

# GLOBAL LEADERS IN NUCLEAR RESEARCH

The Department of Energy's **Pacific Northwest National Laboratory** (PNNL) located in Richland, WA, receives over \$400 million annually for its nuclear-research and development projects, many of which have received international recognition.

Additionally, over **5,000 employees and scientists** work in PNNL's laboratories, including the **Radiochemical Processing Laboratory** (RPL) and the **Environmental Molecular Sciences Laboratory** (EMSL), **furthering expertise in nuclear energy areas** including licensing and environmental studies, fuel design, fabrication and examination, reactor materials, nuclear science and engineering, irradiation science, non-destructive examination and online monitoring, safeguards and security, cyber security, techno-economics, waste management and decommissioning.

# **SUPPLY CHAIN**

From start to finish, **over 100 companies specialize** in and have the **expertise** to coordinate and oversee every step of nuclear production including:

- Asset Management
- Business Services
- Communications
- Component Assembly and Installation
- Contract Management
- Craft Management
- Crane & Rigging
- Environmental Management and Remediation
- Equipment Qualification
- Fire Protection
- Heavy Transportation
- Information Management Systems
- Infrastructure and Site Planning
- Integrity Assessments

- Laboratory Space/Business Startup Center
- Large-Scale Construction
- Machining
- Master Planning
- Material Control
- NEPA Analysis
- NQA-1 Fabrication and Construction
- Nuclear Design and Engineering (Civil, Structural, Mechanical, Electrical)
- Nuclear Fuel R&D, Design and Manufacturing
- Nuclear Licensing
- Nuclear Power Plant Operations
- Nuclear Power Plant Uprates
- Nuclear Safety

- Post-License Renewal Inspections
- Pre-Evolutionary Planning
- Procurement and Project Estimating
- Project Controls and Management
- Project Documentation
- Project Risk Management
- Quality Assurance and ITAAC (Inspections, Tests, Analyses, and Acceptance Criteria)
  Development
- Regulatory Management
- Security
- Uranium Recovery and Storage
- Welding

And many more!



# **EDUCATION AND WORKFORCE**

As pioneers of nuclear technology, our legacy continues with highly sought-after nuclear education and training programs, producing the next generation of the nuclear workforce. Programs and partnerships include:

# **WASHINGTON STATE UNIVERSITY (WSU) SYSTEM**

- Undergraduate and graduate degree (M.S. & Ph.D.) programs in science and engineering with nuclear focus
- Certificate offered in Nuclear Materials, Science, and Engineering
- WSU/PNNL Nuclear Science & Technology Institute creating a workforce development pipeline
- Nuclear Science Center training for U.S. NRC licensing — nuclear reactor operator and nuclear technology training at the WSU 1 MW TRIGA research reactor

Additional WSU system-wide investments in nuclear education and research include:

- Applied nuclear research and applications in security and emergency preparedness.
- WSU/PNNL Nuclear Science and Technology Institute (NSTI) is building upon and creating a robust interaction between WSU and PNNL in research in the Nuclear Sciences. Programs span fundamental science, nuclear forensics, nuclear materials in advanced reactors, environmental science, national security applications and application of data analytics to problems in nuclear science.

 Nuclear Science Center User Facility furthering nuclear capabilities and measurements not available elsewhere for scientists in a university setting including actinide materials research, characterization, and an incubator for new technological developments.

# CENTRAL WASHINGTON BUILDING AND CONSTRUCTION TRADES COUNCIL

- 16 Affiliated Unions; Operating Accredited State Apprenticeship Programs
- NQ-1 Program Certifications and Training: Welding, Material Control, Project Documentation, Pre-Evolutionary Planning

### **COLUMBIA BASIN COLLEGE (CBC)**

- Health Physics & Project Management, B.A.S.
- Nuclear Technology, A.A.S. with special tracks in: Radiation Protection, Non-Licensed Nuclear Operator, Instrumentation & Control

## **METAL TRADES DEPARTMENT, AFL-CIO**

17 Affiliated Metal Trades Unions



# **GLOBAL ACCESS**

The Tri-Cities has numerous locations capable of supporting energy-related research, development, manufacturing, and generation, including large sites with up to 500 contiguous acres.

With direct access to interstate highways, two national mainline railroads, a nuclear certified port, extensive commercial barge transportation with river access to the Pacific Ocean, and airports with service to major metros across the nation, the Tri-Cities is a gateway to the world.

Visit www.LocateTriCities.com to find your perfect site!

Generate. Manufacture. Deliver. Bringing nuclear technology to the rest of the world.



