



Consumers
Power
Company

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See
COPY

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Region III
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DOCKET 50-255 - LICENSE DPR-20 -
PALISADES PLANT - IE BULLETIN 79-13

Consumers Power Company provided you our schedule for completion of IE Bulletin 79-13 in a letter dated July 13, 1979. This schedule is still accurate. However, having reviewed the bulletin in depth, we conclude that certain of the inspections are unnecessary. We intend to comply with the various items in the bulletin as follows:

Item 1(a)

The NDE conducted on the feed-water lines will be in accordance with the Palisades ISI Program; ie, testing methodology and acceptance criteria will be in accordance with the ASME B&PV Code, Sections III, V and XI 74S75 Addendas, except as amended by requests for relief submitted by the Palisades Plant to the Regulatory Authority. RT or UT will be used to locate indications. Indications found will be characterized by both UT and RT.

Section III acceptance criteria will be applied to RT indications as required.

UT indications will be evaluated to Section XI acceptance criteria for the reasons noted below:

Differences exist between the acceptance criteria utilized in the current Palisades ISI Program and the Section III acceptance criteria set forth in the IE Bulletin. The essential differences center on UT recording/evaluating level and on size of rejectable indication. Section III establishes a 20% DAC evaluating level whereas Section XI (Appendix III) 74W75 and thereafter utilizes a 100% evaluating level. Experience has shown that recording/evaluating at the 20% DAC level leads to numerous "geometric" or nonrelevant indications. The technical branch of the NRC has technically accepted the 100% DAC evaluating level for piping, as evidenced by the promulgation of the proposed change to

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10 CFR 50.55a to incorporate the 77S78 Addenda. Consumers Power Company utilizes hole type reflectors (increasing sensitivity by a factor of two) and three angles (0° , 45° and 60°), whereas the Code requires only two angles, all of which provide a high degree of assurance that any relevant indication is located and evaluated.

Section III UT acceptance criteria is patterned after Section III RT acceptance criteria and is based solely on the length of the indication (ie, $1/4''$ for $t \leq 3/4''$). Section XI UT acceptance criteria was established specifically for UT and was based on a very conservative fracture mechanics approach. Section XI, 74S75, acceptance criteria (IWB-3514) rejects based both on length (ie, $0.1''$ to $0.4''$ for $t = 3/4''$) and depth (2.6% - 7.2% of wall thickness) of the indication. The Section XI acceptance criteria effectively brackets the acceptance criteria of Section III and the finite differences between the two acceptance criteria is within the limit of the NDE operator's ability to measure lengths, ie, $0.1''$. The principal dimension with which we are concerned is the depth of the indication (which only Section XI treats) and which can be measured much more accurately on the display screen (CRT) of the UT instrument, ie, $0.05''$, than can the length. Therefore, Section XI acceptance criteria will be used.

Item 1(b)

If cracking is noted during the examination of the feed-water piping-to-safe end weld or the safe end-to-nozzle weld, the following welds will be examined. (See Dwg B-25, ISI Master Plan attached.)

FWS-18-FWL-1S1-259	FWS-18-FWL-1S1-260
FWS-18-FWL-2S1-260	FWS-18-FWL-2S1-261

These welds constitute all the welds between the feed-water nozzle and the first pipe support.

Item 1(c)

The following piping support components inside containment will be examined to verify operability and conformance to design. (See Dwg B-25, ISI Master Plan.)

<u>Hangers</u>	<u>Snubbers</u>	<u>Lugs</u>	<u>Saddle Supports</u>
FWS-18-FWL-1S1-248PR	None	FWS-18-FWL-1S1-256PL 1-4	FWS-18-FWL-1S1-248PR
FWS-18-FWL-1S1-251PR		FWS-18-FWL-2S1-257PL 1-4	FWS-18-FWL-1S1-251PR
FWS-18-FWL-1S1-252PR			FWS-18-FWL-1S1-252PR
FWS-18-FWL-1S1-256PR			FWS-18-FWL-1S1-258PR-1
FWS-18-FWL-1S1-258PR-1			FWS-18-FWL-1S1-259PR-2
FWS-18-FWL-1S1-258PR-2			
FWS-18-FWL-2S1-249PR			FWS-18-FWL-2S1-249PR
FWS-18-FWL-2S1-252PR			FWS-18-FWL-2S1-252PR
FWS-18-FWL-2S1-253PR			FWS-18-FWL-2S1-253PR
FWS-18-FWL-2S1-257PR			FWS-18-FWL-2S1-259PR-1
FWS-18-FWL-2S1-259PR-1			FWS-18-FWL-2S1-259PR-2
FWS-18-FWL-2S1-259PR-2			

These supports constitute all of the feed-water system piping supports and snubbers in containment.

Item 2(a)

The Palisades Plant uses a common feed-water line/feed-water nozzle for both main feed-water and auxiliary feed-water inside containment. A volumetric examination (UT) will be performed on each auxiliary feed-water-to-main feed-water pipe branch connection outside containment. The performance of NDE examinations on the nozzle and safe end welds will be in accordance with 1(a) above. Additional examinations conducted pursuant to finding Code rejectable indications will be in accordance with 1(b) above. No NDE will be performed on the remainder of the feed-water lines within containment with the exception of those currently scheduled in the ISI Master Plan, unless IWC-2430 is applicable.

The NDE performed pursuant to 1(a), 1(b) (if necessary), 1(c), and 2(a) above, which will be conducted in lieu of the examination of every piping weld on the feed-water line in containment, provides a high degree of assurance that defects existing in highly stressed feed-water welds are detected. The feed-water nozzle welds and the auxiliary feed-water-to-main feed-water branch connection are postulated to be among the highest stressed components in the feed-water lines due to the rigid constraint imposed by the steam generator and thermal gradients resulting from feedwater at 390°F flowing into the steam generator(s) at 550°F and 40°F auxiliary feedwater flowing into 390°F main feedwater. The performance of NDE on the above cited components effectively canvasses those areas most susceptible to stress induced failure and as such adequately monitors the integrity of the Palisades feed-water lines.

Item 2(b)

Item not applicable to Palisades Plant.

Item 2(c)

Performed as stated in 1(c) above.

Item 3

Item not applicable to Palisades Plant.

Item 4

Any cracking or other Code rejectable defect will be reported to the NRC Regional Office within 24 hours of identification.

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Item 6

The results of these examinations will be reported in the ISI Final Report 90 days after the last ISI examination since all Code rejectable defects will be reported within 24 hours.

David P Hoffman (Signed)

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