

## **Nuclear Expert Bios**

### **Dr. Richard Meserve**

Senior of Counsel in the Washington, DC, office of Covington & Burling LLP. He is the President Emeritus of the Carnegie Institution for Science and former Chairman of the U.S. Nuclear Regulatory Commission. He is a member of the National Academy of Engineering, the American Academy of Arts and Sciences, and the American Philosophical Society, a Fellow of the American Physical Society and the American Association for the Advancement of Science, and a foreign member of the Russian Academy of Sciences. Early in his career, after obtaining a PhD in applied physics from Stanford and a JD from Harvard Law School, he served as law clerk to Supreme Court Justice Harry A. Blackmun and as legal counsel to the President's Science Adviser. Among other activities, he is the former President of the Board of Overseers of Harvard University and the former Chairman of the International Nuclear Safety Group (chartered by the International Atomic Energy Agency). He has chaired or served as a member of a wide variety of studies undertaken by the National Academies of Sciences, Engineering, and Medicine, including as chairman of a recently completed study of advanced reactors. He is currently serving as an external adviser to the Japanese Nuclear Regulation Authority, the regulator established after the Fukushima accident, and has received the Order of the Rising Sun, Gold and Silver Stars, from the Japanese Emperor for his service to Japan after the accident.

### **Dr. Rita Baranwal**

#### **Senior Vice President, AP300™ Small Modular Reactor, Westinghouse Electric Company**

As Senior Vice President, Dr. Rita Baranwal leads development and deployment of the AP300™ Small Modular Reactor (SMR). She has 25 years of nuclear industry experience and has held this role since May 2023.

Prior to this role, Dr. Baranwal was Chief Technology Officer and Senior Vice President of Digital and Innovation at Westinghouse where she led the clean energy company's global research and development investments and spearheaded a technology strategy to advance the company's innovative nuclear solutions.

Previously, Dr. Baranwal served as Chief Nuclear Officer and Vice President of Nuclear at the Electric Power Research Institute (EPRI). She had overall management and technical responsibility for the research and development (R&D) activities conducted by EPRI with its global membership related to nuclear generation, providing support to more than 80 percent of the world's existing and advanced commercial nuclear fleet.

Before joining EPRI, Baranwal served as Assistant Secretary for the Office of Nuclear Energy in the U.S. Department of Energy (DOE) in a U.S. President-appointed and Senate-confirmed role. She led efforts to promote R&D on existing and advanced nuclear technologies that sustain the U.S. fleet of nuclear reactors and enable the deployment of advanced nuclear energy systems.

Prior to the DOE, Dr. Baranwal directed the Gateway for Accelerated Innovation in Nuclear (GAIN) initiative at Idaho National Laboratory. She was responsible for providing the nuclear

industry and other stakeholders access to DOE's state-of-the-art R&D expertise, capabilities, and infrastructure to achieve faster and cost-effective development, demonstration, and ultimate deployment of innovative nuclear energy technologies. Under her leadership, GAIN positively impacted over 120 organizations.

Before joining the Idaho National Laboratory, Dr. Baranwal served as Director of Technology Development & Application at Westinghouse. There, she led the creation and development of game-changing technologies and managed characterization and hot cell laboratories. Her previous positions at Westinghouse included director of Core Engineering and manager of Materials and Fuel Rod Design. Prior to joining Westinghouse, she was a manager in Materials Technology at Bechtel Bettis, Inc. where she led and conducted R&D in advanced nuclear fuel materials for U.S. Naval Reactors.

Dr. Baranwal is a Fellow of the American Nuclear Society (ANS). She serves on Advisory Boards for the US Nuclear Industry Council (US NIC) and the Nuclear Engineering departments of the University of Michigan and North Carolina State University. She also serves as a Commissioner on the Council on Strategic Risks (CSR) High Level Commission on Nuclear Energy and Climate Security, the Atlantic Council's Nuclear Energy and National Security Coalition, the Nuclear Energy Agency (NEA)'s High-level Group on Stakeholder Engagement, Trust, Transparency and Social Sciences (HLG-SET), and the Board of Scholars at American Council for Capital Formation (and is the first non-economist selected to serve on this Board).

Dr. Baranwal has a bachelor's degree from Massachusetts Institute of Technology in Materials Science and Engineering and a master's degree and Ph.D. in the same discipline from the University of Michigan.

## **Climate One podcast: The Nuclear Option**

Fourteen years after receiving its permit, the nation's first new nuclear reactors in decades just fired up in Georgia. Massive, traditional nuclear reactors like this have faced so many cost overruns and construction delays that the investment market for them all but vanished. Despite a handful of recent technical breakthroughs in fusion power, its promise of virtually limitless power remains just a promise. But could a new wave of small, modular fission reactors bring new carbon-free power onto the market faster and cheaper (and safer?) than traditional nuclear plants in time to help the world decarbonize?

**Melissa Lott** – Senior Research Scholar and the Senior Director of Research at the Center on Global Energy Policy, Columbia University

**Jacopo Buongiorno** – TEPCO Professor of Nuclear Science and Engineering, MIT

**Allison Macfarlane** – Director of the School of Public Policy & Global Affairs, University of British Columbia; Former Chair, Nuclear Regulatory Commission

## “Can Nuclear Energy Help Meet US Climate Goals?”

Panel discussion with all three panelists expressing skepticism about the role that nuclear power can play.

- [The Hon. Gregory Jaczko](#), former chair, U. S. Nuclear Regulatory Commission
- [Dr. Mark Z. Jacobson](#), Stanford University Professor of Civil and Environmental Engineering, Director of Stanford’s Atmosphere/Energy Program, and author of [\*No Miracles Needed: How Today’s Technology Can Save Our Climate and Clean Our Air\*](#).
- [Dr. M. V. Ramana](#), Professor and Simons Chair in Disarmament, Global and Human Security at the School of Public Policy and Global Affairs, University of British Columbia, and Graduate Program Director of its Master of Public Policy and Global Affairs program.
- [Cindy Folkers M.S.](#), Radiation and Health Hazard Specialist, Beyond Nuclear, Moderator