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NUCLEAR AND RADIATION STUDIES BOARD

Forty-first Meeting: January 12-13, 2023

PUBLIC AGENDA
(January 19, 2023, Draft)

Thursday, January 12, 2023 (All times are ET.)

PUBLIC SESSION

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1:00 pm

Call to Order and Welcome to NRSB's Open Session

William H. Tobey, Chair, or Amy Berrington, Vice Chair

1:01 pm

Joint Briefing from NRC and EPA on Generic Regulations and Standards for Disposal of Spent Nuclear Fuel and High-Level Waste

[Tim McCartin](#), Senior Level Advisor for Performance Assessment in the Division of Spent Fuel Management, U.S. Nuclear Regulatory Commission (NRC) (confirmed)

[Tom Peake](#), Director, Center for Waste Management and Regulations, U.S. Environmental Protection Agency (EPA) (confirmed)

[Dan Schultheisz](#), Associate Director, Center for Waste Management and Regulations, Radiation Protection Division, EPA (confirmed)

1:20 pm	Q&A
1:40 pm	Break
1:45 pm	Overview of the Office of Environmental Management Cleanup Activities and EM's Efforts under the Justice40 Initiative Nicole Nelson-Jean , Associate Principal Deputy Assistant Secretary for Field Operations, Office of Environmental Management (EM), U.S. Department of Energy (confirmed) [Oral comments only]
2:10 pm	Q&A
2:25 pm	Break
2:30 pm	DOE's Office of Spent Fuel & Waste Disposition: New Developments Natalia Saraeva , Team Lead for Consent-Based Siting, Office of Nuclear Energy (NE), U.S. Department of Energy (confirmed)
2:55 pm	Q&A
3:25 pm	Break
3:30 pm	DOE-Office of Science's Activities on Low-Dose Radiation Research Todd Anderson , Director, Biological Systems Science Division, Office of Science, U.S. Department of Energy (confirmed)
3:55 pm	Q&A
4:15 pm	Discussion and wrap-up
4:30 pm	Adjourn Open Session

Speaker Biographies

Dr. [Todd Anderson](#) serves as the Director of the Biological Systems Science Division within DOE's Office of Biological and Environmental Research (BER). The division manages basic science programs addressing the fundamental biology of plants and microbes of relevance to DOE's bioenergy and environmental missions. The portfolio includes the Genomic Science Program, the DOE Bioenergy Research Centers, the DOE Joint Genome Institute, the DOE Systems Biology Knowledgebase, the National Microbiome Data Collaborative, Bioimaging Science Program and, capabilities at the DOE Synchrotron Light and Neutron sources for Structural Biology. Dr. Anderson holds a bachelor's degree in chemistry from the University of Virginia, a master's degree in

environmental engineering from the Johns Hopkins University and a Ph.D. in environmental engineering from the University of Massachusetts.

Mr. [Tim McCartin](#) is the Senior Level Advisor for Performance Assessment in the Division of Spent Fuel Management at the U.S. Nuclear Regulatory Commission (NRC). Since joining the U.S. Nuclear Regulatory Commission, Mr. McCartin has been involved, with increasing levels of responsibility, in the development and application of (1) performance assessment approaches and computational tools for evaluating the safety of storage and disposal of high-level radioactive waste and spent nuclear fuel and (2) national and international regulations for geologic disposal. In his current position, Mr. McCartin is responsible for ensuring technically sound performance assessment approaches and concepts are implemented at the NRC in the review of license applications of waste management facilities and the development of performance assessments of waste management facilities. He has participated in international model validation activities for hydrogeologic flow and transport models used in performance assessment and served as the technical lead for development of the NRC's total system performance assessment code (TPA) for evaluating performance of deep geological disposal of spent nuclear fuel. Mr. McCartin was the technical lead for the development of NRC's regulations for a geologic repository at Yucca Mountain and was the technical lead for overall compliance in the safety review of the U.S. Department of Energy's license application for Yucca Mountain. More recently, Mr. McCartin has been involved with the evaluation of (1) the performance the disposal of Greater-than-Class-C (GTCC) low-level radioactive waste in a potential near surface disposal facility and (2) approaches and information used in probabilistic risk assessments for the storage of spent nuclear fuel in dry casks.

Ms. [Nicole Nelson-Jean](#) is the Associate Principal Deputy Assistant Secretary for Field Operations for the Office of Environmental Management (EM). Nelson-Jean has the overriding responsibility to develop strategies, policy, and guidance for the 15 EM field sites in support of the EM mission. She oversees nuclear operations, safeguards and security, and technology development. Nelson-Jean also oversees EM's efforts under the Justice40 Initiative. Prior to this position, Nelson-Jean served as the Manager of the National Nuclear Security Administration (NNSA) Savannah River Field Office providing oversight for the management, quality assurance, nonproliferation, and national security missions for the Savannah River Site. Nelson-Jean was also the Manager of the Livermore Field Office and the Senior Advisor to the Acting NNSA Administrator at the Los Alamos Site Office. In these roles, she managed a wide variety of tasks related to infrastructure, nuclear safety and security, nonproliferation, business, and contract management. Nelson-Jean served as Energy Attaché to the U.S. Ambassador of the Mission to International Organizations in Vienna, Austria, where she coordinated and oversaw NNSA support of the International Atomic Energy Agency nuclear security. She also served as the DOE Attaché to the U.S. Ambassador to Japan overseeing NNSA interests in Asia and the Pacific Rim. Other positions held in NNSA include Office Director with the Global Threat Reduction Initiative and Deputy Office Director in Material Protection, Control and Accounting Program. Nelson-Jean began her career at Los Alamos National Laboratory in EM. She was honored with the Distinguished Presidential Rank Award and the Service to America Medal from the Partnership for Public Service. Nelson-Jean earned a bachelor's degree in political science from Grambling State University, a master's degree in liberal arts from St. John's College, and a master's degree in strategic security studies from National Defense University. She also completed the Leadership for a Democratic Society Program at the Federal Executive Institute.

Mr. [Tom Peake](#) works for the United States Environmental Protection Agency as the Director for the Center for Waste Management and Regulations in the Radiation Protection Division, which is part of the Office of Air and Radiation. The group's focus is the safe management of radioactive waste and general, public health and environmental radiation protection issues. These issues include oversight of the Department of Energy's Waste Isolation Pilot Plant compliance with EPA's radioactive waste disposal regulations, uranium recovery regulations under the Uranium Mill Tailings Radiation Control

Act, radioactive emissions under the Clean Air Act and TENORM. The Radiation Protection Division would be the lead for the development of any new EPA generic SNF/HLW radioactive waste disposal standards.

Ms. [Natalia Saraeva](#) is the Team Lead for Consent-Based Siting in the U.S. Department of Energy (DOE), Office of Nuclear Energy (NE). Prior to working at DOE, she was an Advisor with the Pacific Northwest National Laboratory (PNNL) and was on detail to DOE's Office of Spent Fuel and Waste Disposition and served as a senior advisor to the Deputy Assistant Secretary. Her over 15 years of experience includes working at National Labs (PNNL and Argonne) and supporting DOE-NE and National Nuclear Security Administration programs, serving as a staffer for the Blue Ribbon Commission on America's Nuclear Future, being a fellow with the U.S. Nuclear Industry Council, and more. She received her M.S. degree in Foreign Service from Georgetown University and holds a B.S. in Nuclear Engineering and an M.S. Nuclear Security from Moscow Engineering Physics Institute. She resides in Washington DC with her husband, son, and their cat.

Mr. [Dan Schultheisz](#) is the Associate Director of the Center for Waste Management and Regulations in EPA's Radiation Protection Division. He has led or participated in numerous rulemakings, including as part of the team developing EPA's standard for the proposed repository at Yucca Mountain. He also represents EPA in international activities, including as a member of the OECD/Nuclear Energy Agency's Radioactive Waste Management Committee.