

TENNESSEE VALLEY AUTHORITY (TVA) SEQUOYAH NUCLEAR PLANT LICENSE RENEWAL ENVIRONMENTAL REPORT

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TVA License Renewal

- TVA plans to submit a License Renewal Application for its Sequoyah Nuclear Plant to the Nuclear Regulatory Commission (NRC) in the first quarter of 2013
- TVA performed a National Environmental Policy Act (NEPA) Review for Sequoyah License Renewal and completed a Supplemental Environmental Impact Statement in July 2011
- TVA is currently developing the Environmental Report to be included as Appendix E to the Sequoyah License Renewal Application



Presentation Topics

- Ensure the Sequoyah License Renewal Application adequately addresses both current and proposed draft Generic Environmental Impact Statement (GEIS) issues
- Use TVA's timeline for development and review of the SQN Environmental Report for License Renewal to illustrate lead time recommendation.



Crosswalk - Purpose

- To ensure all content and issues from the current 1996 GEIS as well as the proposed draft GEIS are addressed
- New issues and expanded issues are clearly identified
- Deal with any uncertainty on current versus new requirements



Crosswalk – Example Using Partial

License Renewal Environmental Issues:

Current 1996 GEIS / Proposed 2009 GEIS Crosswalk

(2009 issue expansions in blue font; new 2009 issues shaded yellow)

1996 GEIS Issue	2009 GEIS Issue	1996 Category	2009 Category	Applicabl e to SQN Y/N	Where Considered
Surface Water Quality, Hydrology, and Use					
Impacts of refurbishment on surface water quality	Surface water use and quality (both continuing operations and refurbishment)	1	1	1996: N 2009: Y	ER Section 3.3
Impacts of refurbishment on surface water use		1		1996: N 2009: Y	ER Section 3.3
Altered salinity gradients	Altered salinity gradients	1	1	N	ER Section 4.0 and Table 4.0 - 1
Not specifically identified as a separate category issue - addressed elsewhere.	Effects of dredging on water quality	No category	1	Υ	ER Section 2.2, 2.5, and 3.2



LR Environmental Report Timeline

Today

TVA
Environmental
Report
Development
(~12 months)

TVA and Industry Peer Reviews (~3 months)

Plant Operating
Review Committee
(PORC) and Nuclear
Safety Review
Board (NSRB)
Reviews
(~3 months)



Conclusions & Recommendations

- Proposed changes to the NRC's regulations and regulatory guidance are expected to be manageable, but major changes to the draft could be problematic
- Finalize new requirements as soon as possible to reduce uncertainty
- Sufficient lead time is required to produce an Environmental Report, so the rule should have a reasonable effective date