

CHARLES A. HUGHEY, JR.

EXPERIENCE SUMMARY

Mr. Hughey has a broad and extensive experiences in nuclear quality assurance, operations oversight, chemistry, and health physics at commercial nuclear power plants, commercial HEU/LEU fuel facilities, and DOE nuclear facilities.

DETAILED EXPERIENCE

Senior Consultant – Longenecker & Associates

2015-Current

Senior Technical Consultant – B&W Conversion Services

2014-2015

Independent Consultant to B&W Conversion Services providing improvement recommendations and feedback to the Plant Managers at the Paducah, KY and Portsmouth, OH DUF6 Facilities for operations, maintenance, and quality assurance activities. Provided significant input and assistance for upcoming operational readiness activities.

Quality Assurance Engineer - Navarro Research and Engineering Oak Ridge, TN

2012-2014

Supported DOE Federal staff with oversight of quality assurance activities for UPF Project. Planned and conducted assessments of NQA-1 based design, configuration management, procurement, and construction activities. Developed initial Quality Assurance Program and associated procedures for the UPF Project Office. Interfaced with Contractor quality assurance staff. Advised UPO Federal staff on quality issues.

Lead Quality Assurance Engineer – URS/ACTS Oak Ridge, TN

2009-2012

Conducted quality oversight of a major construction activity (Potable Water Upgrade Project), and liquid waste processing/transportation operations in the Oak Ridge area to ensure compliance with NQA-1 based quality programs including flowdown of quality plan requirements to subcontractors. Conducted assessments and audits of suppliers of nuclear grade components for URS nuclear construction projects. Developed and revised quality assurance plans and procedures. NQA-1 Lead Auditor.

Quality Assurance Lead during contract transition at the Paducah DUF6 Conversion Plant. **Senior Supervisory Watch** (conduct of operations oversight) during successful startup of the Plant. Developed and revised operating procedures.

Quality Assurance Chief—U.S. Department of Energy/National Nuclear Security Administration, Y-12 Site Office

Oak Ridge, TN

2006-2008

Led a team responsible for oversight, assessment, and evaluation for approval of the M&O Contractor's weapons quality assurance program (QC-1), including final acceptance of weapons components, and the nuclear facility quality assurance program (10 CFR 830, DOE O 414.1C/NQA-1). Also responsible for oversight and assessment of the Contractor's Integrated Safety Management and Price-Anderson Amendments Acts programs.

Facility Representative—U.S. Department of Energy/National Nuclear Security Administration, Y-12 Site Office**Oak Ridge, TN**

2001-2006

Responsible for day-to-day oversight and assessment of conduct of operations and work planning/execution at several complex highly enriched uranium processing facilities to ensure operations were conducted in accordance with approved safety basis documents, quality requirements, ISM principles, and safeguards/security requirements. This included direct oversight of operations during the restart of several idled uranium chemistry processes and the startup testing of a new HEU oxide conversion facility. Participated in a Type B investigation into Pu-238 uptakes at Los Alamos National Laboratory.

Senior Resident Inspector—U.S. Nuclear Regulatory Commission, Region II, BWXT Naval Nuclear Fuels Division**Lynchburg, VA**

1996-2001

On-site inspector at a highly enriched uranium fuel fabrication, recovery, and downblending facility. Planned and led investigations, inspections, and assessments of licensee safety and safeguards performance to ensure compliance with license requirements/rules/regulations/standards, and safe work practices. Routinely conducted additional assessments of other commercial nuclear fuel manufacturing and enrichment facilities.

Resident Inspector—U.S. Nuclear Regulatory Commission, Region II, Grand Gulf Nuclear Station Port Gibson, MS

1991-1996

On-site inspector at an operational boiling water reactor (BWR-6). Planned and conducted inspections, assessments, and investigations to ensure licensee compliance with requirements/rules/regulations/standards, and to identify safety concerns. Observed and evaluated reactor operations, maintenance/surveillance activities, facility modifications, engineering, event response/incident investigations, radiological controls, physical security, and other areas important to plant safety. Routinely conducted additional assessments of other PWRs and BWRs.

Senior Radiation Specialist—U.S. Nuclear Regulatory Commission, Region II Atlanta, GA

1987-1991

Planned and conducted independent and team radiological/environmental inspections and assessments of licensed nuclear power plants and HEU/LEU fuel fabrication/processing facilities to ensure

compliance with applicable license requirements, rules, regulations, and safe work practices. Identified safety and compliance concerns and recommended enforcement actions in the areas of internal/external exposure controls, ALARA planning, contamination control, liquid and gaseous radioactive effluents, plant chemistry, and radwaste systems.

**Chemistry Instructor—Nuclear Energy Services, Riverbend Nuclear Generating Station
St. Francisville, LA**

1986-1987

Developed and delivered classroom, laboratory, and on the job training to plant chemistry and operations personnel at an operational boiling water reactor. Operated and calibrated radiological assay equipment including germanium, sodium iodide, proportional detectors, liquid scintillation counters and various types of portable radiological survey instrumentation.

**Chemistry Instructor—Resource Technical Services, Millstone Point and Connecticut Yankee Nuclear
Generating Stations
Waterford, CT**

1985-1986

Developed and implemented the training program for plant chemistry personnel. This included job/task analyses, instructional objective and lesson plan/OJT card development, classroom delivery and program evaluation leading to INPO accreditation of the chemistry training program at Northeast Utilities.

**Chemist—Norco Services, Riverbend Nuclear Station
St. Francisville, LA**

1984-1985

Provided startup support services which included monitoring and maintaining the chemistry of various plant systems during turnover and initial testing. Heavily involved in the initial setup of the radiological counting room and other non-radiological laboratory instrumentation including the development of operating and calibration procedures, and training of utility company technicians.

**Chemistry Engineer—Union Electric Co., Callaway Nuclear Plant
Fulton, MO**

1983-1984

Provided professional expertise and technical advice concerning plant chemistry and radiochemistry matters. Developed chemistry, radiochemistry, and laboratory quality control procedures. Supervised chemistry technicians, prepared reports pertaining to various plant systems, and recommended chemical equipment for laboratory and plant use.

**Chemist—Combustion Engineering Field Services, San Onofre Nuclear Generating Station
San Clemente, CA**

1982-1983

Monitored and maintained reactor coolant, steam generator, feedwater, condensate, and other plant systems chemistry during Unit 2 and 3 hot functional testing, fuel loading, initial criticality and power ascension testing. Operated and calibrated radiological assay equipment including germanium, sodium iodide, proportional detectors, liquid scintillation counters, various types of portable radiological survey instrumentation, and a variety of laboratory analytical instrumentation.

**Chemistry Technician—Louisiana Power and Light, Waterford 3 Nuclear Generating Station
Killona, LA**

1980-1982

Developed and validated radioanalytical, environmental, and other chemistry procedures. Maintained NPDES and other environmental programs. Closely involved with startup engineering groups during systems testing and turnover. Procured laboratory equipment and completed their initial setup and use. Sampled and analyzed plant systems during post construction flushing activities.

**Chemical Radiation Technician—Georgia Power Co., Plant E.I. Hatch Nuclear Generating Station
Baxley, GA**

1980

Sampled and analyzed radioactive and nonradioactive solid, liquid and gaseous plant systems. Operated the makeup water treatment plant. Oversaw the analysis, packaging, and shipment preparation of radioactive wastes to burial sites. Determined dose rates, stay times, protective clothing and respiratory protection requirements for plant workers. Operated and calibrated laboratory and field radiological assay equipment.

MILITARY

U.S. Air Force, December 1970 to September 1974
Vietnam Veteran

EDUCATION

Georgia Southwestern State University, Americus, GA
Bachelor of Science in Chemistry, 1979

QUALIFICATIONS

DOE/NNSA Facility Representative
NRC Fuel Facility Inspector
NRC BWR Operations Inspector
NRC PWR Operations Inspector
NRC Health Physics Inspector
NQA-1 Lead Auditor
ISO/IEC 17025 Lead Auditor

CLEARANCE

Active NRC/DOE Q Clearance since 1988
Previous HRP participant

COMMUNITY ACTIVITIES

Treasurer/Former President, Arts Council of Oak Ridge
Treasurer, Oliver Springs Airport