

**SCOTT MCCAIN**  
**CONTINGENCY MANAGEMENT CONSULTING GROUP, LLC**

**Title/Position: Senior EP Specialist**

**Years of Experience: 21**

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**EXPERIENCE SUMMARY:**

Greater than twenty one years of experience in commercial nuclear power in the areas of emergency preparedness, security and health physics involving management, supervisory, consulting and technician positions. A Senior Specialist specializing in program management and standardization; program performance assessment and monitoring; emergency plan, EAL and procedure development; ERO systems approach to training program development; security plan development; emergency response software application design and development; and drill and exercise scenario development, conduct and critique.

**EDUCATION AND SPECIALIZED TRAINING:**

BS, Nuclear Technology Excelsior College

National Registry of Radiation Protection Technologists Certification

Instructor – NEI Emergency Planning Course

Faculty - Harvard School of Public Health Advanced Emergency Planning Course

Microsoft Access Data Base Developers Advanced Course

University of Vermont Geographic Information Systems Training Course

**MAJOR SKILL AREAS:**

- Program standardization for multi-station utilities.
- Development of new plant COLA Emergency and Security Plans and support of post-submittal activities and requests for information.
- Development, revision, and maintenance of emergency preparedness program documents including emergency action levels (EALs) emergency plans, implementing procedures, administrative procedures and performance indicators.
- Documentation of Job Task Analysis (JTA) and development of ERO training programs under SAT processes. Development of lesson plans and conduct of training in the functional areas of dose assessment and protective action recommendations, offsite monitoring, and core damage assessment.
- Development and documentation of software and computer based training applications used for emergency planning functions such as core damage, dose assessment and protective actions, offsite notifications, emergency action levels and scenario development.
- Performance of audits and evaluations to test the regulatory and technical adequacy of emergency preparedness programs, training procedures and records, and health physics and chemistry programs.
- Emergency response drill and exercise procedure development, scenario planning, preparation, conduct, and critique.

## **DETAILED EXPERIENCE:**

### **Various Nuclear Sites**

**2007-present**

Provide expert consultant services to nuclear utilities primarily in the area of program development and assessment. Specific activities have included; Development and submittal of NEI 99-01 Rev 5 based Emergency Action Level (EAL) basis manuals and engineering calculations for several stations involving multiple utilities; regulatory compliance review of EALs at V.C. Summer, Palo Verde, Calvert Cliffs, Nine Mile Point and D.C. Cook; program assessment support as part of or in preparation for NRC inspections, INPO assessments and 50.54(t) audits at Diablo Canyon, Indian Point, San Onofre, Kewaunee, D.C. Cook and Duke Energy (all sites); ERO training and qualification organization analyses and conversion to Systems Approach to Training (SAT) process at Diablo Canyon, Palo Verde and Columbia; ERO fleet standardization for Entergy's Pilgrim station; security plan, emergency plan and EAL development support for several U.S. EPR unit COLA submittals, and development of Areva uranium enrichment facility emergency plan and EALs for the initial licensing submittal.

### **Exelon Nuclear**

**2000-2007**

Emergency Preparedness Manager - Responsible for the emergency preparedness program for the Midwest region nuclear stations (Byron, Braidwood, Clinton, Dresden, LaSalle, Quad Cities and Zion). In addition to directly managing 25 (13 corporate and 12 station) personnel assigned to the EP Department, responsibilities include managing all aspects of the EP budget and the interface with all local, State and Federal agencies involved in the planning effort. Major program initiatives include; Involvement as lead and task force member for several NEI industry initiatives, top quartile performance, implementation of a standard Emergency Plan and single set of EP procedures for all stations, development and implementation of the EP Management Model enabling centralization of the EP organization, development and deployment of a common plant process computer accident assessment display system and dose assessment/core damage methodology, implemented a single exercise evaluation process and new 50.54(t) performance indicator methodology as part of an enhanced EP self-assessment system.

### **Carolina Power and Light**

**1997-2000**

Emergency Preparedness Supervisor - Responsible for the emergency preparedness program at the Shearon Harris nuclear power plant. In addition to directly supervising 4 personnel assigned to the EP Unit, responsibilities include managing all aspects of the emergency preparedness budget and the interface with all local, State and Federal agencies involved in the planning effort. Major onsite program initiatives included; Implementation of the NRC Cornerstone and Region II EP Performance Indicators, implementation of Severe Accident Management and performance based ERO training and qualification programs, re-development of EP specific core damage and dose assessment computer codes to address Y2K and other technical issues, development of formalized program maintenance documents, and identification and documentation of all plant specific EP commitments. Offsite experience includes; successful negotiations in significant budget reductions while maintaining a strong integrated program and working relationship with State and county agencies, and controlling the interface with offsite emergency management and elected officials during the intervention for the activation of two spent fuel pools.

**MDSC Inc.****1994-2000**

Senior Technical Consultant - Worked as an independent contractor specializing in the areas of emergency preparedness program support, computer application development and exercise scenario data generation. Conducted multiple ERO job task analyses at several utilities. Created performance based ERO training programs used to replace traditional qualification requirements. Organized the conversion of several plant emergency plans into NUREG-0654 format. Authored a guideline for the conduct of emergency preparedness program audit and assessment evaluations in accordance with federal regulations and guidance. Provided support to several utilities on issues in areas of dose assessment and protective action recommendations. Developed an EP Overview course for computer based training for Emergency Response Organization personnel. Developed an integrated computer application used as an aid in core damage estimation. Developed a computer application used to generate all necessary offsite data tables for plume phase, ingestion pathway and recovery/reentry portions of an exercise. Developed a modular computer application that combined dose assessment, protective action recommendations, emergency action level documentation and references, and offsite notification forms. Provided support as technical specialist for several annual 10 CFR 50.54(t), self-assessment, and Severe Accident Management audits. Assisted several utilities in exercise scenario development, controller/evaluator support, and critique report generation.

**Boston Edison Co.****1989-1994**

Senior RP Planner - Provided technical support in the areas of health physics, computer software design and development, emergency preparedness plans and procedures, and scenario generation and conduct at the Pilgrim Nuclear Power Station. Developed and documented the computer applications used for offsite dose assessment, core damage assessment and offsite emergency notification. Designed and developed the database used to track training, qualification, and emergency drill participation. Rewrote the administrative documents that controlled the methods by which emergency plans and procedures are created and revised. Aided the offsite division in resolving technical issues concerning plume tracking and evacuee monitoring equipment, and implementation of EPA-400 recovery/reentry criteria. Assisted the Emergency Preparedness Training section by conducting instructor and ERO training, and module and examination development. Responsible for the development and installation of a relational, geographic database used by utility and state personnel.

**NUTECH Engineers****1988-1989**

Technical Specialist - Specialized in the areas of emergency planning health physics, plant chemistry, and dose assessment. Routinely utilized as a controller/evaluator during drills and exercises for numerous utilities. Developed radiological scenario data packages including area and process radiation monitors, containment shine, chemistry results, core damage assessment results, and offsite plume transportation and deposition data. Developed a reactor chemistry sample data computer model used for exercise scenarios. Upgraded Nutech's offsite radiological scenario development model. Assisted in the development of a BWR core damage model.

**US Navy****1980-1988**

Served as Leading Engineering Laboratory Technician (LELT) on board two nuclear powered submarines supervising six technicians in the radiological and chemistry controls division. Awarded the Navy Achievement Medal in recognition of personal performance. Served as an instructor at the Naval Reactors S5G Prototype in Idaho.