Entergy

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

January 4, 2001

1CAN010101

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. MA8055)

Gentlemen:

By letter dated October 5, 2000 (1CNA100004), the NRC issued the draft plant–specific Supplement 3 to the Generic Environmental Impact Statement (SEIS) regarding Arkansas Nuclear One, Unit 1 (ANO-1) for comments. Please find attached Entergy Operations' comments. Also, Entergy Operations is in the process of performing an archaeological survey of the ANO site. Based on this new information Entergy Operations will be providing additional comments on Sections 2.2.9 and 4.4.5 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,

Jimmy D. Vandergriff
Director, Nuclear Safety Assurance

JDV/nbm
Attachment

A001

cc: Mr. Ellis W. Merschoff
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector
Arkansas Nuclear One
P.O. Box 310
London, AR 72847

Mr. William Reckley
NRR Project Manager Region IV/ANO-1
U. S. Nuclear Regulatory Commission
NRR Mail Stop O-7 D1
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Mr. Tom Kenyon
U. S. Nuclear Regulatory Commission
NRR Mail Stop O-11F1
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

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

## ANO-1 Draft SEIS Comments

| Page | Line Numbers | Comment |
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| 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. |
| 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 easements around Lake Dardanelle". |
| 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. |
| 2-4 | 7 – 8 | Delete "cropland," since they do not exist around the ANO site. |
| 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 $m^3/s$ (191,000 gpm)" should be changed to "12.3 $m^3/s$ (195,550 gpm)". In addition, the value of "1.2 $m^3/s$" should have been "12.1 $m^3/s$". |
| 2-5 | 36 | Revise "converted to a solid waste form" to "retained in a solid waste form". |
| 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 "ANO has the capability to provide for temporary onsite accumulation of mixed wastes, which contain both radioactive and chemically hazardous materials". |
| 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 | 20 | Delete "boiler" since ANO does not produce boiler metal cleaning wastes. |
| 2-11 | 40 - 41 | Revise sentence to read "Approximately 700 additional workers are onsite during a typical refueling outage". |
| 2-14 | 15 | Revise the sentence to read "Site topography is primarily flat". |

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| 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 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". |
| 2-17 | 2 | "Delete the sentence "The lake supports a growing commercial fishing 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 Dardanelle include the *Corbicula fluminea* and *Dreissena polymorpha*". |
| 2-17 | 14 – 15 | Change "Flathead/yellow catfish (*Noturus trautmani*)" to "Flathead catfish (*Pylodictis Olivaris*)". |
| 2-17 | 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 species of fish and waterfowl utilize the warm water effluent during cold water conditions". |
| 2-17 | 38 | Revise "The use of the canal" to read "The use of the intake and discharge canals". |
| 2-18 | 2 | Insert the word "limited" in front of hunting since firearms are not allowed on-site. |
| 2-18 | 25 | Change "forested" to "lake". |
| 2-18 | 27 | Change "nest in tress" to "frequent the discharge canal area" since nests have not been observed in the area. |
| 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". |

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| 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". |
| 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 $m^3/s$ (1743 $ft^3/s$)). |
| 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 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. |
| 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". |
| 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 $m^3/s$ (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. |
| 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." |

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| 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. |

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| 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 $m^3/s$ (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. |