# Discussion of Comments Received on the Environmental Review

## Discussion of Comments Received on the Environmental Review

#### Part I - Comments Received During Scoping

On March 10, 2000, the NRC initiated the scoping process for Arkansas Nuclear One, Unit 1 (ANO-1) with the issuance of a Federal Register Notice of Intent (65 FR 13061) to prepare a plant-specific supplement to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NUREG-1437)(GEIS) to support the renewal application for the ANO-1 operating license. The NRC invited the applicant; Federal, State, Tribal, and local government agencies; local organizations; and individuals to participate in the scoping process by providing oral comments at the scheduled public meetings and/or submitting written suggestions and comments no later than May 9, 2000. The scoping process included two public scoping meetings that were held at the Holiday Inn in Russellville, Arkansas on April 4, 2000. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the National Environmental Policy Act (NEPA) process. Following the NRC's prepared statements, the meetings were opened for public comments. Three attendees provided oral comments at both the afternoon and evening sessions that were transcribed by a certified court reporter. The corrected meeting transcripts are available as an attachment to the May 1, 2000, meeting summary. In addition to the comments provided during the public meetings, four comment letters and one e-mail were received by the NRC in response to the Notice of Intent during the scoping period.

At the conclusion of the scoping period, the NRC staff and its contractor reviewed the transcripts and all written material received, and identified individual comments. A summary report of the comments from the scoping meetings and written comments was prepared and published on August 21, 2000. All comments and suggestions received orally during the scoping meetings or in writing were considered while developing the Supplemental Environmental Impact Statement (SEIS)(NUREG-1437, Supplement 3). Each commenter was given a unique identifier (commenter number) such that it could be traced back to the transcripts or written comments. Comments with similar specific objectives were combined to capture the common essential issues that had been raised in the source comments. Once comments were grouped according to subject area, the staff and contractor determined the appropriate action for the comment. The staff made a determination on each comment that it was one of the following:

(1) a comment that was actually a request for information and introduced no new information.

- (2) a comment that was either related to support or opposition of license renewal in general (or specifically, ANO-1) or that made a general statement about the license renewal process. It may have made only a general statement regarding Category 1 and/or Category 2 issues. In addition, it provides no new information and does not pertain to 10 CFR Part 54.
- (3) a comment about a Category 1 issue that
  - (a) provided new information that required evaluation during the review, or
  - (b) provided no new information
- (4) a comment about a Category 2 issue that
  - (a) provided information that required evaluation during the review, or
  - (b) provided no such information
- (5) a comment that raised an environmental issue that was not addressed in the GEIS
- (6) a comment on safety issues pertaining to 10 CFR Part 54, or
- (7) a comment outside the scope of license renewal (not related to 10 CFR Parts 51 or 54).

While developing this plant-specific supplement to the GEIS, the staff and its contractor considered all of the relevant issues raised during the scoping process. Table A-1 identifies the individuals providing comments that were applicable to the environmental review. The individuals are listed in the order in which they spoke at the meetings or provided written comments. To maintain consistency with the scoping summary, we have retained the same unique identifier that was used for that person in the report. The accession number is provided for the written comments to facilitate access to the document through the Public Electronic Reading Room (ADAMS). Comments were then consolidated and categorized according to the topic within the proposed supplement to the GEIS, or according to the general topic if outside the scope of the GEIS.

Each comment that was applicable to this environmental review is summarized in this section. This information was extracted from the ANO-1 Scoping Summary Report, dated August 21, 2000, and is being provided in this report for the convenience of those interested in the scoping comments applicable to this environmental review. The comments that were determined to be general or outside the scope of the environmental review for ANO-1 are not included in this report. More detail regarding the disposition of general or non-applicable comments can be found in the ANO-1 Scoping Summary Report. Commenters whose comments are not discussed in this section will find the disposition of their concerns addressed in that report.

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**Table A-1**. Individuals Providing Comments Applicable to the ANO-1 Environmental Review During Scoping Comment Period

Commenter Number	Commenter's Name	Commenter's Affiliation (If Stated)
	Afternoon and Evening Session of	f Public Scoping Meeting
1	Craig Anderson - spoke at both afternoon and evening sessions	Vice President for ANO-1
	Letters and E-Mails Received D	ouring Comment Period
4	Jim Wood (April 5, 2000, ACN <sup>(a)</sup> : ML003711383)	no affiliation given
7	Robert Cast (May 15, 2000, ACN: ML003725767)	Historic Preservation Officer, Caddo Tribe of Oklahoma
(a) ACN - acce	ession number.	

For reference, after the comment, the unique identifier (commenter number listed in Table A-1) of the commenter is provided in parentheses. In those cases where no new information was provided by the commenter, no further evaluation was performed.

#### **Comments Concerning Ecology**

**Comment:** Entergy performed a study that included a review of water quality, water flow at the intake and discharge structures, water use, and the fish habitats on Lake Dardanelle. Evaluation of historic data indicates no changes to water resources. There are no planned changes in Entergy's operations that result from license renewal. Therefore, Entergy will continue to maintain the same water quality. (1)

**Comment:** Entergy has consulted with the U.S. Fish and Wildlife Service, Arkansas Natural Heritage Commission, and Arkansas Game and Fish Commission regarding threatened and endangered species inhabiting ANO-1 property and its transmission lines. Based on these consultations, no records of threatened or endangered species nor species of concern were identified along the transmission line corridor.

With regard to threatened and endangered species on the Entergy property, six species were identified as having geographic ranges that could possibly include the ANO-1 property. However, of the six species, only the bald eagle has occasionally been known to visit the site area. Entergy concluded that suitable habitat for the other five species does not exist on the site property.

Entergy stated that although there were no state listed threatened or endangered species inhabiting the site property, based on consultation with the Arkansas Natural Heritage Commission, there were seven elements of interest identified in their records. Only the Northern Crayfish Frog and the species living in a sandstone glade outcrop habitat have suitable habitat to exist at ANO-1.

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Based on the rarity of the Northern Crayfish Frog (which has not been observed at the site), the Arkansas Natural Heritage Commission has changed the ranking of this species to a status that requires no protection. In addition, Entergy stated, the few areas of Sandstone Outcrop Habitat present on the site property were impacted during initial construction activities and have lost their original habitat value.

In summary, Entergy concluded that no threatened or endangered species inhabit the ANO-1 property and therefore, there is no adverse impact from the continued operation of Unit 1. (1)

**Comment:** For the past 25 years of operation, ANO-1 has not adversely affected the air quality. There are no planned changes in operation associated with the license renewal that would alter the air quality in any way. (1)

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**Response:** The comments were noted. The comments summarize the applicant's review of ecological issues, as documented in detail in its license renewal application. They address both Category 1 and Category 2 issues. The comments provided no new information and therefore were not evaluated further.

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Discussion of water quality and use and fish habitats can be found in Sections 2.1.3, 2.2.2, 2.2.5, and 4.5. Discussion on consultation with U.S. Fish and Wildlife and threatened and endangered species can be found in Sections 2.2.6 and 4.6.

#### **Comments Concerning Socioeconomics**

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**Comment:** Over the years, ANO-1 has demonstrated high levels of safety and reliability, and serves as an economical source of electricity for Entergy customers. Even if you add the cost of construction, future cost of operation and maintenance, and the license renewal process, Unit 1 is projected to be a sound, cost-effective supply of electricity. (1)

**Comment:** Unit 1 is a valuable asset that has continued to improve with time. It is operated more efficiently today than it did when it was new. With this trend and continued improvement, it clearly makes economic sense to pursue renewal of the Unit 1 operating license. (1)

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**Comment:** In addition to being a safely operated facility, ANO-1 has benefitted the communities in the form of increased tax revenues. Over the past 25 years, Entergy has

contributed almost \$200 million in taxes to Pope County. The ANO-1 facility will also keep jobs in the community, which helps maintain a strong local economy. ANO-1's annual payroll of over \$80 million helps support local business and industry. (1)

**Response:** The comments were noted. The comments summarize the applicant's review of socioeconomic issues, as documented in detail in its license renewal application. They address both Category 1 and Category 2 issues. The comments provided no new information and therefore were not evaluated further.

Socioeconomic issues are addressed in Sections 2.2.8 and 4.4. Safety and reliability of ANO-1 are not specifically addressed in the SEIS. These matters are addressed as part of the current reactor oversight process.

#### **Comments Concerning Archeological and Historic Resources**

**Comment:** Entergy has consulted with the State Historic Preservation office to identify any new information regarding sites of potential archaeological, historical, or architectural significance on the ANO-1 site. Although no historical or architectural sites were identified, a few archaeological sites of interest were reported to exist around ANO-1.

However, none of these areas is close enough to existing facilities to warrant concern. The commenter stated that a map identifying these sites was provided to Entergy, and controls are in place to ensure that their archaeological value remains protected.

Entergy also considered how the land will be used over the additional operating time. License renewal will not require additional land usage and Entergy's activities will remain within the existing site boundaries. Based on these evaluations, Entergy has determined that the renewal of the Unit 1 license will not impact historic, archaeological, or land resources in the community. (1)

**Response:** The comments were noted. The comments summarize the applicant's review of archeological and historic resources, as documented in detail in its license renewal application. They pertain to a Category 2 issue. The comments provided no new information.

Historic and archaeological resources are addressed in Sections 2.2.9 and 4.4.5. Onsite land use is addressed in Section 2.2.1.

**Comment:** As a result of the staff's observations during the ANO-1 site audit (see summary dated May 1, 2000), one commenter expressed concern with the subsurface disturbance to any of the potentially historic properties at the ANO-1 site. The commenter asked that, as a condition of the license renewal and any future permits, that the area be surveyed for

archeological and historic properties and that any areas of disturbance be reported to the Arkansas Historic Preservation Officer and to the Caddo Tribe of Oklahoma. The commenter further asked for additional information concerning disturbance of some potentially historic sites at the plant. (7)

**Response:** In a letter dated August 10, 2000, the staff informed the Arkansas State Historic Preservation Officer (SHPO) of observations it made during the April site audit to ensure that the State official was made aware that sites of potential historical value have or may have been disturbed, and are possibly not being tracked by Entergy. The commenter's letter was also forwarded to the SHPO. These comments involve concerns that are relevant to current ANO-1 operation, and therefore, were dispositioned under the current reactor oversight process.

Historic and archaeological resources are addressed in Sections 2.2.9 and 4.4.5.

#### **Comments Concerning Age-Related Safety Issues**

**Comment:** As ANO-1 equipment ages, it loses a measure of reliability. Equipment age, rather than likely reductions in plant equipment reliability, should also be included in [the] EIS as an ANO-1 site-specific issue for analysis along with required mitigation (40 CFR 1508.20). (4)

Response: The staff has determined that the reliability of equipment would not change substantially throughout the life of the plant, provided the applicant has aging management programs that conform with 10 CFR Part 54. Regulatory controls ensure that the physical plant condition and associated risk (i.e., the predicted probability of, and radioactive material releases from, an accident) will be maintained at acceptable levels during the renewal period. Therefore, no aging effects are considered in the probability risk assessment for a nuclear plant, and aging-related Severe Accident Mitigation Alternatives are not identified. Aging management programs are reviewed under the safety portion of the license renewal review. The adequacy of these programs will be addressed in the Safety Evaluation Report developed under 10 CFR Part 54. Severe accident mitigation alternatives are addressed in Section 5.2 of this report.

#### Summary

While developing this plant-specific supplement to the GEIS, the staff and its contractor considered all of the relevant issues raised during the scoping process that are identified in this section. Concerns identified that are outside the scope of the staff's environmental review have been forwarded to the appropriate NRC program manager for disposition. More detail about the results of the staff's scoping review for ANO-1, including the disposition of general or non-applicable comments, can be found in the ANO-1 Scoping Summary Report, dated August 21, 2000.

#### Part II - Comments Received on the Draft Supplement

Pursuant to 10 CFR Part 51, the staff transmitted the *Generic Environmental Impact Statement* for License Renewal of Nuclear Plants, Regarding Arkansas Nuclear One, Unit 1, Draft Report for Comment (NUREG-1437, Supplement 3, referred to as the draft SEIS) to Federal, State, and local government agencies as well as interested members of the public. As part of the process to solicit public comments on the draft SEIS, the staff

- placed a copy of the draft SEIS into the NRC's electronic Public Document Room, its license renewal website, and the Pendergraft Library, located at Arkansas Tech University, 305 West Q Street, Russellville, Arkansas
- sent copies of the draft SEIS to the applicant, members of the public who requested copies, and certain Federal, State, and local agencies
- published a notice of availability of the draft SEIS in the Federal Register on October 25, 2000 (65 FR 63898)
- issued public announcements, such as advertisements in local newspapers and postings in public places, of the availability of the draft SEIS
- announced and held two public meetings in Russellville, Arkansas, on November 14, 2000, to describe the results of the environmental review and answer related questions
- issued press releases announcing the issuance of the draft SEIS, the public meetings, and instructions on how to comment on the draft SEIS
- established a website to receive comments on the draft SEIS through the Internet.

During the comment period, the staff received a total of 6 comment letters in addition to the comments received during the public meetings.

The staff has reviewed the public meeting transcripts and the 6 comment letters that are part of the docket file for the application, all of which are available in the NRC's electronic Public Document Room. Section A.1 contains a summary of the comments and the staff's responses. Section A.2 contains an excerpt from the November 14, 2000 transcript that contains comments from a member of the public. Copies of the 6 comment letters follow Section A.2 (Letters B - G). No written statements were provided by members of the public during the public meetings.

Each comment identified by the staff was assigned a specific alpha-numeric identifier (marker). That identifier is typed in the margin of the transcript or letter at the beginning of the discussion

of the comment. In addition, to assist the reader in finding the response to the comment, the section number(s) where the comment is addressed in Section A.1 of this report is also listed in the margin next to the identifier. A cross-reference of the alpha-numeric identifiers, the speaker or author of the comment, the page where the comment can be found, and the section(s) of this report in which the comment is addressed is provided in Table A-2.

The staff made a determination on each comment that it was one of the following:

- (1) a comment that was actually a request for information and introduced no new information.
- (2) a comment that was either related to support or opposition of license renewal in general (or specifically, ANO-1) or that made a general statement about the license renewal process.

Table A-2. ANO-1 SEIS Comment Log

No.	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
A1	Garry Young	Afternoon Meeting Transcript (11/14/00)	A-24	A.1.2
A2	Garry Young	Afternoon Meeting Transcript (11/14/00)	A-24	A.1.1
А3	Garry Young	Evening Meeting Transcript (11/14/00)	A-24	A.1.2
A4	Garry Young	Evening Meeting Transcript (11/14/00)	A-24	A.1.1
В	Jim Wood	November 28, 2000 Letter	A-25	A.1.3 A.1.4
С	G. Patterson, ADEQ	December 5, 2000 Letter	A-26	A.1.2
D	G. Sekavec, US DOI	December 15, 2000 Letter	A-27	A.1.2
E	J. Vandergrift, Entergy	January 4, 2001 Letter	A-28 to A-30	A.1.5 Table A.3
F	J. Vandergrift, Entergy	February 2, 2001 Letter	A-31	A.1.5 Table A.3
G	M. Jansky, EPA	February 7, 2001 Letter	A-32	A.1.2

It may have made only a general statement regarding Category 1 and/or Category 2 issues. In addition, it provides no new information and does not pertain to 10 CFR Part 54.

- (3) a comment about a Category 1 issue that
  - (a) provided new information that required evaluation during the review, or
  - (b) provided no new information
- (4) a comment about a Category 2 issue that
  - (a) provided information that required evaluation during the review, or
  - (b) provided no such information
- (5) a comment that raised an environmental issue that was not addressed in the GEIS or the DSEIS
- (6) a comment on safety issues pertaining to 10 CFR Part 54, or
- (7) a comment outside the scope of license renewal (not related to 10 CFR Parts 51 or 54).

There was no significant new information provided on Category 1 issues [(3)(a) above] or information that required further evaluation on Category 2 issues [(4)(a)]. Therefore, the GEIS and draft SEIS remained valid and bounding, and no further evaluation was performed.

Comments without a supporting technical basis or that did not provide any new information are discussed in this appendix, and not in other sections of this report. Relevant references that address the issues within the regulatory authority of the NRC are provided where appropriate. These references can be obtained from the NRC electronic Public Document Room.

Within each section of this appendix (A.1.1 through A.1.5), similar comments are grouped together for ease of reference, and a summary description of the comments is given, followed by the staff's response. Where the comment or question resulted in a change in the text of the draft report, the corresponding response refers the reader to the appropriate section of this report where the change was made. All revisions to the text of the draft report, whether substantive (including those made in response to comments) or editorial, are designated by vertical lines beside the text.

April 2001

#### A.1 Comments and Responses

#### A.1.1 General Comments in Support of License Renewal

**Comment:** The record of the public meetings contains one comment from each public meeting that expresses general support for license renewal (A2 and A4). The comment states that license renewal for ANO-1 is reasonable from an environmental impact viewpoint.

**Response:** These comments are general in nature and do not provide new information. Therefore, no further evaluation was required, and no changes to the SEIS were made as a result of these comments.

#### A.1.2 General Comments on Adequacy of the Review and Analysis

**Comment:** The record of the public meetings and comment letters contain five comments related to the staff's environmental review. Two comments, one from each public meeting stated that the document was both thorough and comprehensive in addressing the important environmental topics. Three letters (Letters C, D, and G) were received that stated that there were no additional issues that needed to be addressed in the draft SEIS.

**Response:** These comments are general in nature, and do not provide new information. Therefore, no further evaluation was required, and no changes to the SEIS were made as a result of these comments.

#### A.1.3 License Renewal Review Process

**Comment:** One comment letter (Letter B) addressed a comment provided during the scoping period related to emergency planning. The author stated that the issue, which was determined to not be within the scope of the environmental review for ANO-1, should qualify as part of the Human Environment for EIS analysis as provided by the NEPA process.

**Response:** The adequacy of the license renewal process is not within the scope of the environmental review related to the ANO-1 license renewal. The staff considered the need for a review of emergency planning issues in the context of license renewal during its rulemaking proceedings on 10 CFR Part 54 which included public notice and comment. As discussed in the Statement of Considerations for the rulemaking (56 FR 64966), the programs for emergency preparedness at nuclear plants apply to all nuclear power plant licensees, and require the specified levels of protection from each licensee regardless of plant design, construction, or license date. The requirements of 10 CFR 50.47 and Appendix E to 10 CFR

Part 50 are independent of the renewal of the operating license, and will continue to apply during the license renewal term. Through its standards and required exercises, the Commission ensures that existing plans are adequate throughout the life of any plant even in the face of changing demographics and other site-related factors. Therefore, the Commission has determined that there is no need for a review of emergency planning issues in the context of license renewal.

This comment did not result in modification of the SEIS text.

#### A.1.4 Operational Safety Issues

The record contains one comment related to operational safety issues (Letter B) that involves concerns with the passability of certain rural roads during an evacuation. These concerns are relevant to current ANO-1 operation, and in accordance with 10 CFR 54.30, these issues are outside the scope of license renewal. They have been referred to the NRC operating plant project manager for disposition. The comments were responded to in a letter dated February 27, 2001. These comments did not result in modification of the SEIS text.

#### A.1.5 Technical Clarifications and Corrections

The list of specific comments included with Comment Letters E and F includes 57 comments that are technical enhancements or correction of information such as plant dimensions, document dates, and plant-specific terminology. Table A.3 addresses the disposition of these comments.

 Table A-3.
 Entergy's Comments and Staff Response

No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
1.	1-8	10	Under the Activity Covered Column, add "plant wastewaters" and change "emergency cooling water ponds" to "emergency cooling water pond" since ANO has only one emergency cooling pond.	Corrected as suggested
2.	1-8	12	Under the Activity Covered Column, change "Diesel fuel storage" to "Fuel storage" since the ANO tank certificates covers two diesel fuel tanks and one gasoline tank.	Corrected as suggested
3.	2-1	25	Revise sentence to read, "The property that is not owned by Entergy is privately owned, with the U. S. Army Corps of Engineers also owning easements around Lake Dardanelle".	Corrected as suggested
4.	2-1	34-35	Revise "the majority of the land area is forest, with pasture, cropland, and residential development, each contributing significant proportions to land use" to read as follows: "the majority of the land area is forest and residential development". Pasture and croplands are insignificant to nonexistent on the peninsula.	Corrected as suggested
5.	2-4	7-8	Delete "cropland," since they do not exist around the ANO site.	Corrected as suggested
6.	2-4	8	Revise sentence to read, "Recently, Entergy initiated an onsite reforestation project".	Modified as suggested

 Table A-3.
 Entergy's Comments and Staff Response

			Entergy of Commente and Stan Response	
No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
7.	2-5	28	Based on condenser replacements and new calculated flow rates, the value of "1.2 m³/s (191,000 gpm)" should be changed to "12.3 m³/s (195,550 gpm)". In addition, the value of "1.2 m³/s" should have been "12.1 m³/s".	Corrected as suggested
8.	2-5	36	Revise "converted to a solid waste form" to "retained in a solid waste form".	Corrected as suggested
9.	2-7	11	Revise "Contaminated spent resins, filters, and evaporator concentrates" to read "Contaminated spent resins and filters" since ANO-1 does not have an evaporator.	Corrected as suggested
10.	2-7	23-25	ANO has no mixed waste in storage. Request that the sentence "ANO also provides for temporary onsite storage of mixed wastes, which contain both radioactive and chemically hazardous materials" be clarified to read "ANO has the capability to provide for temporary onsite accumulation of mixed wastes, which contain both radioactive and chemically hazardous materials".	Corrected as suggested
11.	2-7	26	Insert "and/or accumulation" after the word "storage".	Corrected as suggested
12.	2-11	12-13	Replace "disposal" with "treatment". Although there is a licensed treatment facility in Oak Ridge, Tennessee, no licensed disposal exists.	Corrected as suggested
13.	2-11	20	Delete "boiler" since ANO does not produce boiler metal cleaning wastes.	Corrected as suggested

 Table A-3.
 Entergy's Comments and Staff Response

Table 71 of Emergy Comments and Stan Response				
No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
14.	2-11	40-41	Revise sentence to read "Approximately 700 additional workers are onsite during a typical refueling outage".	Corrected as suggested
15.	2-14	15	Revise the sentence to read "Site topography is primarily flat".	Corrected as suggested
16.	2-14	18-19	Revise sentence to read, "Forests and residential development cover the majority of the peninsula" since pasture and croplands are insignificant to nonexistent on the peninsula.	Corrected as suggested
17.	2-15	20-25	Entergy requests that sentences on lines 20-25 be deleted and replaced as follows; "The predicted modeling studies would have shown much greater impact on the thermal plume if the current 7Q10 estimate had been used. However, based on previous operational studies and current thermal monitoring within the discharge canal and lake required by the NPDES Permit, it has been demonstrated that thermal impacts continue to be consistent with preoperational predicted modeling studies described in the ANO-1 FES. Therefore, no significant impacts to Lake Dardanelle's biota as a result of the thermal discharge have been identified".	Clarified
18.	2-17	2	Delete the sentence "The lake supports a growing commercial fishing industry" since commercial fishing in Lake Dardanelle has declined.	Clarified

Table A-3. Entergy's Comments and Staff Response

			Entergy's Comments and Stair Nesponse	
No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
19.	2-17	12	Since these organisms are numerous in the lake, add another sentence to read "Additional benthic organisms that have been introduced into Lake Dardanelle include the <i>Corbicula fluminea</i> and <i>Dreissena polymorpha</i> ".	Corrected as suggested
20.	2-17	14-15	Change "Flathead/yellow catfish (Noturus trautmani)" to "Flathead catfish (Pylodictis Olivaris)".	Corrected as suggested
21.	2-17	17	Change "green sunfish/black perch" to "green sunfish" and "bluegill/bream" to "bluegill sunfish".	Corrected as suggested
22.	2-17	19	Change "Illinois Bayou" to "area" since ANO does not withdraw water directly from the Illinois Bayou.	Clarified
23.	2-17	23	Delete the reference to "and white perch ( <i>M. americana</i> )" since these species do not exist in the fish community near ANO.	Corrected as suggested
24.	2-17	25	Change "Asian" to "European"	Corrected as suggested
25.	2-17	26	Change "(Carpiodes carpio)" to "(Carpiodes spp.)".	Corrected as suggested
26.	2-17	27	Insert the word "species" after fish.	Corrected as suggested
27.	2-17	37-38	Revise the sentence "Numerous species of fish and waterfowl use the warm water effluent to survive cold water conditions" to read "Numerous species of fish and waterfowl utilize the warm water effluent during cold water conditions".	Corrected as suggested

 Table A-3.
 Entergy's Comments and Staff Response

ı			Table A 0.	Entergy 3 Comments and Stan Response	
I	No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
   	28.	2-17	38	Revise "The use of the canal" to read "The use of the intake and discharge canals".	Corrected as suggested
   	29.	2-18	2	Insert the word "limited" in front of hunting since firearms are not allowed on-site.	No change
 	30.	2-18	25	Change "forested" to "lake".	Corrected as suggested
	31.	2-18	27	Change "nest in trees" to "frequent the discharge canal area" since nests have not been observed in the area.	No change
	32.	2-28	4-5	Based on Table 1 of Appendix 5A to the ANO Emergency Plan, the estimated resident population of "26,800" for 1980 should be changed to "33,754".	Corrected as suggested
       	33.	2-28	6-7	Based on the estimated resident population value of 26,800 changing to 33,754 for 1980, the increase of approximately "60 percent" should be changed to "33 percent".	Corrected as suggested
	34.	2-33	38	Change "around ANO" to "outside the ANO property line".	Clarified as suggested
	35.	2-35	9	Change "1100-acre site" to "1164-acre site" to be consistent with what is shown in Section 2.1 of the draft SEIS and the ANO-1 ER.	Corrected as suggested
 	36.	2-36	9	Delete the word "clearly" since this overstates the point.	Modified as suggested

 Table A-3.
 Entergy's Comments and Staff Response

No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
37.	4-11	26	Insert the word "approximately" in front of "49" since actual design flow should be based on four circulating pumps with a design flow of 195,550 gpm each (49.3 m³/s (1743 ft³/s)).	Corrected as suggested
38.	4-13	11	Change "22 km (14 mi)" to "38 km (24 mi)". On Page 3-72 of the ANO-1 FES, "One pair of 500 kV lines scheduled for Unit 1 traverses 5.3 miles north and westward in Pope County and extends southward from the Arkansas River 8.4 miles in Logan County and about 10 miles in Yell County. Then from a junction point near Danville and Ola" Based on the values of 5.3, 8.4, and 10, total distance would be 23.7 miles.	Corrected as suggested
39.	4-17	2-4	Delete last sentence in the paragraph and replace with the following: "However, even though no known incidents of electric shock have been reported since the lines were put into service, Entergy upgraded the 161 kV-lines during 2000 to meet the threshold for the 1997 NESC clearance requirements".	Corrected as suggested
40.	4-25	22	Replace "several hundred acres" with the word "portions". These activities only included approximately 154 acres and not several hundred as currently stated.	Corrected as suggested

 Table A-3.
 Entergy's Comments and Staff Response

No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
41.	4-27	17	Delete "groundwater use conflicts" since ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville that is used for drinking water, restroom and irrigation purposes, comes from a surface water source, not groundwater.	No change
42.	4-31	10-11	Delete the sentence "As discussed in Section 2.2.2, ANO-1's groundwater use is less than 0.068 m³/s (100 gpm)", since water utilized for cooling at ANO is surface water and water supplied by the City of Russellville that is used for drinking water, restroom and irrigation purposes, comes from a surface water source, not groundwater. In addition, Section 2.2.2 of the Draft SEIS does mention ANO-1 groundwater use.	Clarified
43.	5-3	37-38	Revise sentence to read "However, further evaluation by Entergy showed that this issue was already adequately addressed in the operations training cycle."	Clarified <sup>(b)</sup>

 Table A-3.
 Entergy's Comments and Staff Response

No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
44.	5-21	6-10	Revise paragraph to read "Although not age-related, further evaluation by Entergy showed that SAMA 129 was already adequately addressed in the operations training cycle." The task of shifting the ECCS suction to the Reactor Building sump is already included in ANO's training program. The task is covered in the Reactor Operator Program in the simulator malfunction guide for LOCAs, AA51105.005, and is intrinsic in the performance of the Emergency Operating Procedure for an ESAS actuation as part of the requalification process. There is also a Job Performance Measure (JPM) for specifically evaluating the performance of shifting the ECCS suction to the Reactor Building Sump, (ANO-1-JPM-RO-EOP11), to evaluate the trainees performance of the task. The performance of this task is not routine in that ANO does not continually create situations to force this action, due to time constraints; however, ANO does occasionally perform training on the task as part of the coverage of different portions of the EOP as necessary.	Clarified <sup>(b)</sup>
15.	8-6	12		Corrected as suggested

Table A-3. Entergy's Comments and Staff Response

No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
46.	8-8	14-16	Revise sentence to read "Groundwater use would be unaffected because water used to supply drinking and restroom facilities, as well as irrigation water for site landscaping during the summer months comes from a surface water source". ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.	Corrected as suggested
47.	8-9	21	Change "Entergy would have to" to "Entergy could potentially have to" since allowances may already be in place when and if this alternative occurred.	Corrected as suggested
48.	8-17	17	Revise "Reduced groundwater withdrawals due to reduced workforce" to read "No impacts" since water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.	Clarified
49.	8-19	35-38	Revise sentence to read "Groundwater use would be unaffected because water used to supply drinking and restroom facilities, as well as irrigation water for site landscaping during the summer months comes from a surface water source". ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.	Clarified

Table A-3. Entergy's Comments and Staff Response

No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
50.	8-30	12	Revise "Gas-Fired: Reduced groundwater withdrawals due to reduced workforce" to read "Gas-Fired: No impact on groundwater" since ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.	Corrected as suggested
51.	9-5	7-9	Revise sentence to read "Although one cost-beneficial SAMA, unrelated to managing age-related effects during the period of extended operation was identified, further evaluation by Entergy showed that this issue was already adequately addressed in the operations training cycle."	Clarified
52.	9-8	Table 9-1	For Combination of Alternatives, Water Quality - Groundwater impact under the ANO Site Column should be changed from "SMALL to MODERATE" to "SMALL" since ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.	No change

Table A-3. Entergy's Comments and Staff Response

No.	Page <sup>a</sup>	Line Nos.	Comment	Disposition
53.	F-2	2-3	Under the Comment Column, revise "ANO-1 uses <0.068 m³/s (100 gpm) of groundwater" to "ANO-1 utilizes surface water sources only". Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville that is used for drinking water, restroom and irrigation purposes, comes from a surface water source, not groundwater.	Corrected as suggested
54.	2-35	3	Change "Missouri-Pacific" to "Union Pacific" to reflect proper name of railroad line.	Corrected as suggested
55.	4-25	5	Replace the word "jeopardized" with "impacted".	Corrected as suggested
56.	4-25	15	Replace "15 to 20" with "some of the" unless the sites impacted were actually counted during the site visit.	Clarified
57.	4-26	19	Insert the word "potential" in front of "historic properties" since a determination has not been made yet on their significance.	Modified as suggested

<sup>&</sup>lt;sup>a</sup> Page numbers refer to pages in the draft SEIS.

<sup>&</sup>lt;sup>b</sup> This comment resulted in additional changes to the document in The Executive Summary, Sections 5.2.1, 5.2.3.1, 5.2.6.2, 5.2.7, and 9.1.

#### A.2 Public Meeting Transcript Excerpts and Comment Letters

#### **LETTER A** (Transcript)

Transcript of the Afternoon Public Meeting on November 14, 2000, in Russellville, Arkansas (Note: the same presentation was given at both Afternoon and Evening Public Meetings and is only presented once below).

[Introduction by Mr. Cameron] [Presentation by NRC Staff and contractor]

Mr. Young (same presentation for both afternoon and evening public meetings):

No. A1, and A3 A.1.2 This document is both thorough and comprehensive for addressing the environmental topics important for consideration at Arkansas Nuclear One, and the range of topics and the level of detail clearly indicate the NRC's diligence in preparing this document and also it provides and excellent source of information for the public about the environment around Arkansas Nuclear One.....we share an interest with our neighbors in protecting the environment. As indicated in the summary of the document, the option of licensing renewal for ANO-1 is reasonable from an environmental impact viewpoint. This conclusion is consistent with the findings made by Entergy prior to making the decision to seek license renewal.

No. A2, and A4 A.1.1

There were no other comments by members of the public on the Draft SEIS presented at either session of the November 14, 2000, public meetings.

മ

Jim Wood Route 3 Box 1278 Dardanelle, AR 72834 November 28, 2000

RECEIVED

William D. Reckley, Project Manager, Section 1

Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 2055-0001

Dear Mr. Reckley,
Thank you for your October 26, 2000 letter regarding my April 5 response to NRC%
public solicitation of comments and scoping of issues of redevolping an Environmental Impact Statement as part of your proposed operating license extension for Ark. Nuclear 1, Unit 1. In a June 6 NRC response, Mr. M. Christopher Nolan states, "emergency pleating is not included within the review scope for license renewal" because it is a periodic esting, monitoring program. Likewise, this rational would seem to qualify for EIS exclusion ANO plant equipment systems, which undergo an existing program of periodic resting, monitoring and evaluation by NRC and the utility. Excluding off-site public health and safety issues created through plant licensing is not in the public interest and seems inconsistent with your "continuing obligation" at 10 CFR 51.10(b).

I must reaffirm my previous conclusion that off site emergency planning to protect public health, safety, property values and the environment (VUREG-0654 Planning Basis) from "the worst possible accident, regardless of its extremely low likelihood" is created and influenced by NRC's licensing of ANO and thus qualifies as a connected part of the Human Environment for EIS analysis as provided by the NEPA Process/CEQ Procedural Provisions at 40 CFR 1800-1508. I find no regulatory authority for you to exclude NUREG 0654, Categorically or otherwise, from ANO's renewal licensing EIS, and request that you reconsider your decision to exempt this Issue from inclusion in your EIS

NUREG 0654 was developed and applied to the ANO Planning Zone without benefit of either an Environmental Assessment or Environmental Impact Statement, notwithstanding it qualified as a "Significant" action from the ourset based on it's high lender of public interest and controversy, 1508.27, within the Delaware Township/Logan County portion of ANO's EPZ. My April 5 Issue Scoping comments clarified reasonable rational as to why setting evacuation route standards of maintenance qualities as an issue under the NEPA Process. NRC is the Lead Agency for development of an EIS for ANO license renewal, thus I expected the matter to be part of an NRC Action and not diverted to FEMA, Ark. State Health Dept. and local government for response. Howeve, please allow me to clarify some evacuation route review comments in enclosed letters you received on July 27, 2000 from David Snelling and Ms Vanessa Quinn dated August 21.

EO-HON = SOID - 3 ald = 1. Konyon (15ka)

Alle = A34-013

'passability of County Roads' for the two rural Delaware Township routes depicted in the two atrached photos. based on a July 24, 2000 driving tour conducted during one of the areas worst summer droughts. Since the East Logaric County Citizens Committee entered this EPZ evacuation route project in mid 1980's and found disinterest in correcting the deficiencies from responsible NRC, State and local officials, we too have In Ms Quinn's August 8 letter she describes a finding of evacuation route adequacy and weather summer conditions. The following photo reviews were taken on January 27, 1994. conducted "passability reviews" from time to time---not just during favorable dry

Photo #1 depicts the condition of Logan County Road #130 (Delaware Bay Road). Twenty six homes are located on this evacuation route which has deteriorated during winter to the point that the rural mail carrier was unable to travel it in a 4 wheel drive

Photo #2 depicts the condition of Logan County Road #98 (River Mountain Road). There are approximately 40 homes on this evacuation route

I would very much appreciate a description of the evaluating methodology used by Ms Quinn and Mr. Snelling to conclude that non gravel, dirt evacuation routes in conditions depicted in these photos meet the test of complying with NUREG 6654, "worst case accident" at ANO where immediate automobile evacuation of Delaware Township is necessary to protect public health and safety.

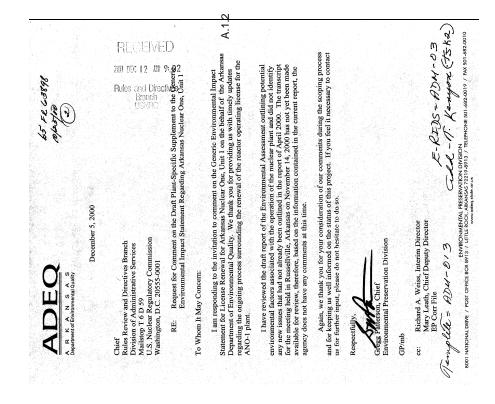
A.1.3 and A.1.4

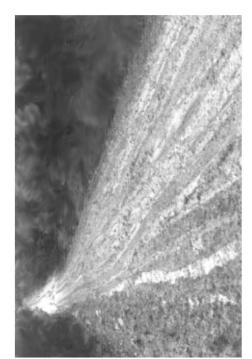
Thank you for your October 26 comments and response to my April 5 submission of proposed Issues for your Agency's development of an EIS on ANO, Unit 1 license renewal. I reaffirm my position that NUREO 6064, and the Delaware Township evacuation route maintenance matter, is a connected part of ANO licensing and thus under CEQ Procedural Provisions at 40 CFR 1500-1508 should be included in your EIS analysis.

If you have further questions, please call me at (501)229-4449.

Best Regards, Jim Wood

cc & enclosure Ms Vanessa E. Quinn David D. Snelling







LETTER D



200 DEC 28 FILS: 18 United States Department of the Interior  $\ensuremath{\mathsf{RECENED}}$ 

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Post Office Box 649
Albuquerque, New Mexico 87103

. Rules and Directives

December 15, 2000

ER 00/775

Rules Review and Directives Branch Division of Administrative Services Malistop T 6 D59 U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Dear Sir or Madam:

The U.S. Department of the Interior has reviewed NUREG-1437 "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Supplement 3, Arkansas Nuclear One, Unit 1,

A.1.2

Thank you for the opportunity to review this

Draft Report. In this regard we have no comments.

E-REDS-ADM-03 ald- F. Kompon (15K2)

/ Jample 1 - ADM-013

# ATTACHMENT TO E

Attachment to

### Attachment to 1CAN010101 Page 1 of 5

ANO-1 Draft SEIS Comments

86%	Page	Line Numbers	Comment
6	1-8	10	Under the Activity Covered Column, add "plant wastewaters" and change
			"emergency cooling water ponds" to "emergency cooling water pond" since ANO has only one emergency cooling and
	1-8	12	Under the Activity Covered Column, change "Diesel fuel storage" to
			'Fuel storage" since the ANO tank certificates covers two diesel fuel tanks and one gasoline tank
	2-1	25	Revise sentence to read, "The property that is not owned by Entergy is
			privately owned, with the U. S. Army Corps of Engineers also owning
	-	34 35	easements around Lake Dardanelle"
	1-7	34 - 35	Revise "the majority of the land area is forest, with pasture, cropland,
			and residential development, each contributing significant proportions to land use, to read as follows: "the majority of the land use,"
			residential development". Pasture and croplands are insignificant to
			a
4	2-4	7 - 8	Delete "cropland," since they do not exist around the ANO site.
ς: - Υ	2-4	8	Revise sentence to read, "Recently, Entergy initiated an onsite
			reforestation project".
	2-5	28	Based on condenser replacements and new calculated flow rates, the
			value of "1.2 m3/s (191,000 gpm)" should be changed to "12.3 m3/s
			(195,550  gpm)". In addition, the value of "1.2 m³/s" should have been "12.1 m³/s".
	2-5	36	Revise "converted to a solid waste form" to "retained in a solid waste
			t
	2-7	11	Revise "Contaminated spent resins, filters, and evaporator concentrates"
			to read "Contaminated spent resins and filters" since ANO-1 does not
			have an evaporator.
	2-7	23 - 25	ANO has no mixed waste in storage. Request that the sentence "ANO
			also provides for temporary onsite storage of mixed wastes, which
			contain both radioactive and chemically hazardous materials" be clarified
			to read AINO has the capability to provide for temporary onsite
			accumulation of mixed wastes, which contain both radioactive and
4	2-7	26	Insert "and/or accumulation" after the word "storage"
	2-11	12 - 13	Replace "disposal" with "treatment" Although there is a licensed
-			treatment facility in Oak Ridge, Tennessee, no licensed disposal exists
	2-11	7	Delete "boiler" since ANO does not produce boiler metal cleaning wastes.
8	2-11	40 - 41	Revise sentence to read "Approximately 700 additional workers are onsite during a typical refueling outside."
`	2-14	15	Revise the sentence to read "Site topography is primarily flat"

otin Entergy

January 4, 2001

ICAN010101

Chief, Rules and Directives Branch
Mail Stop T-GD59

65 Fe 63898

Entergy Operations, Inc. 1448 S.R. 333 Russellvile, AR 72802 Tel 501 858 5000

Chief, Rules and Directives Branch
Mail Stop T-6D59
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Subject: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
Draft SEIS Comments (TAC No. MA

Gentlemen:

Gentlemen:

Gentlemen:

Gentlemen:

Gentlemen:

Gentlemen:

Gentlemen:

By letter dated October 5, 2000 (ICNA100004), the NRC issued the draft plant-apacities. Supplement 3 to the Generic Environmental Impact Statement (SEIS) regarding Arfansas Nuclear One, Unit 1 (ANO.) for comments. Plasse find attached Entleys Operations comments. Also, Entergy Operations is in the process of performing an archaeological survey of the ANO site. Based on this new information Entleys Operations will be providing additional comments on Sections 2.2, 9 and 4.4 s of the draft SEIS in the near future. Should you have any questions concerning these comments, please contact me.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 4, 2001

Very truly yours,

| John Description | John Description | John Description | John Director, Nuclear Safety Assuran

JDV/nbm Attachment Newyolk - 104-013

E-RIDS=ADM-O. Cell: N. Kenyor (T5K2)

#### ATTACHMENT TO E (continued)

Attachment to 1CAN010101 Page 2 of 5

Page	Line	Comment
	Numbers	Comment
2-14	18 – 19	Revise sentence to read, "Forests and residential development cover the
		majority of the peninsula" since pasture and croplands are insignificant to
		nonexistent on the peninsula.
2-15	20 – 25	Entergy requests that sentences on "lines 20 -25" be deleted and replaced
		as follows; "The predicted modeling studies would have shown much
		greater impact on the thermal plume if the current 7010 estimate had
		been used. However, based on previous operational studies and current
		thermal monitoring within the discharge canal and lake required by the
		NPDES Permit, it has been demonstrated that thermal impacts continue to
		be consistent with preoperational predicted modeling studies described in
	1	the ANO-1 FES. Therefore, no significant impacts to Lake Dardanelle's
2-17	2	biota as a result of the thermal discharge have been identified".
2-17		"Delete the sentence "The lake supports a growing commercial fishing
2-17	12	industry" since commercial fishing in Lake Dardanelle has declined
2-17	12	Since these organisms are numerous in the lake, add another sentence to
		read "Additional benthic organisms that have been introduced into Lake
2-17	14 – 15	Dardanelle include the Corbicula fluminea and Dreissena polymorpha".  Change "Flathead/yellow catfish (Noturus trautmani)" to "Flathead
	14 15	catfish (Pylodictis Olivaris)".
2-17	17	
	17	Change "green sunfish/black perch" to "green sunfish" and "bluegill/bream" to "bluegill sunfish".
2-17	19	Change "Illinois Bayou" to "area" since ANO does not withdraw water
		directly from the Illinois Bayou.
2-17	23	Delete the reference to "and white perch (M. americana)" since these
		species do not exist in the fish community near ANO.
2-17	25	Change "Asian" to "European".
2-17	26	Change "(Carpiodes carpio)" to (Carpiodes spp.)".
2-17	27	Insert the word "species" after "fish"
2-17	37 – 38	Revise the sentence "Numerous species of fish and waterfowl use the
		warm water effluent to survive cold water conditions" to read "Numerous"
ļ		species of fish and waterfowl utilize the warm water effluent during cold
2-17	20	water conditions".
2-17	38	Revise "The use of the canal" to read "The use of the intake and
2-18	2	discharge canals".
2-18	2	Insert the word "limited" in front of hunting since firearms are not
2-18	25	allowed on-site.
2-18	25 27	Change "forested" to "lake".
2-10	21	Change "nest in tress" to "frequent the discharge canal area" since nests
2-28	4 – 5	have not been observed in the area.
2-20	4-3	Based on Table 1 of Appendix 5A to the ANO Emergency Plan, the
		estimated resident population of "26,800" for 1980 should be changed to "33,754".
		33,/34 .

#### ATTACHMENT TO E (continued)

Attachment to 1CAN010101 Page 3 of 5

Page	Line	Comment
	Numbers	Comment
2-28	6 – 7	Based on the estimated resident population value of 26,800 changing to
	İ	33,754 for 1980, the increase of approximately "60 percent" should be
		changed to "33 percent".
2-33	38	Change "around ANO" to "outside the ANO property line".
2-35	9	Change "1100-acre site" to "1164-acre site" to be consistent with what is shown in Section 2.1 of the draft SEIS and the ANO-1 ER.
2-36	9	Delete the word "clearly" since this overstates the point.
4-11	26	Insert the word "approximately in front of '49' since actual design flow
		should be based on four circulating pumps with a design flow of 195,550
		gpm each $(49.3 \text{ m}^3/\text{s} (1743 \text{ ft}^3/\text{s}))$
4-13	11	Change "22 km (14 mi)" to "38 km (24 mi)". On Page 3-72 of the
		ANO-1 FES, "One pair of 500 kV lines scheduled for Unit 1 traverses 5.3
	l	miles north and westward in Pope County and extends southward from
1		the Arkansas River 8.4 miles in Logan County and about 10 miles in Yell
	Į.	County. Then from a junction point near Danville and Ola"
ŀ		Based on the values of 5.3, 8.4, and 10, total distance would be 23.7
4-17	2 – 4	miles.
1 -17	2-4	Delete last sentence in the paragraph and replace with the following:
	ļ	"However, even though no known incidents of electric shock have been reported since the lines were put into service, Entergy upgraded the 161
		kV-lines during 2000 to meet the threshold for the 1997 NESC clearance
1		requirements".
4-25	22	Replace "several hundred acres" with the word "portions". These
		activities only included approximately 154 acres and not several hundred
		as currently stated.
4-27	17	Delete "groundwater use conflicts" since ANO does not use groundwater.
		Water utilized for cooling at ANO is surface water and water supplied by
		the City of Russellville that is used for drinking water restroom and
		irrigation purposes, comes from a surface water source, not groundwater
4-31	10 – 11	Delete the sentence "As discussed in Section 2.2.2 ANO-1's
		groundwater use is less than 0.068 m <sup>3</sup> /s (100 gpm)", since water utilized
		for cooling at ANO is surface water and water supplied by the City of
		Russellville that is used for drinking water, restroom and irrigation
		purposes, comes from a surface water source, not groundwater. In
		addition, Section 2.2.2 of the Draft SEIS does mention ANO-1
5-3	37 - 38	groundwater use.
3-3	3/-38	Revise sentence to read "However, further evaluation by Entergy showed
		that this issue was already adequately addressed in the operations training cycle."
		cycle.

#### ATTACHMENT TO E (continued)

Attachment to 1CAN010101 Page 4 of 5

Page	Line	Comment
	Numbers	
5-21	6 - 10	Revise paragraph to read "Although not age-related, further evaluation by Entergy showed that SAMA 129 was already adequately addressed in the operations training cycle." The task of shifting the ECCS suction to the Reactor Building sump is already included in ANO's training program. The task is covered in the Reactor Operator Program in the simulator malfunction guide for LOCAs, AA51105.005, and is intrinsic in the performance of the Emergency Operating Procedure for an ESAS actuation as part of the requalification process. There is also a Job Performance Measure (JPM) for specifically evaluating the performance of shifting the ECCS suction to the Reactor Building Sump, (ANO-1-JPM-RO-EOP11), to evaluate the trainees performance of the task. The performance of this task is not routine in that ANO does not continually create situations to force this action, due to time constraints; however, ANO does occasionally perform training on the task as part of the coverage of different portions of the EOP as necessary.
8-6	12	Change "Little groundwater" to "No groundwater" since water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.
8-8	14 - 16	Revise sentence to read "Groundwater use would be unaffected since water used to supply drinking and restroom facilities, as well as irrigation water for site landscaping during the summer months comes from a surface water source". ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.
8-9	21	Change "Entergy would have to" to "Entergy could potentially have to" since allowances may already be in place when and if this alternative occurred.
8-17	17	Revise "Reduced groundwater withdrawals due to reduced workforce" to read "No impacts" since water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.
8-19	35 - 38	Revise sentence to read "Groundwater use would be unaffected since water used to supply drinking and restroom facilities, as well as irrigation water for site landscaping during the summer months comes from a surface water source". ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.
8-30	12	Revise "Gas-Fired: Reduced groundwater withdrawals due to reduced workforce" to read "Gas-Fired: No impact on groundwater" since ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.

#### ATTACHMENT TO E (continued)

Attachment to 1CAN010101 Page 5 of 5

Page	Line Numbers	Comment
9-5	7-9	Revise sentence to read "Although one cost-beneficial SAMA, unrelated to managing age-related effects during the period of extended operation was identified, further evaluation by Entergy showed that this issue was already adequately addressed in the operations training cycle."
9-8	Table 9-1	For Combination of Alternatives, Water Quality – Groundwater impact under the ANO Site Column should be changed from "SMALL to MODERATE" to "SMALL" since ANO does not use groundwater. Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville comes from a surface water source, not groundwater.
F-2	2 - 3	Under the Comment Column, revise "ANO-1 uses <0.068 m³/s (100 gpm) of groundwater to "ANO-1 utilizes surface water sources only". Water utilized for cooling at ANO is surface water and water supplied by the City of Russellville that is used for drinking water, restroom and irrigation purposes, comes from a surface water source, not groundwater.

Appendix A

# ATTACHMENT TO F

Attachment to ICAN010203 Page 1 of 1

ANO-1 Draft SEIS Additional Comments

Entergy Operations, Inc. 1448 S.R. 333 Russelwille, AR 72802 Tel 501 858 5000

Additional SEIS Comments (TAC No. MA8055) Arkansas Nuclear One - Unit 1 Docket No. 50-313 License No. DPR-51

U. S. Nuclear Regulatory Commission Document Control Desk Mail Station OP1-17 Washington, DC 20555

February 2, 2001

1CAN010203

Gentlemen:

By letter dated January 4, 2001 (1CAN010101), Entergy Operations provided comments on the draft plant-specific Supplement 3 to the Generic Environmental Impact Statement (SEIS) regarding Arkansas Nuclear One, Unit 1 (AND.). In the January 4, 2001, correspondence Entergy Operations committed to providing additional comments on Sections 2.2.9 and 4.4.5. Please find attached the additional comments on the draft SEIS.

A.1.5

Also, by letter dated September 21, 2000 (1CAN090005), Entergy Operations committed to implement a new procedure to address control over future land disturbances at the ANO site. This procedure has been implemented. Should you have any further questions, please contact me.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 2, 2001.

Very truly yours,

JDV/nbm Attachment

April 2001

LETTER F

A-31

NUREG-1437, Supplement 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY FIVED REGION AGENCY FIVED 1445 FOSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

65 FR 63898

Rules and Diractives Branch USNRO 23 14 11 9:23

February 7, 2001

Rules Review and Directives Branch

Mr. Thomas J. Kenyon

Mailstop T 6 D59

Division of Administrative Services

U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Dear Mr. Kenyen

Generic Environmental Impact Statement (DEIS) for the license renewal of Arkansas Nuclear One (ANO-1). Entergy Operations, Inc., operates Arkansas Nuclear One, Units 1 and 2, in west-central Arkansas under operating Licenses DPR-51 and NPF-6 as now issued by the U.S. Nuclear In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality Regulations (CEQ) for Implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed an abbreviated review of the Draft Supplement Regulatory Commission

The NRC staff's preliminary recommendation is that," the Commission determine that the environmental impacts of license renewal ANO-1 are not great and that preserving the option of license renewal for the energy-planning decision-makers would be reasonable".

EPA classified your DEIS and proposed action as "LO," i.e., EPA has "Lack of Objections". Our classification will be published in the <u>Federal Register</u> according to our responsibility under Section 309 of the Clean Air Act, to inform the public of our views on proposed Federal actions.

A.1.2

We appreciate the opportunity to review the supplemental information. EPA requests that you send our office one (1) copy of the Final Supplemental EIS at the same time that it is sent to the Office of Federal Activities (2251A), EPA, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20044.

Michael P. Jansky, P. Sincerely yours,
Muchael P.

309 Review Coordinator

Case = T. Konyon (TSK) E-RIDS- ADM-03

Internet Address (URL) • http://www.epa.gov

Template = ADM-013