

NOV 04 1983

MEMORANDUM FOR: Stewart D. Ebnetter, Chief, Engineering Programs Branch  
Division of Engineering and Technical Programs

THRU: Jacque P. Durr, Chief, Materials and Processes Section,  
EPB, DETP

FROM: Lewis Narrow, Lead Reactor Engineer, M&PS, EPB, DETP

SUBJECT: SALP INPUT (10/1/82 - 9/30/83) FOR NINE MILE POINT 2

SALP input for the period ending 9/30/83 is attached. Included are analyses in the following areas:

- Containment and other safety related structures - Inspection No 82-15;
- Electrical Power - Inspection 82-16, 83-03, 83-06, 83-08 and 83-11;
- Piping Systems and Supports - Inspection 83-10;
- Quality Assurance - 83-10.

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## 2. Containment and Other Safety Related Structures

One inspection was conducted of concrete construction and placement of high density concrete fill. Preplacement preparation and concrete placement for fuel pool girders and interior walls was accomplished in accordance with the applicable specifications. Inspection prior to and during placement was adequate. Test samples were obtained and records maintained as required.

Observation and review of records for placement of high density concrete fill in the biological shield show extensive planning and training of personnel. The mix was tested and controlled during placement. The placement technique provided adequate control of fill height. Satisfactory QC records were maintained.

Recommendation: category ~~1~~ (Varela)

(The report indicates that Category 1 may be warranted)

## Electrical Power Supply and Distribution

Five inspections were conducted during this period covering cable and raceway installation; receipt, storage and maintenance of equipment; qualification testing of equipment; design verification and control; and QA/QC procedures, performance and records. Two violations were identified; failure to control design interfaces and properly integrate load sequencing schemes provided by GE and SWEC, and acceptance of Gould 600 volt and 125 volt motor control centers (MCC's) which did not meet SWEC electrical specification requirements for internal wiring.

Observation of cable pulling, terminations and raceway installation and review of QC records showed craft and QC personnel to be well trained and qualified. Procedures for performance and inspection of this work were generally acceptable although cable pull records do not reflect the actual installed lengths of cable and there is no requirement for verification of conformance to tray fill requirements. QA audits are complete, thorough and followed for timely corrective action.

Management planning and control of activities is frequently ineffective as exemplified by the violations described above, by failure to provide adequate qualification requirements for the emergency diesel generators (EDG's) and by failure to require inspection of the Power Generation Control Console (PGCC) site a record of numerous deficiencies identified with this equipment at sites. In addition, load calculations for the EDG's and the load sequencing information are shown incorrectly in the FSAR. However, management does become directly involved in correction of identified deficiencies and has taken personal responsibility for delivery, inspections and modification of the PGCC system.

Recommendation: ~~Category 3 (Finkel)~~  
Category 2 (Plisco)

### Piping Systems and Supports

The previous SALP review had identified significant piping/welding deficiencies and the corrective actions taken by the licensee and the piping contractor, ITT Grinnell (ITT).

One inspection was conducted during this period. ITT welder qualification and work in progress are acceptable. Welding documentation ("Planner") packages are adequate although overly cumbersome. Licensee and ITT management are actively involved in improving quality and correcting identified problems. They participate in Problem Review and QA meetings.

Qualification of welders for stainless steel welding by Johnson Controls, Inc. (JCI) was identified as not in accordance with ASME IX, although JCI claimed that it was an approved method. After review of Code Requirements, the licensee prohibited this practice and provided controls to prevent welders so qualified from working on ASME or safety related systems.

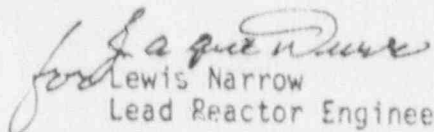
Recommendation: Category 2 (Gray)

### Quality Assurance

One inspection was conducted during this period for review of corrective action and trending of nonconformances. Nonconformances are reviewed by Field QC (FOC) for generic problems and causes. Items identified are reviewed at Quality Trend Meetings conducted by QA and if considered significant are forwarded for review at Potential Problem Review Meetings (PPRM's) which are held monthly. Licensee and Stone & Webster Engineering Corporation (SWEC) management attend PPRM's and are actively involved in resolution of significant nonconformances. In addition, a Construction Control and Completion Program coordinates corrective and preventive action by construction. The administrator of this program collects and analyzes data concerning problem causes and corrective action and reports this data to management.

These programs provide evidence of prior planning and management involvement in identification of causes of problems and providing for proper corrective action. However, they are not applied to organizations such as ITT and JCI which conduct their own QA/QC programs. Each of these companies conducts its own corrective action; there is no formal coordination of all site corrective actions.

Recommendation - Category 2 (Narrow)

  
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cc: H. Kister  
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