

ZOOM WEBINAR ANNOUNCEMENT

Register at: https://us02web.zoom.us/webinar/register/WN_Pi4FJBy-T8KijmyClhGPNA

"Reflections on Pete Lyons' Technical Contributions to Nuclear Energy in the USA and Beyond"

Background: Peter Bruce Lyons (1943-2021) was a larger-than-

life contributor to many aspects of the nuclear energy landscape. His career touched Los Alamos National Laboratory, the US Senate staff, the Nuclear Regulatory Commission, the Department of Energy, and the American Nuclear Society. We are bringing together representatives of those various phases of Pete's technical life to offer a professional tribute to his many technical contributions and accomplishments.



Directions: This webinar will be hosted on Zoom. The registration link (to receive

the Zoom event link) will also be posted on the Calendar page of our

web site (http://local.ans.org/trinity/calendar.html).

Date: Tuesday, 16 Nov 2021

Time: 6:30pm (MST) Speakers and discussion

Panelists: please see the following pages for biographies

Moderator Dr. John Kelly

Panel Discussion (10 min remarks each)

Dr. John Browne

Hon. Clay Sell

Hon. William D. Magwood IV Hon. Warren (Pete) Miller, Jr.

Hon. Joyce Connery Ms. Liz Ramsay Dalton

Reflections from Pete Lyons' Family (15 min)

Peggy Bull (Pete's partner), Dan and Dave Lyons (sons)

Q&A and Discussion (25 min)

Questions: Please feel free to reach out to Chris Perfetti (cperfetti@unm.edu), Bill Flor (wjflor@lanl.gov) or John Kelly (jekellyans@gmail.com) if you have questions regarding this event.

Dr. John C. Browne (Pete's LANL career)



Dr. John Browne received his BS in physics from Drexel University in 1965 and his Ph.D. in nuclear physics from Duke University in 1969. He was a research scientist at Lawrence Livermore National laboratory from 1970 to 1979 where he did research in

basic and applied nuclear physics. He joined Los Alamos National Laboratory in 1979 as head of the neutron physics group P-3 in the Physics Division.

He held a series of technical leadership positions at Los Alamos, including Physics Division Leader (1981-84), several Associate Laboratory Director positions (1984-93), LANSCE Director (1993-97), and Laboratory Director from 1997 to 2003.

He is a Fellow of the American Physical Society and a Fellow of the American Association for the Advancement of Science. He holds a lifetime membership in the American Nuclear Society.

(<u>from Pete's LANL career</u>): John and Pete were contemporary technical group leaders in the Physics Division at LANL where Pete headed the X-ray diagnostic group and John the neutron physics group.

John became Associate Director for Defense Research and Applications in 1986 and Pete became John's Deputy in that job for the next 6 years. Together they headed all the Department of Defense programs at Los Alamos including The Strategic Defense Initiative (SDI) programs for the Neutral Particle Beam, and the Free Electron Laser. Pete was well respected in the national SDI program for his efforts in bringing government, industry and lab people together in solving problems. Pete moved on to become Deputy Associate Director for Energy programs at LANL while John moved on as Director of the Los Alamos Neutron Science Center (LANSCE). Pete and John collaborated again during this period in the development of the Accelerator Transmutation of Waste (ATW) concept.

Mr. Clay Sell (Pete's Senate career)



The Honorable Clay Sell serves as CEO of X-energy. Clay has deep professional expertise across many sectors of the international and U.S. energy industry developed through his service in senior level positions in

the private sector and in government.

From 2008-2018, Clay was the president of Hunt Energy Horizons, LLC, the renewable energy subsidiary of Hunt Consolidated, Inc., a multinational energy, real estate, and investment corporation controlled by the Ray L. Hunt family of Dallas.

Previously, Clay held positions for 14 years in the U.S. government, most recently as Deputy Secretary of Energy in the George W. Bush Administration from 2005-2008 — and the youngest person to hold that position. In that role, Clay served as Chief Operating Officer of the Department and emerged as one of the leading advocates for the Administration's nuclear energy policies.

From 2003-2005, Clay served in the White House as a Special Assistant to the President for Economic Policy and a Special Assistant to the President for Legislative Affairs. From 1999-2003, he served as the Clerk for the Senate Energy & Water Subcommittee of Appropriations under the legendary Senator Pete Domenici of New Mexico. Clay began his career in Washington on the staff of future House Armed Services Committee Chairman Mac Thornberry of Texas from 1995-1999.

Clay holds a Juris Doctorate from the University of Texas School of Law and a BBA in Accounting from Texas Tech University.

(from Pete's Senate career): Clay and Pete worked closely together for Senator Pete Domenici where Clay credits Pete Lyons for being a mentor to him on all things nuclear. While on separate Senate committee staffs, their joint efforts led to the authorization and appropriation of resources to key nuclear energy programs.

Mr. William D. Magwood IV (Pete's Government career)



Mr Magwood took up his duties as Director-General of the Nuclear Energy Agency (NEA) on 1 September 2014. He has extensive experience in both the regulatory and developmental aspects of nuclear energy, including at the international level.

From 2010 to 2014, he served as one of the five Commissioners appointed by the US President and confirmed by the US Senate to the US Nuclear Regulatory Commission (NRC). While a commissioner, he advocated the importance of nuclear regulatory independence and the necessity of maintaining strong, credible and technically sound nuclear regulation in the United States and all countries that use nuclear power.

Prior to his appointment at the NRC, from 2005 to 2010 he provided independent strategic and policy advice to US and international clients on energy, environment, education, and technology policy issues. From 1998 to 2005, Mr Magwood was Director of the US Government's civilian nuclear energy programme at the US Department of Energy (DOE). During his tenure, he established the Idaho National Laboratory;

created activities that reversed the decline of US nuclear technology education; and launched important initiatives such as the Generation IV International Forum (GIF) and the US "Nuclear Power 2010," which helped restart nuclear plant construction in the United States. He was also actively involved in the work of the NEA, serving as a Steering Committee Bureau member from 1999 to 2005, including a term as Chair of the Steering Committee from 2004 to 2005.

Prior to his experience at the DOE, Mr Magwood managed electric utility research and nuclear policy programmes at the Edison Electric Institute in Washington, DC, and was a scientist at Westinghouse Electric Corporation in Pittsburgh, Pennsylvania. Mr Magwood, a US national, holds Bachelor degrees in Physics and English from Carnegie Mellon University and a Master of Fine Arts from the University of Pittsburgh.

(<u>from Pete's Government career</u>): Bill had many interactions on nuclear energy with Pete while Pete was a Senate staffer and later when Pete was Assistant Secretary and Bill was an NRC Commissioner

Dr. Warren "Pete" Miller, Jr. (Pete's LANL and DOE careers)



The Honorable Dr. Miller was born in Chicago, IL in 1943 and was an elementary school friend of Emmett Till who was lynched in Mississippi in 1955 sparking the Civil Rights Movement under the leadership of Dr. Martin Luther King. Dr. Miller was admitted to the United States

Military Academy at West Point in 1960, graduating in 1964. He is a Viet Nam veteran and is a recipient of the Bronze Star.

He entered Northwestern University in 1969 and was awarded a PhD in Engineering Sciences in 1973. His research was in computational methods of neutron transport and he co-authored a text book on the subject. He served for almost 30 years and retired from Los Alamos National Laboratory (LANL) in 2001, achieving the rank of Deputy Laboratory Director for Science and Technology. He has served since then in part time or consultant capacities at the University of New Mexico, LANL, Argonne National Laboratory, Idaho National Laboratory, AZIsotopes LLC, Texas A&M University and Kairos Power.

In 2009, he was confirmed by the U.S. Senate as Assistant Secretary for Nuclear Energy serving under

the leadership of Secretary Stephen Chu in the first Obama Administration.

Dr. Miller is a recipient of the Northwestern University Alumni Merit Award and was named by the National Society of Black Engineers as its 2004 Distinguished Engineer.

Dr. Miller is a Fellow of the American Nuclear Society and in 1996 was elected to the National Academy of Engineers.

He is presently a Senior Technical Advisor at Kairos Power and a Professor of Practice in the Department of Nuclear Engineering at Texas A&M University.

(<u>from Pete's LANL and DOE careers</u>): Pete has known Pete Lyons since the late 1970s as a colleague at LANL. Their sons were very close friends in high school. He was closely associated with the Nuclear Energy programs at LANL while Pete Lyons served with Pete Domenici in the Senate. In 2009, when he was confirmed as Assistant Secretary for Nuclear Energy in the U.S. DOE and, at his request, Pete Lyons served as his Principal Deputy. When he departed the administration in late 2010, Pete Lyons was confirmed as his replacement as Assistant Secretary and served with distinction until late 2015.

Ms. Joyce Connery (Pete's DOE career)



The Honorable Joyce L. Connery, a native of Massachusetts, was designated as Chair of the Defense Nuclear Facilities Safety Board by President Biden on January 20, 2021. She was initially appointed to the Board by former President Obama in

2015, where she served as the Board's Chair from her appointment in August 2015 until January 2017. She was confirmed again by the Senate to be a Member of the Defense Nuclear Facilities Safety Board on July 2, 2020, for a term expiring October 18, 2024. Ms. Connery has had an extensive career in the fields of nuclear security, safety, nonproliferation, and energy policy. Ms. Connery began her career at the national laboratories, first serving in Kazakhstan working on the shutdown of the BN-350 fast breeder reactor and then

returning to Washington, DC, to work in the Office of International Safety in the Department of Energy's (DOE) National Nuclear Security Administration. She has served in several capacities at DOE, including as the senior policy advisor to the Deputy Secretary of Energy. She also served two tours in the National Security Council. From February 2008 through May 2010, she worked in the area of nonproliferation and nuclear security, and from January 2012 through July 2015, she served as Director for Nuclear Energy Policy within the Office of International Economics.

Ms. Connery received a B.A. from Tufts University and an M.A.L.D. from the Fletcher School of Law and Diplomacy.

(<u>from Pete's DOE career</u>): Joyce worked with Pete while he was Assistant Secretary for Nuclear Energy.

Ms. Liz Ramsay Dalton (Pete's DOE career)



Ms. Liz Ramsay Dalton is a Senior Vice President with Boundary Stone Partners. Liz has spent her career developing strategies and partnerships at the intersection of clean energy technology, policy, and finance.

Liz most recently served as the Vice President of Strategy of Powerhouse where she led the innovation firm and worked with corporate and investor partners to help build the next century of clean energy and mobility innovation. Prior to joining Powerhouse, Liz was the Executive Director of the Clean Energy Leadership Institute (CELI) where she equipped hundreds of emerging leaders with the skills and expertise to lead the transition to a clean energy economy.

Liz served as an executive appointee in the Obama Administration at the U.S. Department of Energy (DOE) as the Principal Deputy Assistant Secretary for the Office of Electricity Delivery and Energy Reliability. In this role, Liz executed the DOE's grid modernization research and development portfolio, transmission permitting, emergency response operations, and energy cybersecurity programs. Previously, Liz helped direct \$900 million in nuclear energy R&D funding as Chief of Staff and Senior Advisor for DOE's Office of Nuclear Energy.

An Arkansas native, Liz began her career in public service working for U.S. Congressman Marion Berry (D-AR). She holds a Master's in Leadership from Georgetown University's McDonough School of Business and received her B.A. in Political Science from the College of Charleston.

Liz currently serves on the Advisory Committees for the Atlantic Council's Veterans Advanced Energy Project and the Pacific Northwest National Laboratory's Energy and Environment Directorate.

(<u>from Pete's DOE career</u>): Chief of Staff and Senior Advisor for DOE's Office of Nuclear Energy during Pete's tenure as Assistant Secretary for Nuclear Energy.

Pete's Family Members

Peggy Bull (Pete's partner)

Peggy was Pete's high school sweetheart, with whom he reconnected in the last decade. They lived together in Golden, Colorado, and traveled the world in Pete's "retirement" years. Peggy is an accomplished concert pianist, and Pete found time in the last several years to serve on the board of a local orchestra where Peggy played.

Dan Lyons

Dan is Pete's eldest son, who along with his youngest brother Michael, followed their father into the world of science and engineering—Dan with a PhD in immunology and Mike with a Masters in biomedical engineering. Dan and Mike and their families live in Denver and Boulder, CO, respectively.

Dave Lyons

Dave is Pete's second son, who was the one Lyons family son who did not pursue a technical degree, focusing instead on international affairs. However, Dave has continued on in the "family business," working for the past twenty-plus years at Los Alamos National Laboratory where his career had occasional overlaps with his father's. Dave and his family live in Los Alamos, NM.

Moderator: Dr. John Kelly (Pete's LANL and DOE careers)



Dr. John E. Kelly is Past President of the American Nuclear Society. He was the Chief Technology Officer for Nuclear Energy and Deputy Assistant Secretary for Nuclear Reactor Technologies at the USDOE (2010-2017). Prior to DOE, he had a prominent 30+ year career in

nuclear safety and advanced nuclear energy R&D at Sandia National Laboratories. He chaired the IAEA Standing Advisory Group on Nuclear Energy for several years and was Chair of Generation IV International Forum from 2013 to 2015.

Dr. Kelly received his B.S. degree in nuclear engineering from the University of Michigan in 1976 and his Ph.D. in nuclear engineering from the Massachusetts Institute of Technology in 1980. (from Pete's LANL and DOE careers): John worked directly for Pete when Pete was the Assistant Secretary for Nuclear Energy (2010-2015). He had also worked with Pete during the Accelerator to Produce Tritium Program, which involved LANL, SNL, and BNL (1992-1995).