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Docket Nos. 50-321
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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Edwin I. Hatch Nuclear Plant
Third 10-Year Interval Inservice Inspection Program
Adoption of BWRVIP-75

Ladies and Gentlemen:

By letter dated October 27, 1999, the Boiling Water Reactor Vessel and Internals Project (BWRVIP) submitted a report entitled "BWRVIP Technical Basis for Revisions to Generic Letter 88-01 Inspection Schedules (BWRVIP-75)," EPRI Report TR-113932, for NRC review and approval. At this time, the NRC has not issued a Safety Evaluation Report (SER) approving the use of BWRVIP-75 in lieu of the criteria previously established in NRC NUREG-0313, Supplement 2, as implemented via NRC Generic Letter (GL) 88-01. However, NRC and BWRVIP representatives have met to discuss BWRVIP-75 and appear to be close to resolution of the technical issues.

Southern Nuclear Operating Company's (SNC) would like to adopt BWRVIP-75 for weld examination sample determination and scope expansion criteria beginning with the Edwin I. Hatch Nuclear Plant Unit 1 Fall 2000 Refueling Outage which is presently scheduled to begin September 30, 2000. If Plant Hatch is to take advantage of the examination relaxations in BWRVIP-75, SNC needs to inform its ISI contractors so that man-power loading and schedules can be finalized. SNC would adjust the weld examination scope for the forthcoming Unit 1 outage and apply the sample size criteria described in BWRVIP-75 for plants maintaining effective Hydrogen Water Chemistry (HWC). Justification for SNC adoption of BWRVIP-75 as an effective HWC plant is provided in the Enclosure.

The RCS piping within the scope of BWRVIP-75 is also subject to the inservice inspection (ISI) requirements of the ASME Section XI Code. ASME Section XI Code Table IWB-2500-1, Examination Categories B-F and B-J, as appropriate, contain examination requirements for the subject RCS welds. The ASME Section XI Code (1989 Edition applicable for Plant Hatch) applies a random sample approach for weld examinations. Alternatively, BWRVIP-75 applies a technical evaluation approach applicable to the materials and degradation mechanisms of the subject piping as well as industry experience to justify the examination criteria.

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In order to achieve full benefit of the BWRVIP-75 criteria, SNC is therefore requesting NRC approval to utilize BWRVIP-75 as an alternative, in accordance with 10 CFR 50.55a(3)(i), to the ASME Section XI, Table IWB-2500-1 for Examination Categories B-F and B-J. SNC proposes BWRVIP-75 as the sole criteria to be utilized for all weld examinations within the scope of existing NRC documents NUREG-0313 and GL 88-01 with no consideration of the examination requirements of Section XI Table IWB-2500-1.

SNC requests approval of this 10 CFR 50.55a(3)(i) alternative no later than September 1, 2000. With NRC issue of an SER for BWRVIP-75 expected in the near future, SNC also considers that this letter supercedes all previous commitments related to the implementation of NUREG-0313 and NRC GL 88-01 applicable to Plant Hatch.

Should you have any questions in this regard, please contact this office.

Respectfully submitted,



H. L. Sumner, Jr.

IFL/eb

Enclosure: Justification for SNC Adoption of BWRVIP-75

cc: Southern Nuclear Operating Company
Mr. P. H. Wells, Nuclear Plant General Manager
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II
Mr. L. A. Reyes, Regional Administrator
Mr. J. T. Munday, Senior Resident Inspector - Hatch

Enclosure

Edwin I. Hatch Nuclear Plant Third 10-Year Interval Inservice Inspection Program Adoption of BWRVIP-75

Justification for SNC Adoption of BWRVIP-75

- The Chemistry Monitoring Program at Plant Hatch provides guidance for operating both Units in accordance with the EPRI BWR Water Chemistry Guidelines. Water chemistry control parameters are monitored and action level values are used by plant staff members to correct water chemistry conditions and evaluate those conditions, as required.
- Hatch Unit 1 has been operated with Hydrogen Water Chemistry (HWC) since September, 1987. From May 1994 to March 1999 (Cycles 16, 17, & 18), Unit 1 has operated under moderate HWC with hydrogen injection at 45 - 55 SCFM, conductivity measured in the 0.08 to 0.14 $\mu\text{S}/\text{cm}$ range, and Electro-Chemical Potential (ECP) measurements in the -400 to -450 SHE range. HWC availability has been maintained at > 80% since initial implementation. At the shutdown of Cycle 18 (Spring 1999), NobleChem (NMCA) was added to Unit 1. The NobleChem addition was implemented with both Reactor Coolant System (RCS) Recirculation Pumps in operation to achieve as much distribution to the RCS piping as possible. During Cycle 19 (current cycle), hydrogen injection has been maintained at 6 to 8 SCFM and ECP is measured at -450 to -480 SHE.
- Hatch Unit 2 has been operated with HWC since September of 1991. From May 1994 to March 2000 (Cycles 12, 13, 14 & 15), Unit 2 has operated under moderate HWC with hydrogen injection at 35 - 55 SCFM, conductivity measured in the 0.08 to 0.14 $\mu\text{S}/\text{cm}$ range, and Electro-Chemical Potential (ECP) measurements in the -400 to -450 SHE range. HWC availability has been maintained at > 80% since initial implementation. At the shutdown of Cycle 15 (Spring 2000), NobleChem was added to Unit 2. The NMCA was implemented with both Reactor Coolant System (RCS) Recirculation Pumps in operation to achieve as much distribution to the RCS piping as possible. During Cycle 16 (current cycle), hydrogen injection has been maintained at 6 to 8 SCFM and ECP is measured at -450 to -480 SHE.
- Adoption of BWRVIP-75 will allow deletion of fifteen (15) mechanized UT and eight (8) manual UT examinations which are NUREG-0313 Category C welds, and two (2) manual UT examinations which are NUREG-0313 Category A welds, during the Hatch Unit 1 2000 outage. Additionally, approval of BWRVIP-75 as an alternative to the ASME XI examination requirements results in deletion of eighteen (18) surface (liquid penetrant) examinations. The estimated savings are: \$8K/weld for UT, \$1K/weld for PT, \$18.5K/week mechanized equipment rental (3-weeks), plus mobilization expenses for 8 contractor personnel. SNC estimates a total cost of \$287.5K for examinations only. Most of these examinations require erection of scaffolding for access, and all require insulation removal, some surface preparation, radiation shielding, and restoration after examination. The associated craft support cost are estimated at another \$75K. All of these examinations are located in the primary containment (drywell), which is a high radiation area, and Health Physics personnel estimate total dose for ISI and craft support at 10-15 man-rem. Therefore, SNC could also benefit from an approximate \$500K cost savings for the fall 2000 Unit 1 outage and resultant future ISI cost savings on both units.