CINTAC

Civil Nuclear Trade Advisory Committee

July 18, 2024

The Honorable Gina M. Raimondo Secretary U.S. Department of Commerce 1401 Constitution Ave., NW Washington, DC 20230

Dear Madam Secretary:

The Civil Nuclear Trade Advisory Committee (CINTAC) appreciates your leadership and support for America's civil nuclear energy industry. The Biden Administration's leadership in civil nuclear strengthens our economy, achieves U.S. clean energy priorities, supports U.S. competitiveness, creates high-paying jobs, and strengthens U.S. energy and national security.

Nations around the world are working to transition away from fossil fuels, while ensuring their energy security. Recent advances in nuclear deployment and nuclear exports by Russia and China, as well as Russia's continued war against Ukraine, highlight the urgent need for U.S. leadership so we can offer technology choices as alternatives. Executing the Advanced Reactor Demonstration Program (ARDP) projects, continuing ongoing efforts to streamline the regulatory process, and authorizing and appropriating a program to expand domestic Low-Enriched Uranium (LEU) and High-Assay Low-Enriched Uranium (HALEU) supply for an orderly energy transition demonstrate the U.S. Government's commitment to nuclear deployment. It is vital to renewing U.S. leadership that we carry out these programs effectively and efficiently.

However, more progress on domestic deployment, including a sense of urgency, is needed if we are to offer competitive and compelling U.S. nuclear technology exports. Since nearly all international partners will require U.S. licensing and deployment of our technologies before they commit to them, domestic deployment is a *necessary and vital first step* to the U.S. export strategy. CINTAC strongly supports the need for U.S. demonstration and supply of reliable and affordable technologies for the energy transition. To export safe and secure civil nuclear alternatives to the global market, the U.S. needs to demonstrate its commitment to deployment in the domestic market. Hence, CINTAC recommends that the Biden Administration champion and persevere through funding and deployment of nuclear technology domestically as a means to demonstrate the credibility of our civil nuclear export strategy.

The U.S. government has joined the collective goal to triple nuclear energy by 2050. Demonstrating this commitment through domestic deployment is required to put us in a position to export the technology to international partners. The only way to meet this mid-century goal, or any other future energy goal that relies on nuclear energy, is to accelerate deployment of nuclear plants and their supporting supply chains in the United States and internationally. This will require

working within the Department of Commerce and with the executive branch and Congress on the following enabling support strategies:

- Collaborating with energy-intensive industries and facilitating the formation of off-taker consortia: The Department of Commerce can leverage existing connections and committees¹ that engage with energy-intensive industries that are strategic to maintain onshore and are committed to carbon-free energy to support chip fabrication facilities, data centers, steel mills, etc. The recently announced Google-Microsoft-Nucor advanced clean energy initiative² demonstrates interest among off-takers to partner in pooling risk and aggregating capital towards the buildout of innovative nuclear energy technologies. Utilizing its networks with key sectors that are potentially interested in small modular and advanced reactors, the Department of Commerce can catalyze the formation of such partnerships/consortia to help clear initial barriers related to first-of-a-kind (FOAK) deployment.
- Advancing federal policy solutions to mitigate FOAK risks: Advanced nuclear technologies, such as small modular reactors (SMRs) and advanced reactors, represent a potential competitive edge for U.S. industry in overseas markets for decades to come. While there is interest in deploying these technologies domestically, uncertainties in FOAK costs and risks present formidable hurdles, even for well-capitalized consortia. The Secretary can work with the interagency and Congress to advance federal solutions, such as establishment of completion insurance or cost stabilization programs, to address and mitigate FOAK concerns among potential off-takers.
- Funding Assistance: Continued federal funding assistance programs will be needed to deploy FOAK SMRs and advanced reactors in the U.S. to enable exports. While these funds have been, and will continue to be, administered principally through the Department of Energy, support for these programs from the Secretary of Commerce and other senior members of the administration to Congress sends an important signal. We also encourage the Secretary to continue its efforts to support nuclear within its existing programs that can support FOAK deployments, such as through the Economic Development Administration. Further, a robust orderbook for new reactor technologies is critical, thus support for program funding through the U.S. Export Import Bank, the U.S. International Development Finance Corporation, the U.S. Trade and Development Agency, and the Commerce Department's Market Development Cooperative Program should be prioritized.

We see energy-intensive industries, including those crucial to U.S. national interests, gravitating to where there is reliable, affordable power. Countries are increasingly transitioning to clean energy sources to address climate change and energy security. Nuclear energy is the only baseload source of carbon-free power than can scale to meet the growing demand from these industries. Domestic nuclear deployment is essential to onshoring critical, energy-intensive sectors, and reinforcing a robust nuclear supply chain at home will better serve international markets.

¹ https://www.trade.gov/itac-committees

² https://nucor.com/newsroom/google-microsoft-and-nucor-announce-initiative

We must retire FOAK cost and schedule risks that prevent utilities and other consumers of power and heat from committing to deployment. We need a commitment by both government and industry to deploy real nuclear energy facilities with reliable schedules and budgets in the near-term. The goal cannot be met by industry alone, and the Secretary, as a senior leader in the U.S. government with the stature and access to leadership, can work with industry and champion an ambitious strategy for new nuclear domestically.

CINTAC believes that these recommendations will help ensure that we lead by example with our own deployments of new nuclear technology that serves to advance the energy transition and energy security, placing U.S. industry in a much stronger position to complete globally.

Sincerely and on behalf of the members of the CINTAC,

Carol Berrigan, Chair

Carol 24

cc: U.S. Secretary of Energy

U.S. Assistant Secretary of Commerce for Economic Development Chief Executive Officer, U.S. International Development Finance Corporation Chairman, Export-Import Bank of the United States Director, U.S. Trade and Development Agency

CINTAC Members:

- 1. Mr. Billy Mack, President and CEO, Accelerant Solutions
- 2. Mr. Craig Piercy, Executive Director and CEO, American Nuclear Society (ANS)
- 3. Dr. Hash Hashemian, President, Analysis and Measurement Services Corporation (AMS)
- 4. Ms. Colleen Deegan, Vice President and Manager, Bechtel Power Corporation
- 5. Dr. Danielle Castley, Founder & CEO, Becq
- 6. Mr. Glenn Neises, Nuclear Director, Burns & McDonnell
- 7. Mr. Joshua Parker, Director of Business Development, BWX Technologies, Inc.
- 8. Dr. Yassin Hassan, University Distinguished Professor and Director, Center for Advanced Small Modular and Microreactors (CASMR) at Texas A&M University
- 9. Mr. Sean Oehlbert, Vice President, Corporate Business Strategy, Centrus Energy
- 10. Mr. Nicholas McMurray, Managing Director, Public Policy, ClearPath
- 11. Mr. Gary Wolski, Vice President, Sales, Curtiss-Wright
- 12. Mr. Rod Baltzer, Chief Operating Officer, Deep Isolation
- 13. Mr. Colin Austin, Senior Vice President of International Business, EnergySolutions
- 14. Mr. Donald Hoffman, Founder/President/CEO, EXCEL Services Corporation
- 15. Mr. Jarret Adams, Founder and CEO, Full On Communications, LLC
- 16. Mr. Adam DeMella, Senior Vice President, Global Government Affairs and Policy, GE Hitachi Nuclear Energy
- 17. Mr. Brandon Brooks, Senior Manager, Strategic Business Development, General Atomics Electromagnetics (GA-EMS)
- 18. Ms. Amy Roma, Partner and Global Energy Practice Area Leader, Hogan Lovells
- 19. Mr. Myron Kaczmarsky, Vice President, Holtec Government Services, Holtec International
- 20. Mr. Paul Amico, Director, International Industrial Practice, Jensen Hughes
- 21. Mr. Peter Hastings, Vice President, Regulatory Affairs & Quality, Kairos Power LLC
- 22. Mr. Seth Grae, President and CEO, Lightbridge Corporation
- 23. Mr. Paul Murphy, Managing Director, Murphy Energy & Infrastructure Consulting
- 24. Mr. Alex Polonsky, Partner, Morgan, Lewis, & Bockius LLP
- 25. Dr. Michael McMahon, Vice President, Transportation and Strategic Projects, NAC International
- 26. Ms. Carol Berrigan, Executive Director, Federal Programs and Supplier Relationships, Nuclear Energy Institute
- 27. Mr. Ted Garrish, International Nuclear Trade Advisor, New Horizons Nuclear Associates (NHNA), LLC
- 28. Mr. Clayton Scott, Executive Vice President, Business Development, NuScale Power, LLC
- 29. Mr. Robert Sweeney, Head of Energy and Infrastructure, nXSolutions
- 30. Mr. Jeff Merrifield, Partner and Energy Section Leader, Pillsbury Winthrop Shaw Pittman, LLP
- 31. Mr. Nathan Schukei, Sales and Business Development Manager, Rosemount Nuclear Instruments, Inc.
- 32. Ms. Marcia Burkey, Executive Vice President and Chief Financial Officer, TerraPower, LLC
- 33. Mr. Joseph Green, Chief Nuclear Officer, Thermal Engineering International (USA), Inc.
- 34. Mr. Alan Ahn, Senior Resident Fellow for the Climate and Energy Program, Third Way
- 35. Mr. Michael McMurphy, Senior Fellow, U.S. Nuclear Industry Council (USNIC)
- 36. Mr. Elias Gedeon, Senior Vice President, Commercial Operations, Westinghouse Electric Company