

May 1, 2000

APPLICANT: Entergy Operations Inc.

FACILITY: Arkansas Nuclear One Unit 1

SUBJECT: SUMMARY OF SITE AUDIT TO SUPPORT REVIEW OF LICENSE RENEWAL
APPLICATION OF ARKANSAS NUCLEAR ONE UNIT 1

An environmental review team consisting of the Nuclear Regulatory Commission (NRC) staff and contractors from Pacific Northwest National Laboratory (PNNL) participated in a site audit at Arkansas Nuclear One Unit 1 (ANO-1) on April 3 through April 6, 2000, to support the review of the ANO-1 license renewal application. The team consisted of nine PNNL and four NRC staff. The primary goal of the site visit was to review documentation, gather information to ensure that environmental requirements of license renewal as codified in 10 CFR Part 51 are met, and to interface with officials in State and local government permitting and resource agencies to obtain related information. Attachment 1 is the list of NRC, PNNL, and Entergy Operations Inc. (Entergy) representatives that participated in the audit. Attachment 2 is information provided to the staff by Entergy to assist the staff in its review of the ANO-1 Environmental Report.

The entire team participated in an overview meeting with Entergy staff on Tuesday, April 4, 2000, before the environmental scoping meetings held later that day in Russellville, Arkansas. Entergy's presentations provided a brief overview of the layout of the plant, followed by a guided site tour, focusing on areas relevant to the environmental review. These areas included the intake and discharge structures and canals, independent spent fuel storage installation (ISFSI), meteorological tower, and chemical treatment ponds. During the rest of the site audit, review team members broke off into smaller groups with Entergy representatives with corresponding environmental disciplines. These groups participated in various activities, including a boat tour of Lake Dardanelle and automobile tours of the transmission line corridors. Environmental review team members discussed new and significant information identification methodology, determinations for issues identified as possible issues in NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," and other supporting documentation provided by Entergy. No significant new information was identified.

In addition, during the site audit, review team members met offsite with staff representing state and local government agencies and various local service agencies, including the Arkansas Department of Environmental Quality and the Research Station Archeologist at Arkansas Tech University. No major problem areas were identified during these consultations.

At the conclusion of the site visit, the NRC and PNNL staff participated in a summary exit meeting with Entergy representatives. The staff indicated that Entergy provided an informative

and well-represented site visit for the environmental review team. Some issues raised by the environmental review team during the ANO-1 site visit include:

1. The review team noted that there was significant erosion within the transmission line rights-of-way, apparently resulting from vehicle access by non-Entergy personnel. Entergy does not control public access to these rights-of-ways and do not use a Best Management Practice to control erosion. Although this is an existing condition that will continue whether or not the ANO-1 license is renewed, the staff noted this is an environmental impact resulting from ANO-1 operation.
2. The review team noted that the meteorological tower was out of service for more than a week, and that there was no backup meteorological tower to provide certain meteorological information in the control room during operation during this period. The NRC staff indicated that it would provide this information to the Operating Plant Project Manager. In addition, the staff noted that trees had recently been planted close to the meteorological tower which, after a growth period, could cause the tower to not properly represent the meteorology of the site. Entergy indicated that they were aware of the issue, and that a condition report had been initiated to enter the concern into ANO-1's commitment tracking system to correct the matter.
3. The review team requested Entergy to determine any future plans of the U.S. Army Corps of Engineers regarding operation of the McClellan-Kerr Arkansas River Navigation System that could affect operation of ANO-1 during the license renewal period. A telecon was held between Entergy, the NRC, and PNNL staff, and Mr. Mike Hendricks of the U.S. Army Corps of Engineers, during which Mr. Hendricks indicated that he was not aware of any plans that would affect ANO-1 operation during the period in question. Entergy followed up the telecon with a letter requesting verification of that conclusion (letter included in Attachment 2). The staff requested Entergy to provide it with the written response from the U.S. Army Corps of Engineers.
4. The review team identified conflicting information concerning the estimated low flow conditions used in the earlier thermal analysis of the Arkansas River resulting from ANO-1 operation. The higher temperatures that would be expected with the low flow conditions could result in reduced dissolved oxygen concentrations. Reduced dissolved oxygen was identified as a evolving regional concern. The NRC staff indicated that it would investigate the discrepancies, and notify Entergy if it had any additional concerns on the matter.
5. The review team's investigation of potential archeological sites at the ANO-1 site revealed that there were sites of potential historical value on the ANO-1 property that were not identified in the license renewal application. In addition, the staff identified information that conflicted with the location of certain sites that were identified in the application. Also, Entergy has implemented a reforestation program at the site that, based on the staff's observation, disturbed some of these sites. Entergy indicated that the potential archeological sites identified in the ANO-1 Environmental Report were the only ones that were identified by the Arkansas State Historic Preservation Office.

The NRC staff indicated that it did not identify any other issues during its site visit or the visits offsite with Federal, State, and local agencies. However, it further indicated that the review was ongoing, and that any additional information necessary to support the review would be formally requested as a request for additional information.

/RA/

Thomas J. Kenyon, Senior Project Manager
Generic Issues, Environmental, Financial, and
Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-313

Attachments: As stated

cc w/o atts: Eva Hickey, PNNL
Chris Nolan, NRC/PM
Service List

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 Chris Nolan, NRC/PM
 Service List

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OFFICE	RGEb	SC:RGEb	C:RGEb	C:REXB
NAME	TKenyon:sw	BZalcman	CCarpenter	CGrimes
DATE	4/26/00	4/27/00	4/29/00	5/1/00

ATTENDEES
ENVIRONMENTAL SITE AUDIT FOR ANO-1
April 3-6, 2000

NAME	ORGANIZATION
Natalie Mosher	ANO Licensing
Marty Ray	TENUS
Jon Cudworth	Tetra Tech NUS
Van Ramsdell	PNNL
Paul Nickens	PNNL
Duane A. Neitzel	PNNL
Cindi Carpenter	NRC
Eva Eckert Hickey	PNNL
Katie Allen Cort	PNNL
Bob Prato	NRC
Janice Moore	NRC
Sue Wiens	NRC
Mike Scott	PNNL
Kathy Rhoads	PNNL
Lance Vail	PNNL
Charlie Brandt	PNNL
Garry G. Young	Entergy
Ricky N. Buckley	Entergy
J. Dennis Calloway	Entergy
Chip Cameron	NRC
Kim Leigh	NRC
Jim Wilson	NRC
Thomas Kenyon	NRC
Rob Jolly	NRC
Barry Zalcman	NRC
John Holz	ANO Design
Linda Baynham	Entergy
Gary Tucker	FTN Associate, Ltd
Bob West	FTN Associate, Ltd
Don Woods	R/W Management
Don Hicks	ANO RP/RW
John Etheridge	Entergy
Lee Willingham	R/M Management
Roger Freeman	EP
Jackie Haynes	ANO
Michael Frala	ANO-Chemistry
Greg Stephenson	ANO-Chemistry
Teresa Maddey	ANO-Chemistry
Michael Prock	ANO-Chemistry
Charles Adams	ANO-Chemistry

Attachment 1

Arkansas Nuclear One

cc:

Executive Vice President
& Chief Operating Officer
Entergy Operations, Inc.
P. O. Box 31995
Jackson, Mississippi 39286-1995

Mr. Douglas J. Walters
Nuclear Energy Institute
Ste 400
1776 I St., NW
Washington, DC 20006-3708

David D. Snellings, Jr., Director
Division of Radiation Control and
Emergency Management
Arkansas Department of Health
4815 West Markham, Mail Slot #30
Little Rock, Arkansas 72205-3867

Mr. Garry Young
Entergy Operations, Inc.
Arkansas Nuclear One

Winston & Strawn
1400 L Street, N.W.
Washington, DC 20005-3502

Manager, Rockville Nuclear Licensing
Framatone Technologies
1700 Rockville Pike, Suite 525
Rockville, Maryland 20852

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 310
London, Arkansas 72847

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

County Judge of Pope County
Pope County Courthouse
Russellville, Arkansas 72801

Vice President, Operations Support
Entergy Operations, Inc.
P. O. Box 31995
Jackson, Mississippi 39286-1995

Wise, Carter, Child & Caraway
P. O. Box 651
Jackson, Mississippi 39205

1448 SR 333 GSB-2E
Russellville, Arkansas 72802

Russellville Resident Office
U.S. Army Corp of Engineers

PO Box 1087
Russellville, Arkansas 72811

Mr. Harold K. Grimmett, Director
Arkansas Natural Heritage Commission
1500 Tower Building
323 Center Street
Little Rock, Arkansas 72201

Mr. Craig Uyeda
Arkansas Game and Fish Commission
2 Natural Resources Drive
Little Rock, Arkansas 72205

Ms. Cathryn B. Slater, SHPO
Arkansas Historic Preservation Program
323 Center Street, Suite 1500
Little Rock, Arkansas 72201

George McCluskey, Senior Archeologist
Arkansas State Historic Preservation Office
323 Center Street, Suite 1500
Little Rock, Arkansas 72201

Mr Randall Mathis, Director
Arkansas Department of Environmental
Quality
PO Box 8913
Little Rock, Arkansas 72219-8913

Mr. Randy Young, Director
Arkansas Soil and Water Conservation
Commission
101 E. Capitol Ave, Suite 350
Little Rock, Arkansas 72201

Jim von Grep, Chairman
Arkansas Public Service Commission
1000 Center Building
Little Rock, Arkansas 72201

Raye Turner
Mayor, City of Russellville
PO Box 428
Russellville, Arkansas 72801

Edwin Price
Mayor, City of London
PO Box 130
London, Arkansas 72847

Carolyn McGee
Mayor, City of Dardanelle
PO Box V
Dardanelle, Arkansas 72834

Pope County Judge
Pope County Courthouse
Russellville, Arkansas 72801

Logan County Judge
Courthouse, Room 22
Paris, Arkansas 72855

Johnson County Judge
P.O. Box 278
Clarksville, Arkansas 72830

Yell County Judge
P.O. Box 236
Dardanelle, Arkansas 72834

Conway County Judge
Courthouse
Morrilton, Arkansas 72110

LaRue Parker, Chairwoman
Caddo Indian Tribe of Oklahoma
P.O. Box 487
Binger, Oklahoma 73009

Chadwick Smith, Principal Chief
Cherokee Nation of Oklahoma
P.O. Box 948
Tahlequah, Oklahoma 74465

Gregory E. Pyle, Chief
Choctaw Nation of Oklahoma
P.O. Drawer 1210
16th and Locust Streets
Durant, Oklahoma 74702-1210

R. Perry Beaver, Principal Chief
Muscogee (Creek) Nation of Oklahoma
P.O. Box 580
Okmulgee, Oklahoma 74447

Charles O. Tillman, Jr., Principal Chief
Osage Tribal Council
P.O. Box 799
Pawhuska, Oklahoma 74056

Ed Rodgers, Chairman
Quapaw Tribal Business Council
P.O. Box 765
Quapaw, Oklahoma 74363

Jerry G. Haney, Principal Chief
Seminole Nation of Oklahoma
P.O. Box 1498
Wewoka, Oklahoma 74884
Jim Henson, Chief
United Keetoowah Band of Cherokee
Indians
PO Box 746
Tahlequah, OK 74465

Jon Cudworth
Tetra Tech NUS, Inc.
900 Trail Ridge Rd
Aiken, South Carolina 29803

Garry G. Young

Entergy Operations, Inc.
2306 W. 7th St.
Russellville, Arkansas 72801

Rick Buckley
Entergy Operations, Inc.
PO Box 31995
Jackson, Mississippi 39286

Jager Smith
Entergy Operations, Inc.
PO Box 651
Jackson, Mississippi 39205

Bernard Bevill
Arkansas Department of Health
4815 West Markham Street
Little Rock, Arkansas 72205

Chris Meyer
Arkansas Department of Health
P. O. Box 1749
Russellville, Arkansas 72811

Marty Ray
Tetra Tech NUS, Inc.
900 Trailridge Road
Aiken, South Carolina 29803

Dennis Calloway
Entergy Operations, Inc.
1448 SR 333
Russellville, Arkansas 72801

Karen Fricke
Arkansas Public Service Commission
1000 Center
Little Rock, Arkansas 72203

Nick Eggemeyer
Entergy Operations, Inc.
106 Skyridge Road
Russellville, Arkansas 72801

Grant Merrill
KARV Radio
201 West Second Street

Russellville, Arkansas 72801

Kate Sullivan
KATV
Main Street
Little Rock, Arkansas 72211

Judith Stewart-Abernathy
Troop 221 Boy Scouts of American
Rt 3 Box 1344
Dardanelle, Arkansas 72834

Angie Howard
Nuclear Energy Institute
1776 I Street, NW
Suite 400
Washington, DC 20006-3708

U.S. Nuclear Regulatory Commission
Region RIV
ATTN: Kriss Kennedy
611 Ryan Plaza Drive
Suite 400
Arlington, Texas 76011-8064

Lee McColloch
Arkansas Public Service Commission
1000 Center
Little Rock, Arkansas 72203

Dallas Eggemeyer
Entergy Operations, Inc.
106 Skyridge Road
Russellville, Arkansas 72801

Tom McChesney
Arkansas Department of Health
P.O. Box 1749
Russellville, Arkansas 72811

Reza Ahrable
Entergy Operations, Inc.
703 E. Elm
Russellville, Arkansas 72802