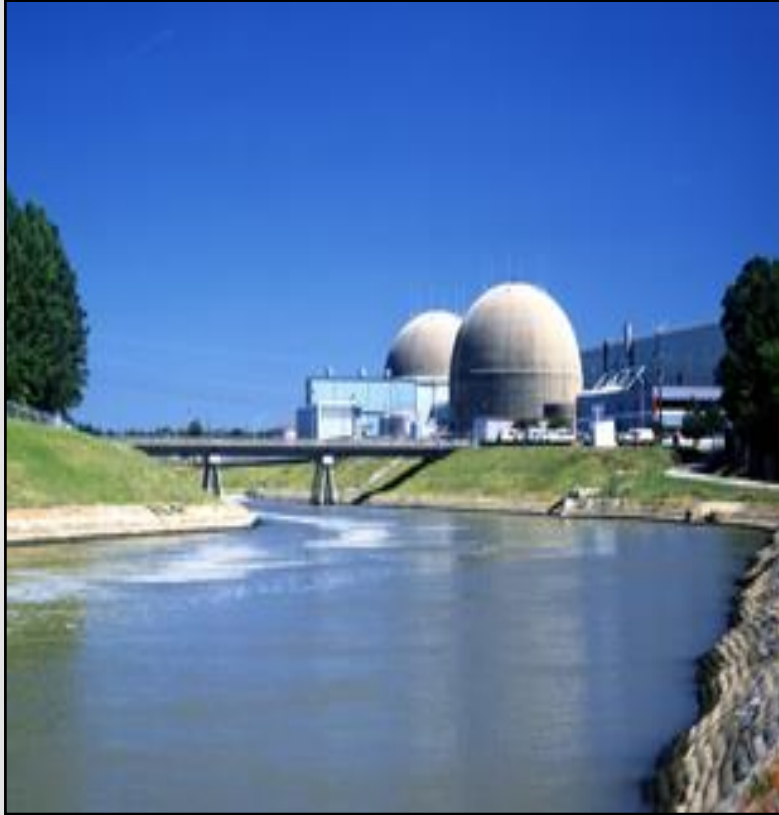


# Subsequent License Renewal Surry Power Station

Paul Aitken  
Engineering Manager-SLR  
April 26, 2017



# Surry Power Station – Lead Plant



- Two Westinghouse 3-loop PWRs
- Net Capacity: Each unit is 838 MW (net) => 1676 MW
- Capital Improvements ~ \$1B since previous LRA

	Orig. (OL)	40 Years	60 Years	80 Years
Unit 1	1972	2012	2032	2052
Unit 2	1973	2013	2033	2053

*Lifetime Generation over 460,000,000 MWhrs*

# Dominion Assessment

## Surry Power Station

- First station in fleet to reach 60 years (2032/2033)
- Makes sense for Dominion, employees, stakeholders and customers
- Political landscape is supportive
- NRC notified of intent to apply for SLR (Nov-15)

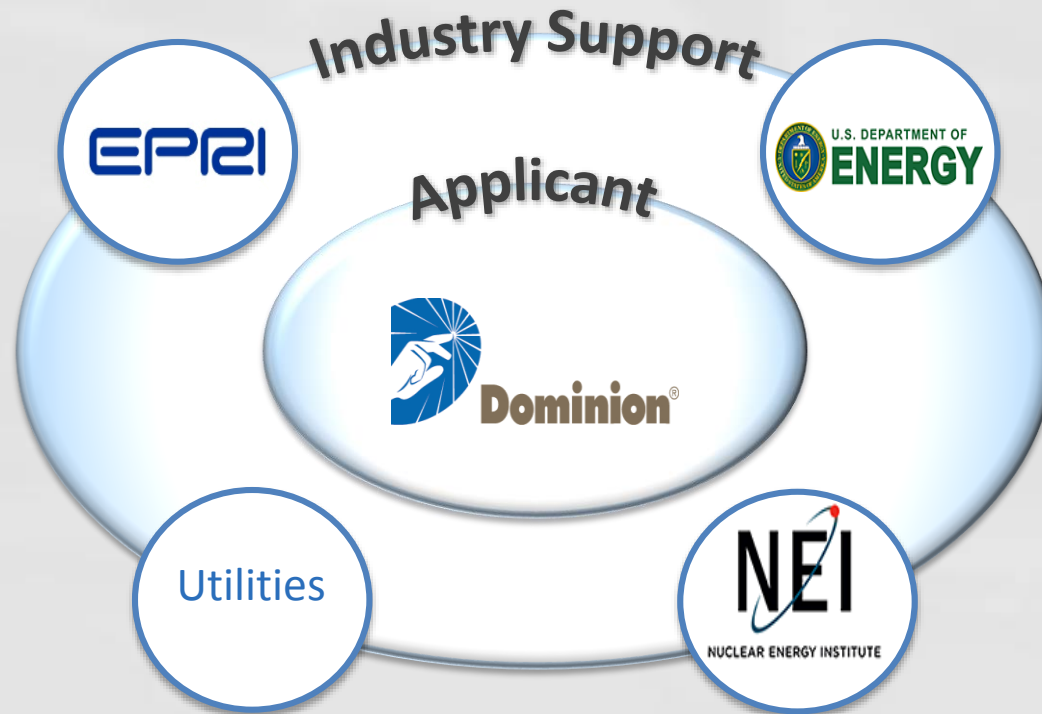
# Dominion Experience

- Highly experienced team involved in previous Dominion and industry LR applications
- Team members engaged in various SLR industry groups
- Extensive experience with the evolution of GALL/SRP (NUREG-1800/1801) for first renewals
- Direct involvement in GALL SLR review and SLR industry guidance development
- Coordinated GALL-SLR issue resolution

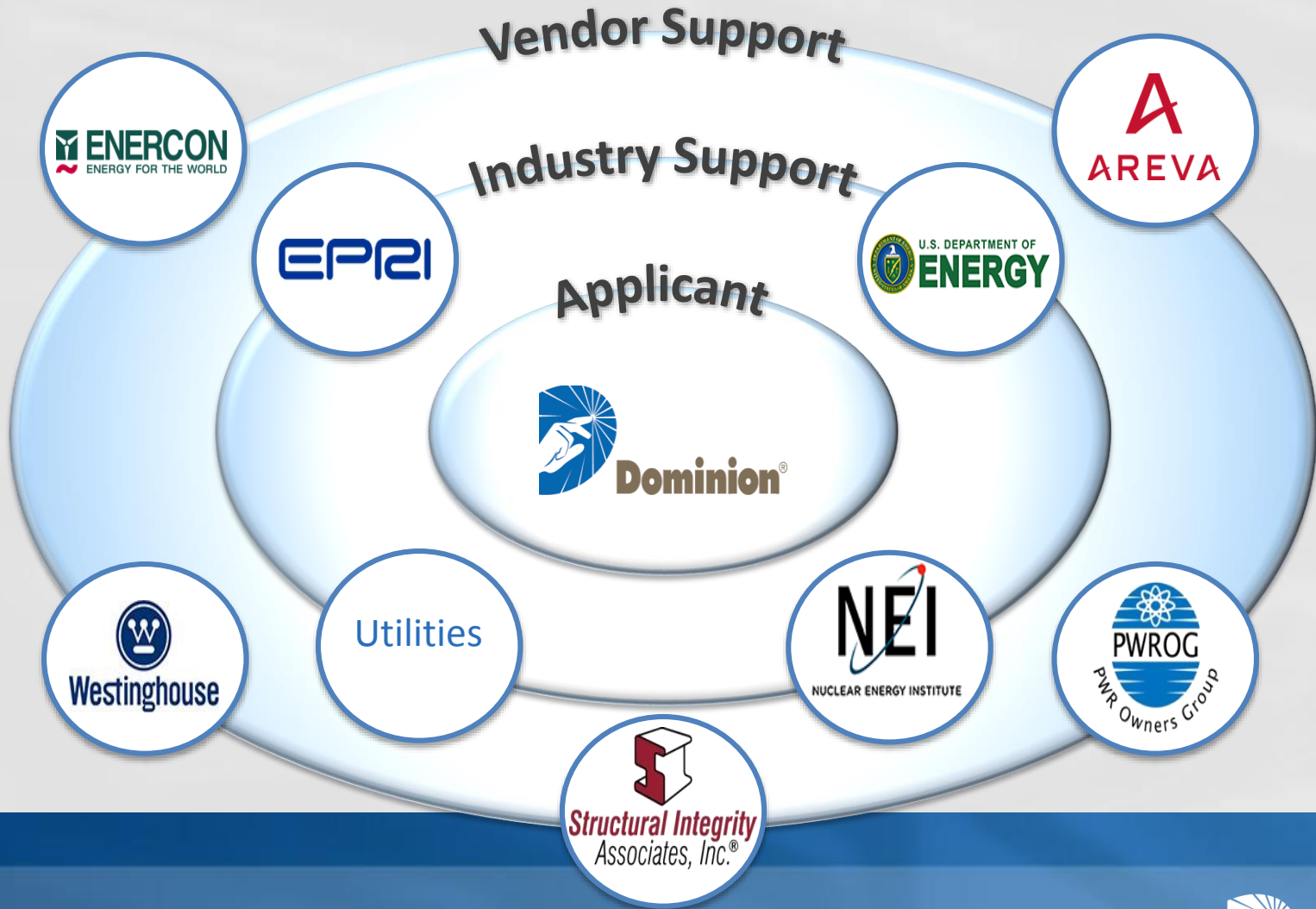
# SLR – Circles of Support



# SLR – Circles of Support



# SLR – Circles of Support



# Dominion SLR Application

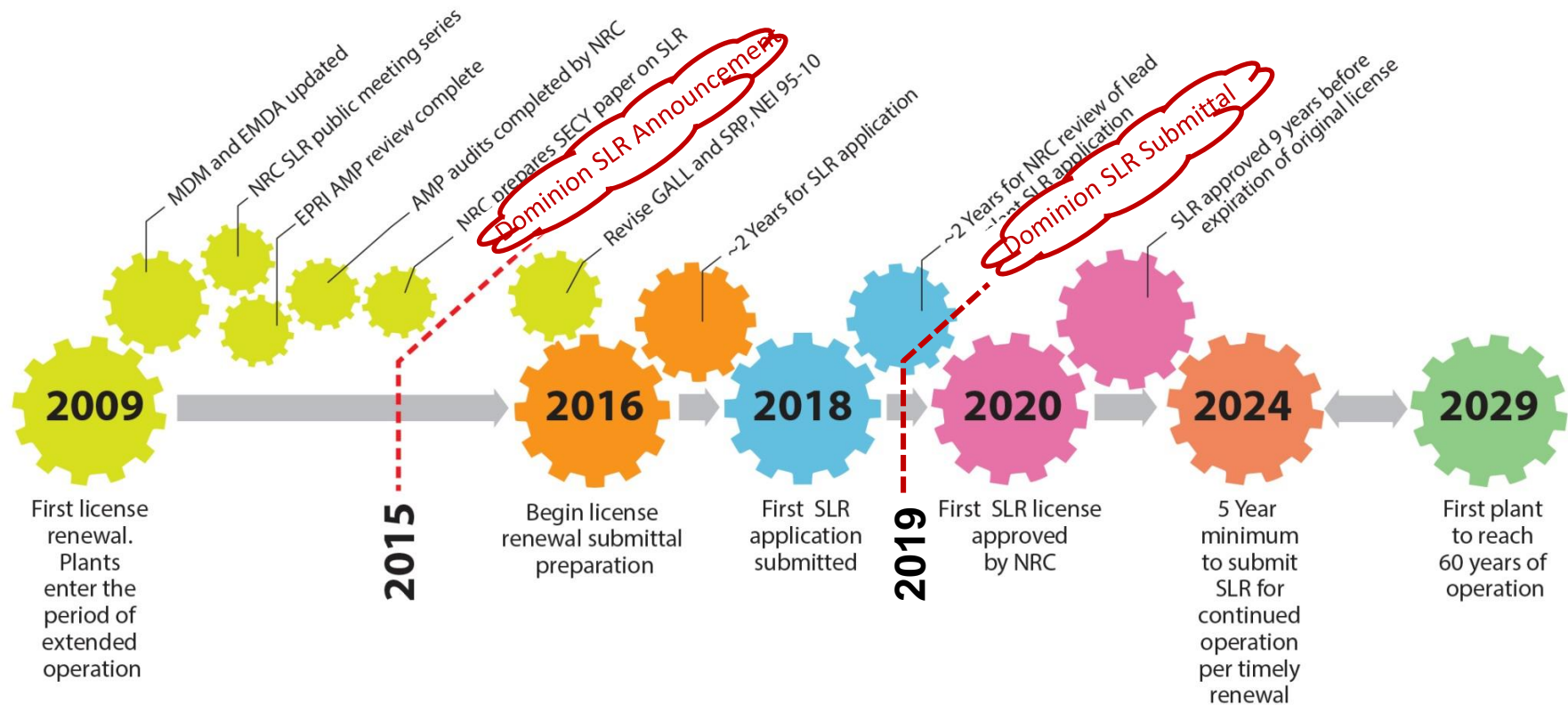
- Will be a continuum from the first industry LR applications
- Will meet the expected standards established with the most recent industry LR applications
- Expected to be high degree of consistency with GALL-SLR
- AMPs will effectively manage the effects of aging to provide reasonable assurance for SLR period
- Quality will support an 18 month NRC review schedule

# Dominion SLR – 47 AMPs

Mechanical		Structural
XI.M1 ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD	XI.M30 Fuel Oil Chemistry	XI.S1 ASME Section XI, Subsection IWE
XI.M2 Water Chemistry	XI.M31 Reactor Vessel Material Surveillance	XI.S2 ASME, Section XI, Subsection IWL
XI.M3 Reactor Head Closure Stud Bolting	XI.M32 One-Time Inspection	XI.S3 ASME Section XI, Subsection IWF
XI.M10 Boric Acid Corrosion	XI.M33 Selective Leaching	XI.S4 10 CFR Part 50, Appendix J
XI.M11b Cracking of Nickel-alloy Components and Loss of Material Due to Boric Acid-induced Corrosion in Reactor Coolant Pressure Boundary Components	XI.M35 ASME Code Class 1 Small-Bore Piping	XI.S5 Masonry Walls
XI.M.12 Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS)	XI.M36 External Surfaces Monitoring of Mechanical Components	XI.S6 Structures Monitoring
XI.M16A PWR Vessel Internals	XI.M37 Flux Thimble Tube Inspection	XI.S7 Inspection of Water-Control Structures Associated with Nuclear Power Plants
XI.M17 Flow-Accelerated Corrosion	XI.M38 Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	XI.S8 Protective Coating Monitoring and Maintenance
XI.M18 Bolting Integrity	XI.M39 Lubricating Oil Analysis	Electrical
XI.M19 Steam Generators	XI.M41 Buried and Underground Piping and Tanks	
XI.M20 Open-Cycle Cooling Water System	XI.M42 Internal Coatings/Linings for in scope Piping, Piping Components, Heat Exchangers, and Tanks	
XI.M21A Closed Treated Water Systems	TLAA	
XI.M23 Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems	X.M1 Fatigue Monitoring	
XI.M24 Compressed Air Monitoring	X.M2 Neutron Fluence Monitoring	
XI.M26 Fire Protection	X.E1 Environmental Qualification of Electric Components	
XI.M27 Fire Water System		XI.E6 Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
XI.M29 Outdoor and Large Atmospheric Metallic Tanks		XI.E7 High Voltage Insulators

# NEI Roadmap –SLR Timeline

## Subsequent License Renewal Timeline



# Summary

- NRC Staff has encouraged stakeholder review and input during GALL SLR/SRP development
- Dominion is engaged and integrated with the development of GALL-SLR and industry guidance
- Dominion team is experienced with LR/SLR and requirements
- Dominion will submit a high quality application to support an 18 month NRC review
- Surry Project Team is on schedule for a 1<sup>st</sup> quarter 2019 submittal