

## DESD Program Committee Meeting Agenda

Monday, 5:00 PM – 6:00 PM Eastern

June 8, 2020

Phone Number: (563) 999-1067

Participant Passcode: 673856

(New conference call number dedicated to DESD)

Officers		
Chair	Gerry van Noordennen	X
Vice Chair	Doug Davis	
Secretary	Miles Van Noordennen	
Treasurer	Leah Parks	
Ex Officio – Past Chair	Dustin Miller	

### Program Committee Chair Jim Byrne

#### Other participants:

Jay Peters		Lynne Goodman	
Nadia Glucksberg		Mark Campagna	
Sue Aggarwal		Leo Lagos	

### ANS 2020 Annual Conference DESD Sessions – June 8-11

At this week's ANS Meeting DESD is sponsoring three sessions. The first session held today on Nuclear Energy and Climate Change Policy in the US and Abroad in a Post-Pandemic World was excellent. Leah did her usual excellent job putting this session together there were up to 160 attendees at this session

The other two sessions DESD is sponsoring are:

June 9 2:30 PM – 4:15 PM EDT: Uranium Mine Remediation–Panel (Post meeting note 40-50 people attended this session virtually) – Post Meeting note this session had over 40 attendees)

June 10 Noon – 2:10 PM EDT: General Topics in Decommissioning (Post session note this session had approximately 20 attendees)

### ANS 2020 Utility Working Conference DESD Sessions – August 11, 2020

Due to the Coronavirus Pandemic the ANS has converted the Utility Working Conference to a one-day Virtual Meeting Similar to this week's Annual Meeting. Registration information is not yet available. There will be an Opening Plenary from 10 – 12 EDT to be followed by three breakout sessions. DESD is responsible for the following three sessions

**Innovative and Historical Approaches to Decommissioning – 12:30 to 2:00 PM**

**EDT** - this session will address what is involved in decommissioning a nuclear power plant and approaches to decommissioning, including regulatory perspectives and new innovative decommissioning models. Historically, the owner/licensee has performed or overseen decommissioning activities. In new approaches, a decommissioning entity becomes the licensee and/or owner of the plant and controls the cleanup. Costs of decommissioning will be addressed. The session will include a discussion of pros and cons of various models. Organizers Lynne Goodman, Joe Carignan,

**Status of Decommissioning Projects in progress and completed to date – 2:20 to 3:50 PM EDT.** Speakers offer insights on past and current D&D projects with a focus on major differences between the original decommissioning plan and the realities of how things turned out during actual project execution.” Organizer: Gerry van Noordennen

**Nuclear Industry Security transformation to Reduce Costs – 4:10 to 5:40 PM EDT.**

This session covers lifecycle aspects with a focus on innovative technology to drive necessary rapid transformation to improve efficacy/cost efficiency across the entire nuclear industry. Organizers: Mark Campagna, Skip Young

**ANS 2020 Winter Conference – November 15-19, 2020 Chicago, Illinois**

The DESD session topics and Organizers for the Winter Meeting are listed below based on feedback I have received from the organizers all the sessions appear to be on track. The Room assignment meeting for this meeting will be in mid-July so please finalize your panels by the end of June and send me the names and affiliations of your Panelists. Papers are due by July 1<sup>st</sup> with Reviews completed by July 20<sup>th</sup>. The paper portal is not open for review yet but I will notify people when it is so we can complete our reviews in a timely manner.

**Remember DESD is limited to 5 one-day complimentary registrations so we need to limit that to one-per panel.** Anyone needing a complimentary registration should be identified by the room assignment meeting in mid-July.

The sessions for the Winter Meeting are.

**Meeting Targets for Reduction of CO2 Emission without Causing Economic Damage – (Jan VanErp - Organizer)** According to scientific consensus anthropogenic

CO2 is a major contributor to climate change. Different countries will aim to comply in different ways with international targets for CO2 emission reduction, depending on their specific circumstances. This session will address this important matter, covering the role of various energy sources, including hydro power, varying (intermittent) energy (mainly wind and solar) and nuclear energy. The potential impact on the countries' economies will be briefly discussed.

**Grid Modelling Considerations for Nuclear Energy (Leah Parks – Organizer) -**

Nuclear energy can provide many societal and electric system benefits such as reduced air pollution, low land requirements, job creation, high unit-reliability, and grid stability. However, most of nuclear engineering focuses on the nuclear reactor rather than its real but currently unquantified electric grid benefits. This session will cover the latest research being done to model aspects of our electric transmission grid that nuclear energy contributes to, and specifically invite considerations for nuclear energy's unique contributions to grid stability. Speakers from government laboratories, academia, and federal government will discuss the technical, and economic considerations.

**Building Up Decommissioning Staff Credentials for Future Decommissioning Projects (Larry Boing – Organizer) -**

The decommissioning workforce is changing from that which did the first decommissioning projects in the 1980s and early 1990s. Many of the current staff working decommissioning are reaching retirement age – but the need for replenishment staff on such projects is only increasing – more work is coming available in commercial NPP and FCF D&D and DOE / Government Owned Facility/Site D&D projects and programs. What happened is more effort is now being focused on adding younger, fresh graduates and other 'career changing' staff (new to the D&D area) to undertake such work and the number of staff needed for such work is steadily growing both for operators and regulators. This session will look at some of the work underway in the industry to feed this need to 'power up' the decommissioning staff credentials going forward at various levels – University, Government, others – both at the domestic level and internationally.

**Community Advisory Panels (Gerry Van Noordennen – Organizer) –**NEIMA is the Nuclear Energy Innovation and Modernization Act that was passed this year. It requires the NRC to report to Congress on the best practices for establishing the advisory panels. This session will address:

- a description of the type of topics that could be brought before a community advisory board.
- how the board's input could inform the decision-making process of stakeholders for various decommissioning activities.

- how the board could interact with the NRC and other Federal regulatory bodies to promote dialogue between the licensee and affected stakeholders; and
- how the board could offer opportunities for public engagement throughout all phases of the decommissioning process.

This session will include a discussion of the composition of existing community advisory boards and best practices identified during the establishment and operation of such boards, including logistical considerations, frequency of meetings, and the selection of board members.

**Innovative Characterization Techniques in Support of Decommissioning** (Jay Peters – Organizer) - This session will present case studies of characterization techniques that have allowed for more efficient and cost-effective identification of radiological or chemical disposition of materials in support of decommissioning. Topics may include characterization of building materials, soil, sediment, and groundwater at nuclear power plant and legacy (non-power plant) decommissioning projects.

**General Topics in Decommissioning** – This session will explore a variety of decommissioning issues contributed by decommissioning practitioners.

**2021 Annual Meeting – Providence RI  
June 17 – 21, 2021**

Although this meeting is immediately before our Topical Meeting, we should try to sponsor a few sessions.

Suggestions for sessions I have received are

Decommissioning Projects in the Northeast (Some example projects to consider are the Three Yankee Plants, Millstone 1, S1C, Cintichem, Brookhaven, FUSRAP)

Environmental Remediation in the Northeast (Some subjects could be groundwater issues VY, Indian Point, the concrete block saga from CY, anything else people can think of)

Please let me know of any other suggestions and if anyone wants to volunteer to organize and/or speak on any of these subjects.

**2021 Utility Working Conference – Marco Island FL  
August 2021**

Organization for this meeting will start following completion of the current meeting

## 2021 DESD/RRSD Embedded Topical Meeting November 2021 – Washington, DC

Final approval for this meeting was given at the National Program Meeting last week.

The Organizing Committee Members for the meeting are listed below (There is room for more),

Sue Aggarwal  
Larry Boing  
Jim Byrne  
Mark Campagna  
Gene Carpenter  
Nadia Glucksberg  
Leo Lagos

Leah Parks  
Marty Plys  
Julia Plummer  
Michael Serrato  
Young Soo Park  
Gerry Van Noordennen

- The General Chair for the Meeting is Jim Byrne,
- The Technical Program Chairs are Sue Aggarwal – Decommissioning,  
Nadia Glucksberg – Environmental Science  
Leo Lagos – Robotics and Remote Systems.
- Technical Program Chairs will each be responsible for 4 sessions, develop topics for each session and recruit session organizers for each session.
- Thoughts for a base schedule:
  - Opening Plenary – Monday PM (Big Wigs from DOE, Foreign Countries, International Institutions)
  - Paper Presentation Sessions – Tuesday and Wednesday AM, PM
  - Poster Session (If needed) – Tuesday Evening
  - Closing Plenary – Wednesday Evening – Track Chairs to give a report out of their track (Another alternative is to have session chairs give a short report, use Power Points Slides so we can send them to attendees after the meeting)

We need at least 72 papers to fill out program without a Poster Session

- Jay Peters volunteered to be the Publication Chair for DESD, we still need a Publication Chair from RRSD.
- I attended the RRSD Committee Meeting. RRSD is on track to fill out their track. One issue that was brought up was the subject of page charges. It was suggested instead of having a charge per page to just have a flat fee. I have made that suggestion to ANS, I will let members know of any feedback.

As part of promoting interest in the meeting we have generated the attached Save the Date flyer for the meeting.

At a previous conference call members of the Organizing Committee volunteered to promote interest in the following areas:

- Gene Carpenter will provide me contact information for DOE related decommissioning projects and Jim Byrne will reach out to them to solicit participation.
- Leo Lagos will also provide Jim with contact information for the EM person replacing Andy Szilagyi.
- Sue Aggarwal will reach out to her EDF and Spanish Contacts
- Mark Campagna will reach out to UK contacts in coordination with Noah Fetherston
- Marty Plys will reach out to Japanese, Swedish and German contacts
- Young Soo Park will reach out to his South Korean contacts.
- Everyone should send this to all their contacts in the subjects covered by the conference. Also, if there any contact lists, we can send this to please let me know and I will put out a note.
- Finances
  - This will be a paper conference so we will need paper reviewers for each track. One of the issues with a paper conference at a National Meeting is that there is a page charge as discussed above. One area where we could use sponsorship is paying for page charges.
  - If we want to have a reception with the Tuesday Poster session, we will have to raise some money. I asked ANS what the Universities paid for their mixers at the last ANS Meeting in DC and the average was about \$25,000.
  - Jim will talk to ANS if there is any logistical way we could do this at a National Meeting.

Topics proposed for the topical are:

**RRSD**

- Robotics & Remote Systems for Surveillance in Hazardous Environments – tanks, H-canyon, contamination monitoring etc.
- Nuclear materials handling – radiography, conveyance, glovebox robotics
- Nuclear Plant Maintenance and Operations
- Robotics & Remote Systems for Nuclear Waste and Spent Fuel Handling
- Robotics & Remote Systems in Commercial Power – SMR refueling, spent fuel management, Dry cask storage monitoring (some overlap with surveillance)
- Radiation Damage and Hardening

**Cross Over Sessions [DESD/RRSD]:**

- Robotics & Remote Systems for Decommissioning and Waste Disposal
- Robotics & Remote Systems for Environmental Remediation and Monitoring

### **International Panel:**

- International Panel on the Use of Robotics & Remote Systems for Nuclear Decommissioning (France, UK, US, S. Korea, others?)

### **Special Topics:**

- Artificial Intelligence in Robotics & Remote Systems
- Telerobotics
- Robotics Operating System (ROS)
- Nuclear Emergency Response

### **DESD**

#### **Environmental**

- Emerging (Non-Radiological) Compounds
- Sampling Methods/Techniques
- Groundwater Modeling and Investigations
- Integrating Site Closure (non-Rad) and License Termination (rad) during Decommissioning
- Water Technologies and Nuclear Power Update
- The Path Towards a Low-Carbon Sustainable Energy Supply System
- Integrating Nuclear Plants with Renewable Sources Through Heat Storage and Heat Recycling to Fuel Alternative Applications Beyond the Grid
- Meeting Targets for Reduction of CO2 Emission without Causing Economic Damage

#### **Decommissioning (Planning, Execution & Lessons Learned)**

- International Decommissioning
- US Decommissioning (both DOE and Commercial) and
- Innovative Technologies

### **Future Meetings**

2022 Annual Meeting June 12-16, 2022 – Anaheim Hilton (Across the street from Disneyland)

**AMERICAN NUCLEAR SOCIETY  
DECOMMISSIONING AND ENVIRONMENTAL SCIENCES DIVISION**

2022 Winter Meeting – It was reported that the meeting is being moved from Albuquerque to Phoenix.

2023 Annual Meeting – Indianapolis June 11-15, 2023

2023 Winter Meeting – Washington DC Nov. 5-9, 2023

2024 Annual Meeting – Las Vegas (The Mirage) – June 9-13, 2024

2024 Winter Meeting – Orlando (Sea World) – Nov 17-21, 2024

### **Action Items**

- 2020 Winter Meeting Session Organizers - finalize your panels by the end of June and send me the names and affiliations of your Panelists.
- 2020 Winter Meeting Paper Reviewers - Papers are due by July 1<sup>st</sup> with Reviews completed by July 20<sup>th</sup>. I will notify people when the paper review portal is open so we can complete our reviews in a timely manner
- 2020 Winter Meeting Session Organizers - Anyone needing a complimentary registration should be identified by the room assignment meeting in mid-July. **Remember DESD is limited to 5 one-day complimentary registrations so we need to limit that to one-per panel.**
- 2021 Annual Meeting - All - Please let me know of any other suggestions for sessions for the 2021 Annual Meeting
- 2021 Annual Meeting - All - volunteer to organize a session and/or speak at the meeting
- 2021 DESD/RRSD Embedded Topical Meeting – Jim - Send the Save the Date Flyer to the Organizing Committee, the RRSD Chair and DESD Executive Committee
- 2021 DESD/RRSD Embedded Topical Meeting – All - distribute the Save the Date Flyer to everyone you know.
- 2021 DESD/RRSD Embedded Topical Meeting – Jim – Discuss Page Charges with ANS
- 2021 DESD/RRSD Embedded Topical Meeting – Jim – Discuss process for obtaining sponsorships that does not interfere with ANS efforts to obtain sponsorship for the Main Meeting.
- 2021 DESD/RRSD Embedded Topical Meeting – Leo Lagos – Provide the name of a Publication Chair for RRSD