

2023



VIRGINIA NUCLEAR ENERGY CONSORTIUM AUTHORITY

2023 ANNUAL REPORT

VIRGINIA DEPARTMENT OF ENERGY

1100 Bank St. 8th Floor

Richmond, VA 23219



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2023 GOALS AND ACTIVITIES

The Authority identified several specific goals as priorities for their 2023 activities:

- 1) Continue to enhance strategic priorities to serve as a roadmap for future activity that has culminated in the drafting of the 'Virginia is Nuclear' 2020-2024 Strategic Plan as directed in § 67-1700 of the Virginia Code
- 2) Continue to stress the importance to the Commonwealth of nuclear energy as a major source of zero carbon generation
- 3) Continue to expand existing coordination and identify new opportunities for collaboration and support between VNECA and VNEC
- 4) Support efforts to retain existing nuclear assets and investments in Virginia
 - a) Support positive regulatory climate to preserve existing assets
 - b) Support public policy initiatives to enable investments needed to preserve existing and new nuclear assets
- 5) Provide technical expertise and promote greater awareness amongst policymakers of the role nuclear energy can play in the Commonwealth's environmental and energy initiatives
 - a) Utilize the Authority platform to bring increased information sharing opportunities about the state of the nuclear industry
- 6) Provide advice and guidance to pursue specific aspects of the Virginia is Nuclear Strategic Plan

KEY ACTIVITIES CONDUCTED IN 2023

Asset Inventory

To better understand and communicate the significant impact of the nuclear industry on Virginia's economy and workforce, the Authority maintains an inventory of nuclear assets in Virginia including private industry, utilities, educational institutions and federal research laboratories. The Authority reviews the inventory quarterly.

The key findings from the asset survey are highlighted by the following summary. The full database of nuclear energy assets, including company employment and annual revenue figures, can be found in Appendix A.

2023 Authority Meeting Activities

The Authority held four meetings in the past calendar year (January 30, April 21, July 27 and September 18). Over the course of the year, the group considered several activities on which to focus their work efforts, including:

- Completion of the Virginia Innovation Nuclear Hub proposal
- Completion/submission of the 2023 Virginia Nuclear Energy Consortium Authority Annual Report to the Governor and members of the General Assembly
- Working closely with the new Administration to champion Virginia as a nuclear innovation leader
- Continued promotion of nuclear energy as a vital component in zero emissions electricity generation in the combat against global climate change
- Communicating the importance of having a diverse energy portfolio that is flexible and resilient is key to sustainable energy and a strong economy
- Expanding the coordination and information exchange with other key Virginia stakeholder groups, including regular briefing opportunities with the Energy DELTA Lab leadership
- Continued efforts on educating members via technical and informational presentations, or engaging in advocacy work to focus on nuclear as a vital component of Virginia's energy mix; and
- Provide updates on nuclear energy policy in other States that may serve as an example for or have an impact on nuclear energy activity in Virginia
 - The Authority in coordination with the Consortium has also served as an example for other States looking to build nuclear energy advisory activities including Kentucky, West Virginia and Idaho.

Presentations

On January 2023, Braden Croy, Program Director at Dominion Energy Innovation Center (DEIC), provided a summary of the DEIC and its increasing research in new hydrogen and nuclear power opportunities. Mr. Croy also briefed the Authority specifically on the SPARK Virginia events being held around the Commonwealth with invitations for organizations to participate and support.

On April 21, Christine King, Director for Gateway for Accelerated Innovation in Nuclear (GAIN), provided the board an overview of the programs' current activities related to nuclear, such as awards and ongoing projects. The Authority learned more about GAIN's current activities and committed to continued dialogue about potential collaboration on Virginia's nuclear energy activities.

On July 27, Simon Glynn, Chief Strategy Officer of Lippincott and co-lead for Potential Energy Coalition, provided the board with a review of recent findings on nuclear public acceptance across eight countries (USA, France, Germany, Poland, Sweden, UK, Japan and South Korea), known as "The World Wants Nuclear." The study was a partnership between Potential Energy, REPLANET, Third Way and ClearPath.

AUTHORITY ADMINISTRATION

Virginia Nuclear Energy Consortium Authority Administration

The Virginia Nuclear Energy Consortium Authority Board elected the following slate of officers to lead the Board for 2023:

Chairman – Tom DePonty

Vice Chairman – Gary Tepper

Treasurer – Eugene Grecheck

Secretary – Virginia Energy







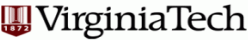
The full list of Authority Board Members is included in Appendix C.

Additionally, the Authority maintains a webpage on the Secretary of Commerce and Trade's website that serves as an information resource for nuclear energy in Virginia and the activities of the Authority. Authority Website - <https://commerce.virginia.gov/initiatives/va-nuclear>



APPENDIX A:

VIRGINIA NUCLEAR ENERGY ASSET INVENTORY



Nuclear in Virginia: Educational Institutions

Entity	Logo	Nature of Activity	Applicable Program(s)	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
Christopher Newport University (CNP)		Public Liberal Arts University	Applied Physics (B.S.), Computational and Applied Mathematics (B.S)	Paul S. Triple Jr, President	Christopher Newport University, 1 Avenue of the Arts, Newport News, VA 23606	1961	166.5 (total revenue FY12)	~400 faculty	www.cnu.edu
George Mason University (GMU)		Public University	Systems Engineering (B.S.), Applied and Engineering Physics (M.S.)	Ángel Cabrera, President	4400 University Dr, Fairfax, VA 22030	1957	911 budget (FY14)	1,801 (includes part-time FTE)	www.gmu.edu
George Washington University		Private University	Physics (B.S., M.S., Ph.D.); Aerospace, Electrical, Mechanical, and Systems Engineering (B.S., M.Eng., M.S., Ph.D.)	Ellen M. Granberg, President	45155 Research Place, Ashburn, VA 20147	1821		11,500 faculty and staff	www.gwu.edu
Liberty		Private University	Mechanical Engineering (B.S., M.S., Ph.D.)	Jerry Prevo	1971 University Blvd, Lynchburg, VA, 24515	1971		~2,500 faculty	www.liberty.edu
University of Virginia (UVA)		Public Research University, Health System	Physics (B.S., M.S., Ph.D.); Aerospace, Electrical, Materials Science, Mechanical, and Systems Engineering (B.S., M.Eng., M.S., Ph.D.)	James E. Ryan, President	Thorton Hall, 351 McCormick Rd., Charlottesville, VA 22904-4203	1819	1,910 (academic division, FY19-20)	30,000 (incl. Health Systems)	www.virginia.edu
Virginia Commonwealth University (VCU)		Public Research University, Health System	Nuclear Engineering Concentration (B.S), Nuclear Engineering (M.S., Ph.D.), Department of Radiation Sciences	Michael Rao, President	821 West Franklin St, Richmond, VA, 23284	1838	967.4 budget (FY13-14)	20,241 (incl. medical center)	www.vcu.edu
Virginia Community College System (VCCS)		Community College Network	Engineering (AS), Engineering Technology (AAS), Nuclear Technology (AAR)	Dr. David Doré, Chancellor	300 Arboretum, Suite 200 Richmond, VA 23236	1966	1,276 (total revenue FY13)	11,000+ total faculty	www.vccs.edu
Virginia Tech (Virginia Polytechnic Institute and State University)		Public University, Research Institution	Nuclear Engineering Program (Ph.D., MS,ME)	Dr. Timothy D. Sands, President	925 Prices Fork Road, Blacksburg, VA, 24061-0002	1872	1,284.3 budget (FY13)	7,263	www.vt.edu




Nuclear in Virginia: Federal Research Laboratories

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
Thomas Jefferson National Accelerator Facility		Nuclear Physics Research	Stuart Henderson, Director	12000 Jefferson Ave, Newport News, VA 23606	1984	\$280M (FY22)	810	www.jlab.org/
US Navy (Norfolk Naval Shipyard)		Manufacturing, R&D, and support for US Navy	Captain Dianna Wolfson, USN	Norfolk Naval Shipyard, Portsmouth, VA, 23709	1767	1,016 (FY11-12)		www.navsea.navy.mil/shipyards/norfolk/



Nuclear in Virginia: Utilities

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
Dominion Resources		Power Generation, Transmission, Distribution	Robert M. Blue	600 E Canal St, Richmond, VA 23219	1983	13,120 (FY13)	14,500 (total)	www.dom.com
Old Dominion Electric Cooperative		Electricity Provider	Jackson Reasor, President and CEO	4201 Dominion Blvd, Glen Allen, VA, 23060	1948	842.1 (FY13)	~100	www.odec.com/














Nuclear in Virginia: Private Industry

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
Abbitz Measurement, Inc.		Pressure Systems Instrumentation	Tammy Nicoll, President	1619D Diamond Springs Rd, Virginia Beach, VA, 23455	2009		~10-20	www.abbitz.com
ABZ, Inc.		Fluid Flow Consulting	Ed Abbott, President	4451 Brookfield Corporate Drive, Suite 101, Chantilly, VA, 20151	1986		~10	www.abzinc.com
Action Technology, Inc.		Staffing, Consulting, Training	Bonnie Lonon, President and CEO	3121 E. Boundary Ct., Midlothian, VA, 23112	1982	24	~250	www.action-tech.com
Advex Corporation		Machining and Fabrication	George Hill Jr, President	121 Floyd Thompson Drive, Hampton, VA, 23666	1969		180	
Aerofin		Heat transfer applications supplier	David Corell, President	4621 Murry Place, P.O. Box 10819, Lynchburg, VA, 24502	1923			www.aerofin.com
Affordable Fastener Supply Company		Hardware Supply	Carl Grunthamer, President and CEO	312-G Old York Hampton Highway, Yorktown, Virginia, 23692	2005			www.affordablefast.com
Air Systems, Inc.		Filtration, Air Systems	David Angelico, President	821 Juniper Crescent, Chesapeake, VA, 23320			42	www.airsystems.cc
AMEC		Engineering, Project Management, Consulting	Samir Brikho, CEO	14424 Albemarle Point Place, Suite 115, Chantilly, VA, 20151; 1070 West Main St, Suite S, Abingdon, VA, 24210; 2028 Dabney Rd, Suite E-18, Richmond, VA, 23230; One Colubums Center, Suite 600, Virginia Beach, VA, 23642	1982	6,735 (FY13)	~27,000	www.amec.com
American Operations Corp.		Analysis, Consultancy, Specialist Services	L. Frank 'Smokey' Field, Chairman and CEO	14030 Thunderbolt Place, Suite 700, Chantilly, VA, 20151	1983		~200	www.aocwins.com
Applied Technical Services		Nondestructive Testing	Jim Hills, President	2312 Commerce Center Drive, Suite A, Rockville, VA 23146; 5566 General Washington Drive, Alexandria, VA, 22312; 1325-B Cavalier Blvd, Chesapeake, VA	1967		~600	www.atslab.com
Ares Security Corporation		Security Consulting and Applications	Ben Eazzetta, President	8045 Leesburg Pike, Suite 400, Tysons Corner VA 22182	2012		850+ (incl. ARES Holding)	www.aressecuritycorp.com
Axiom Quality Assurance		Consulting and Analysis		P.O. Box 328, McLean, VA, 22101				www.axiomqa.com
Bauer Compressors, Inc.		Compressors and High Pressure Systems	Tony Bayat, President	1328 Azalea Garden Rd, Norfolk, VA 23502	1946			www.bauercomp.com
Bechtel		Engineering, Construction	Brendan Bechtel, Chairman & CEO	12011 Sunset Hills Rd, Reston, VA, 20190	1898	37,900 (FY12)	53,000+ (total)	www.bechtel.com/















Nuclear in Virginia: Private Industry

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
Beta Analytics International, Inc.		Access Control, Security, Fire Protection	Darden Hood, President	2677 Prosperity Avenue, Suite 400, Fairfax, VA, 22031	1979		~300	www.radiocarbon.com
Boh Environmental, LLC		Container Systems	Eric Hediger, President	14520 Avion Pkwy, Chantilly, VA 20151 800 Main Street, Lynchburg 2016 Mt. Athos, Lynchburg	1998		~15	www.bohfupsystems.com
BWX Technologies, Inc.		Nuclear design, engineering, manufacturing and services	Rex D. Geveden, President and CEO	1570 Mt. Athos, Lynchburg 109 Ramsey Place, Lynchburg 110 Ramsey Place, Lynchburg 107 Vista Centre Drive, Forest	Company history dates back to 1856	\$2.23B (CY2022)	7,000 in North America	www.bwxt.com
Caliper Inc.		Staffing and Recruitment	Robert Y. Green, Jr, President and CEO	512 Central Drive, Virginia Beach, VA, 23454; 4907 Fitzhugh Ave, Suite 201, Richmond, VA, 23230; 11325 Random Hills Rd, Suite 360, Fairfax, VA, 22030	1984			www.caliper.net
CBG, LLC		Metal Disintegration & Stud Removal	Ken Guthrie, Owner	4013 Seaboard Court, Suite A-3, Portsmouth, VA, 23701	2002			www.cbgmaintenance.com
Chemetrics, Inc.		Water Testing	Bruce H. Rampy, President	4295 Catlett Rd, Midland, VA, 22728	1969		55+	www.chemetrics.com
CMC Technical		Staffing and Recruitment		502 Viking Drive, #102, Virginia Beach, VA, 23452	1978			www.cmc-jobs.com
Coastal Network of Virginia, LLC		Radiation Safety		600 Plantation Ct, Charlottesville, VA, 22903	1987		5	www.nuclearsupply.com
Communications-Applied Technology		Communication Systems Design and Manufacturing	Seth Leyman, President and Founder	11250-14 Roger Bacon Drive, Reston, VA, 20190	1982		~15	www.c-at.com
CraneTech Solutions CTS		Cranes & Lifting Equipment	Frank Hegan, President	2030 Ponderosa St, Portsmouth, VA, 23701	1958			www.ct-sol.com
Dominion Engineering, Inc.		Technical Consulting Services	Robert D. Varrin, JR, Ph.D, Principle Officer	12100 Sunrise Valley Drive, Suite 220, Reston, VA, 20191	1980		<50	www.domeng.com
Donley Technology		Environmental Health and Safety Information	Elizabeth M. Donley, Founder and Executive Director	P.O. Box 152, Colonial Beach, VA, 22443	1988			www.donleytech.com
DynCorp International		Security Training and Consulting	Steven F. Gaffney, Chairman and CEO	1700 Old Meadow Road, McLean, VA 22102	1946	~3,000 (FY10)	16,800 (2009)	www.intellpros.com









Nuclear in Virginia: Private Industry

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
Eddy Current Technology, Inc.		Eddy Current Testing		201A Horace Ave, Virginia Beach, VA, 23462				www.eddy-current.com
Electric Motor and Contracting Company, Inc.		Motor repair, decontamination, refurbishment	James L. King, President CEO	3703 Cook Blvd, Chesapeake, VA, 23323	1960	~30	~200	www.emc-co.com
F.N. Anderson & Associates		Engineering Analysis and Services	Floyd N. Anderson, President	87 Braxton Lane, Forest, VA, 24551	1993		~4	www.fnaai.com
Finite Matters, Ltd.		Management Solutions, Consulting, Software	Anthony Luca, Owner	3064 River Road West, Suite B, Goochland, VA, 23063	1991		<10	www.fml.com
Flowserve		Pumps, Valves, Tubing	Mark A. Blinn, President and CEO	5114 Woodall Rd, Lynchburg, VA 24502	1997	4,954 (FY13)	15,000+	www.flowserve.com
Framatome Inc.		Engineering, Design, Manufacturing, Nuclear Services and Support	Katherine Williams, President and CEO	Corporate headquarters 3315 Old Forest Road Lynchburg, VA 24501 Solutions Complex 2700 W. Main Street	1958	~\$1 billion	2,300	www.Framatome.com
Fuji Electric America		Power Electronics Technology	Michihiro Kitazawa, President and Chairman (Fuji Global)	5115 Bernard Drive, Suite 102, Roanoke, VA, 24018 (Drives and Inverters Dept.)	1923	7,315 (consolidated sales FY12)	~25,000	www.fujielectric.com
Honeywell (Uvex Safety Frames)		Safety Products, Eye + Face Protection	David M. Cote, Chairman and CEO	690 HP Way, Chester, VA, 23836	1906	37,665 (FY12)	~132,000 (worldwide)	www.honeywellsafety.com
Huntington Ingalls		Shipbuilding, Nuclear Operations, Engineering Services	Mike Petters, President and CEO	4101 Washington Ave., Newport News, VA, 23607	2008	6,800 (FY13)	39,000+ (total)	www.huntingtoningalls.com
ICF International, Inc.		IT Services, Research, and Consulting	Sudhakar Kesavan, Chairman and CEO	9300 Lee Hwy, Fairfax, VA, 22031	1969	949 (FY13)	4,500+	www.ici.com
Innerspec Technologies		Engineering Consultant	Borja Lopez, CEO	2940 Perrowville Rd, Forest, VA 24551	1989		58	https://www.innerspec.com
Interdevelopment, Inc.		Management Consulting and Business Research	Margareta Luddemann, President and CEO	P.O. Box 15249, Arlington, VA, 22215	1967	<1	~10	www.interdevelopment.com
Invensys Eurotherm		I&C sales, support, repair	Mike Caliel, President and CEO (Invensys)	44621 Guilford Drive, Ashburn, Virginia, 20147	1952			www.eurotherm.com
ITC Learning		Industrial Skills Training	Gloria MacCorkindale, Vice President	13515 Dulles Technology Drive, Herndon, VA, 22171		~3	~40	www.itclearning.com





Nuclear in Virginia: Private Industry

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
JGW Group		Business Development, Training, Consulting	Andrew Wilson, President	1801 Robert Fulton Drive, Suite 400, Reston, VA, 20191	1980		10 (+int'l associates)	www.jgwgroup.com
KSB, Inc.		Pumps, valves, and systems supplier	Ed Harvie, President (KSB USA)	4415 Sarellen Rd, Henrico, VA, 23231		~3,125	16,500+ (global)	www.ksb.com
Lightbridge		Fuel Cycle Consulting and Design	Seth Grae, President and CEO	1600 Tysons Blvd, Suite 550, Tysons Corner, VA, 22102	1992			www.ltbridge.com
Limitorque Corp. (subsidiary of Flowserve)		Actuators	Mark A. Blinn, President and CEO (Flowserve)	5114 Woodall Rd, Lynchburg, VA 24502	1929 (Limitorque)	4,954 (FY13) (Flowserve)	15,000+ (Flowserve)	www.flowserve.com/Limitorque
Mega-Tech Services, LLC		Tooling, Engineering Consulting	Deanna R. Bowen, President	11118 Manor View Drive, Mechanicsville, VA, 23116				www.mecha-techservices.biz
MELD Manufacturing		Manufacturing and Design		200 Technology Drive, Christiansburg, VA 24073	2018			http://meldmanufacturing.com/
Mitsubishi Nuclear Energy Systems		Vendor, Nuclear Services	Makoto Toyama, President and CEO	1001 19th St N #2000, Arlington, VA	2006		200+ (site-specific)	www.mnes-us.com/
MPR Associates, Inc.		Engineering and Management Services	Bob Coward, Principle Officer	320 King St, Alexandria, VA, 22314	1964		~200	www.mpr.com
Novatech USA		Engineering and Manufacturing Services	Mr. Richard Fl. Rochow, President	220 Jefferson Ridge Parkway Lynchburg, VA 24501	1994		35	http://novatechusa.com/industries/nuclear/
Nuclear Energy Support International, LLC		Staffing and Recruitment	Mary Ann Snyder, Owner	Lynchburg, VA 24501	1983			www.nesilc.com
OFI Custom Metal Fabrication		Safety Related Fabrication	Jim Clifford, President	10412 Design Road, Ashland, VA, 23005	1982			www.osfi.com
Proxtronic, Dosimetry LLC		Dosimetry Services	W. Guy Davis, President and CEO	85 S. Bragg St, Suite 400, Alexandria, VA, 22312	1990			www.proxtronicdosimetry.com
Radiological Training Services, LLC		Radiological Training	John Duley, Producer	6538 Koziara Drive Burke, VA, 22015	1999		<5	www.radiationvideos.com/about.html
Radium, Inc.		Steam Generator Services, Products	Cam Abernethy, President and Owner	463 Dinwiddie Ave, Waynesboro, VA, 22980	2004		~10	www.radiuminc.com

Nuclear in Virginia: Private Industry

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
River Technologies, LLC		Radiological Decontamination	Robert Kozma, COO	2107 Graves Mill Rd, Suite A, Forest, VA, 24551	2003		~10	www.rivertechnologies.biz
Robatel Technologies, LLC		Engineering Services	Teo Grochowski, CEO	5115 Bernard Drive, Suite 304, Roanoke, VA, 24018	2009 (US subsidiary)		115 (Robatel Industries)	www.robateltech.com
SC&A, Inc.		Environmental and Energy Consulting	Gregory P. Beronja, President and CEO	1608 Spring Hill Road, Vienna, VA, 22182	1981			www.scainc.com
Seaward Marine Services		Cleaning and Inspection	Edward A. Wardwell, Founder	5409 Beamon Road Norfolk, VA 23513 United States	1972			www.seaward-marine.com
TalentHunter		Recruitment and Staffing	Al Visco, Vice President	PO Box 275, Ashburn, VA, 20146	1982			www.talenthunter.com
TeamBest		Radiation Protection, Cancer Treatment	Krishnan Suthanthiran, President and Founder	7643 Fullerton Rd, Springfield, VA 22153	1977			www.teambest.com
Thermal Spray Solutions, Inc.		Thermal Spray Coatings		1105 International Plaza, Suite B Chesapeake, VA 23323				http://www.thermalsprayusa.com/
Weidmuller Inc.		IT Products and Services	Brian Schofner, President	821 Southlake Blvd., Richmond, VA, 23235	1850	~40	~100	www.weidmuller.com

Nuclear in Virginia: Other

Entity	Logo	Nature of Activity	Leadership	Virginia Presence	Founded	Revenue/ Funding, \$1M	Employees	Website
ANS		Not-for-profit, International, Scientific and Educational Organization	Kenneth Peterson, President	5200 Thatcher Rd, Suite 142, Downers Grove, IL, 60515 Virginia Local Section and VCU Student Section	1954		11,000 members	www.ans.org
Virginia Department of Energy		Governmental research and regulatory body	Glenn Davis, Director	Washington Building, 8th Floor, 1100 Bank St, Richmond, VA, 23219	1985	15.6 State General Fund, 17.3 Federal Funds, 2.6 Fees	182	http://www.energy.virginia.gov/
Virginia Economic Development Partnership		State Authority for business advocacy, development, and support	Dan M. Pleasant, Chairman of the Board	901 East Cary Street Richmond, VA 23219	1995	17.8 (State General fund, FY2014)	~100	https://www.vedp.org/
Virginia Nuclear Energy Consortium		VNEC advocates for the nuclear industry, and our member companies, on a number of fronts. Our work includes promotion of the industry; efforts to address workforce development; initiatives to promote research and development and identify new opportunities for public-private partnerships; advocacy on legislative and regulatory matter; and education/public awareness efforts regarding nuclear's role as a carbon-free energy source capable of meeting our clean energy needs.	April Wade, Executive Director	State Wide	2013		1	https://virginianuclear.org

APPENDIX B:

VIRGINIA NUCLEAR ENERGY CONSORTIUM UPDATE

The Virginia Nuclear Energy Consortium (the Consortium) was formally launched in 2015 and now has been in operation for over eight years in accordance with § 45.2-2105 of the laws of the Commonwealth. The full 2023 Consortium activity report and membership roster are included as Appendix B.



VIRGINIA NUCLEAR ENERGY CONSORTIUM

2023 Report

Overview

The Virginia Nuclear Energy Consortium (VNEC) has been in operation for over eight years in accordance with Section 67-1404 of the laws of the Commonwealth. This report provides an overview of VNEC's activities and mission.

- Current membership includes (2022 & 2023 membership has grown):
 1. Appalachian Power
 2. Curio
 3. Dominion Energy Services
 4. Framatome Inc.
 5. GE Hitachi Nuclear Energy
 6. Holtec International
 7. Liberty University
 8. Lightbridge Corporation
 9. Newport News Shipbuilding
 10. NuScale Power
 11. University of Virginia
 12. Virginia Commonwealth University
 13. Virginia Tech University
 14. X-Energy Reactor Company, LLC.
- Officers for 2023:
 1. Chairman - John Harrell, Dominion Energy Services
 2. Vice-Chair - Alireza Haghighat, Virginia Tech
 3. Treasurer - Supathorn Phongikaroon, Virginia Commonwealth University

Activities and Mission

VNEC advocates for the nuclear industry, and our member companies, on a number of fronts. Our work includes promotion of the industry; efforts to address workforce development; initiatives to promote research and development and identify new opportunities for public-private partnerships; advocacy on legislative and regulatory matter; and education/public awareness efforts regarding nuclear's role as a carbon-free energy source capable of meeting our clean energy needs.



□ Promotion of Virginia's nuclear assets and capabilities

1. In accordance with the Virginia is Nuclear 2020 Strategic Plan, VNEC worked to advance nuclear energy in line with the Commonwealth's 2045 carbon-free energy goal.
2. Provided education and information regarding the nuclear industry's position as a carbon-free energy source and contribution to clean air, new technology and innovation opportunities and general topics related to nuclear in Virginia.
3. Briefed policymakers and a variety of state agencies on industry issues.
4. Supported the Governor's 2022 Virginia Energy Plan.
5. Made introductions between advanced reactor companies and state agencies.
6. Provided briefing materials and presented subject matter experts to government officials.
7. Participated in Dominion Innovation Spark events.
8. Participated in events in SW Virginia supporting nuclear energy.
9. Attended and provided updates the SWVA Research and Development Authority.

□ Workforce Development

1. Active participation with the Virginia Energy Workforce Consortium (VEWC).
2. Organized a VNEC Workforce Working group to collaborate, identify opportunities, and identify needs for the nuclear industry.
3. Supported university training of nuclear engineers and scientists.
4. Ongoing support to address industry workforce needs.
5. Discussed opportunities with Virginia Department of Education Work-Based Learning Specialist Team.

□ Research and Development

1. Finalized proposal to create the Virginia Nuclear Innovative Hub (VIN Hub).
2. Worked to develop VIN Hub governing documents and organization structure.
3. Participated in Governor Youngkin's bill signing event supporting energy legislation.
4. Promoted advanced technologies and research.
5. Worked with Virginia state officials and business community to develop awareness and recognition of the research assets and capabilities of Virginia nuclear engineering programs.
6. Coordinated with the Virginia research and nuclear business communities.
7. Worked to identify public-private investment opportunities.
8. Supported member company efforts to create new business opportunities and to advocate for nuclear issues.
9. Supported development of new technology & innovation opportunities including advanced manufacturing.



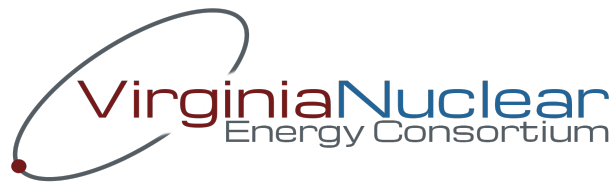
10. Supported nuclear research opportunities for Virginia universities.
11. Leading organization applying for designation as the Virginia Technology, Workforce, and Innovation in Nuclear (TWIN) Hub under the US Economic Development Administration's Regional Technology and Innovation Hubs (Tech Hubs) program.
Partner organization with the Lynchburg Regional Business Alliance's, Virginia's Nuclear Industry Technology Commercialization Hub (NITCH) under the US Economic Development Administration's Regional Technology and Innovation Hubs (Tech Hubs) program.

Legislative and Regulatory Advocacy

1. Supported public policies that advance the nuclear industry.

2023 State Legislation

- **Supported Governor Youngkin's Virginia Power Innovation Fund - [SB 800](#) [Item 122](#) [HB 1400](#) [Item 122](#).**
- **[HB 2386](#) & [SB 1464](#) - Virginia Power Innovation Fund and Program**
 - Patrons - Delegate Israel O'Quinn & Senator Jill Holtzman Vogel**
 - Virginia Power Innovation Fund and Program; created. Creates the Virginia Power Innovation Fund with funding to be used solely for the purposes of research and development of innovative energy technologies, including nuclear, hydrogen, carbon capture and utilization, and energy storage. The bill also creates the Virginia Power Innovation Program to use moneys from the Fund to (i) establish a Virginia nuclear innovation hub and (ii) award competitive grants to support energy innovation.
- **[HB 2197](#) Va. Electric Utility Regulation Act; eligible sources for renewable energy portfolio standard.**
 - Patron Delegate Kathy Byron**
 - Provides that for the purpose of the Virginia Electric Utility Regulation Act, renewable energy includes energy from advanced nuclear technology. The bill provides electric-generating resources that generate electric energy derived from advanced nuclear technology and hydrogen power located in the Commonwealth or physically located within the PJM region as a renewable energy portfolio standard program source.
- **[HB 2333](#) - Electric utilities; SCC to establish a small modular nuclear reactors pilot program.**
 - Patron – Delegate Daniel Marshall**
 - Electric utilities; small modular nuclear reactors; pilot program. Provides that it is the policy of the Commonwealth to promote the development and operation of small modular nuclear reactors



- at the earliest reasonable time possible, with a goal of having the
- first small modular nuclear reactor operating by the end of 2032 and requires the State Corporation Commission to establish a small modular nuclear reactor pilot program. Under the program, any entity that holds a license from the U.S. Nuclear Regulatory Commission to operate one or more existing nuclear facilities at the time of the application may apply to the Commission for a certificate of public convenience and necessity to construct and operate one or more small modular nuclear reactors. Under the bill, the pilot program will be limited to four small modular nuclear reactor sites, each of which may include multiple small modular nuclear reactors, in the Commonwealth. The bill requires the Commission to consider certain factors in considering an application for a certificate of public convenience and necessity for a small modular nuclear reactor under the pilot program. The bill provides that an additional two sites outside of the Commonwealth that will primarily serve Virginia retail customers may also participate in the pilot program.
 - **[HB 1779](#) - Nuclear Education Grant Fund and Program; established.**
 - **Patron Israel O'Quinn**
 - Nuclear Education Grant Fund and Program established. Establishes the Nuclear Education Grant Fund and Program, to be administered by the State Council of Higher Education for Virginia, for the purpose of awarding grants on a competitive basis to any public institution of higher education or private institution of higher education in the Commonwealth that seeks to establish or expand a nuclear education program, defined in the bill as an instructional program that leads to a degree or credential that specifically supports the nuclear power industry, including nuclear engineering and nuclear welding. The bill permits the Council to establish such rules, policies, and procedures as it deems necessary for the administration of the Program, including rules, policies, and procedures for Program applications and grant awards.
 - **[HB 1780](#) - Small modular reactor plant; revenue-sharing agreement among certain localities.**
 - **Patron Israel O'Quinn**
 - Small modular reactor plant revenue-sharing agreement among certain localities. Requires the Counties of Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, and Wise and the City of Norton to enter into a perpetual revenue-sharing agreement regarding a



- certain small modular reactor plant or facility to be located in one of these localities. The measure establishes the percentage of the revenue to be allocated to each locality and provides that the host locality shall retain the remaining six percent of the revenue. The bill requires any direct costs of infrastructure improvements incurred by the host locality for purposes of the small modular reactor plant or facility to be allocated among the localities in the same proportion as the revenues from the plant or facility
- 2. Supported federal legislation supporting nuclear energy and advanced technologies.
- 3. Proactive coordination with state and federal officials advocating for more federal research investment and manufacturing dollars in Virginia.
- 4. Reached out to elected officials and staff to attend MIT Nuclear Energy Course.
- 5. Attended MIT Nuclear Energy Course.
- 6. Developing legislative recommendations for 2024.

Summary

We continue to make great strides in advancing the industry and helping ensure its future. We continue to follow the key guiding principles outlined in the Virginia is Nuclear 2020 Strategic Plan:

- Ensuring nuclear energy's continued contribution to Virginia's carbon-free future
- Prioritizing nuclear innovation
- Leveraging existing in-state infrastructure and identify capability gaps
- Growing related educational opportunities for the future nuclear workforce

To that end, VNEC worked to secure funding for the planning of the nuclear research and innovation hub outlined in the plan. VNEC has worked with the Youngkin administration and provided recommendations from the strategic plan for the Governor's energy plan. His energy plan included pursuing an SMR in the Commonwealth, encouraged developing the research hub, and made nuclear a significant piece of Virginia's energy future.

VNEC will continue to pursue advanced demonstration projects that will promote Virginia's leadership in nuclear energy solutions for the world's pressing energy, economic, environmental, and national security needs. In 2024, VNEC will update its strategic plan for the state, with a continued focus promoting electrical generation, promoting advanced manufacturing and service capabilities, encouraging development of advanced reactor technologies, supporting defense applications of nuclear technology, encouraging , research & development, and growing the industry workforce.

APPENDIX C:

VIRGINIA NUCLEAR ENERGY CONSORTIUM AUTHORITY BOARD MEMBERS

Role	First Name	Last Name	Organization
Chairman	Tom	Deponty	Framatome Inc.
Vice Chairman	Gary	Tepper	Virginia Commonwealth University (VCU)
Member	Jeffrey	Fox	University of Virginia (UVA)
Member	Ken	Ball	George Mason University (GMU)
Member	Bill	Briscoe	George Washington University (GWU)
Member	John	Capps	Central Virginia Community College
Member	Scott	Kopple	BWX Technologies
Member	Daniel	Stoddard	Dominion Energy
Member	Glenn	Davis	Virginia Department of Energy
Member	Rhonnie	Smith	Retired, BWX Technologies
Member	Rich	Diddams	Center of Energy Research and Education (CERE)
Member	Eugene	Grecheck	American Nuclear Society
Member	Andrew	Hutton	Jefferson Lab
Member	Woody	Lawman	Flowserve-Limitorque
Member	Michael	Lempke	Huntington Ingalls Industries' Technical Solutions
Member	Randy	Heflin	Virginia Tech (VT)
Member	Tim	Stuller	Virginia Economic Development Partnership