

October 18, 1995

**ComEd**

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

Subject: LaSalle County Nuclear Power Station Unit 1  
L1R07 Core Shroud Inspection Plan  
NRC Docket No. 50-373

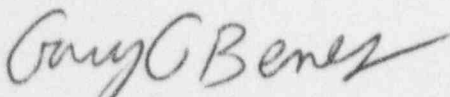
Reference: G. G. Benes letter to W. T. Russell, dated August 23, 1994

The above Reference provided ComEd's response to Generic Letter 94-03, "Intergranular Stress Corrosion Cracking of Core Shrouds in Boiling Water Reactors". As indicated in our response (and required by the Generic Letter), we committed to providing the NRC with our core shroud inspection plan no later than three months prior to performing the core shroud inspections. Attached is the Core Shroud Inspection Plan for the LaSalle 1 Seventh Refuel Outage (L1R07). The refuel outage is scheduled to begin January 27, 1996.

To the best of my knowledge and belief, the statements contained above are true and correct. In some respect these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contractor employees, and consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

Please direct any questions you may have regarding this matter to this office.

Sincerely,



Gary G. Benes  
Nuclear Licensing Administrator

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P PDR

USNRC

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October 18, 1995

Subscribed and Sworn to before me  
on this 18<sup>th</sup> day of  
October, 1995.

Mary Jo Yack  
Notary Public



Attachment

cc: H. J. Miller, Regional Administrator - RIII  
P. G. Brochman, Senior Resident Inspector - NRC, LaSalle  
R. M. Latta, Project Manager, NRR  
Office Of Nuclear Facility Safety - IDNS

## Response to Generic Letter 94-03

### References:

1. BWRVIP document GENE-523-113-0894, *BWR Core Shroud Inspection and Evaluation Guidelines*, dated September of 1994.
2. BWRVIP document, *BWR Core Shroud Repair Design Criteria*, Revision 1., dated September 12, 1994.
3. USNRC SAFETY EVALUATION REPORT ON BOILING WATER REACTOR (BWR) CORE SHROUD REPAIR DESIGN CRITERIA, dated September 29, 1994.
4. Letter from G.G. Benes to the U.S. Nuclear Regulatory Commission dated November 17, 1994.

This document is the LaSalle County Station (LSCS) response pursuant to the Station's commitment to comply with the additional reporting requirements of items 2. (a) & (b) of USNRC Generic Letter 94-03; "*Intergranular Stress Corrosion Cracking of Core Shrouds in Boiling Water Reactors*", as those items apply to LSCS Unit 1. Previous responses to address these reporting requirements for LSCS Unit 2 have been submitted in accordance with the time frame requested in the Generic Letter. This Unit 1 Inspection Plan is essentially identical to the Unit 2 Inspection Plan submitted under the letter of reference No. 4. The format of this LSCS response retains the numbering sequence of the Generic Letter.

In the Generic Letter, the staff has urged Licensees to refer where applicable to generic documents and analyses produced under the working charter of the Boiling Water Reactor Vessel Internals Project (BWRVIP) so long as the documents have been officially submitted to NRC. The LSCS response provides reference to these documents and analyses where they are applicable. In referencing these items, it is not intended that they supersede the design basis analysis of record at LSCS. Other LSCS site specific documents are also referenced as applicable in the body of this document.

As a utility, ComEd is committed to the BWRVIP. ComEd has been, and will continue to be an integral part of the BWRVIP. LaSalle County Station will follow the guidance provided by the BWRVIP with respect to flaw assessment, inspection, and repair options as this guidance is provided, and if it should be subsequently revised.

## Reporting Requirements

2. No later than 3 months prior to performing the Core Shroud inspections, provide the following information:

- 2.(a) The inspection plan requested above in item 3 of Requested Actions.

Item 3 of the Requested Actions section of the Generic Letter requires the development of an inspection plan which addresses:

- (a) "All Shroud welds (from support attachments to the vessel to the top of the Shroud) and/or, provides a justification for the elimination of particular welds from consideration."
- (b) "examination methods with appropriate consideration given to use of the best available technology and industry inspection experience (e.g., enhanced VT-1 visual inspections, optimized UT techniques)."

The examination plan described below for the LSCS Unit 1 Core Shroud will be completed during the unit's seventh refueling outage which is scheduled to begin in January of 1996.

LaSalle County Station has reviewed the *BWRVIP BWR Core Shroud Inspection and Evaluation Guidelines*, of reference No. 1 above, and determined that LSCS Unit 1 falls into Inspection Category B. Therefore the examination of the LSCS Unit 1 Core Shroud will be in accordance with the Category B (Limited Inspection) plan as described in the reference No. 1 guidelines with two minor exceptions as described below.

Due to its construction the LSCS Unit 1 Core Shroud has an additional shell course, and therefore an additional circumferential weld. In order to maintain consistency with existing LSCS Core Shroud drawings, LSCS will retain the weld numbering sequence shown on the attached sketch. So as to meet the intent of the Category B inspection plan LSCS will examine welds designated as H3, H4, H5, H6, and H8. These welds represent each region of the Shroud where significant cracking has been seen to date at other Boiling Water Reactors. In addition, H8 will be examined due to the nature of its construction which incorporates a bimetallic weld and creviced backing ring. Justification for the deferral of inspection of remaining Shroud welds is addressed in the reference No. 1 guidelines on pages 3-4, and 3-5.

The LSCS Unit 1 Core Shroud examination will also utilize a different inspection technology than is called for by the *BWR Core Shroud Inspection and Evaluation Guidelines*. Examination of the far surface of the welds listed above will be accomplished using standard 45 degree Shear wave, and 60 degree Refracted Longitudinal wave Ultrasonic (UT) testing. The near surface of the above listed welds will be examined using the "creeping wave" UT method. The "Creeping Wave" UT method has been qualified at the EPRI NDE Center and has proven



both reliable and effective in detecting near surface flaws when used in lieu of the ET technique during Fall of 1994 outages. Although no flaws were detected, the "Creeping Wave" technique was also used successfully during the examination of the LSCS Unit 2 Core Shroud in the Spring of 1995. The ET technique proposed in the guidelines has not been EPRI qualified.

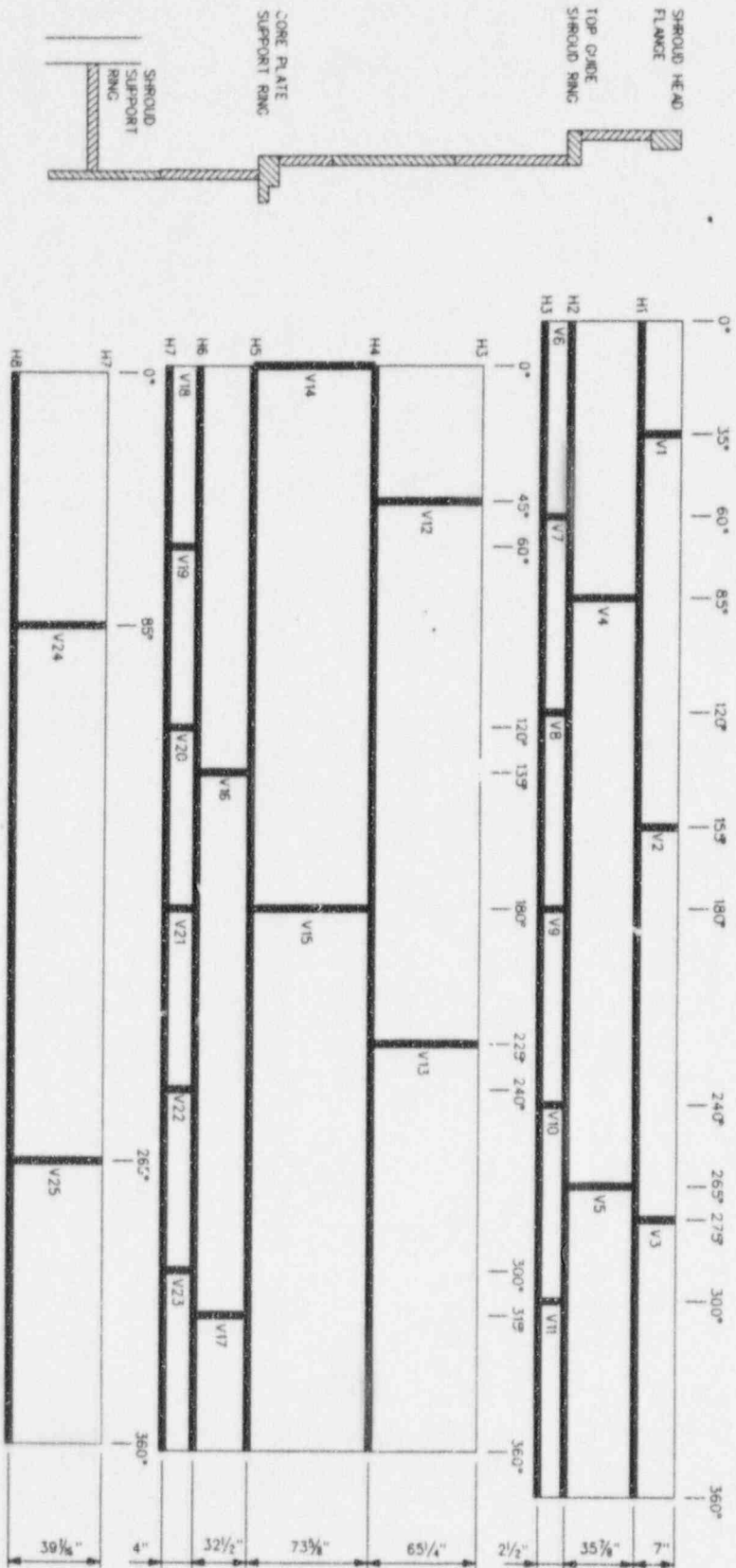
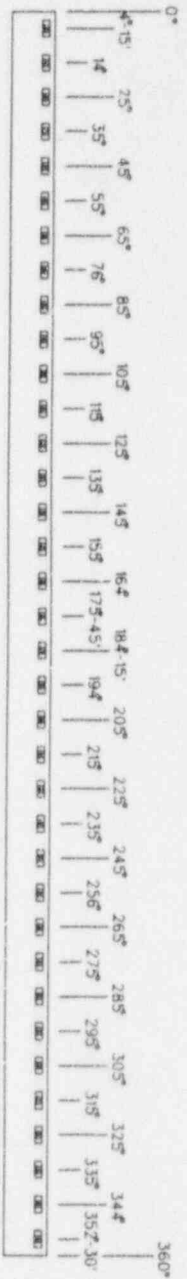
LaSalle believes that the two alternatives to the *BWR Core Shroud Inspection and Evaluation Guidelines* which will be used during examination of the Unit 1 Core Shroud are both effective and practical, and will not adversely impact the quality of the inspection results.

**2.(b) Plans for evaluation and/or repair of the Core Shroud based on the inspection results.**

All evaluations required to support the results of the examination of the LSCS Unit 1 Core Shroud will be completed in accordance with the *BWR Core Shroud Inspection and Evaluation Guidelines* of reference No. 1.

Should it become necessary or advantageous for LaSalle to implement a repair to the Unit 1 Core Shroud, the guidance provided in the reference No. 2 BWRVIP document entitled *BWR Core Shroud Repair Design Criteria*, dated September 12, 1994 will be utilized. LaSalle is aware that the staff's *SAFETY EVALUATION REPORT ON BOILING WATER REACTOR (BWR) CORE SHROUD REPAIR DESIGN CRITERIA*, dated September 29, 1994, (reference No.3), contains caveats regarding the acceptable use of this BWRVIP document, and will adhere to them if a repair is required.

Within 30 days from the completion of the inspection of the LSCS Unit 1 Core Shroud, the results of the inspection will be provided to the staff as requested.



SKETCH SHOWING TYPICAL WELDS  
IN THE CORE SHROUD  
(NOT TO SCALE)