (3) members, including the Vice-Chair, Secretary, and Treasurer, who shall be charged with the duty of bringing the advantages of the Thermal Hydraulics Division membership to the attention of qualified candidates.

9.4 Honors and Awards Committee – Shall be composed of not fewer than two (2) members who shall be responsible for recommending to the Executive Committee, Division members as candidates for Society and/or Division Honors and Awards and nominees for Society officers and membership on national committees.

a. Responsibilities

1. The Honors and Awards Committee shall be responsible for identifying candidates for (i) Society and Division awards (Technical Achievement Award, ~~Outstanding~~ Meritorious Service Award, **Sehgal Memorial Award**, **NURETH Fellow Award**, **Excellence in Review**

~~Award, Best Paper Award~~) and (ii) Fellow Nominations.

b. Membership

1. Past chairs of the Division serve 4 year terms, starting at the end of their term as ~~chair~~ **vice-chair**. Three general members are appointed to serve 3-year terms. The Honor and Awards committee will include a minimum of one (1) international member.

c. Officers

- ~~1. On the fourth year of service to the Honors and Awards Committee, the past Division Chair shall serve as the Honors and Awards Committee Chair.~~
- 1. One of the general members of the committee shall be appointed by the EC on the recommendation of the nominating committee to serve as the Honors and Awards Committee Chair for a 3-year term.**
- 2. On the fourth year of service to the Honors and Awards Committee, the past Division Chair shall serve as the Honors and Awards Committee Vice-Chair for a 1-year term.**
- 3. The Vice-Chair will fill-in for the Chair as necessary and assist the Chair in conducting the duties of the office.**

d. Eligibility and Appointment

1. Any member of the THD is eligible for Honors and Awards Committee membership. The general members are appointed by the Executive Committee at the recommendation of the Nominating Committee which, in developing this recommendation, shall take into consideration the recommendations of the Honors and Awards Committee transmitted through its chair. Rotations (Chairs) and appointments become effective after the ANS Summer Meeting.

e. Meetings

1. The Committee shall meet at the ANS Winter and Annual meetings, as needed.

~~9.5 Conference Selection Committee – Shall be composed of eight (8) members who shall be responsible for recommending to the Executive Committee host organizations for meetings sponsored or co-sponsored by the division.~~

- a. Responsibilities
 1. ~~The Conference Selection Committee shall be responsible for soliciting technical meeting proposals and recommending host organizations for division sponsored and co-sponsored technical meetings.~~
- b. Membership
 1. ~~Each of the members is appointed by the Executive Committee at the recommendation of the Nominating Committee.~~
 2. ~~Members shall serve 4-year terms. At least 2 members shall be added each year to the Committee.~~
 3. ~~The Conference Selection committee will include a minimum of two (2) international members.~~
- c. Officers
 1. ~~A Chair shall be appointed by the Executive Committee at the recommendation of the Nominating Committee. To be eligible for appointment as Chair, the member shall have served at least 2 years on the Conference Selection Committee prior.~~
 2. ~~The Chair of the Conference Selection Committee shall serve a two year term.~~
- d. Eligibility and Appointment
 1. ~~Any member of the THD is eligible for Conference Selection Committee membership.~~

9.5 Conference Screening Committee shall be composed of nine (9) members.

- a. Responsibilities: The Conference Screening Committee shall be responsible for soliciting technical meeting proposals and recommending to the Executive Committee host organizations for division sponsored or co-sponsored technical meetings.
- b. Membership
 1. The Chair of the Conference Screening Committee shall be appointed by the Executive Committee at the recommendation of the Nominating Committee. The Chair shall serve a 4-year term. To be eligible for appointment as Chair, the member shall have served at least 2 years on the Conference Screening Committee prior.

2. Members shall serve 4-year terms. At least 2 members shall be added each year to the Committee. Members are to be nominated by the Chair of Conference Screening Committee and appointed by the Executive Committee.
 3. The Conference Screening Committee will include a minimum of 3 international members, with a minimum of one member from Europe and one from the Asia-Pacific region.
 4. Members of the Conference Screening Committee must be members of the ANS Thermal Hydraulics Division. Preference is given to individuals with previous experience in conference organization, as evidenced by roles such as: General Chair, General Co-Chair, Assistant General Chair, Program Chair, Program Co-Chair, Assistant Program Chair, Local Organizing Committee Chair, or Steering Committee Chair.
- c. Conflict of Interest
1. Conference Screening Committee members who are listed as General Chair, General Co-Chair, Assistant General Chair, Program Chair, Program Co-Chair, Assistant Program Chair, Local Organizing Committee Chair, or Steering Committee Chair on any proposal to host a given conference under deliberations shall recuse themselves from the deliberations regarding that conference. Members may recuse themselves for other conflicts of interest.
 2. In the event that the Conference Screening Committee Chair is recused, an Acting Chair shall be selected from among the Conference Screening Committee members on the nomination of the Nominating Committee and appointment by the Executive Committee. The term of the Acting Chair shall end following deliberations regarding the current conference, after which they will remain a Conference Screening Committee Member.

9.6 Other Standing Committees - Additional standing committees (e.g., Scholarship Committee, Public Policy Committee, Education Committee, and

	<p>Publications Committee) may be established by the Executive Committee. Special committees may be established from time to time by the Chair, subject to authorization by the Executive Committee; these shall be dissolved upon completion of the duties assigned to them.</p>
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Article B10 – Meetings

10.1 Meetings of the Division shall be held as determined by the Executive Committee, at times and places it shall designate. If a business meeting is held, it shall be scheduled to coincide with the Annual Meeting of the Society and shall precede the annual reorganization of the Division Executive Committee. The Secretary or Secretary-Treasurer shall mail an advance notice of all intended meetings of the Division to the Executive Director of the Society not less than six (6) weeks before the date of that meeting. In addition, notices of all meetings will be sent to the members of the Division not less than six (6) weeks before the meeting. These meetings are open to all members in good standing in the Division.

10.2 A quorum for the transaction of business at all Division meetings shall consist of fifteen (15) qualified voters or twenty (20) percent of the qualified voters.

R10 – Meetings

10. The THD Meetings procedures are set out in B10.

Article B11 – Amendments

11.1 Amendments to these Bylaws may be proposed by any Division, the Professional Divisions Committee, the Society Bylaws and Rules Committee, or the Society Board of Directors. Amendments must be of a nature that they can be applied equitably to all Divisions, in keeping with the intent of the Standard Bylaws. All proposed amendments shall be forwarded to each Division for comment. Comments should be filed with the Professional Divisions Committee Chair no later than forty-five (45) days prior to the next ANS national meeting. Further detailed procedures for approval of amendments to the Standard Bylaws are in the ANS Rule R18.9.1.

11.2 The Professional Divisions Committee shall notify all Divisions of approved amendments to the Standard Bylaws. Each Division shall be responsible for reviewing approved amendments to determine if corresponding changes to the Division’s Rules are required.

R11 – Amendments

11.1 Proposed Amendments to the Standard Bylaws:
a. Amendments proposed by the Division shall have received an affirmative vote by a simple majority of the Executive Committee.

b. Comments filed by the Division on proposed amendments, which were forwarded to the Division, in accordance with B11.1, shall have received an affirmative vote by a simple majority of the Executive Committee.

11.2 Approved Amendments to the Standard Bylaws
a. When notified of an approved amendment to the Standard Bylaws, the Secretary shall obtain an updated copy of the Division Bylaws from the National Bylaws and Rules Committee, and prepare reconciling changes in the Division Rules for review and approval by the Executive Committee.

b. Division members shall be notified of the amended Bylaws and Rules by appropriate means, such as posting the amended Bylaws on the Division webpage or including a notice in the Division newsletter.

11.3 THD Rules amendments procedures are documented in R6.5.

Article B12 – Rules of Conduct

12.1 In all procedural matters not covered by the Bylaws and Rules of the Division, Robert's Rules of Order, latest edition, shall be used as the authority for parliamentary procedures.

R12 – Rules of Conduct

12.1 Electronic Voting.

The Executive Committee, and other Division committees may resolve issues before them by normal voting procedures at meetings, or they may use e-mail voting. In order to properly transact committee business using e-mail, the following concepts shall be included in the committee procedures.

1. The Chair of the unit determines if an issue is to be considered and voted upon electronically.
2. Documents / issues for comment and vote will be sent to the unit's listserv (i.e., thd@list.ans.org) with a request to review and comment.
3. Deadline dates for comment and voting periods will be provided. Votes can be submitted during the comment period and must be received prior to the voting deadline. All members are required to reply to the listserv for all other members to review both comments and votes.
4. Once the voting deadline has passed, the Chair will review the votes and inform unit members via listserv of the outcome of the vote. To be valid, all votes taken outside of a meeting must have a quorum of unit members registering a vote. To pass, the vote must have a majority of the quorum of unit members submitting an affirmative vote.
5. Between ANS national meetings, issues that have successfully passed through the electronic comment and voting process will be considered approved and activity may commence in accordance with the approved item.
6. Each electronic vote will be confirmed at the next face-to-face meeting of the unit for historical record.

Article B13 – Dissolution

- 13.1 Any Division may be dissolved at the discretion of the Board of Directors of the Society, after proper consultation with the Executive Committee of the Division and the Professional Divisions Committee.
- 13.2 The Division membership must approve dissolution by a 2/3 vote before a petition is submitted.
- 13.3 A Division considering dissolution should prepare and submit a petition to the Professional Divisions Committee that clearly states the reasons the Division cannot fulfill its obligations and mission. The PDC with the Division will forward the petition to the Board of Directors.
- 13.4 Assets of dissolved Division shall become the property of the American Nuclear Society.
- 13.5 Any Division that merges with another Division may do so at the discretion of the Board of Directors after receiving a request from the Professional Divisions Committee and the involved Divisions.
 - a.Assets of merged Divisions will be combined under the newly established Division

R13 – Dissolution

- 13.1 The THD procedures regarding dissolution are set out in B13.

Attachment B

Marked Procedures

(starting from next page)

AMERICAN NUCLEAR SOCIETY

Procedures of the

Thermal Hydraulics Division

Approved by the Executive Committee: 1988

Inconsistencies identified from current practice – May 2020

Article THB7 – Officers	Notes
<p><u>THP7.3 – Vice Chair</u> THP7.3.1 – Communications Within thirty (30) days after any EC meeting in which Division committee membership changed, prepare a publications release for ANS News and the Division Newsletter. Prepare a complete Committee (Subcommittee) roster for publication in the Division Newsletter within thirty (30) days after the ANS Winter Meeting. Contact ANS Publications (ANS News) and Division Newsletter Editor with summary of amendments to Bylaws, Rules or Procedures (ref. Procedures THB11.2(1)).</p> <p><u>THP7.4 – Secretary</u> THP7.4.1 – Minutes Within fifteen (15) days after the Executive Committee (EC) meeting, prepare draft minutes and distribute to EC requesting comments and/or approval. As an appendix to these minutes, the membership of all THD Division Committees and Subcommittees should be included. Within thirty (30) days after the EC meeting, finalize minutes and distribute to EC, chairs of all Division committees and subcommittees and society Executive Director.</p> <p><u>THP7.5 – Treasurer</u> THP7.5.1 – Function The Division Treasurer maintains the financial records of the Division, and acts as the primary liaison between the Division and other organizations within ANS, including ANS Headquarters, with regard to financial matters. The two major responsibilities of the Treasurer in fulfillment of these functions are:</p> <ul style="list-style-type: none"> • Keeping an up-to-date set of financial books; • Preparation of the Division discretionary budget for submission to ANS Headquarters. <p>THP7.5.2 – Division Funding The Division does not maintain an independent financial account from which it can draw funds directly. Instead, these funds are held by ANS Headquarters and are credited to the Division to support discretionary expenditures. The sources of these funds are:</p>	<p>ANS News publishes “New ANS professional division officers and executive committee members” in its May/June news, prior to the Annual Meetings. Division Newsletters are typically published prior to the National Meetings.</p> <p>This may not have been followed.</p>

<p>1. Membership allocations from ANS Headquarters (at \$1.00/Division member/year);</p> <p>2. Topical meeting income;</p> <p>3. Other income, such as profits from Division luncheons at ANS national meetings;</p> <p>Special allocations by ANS Headquarters, to be used for specific projects. Of these sources, only the second is permanent; that is, once topical meeting income is credited to the Division account, it is the Division's to spend as it sees fit, and in such time as is desired. The other sources of income can only be carried over in full for a maximum of one year after the calendar year in which they are credited. If the total, of the carryover of items 1 and 3 from the previous year and the membership allocation from the current year exceeds twice the current year membership allocation, the amount credited to the Division is reduced to twice the current year membership allocation.</p> <p>Records of the Division discretionary account are maintained by ANS and the Division Treasurer, as described in Sec. THP7.5.3.</p> <p>THP7.5.3 – Duties and Procedures</p> <p>1. Financial Records</p> <p>The Division's financial records are kept in a notebook or file. In order to maintain a complete and accurate account of Division financial actions, these records should include copies of all communications between the Division and other ANS entities, and such outside organizations as the Division deals with directly. Such communications include (but are not limited to):</p> <ul style="list-style-type: none"> a. Division budgets; b. Letters to ANS Headquarters amending or modifying the Division budget. Requests for funds from student branches or local sections; c. Requests for authorization of expenditures from Division committee chairs (required for non-budget items); d. Requests to ANS Headquarters for the drawing of checks against Division funds in answer to requests described in Item c, or for payment of bills or pledges as authorized in the budget or as detailed in Item d; e. Division financial reports prepared and distributed by ANS Headquarters; 	<p>Now it is \$2.00/Division member/year</p> <p>No Division luncheons are held at ANS national meetings</p> <p>It is not clear if the restrictions are still enforced.</p>
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<p>f. Reports on the financial status of the Division, as presented at Division EC meetings;</p> <p>g. Communications to and from Topical Meeting officers regarding financial matters;</p> <p>h. Any other material that bears upon Division finances not specifically called out in Items a-h.</p> <p>2. Budget</p> <p>The Division budget is required to be submitted to ANS Headquarters by August 1 of each year. The budget format contains information on:</p> <ul style="list-style-type: none"> • Actual income and expenditures for the two years prior to the year in which the budget is being submitted; • The budget for the current year as submitted and approved by ANS Headquarters in the previous year (including any subsequent amendments or modifications); • A forecast of the actual expenditures for the current year, based on updated information from ANS on membership allocations and other income, and any revised topical meeting figures; • A proposed budget for the coming fiscal (calendar) year. This budget includes an estimation of income from coming year membership allocations, planned topical meetings, and other sources, plus carryover funds consistent with the current year’s forecast (Item c); it includes as expenditures those items approved by the EC. <p>Because the different sources of funds are treated differently, with regard to carryover ability, by ANS Headquarters, it is important to be as explicit as possible in detailing from which sources Division funds are coming. The section on budget funds at the head of the budget submittal form should include a breakdown of the specific amounts resulting from each of the four categories detailed previously; the final line of the budget, if it includes an excess (carry-forward), should also break the amount down into the same categories, to aid ANS Headquarters in maintaining accurate records of the Division account.</p> <p>Budget expenses should also be detailed explicitly. Each committee chair (Newsletter, Honors and Awards, Membership, etc.) should be asked to submit a proposed</p>	<p>Maybe “g”?</p> <p>Check if this information is still up to date.</p> <p>Perhaps good practice to follow?</p>
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<p>budget for inclusion in the overall Division budget. Additional amounts are allocated for student support, meeting costs, and special projects as designated by the EC. A line item may also be included to cover miscellaneous expenses; however, the Division budget can effectively be amended by a letter to the Professional Divisions Liaison at ANS Headquarters authorizing a previously unbudgeted expenditure. To this end, the letter of transmittal that accompanies the budget when it is sent to ANS Headquarters includes the names of persons who are authorized to approve expenditures; these are normally the Division Chair and Treasurer.</p> <p>It is also important to be aware of the fact that ANS Headquarters considers an approved line item in the budget as being automatically authorized for payment. Therefore, any expenses falling within a budget category, not exceeding the amount in the line item (or left after previous expenditures), will be paid by ANS, regardless of who submits the request for payment. This implies that a committee chair can submit a bill to ANS Headquarters and have it paid without the Treasurer receiving notification. In order to facilitate the keeping in accurate records, the Treasurer should request that all requests for funds, whether or not they are authorized by a line item in the budget, be submitted to ANS Headquarters through either the Division Chair or Treasurer.</p> <p>3. Reporting The Treasurer shall prepare and present in writing a Division financial report at each meeting of the EC. This report should include a record of expenditures for the current year along with the budgeted amounts. The Treasurer may also be requested to provide reports on other matters as determined by the Division Chair. The topic, format, and content of such reports are left to the determination of the Division Chair, as well.</p> <p>4. Division Financial Liaison The Treasurer acts as the first point of contact between the division and other ANS related organizations, including ANS Headquarters, in matters regarding Division finances. It is the Treasurer's responsibility to process and promptly respond to any requests for financial information from ANS Headquarters. The Treasurer must also maintain contact, as necessary, with ANS local sections, student</p>	<p>Check if this is still allowed</p>
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branches, Divisions, etc. in any matters concerning Division finances. No specific duties or procedures are listed for this function, since most of the contacts described occur on an ad-hoc basis.

5. Topical Meeting Liaison

One of the most important functions of the Division is the sponsorship of topical meetings. Not **ever** meeting with which the **Division** is involved requires a financial commitment on the Division's part. However, when the Division sponsors a major topical meeting for which it has primary financial responsibility, the Treasurer has the responsibility to act as the liaison between the meeting organizers and the Division on the financial aspects of the meeting. When a local section is chosen to act as the host of such a topical meeting, the Treasurer should immediately establish contact with the Finance Committee Chair for the meeting in order to assist, if required, in preparation of a meeting budget, and **to negotiate the percentage of the meeting's income and profits that will be paid to the Division, within ANS guidelines**. Estimates of these amounts should be included in budget submittals as appropriate. It is the responsibility of the meeting organizers to prepare documentation and to handle all interactions with ANS Headquarters and the National Program Committee. However, the Treasurer should stay up-to-date on actions affecting meeting finances. These aspects should be covered in the reports that the meeting organizers are required to present to the Division Program Committee (PC); pertinent information should be passed from the PC Chair to the Treasurer.

At the conclusion of the topical meeting, **the Treasurer is responsible for obtaining a final financial report from the meeting organizers, and should take whatever steps are necessary to ensure that the meeting books are closed out, that ANS Headquarters receives the **prober** amount, and that the appropriate portion of this amount, as previously negotiated, is credited to the Division's discretionary account**. It is important to note again that no payments can be made to the division itself; all proceeds must first pass to ANS Headquarters, which then determines the amount credited to the Division. The Treasurer must, therefore, maintain close contact with both parties to make certain that Division proceeds are properly credited, and that the

This should occur earlier, perhaps when the proposals for hosting the topical meetings are being prepared?

show up correctly in the Division budgets and financial reports.

6. Other Duties

The Treasurer shall perform any other functions consistent with the job or as requested by the Division Chair. These duties may include, but are not limited to:

- Informing other ANS organizations, e.g. student branches, about the availability of funds for specific purposes;
- Investigating the feasibility and/or financial impact of proposed Division actions or projects;
- Serving on ad-hoc subcommittees of the EC.

Article THB9 – Standing and Special Committees	Notes
<u>THP9.1 – Nominating Committee</u>	
THP9.1.1 – Executive Committee and Division Officers	
<p>Headquarters sends nomination package to Division Chairs in September. Nominating Committee (NC) develops a slate of candidates for each vacant officer and EC position and obtains candidates’ acceptance to fulfill duties of position if elected. After the NC chooses a slate of candidates they contact each candidate for his/her agreement to run for office and inform them the Headquarters will contact them for new or updated biographical information of approximately 150 words and two 5X7 glossy photographs, if nomination approved by EC. Nominating Committee Chair reports candidate slate and obtains EC approval at the ANS Winter meeting. Nominating Committee Chair reports the approved slate of candidates to ANS Headquarters within 15 days of EC approval. This allows Headquarters to submit the slates to ANS NEWS in time for publication. Ballots are distributed to members in the spring by ANS Headquarters (note that any Bylaws changes desired should also be included by the Division Chair in this voting package to the members). All candidates are notified of election results by ANS in May.,</p>	<p>Typo</p> <p>is approved?</p> <p>Good practice to follow?</p> <p>Typo</p>
<p>THP9.1.2 – Program Committee</p> <p>The PC Chair recommends candidates for the various PC positions, (i.e., chair, vice-chair, subcommittee chairs, subcommittee members, and committee members) as needed. This is 30 sent in writing by September 15 of each year to all NC members, together with a brief description of how these recommendations were developed. The NC Chair, in consultation with NC members, develops a recommendation and reports candidate slate to the EC at the ANS Winter Meeting. The NC Chair brings each case up to the EC ANS Winter Meeting for discussion and vote. The NC and EC reserve the right to introduce alternative possibilities for discussion. All candidates are notified of the nomination results immediately after the ANS Winter meeting. Members are notified by Division Winter Newsletter.</p>	<p>Good practice to follow</p> <p>THD does not publish Winter Newsletter (one spring and fall)</p>
<p>THP9.1.3 – Membership Committee</p> <p>The departing member makes recommendations for replacement to the Division Chair, who passes it on to the</p>	<p>Not sure if this is still the practice</p>

NC. The NC brings at least two candidates to the EC for selection and appointment.

THP9.1.4 – Honors and Awards Committee

The H/AC Chair develops recommendations for replacing rotating out members. This is sent in writing by September 15 of each year to all NC members, together with a brief description of how these recommendations were developed. The NC Chair in consultation with NC members develops a recommendation and reports candidate slate to the EC at the ANS Winter Meeting.

The NC Chair brings each case up to the EC winter meeting for discussion and vote. The NC and EC reserve the right to introduce alternative possibilities during the discussion.

All candidates are notified of the nomination results immediately after the EC winter meeting. Members are notified by Winter Newsletter.

THP9.2 – Program Committee

THP9.2.4 – Standing Subcommittees

THP9.2.4.1 – Editorial Subcommittee

1. Scope

Oversee the review of all ANS papers submitted for the National/International Heat Transfer Conferences. Provide assessments of the technical quality of THD proceedings (Topical Meetings and NHTC). Oversee the selection of archival-quality papers among those presented in meetings sponsored by the Division and facilitate their timely publication in archival journals. Recommend to the Chair of the PC candidates for the Best Paper Award. Make available forms and lists of reviewers when requested by others handling the review process.

2. Membership

The Editorial Subcommittee (ES) is composed of a team of nine internationally recognized experts in specialties spanning the whole range of Nuclear Thermal Hydraulics i.e.e, BWR Systems, PWR Systems, Experiments, Interfacial Instabilities, Severe Accidents, Two-Phase Flow Instability, Two-Phase Flow Models and Exchange Laws, and Numerical Methods/Codes. They automatically become PC members, too. Each member shall serve for three years. Each year three members shall be replaced.

Such a subcommittee has not been in existence for years. Many of the functions described here are taken by the PC.
Does not cosponsor NHTC

Renewal of membership should be initiated by the ES chair. The ES Chair, with the counsel of each ES member, will identify potential replacements of ES members. The PC shall discuss and vote for each position (see THP9.1.2).

This process should be initiated at the beginning of the third year and should be completed within that year so as to provide some overlap and continuity. Further expansion of the ES specialty areas may be undertaken at anytime by the ES Chair on the basis of experience, Subcommittee members' advice and PC approval.

3. Procedures

Corresponding to the five elements of scope defined above, the ES will operate according to the guidelines provided below;

The responsibility for selection of papers will lie with the session chair as is common practice. The mandate of the ES is to oversee this process in the following manner: (i) The session chair is to supply to the ES a list of all papers submitted and the three referees chosen for each one of them. This should be done concurrently with sending the papers out for reviews. (ii) The ES should be prepared to provide its own review input to the session chair for any rare cases for which the choice of referees is deemed inadequate. (iii) Upon completion of the review process the session chair is to turn over the review correspondence for permanent ES files. (iv) The ES will meet just before the Summer meeting to assess quality of the review process and of the corresponding proceedings of the past year. Any recommendation will be transmitted to the PC. The ES Chair will solicit written reports from the members that cannot be present at this meeting.

The procedure here will be the same as Item a above, except for Topicals, use "Technical Program Chair" in place of "Session Chair."

It is important that every effort is made here to not dilute, because of paper volume and/or time constraints, the review normally expected for archival publication. To this end the following should be adhered to:

Two referee forms should be used, one for meeting presentation/proceedings and another to be completed only

if the referee judged the paper sufficiently close to archival quality as to be immediately publishable with minor revisions (i.e., readily carried out within the time-frame of the meeting requirements).

Letters to authors and referees should explain the process of selection and routing for archival publication. The general guidelines to be used should be along the lines provided in ANS and ASME publications. Based on the referee reports the Session Chair should nominate to the ES any papers ready for archival publication. This should be done immediately following the meeting and simultaneous with transmitting the whole file to the ES. The ES Chair will ask an appropriate specialist to review each such nomination and second it if it meets with his approval, or make appropriate recommendations for revision, or simply reject it. The ES Chair then will communicate with the author and make arrangements for routing the paper to the appropriate journal according to the author's wishes with the Division's endorsement. If in the Session Chair's opinion a particular paper was not sufficiently close to archival to be nominated, but it did have the basic ingredients and technical substance for such, it should be brought forward in a "potentially archival" category. Such papers will be pursued by the ES on a longer term.

Subject to the respective Editor's final approval, both Nuclear Science and Engineering and Design are prepared to immediately publish papers that have the Division's endorsement according to the above procedure. Copies of the review forms must be transmitted to the appropriate Editor together with the final manuscript and original artwork. The whole handling by the ES should be completed within two months following receipt of the file by the ES. A footnote on the title page should show that "This paper is sponsored by the ANS Thermal-Hydraulics Division. It was originally presented in ..."

For the NHTC the session chairs are to provide to the ES their nominations (which must be solicited by ES Chair) for Best Paper Award. For the Topical meetings this is to be coordinated with the Technical Program Chair. In all cases this should be done simultaneously with transmitting the review files immediately after the meeting. Also, in all cases, copies of the nominated papers or of the proceedings should also be transmitted. The ES Chair with the counsel

of ES members is to make a selection of approximately three papers to be considered for the Division Best Paper award. These are submitted to the Best Paper Subcommittee (BPS) in February of each year.

The ES will use the files to refine and maintain a list of reliable and high quality referees with corresponding areas of specialization. Such lists will be made available to session chairs (or technical program chairs for Topicals) at their request.

THP9.2.4.2-National/International Heat Transfer Conference ANS Representative and Technical Program Co-Chair

Scope

The ANS representative has the responsibilities to:

1. attend NHTC and IHTC Coordinating Committee meetings, where he represents the ANS.
2. organize ANS-sponsored sessions for approval by the ANS/THD Program Committee.
3. plan the timing of events leading to the publication of proceedings and paper presentations.
4. serve as liaison between the conference Coordinating Committee and the organizers of ANS-sponsored sessions.
5. serve to select the NHTC Best Paper Awards.

Selection

The ANS Representative to the NHTC/IHTC Program Committee is selected by the PC Chair and approved by the EC. He serves for three years.

Procedures

In order to carry out his responsibilities, the ANS representative to the NHTC Coordinating Committee follows these procedures:

Attend the organizing meetings of the NHTC Coordinating Committee as called by its chair. Propose session topics and session organizers before March 15 of the year preceding the NHTC to the PC. Have Session topics and organizers included in early program fliers for nationwide distribution. Establish and convey to session organizers two Planning Schedules in April of the year preceding the NHTC. One schedule is for interactions between session organizers and authors. The other schedule is for

Such a subcommittee is currently not in existence.

<p>interactions between the Program Co-Chair and the session organizers.</p> <p>The first schedule contains dates for sending calls for papers to prospective authors, receiving abstracts, notifying authors, receiving, reviewing and accepting manuscripts, for notifying authors, sending and receiving mats, for sending confirming letters to authors with session date, time, place and request for biographical information from authors, and the date for proposing best paper nominations, and for sending thank you notes to authors. The second schedule contains the dates, at which session chairs distribute call for papers, send copies of abstracts of accepted papers, of M&M forms, mats and copyright forms and requests for special arrangements, to the Program Co-Chair.</p> <p>All dates must be synchronized with the dates set by the NHTC Coordinating Committee.</p> <p>Include with these schedules the paper review package with review forms, review standards and author guides.</p> <p>Coordinate paper publications and preparations of sessions with session organizers and NHTC Coordinating Committee. Serve as ANS representative in the selection of the NHTC Best Paper Award. Solicit nominations from session organizers. Confirm with session organizers that all review correspondence has been transferred to the ES Chair.</p> <p>THP9.2.4.3 – National/Topical Subcommittee</p> <p>Scope The National/Topical Subcommittee (N/TS) has the following responsibilities:</p> <ul style="list-style-type: none"> • Development of sessions for the ANS National Meetings at which the Division has elected to participate (currently, the ANS Winter Meeting only). • Organization and oversight of the Paper Review for the ANS National Meetings. <p>Oversight of the liaison with the organizing and technical program committees for Topical Meetings for which the</p>	<p>Such a subcommittee is currently not in existence.</p>
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THD is a principal sponsor. At present, these consist of the International Topical Meeting on Nuclear Reactor Thermal Hydraulics and the Far East Topical on Reactor Operations and Thermal Hydraulics.

The N/TS Chair will serve as the Division Representative to the NPC.

Membership

The N/TS consists of a minimum of three persons, with other members added as required to fulfill the Subcommittee's duties. The three members include a university/national laboratory liaison, a utility/industry liaison, and a coordinator for the Far East Topical Meeting. Other duties as delineated in the Scope, may be assumed by these members, or may be assigned to additional members, at the determination of the N/TS Chair.

Aside from willingness to work, the primary criteria for N/TS membership are:

- maintain a distribution among the segments of the thermal hydraulics community (university, national laboratory, utility, industrial, consultant), and
- maintain a geographical distribution of members throughout the U.S., to facilitate attendance of N/TS members at ANS meetings.

The term of membership is nominally three years. The N/TS Chair shall identify potential N/TS members to replace those whose terms have expired. The PC shall discuss and vote for each position (see THP9.1.2).

Procedures

In order to carry out the responsibilities entrusted to it, the N/TS will adhere to certain procedures. These are listed and keyed to the duties outlined in the Scope.

Development of sessions for ANS National Meetings:

In order to assure high-quality papers, most sessions that the Division sponsors will have Session Organizers appointed to "stimulate" contributions. For those sessions requiring full papers, these Sessions Organizers will also coordinate manuscript reviews, and will assist in National Meeting Paper Reviews (see next item). The schedule for submissions, review, and publication of full papers will be

While this subcommittee does not exist, the majority of the procedures still apply.

developed by the N/TS Chair or his designee, in cooperation with the PC Chair and the ES Chair.

Manuscript reviews will be carried out in accordance with procedures developed by the ES. The Session Organizers will be chosen for their expertise in the areas chosen for session topics, and should also be chosen so as to promote an equitable geographical and technical distribution. For meetings for which the site is not centrally located, Session Organizers should be selected in order to make it possible for them to attend the Paper Review and will be maintained by the PC. When a slate of sessions has been approved, Session Organizers will be selected from the list, or from other individuals having a special expertise in the topic areas, as suggested by the PC, with possible alternates in the event that the first choice is unavailable. It will then be the responsibility of the N/TS Chair (or his designee) to contact the Session Organizer and obtain that person's agreement to serve in such a capacity.

The Session Organizer is responsible for stimulating papers, coordinating manuscript reviews, when necessary, attending the Paper Review for summaries, and serving as Session Chair at the Conference. The Session Organizer will also work with the ES in helping to select papers for archival publication and candidates for the Division's Best Paper Award.

Other responsibilities of the N/TS Chair are to prepare the 100-word summaries required for National Meeting sessions and to act as liaison in such instances as require co-sponsorship of a session with another ANS Division, whether at THD's initiative or the other ANS Division's. Both of these duties generally occur in conjunction with NPC meetings, to which the N/TS Chair is designated as the THD representative.

Organization and oversight of the National Paper Review.

Once the list of sessions for a National Meeting has been approved, the N/TS Chair or his designee(s) will be responsible for arranging for reviewers to attend the Paper Review at which the ANS summaries are refereed. If the sessions include invited or stimulated papers, for which Session Organizers are responsible, these Session Organizers will be asked to participate in the Review (or to send a stan-in), as previously noted. Other reviewers

should be chosen from the PC membership or, if appropriate, from the Division membership-at-large, based on the availability of such persons and their credentials. An effort should be made to rotate this responsibility among PC members, so as to permit a wide range of expertise on the review panel.

The **N/TS** Chair, or his designee, will also attend the Paper Reviews to oversee the activities of the reviewers and to serve as the point of contact between the Meeting Technical Program Chair and the Division. This person will also represent the Division at the NPC meeting held at the Paper Review and at the “auction” for session meeting rooms. All actions taken by reviewers that affect the meeting organization, e.g. acceptance, rejection, or revision of papers; movement of papers into or out of the Division’s sessions; session organization; and session placement in the meeting, are subject to this individual’s approval.

Oversight and liaison with Division-sponsored Topical Meetings:

The **N/TS** Chair or his designee(s) will act as a liaison with the organizing and Technical Program Committees of topical meetings sponsored by the Division. This activity is most important in Class I and Class II meetings, in which the Division has a major financial and/or organizational responsibility. Class IV meetings, however, will also be subject to a lesser degree of **coordination**. The degree of PC involvement in these meetings is described below, but may be expanded upon request of the conference organizers, subject to approval by the PC. For conferences held in the U.S., The **N/TS** Chair or his designee will automatically become a member of the conference Technical Program Committee. For these conferences, a written report on organizational progress will be required at each meeting of the PC, and a written summary report is required after the conclusion of the conference, and the **N/TS** Chair shall see that such reports are prepared and submitted to the PC. The **N/TS** Chair will review conference planning documents required by the NPC.

For conferences held outside the U.S., the **N/TS** Chair or his designee will act as liaison with the conference organizing and Technical Program Committees. If practical, this person will also serve on the conference

Technical Program Committee. If such is not practical, the liaison will maintain close contact with U.S. members of these committees. Written reports on organizational progress will also be required for these conferences, prepared and presented by the liaison. However, review of organizational documentation is not required.

In the case of Specialists Meetings (Class IV), it is desirable, but not required, that at least one member of the PC serve on the meeting Technical Program Committee. Oral reports on meeting organizational progress are required, or written reports may be required. The N/TS Chair and ES Chair, if requested, will assist the meeting organizers in review of papers for such conferences.

Division Representative.

The N/TS Chair will act as the Division's representative to the ANS NPC, and will attend all meetings of the NPC as required. If circumstances do not permit his attendance at such meetings, he must arrange for a substitute, so that the Division is fully represented before NPC. A continual inability to attend such meetings will constitute grounds for dismissal of the N/TS Chair.

Important Note: In all activities that require review of papers for conferences, whether for National ANS, Topical, or Specialists meetings, the N/TS Chair will maintain close coordination approved by the PC, as to whether full papers are to be required for specific sessions of the ANS national meetings. If such is the case, the review procedure will be the same as outlined in points 1 and 2; however, immediately after the ANS National Meeting review is completed, a list of accepted summaries will be forwarded to the ES Chair, who will arrange for review of full papers.

THP9.2.5 – Meetings

The PC Chair shall mail call-for-meeting notice and proposed agenda to all PC members thirty (30) days in advance of meetings. The PC Chair will ensure that all action items have been looked after and mail out material for consideration thirty (30) days in advance of meetings.

THP9.3 – Membership Committee

<p>The purpose of the Membership Committee (MC) is to increase the number of members in the Thermal Hydraulics Division. As many prospective members are not ANS members, a parallel objective is to encourage membership in the Society.</p> <p>The Committee finds new Division members through advertisement, individual contacts, and letter campaigns. The advertisement consists of Thermal Hydraulic brochures and posters, which are made available at numerous ANS and nuclear conferences during the year.</p> <p>Individual contacts are made through current Division members at each company and nuclear utility. A division membership list by company was compiled and is used to determine prospective members who are then given a member packet.</p> <p>Letter campaigns consist of welcome letters to new student members and reminder letters to dropped members.</p> <p><u>THP9.4 – Honors and Awards Committee</u> THP9.4.1 – Chronological Schedule of Awards Committee planning is based on two meetings per year cycle. For Awards and Best Paper, committee action takes place at the NHTC meeting of H/AC and the award is made at the next ANS Winter Meeting. For Fellows Nominations, committee action takes place in the ANS Winter Meeting.</p> <p>THP9.4.2 – Subcommittee Assignments In the first three years of tenure, the Division Past Chair serves as Chair of one of the subcommittees (Best Paper, Fellow Nominations, Awards). During the fourth and last year of tenure on the committee, he/she serves as the H/AC Chair. The general members remain on the subcommittee appointed to for the duration of their tenure.</p> <p>THP9.4.3 – Implementation Plan For the presentation of both awards, an Awards Luncheon will be held. The logistics of the Awards Luncheon should be handled by the Chair of H/AC (except where another specific person is mentioned).</p> <p>After the selection is made, the Chair of the H/AC should write to the award recipients about the award decision and</p>	<p>H/AC does not do Fellow nominations.</p> <p>No such committees</p> <p>Vice Chair?</p> <p>No awards luncheons are held</p>
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<p>also invite the Technical Achievement Award recipient to present a short lecture during the Awards Luncheon. The recipients should be told that the lunch tickets will be provided to him/her and spouse, but not the travel expenses.</p> <p>In August or September discuss with ANS Headquarters to set up an Awards Luncheon at the ANS Winter Meeting. Traditionally, it has been held on Monday. If the decision is to hold the Award Ceremony at an ANDS Topical Meeting, the responsible official of that Topical meeting should be contacted for arrangements.</p> <p>In August or September, contact ANS Headquarters to have the plaques and certificates prepared. The wording of the Awards Certificate should be drafted by the cognizant subcommittee chairs. Brochures should also be prepared by seeking printers at reasonable cost. For annual meetings, at most 100 copies will be needed.</p> <p>In August, announcement of the Award should be sent to Division Newsletter and ANS News.</p> <p>Notify the Treasurer about the expenses.</p> <p>Prior to the Awards Luncheon, arrangements should be made to have a camera (and an ANS reporter if possible) on hand to record the event.</p> <p>In December, send the news release and the photo the Division Newsletter and the ANS News for public release.</p> <p>THP9.4.4 – Technical Achievement Award THP9.4.4.1 – Purpose This award, established in 1984, is presented to a member of the ANS in recognition of outstanding past or current technical achievement.</p> <p>THP9.4.4.2 – Award Description This award is a certificate and/or other suitable memento with an appropriate citation and presented by the Division Chair at the ANS Winter Meeting or at a Division Topical Meeting. The award is announced in the Division Newsletter, ANS News, and Nuclear News. This award is normally given annually. The award includes \$500 cash to the recipient.</p>	<p>H/AC chair No brochures are provided</p> <p>Timeline</p> <p>\$2000 now</p>
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THP9.4.4.3 – Eligibility

Any member of the American Nuclear Society is eligible for this award.

THP9.4.4.4 – Nomination Procedure

Nominations for this award are made by the Division membership or by the technical community. They are to be submitted in writing to the Chair of the H/AC accompanied by at least three supporting letters.

THP9.4.4.5 – Selection Criteria

This award will usually be based on a major contribution to the state of the art, an important publication, major technical achievement, or a sustained record of accomplishment and technical excellence in the art of science of Thermal Hydraulics.

THP9.4.4.6 – Procedure

The annual schedule is as follows:

1. Develop candidate list from nominations prior to the H/AC Summer Meeting.
2. Select the winner of the award **the H/AC Summer Meeting** and notify the Division EC. The winner of this award is selected from the candidates by written ballot of the members of the H/AC.
3. The Division chair presents the award at the ANS Winter Meeting or at an equivalent Topical meeting of the Thermal Hydraulics Division.

THP9.4.5 – Best Paper Award

THP9.4.5.1 – Purpose

This award is presented to the authors of the best full-length paper presented at Sessions sponsored by the Thermal Hydraulics Division.

THP9.4.5.2 – Award Description

The award is a certificate and/or other suitable memento with an appropriate citation and presented by the Division Chair at the ANS Winter Meeting or at a Division Topical meeting. Award announcements are presented in the Division Newsletter, **ANS News, and The Nuclear News.** The award is given annually. The award includes **\$100** cash to the author/or divided among co-authors.

The nominations are due August 1.

\$500

THP9.4.5.3 – Eligibility

At least one author must be a member of the American Nuclear Society. Full-length papers are eligible, extended abstracts are not.

The fact that Topical meeting organizers have given a best paper award specific to their meeting will not disqualify papers from the meeting from eligibility for this Divisional award.

THP9.4.5.4 – Nominating Procedure

The **ES Chair** nominates approximately **three** full-length papers to the H/AC through the PC Chair. Each nomination is accompanied by independent reviews (generally three).

THP9.4.5.5 – Selection Criteria

The award is made on the basis of originality and creativity in addition to the usual criteria of impact and scientific integrity. The H/AC may decide on the basis of the reviews submitted by the PC or invite further review.

THP9.4.5.6 – Procedure

Eligible conferences are identified at the ANS **Winter Meeting**, and the **ES Chair** is notified.

Nominations for Best Paper Award are submitted by the **ES Chair** by **the end of February**. These also include nominations received from the eligible conference program chairs.

The nominations are distributed by the **Best Paper Subcommittee (BPS)** to all members of the H/AC for review in May.

Selection is made by ballot of the H/AC using the criteria described below. **The ballot will be completed before the summer meeting of the H/AC.**

Final selection is made at the **summer meeting** of the H/AC.

THP9.4.5.7 – Selection Criteria

The following criteria serve as guidelines in the selection process. A sliding scale from one to ten may be used as an option in each of the categories listed below to qualify the review.

Organization of Paper-How well do the authors present the material? Is it logical? Does it flow smoothly? Is it easily understood?

Originality-How similar is the work to other published material? Is it the first time the work has appeared in this form?

Creativity-Does the work show insight in advancing the particular area of study, or solving a particular problem?

Impact and Scientific Integrity-How significant is the work with respect to advancing scientific knowledge?

Practicality-How useful is the work to the Nuclear Industry?

Other-Are there any comments that should be made about the paper that would cause its overall rating to be modified from the first five categories.

THP9.4.6 – Fellow Nominations Subcommittee

Nomination of ANS members for advancement to Fellow grade is initiated by any member who believes another member has an outstanding record of achievements that should be recognized by this special designation. A group of five sponsors are required, at least one of whom must be an ANS Fellow. The purpose of defining a procedure whereby the Division H/AC will play a role in initiating nominations is to ensure that Division members who are eligible are not overlooked by their colleagues. It is not intended that the Committee's activity should be interpreted as inhibiting the nomination by other individuals who recognize a strong candidate.

Standards for ANS Fellow are set by the ANS H/AC and approved by the Board of Directors. These standards were recently redefined to encourage the Divisions to stimulate nominations of deserving candidates including those from the ranks of architect/engineers, suppliers, utilities, etc.

THP9.4.6.1 – Procedure and Schedule for Fellows

Nominations

The Division Fellows Nominations Subcommittee (FNS) will review each year the Division roster to identify potential candidates. This is done late in the calendar year

H/AC does not nominate ANS Fellows

so that sponsors may be identified and the case prepared by March to meet the ANS Honors and Awards Schedule.

The FNS, via the Division Winter Newsletter, will encourage and offer to aid individual members in developing a nomination.

ATTACHMENT F

Motion to establish a scholarship committee.

New rule for scholarship committee

R. Martin, E. Merzari (Secretary) and X. Sun

The task force team was tasked by Dr. Song to provide a proposal for a new rule 9.6 (the current rule 9.6 would become rule 9.7) covering the establishment of a standing Scholarship Committee. In attachment an amended proposal is also provided (Attachment F.1) for the Hochreiter Scholarship, which makes the scholarship committee responsible for the selection of the recipients.

The structure of the committee was subject to various deliberations in the task force. We resolved to:

- include a minimum of 5 members and a maximum of 9, all serving 3-year terms (except the division chair who has a one-year term);
- add at least 2 new members every year;
- include at least 3 members from non-academic institutions;
- include at least 1 international member.

The proposed new rule is as follows:

9.6 Scholarship committee shall be composed of a minimum of five (5) members and a maximum of nine (9) members, including the division Chair.

a. Responsibilities: The Scholarship Committee shall be responsible for supporting the society in the selection of the recipients of all THD-funded scholarships.

b. Membership

1. The Chair of the Scholarship Committee shall be appointed by the Executive Committee at the recommendation of the Nominating Committee. The Chair of the Scholarship Committee shall serve a 3-year term.
2. Appointed members shall serve 3-year terms. The division Chair shall serve a one-year term. At least 2 appointed members shall be newly added each year to the Committee. Appointed members are to be nominated by the Nominating Committee and appointed by the Executive Committee.
3. The Scholarship Committee shall include a minimum of 3 members with non-academic affiliations such as industry, government, or national laboratory.
4. The Scholarship Committee shall include a minimum of 1 international member.
5. Members of the Scholarship Committee must be members of the ANS Thermal Hydraulics Division.

c. Conflict of Interest

1. In the event that a candidate package is submitted from the institution of a Scholarship Committee member, the member shall recuse herself/himself from any deliberation regarding the candidates for that evaluation cycle. Members may recuse themselves for other conflicts of interest.
2. In the event that the Scholarship Committee Chair is recused, an Acting Chair shall be selected from among the Scholarship Committee members on the nomination of the Nominating Committee and appointment by the Executive Committee. The term of the Acting Chair shall end following deliberations regarding the current

evaluation cycle, after which herself/himself will remain a Scholarship Committee member.

Attachment F.1

1. Name of Scholarship

Lawrence E. Hochreiter Graduate Scholarship

2. Background information on the individual that the Scholarship is honoring.

Lawrence E. Hochreiter was employed at Westinghouse during the formative years of nuclear safety and later as a professor and mentor at Penn State University. At Westinghouse, he led the evaluation of safety issues for both Pressurized and Boiling Water Reactors and consulted with the Westinghouse Savannah River Company and the Westinghouse Naval Division. His collaboration partners included the U.S. Nuclear Regulatory Commission, Electric Power Research Institute, Bettis Atomic Power Laboratory and many companies in the industry. He served in a direct role in nuclear industry's more significant events, including the nuclear industry's response to the 1972-1973 Emergency Core Cooling System Hearing, the 1979 Three Mile Island accident and the 1986 Chernobyl accident. In 1986, as an adjunct professor, Hochreiter began teaching graduate courses in the Penn State/Westinghouse mechanical engineering program. He joined Penn State's nuclear engineering department in 1997 as professor of nuclear and mechanical engineering, teaching undergraduate and graduate students.

His research at the university focused on thermal-hydraulic modeling of nuclear power plants, reactor safety analysis and experimental studies of two-phase flow and heat transfer. He created a state-of-the-art reflood heat transfer facility where Penn State graduate students carry out a variety of experiments in heat transfer, convective steam cooling and steam cooling with droplet injection. Hochreiter received posthumously the Technical achievement award, the highest honor of THD, in 2008. Always a passionate teacher and mentor, he inspired a generation of THD leaders. As THD chair he spear-headed efforts that ultimately led to the establishment of this scholarship.

We note that THD is the only major division without a scholarship program despite significant growth in recent years. One scholarship will be awarded to a graduate nuclear science/engineering major, with the desired emphasis on areas supporting thermal-hydraulics as applied to nuclear energy. These areas include, but are not limited to computational thermal-hydraulics, experimental thermal-hydraulics, two-phase flow and heat transfer, thermal-hydraulics of severe accidents, thermal-hydraulics of operating light water reactors and thermal-hydraulics of advanced reactors,

3. Sponsoring organization or Individual

THD

4. Academic level

Master's and doctoral level (graduate).

5. Academic/research discipline (if any)

Awardee should be enrolled in a US institution pursuing a master or a PhD with a main focus on thermal-hydraulics as applied to nuclear energy.

6. Proposed initial level for fully-funded scholarship

\$63,000.

7. Expected sources of initial/supplementary funding (must be fully-funded within 5 years)

\$48000 from unrestricted funds (to be moved to restricted funds) and \$15000 from restricted funds.

8. Plans for award of scholarship until sufficient funds are achieved
Scholarship will be fully funded from the start.

9. Special selection criteria, restrictions, and other special requirements (if any)
Awardee should be enrolled in a US institution pursuing a master or a PhD with a main focus on thermal-hydraulics as applied to nuclear energy. This include but is not limited to computational thermal-hydraulics, experimental thermal-hydraulics, two-phase flow and heat transfer, thermal-hydraulics of severe accidents, thermal-hydraulics of operating light water reactors and thermal-hydraulics of advanced reactors.

No residency or nationality requirement will be imposed reflecting the international nature of the field.

Applicants shall submit a personal statement of 500 words or less where they describe long-term and short-term professional objectives with respect to their interest in nuclear reactor thermal-hydraulics.

The THD **H&A Scholarship Committee** shall be responsible **for or at least represented in** the selection process of the awardee.

ATTACHMENT G

Chair report

American Nuclear Society Thermal Hydraulics Division

Executive Committee Meeting

June 7, 2020

Chair Report

W. Marcum (for C.H. Song)

7.A. PRESIDENT'S MEETING WITH DIVISION CHAIRS

The Chair Report summarizes the accounts of two meetings taking place with the president and the CEO since our last ANS meeting.

Conference Call with Craig Piercy (March 19, 2020)

Craig Piercy scheduled a courtesy call with each professional division chair. On March 19, 2020 he and I met. The purpose of his call was to informally get a sense for THD's stance on the efforts that have resulted from the reorganization plans associated with ANS. Representing THD, I impressed upon him the following items:

- It is important to ensure an incentive-based model from ANS HQ as it applies toward hosting topical meetings by divisions and local chapters. Without incentive it is difficult to create motive among members to contribute in ways that they believe add value.
- It is important that we engage young members in a way that they particularly see value in contributing to the society and professional divisions to ensure the long-term sustainability and success of the Society.
- It is important to ensure that industrial partners, such as utilities, who have vocalized a lack of value of the society become key stakeholders as we move forward within the Society to ensure the Divisions' well-roundedness as well as the Society's continuity.

Craig provided a brief update on outcomes as they relate to the organization of the society as well as early impacts and predictions on finance due to the COVID-19 pandemic including:

- The Society is financially planning on moving forward remotely with ANS Annual meeting and in-person with ANS winter meeting. financial impacts are significant if ANS winter meeting is to be remote as well.
- The Society has been proactive in making its presence more substantial virtually through alternate media forms than it has in the past and these forms are likely to continue given early successes observed even after the pandemic subsides.
- The Society is working to become more secure in its infrastructure as it relates to online tools and resources including cloud services and website development.

The conversation was brief and positive. Craig expressed his appreciation for THD in its activeness within the Society and its fiscal contributions through efforts as they relate to topical meetings such as NURETH,

ATH and others. Presently, it is planned that a brief phone call take place between Craig and the THD division chair on a quarterly basis moving forward.

President's Meeting with Division Chairs (May 19, 2020)

Marylin Kray, Craig Piercy, Mary Lou Dunsik-Gouger, and Professional Division Chairs were present in a zoom meeting on May 19, 2020 taking place from 11:00-13:00 PDT. During this meeting, focus was directed toward the topic of ANS 2.0 and the change-plan. Particularly clarity was provided on the reorganization of committee structures and their new roles and responsibilities as the change plan comes into effect. Additional items include:

- Financial state of the Society is still of concern, however, less dyer than previous as a result of numerous efforts to reduce expenditures. A few items of specificity:
 - ANS has reduced its full-time employment overhead
 - ANS has had to absorb the cost of several topical meetings at hotel venues that were already committed, but canceled due to the pandemic.
 - ANS will see significant short-comings in finances if ANS winter meeting is not held in-person, however, plans are beginning to evolve to take this scenario into consideration.
- ANS purchased cloud-space and a new server system to ensure more sustainable infrastructure for remote operations.
- ANS has hosted numerous virtual events and supported the several virtual meetings since the beginning of the pandemic and found an overwhelmingly positive response to this effort including significant contribution of volunteers and direct participants relative to original predictions.

7.B. PROFESSIONAL DIVISIONS COMMITTEE MEETING

Due to the remote annual meeting arrangements the Professional Divisions Committee (PDC) Meeting is scheduled uniquely relative to previous in-person meetings. It is presently scheduled to take place on June 9, 2020 (after the ANS THD EC meeting is scheduled). As such the chair has no information to report upon or actions to provide to the Division from this workshop meeting. The Chair Designate will take the action of assembling a written summary of the professional division committee meeting and report out to the executive committee via both email and posting to the THD website on the outcomes of the PDC Meeting.

ATTACHMENT H

Treasurer report

Treasurer Report – 2020 Annual Meeting

Bao-Wen Yang, THD Treasurer, 2019-2020

The following report summarizes an updated THD 2020 budget. All expenses up to March 31, 2020 were confirmed with financial report from ANS 2020 first quarter report.

The budget for 2021 is also proposed and included in Table 2 (blue column) for approval.

As shown in the attached Table 1 for all three award funds,

1. The TAA award account started at a fund level of \$35,881, with incomes from investment gain (\$7,255, a 20.22% annual gain) and division designated fund transfer (\$8,192 transferred from the general account), after deducting \$1,000 for TAA award and \$72.5 for the plaque, the expected budget balance will be \$50,255 (not account for the investment gain/loss in 2020). This new balance will raise the spending limit to \$2,472.55 (4.92%) sufficient to support the increase of TAA award from \$1,000 to \$2,000.
2. With the investment gain of \$12,739 (20.22% gain), the Lawrence Hochreiter scholarship account reaches a new balance of \$75,739, not including the investment gain/loss in 2020.
3. The newly established Service Award fund was set up with a disbursement of \$21,000 from the General account, which will allow a pending limit of \$1,033 (4.92%).
4. There were two major movements in the general account: an income of \$25,054 (thanks to the generous contribution from NUTH-18) and a major disbursement of \$29,192 to the award funds (\$21,000 to fund the service award, and \$8,192 to support the increase of TAA fund). The general account has new balance of \$43,792 (see Table 2).

Table 1

ANS THD-Hochreiter-TAA-Services Award Funds (March 31, 2020)			
	Hochreiter	TAA	Services
Balance Forward from 12/31/2018 Year	\$63,000	\$35,881	\$0
Budget Funds			Starting 2020
Investment Gain (up to 12/31/2019)	\$12,739	\$7,255	
Division Designated (2020)		\$8,192	\$21,000
Total Income	\$12,739	\$15,447	\$21,000
Budget Expenses			
Awards		\$1,000	
Plaques		\$73	
Other Expenses			\$0
Total Expenses	\$0	\$1,073	\$0
Net	\$12,739	\$14,374	\$21,000
Total Year End Funds	\$75,739	\$50,255	\$21,000
Spending Limit (4.92%)	\$3,726.36	\$2,472.55	\$1,033.20

1. The disbursement to award funds (total \$29,192) was processed on Feb 2, 2020 and confirmed in the ANS Q1 report at the end of April, 2020

Budget for Thermal Hydraulics Division (March 31, 2020)						
	2019	2019	2020	2020	2021	
	Budget	Actual through 12/31/2019	Approved budget (Merzan)	Actual Through 3/31/20	Proposed budget	
Balance Forward from Previous Year	\$51,459	\$51,459	\$87,682	\$72,984	\$43,898	
Budget Funds						
Member Dues Allocation (\$2/full dues member; \$1 / reduced dues member)	\$2,300	\$1,325	\$2,300	\$409	\$2,300	
Student Support (ANS Changed Plan)					\$3,000	(Change plan ??)
Division Income	\$39,173	\$25,054		\$0	\$0	Uncertainty 25% revenue share?
Total Income	\$41,473	\$26,379	\$2,300	\$409	\$5,300	
Budget Expenses						
Newsletters, Website						
Awards & Plaques	\$1,250	\$851	\$1,250	\$0	\$845	
Disbursement to Award Funds				\$29,192		
National Meeting Costs						
Topical Meeting Costs						
Division Officer Expenses						
Student Support	\$3,500	\$3,000	\$2,500	\$500	\$2,500	
Future Activity						
Scholarship/NEED Funding	\$500	\$1,000	\$500		\$500	
YMG Support						
Other Expenses		\$3				
Total Expenses	\$5,250	\$4,854	\$4,250	\$29,692	\$3,845	
Net	\$36,223	\$21,525	(\$1,950)	(\$29,286)	\$1,655	
Total Year End Funds	\$87,682	\$72,984	\$85,732	\$43,698	\$45,353	
		(Balance 12/31/2019)		(Balance 3/31/2020)		

1. Budget includes the income from NURETH-18 \$25,054
2. Membership income as of March 31, 2020 report
3. The disbursement to award fund (\$29,192) was processed Feb 2, 2020, confirmed in Q1 report (April 30, 2020)
4. No other division income is proposed due to cancellation of NUTHOS, Canada
5. In 2021 budget, membership income and student support (\$3000) from ANS based on "Change Plan" might subject to change.
6. Actually spending in after the above update: Plaque for Exiting THD Chair \$72.5+Plaque for YPRC \$72.5 +Award for YPRC \$300

Bao-Wen Yang
ANS THD Treasurer 2019-2020

ATTACHMENT I

Membership committee report

American Nuclear Society Thermal Hydraulics Division

Executive Committee Meeting

June 7, 2020

Membership Committee Report

W. D. Pointer

Membership in the American Nuclear Society is based on the calendar year, nominally beginning January 1 and expiring on December 31. Individuals may apply for membership or submit a renewal at any time. However, for the purpose of counting annual membership in the Society as a whole and the individual Professional Divisions of ANS, the annual membership drive for the calendar year is closed at the end of the month of July. Memberships processed after this date are counted for the following year. Notifications to members for renewals for the next calendar year begin in October.

Professional Division membership is determined based on self-selection by ANS members on the membership application or annual renewal application. For calendar year 2019, THD recorded 1262 members. THD membership has continued to grow over the past decade, in contrast to an overall downward trend in ANS membership. For 2019, just under 14% of all ANS members opted to join the Thermal Hydraulics Division, rising from just under 10% in 2010.

Calendar year 2020 membership data will be available after the closure of the annual membership drive.

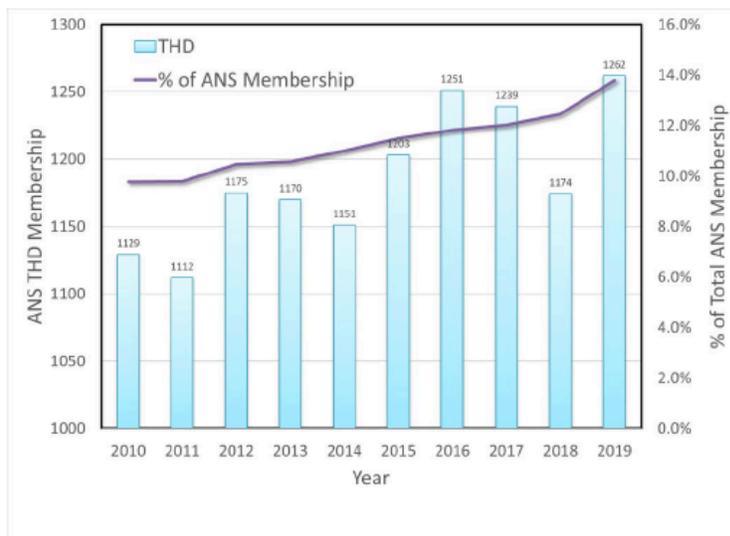


Figure 1. ANS Thermal Hydraulics Division Membership Data for Calendar Years 2010 through 2020.

The Membership Committee is defined as follows in ANS Thermal Hydraulics Division Rule 9.3.

9.3.Membership Committee – Shall be composed of not fewer than three (3) members, including the Vice-Chair, Secretary, and Treasurer, who shall be charged with the duty of bringing the advantages of the Thermal Hydraulics Division membership to the attention of qualified candidates.

Recommendation

However, ANS THD has traditionally operated assigning this responsibility of the Immediate Past Chair, without clear appointment of other members. The Immediate Past Chair recommends that Executive Committee consider revision of rule 9.3 to formally assign role of Chair of the Membership Committee to the Immediate Past Chair and to populate the committee with volunteer members who will work to identify opportunities to actively recruit members to the Thermal Hydraulics Division.

ATTACHMENT J

Nominating committee report

American Nuclear Society Thermal Hydraulics Division Executive Committee Meeting June 7, 2020

Nominating Committee Report

W.D. Pointer, C.-H. Song, W. Marcum, and I. Bolotnov (ex-officio)

The Nominating Committee is tasked with the identification of candidates for elected positions in the Thermal Hydraulics Division and appointed positions in THD committees.

Annual Officer Elections

Nominations for officer positions are accepted from the THD membership at large or recruited from ANS THD committees. The ANS annual election is held in April and certified at the ANS Annual Business Meeting in June. For the 2020-2021 business year beginning at the close of the ANS Annual Meeting on June 11, 2020, the following individuals have been elected to fill ANS THD officer roles:

Vice Chair – Elia Merzari, Pennsylvania State University

Secretary – Bao-Wen Yang, Delta Energy Group

Treasurer – Annalisa Manera, University of Michigan

The current Vice Chair, Wade Marcum of Oregon State University, is the Chair-Elect and will serve as the 2020-2021 Chair.

The Nominating Committee thanks outgoing THD Chair Chul-Hwa Song of Korea Atomic Energy Research Institute for his dedicated service to the Division. He will continue to serve THD as the Immediate Past Chair and the Chair of the Nominating Committee for the 2020-2021 business year.

Annual Executive Committee Elections

Each year, five Executive Committee members are elected to at-large committee seats for a three-year term. For the 2020-2021 business year beginning at the close of the ANS Annual Meeting on June 11, 2020, four active executive committee members have been reconfirmed by election for a second three-year term.

Yang Liu, Virginia Polytechnic Institute and State University

John Luxat, McMaster University

Hisashi Ninokata, Politecnico di Milano

Piyush Sabharwall, Idaho National Laboratory

In addition to these four reconfirmations, one new Executive Committee member has been elected, filling the seat vacated by the election of Annalisa Manera to Treasurer.

Caleb Brooks – University of Illinois at Urbana-Champaign

Conference Screening Committee

The Conference Selection Committee is defined in the ANS Thermal Hydraulics Division Rule 9.5 as follows:

Rule 9.5 Conference Selection Committee

Shall be composed of eight (8) members who shall be responsible for recommending to the Executive Committee host organizations for meetings sponsored or co-sponsored by the division.

A. Responsibilities;

- 1. The Conference Selection Committee shall be responsible for soliciting technical meeting proposals and recommending host organizations for division sponsored and co-sponsored technical meetings.*

B. Membership;

- 1. Each of the members is appointed by the Executive Committee at the recommendation of the Nominating Committee.*
- 2. Members shall serve 4-year terms. At least 2 members shall be added each year to the Committee.*
- 3. The Conference Selection committee will include a minimum of two (2) international members.*

C. Officers;

- 1. A Chair shall be appointed by the Executive Committee at the recommendation of the Nominating Committee. To be eligible for appointment as Chair, the member shall have served at least 2 years on the Conference Selection Committee prior.*
- 2. The Chair of the Conference Selection Committee shall serve a two-year term.*

D. Eligibility and Appointment;

- 1. Any member of the THD is eligible for Conference Selection Committee membership.*

ANS THD voted in June 2014 to change the name of this committee to the Conference Screening Committee. No further changes have been recorded in meeting minutes.

The appointment and confirmation of the current Conference Screening Committee membership has not been recorded in Executive Committee Meeting Minutes and the beginning and end dates of those appointments are not clear.

RECOMMENDATION: In order to comply with Rule 9.5, the Nominating Committee **recommends** that the Executive Committee consider all current member terms to be expired at the close of the ANS Annual Meeting and that the Nominating Committee be authorized the Executive Committee to nominate candidates for the following terms for Executive Committee confirmation by electronic vote as soon possible.

- 1. Two nominees for Conference Screening Committee Member with term expiring June 2021*
- 2. Two nominees for Conference Screening Committee Member with term expiring June 2022*
- 3. Two nominees for Conference Screening Committee Member with term expiring June 2023*
- 4. Two nominees for Conference Screening Committee Member with term expiring June 2024*
- 5. From among these nominees a nominee to serve as Chair of the Conference Screening Committee with a two year term expiring June 2022.*

With implementation of this correction, the Executive Committee would resume annual appointment of two members to this committee in 2021.

Program Committee Nominations

As of 2019 ANS THD PC had 58 members with 41 members' terms expiring in 2019, 7 members in 2020 and 10 members in 2021. The renewal of terms expiring in 2019 was delayed until the 2020 Annual Meeting.

The Nominating Committee brings the following **MOTION** regarding renewal of expiring terms to the THD Executive Committee.

MOTION: Renew the term of the following 29 Program Committee members through 2022.

- | | |
|-----------------------|-----------------------|
| 1. Steven Arndt | 16. Y. Liu |
| 2. Fatih Aydogan | 17. John Luxat |
| 3. Steven Bajorek | 18. Robert Martin |
| 4. Philippe Bardet | 19. Kurshad Muftuoglu |
| 5. Sama Bilbao y Leon | 20. Hisashi Ninokata |
| 6. Lane Carasik | 21. W. David Pointer |
| 7. H. Chang | 22. Shripad Revankar |
| 8. Xu Cheng | 23. Jovica Riznic |
| 9. Fan-Bill Cheung | 24. Piyush Sabharwall |
| 10. Cesar Frepoli | 25. Chul-Hwa Song |
| 11. Yassin Hassan | 26. Xiadong Sun |
| 12. Rui Hu | 27. Brian Woods |
| 13. Jong Kim | 28. Bao-Wen Yang |
| 14. Seungjin Kim | 29. Ling Zou |
| 15. Si Young Lee | |

The Nominating Committee brings the following **MOTION** regarding transition of Program Committee members to the Program Committee Advisory Council to the Executive Committee.

MOTION: Transition the following 12 Program Committee members to the advisory council with the term expiring in 2025.

- | | |
|----------------------|---------------------------|
| 1. David Aumiller | 7. J.-M. LeCorre |
| 2. Emilio Baglietto | 8. Michael Podowski |
| 3. Brian Collins | 9. Pradip Saha |
| 4. Francesco d'Auria | 10. DuWayne Schubring |
| 5. Randall Gaunt | 11. Kune Suh |
| 6. Takashi Hibiki | 12. Karen Vierow Kirkland |

The Nominating Committee brings the following MOTION regarding appointment of new Program Committee members to the Executive Committee.

MOTION: Appoint following active THD members to Program Committee membership with terms expiring in 2023.

- | | |
|------------------------------------|--------------------------|
| 1. Seung Jun Kim (LANL) | 7. Su-Jong Yoon (INL) |
| 2. Guillaume Mignot (Oregon State) | 8. Matthew Zimmer (KAPL) |
| 3. Lander Ibarra (ANL) | |
| 4. Shanbin Shi (RPI) | |
| 5. Rodolfo Vaghetto (TAMU) | |
| 6. Jun Wang (Madison) | |

If proposed actions are taken, the PC will have 55 total members with terms expiring in 2020 (7 members), 2021 (10 members), 2022 (30 members) and 2023 (8 members).

NURETH 40th Anniversary Celebration Committee

At the November 2019 ANS Winter Meeting, the Executive Committee authorized the creation of a special committee to organize a celebration of the 40th anniversary of NURETH at the November 2020 ANS Winter Meeting. The Nominating Committee brings the following **MOTION** to the Executive Committee.

MOTION: *Appoint the following members to the NURETH 40th Anniversary Celebration Committee.*

- 9. Fan-Bill Cheung, Pennsylvania State University (Chair)*
- 10. Yassin Hassan, Texas A&M University*
- 11. Lane Carasik, Virginia Commonwealth University*
- 12. Dillon Shaver, Argonne National Laboratory*
- 13. Elia Merzari, Pennsylvania State University*
- 14. Igor Bolotnov, North Carolina State University*
- 15. Subash Sharma, University of Massachusetts at Lowell*
- 16. Bao-Wen Yang, Delta Energy Group*