

Advanced Nuclear Technology

Available Research – January 2012

Design

- Design Reliability Assurance Program Implementation Guidance (1023008) 12/18/2011
- BWRVIA Modeling of Advanced Boiling Water Reactor (1023003) 12/16/2011
- Combinatorial Testing for Digital I&C Systems (1023010) 11/29/11
- Technical Guidance for Achieving Higher Levels of Electromagnetic Compatibility for Advanced Nuclear Power Plants (1021092) 12/22/2010
- Equipment Reliability for New Nuclear Plant Projects: Industry Recommendations – Design (1019214) 8/26/2010
- Valve Regulated Lead Acid (VRLA) Battery Qualification Assessment (1019216) 11/6/2009
- Utility Requirements Document Revision 10 (1018397) 12/22/2008 (<http://urd.epri.com>)
- Economic Simplified Boiling Water Reactor (ESBWR) Risk Priority Evaluation (1016333) 3/24/2008
- Security Technology Evaluation for New Nuclear Power Plants (1015112) 10/22/2007
- GE Economic Simplified Boiling Water Reactor (ESBWR)-Radwaste System Design (1013503) 11/21/2006
- Utility Requirements Document – Assessment of AP1000 Conformance (1007741) 2/10/2003
- AIMS Architectural System Description and Implementation Plan (1003176) 11/7/2001

Planning

- Integrated Generation Technology Options (1019539) 11/25/2009
- New Plant Deployment Program Model (NPDP) (1015113) 3/24/2008
- Assessment of Various Nuclear Power Generation Technologies (1015207) 6/20/2007
- Staff Optimization Scoping Study for New Nuclear Power Plants (1011717) 8/24/2005
- Combined Operating License Model Program Plan (1002997) 11/17/2003
- Early Site Permit Model Program Plan (1002996) 6/12/2002
- Site Selection and Evaluation Criteria for an Early Site Permit Application (1006878) 3/21/2002

Materials

- Environmentally Assisted Fatigue Gap Analysis and Roadmap for Future Research: Gap Analysis (1023012) 12/23/2011
- Evaluation of Design Options for Buried Piping Containing Radioactive Materials (1023009) 12/1/2011
- EPRI Materials Management Matrix Project: KHNP Advanced Pressurized Water Reactor (APR1400) Materials Management Tables (1024568) 12/1/2011
- EPRI Materials Management Matrix Project Gap and Opportunity Assessment: Revision 0. (1024567) 11/29/11
- Fire Testing of High-Density Polyethylene Pipe (1023004) 8/23/2011
- EPRI Materials Management Matrix Project: U.S. – Advanced Pressurized Water Reactor Materials Management Tables (1022683) 6/17/2011
- Evaluation of Design Methods for Above Ground High Density Polyethylene Pipe (1021094) 12/22/2010
- AREVA U.S. EPR Materials Management Tables – Revision 0 (1021089) 10/26/2010
- Toshiba Advanced Boiling Water Reactor Materials Management Table Report, Revision 0 (1020488) 2/9/2010
- General Electric – Hitachi Advanced Boiling Water Reactor (ABWR) Materials Management Table Report, Revision 0 (1019210) 12/10/2009
- AP1000 Materials Management Table Report (1016751) 12/22/2008
- Economic Simplified Boiling Water Reactor (ESBWR) Materials Management Table Report (1016334) 4/8/2008

Seismic

- Central and Eastern United States Seismic Source Characterization Project: Workshop 1 Proceedings (1023127) 5/26/2011
- Central and Eastern United States Seismic Source Characterization Project: Workshop 2 Proceedings (1019219) 5/27/2009
- Central and Eastern United States Seismic Source Characterization Project: Workshop 3 Proceedings (1019220) 11/4/2009
- Project Plan: Central and Eastern United States Seismic Source Characterization for Nuclear Facilities (1016756) 6/16/2008
- Effects of Spatial Incoherence on Seismic Ground Motions (1015110) 12/21/2007
- Verification/Validation and Guide for Use of the SASSI Code for Spatial Incoherence (1015111) 11/30/2007
- Seismic Screening of Components Sensitive to High-Frequency Vibratory Motions (1015109) 10/16/2007
- The Effects of High-Frequency Ground Motion on Structures, Components, and Equipment in Nuclear Power Plants (1015108) 6/29/2007
- Effect of Seismic Wave Incoherence on Foundation and Building Response (1013504) 11/15/2006
- Use of Cumulative Absolute Velocity (CAV) in Determining Effects of Small Magnitude Earthquakes on Seismic Hazard Analyses (1014099) 8/16/2006

Fabrication and Procurement

- Methodology for Risk-Informed Procurement for New Plant Deployment: Test Cases (1023007) 12/23/2011
- Cybersecurity Procurement Benchmark (1023502) 8/29/2011
- Alloy 690 Procurement Specification (1023220) 6/22/2011
- Equipment Reliability for New Nuclear Plant Projects – Industry Recommendations for Procurement (1021416) 8/27/2010
- Technical Justification for ASME III Code Change: Reduction of Weld Fabrication Repairs – Fitness for Purpose (1019217) 12/22/2009
- Welding and Fabrication Critical Factors for New Nuclear Power Plants (1019209) 12/8/2009
- Standard Specifications for New Plant Commodity Items (1016755) 12/11/2008
- Component Margins and Monitoring Database (1016537) 4/21/2008

Construction

- ANT Embedded Sensors in Concrete (1023006) 11/30/2011
- NDE Evaluation of Filmless Radiography (1022933) 11/21/2011
- Korea Hydro & Nuclear Power Co., Ltd. Nuclear Power Plants: Construction and Technology Experience (1023495) 9/21/2011
- Elements of Pre-Operational and Operational Configuration Management for a New Nuclear Facility (1022684) 4/18/11
- Embedded Sensors in Concrete—Report 1 (1021093) 12/22/2010
- Modularization of Equipment for New Nuclear Applications – Testing and Preservation (1021178) 5/10/2010
- Modularization of Equipment for New Nuclear Applications – Benchmarking (1019213) 10/27/2009
- Virtual Reality Construction of the AP600 and AP1000 Plants (1009685) 7/19/2004

Start-up

- Advanced Nuclear Technology: Startup Program Guideline – Lessons Learned (1023005) 7/29/11
- Equipment Reliability for New Nuclear Plant Projects: Industry Recommendations for Storage, Construction, and Testing (1021413) 8/26/2010
- New Nuclear Power Plant Information Handover Guide (1019221) 12/22/2009

Operations

- Human Factors Engineering Training Course for Utilities Involved in New Nuclear Power Plant Designs, Construction, and Operation (1023011) 12/23/2011
- An Assessment of PWR Water Chemistry Control in Advanced Light Water Reactors: U.S. APWR (1024502) 1/31/2011
- An Assessment of PWR Water Chemistry Control in Advanced Light Water Reactors: U.S. EPR™ (1024499) 2012
- An Assessment of BWR Water Chemistry Control in Advanced Light Water Reactors: Economic Simplified Boiling Water Reactor (ESBWR) (1023002) 12/12/2011
- Training Modules for Implementation of Digital I&C in New Build Nuclear Plants (1023013) 12/7/2011
- Advanced Nondestructive Evaluation Methods for Testing Ferritic and Duplex Tubing (1022932) 11/4/2011
- Data Conversion, Data Storage, and Records Management Study for NDE (1022942) 9/27/2011
- 1E Battery 80% Service Test (1023622) 9/9/2011
- Elements of Pre-Operational and Operational Configuration Management for a New Nuclear Facility (1022684) 4/18/11
- An Assessment of PWR Water Chemistry Control in Advanced Plants: AP1000™ (1021090) 12/16/2010
- Risk-Informed Pre- and In-Service Inspection Methodology for New Nuclear Deployment (1021096) 12/15/2010
- An Assessment of BWR Water Chemistry Control in Advanced Plants: Advanced Boiling Water Reactor (1021091) 12/9/2010
- Risk-Informed In-Service Inspection for New Build: Test Cases (1019218) 12/22/2009
- Assessment of EPRI Fuel Reliability Guidelines for New Nuclear Plant Designs (1019211) 12/9/2009
- Technical Support for GE Economic Simplified Boiling Water Reactor (ESBWR)-Radwaste System Design (1013503) 11/21/2006
- Review of Westinghouse AP1000 LLW Management Program (1008016) 11/19/2003

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