

### UNITED STATES NUCLEAR REGISLATORY COMMISSION WASHINGTON, D C. 70755

#### OCT 1 1982

MEMCRANDUM FOR: Darrell G. Eisenhut, Director, Division of Licensing, NRR.

FROM:

Edward L. Jordan, Director, Division of Engineering and

Quality Assurance, IE

SUBJECT:

REVISED RECOMMENDATIONS FOR BOARD NOTIFICATION

REFERENCES:

(1) Memorandum dated August 23, 1982 Jordan to Eisenhut, "Proposed Board Notification Deficiencies in Welds in Main Control Panels."

(2) Memorandum dated August 25, 1982 Eisenhut to Novak and

Lainas, "Board Notification 82-90."

The enclosed IE Information Notice 82-34, Rev. 1 clarifies the time period during which the weld deficiencies mentioned in Reference 1 may have existed and deletes several plants that were identified in the original Information Notice. Due to these deletions, our recommendations for Board notification are modified.

Of the plants mentioned in Reference 1, Marble Hill 1 and 2 and Clinton are deleted from the revised Information Notice. Of the plants mentioned in Reference 2, Clinton should be deleted.

> Edward A. Jordan, Director Division of Engineering and

Quality Assurance

Office of Inspection and Enforcement

Enclosure: As stated

cc: R. C. DeYoung, IE

J. H. Sniezek, IE M. Williams, NRR

B. Baer, IE M. S. Wegner, IE

Regional Administrators

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# NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT WASHINGTON, D. C. 20555

September 17, 1982

IE INFORMATION NOTICE NO. 82-34, REV 1: WELDS IN MAIN CONTROL PANELS

## Addressees:

All holders of a nuclear power reactor operating license (OL) or construction permit (CP).

## Purpose:

This revision is made to provide the specific time period during which the potentially significant problem pertaining to welds in main control panels may have existed. The panels of concern were supplied to a number of operating plants and construction sites by Systems Control of Iron Mountain, Michigan prior to March 1980; Reliance Electric of Stone Mountain, Georgia prior to March 1982; and Comsip of Linden, New Jersey prior to March 1982. Only those panels manufactured prior to these dates are now included in the list of sites which may have panels with defective welds. The potential safety significance of this problem is still under review by the Nuclear Regulatory Commission (NRC) staff. If NRC evaluation so indicates, further licensee action may be requested. In the interim, the staff expects licensees to review the information herein for applicability to their facilities. No specific action or response is required at this time.

# Description of Circumstances:

Inspections at the vendors' facilities conducted in March of 1980 (Systems Control) and March of 1982 (Reliance and Comsip) disclosed numerous welding practices not in accordance with the American Welding Society (AWS) Standards and several quality assurance practices not in compliance with the vendors' procedures or NRC requirements. Among these were the following:

- Certified material test reports not obtained, not available, or not in accordance with AWS specifications
- 2. Changes to drawings not properly reviewed and accepted
- Welding being done by unqualified individuals without qualified procedures and using uncalibrated equipment
- Poor welds, including lack of fusion, undercuts in excess of 1/32", and weld wire remnants from 1/2" to 4" in accepted welds
- 5. Welding procedure qualification and welder qualification testing required by AWS Standards not accomplished
- 6. Essential variables as specified by AWS Standards violated
- Management oversight not accomplished for lengthy periods; lack of separate review and approval for Quality Assurance
- 8. Unidentified weld filler metal used
- Gas tung ten arc welding (GTAW) process used but not documented in place of required gas metal arc welding (GMAW) or shielded metal arc welding (SMAW) processes

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## LIST OF RECENTLY ISSUED 1E INFORMATION NOTICES

Information Notice No.	Subject	Date of Issue	Issued to
82-37	Cracking in the Upper Shell to Transition Cone Girth Weld of a Steam Generator at an Operating Pressurized Water Reactor	9/16/82	All power reactor facilities holding an OL or CP
82-36	Respirator Users Warning for Certain 5-Minute Emergency Escape Self-Contained Apparatus	9/2/82	All power reactor facilities holding an OL or CP, fuel facilities and Priority I material licensees
82-35	Failure of Three Check Valves on High Pressure Injection Lines to Pass Flow	8/25/82	All power reactor facilities holding an OL or CP
82-34	Welds in Main Control Panels		All power reactor facilities holding an OL or CP
82-33	Control of Radiation Levels in Unrestricted Areas Adjacen to Brachytherapy Patients	8/20/8 <b>2</b> t	All Medical Institutions
82-32	Contamination of Reactor Coolant System by Organic Cleaning Solvents	8/19/82	All power reactor facilities holding an OL or CP
82-31	Overexposure of Diver During Work in Fuel Storage Pool	7/28/82	All power reactor facilities holding an OL or CP
82-30	Loss of Thermal Sleeves in Reactor Coolant System Piping at Certain Westing- house PWR Power Plants	7/26/82	All power reactor facilities holding an OL or CP and applicants for operating license (NTOL)
82-29	Control Rod Drive (CRD) Guide Tube Support Pin Failures at Westinghouse PWRS	7/23/82	All power reactor facilities holding an OL or CP Westinghouse- designed NSSS

OL = Operating License CP = Construction Permit

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Since the inspection determined that the non-conforming practices of all three vendors were similar and widespread at each manufacturing facility, it can be assumed that any panel furnished by these vendors prior to the respective NRC inspection dates may have defective welds. Although the vendors have seismically qualified similar panels, improper welding practices and defective welds prior to the NRC inspection may affect the validity of those qualifications.

Some control panels were identified during vendor inspections as having defective R1 welds. Sites which have received panels that may have defective welds are as follows: Palo Verde 1, 2, and 3; Byron 1 and 2; Braidwood 1 and 2; Midland 1 R1 and 2; Vogtle 1 and 2; Callaway 1; Comanche Peak 1 and 2; Waterford 3; Wolf Creek; R1 Brunswick 1 and 2; Seabrook; Susquehanna; Three Mile Island 1; Salem 1 and 2; R1 Hope Creek; Monticello; Perry 1 and 2; Hatch 1 and 2; Indian Point 2; Shearon Harris 1, 2, 3, and 4; St. Lucie 2; Shoreham; Virgil Summer; Dresden; and R1 LaSalle.

If you have any questions regarding this matter, please contact the administrator of the appropriate Regional Office or this office.

Edward L. Jordan, Director
Division of Engineering and
Quality Assurance
Office of Inspection and Enforcement

Technical Contact: M. S. Wegner

301-492-4511

Attachment:

List of Recently Issued IE Information Notices