

Enclosure 5, Champion Scorecard

Sponsoring Org	Task ID	Research Project	Potential Applications	End User	CHAMPION [Name (SDO)]	Standards Use	Regulatory Use	NRC Rep.
[SAMPLE ENTRY]		Introduction of HDPE pipe in service water systems	Class 3 piping systems	Duke Energy, Ameren	Frank Schaaf (ASME)	ASME III, CC N-755; ASME XI, CC N-808	RG 1.84, RG 1.147	C. Basavaraju; M. Audrain
EPRI	2009-07	Next Generation Attenuation Model for the Central and Eastern US	Seismic analyses				10CFR50	
EPRI	2010-11	Methodology for Risk Informed Strategies			Prasad Kadambi (ANS) TBD (ASME)	ASME/ANS PRA Standard	10CFR50.69	
EPRI	2010-13	Seasonal/Annual Cooling Tower Impacts (SACTI) Model Update	Cooling towers					
EPRI	2012-01	Water Chemistry Guidelines for Advanced Light Water Reactors				EPRI Guidelines		
EPRI	2012-06	High Strength Reinforced Rebar	Reinforced concrete structures		TBD (ASME w/ACI)	ACI 318, ACI 349	RG 1.35.1, RG 1.69, RG 1.136, RG 1.142, RG 1.143, RG 1.199	RES/DE/SGSEB
EPRI	2012-15	New Steam Generator Thermal-Hydraulics Code (Triton)	SGs					
EPRI	2013-*1	Powder Metallurgy and Hot Isostatic Processing Methods	AM		TBD (ASME)	ASTM B834-13 ASME Sec II: A988-11 & A989-11, CC N-834		
EPRI	2013-03	PWSCC Initiation Testing for Alloy 690 Weld Metals	Piping system DM welds, Upper head, Lower Head, Pressurizer		TBD (ASME)	ASME Sec XI CC N-770-1, N-722-1, N-729-1	10 CFR 50.55a(g)(6)(ii)(D), (E), and (F)	NRR/DE
EPRI	2013-07	Residual Stress (RS) Guidelines			TBD (ASME)	ASME Section III		
EPRI	2014-01	Reactor Coolant Radiological Source Terms for Normal Operation	RCS		ANS	ANS 18.1		
EPRI	2014-02	Elimination of Dissimilar Metal Welds (DMWs)	Piping systems		TBD (ASME)			
EPRI	2014-03	ASME Code Acceptance of HDPE	HDPE Piping, Class 3 SR		TBD (ASME)	ASME Sec III Appx XXVI; CC N-755-2		NRR/DE
EPRI	2014-06	Thick Section Component Welding			Tentative: TBD (ASME)			
EPRI	2014-08	Advanced Battery Evaluation for 1E Service Qualification	LTO		IEEE	IEEE 535	RG 1.158, RG 1.206, RG 1.212	RES/DE/ICEEB
EPRI	2015-01	Real Time NDE for Welding Technology for SMR Staff Optimization	Piping systems					
EPRI	2015-02	SMRs	SMRs		IEEE	IEEE	10CFR50 Appx B	
EPRI	2015-03	Environmentally Assisted Fatigue – Long-Term Collaboration and Testing	LTO, Piping systems		TBD (ASME)	ASME III	NUREG-6720, NUREG/CR-6909, RG 1.207	NRR/DLR
EPRI	2015-04	Demonstration of Self-Consolidating Concrete (SCC) and SCC Structural Members	Reinforced concrete structures			ACI 301 (potentially)	RG 1.107	
EPRI	2015-05	Additive Manufacturing of Net Shape Powder Metallurgy Cans for Valves	AM, PM-HIP		TBD (ASME)	ASTM B834-13 ASME Sec II: A988-11 & A989-11, CC N-834		
EPRI	2015-06	Alloy Code Development for Powder Metallurgy	PM-HIP		TBD (ASME)	ASTM B834-13 ASME Sec II: A988-11 & A989-11, CC N-834		
EPRI	2015-07	Pre-filming Steam Generator Tubing Evaluation	SGs			EPRI Specification		
EPRI	2015-08	EPZ Size Evaluation	SMRs		ANS		NUREG-0396	NRO
EPRI	2015-09	Seismic High Frequency Loadings	Seismic analyses for structures and equipment anchoring		IEEE		NUREG-0800	

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EPRI	2015-10	Mass Concrete Modeling & Temperature Control	Reinforced concrete structure of material defined as mass concrete			ACI 301		
EPRI	2015-11	Moisture Tolerant Coatings for Decreasing Open Top Construction Time	Reinforced concrete member requiring coatings					
EPRI	2015-12	PIM Archive and Lessons Learned						
EPRI	2015-13	SMR Aerosol Project					RG 1.183	
EPRI	2016-01	Cyber Security During Construction	Cyber security			NEI-08-09	RG 5.71	
EPRI	2016-02	PM-HIP Manufacturing Demonstration of ALWR and SMR Components	PM-HIP					
EPRI	2016-03	Augmented Reality (AR) Scoping Study for New Plant Applications						
EPRI	2016-06	Advanced Manufacturing Program	AM, PM-HIP		TBD (ASME)	ASME Section II, III, and IX		
		Design standards for High Temperature Gas Reactors	HTGRs		TBD (ASME) Flanagan (ANS / IEEE)	ANS, ASME III	10CFR50 Appx A, RG 1.87, RG 1.84	A. Cabbage
		Design standards for Liquid Metal Reactors (incl SFR)	LMRs		TBD (ASME) Flanagan (ANS / IEEE)	ANS, ASME III	10CFR50 Appx A, RG 1.84	A. Cabbage
		ASME Code Case N-860 Examination Requirements and Acceptance Standards for Spent Nuclear Fuel Storage and Transportation Containment Systems	Spent fuel storage and transportation		TBD (ASME)	ASME XI	RG 1.147	D. Dunn