Program Committee Meeting Minutes

The Program Committee met at 3:30 PM on June 9, 2019. Present for the meeting were Jim Byrne, Lynne Goodman, Leah Parks, Stephen Dahms, Leo Lagos, Young Soo Park, Mark Campagna, Gerry VanNoordennen, Nadia Glucksberg, Sue Aggarwal, and Dave Hilyer (Did I miss anyone?). Discussed below are the current Annual Meeting, the 2019 Utility Working Conference, the 2019 Winter Meeting in DC, the 2020 Annual Meeting in Phoenix and the proposed 2021 Embedded Topical Meeting at the ANS Annual Meeting in Providence RI. We need volunteers to help with the 2020 Annual Meeting in Phoenix, the 2020 Utility Working Conference and the 2021 Embedded Topical. Please let me know what you are willing to help on.

1. 2019 Annual Meeting

There are four Sessions at the Annual Meeting as detailed below. A fifth session General Topics in Decommissioning was cancelled as two of the three papers were withdrawn and we moved the remaining paper (Experimental Investigation of Partitioning Ratio of Co Between Ingot and Slag after Melting Process of Radioactive Metal Waste, Byum Kyu Kim, Hwajeong Han, Byung Gi Park *(Soonchunhyang Univ.),* Bongsoo Lee *(Chung-ang Univ.)*) to a complementary Fuel Cycle and Waste Management Session occurring at the same time.

The sessions at the Annual meeting were.

**Rejuvenate Nuclear Technology Infrastructure and Facilities – Dustin joint with Criticality Safety Division** (I just attended this session and it was wonderful, good job Dustin we need to continue this collaboration)

**Sponsored by** NCSD; **Cosponsored by** DESD

**Session Organizers and Cochairs:** Dustin Miller *(Chase)*, Kevin H. Reynolds *(Y-12)*

**Panelists:**

David Kupferer *(CNS)*

William R. Lonergan *(CNS)*

Chris Crefeld *(Westinghouse)*

Marilyn Kray *(Exelon)*

Lou Martinez *(Kairos Power)*

**Water Technologies and Nuclear Power Update**

**Sponsored by** DESD

**Session Organizer and Chair:** Leah Parks *(NRC)*

**Panelists:**

Ibrahim Khamis *(IAEA)*

Aaron Wilson *(INL)*

Eric Schwarz *(Exelon)*

Youssef Shatilla *(Masdar Inst)*

**License Transfers for Decommissioning (P) –**

**Session Organizer and Chair:** Gerry Van Noordennen *(Energy Solutions)*

Pilgrim and Oyster Creek Experience, Pam Cowan *(Holtec)*

Zion Experience, Tony Orawiec *(Exelon)*

LaCrosse Experience, Lane Peters *(Dairyland Power Cooperative)*

Zion and LaCrosse Experience, Gerald P. Van Noordennen *(EnergySolutions)*

**Decommissioning Experience in the Midwest (P)**

**Session Organizer and Chair:** Jim Byrne *(Byrne & Assoc.)*

**Panelists:**

John Closs *(Xcel Energy (Retired))*

Andrew Keim (*DOE, Office of Legacy Management)*

Gerry van Noordennen *(EnergySolutions)*

1. The next meeting, we are supporting, is the Utility Working Conference (UWC) scheduled for August 4-7, 2019, in Amelia Island, FL

The goal of this effort was to develop and deliver a program track for the UWC that will cover the spectrum of contemporary commercial nuclear plant decommissioning planning and execution decisions, options, and lessons learned. The materials are developed with the intention of informing the attendees and causing a desire for further inquiry into the various subjects presented. Based on the response detailed below I believe we met this objective thanks to the hard work of all the organizers.

The sessions are:

**Session 1 - Decommissioning Funding: A Broad look and the funding, reporting, and expenditure processes.**

Speakers provide insights and lessons learned on the regulatory and practical frame work of decommissioning financial assurance. Changes to trust fund financial rules, access to funds, commingling of funds, and hypothetical examples of improper fund use will be examined.

Organizer: Jim Byrne, Richard St. Onge

Speakers: Tom Magette (Talisman), John Matthews (Morgan Lewis), Nick Capik (ABZ Inc.), Jack Parrott (USNRC)

**Session 2 - Decommissioning Planning, Estimating and Assumptions: What does past performance tell us about future results?**

Speakers would provide insights on managing Decommissioning Cost Estimates and the challenges that owners face as they defend those estimates against an increasing critical public and private audience. Best practices will be highlighted based on lessons learned in the industry.

Organizer: Richard St. Onge, Dustin Miller

Speakers: Nick Capik (ABZ Inc.), Richard McGrath (EPRI), Joe Carignan, Richard St. Onge (7th Factor)

**Session 3 - Regulatory perspectives and updates on Commercial Decommissioning processes**

Speakers will provide perspectives on decommissioning regulatory advancements including the current state of affairs on NRC rule making and other regulatory changes past, present, and future. Also explored is the role of the Corrective Action Program as it applies to permanently shut down facilities in both Safestor and Decon.

Organizers: Jim Byrne, Richard St. Onge

Speakers: Jack Parrott (USNRC), Rhonda Felumb (Entergy), Gerry van Noordennen (Energy Solutions)

**Session - 4 End of Plant Operations: Where do we go from here? Insights on the experiences of plants that have transitioned to permanently defueled status.**

Speakers would provide experiences and lessons learned from facilities having made the

decision to permanently shut down and provide insight into why they chose their post shutdown

USNRC Option (License Transfer and immediate Decon, Immediate Decon, or Safstor); lessons

learned throughout the decommissioning phases including transition of the site to the

decommissioning entity

Organizers: Lynne Goodman, Noah Fetherston.

Speakers: Trevor Orth (TMI-1), Ivan Wilson (CR-3), Michael Lackey (Energy Solutions) Bob Nichols (Fluor)

**Session - 5 Overview of the Decommissioning Projects in progress and completed to date.**

Speakers offer insights on past and current D&D projects with a focus on the age-old question “If you had to do it over again, what would you do differently? How and why so?”

Organizers: Mark Kirshe, Noah Fetherston.

Speakers: Wayne Norton (3Yankees), John Sauger (Energy Solutions), Bob Nichols (Fluor), Richard Sexton (AECL)

**Session - 6 Achieving a major contribution towards optimal DDER Cost profile/ project results by application of an integrated and therefore optimal Safety, Security and Safeguards approach.**

This panel will explore 21st Century methods and tools available that would optimize project planning and performance now; these methods would be deployable during both NPP operation and transition to DDER. These techniques are simultaneously being developed with increased pace/urgency benefiting from recent progress in the Advanced Reactors and SMR sector.

Organizer: Mark Campagna

Speakers: Nick Capik (ABZ Inc.),Mark Campagna, Skip Young (USNRC-Ret.), Cory DeWitt (CDI), Terry L. Sopkin(S&L)

**Session - 7 Innovation to Achieve Success in Decommissioning**

Speakers will provide insights on means and methods to reduce the footprint of permanently shutdown nuclear facilities, with a focus on innovative approaches. The penultimate goal of decommissioning projects is to reduce on-site hazards below regulatory limits to protect the health & safety of its workers and the public. The goal of decommissioning is to complete the closure of the nuclear power lifecycle through the final closure and license termination of these facilities.

Organizer: Jim Byrne

Speakers: Bob Nichols (Fluor), Richard Sexton (AECL), Arthur DiGiovine (Studsvik), Varesha Mauney (BHI), Sheldon Lefkowitz (Pentek, Inc.)

I am working with ANS to put together a brochure about the decommissioning track to try to stimulate attendance and vendor support.

Planning for UWC 2020 which will be held the August 9-12, 2020 in Marco Island, FL will begin during the 2019 meeting. One possible session would deal with Environmental Issues in PSDAR submittals and the NRC update of the GEIS.

1. Following UWC is the 2019 Winter Meeting scheduled for November 17-21, 2019 in Washington DC the sessions we are supporting for this meeting are listed below. I will need final names to enter into the system by the first week in July.

4a. General Topics in Decommissioning

This is the Standard Paper Session and will consist of the papers submitted for the conference. One of the papers withdrawn from the Annual Meeting will be resubmitted to the Winter Meeting.

4b. The Path Towards a Low-Carbon Sustainable Energy Supply System (P)

Summary:

This session addresses the all-important issue of attaining within the next thirty years a low-carbon sustainable energy supply system that is capable of large-scale application. While the main emphasis will be on resolving the remaining technical aspects, it is important to also address the issues of economic viability, on-time fabrication and availability of necessary material resources.

In the context of energy options, ‘sustainable’ means the ability to provide energy for indefinitely long time periods without depriving future generations and in a way that is environmentally friendly, economically viable*,* safe and reliable. This understanding of the term ‘sustainable’ implies that it may be more restrictive than the term ‘renewable’.

Session Organizer(s): Jan Van Erp, (and others), [vanerp@AOL.com](mailto:vanerp@AOL.com)

Speakers / Panelists (confirmed):

* **Fiona Rayment**, Executive Director NIRO, National Nuclear Laboratory (United Kingdom)
* **Frank Carre**, Scientific Director, Nuclear Energy Division, CEA Saclay Research Center (France)
* **Alexander Bychov**, Former Deputy Director General of IAEA and former Head of the IAEA Nuclear Power Department (Russian Federation)
* **Jozef Misak**, Vice President for Strategy, Nuclear Research Institute Rez, UJV Rez, a.s, (Czech Republic)
* **Yoon Chang**, Distinguished Fellow, Argonne National Laboratory (USA)
* **William Hannum**, Consultant (ex-ANL, ex-INEA, ex-DOE (USA)

4c. TMI-2 40 years later (P) –

Organizer – Jim Byrne

Committed Speakers

* Jack Devine - Former VP GPU Nuclear
* Lake Barrett – Former Head NRC Program Office
* Willis Bixby – Former Head DOE TMI Site Office

I will also talk to the current owners (and my Current boss) to discuss the current status

4d. Hybrid Energy Systems: Integrating Nuclear Plants with Renewable Sources Through Heat Storage and Heat Recycling to Fuel Alternative Applications Beyond the Grid (Leah is this a joint session with OPD?)

Organizer – Leah Parks

Leah listed the following names as potential speakers and the status of her contacts with them.

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| --- | --- | --- | --- |
| Name | Organization | ANS Member | Response |
| Shannon Bragg-Sitton | INL | Y | Yes |
| Sherry Bernhoft | EPRI | Y | Yes |
| Mark Ruth | NREL, DOE | N | Not invited Yet |
| Kevin Lee | Canadian Nuclear Safety Commission | N | Not Invited Yet |
| Gina Strati | CNL,  Director, Energy Program | Y | No Response Yet |
| Giulia Bisconti | DOE (NICE Future Initative) | N | recommended Sarah  Lennon |
| Charles Forsberg | MIT | Y | Yes |
| Cristian Rabiti | INL | Y | Not Invited Yet |
| Sarah Lennon, | DOE,  Associate Deputy Assistant Deputy Secretary for NE | N | Yes |
| Ibrahim Khamis | IAEA | Y | Yes |

4e. Overview of the Various Environmental Standards Projects

Organizer – Leah Parks

The ANS Environmental and Siting Consensus Committee (ESCC) has been busy developing several standards in the last few years.  These include new standards such as ANS 2.6 “Guidelines for Estimating Present and Projecting Future Population Distributions Surrounding Nuclear Facility Sites”, ANS 2.22 “Environmental Radiological Monitoring at Nuclear Facilities, ANS 2.8 “Probabilistic Evaluation of External Flood Hazards for Nuclear Facilities”, ANS 2.16 “Criteria for Modeling Design-Basis Accidental Releases From Nuclear Facilities”, ANS 2.18 “Standard for Evaluating Radionuclide Transport in Surface Water for Nuclear Power Sites”, and others.  This panel will provide an overview of the new projects and revisions to existing standards within ESCC.

Carl Mazzola (ESCC Chair( has committed to being a Panelist

Dan Mussatti (NRC) can talk about ANS 2.6 (he was the WG Chair)

Leah can also be a panelist.

4f. New and Emerging Technologies

Organizers Boby-Abu Eid, Leah Parks, Leo Lagos

I spoke with Boby at the RIC and he agreed to support this session as he ran a similar session at the RIC. This will be a joint session with RRSD, Leah will work with Boby and Leo to help pull this panel together

Potential Panelists Include

Leo Lagos (FIU)

Andy Szilagyi (DOE)

Richard Reid (EPRI)

IAEA representative

4g. International Decommissioning

Organizers - Young Soo Park (Korea), Jim Byrne (Canada), Mark Campagna (UK), Dave Hilyer (Japan/Taiwan), Sue Aggarwal (France)

Young reported that he had contacted the Koreans and received a positive response from the Technology side and an equivocal response from the operator side. Young will put me in touch with the operator side.

I have spoken to the Canadian Regulator and they are interested but I have not heard back on a definite plan. I need to get back in touch. I have also spoken with TEPCOs Washington Rep and he will support the session. And it was suggested I talk with the NEA and IAEA (Leo Lagos provided me an IAEA Contact)

Mark volunteered to contact folks he knows in the NDA in the UK ,

Dave will follow up with the Japanese and Taiwanese

Sue will talk with the French when she is over there

The hook to get International Participation in this session is say it will also bring the various parties together to help plan a decommissioning topical meeting in the United States. This meeting would embedded in the 2021 ANS Annual Meeting in Providence, RI, convenient to Boston, and we could possibly get a tour of Pilgrim and/or Millstone 1 in conjunction with the meeting.

1. 2020 Annual Meeting, June 7-11, Phoenix

Thoughts on sessions, I will need 100 word summaries by the end of June.

Nuclear as an Environmental Solution – A follow up on COP21 possible speakers include George Grechek, Bill Burchill, John Kelly, Eric Meyer (Head of an Environmental Advocacy Group for Nuclear), International, another idea from the opening plenary is nuclear’s role in a carbon free energy mix and maybe get an Environmental activist who has turned into a nuclear supporter on the panel – Leah will flesh out a 100 word summary for the session.

Department of Energy activities – Leo Lagos would provide me some contacts and we will try to engage some DOE folks in the area (Sandia, Los Alamos, WIPP etc.) – I will put together a 100 word Summary

Work Force Development – Stephen Dalms suggested we take a look at Work Force Development needs for decommissioning. I spoke with the Program Chair for the Education Training and Workforce Development Division and they would love to partner with us on this subject. – Stephen I know you are new to ANS but could you put together a short synopsis (100 words) of what you envision for this session and possible people you could contact for the session and I’ll hook you up with the right person in Education to help pull the session together.

Community Advisory Panels – apparently there is some guidance coming out on Community Advisory Panels that might make a good session – possible speakers David Vicker, chair of the SanOnfre Panel, NRC, possibly someone from Humboldt Bay/Diablo Canyon (I’ll talk with Loren Sharp), possibly a local DOE Panel – Leah, Stephen please send me your thoughts and I’ll put together a 100 word summary (I have the term NEIMA in my notes what is that?)

Uranium Mine Reclamation – We had a really good session on this several years ago and Phoenix might be a good place to engage these people. I will track down the organizer for that session and talk with them.

Decommissioning Ethics – Lynne approached me after the meeting and suggested a session on decommissioning ethics, she will prepare a 100 word summary.

And as always General Topics for those people who would like to submit a paper.

1. 2020 Utility Working Conference

Need Volunteers to help organize See above

1. 2020 Winter Meeting – skip this meeting to focus on Embedded topical
2. 2021 Embedded Topical – We discussed putting on an Embedded Topical Meeting at the ANS 2021 Annual Meeting in Providence RI, convenient to Boston. The subjects would be International Decommissioning, Department of Energy and other Federal projects (e.g US Army FT Belvoir and Ft Greely, MARAD NS Savannah, Army Corps projects) & Technology. RRSD approached me to partner with us again and I said yes. The ANS Director of Meetings said she will fit us in. I suggested three rooms that’s about 108 presentations. The next step is to flesh out a program proposal, a Technical Program Committee (I suggest three co-chairs D&D, Environmental and Remote Technology) The co-chairs will recruit a Technical Program Committee for their track (Note this should be completely separate from the Utility Working Conference so we need two separate conference organizational units) and we will work together to put together first a program and then a meeting so for now we need 9 session topics each from each Co-chair. This morning I got Gene Carpenter, Ruth Weiner and Marty Plys to agree to be on the Technical Program Committee. I need a DESD Volunteer for the D&D Track and the Environmental Track co-chair positions and for RRSD to provide a co-chair for the Remote Technology Track. We should also think of a good General Chair maybe some Senior DOE Employee.