Last Updated: 26 July 2013

Joseph J Maletz

Professional Qualifications

Mr. Maletz more than 42 years of experience in providing engineering services for power plants, manufacturing, biotechnical, and industrial facilities. As a Consultant, Engineering Specialist, and Senior Lead instrumentation and controls Engineer, configuration management, and procurement expert, he designs and implements modifications to new and operating plants and facilities. Mr. Maletz has designed and developed systems and software for nuclear, fossil, biotechnical, industrial, and manufacturing clients and can contribute both detailed engineering and project management support. Mr. Maletz's instrument, control, and computer skills are transportable to most all industries.

Mr. Maletz is an instrument and controls expert in nuclear power plants, provided engineering services to upgrade operating nuclear power plants around USA for power uprates and other life extension and enhancement upgrades. The work included preparing engineering and licensing reports.

Mr. Maletz is assigned as the Senior Lead I&C Engineer for the China AP1000 projects to design and build 2 AP1000 Units at Sanmen and 2 AP1000 Units at Haiyang.

Mr. Maletz designed and engineered a new condensate polisher systems and building for a power plant. The design included programmable logic control (PLC) and monitoring for all systems. Mr. Maletz was innovative in implementing the project as mostly electronic and paperless. The reduction in paper and electronic creation of drawings and documents allowed speed and convenience for review, communications, and design within Stone & Webster and between the client and vendors.

Mr. Maletz has performed engineering reviews and owner oversight tasks for Integrated Vehicle Highway Systems for the Big Dig and Tunnel Projects in Boston.

Mr. Maletz successfully developed configuration and maintenance management programs at former Soviet Russian power plants in Ukraine and Lithuania.

Mr. Maletz successfully designed and engineered new Coolant Recycle Systems for the manufacturing of jet engines. Mr. Maletz designed and engineered Wastewater Treatment Systems at industrial plants.

Mr. Maletz, as a world expert, provided services to determine optimum methods to detect leaks from main steam lines of power plants for "leak before break" design requirements.

Mr. Maletz successfully provided services to develop total remaining value of a power plant destroyed by fire for an insurance company.

Mr. Maletz successfully provided services to utilities to develop descriptions and cost of older power plants for the purpose of selling them as a result of the electric industry deregulation.

Mr. Maletz has provided hardware and software support functions for all PC based computers in corporate headquarters. He has provided Help-Desk functions to answer and solve PC software and hardware problems. He currently is a consultant to the computer department for answering computer-related hardware, software, and application questions for all products currently in use in corporate headquarters.

Mr. Maletz has provided due diligence reviews for clients intending to purchase a share in a co-generation plant.

Mr. Maletz has provided engineering reviews for an insurance company to determine the cash value of a co-generation power plant partially destroyed in a fire.

Mr. Maletz has performed engineering and design tasks for low NOx modifications to fossil powered plants.

Mr. Maletz designed and engineered the balance of plant control and interface systems for a new pressurized water reactor standard plant design that is now approved by the NRC.

He has designed and engineered new and retrofit systems for existing nuclear power plants, including redesigning technical support centers to satisfy NRC requirements. Mr. Maletz has also designed and engineered Inadequate Core Cooling Monitoring Systems (ICCMS) for pressurized water reactors, anticipated transient without scram (ATWS) systems, and control room design reviews.

Mr. Maletz has provided demolition, decommissioning, and engineering services for a test reactor facility. He has developed detailed specifications, drawings, and construction strategies.

Mr. Maletz has provided procurement engineering management services, including developing engineering database programs for dedicated commercial-grade existing plant equipment and future purchases. In addition, he can develop software, which is provided to clients for their continuing use, to input and implement such programs.

Mr. Maletz has performed a wide variety of design and engineering tasks for utility clients. He has developed test programs for molded case circuit breakers and has designed technical support centers incorporating computer-based control rooms and consoles; data acquisition multiplexed systems providing NUREG-0696 emergency response facilities outputs; and ICCMS for nuclear power plant units. Mr. Maletz has performed human factor reviews and directed related human factor implementation programs, and he has prepared elementary diagrams, one-line diagrams, panel drawings, and bills of materials.

Mr. Maletz has performed configuration management tasks at nuclear power plants. Mr. Maletz has developed Design Basis Documents (DBDs), Topical Design Criteria (TDC), and computerization of plant configuration data. Mr. Maletz was responsible for gathering and documenting plant configuration data to input into new plant Emergency Response System (ERF) computers.

Mr. Maletz has provided design, startup, testing, and de-bugging for a biotechnical pharmaceutical facility.

Mr. Maletz provided project design, engineering, procurement, and installation for the Condensate Polisher Systems at a power plant. He developed control panel and equipment skid requirements to ensure successful design, construction, and implementation of the systems. He successfully diagnosed and "debugged" various control panel and skid design problems and inadequacies, conflicts with station and specification requirements, and drawing errors during the design stage, prior to manufacturing, saving costly construction modifications and schedule delays.

Mr. Maletz has provided extensive engineering and design services for modifications to many nuclear power plants including field changes and change requests. He has prepared many types of specifications and procurement support including technical bid evaluations and supplier documentation reviews. Mr. Maletz has performed FSAR reviews, design input reviews, Q-List changes, new and revised bill of materials and data sheets, and technical manual reviews. Mr. Maletz has provided many environmental qualification tasks including seismic design input, test, and evaluations of I&C equipment.

Education

Bachelor of Engineering, Electrical Engineering, University of Massachusetts, Amherst, Massachusetts, 1971

Additional Training/Continuing Education

Hazwoper 8-hr Certification, Boston, 2006

National Red Cross First Aid/BPP, Boston, 2003

Foxboro I/A Series Systems- Introduction to Configuration, Foxboro Company, 2001

Career Development Program, Stone & Webster Engineering Corporation, Stone & Webster, 1973

Registrations/Certifications/Licenses

Professional Engineer, Electrical, 1986, E-24391, Active, Wisconsin, 07/2050

Security Clearance

Unescorted Access, US Nuclear Regulatory Commission, 2002, Inactive, 06/2003

Experience and Background

07/2012 – PRESENT

Principal Consultant, Joe Maletz Consultants, Marblehead, Massachusetts

Principal Consultant for a wide variety of projects/clients/industries.

Forward and out of the box thinker and solves problems quickly. Adapts to any situation and finds solutions to complex issues. Can understand and coordinate very large and complex processes.

- Likes Think Tank environments where insolvable problems are broken down to solvable elements with ultimate success in resolving issues.
- Expert I&C Engineer for Power with ability to interface entire systems together for control, alarm, and monitoring for Nuclear and Industrial applications.
- Knows both analog and digital I&C designs and has extensive experience in mechanical and electrical systems and equipment
- Ability to analyze and suggest overall plant/system/component improvements for efficiency and operational improvements

06/2006 – 07/25/2013

Senior Lead I&C Engineer, Stone & Webster, Control Systems, Stoughton/Canton, Massachusetts

China AP1000

Provided negotiation support to win the China AP1000 projects.

Lead I&C Engineer for all aspects of the China AP1000 projects. Primary I&C contact/liaison with design partner Westinghouse. Prepared ESSOW to SNERDI for On-Shore Engineering work. Developed AP1000 project standards and guidelines for executing work. Provided administrative and technical advisor functions for all IT aspects of China AP1000 project including coordination and linking to Westinghouse.

Lead I&C Engineer for subcontract to SDEPCI for China AP1000 Haiyang CI/BOP work.

05/2002 – 07/25/2013

Engineering Specialist and Principle I&C Engineer, Stone & Webster, Control Systems, Stoughton, Massachusetts

Power Uprate Experience

As Principal I&C Engineer, performed I&C reviews and modifications for core power uprates at plants such as Oconee, Catawba, Seabrook, Ginna, Beaver Valley, Dresden/Quad Cities, Byron/Braidwood, Lungmen (Taiwan), and Indian Point.

Bellefonte Nuclear Power Plant

As Principal I&C Engineer, performed I&C studies and reviews to restart the Bellefonte Nuclear Power Plant, especially for Station Blackout.

Seabrook Nuclear Power Plant

As Principal I&C Engineer, provided project design, engineering, procurement, and installation for the Condensate Polisher Systems for Seabrook Nuclear power plant. The design included programmable logic control (PLC) and monitoring for all systems. Mr. Maletz was innovative in implementing the project as mostly electronic and paperless. The reduction in paper and electronic creation of drawings and documents allowed speed and convenience for review, communications, and design within Stone & Webster and between the client and vendors.

He developed control panel and equipment skid requirements to ensure successful design, construction, and implementation of the systems. He successfully diagnosed and "debugged" various control panel and skid design problems and inadequacies, conflicts with station and specification requirements, and drawing errors during the design stage, prior to manufacturing, saving costly construction modifications and schedule delays.

Perry Nuclear Power Plant

As Principal I&C Engineer, performed studies and provided recommendation to reduce the number of scrams at Perry Nuclear Power Station.

Zaporizhzhya and Ignalina Nuclear Power Plants

As Principal I&C Engineer, successfully developed configuration and maintenance management programs at former Soviet Russian power plants in Ukraine and Lithuania. He designed, specified, procured, and installed new hardware and software for Local Area Networks (LAN) computer equipment, including new enterprise software for the configuration management systems. He supervised and trained plant staff in the Western World method of configuration management. This project was funded by the US Government to improve plant safety.

ABB-CE System 80+ Standard Plant Design Certification

As Principal I&C Engineer, designed and engineered the balance of plant control and interface systems for a new pressurized water reactor standard plant design that is now approved by the NRC.

Nuclear Plant Decommissioning/Demolition

As a Lead Mechanical Engineer, provided demolition, decommissioning, and engineering services for the Watertown Arsenal Test Reactor Facility in Massachusetts. He has developed detailed specifications, drawings, and construction strategies.

Virginia Power- North Anna and Surry Nuclear Power Stations

As Principal I&C Engineer, designed and engineered new and retrofit systems for existing nuclear power plants, including redesigning technical support centers to satisfy NRC requirements. He designed and engineered the Inadequate Core Cooling Monitoring Systems

(ICCMS) for pressurized water reactors, anticipated transient without scram (ATWS) systems, and control room design reviews.

He performed a wide variety of design and engineering tasks for utility clients, including designing technical support centers incorporating computer-based control rooms and consoles; data acquisition multiplexed systems providing NUREG-0696 emergency response facilities outputs; and ICCMS for nuclear power plant units. He performed human factor reviews and directed related human factor implementation programs, and he has prepared elementary diagrams, one-line diagrams, panel drawings, and bills of materials.

He performed configuration management tasks at nuclear power plants. He developed Design Basis Documents (DBDs), Topical Design Criteria (TDC), and computerization of plant configuration data. He was responsible for gathering and documenting plant configuration data to input into new plant Emergency Response System (ERF) computers.

Maine Yankee Nuclear Power Plant

As Principal I&C Engineer, provided procurement engineering management services, including developing engineering database programs for dedicated commercial-grade existing plant equipment and future purchases. In addition, he developed software, which is provided to clients for their continuing use, to input and implement such programs. He developed test programs for molded case circuit breakers.

General Electric Aircraft Engines, Lynn, MA

As Principal I&C Engineer, successfully designed, procured, engineered, and supervised installation of industrial controls at GE Aircraft Engines Plant in Lynn, MA. Included were new Coolant Recycle Systems for the manufacturing of jet engines, improvements to the facilities HVAC, and improvements in wastewater discharge and treatment systems.

Roxboro Power Station

As Principal I&C Engineer, provided engineering and design tasks for low NOx modifications for Carolina Power and Light's fossil powered plant.

Miscellaneous

As Principal I&C Engineer, provided extensive engineering and design services for modifications to many nuclear power plants including field changes and change requests. He has prepared many types of specifications and procurement support including technical bid evaluations and supplier documentation reviews. He performed FSAR reviews, design input reviews, Q-List changes, new and revised bill of materials and data sheets, and technical manual reviews. He provided many environmental qualification tasks including seismic design input, test, and evaluations of I&C equipment.

As Principal I&C Engineer and world expert, provided services to KOPEC (Korea) to determine optimum methods to detect leaks from main steam lines of power plants for "leak before break" design requirements.

As Principal I&C Engineer, successfully provided services to an insurance company to develop total remaining value of a power plant in a lumber manufacturer destroyed by fire.

As Principal I&C Engineer, successfully provided due diligence services to Florida Power and Light and Southern California Edison to develop descriptions and values for the sale of older fossil power plants as a result of the deregulation of the electric power industry.

As Principal I&C Engineer, provided hardware and software support functions for all PC based computers in corporate headquarters. He has provided Help-Desk functions to answer and solve PC software and hardware problems. He currently is a consultant to the computer department for

answering computer related hardware, software, and application questions for all products currently in use in corporate headquarters.

As Principal I&C Engineer, performed engineering reviews and owner oversight tasks for Integrated Vehicle Highway Systems for the Boston Big Dig Project.

As Principal I&C Engineer, has provided design, startup, testing, and de-bugging for Biopure, a biotechnical pharmaceutical facility.

The following is a summary of key projects:

Principal Consultant for Joe Maletz Consultants, Marblehead, MA, 07/12/2012- PRESENT

Senior Lead I&C, China AP1000, Canton/Stoughton, 08/2005 – 07/25/2013

Prepare bid package for 4 AP1000 new nuclear plants in China with consortium of Westinghouse and Stone & Webster/Shaw/CB&I

Performed all activities to complete the AP1000 design for four AP1000 Nuclear Power Plants in China.

Accomplishments: Completed the Engineering and Design for Construction of four AP1000 Nuclear Power Plants in China for Sanmen and Haiyang Sites.

Accomplishments: Issued detailed bids, answered detailed questions from Chinese, collaborated with Westinghouse on design and development of AP1000 design

Lead I&C, Fire Pump Controller/Transfer Switch Replacement, Beaver Valley, Stoughton, 03/2005 – 07/25/2013

Prepared detailed mod package to replace the Fire Pump Controller and Transfer Switch with a new design

Accomplishments: Completed Modification Package

Consultant, Indian Point Nuclear Power Station- Unit 2 & 3,IPEC, Stoughton, MA, $1,000,000.00, 01/2003 – 07/25/2013

Principle Instrument and Control Engineer - Evaluated nuclear power plants for power upgrades (2% to 25% increase rated power) for equipment acceptability or modifications, prepared engineering and licensing reports, performed design modification packages.

Accomplishments: Completed uprate and installed replacement Fluke data logger and installed new Megawatt digital meter

Consultant, Oconee Nuclear Power Plant- Unit s 1, 2 and 3, , Duke Power, Stoughton, MA, $1,000,000.00, 01/2003 – 07/25/2013

Principle Instrument and Control Engineer - Evaluated nuclear power plants for power upgrades (2% to 10% increase rated power) for equipment acceptability or modifications, prepared engineering and licensing reports, performed design modification packages

Accomplishments: Completed Power Uprate.

Consultant, Catawba Nuclear Power Station- Units 1 and 2, , Duke Power, Stoughton., MA, $1,000,000.00, 01/2003 – 07/25/2013

Principle Instrument and Control Engineer - Evaluated nuclear power plants for power upgrades (2% to 10% increase rated power) for equipment acceptability or modifications, prepared engineering and licensing reports, performed design modification packages

Accomplishments: Complete Power Uprate.

Consultant, Seabrook Nuclear Station, , Florida Power and Light FPLE, Stoughton, MA, $1,000,000.00, 01/2000 - 01/2004

Principle Instrument and Control Engineer - Evaluated nuclear power plants for power upgrades (2% to 25% increase rated power) for equipment acceptability or modifications, prepared engineering and licensing reports, performed design modification packages.

Accomplishments: Completed power uprate.

Consultant, Byron and Braidwood, Dresden and Quad Cities Nuclear Stations, , Exelon, Stoughton, MA, $1,000,000.00, 01/2000 - 01/2004

Principle Instrument and Control Engineer - Evaluated nuclear power plants for power upgrades (2% to 25% increase rated power) for equipment acceptability or modifications, prepared engineering and licensing reports, performed design modification packages.

Accomplishments: Completed power uprate

Consultant, Beaver Valley Nuclear Station - Unit 2, , FENOC, Stoughton, MA, $1,000,000.00, 01/2000 - 01/2004

Principle Instrument and Control Engineer - Evaluated nuclear power plants for power upgrades (2% to 25% increase rated power) for equipment acceptability or modifications, prepared engineering and licensing reports, performed design modification packages.

Accomplishments: Completed Uprate and installed new Feedwater Isolation Valve

Consultant, Seabrook Condensate Polisher Project, FPLE, Stoughton, MA, 02/1994 - 01/2004

Project Engineer and Principal Instrumentation & Control Engineer- Responsible for all the instrument and controls, electrical equipment, and interfaced with the prime vendor (US Filter). Engineered the smart motor control centers (MCCs) and the programmable logic controller (PLC) system for all equipment. Developed a completely automatic neutralization system for discharge of waste from the plant within regulated limits. The Seabrook Project was within budget and schedule, in part, due to the excellent communication between client, vendor, and Stone & Webster.

Project Engineer and Principal Instrumentation &Control Engineer- Developed and established the administration of the project entirely as paperless with all documents and products being prepared in an electronic format. This proved time saving and allowed global access to project documents by all project personnel via personal computers (PCs) on the electronic network. The electronic project format has also been extremely valuable in providing communication, transferring of files, and review between vendor, client, and Stone & Webster that are all located in different cities. It also reduced some travel needs. This became the model project for all future Stone & Webster projects.

Accomplishments: Completed project

Consultant, Seabrook Nuclear Power Station, , FPLE, Stoughton, MA and site, $500,000.00, 01/1994 - 11/2003

Principle Instrument and Control Engineer. Designed and engineered a new condensate polisher system (CPS) and building for a power plant. The design included programmable logic control (PLC) and distributed control systems (DCS) to provide control and monitoring for all systems.

Accomplishments: Complete CPS system.

Consultant, Surry and North Anna Nuclear Power Stations (Units 1 & 2), , Virginia Power, Boston, MA, $500,000.00, 04/1998 - 01/2000

Principal Instrumentation & Control Engineer- Prepared and reviewed Design Basis Documents (DBDs) and Topical Design Criteria (TDC) Documents as part of a configuration management program.

Accomplishments: Completed DBDs

Consultant, Zaporizhzhya Nuclear Power Plant, Battelle Pacific Northwest Laboratory, Ukraine, 09/1996 - 01/2000

Principal Instrumentation & Control Engineer- Engineered and designed new configuration management and maintenance management systems. Provided engineering and design recommendations for improvements to the plants computer Novell network and related network hardware and software.

Accomplishments: Completed Upgrade.

Consultant, General Electric Aircraft Engines, General Electric, Lynn, MA and Stoughton, MA, 09/1996 - 01/2000

Principal Instrumentation & Control Engineer- Engineered and designed new and updated systems for the cleaning and processing of machine tool coolants and waste water systems. Provided continuing support for the maintenance and programming of the PLCs at that facility.

Accomplishments: Completed Upgrade.

Consultant, Ignalina Nuclear Power Plant, Battelle Pacific Northwest Laboratory, Stoughton, MA, 09/1995 - 01/2000

Principal Instrumentation & Control Engineer- Engineered and designed new configuration management and maintenance management systems. Provides engineering and design recommendations for improvements to the plants computer Novell network and related network hardware and software.

Accomplishments: Completed Upgrade

Consultant, Korean Power Engineering Company, Korean Power Engineering Company, Stoughton, 09/1996 - 03/1999

Principal Instrumentation & Control Engineer- As world expert, provided services to determine optimum methods to detect leaks from main steam lines of power plants for “leak before break” design requirements.

Accomplishments: Completed Study

Consultant, Roxboro Power Station, Unit 2, Carolina Power and Light Company, Stoughton, MA, 01/1996 - 03/1998

Principal Instrumentation & Control Engineer- Performed engineering and design tasks to add low NOx equipment and modifications for a coal burning power plant. Included were changes to the igniters, damper, and tilt drives, and flame scanners. Provided changes and additions to the distributed control system (DCS) including the replacement of electromechanical relays with programmable controllers.

Accomplishments: Completed Upgrade

Consultant, Bellefonte Nuclear Plant, TVA, Bellefonte Nuclear Plant, 04/1997 - 07/1997

Assessed the program for construction completion and turnover for the Plant Manager. Provided analysis and recommendations for organizational and technical program improvement. Also provided Station Blackout options.

Accomplishments: Completed Station Blackout analysis and report for Bellefonte restart.

Consultant, Third Harbor Tunnel Project (IPCS), Massachusetts Highway Department, Stoughton, MA, 12/1995 - 01/1997

Principal Instrumentation & Control Engineer- Performed engineering reviews for the design and engineering of the Integrated Project Control System (IPCS) used to monitor and control all traffic, lighting, ventilation, and emergency response components of the Third Harbor Tunnel operation. Monitored the IPCS contractors to verify that equipment and systems are installed in accordance with specification, codes, and verified proper operation.

Accomplishments: Completed Reviews

Consultant, Auburndale Cogeneration Project, Norgen Power (No. 1) Limited (Norweb, Boston, MA, 11/1995 - 02/1996

Principal Instrumentation & Control Engineer- Performed engineering reviews of an existing Cogeneration plant as part of a due diligence effort in support of Norgen's acquisition of a 50% interest in the Auburndale Power Partners Cogeneration Facility. Reviews included all electrical and instrumentation/ controls equipment at the facility.

Accomplishments: Completed due diligence

Consultant, Stone & Webster Corporate Support for Personal Computers, Stone and Webster Computer Department, Boston, MA, 01/1995 - 12/1995

Principal Instrumentation & Control Engineer- Performed corporate support for all personal computers in headquarters. Answered and resolved Help-Desk trouble calls for hardware, software, and application related questions. Provided suggestions and assistance for optimizing and applying many business and engineering computer applications. Provided Beta testing functions for new software and operating systems. Developed corporate standards and methods to use them to optimize corporate productivity.

Accomplishments: Managed and repaired all PCs in building

Consultant, Stimpson Lumber Company, Factory Mutual Engineering (FME), Stoughton, 02/1995 - 05/1995

Principal Instrumentation & Control Engineer- Performed an engineering assessment, for the insurance company, to determine the actual cash value of the major electrical and instrument/control systems. The facility's powerhouse was involved in a fire. There was extensive fire and water damage and contamination due to the release of PCB's from a transformer involved in the fire.

Accomplishments: Completed report

Consultant, Special Projects, Surry and North Anna, Units 1 and 2, Boston, MA, 02/1994 - 12/1994

Principal Instrumentation & Control Engineer- Performed reviews of Design Basis Documents (DBDs) and developed the electrical and control systems inputs for the DBDs.

Accomplishments: Completed DBDs

Consultant, ABB-CE System 80+ Standard Plant Design Certification, Stone and Webster, Boston, MA, 09/1992 - 02/1994

Principal Instrumentation & Control Engineer- Performed reviews, modifications, and developed balance-of-plant designs for the Combustion Engineering Standard Safety Analysis Report - Design Certification (CESSAR-DC) which has received Final Design Approved (FDA) by the NRC for the System 80+ standard plant design.

Accomplishments: Stone and Webster was first to get CESSAR approval.

Consultant, Biopure Biotechnical Project, Biopure Biotechnical Company, Cambridge, MA, 10/1991 - 08/1992

Principal Instrumentation & Control Engineer- Directed and performed startup testing activities and modified programmable logic control (PLC) systems and distributed control systems (DCS) for a biotech manufacturing company. He performed this work as part of an effort to obtain Food and Drug Administration (FDA) approval to produce human hemoglobin from bovine oxen. Mr. Maletz also controlled second-shift facility operations.

Accomplishments: Completed first blood runs to convert Bovine to Human hemoglobin.

Consultant, Watertown Arsenal Test Reactor, U.S. Army Corp of Engineers, Boston, MA, 10/1991 - 03/1992

Lead Mechanical Engineer- Provided engineering services to demolish and decommission the entire reactor building, including the open pool type test reactor, structure, and its system components, and parts of yard and auxiliary building structures and components. Provided technical reviews of the decommissioning plan; performed walkdowns to characterize contamination and developed sequencing and technique strategies; developed detailed demolishing and decommissioning drawings. Provided mechanical evaluations. Provided input to cost estimates. Developed contractor specifications for all demolition and decommissioning activities including radiation protection and monitoring equipment and requirements; and ALARA evaluations of alternate schemes.

Accomplishments: Completed D&D.

Consultant, Maine Yankee Nulcear Power Station, Maine Yankee Atomic Power Company, Boston, MA, 09/1990 - 10/1991

Task Engineer- Developed an engineering database and software program for evaluation and procurement of commercial-grade components and parts. Used dBASE III Plus and Clipper applications to develop new software to be used as a tool to input and implement the program. This software has been provided as a deliverable to the client for their continuing use.

Provided procurement engineering related to dedicated commercial-grade existing plant equipment and future purchases

Developed a test program for molded case circuit breakers (MCCBs) including developing a stand-alone software package to print specific test data sheets for the MCCBs

Accomplishments: Completed project

Consultant, Surry and North Anna Nuclear Power Plants, Units 1 and Design and Construction Services, Virginia Power, Boston, MA, 01/1992 - 09/1990

Principal Electrical Control Engineer- Provided design and construction engineering on new and retrofit systems and equipment. Over the course of nearly nine years of service, provided the following services:

- Designed and engineered equipment to satisfy NUREG-0696 for both of the dual-unit nuclear power stations. Designs included new technical support centers accommodating high-technology computer/CRT-based control rooms. Redesigned the main control room consoles and boards to integrate the new communications, control, indication, and CRT display equipment
- Designed and engineered class 1E data acquisition multiplexed systems for the four nuclear units. The systems received approximately 1200 inputs per unit and provided outputs to the NUREG-0696 Emergency Response Facilities computer and main control board plasma displays
- Designed and engineered an Inadequate Core Cooling Monitoring System (ICCMS) for each of the four PWR units. Work on the ICCMS included upgrading the incore thermocouple system to a safety-related top-of-reactor-mounted system for two units, and a safety-related bottom-of-reactor integrated incore thermocouple and movable flux detector system for two other units. Integrated the reactor vessel level instrumentation system (RVLIS) and the subcooling monitoring systems (SMS margin-to-saturation monitor) into each of the ICCMS
- Designed and engineered of the control room design reviews and implementation

Accomplishments: Completed projects

Consultant, Millstone Nuclear Power Station- Unit 3, Northeast Utilities, Boston, MA, 03/1974 - 01/1982

Principal Electrical and Control Engineer- Supervised and prepared elementary diagrams, one line diagrams, three line diagrams, panel drawings, and equipment lists. Engineered the main control board and the annunciator systems and wrote and administered specifications. Supervised other personnel who performed these activities. Directed the scheduling, review, and approval of control logic, elementary, and vendor diagrams. Mr. Maletz provided project interface and consulting services for the condensate polisher and makeup demineralizer systems.

Accomplishments: Completed project

Consultant, North Anna Nuclear Power Station, Units 3 and 4, Virginia Power, Boston, MA, 02/1973 - 03/1974

Engineer- Prepared elementary diagrams, one line diagrams, panel drawings, and bills of material for the annunciator system. Directed the review and approval process for control logic and elementary diagrams and vendor drawings.

Accomplishments: Completed Project

Consultant, James A. Fitzpatrick Nuclear Power Station, New York Power Authority, Oswego, NY, 01/1971 - 01/1973

Engineer- Provided technical support and oversight for the erection, startup, and debugging of the process computer and all its inputs. Participated in the erection of the 345 kV switchyard and technically oversaw the erection and troubleshooting of all equipment in the control and relay rooms. Supported the installation of all multiple pin connections.

Accomplishments: Completed project

Professional Affiliations

Institute of Electrical & Electronic Engineers, Member, 1971

Publications/Presentations

Maletz, J.J., Cost Effective Nuclear Commercial Grade Dedication, TP 91-7. Paper presented at the American Power Conference, Chicago, Illinois, 1991

Maletz, J.J. and Knell, K.C, Custom-Engineered ATWS Mitigation System, TP 88-117. Paper presented at the Plant Services Seminar, Boston, Massachusetts, 1988

Maletz, J.J, Research Reactor I&C/Electrical Systems Availability Improvements, TP 87-98. Paper published for the ANS Winter Meeting, Los Angeles, California, 1987

Maletz, J.J. and Saunders, W. (Virginia Power, Considerations for Installing Equipment to Detect Inadequate Core Cooling, TP 87-100. Paper published for the ANS Winter Meeting, Los Angeles, California, 1987

Contact Information

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Industry Experience

Environmental

Manufacturing

Nuclear

Pharmaceutical

Power Generation

Utilities

Wastewater Treatment

International Experience

South Korea, Korean Power Engineering Company, KOPEC- Main Steam Line Leak Before Break, 09/2000 - 09/2004

Russia, Battelle Pacific Northwest Laboratory, Leningrad Nuclear Power Plant, 09/2000 - 09/2002

Lithuania, Battelle Pacific Northwest Laboratory, Ignalina Nuclear Power Plant, 09/1995 - 09/2000

Ukraine, Battelle Pacific Northwest Laboratory, Zaporizhzhya Nuclear Power Plant, 09/1996 - 09/2000