Docket 216

September 28, 1976

NRC FORM 197 (8-76)

U.S. NUCLEAR REGULATORY COMMISSION

TECHNICAL ASSIGNMENT CONTROL FORM

167119

ACTION NEW ASSIGNMENT ☐ NEW INFORMATION ☐ ADDITIONAL INFORMATION REQUESTED ☐ CANCELLATION ☐ COMPLETION ☐

SECTION I. REQUEST DATA

PREPARED BY: NEIGHBORS (PM) & SCHWENCER (BC)

(AD) DATE PREPARED: MO. 04 DAY 10 YR. 77

(AZ) DOR CODE: 3

(AE/AF) TITLE/GENERAL DESCRIPTION (Limit to 120 characters): OCONEE 1,2,3 — REACTOR VESSEL MATERIAL SURVEILLANCE PROGRAM

(AG) REQUEST CONTACT: DON NEIGHBORS

(AB) REQUESTING ORGANIZATION: ORB 1

(AH) REQUESTING TARGET DATE: MO. 05 DAY 15 YR. 77

(AJ/AK) REQUESTING REMARKS (Limit to 120 characters): SEE ATTACHED

(AL) OR CONTROL NUMBER

(AM) STANDARDS TASK NUMBER

SYSTEMS CONTROL DATA

FACILITY NAME(S)	(BA) DOCKET(S)	FACILITY NAME(S)	(BA) DOCKET(S)
(1) OCONEE UNIT 1	050-00 287	(4)	050-00
(2) OCONEE UNIT 2	050-00 287	(5)	050-00
(3) OCONEE UNIT 3	050-00 287	(6)	0

VENDOR'S NAME

REPORT IDENTIFICATION SYMBOL

(DA) PROPRIETARY (P)

(EA) NON-PROPRIETARY VERSION (NP)

(FA) NON-PROPRIETARY REPORT

(AR) REPORT DATE: MO. DAY YR.

(AS) ADDITIONAL INFORMATION REQUEST DATE: MO. DAY YR.

(AT) SUBMIT DATE: MO. DAY YR.

(AU) LETTER TO VENDOR DATE: MO. DAY YR.

(AV) ACCEPTED ☐ NOT ACCEPTED ☐ WITHDRAWN ☐

SECTION II. REVIEW DATA

(AC) TYPE OF WORK (Enter an "S" for Safety Related or an "E" for Environment Related)

POST CP	(PC)		TOPICAL REPORT REV.	(TR)		RESEARCH ACTIVITIES	(RA)		INDUSTRY CODES & STD.	(IC)	
			CONTRACT MGMT.	(CM)		TECH. PROJ. SHORT LS	(ST)		CORRESPONDENCE	(CR)	
			NON-REACTOR REV.	(NR)		TECH. PROJ. LONG LS	(LT)		REG. GUIDES & STD. REV.	(GR)	
PLANT SURVEILLANCE	(PS)		REEVALUATION REVIEWS	(RR)		DOR TECH. PROJ.	(TP)		PROMPT ACTION	(PA)	
EVENT FOLLOWUP	(EF)		OTHER	(OT)		S					

ASSIGNED ORGANIZATION ("X" appropriate column)

LWR 1		LMFB		ADQA		EB	X	MTEB		ADRS		CBB		AAB		ADST							
LWR 2		SRB		ORB1		RS		SEB		APCB		ADET		ETSB		DPM							
LWR 3		OLB		ORB 2		PSB		ADE		CSB		EPB 1		RAB		DOR							
LWR 4		ADSP		ORB 3		EEB		RSB		EICB		EPB 2		ADSA		DSS							
ADLR		QAB		ORB 4		ADOT		CPB		ADPS		EPB 3		GSB		DSEA							
		ISEB		ADOR		MEB		AB		ESB		ADEP		HMB									

REVIEWER'S SURNAME	(CA) REVIEWER'S INITIALS	(CB) ESTIMATED HOURS	COMPLETION DATE (CC) ESTIMATED MO. DAY YR.	COMPLETION DATE (CD) ACTUAL MO. DAY YR.
Neighbors	J.D.N			
ZWETZIG	G.B.Z			

BRANCH COORDINATING LEAD RESPONSE

RESPOND INDIVIDUALLY ☐

COPIES TO:
1. REQUESTER
2. MIPC/PROCESSING & PROGRAMMING BRANCH
3. REVIEWING BRANCH

M-4

NRC FORM 197 (8-76)

Basis for Request: a. Generic Issue - Reactor Vessel Material Surveillance Program

b. Duke Power Company (DPC) letter dated March 10, 1977.

Licensing Action Planned: Issue SER addressing acceptability of the Surveillance Program and amend license to incorporate proposed Technical Specification as appropriate.

Scope of Review: In a manner similar to the review performed for Arkansas, perform a review of the DPC submittal for acceptability and provide a written SER.

The suspense date of May 15, 1977 was chosen to allow issuance of the amendment prior to Oconee Unit 1 startup early in July.

Jerry Swetzig is lead engineer on the generic aspecs of this review.

DOCKETS NOS.: 50-269/270/287 DATE: APR 1 1977

LICENSEE: Duke Power Company (DPC)

FACILITY: Oconee Nuclear Station

SUMMARY OF MEETING HELD ON MARCH 23, 1977, CONCERNING THE JOCASSEE DAM

On March 23, 1977, we met with representatives of Duke Power Company and its consultants concerning the Jocassee Dam and the seismic activity in the Jocassee Dam area. The meeting was held at the Jocassee Dam.

A list of attendees is attached.

The discussions of the meeting basically followed the agenda set forth in the meeting notice and as attached. Duke Power Company made presentations covering the pertinent items of discussion.

The ultimate goal of this meeting was to obtain information concerning the Jocassee Dam and the related seismic activity and to establish monitoring requirements for the seismic activity in the area of the dam with appropriate reporting of unusual or abnormal activity to NRC as soon as possible. Duke Power Company proposed a seismic network of at least four stations in the Jocassee environs and reports to NRC when an earthquake of magnitude greater than 3.0 or more than 100 events per week are observed. We stated that we wanted to consider this proposal and would inform DPC of any additional requirements we feel necessary. In the interim, DPC will report as it proposed.

We requested DPC to provide a short term report summarizing the information to date using the meeting agenda as an outline. DPC agreed to this and we agreed to provide DPC a letter indicating the type of information we feel should be in the report.

We also stated that a long term report may be desired at the end of the monitoring program depending on the results of the program.

D. Neighbors, Project Manager
Operating Reactors Branch #1
Division of Operating Reactors

Enclosure:
List of attendees

cc w/encl: See next page

OFFICE ➤			DOR:ORB#1			
SURNAME ➤			DNeighbors:lb			
DATE ➤			4/01/77			

Docket File
NRC PDR
LOCAL PDR
ORB#1 Reading
NRR Reading
B. C. Rusche
E. G. Case
V. Stello
K. R. Goller
D. Eisenhut
T. J. Carter
A. Schwencer
D. Ziemann
G. Lear
R. Reid
R. Clark
L. Shao
R. Baer
W. Butler
B. Grimes
Project Manager
Attorney, OELD
OI&E (3)
S. M. Sheppard
Participants (NRC)
R. Fraley, ACRS (16)
T. B. Abernathy
J. R. Buchanan

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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Operating Reactors Branch #1
Division of Operating Reactors

Enclosure:
List of attendees

cc w/encl: See next page

NRC MEETING WITH DUKE
POWER COMPANY

MARCH 23, 1977

ATTENDANCE LIST

NRC

D. Neighbors
C. Stepp
R. Jackson
J. Kelleher
L. Heller
D. Simpson (NRC Consultant)

DPC

L. Dail
M. Tuckman
L. Bare
R. Bond
R. Bhatnagar
E. Gladden
D. Stone
F. Chambers

DPC Consultants

T. Long (Ga. Tech)
G. Sowers (Law Engineering)
G. Fogle (Law Engineering)
C. Sams (Law Engineering)
P. Falwani (Univ. of S. Carolina)
W. Conn
P. Leary (Princeton Univ.)

APR 1 1977

DISCUSSION ITEMS

FOR

MEETING WITH DUKE POWER COMPANY

OCONEE/JOCASSEE DAM

1. Geology and Seismology Staff Objectives

2. Specifics of Seismic Network Operation

   a. Station locations

   b. Network capability - magnitude and threshold, distance and depth capability

   c. Discussion of hypocentral activity since July 1976, including focal plane solutions

   d. Reporting procedures to NRC staff

3. Specific Information on Geologic Reconnaissance of Site Area

   a. Location of discovered faluting

   b. Basis of fault age dating

   c. Available photos of dam abutments and foundation

   d. Subsurface geology - models

4. Reservoir-Induced Seismicity

   a. Similarities - difference Jocassee to known damaging earthquakes

5. Sismic Adequacy of Dam

   a. Construction progress photos/airphotos

   b. Groundwater elevation before/after dam filling (time-head plots)

   c. Embankment construction specifications (engineering properties for design and basis, density, gradation of all zones, settlement and alignment of crests and slope as a function of time)

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d. Seepage rates (relief wells, weiss, drains)

e. Simple strain computations to assess approach to threshold of cracking core

f. History of inspections and repairs to date

g. Sensitivity of dam to surface fault movement (thickness and location of filters, strain distribution - rough calculations)

h. Time - acceleration plot of expected earthquake (reference .12 g for 5.6 M_L earthquake - considerations, basis justification)

We request personnel that can discuss the above items and other related peripheral items be present at the meeting. This should include the seismological consultants and dam engineers.

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