

# LONGENECKER and ASSOCIATES

## EXPERIENCE SUMMARIES FOR KEY PERSONNEL

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### Robert M. Shepard, Jr.

#### EXPERIENCE SUMMARY

Mr. Shepard's 33 years of commercial experience includes General and Project Management, specializing in systems-based multi-disciplined management, engineering, nuclear safety, configuration management, diagnosis and solution implementation, NRC licensing (10 CFR 50, 71, 72, 76, & 100), DOE Safety Management (10 CFR 830, DOE G 3009-94 (CN-2), DOE G 424.1-1, DOE-G-423.1-1, & DOE-G-420.1-1), procedure development, production, process, work control, causal analysis, business & management reviews, facility design basis, USQ process, and management assessments. He is experienced in team building for immediate and long-range goals, making timely decisions, and negotiating for equitable solutions. Mr. Shepard has had substantial involvement, including principle author, with 16 PSARs, 16 FSARs for operating plants, 3 standard plant applications, and 3 FSARs & DSAs for DOE facilities.

#### DETAILED EXPERIENCE

Upon completion of his active military service [eight years] as an electrician, machinist, and laboratory technician in the U.S. Navy submarine nuclear power program, Mr. Shepard completed his BS, Nuclear Engineering Sciences at the University of Florida, at which point he began his commercial experience with the Westinghouse Electric Corporation in Pittsburgh. During his service with Westinghouse Mr. Shepard specialized in primary containment design and heat transfer, LOCA, and Main Steam rupture including all licensing aspects of these events. Mr. Shepard served as the Westinghouse interface for all commercial containment issues. Mr. Shepard then concentrated on standard plant licensing activities, most specifically the 3800MWt and 4100MWt plants and their European derivatives as well as the primary industry interface for all standard NSSS plant-to-BOP standard plant commercial and technical issues. Mr. Shepard worked as program manager for all steam generator programs, a \$100M effort. Mr. Shepard served as the Production Control and Materials Manager at the Specialty Metals Division. Mr. Shepard completed his Westinghouse career by serving in Sweden as Manager, Installation and Service Department for the Swedish licensee for the Westinghouse Nuclear Service Division.

Mr. Shepard began his consulting career in 1980 providing emergency planning services to Carolina Power & Light's Brunswick and Robinson plants as well as BG&E's Calvert Cliffs plant. He then was a principle contributor in the licensing of the Grand Gulf station and the Hydrogen Control Owners Group.

Mr. Shepard, as project manager, provided Carolina Power & Light the following services; 1) New generation EOPs for Robinson and Harris [in flow-path format]; 2) Detailed Control Room Design Review for Robinson, Brunswick, and Harris; 3) five-year planning format and methodology; 4) Integrated Emergency Plan Implementation Procedures with the new generation EOPs; 5) SPDS design philosophy; 6) Man-machine interface review of the integration of the SPDS into the control room; 7) Design Basis Reconstitution for Robinson; and 8) Power up-rate and turbine modification support for Brunswick.

#### Mr. Shepard has also provided the following services:

- USQ and Rule of Law training for Hope Creek and Salem 1 & 2
- Technical Support services in support of legal cases
- Steam Generator Corrosion Studies for several plant sites

- Power up-rate support services [Peach Bottom & Salem]
- Technical Specification upgrade services
- Work and outage Control evaluation and support services
- Engineering management and department - Mentor
- Nuclear Criticality Program Upgrade - Project Manager
- Initial setup support for South Korean nuclear safety regulations
- Containment recirculation of ECCS spillage for Salem
- Various Management and business reviews [mixed waste lab, Com. Ed, etc.]
- Plant and Facility operations assessments [Watts Bar, Portsmouth, & Paducah]
- Design/Safety Basis Computerization for 10 plants [Project Manager - \$44 million & 100 personnel]
- Review of Spent Fuel Pool Cooling system requirements and capabilities
- Configuration Management

**Recent DOE-related work has included:**

- Implementation of a new Issues Management process (procedure, software, training, and protocol)
- Multiple causal analyses including USQ process, procedure adherence, corrective action process, & employee retaliation
- Integrated Work Management multi-discipline, multi-organizational review
- Creation of a systematic approach to training process
- Participant in the creation & certification of a NQA-1 QA Program
- Standards/Requirements Identification Documentation - Hanford Tank Farm
- Project Information Office - integration of all ORP directing requirements
- FSAR - S/RID crosswalk - Hanford Tank Farm
- Change Control process evaluation and support - Hanford Tank Farm
- Independent assessment of Cost Estimating Group & Support
- Management Assessment of the Configuration Management process
- Tank Farm USQ Procedure review
- Portsmouth & Paducah USQ procedure preparation
- USQ process assessment and annual submittal reviews - Hanford Tank Farm
- USQ process revamp, streamline, & Applicability Assessment removal - Hanford Tank Farm
- FSAR annual submittal reviews
- Documented Safety Analysis (DSA) [formally known as a FSAR] technical review
- Technical Safety Requirement review
- FSAR commitment management & review
- Technical reviews of isokenetic sampling, two-valve protection, & other issues
- WTP Engineering process assessment

Mr. Shepard is author/coauthor of four published Westinghouse technical reports, twelve magazine articles, a number of program plans, and project final reports.

**EDUCATION**

- University of Florida, B.S., Nuclear Engineering Sciences
- University of Pittsburgh, MSIE, Course Work, Engineering Management
- Westinghouse Electric Corp., Various Management Courses
- Advanced Naval Nuclear Power School, (Officer course work)