

October 17, 2002

MEMORANDUM TO: Pao-Tsin Kuo, Program Director
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Wayne C. Walker, Inspection Team Leader
Division of Reactor Projects
Region IV

FROM: Cynthia A. Carpenter, Chief
Inspection Program Branch
Office of Nuclear Reactor Regulation

Ken E. Brockman Director
Division of Reactor Projects
Region IV

SUBJECT: FORT CALHOUN LICENSE RENEWAL INSPECTIONS

Attached is the final version of the Fort Calhoun Station License Renewal Inspection Plan. The plan, which was developed jointly by NRR and Region IV, is hereby approved. You are directed to use this plan to prepare and conduct the license renewal inspections at Fort Calhoun.

Original signed by _____
Cynthia A. Carpenter, Chief
Inspection Program Branch
Division of Inspection Program Management
Office of Nuclear Reactor Regulation

Date: 10/17/2002

Original signed by PTKuo for _____
Ken E. Brockman Director
Division of Reactor Projects
Region IV

Date: 10/8/2002

Attachment: Fort Calhoun License Renewal Inspection Plan

MEMORANDUM TO: Pao-Tsin Kuo, Program Director
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Wayne C. Walker, Inspection Team Leader
Division of Reactor Projects
Region IV

FROM: Cynthia A. Carpenter, Chief
Inspection Program Branch
Office of Nuclear Reactor Regulation

Ken E. Brockman Director
Division of Reactor Projects
Region IV

SUBJECT: FORT CALHOUN LICENSE RENEWAL INSPECTIONS

Attached is the final version of the Fort Calhoun Station License Renewal Inspection Plan. The plan, which was developed jointly by NRR and Region IV, is hereby approved. You are directed to use this plan to prepare and conduct the license renewal inspections at Fort Calhoun.

Original signed by
Cynthia A. Carpenter, Chief
Inspection Program Branch
Division of Inspection Program Management
Office of Nuclear Reactor Regulation

Date: 10/17/2002

Original signed by PTKuo for
Ken E. Brockman Director
Division of Reactor Projects
Region IV

Date: 10/8/2002

Attachment: Fort Calhoun License Renewal Inspection Plan

Distribution: See next page

DOCUMENT NAME: G:\Rlep\Wang\FCS INSPECTION PLAN.wpd

OFFICE	LA:RLEP:DRIP	PM:RLEP:DRIP	TL:RIV
NAME	H Berilla	HB Wang	WC Walker
DATE	9/26/02	9/26/02	9/26/02
OFFICE	SC:RLEP:DRIP	D:DRP:RIV	BC:IIPB:DIPM
NAME	S Lee	KE Brockman(PTKuo for)	C Carpenter
DATE	10/8/02	9/30/02	10/17/02

OFFICIAL RECORD COPY

DISTRIBUTION: Fort Calhoun License Renewal Inspection, Dated: October 17, 2002 _____

Package: ML022940143

HARD COPY

RLEP RF

W. Burton

H. Wang

E-MAIL:

PUBLIC

J. Johnson

W. Borchardt

D. Matthews

F. Gillespie

RidsNrrDe

R. Barrett

E. Imbro

G. Bagchi

K. Manoly

W. Bateman

J. Calvo

C. Holden

P. Shemanski

H. Nieh

G. Holahan

H. Walker

S. Black

B. Boger

D. Thatcher

G. Galletti

C. Li

J. Moore

R. Weisman

M. Mayfield

A. Murphy

W. McDowell

S. Smith (srs3)

T. Kobetz

C. Munson

RLEP Staff

FORT CALHOUN STATION LICENSE RENEWAL INSPECTION PLAN

I PURPOSE

This inspection plan specifies methods for implementing Manual Chapter 2516 requirements for activities relating to 10 CFR Part 54 (herein after referred to as “the rule”) and the Fort Calhoun Station (FCS) license renewal inspection program. This plan defines the scope of the inspections planned to verify that FCS’s license renewal program is in compliance with the requirements of the rule and is consistent with Omaha Public Power District’s (OPPD’s) license renewal application (LRA) and the staff’s safety evaluation of OPPD’s LRA. The plan also provides guidance for inspection scheduling, inspector training, inspection activities, and resource requirements.

OPPD’s LRA identified the systems and structures that OPPD determined were within the scope of the rule. Attachment 1 lists the systems and structures selected for this inspection. The inspection team chose the items, after reviewing the scoping results provided in FCS’s LRA, on the basis of their risk significance, uniqueness to FCS, and current issues. The scope and depth of inspections of these systems and structures may vary.

II OBJECTIVES

The overall objective of this plan is to provide guidance for inspecting the implementation and effectiveness of the programs and activities associated with OPPD’s license renewal program. The inspection will verify that there is reasonable assurance that the effects of aging will be adequately managed so that the intended function(s) of structures and components (SCs), for which an aging management review is required, will be maintained consistent with the current licensing basis (CLB) during the period of extended operation. Region IV will implement the license renewal inspection plan (LRIP) at FCS before NRR approves OPPD’s LRA to verify that OPPD meets the requirements of the rule and has implemented license renewal programs and activities consistent with the rule, the LRA, and the staff’s safety evaluation report (SER) on the LRA.

III INSPECTION ACTIVITIES

Each inspector will receive basic LRIP training. The inspectors will receive additional training on the FCS LRA and the staff’s safety evaluation of the LRA. The training will be given before the inspections.

Inspection Procedure (IP) 71002, “License Renewal Inspections,” will be the primary procedure used to inspect OPPD’s implementation of the requirements of the rule. IP 71002 is included for ready reference as Attachment 2.

1. The systems and structures groups to be inspected are identified in Attachment 1 of this plan. The selection of these systems and structures is based on risk significance and the importance of the safety function performed. The inspection team will verify that OPPD has implemented the scoping methodology consistent with the rule and OPPD’s methodology, as described in the LRA submitted by letter dated January 9, 2002. The inspection team will also inspect a sample of the systems and structures listed in

Attachment 1 (systems and structures that OPPD concluded were not within the scope of the rule) in order to verify that there is reasonable assurance that all systems and structures within the scope of 10 CFR 54.4 have been identified.

2. The implementation of the screening activities required under 10 CFR 54.21(a)(1) will be inspected by reviewing system boundaries on plant drawings, intended functions, and the active/passive and short-/long-lived characteristics of the SCs within the scope of OPPD's aging management review for the systems, structures, and commodity groups listed in Attachment 1.
3. The inspection team will also walk down accessible portions of the systems and structures to identify any observable inconsistencies in the scoping and screening activities and any aging effects on the systems and structures that are not covered in the LRA. Aging effects identified by OPPD will be reviewed and evaluated during the NRR technical review. The inspection team will perform a sample audit of related maintenance records of the systems and structures listed in Attachment 1 to attempt to identify any previously unrecognized aging.
4. The inspection team will inspect the aging management programs for approximately half of the aging effects in each of the systems and structures listed in Attachment 1. The inspection team will examine records for existing aging management programs to evaluate the programs' effectiveness and will review plans for new aging management programs. The inspection team will then document its findings on the effectiveness of the aging management programs to maintain a system's intended function(s) consistent with the CLB for the period of extended operation.
5. The Generic Aging Lessons Learned (GALL) report contains the NRC staff's generic evaluation of the existing plant programs and the technical bases for determining that the existing programs are adequate either without modification or with enhancements. The inspection team will review OPPD documentation to verify, at least half of the aging management programs (AMPs) where OPPD claims they are consistent with the GALL report, to confirm that FCS's AMPs are consistent with the GALL report and will adequately manage aging effects during the period of extended operation.

IV INSPECTION SCOPE

The FCS license renewal inspection activities will be implemented through three site inspections.

1. The first inspection will last one week, or longer if necessary, and focus on the scoping and screening processes to verify that they have been implemented consistent with the rule, OPPD's methodology, and the staff's safety evaluation of OPPD's methodology. This inspection should be performed after the staff has completed its safety evaluation of the scoping and screening methodology, but before the SER is issued. The inspection will verify that there is reasonable assurance that OPPD's scoping and screening processes have identified all of the SSCs for which an aging management review is required consistent with the requirements of the rule.

Preparation Week: October 28 through November 1, 2002

Onsite Inspection: November 4-8, 2002
Documentation Week: November 11-15, 2002

2. In the second inspection, the team will spend one week at the site, return to the region for one week to review documents, begin to write the inspection report, adjust the inspection plan, if needed, and go back to the site for another week. This inspection will examine aging management reviews and demonstration activities. To support the NRR review process, the second inspection will be performed just before the "SER with open items" (currently scheduled for April 2003) is issued.

Preparation Week: December 30, 2002, through January 3, 2003
Onsite Inspection: January 6-10 and 20-24, 2003
Documentation Week: January 27-31, 2003

3. If the regional administrator decides that the open inspection items from the first two inspections warrant a third inspection, the team will followup on previous inspection activities and inspect OPPD actions on any SER open items. This inspection will also focus on any portion of the LRA updated by the applicant as a result of recent plant modifications. The third inspection report will document the need for any future follow-up inspections.

V INSPECTION RESOURCES

The inspection will need the following inspection resources:

1. Inspectors

- One team leader
- Three inspectors from the region
- One consultant with site-specific knowledge (preferably the resident inspector)
- One or more support staff from the program office

2. Skills

The inspection team needs a cross-section of skills, including mechanical, material, civil, and electrical engineering skills.

The scope of the third inspection (and, thus, the resources) will depend on how many open issues remain from the previous inspection activities.

VI ADMINISTRATIVE

1. The following inspection report numbers have been assigned to the license renewal inspections:

Scoping and Screening Inspection - IR 2002007
Aging Management Review - IR 2003007

NRC inspectors should charge inspection hours on the Human Resources Management System (formerly STAFIRE) using inspection report numbers listed above and one of the following activity codes:

LRP	License Renewal Preparation/Documentation
LRI	License Renewal Inspection
LRT	License Renewal Travel

The Fort Calhoun Station docket number is 50-285.

Attachments:

1. List of Systems and Structures to be reviewed during the inspections
2. Inspection Procedure 71002

FORT CALHOUN STATION LICENSE RENEWAL INSPECTION PLAN

LICENSE RENEWAL SCOPING RESULTS FOR MECHANICAL SYSTEMS

System Name	System in License Renewal Scope?
Auxiliary Boiler Fuel Oil	Yes
Auxiliary Feedwater	Yes
Auxiliary Feedwater Pump Fuel Oil	No
Chemical and Volume Control	Yes
Component Cooling Water	Yes
Containment HVAC	Yes
Containment Isolation	Yes
Containment Spray	Yes
Control Room HVAC	Yes
Diesel Generators and Support Systems	Yes
Fire Protection	Yes
Instrument Air	Yes
Main Steam and Turbine Steam Extractions	Yes
Postaccident Sampling	No
Reactor Coolant, Reactor Vessel Internals, Reactor Vessel	Yes
Safety Injection	Yes
Service Air	No
Raw Water	Yes
Spent Fuel Pool Cooling	Yes
Ventilation	Yes
Condensate	No

FORT CALHOUN STATION LICENSE RENEWAL INSPECTION PLAN

LICENSE RENEWAL SCOPING RESULTS FOR STRUCTURES

System Name	System in License Renewal Scope?
Condensate Storage Tank Enclosures	No
Containments	Yes
Diesel Fuel Oil Tank Foundation	Yes
Emergency Diesel Generator Buildings	Yes
Intake Structures	Yes
Auxiliary Building	Yes
Switchyard	No
Turbine Building and Service Building	Yes
Safety Inspection and Refueling Water Tank	Yes
Building Piles	Yes
Component Supports	Yes
Duct Banks	Yes

FORT CALHOUN STATION LICENSE RENEWAL INSPECTION PLAN

LICENSE RENEWAL SCOPING RESULTS FOR ELECTRICAL/I&C SYSTEMS

System Name	System in License Renewal Scope?
125V DC	Yes
4.16kV Electrical	Yes
480V Electrical	Yes
Communications	Yes
Containment Electrical Penetrations	Yes
Generation and Distribution (includes Main, Auxiliary, and Startup Transformers and the Switchyard)	No
Reactor Protection System	Yes
Engineering Safeguards	Yes
Radiation Monitoring	Yes
Qualified Safety Parameter Display System	Yes
22 kV	No