

ClinchRiverESPHFNPEm Resource

From: Fetter, Allen
Sent: Wednesday, March 01, 2017 12:45 PM
To: Schiele, Raymond Joseph; pshastings (pshastings@tva.gov)
Cc: Stout, Daniel Paul; ClinchRiverESPEmNPEm Resource; Vokoun, Patricia; Dozier, Tamsen
Subject: FW: Draft Alternative Sites info needs
Attachments: 170228-Alts portion of Clinch River Information Needs Table.docx

Good afternoon,

Attached are more draft info needs in support of the May 2017 environmental audit.

Allen H. Fetter, Senior Project Manager
U.S. Nuclear Regulatory Commission
Office of New Reactors
Division of New Reactor Licensing
Licensing Branch 3
Washington, D.C.

301-415-8556 (Office)
301-385-5342 (Mobile)

From: Vokoun, Patricia
Sent: Wednesday, March 01, 2017 11:23 AM
To: Fetter, Allen
Cc: Sutton, Mallecia ; Dozier, Tamsen
Subject: Alternative Sites info needs

Hi

The draft environmental alternative sites info needs are attached for early dissemination to TVA. Please forward the table to TVA.

Please let me know how I can further assist.

Thank you and have a great day,

Patricia Vokoun
301-415-3470
571.212.3554 c

From: Vokoun, Patricia
Sent: Friday, February 17, 2017 6:24 PM
To: Fetter, Allen <Allen.Fetter@nrc.gov>
Cc: Sutton, Mallecia <Mallecia.Sutton@nrc.gov>; Dozier, Tamsen <Tamsen.Dozier@nrc.gov>
Subject: Transportation info needs

Hi, Allen,

The draft environmental transportation info needs are attached for early dissemination to TVA. Please forward the table to TVA.

Please let me know how I can further assist.

Thank you and have a great weekend,

Patricia Vokoun, P.E.
Project Manager
U.S. NRC, Office of New Reactors
Environmental Projects Branch 1
301-415-3470
571.212.3554 c



Hearing Identifier: ClinchRiver_ESP_HF_NonPublic
Email Number: 121

Mail Envelope Properties (Allen.Fetter@nrc.gov20170301124400)

Subject: FW: Draft Alternative Sites info needs
Sent Date: 3/1/2017 12:44:40 PM
Received Date: 3/1/2017 12:44:00 PM
From: Fetter, Allen

Created By: Allen.Fetter@nrc.gov

Recipients:

"Stout, Daniel Paul" <dpstout@tva.gov>
Tracking Status: None
"ClinchRiverESPEnvNPEm Resource" <ClinchRiverESPEnvNPEm.Resource@nrc.gov>
Tracking Status: None
"Vokoun, Patricia" <Patricia.Vokoun@nrc.gov>
Tracking Status: None
"Dozier, Tamsen" <Tamsen.Dozier@nrc.gov>
Tracking Status: None
"Schiele, Raymond Joseph" <rjschiele@tva.gov>
Tracking Status: None
"pshastings (pshastings@tva.gov)" <pshastings@tva.gov>
Tracking Status: None

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Files	Size	Date & Time	
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170228-Alts portion of Clinch River Information Needs Table.docx			51198
image001.jpg	3707		

Options

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CLINCH RIVER EARLY SITE PERMIT
ALTERNATIVE SITES INFORMATION NEEDS

INFO NEEDS #	INFO NEEDED	SME NAME	ER SECTION
ALT-01	Provide a knowledgeable expert on the alternative siting process who can discuss "key criteria" (definitions and application) used to assess candidate areas, potential sites, and candidate sites.	A. Kugler, K. Cort	9.3.1
ALT-02	Table A.5 of the Site Selection Report states that candidate area, Columbus Air Force Base, was "Deferred from further consideration due to inadequate cooling water availability" which is reported to be "LESS THAN 1,300 cfs" in the same table. It would appear in Figure A.6, however, that multiple gaging stations near Columbus Air Force Base have water availability >1,300 cfs. Please provide a knowledgeable expert who can discuss water availability in this region and process that went into eliminating Columbus Air Force Base as a candidate area.	A. Kugler, K. Cort	Site Selectio n Report, pages A-11 and A- 12, ER Section 9.3.1, page E1 A2-7.
ALT-03	Section 5.1 of the TVA Site Selection Report refers to Electric Power Research Institute's (EPRI's) <i>Advanced Nuclear Technology: Site Selection and Evaluation Criteria for New Nuclear Power Generation Facilities (2015)</i> , as the basis for criteria used to evaluate the alternatives. A copy of this guide should be available for review during the site audit.	A. Kugler, K. Cort	TVA Site Selectio n Report, Section 5.1, page 21.
ALT-04	To help facilitate our discussion of the site-selection process and to provide additional perspective related to the selection of candidate sites, please have available a map that identifies the location of Potential Redstone Site 13 (which scored the highest under ecological criteria for Redstone area) in proximity to Redstone Site 12. Likewise, please have available a map that identifies the location of potential Oak Ridge Reservation (ORR) Site 10 (which tied for the highest ecological) relative to ORR candidate sites.	A. Kugler, K. Cort	Figure 9.3-4 and 9.3- 5 of on pages E1 A2- 129 and E1 A2- 130.
ALT-05	Section 2.5.1.5 "Population Density," of the Clinch River ER defines population density in terms of the NUREG-1437 sparseness classifications using a 20-mi radius around the site, or a 1,257 square mile (sq. mi) area. Text from this section of the ER is as follows:	A. Kugler, K. Cort	ER Section 2.5.1.5, ER pop estimat es on E1

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CLINCH RIVER EARLY SITE PERMIT
ALTERNATIVE SITES INFORMATION NEEDS

INFO NEEDS #	INFO NEEDED	SME NAME	ER SECTION
	<p>"A total of 331,238 people live within 20 mi of the CRN Site (Tables 2.5.1-3 and 2.5.1-5). A 20-mi radius area contains 1257 sq. mi; therefore the population density is approximately 264 persons per sq. mi. This population density is classified as a Category 4 sparseness (greater than or equal to 120 persons per sq. mi within 20 mi)."</p> <p>To facilitate a similar comparison of population density around the alternatives sites, please have a similar calculation (i.e., calculation of persons per sq. mi in the 1,257 sq. mi around the site) of population density available for ORR Site 8 (assuming adjacent Site 2 would be similar to the CRR calculations) and Redstone Site 12.</p>		A2-33 and E1 A2-43
ALT-06	<p>Provide a knowledgeable expert able to discuss more detailed characteristics of alternative heat dissipation system alternatives, as described in ESRP 9.4.1 review procedures. Clarify the difference between Natural Draft Cooling Towers and Wet Natural Draft Cooling Towers discussed in ER Sections 9.4.1.2 and 9.4.1.2.2.</p> <p>ESRP 9.4.1 directs the staff's analysis of alternatives to the applicant's proposed heat dissipation system. Factors the staff is directed to consider in an initial screening of alternatives are land use, water use, and legislative or regulatory restrictions. Economic factors are not considered in the staff's initial screening. For alternatives that are not obviously unsuitable for use at the proposed site, and thus not eliminated by the initial screening, the staff considers more detailed characteristics of the alternatives' land use and water use as well as other environmental factors, including atmospheric effects, thermal and physical effects, noise levels, and aesthetic and recreational benefits. For any alternative that is shown to be environmentally preferable, the staff considers economic-cost factors.</p> <p>To facilitate the staff's analysis, provide the following information for the specified alternative heat dissipation systems.</p> <ul style="list-style-type: none"> • wet natural draft cooling towers: land use required, water use required, and any legislative or regulatory restrictions for the use of this alternative • dry cooling towers: land use required, water use required, and any legislative or regulatory restrictions for the use of this alternative 	A. Kugler, P. Meyer	9.4.1

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CLINCH RIVER EARLY SITE PERMIT
ALTERNATIVE SITES INFORMATION NEEDS

INFO	NEEDS #	INFO NEEDED	SME NAME	ER	SECTION
		<ul style="list-style-type: none">• wet/dry (hybrid) cooling towers: land use required, water use required (unless one-third to one-half of a wet cooling tower is the most precise estimate available), and any legislative or regulatory restrictions for the use of this alternative• spray ponds: water use required, and any legislative or regulatory restrictions for the use of this alternative.			

