Duke Power®

RONALD A JONES
Vice President
Oconee Nuclear Site

Duke Power
ON01VP / 7800 Rochester Hwy.
Seneca, SC 29672

864 885 3158
864 885 3564 fax

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

Attention: Document Control Desk

Subject: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287
Special Report per Selected Licensee Commitment 16.9.9
Problem Investigation Process No.: O-05-7215

Pursuant to Oconee Nuclear Station Selected Licensee Commitment (SLC) 16.9.9, attached is a special report regarding the inoperability of the Station Auxiliary Service Water (ASW) System and the Stand-by Shutdown Facility (SSF) ASW System. SLC 16.9.9 Condition B allows these two systems to be inoperable simultaneously with a completion time of 7 days. If this time is exceeded, SLC 16.9.9 Condition C requires that a report be submitted within 30 days to outline plans and procedures to be used to provide for the loss of the system.

The Station ASW and SSF ASW systems share common water supply piping which was removed from service for planned maintenance during a refueling outage on Oconee Unit 2. The expected duration was 11.5 days and the actual duration was approximately 16 days.

This event is considered to be of no significance with respect to the health and safety of the public.

If there are any questions you may contact B. G. Davenport at (864) 885-3044 or R. P. Todd at (864) 885-3418.

Very truly yours,

for Ron Jones

R. A. Jones

Attachment

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cc: Mr. William D. Travers
Administrator, Region II
U.S. Nuclear Regulatory Commission
61 Forsyth Street, S. W., Suite 23T85
Atlanta, GA 30303

Mr. L. N. Olshan
Project Manager
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Mr. M. C. Shannon
NRC Senior Resident Inspector
Oconee Nuclear Station

INPO (via E-mail)

Oconee Nuclear Station
Special Report per SLC 16.9.9
Inoperability of the Station ASW and
SSF ASW for Longer than Seven Days

Summary:

On October 26, 2005, Oconee Nuclear Station entered Selected Licensee Commitment (SLC) 16.9.9, Condition B, because the Station and Standby Shutdown Facility Auxiliary Service Water (ASW) Systems were both removed from service in order to perform planned maintenance associated with a Unit 2 refueling outage. This SLC Condition allows these two systems to be inoperable simultaneously with a completion time of 7 days. When this time is exceeded SLC 16.9.9 Condition C requires that a report be submitted within 30 days to outline plans and procedures to be used to provide for the loss of the system.

In this case, the Station ASW System was returned to service on November 10, 2005, so that the two systems were inoperable for a period of approximately 16 days. Compensatory actions described below were put in place at the beginning of the work activity and remained in place until both systems were returned to service.

This event is considered to be of no significance with respect to the health and safety of the public.

Background:

Oconee Nuclear Station has two independent Auxiliary Service Water (ASW) Systems which provide defense in depth for decay heat removal in Mode 3 following a concurrent loss of the main feedwater system, Emergency Feedwater System, and Decay Heat Removal System for any or all three of the Oconee units.

These two systems are the Station ASW system and the Standby Shutdown Facility (SSF) ASW system. The Station ASW system is credited for tornado mitigation and loss of feedwater events that do not involve loss of onsite power. The SSF includes additional subsystems and is credited for postulated fire, sabotage, or flooding events. The SSF has also been credited as a source of alternate AC power and decay heat removal during station blackout and tornado events.

Both the SSF ASW and the Station ASW pumps take their suction from the Oconee Unit 2 Condenser Cooling Water (CCW) intake piping. Normally this piping can be supplied from intake and discharge conduits that interconnect the three Oconee Units. However, occasionally the Unit 2 intake piping must be removed from service and dewatered for scheduled maintenance activities such as coating inspection and repair. At such times, both the SSF and Station ASW pumps become inoperable.

Technical Specification (TS) 3.10.1 requires the SSF and its subsystems to be operable in modes 1, 2, and 3. The SSF or any of its subsystems may be inoperable for up to 7 days, with a provision for a cumulative 45 day limit per calendar year to allow for periodic maintenance.

Selected Licensee Commitment (SLC) 16.9.9, requires the Station ASW System to be operable in modes 1, 2, and 3. SLC 16.9.9 Condition B allows the Station and SSF ASW systems to be inoperable simultaneously with a completion time of 7 days. If this time is exceeded, SLC 16.9.9 Condition C requires that a report be submitted within 30 days to outline plans and procedures to be used to provide for the loss of the system.

Prior to this event Units 1 and 3 were operating in Mode 1 at 100% power with no safety systems or components out of service that would have contributed to this event. Unit 2 was shutdown for a planned refueling outage.

Event Description:

Several maintenance activities which required removing both the Station ASW and SSF ASW systems from service were scheduled associated with a Unit 2 refueling outage.

These work activities were bundled into a window scheduled for 11.5 days; however the potential for extension was recognized due to the fact that several of the planned activities were first time evolutions. Two Complex Maintenance Plans (CMPs), were created during job planning to address various restrictions and contingencies associated with these work activities; one for the SSF outage and one specifically for work in CCW piping affecting both systems.

At the beginning of the work activities, the SSF outage CMP declared the following components/systems and associated trains

to be "Protected Trains" for the operating units (Units 1 and 3):

- Keowee Hydro Units (i.e. emergency power)
- Lee Combustion Turbine (i.e. back-up emergency power)
- High Pressure Injection (HPI) (High Pressure Emergency Core Cooling)
- Turbine Driven Emergency Feedwater Pumps/Trains (TDEFWP)
- High Pressure Service Water (cooling water supply to HPI pump motor coolers and TDEFWPs; water supply for fire suppression).

As "Protected Trains," no planned maintenance was allowed to be scheduled on these systems/trains for the duration of the work on the ASW systems and associated CCW piping. The Online schedule for Units 1 and 3 were reviewed for any schedule conflicts by the Online and Outage Teams. This review found no additional challenges to Secondary Side Heat Removal, RCP Seal Cooling (HPI), Offsite Power, or Fire Protection. A review was performed each shift for emergent items.

The CCW piping CMP imposed restrictions on Keowee lake level to minimize the potential for Turbine Building Flooding while the CCW piping was open for inspection and maintenance. It also provided contingency instructions for resealing open valves and/or manways if necessary.

The Station ASW system was declared out of service on 10-24-2005 at 02:12. On 10-26-2005 at 14:43 the SSF ASW system was also declared out of service, which required entry into SLC 16.9.9 Condition B and started the 7 day clock. On 11-02-2005 the 7 day limit of SLC 16.9.9 Condition B was exceeded; therefore Condition C was entered, which requires this report.

The provisions described above were put in place prior to beginning the work activities, therefore no additional contingencies were required to be put in place when the 7 day action statement was exceeded.

The Station ASW system was declared operable 11-10-05 at 22:00. The SSF ASW was declared operable 11-11-05 at 04:50. Therefore the duration of time that both systems were inoperable was 15 days, 8 hours (including Daylight Savings time change), and 17 minutes or approximately 16 days.