

DETAILS

1. Persons Contacted

Principal Licensee Employees

*R. P. Barkhurst, Plant Manager
*T. F. Gerrets, QA Manager
*J. Woods, Plant Quality Manager
*W. M. Morgan, Operation QA Manager
*M. A. Triggs, Records and Administration Manager
*F. J. Englebracht, Manager Administrative Services
*T. Chiles, Material Superintendent
*P. V. Prasankumar, Technical Support Superintendent
*W. J. Baldwin, Senior QA Representative
*H. A. Canavier, Maintenance Assistant Superintendent
*R. J. Bentley, On-Site Licensing Engineer
*R. A. Savoie, Licensing
*R. Masters, Maintenance
*J. D. Lee, Plant Engineering
*C. N. Hooper, Operations QA Engineer
*J. R. Kirkland, Maintenance Engineer
R. E. Sproles, Electrical Maintenance Assistant Superintendent
J. W. Smart, Operations QA Representative
D. Gallodoro, General Support Engineer
C. Cudworth, General Support Engineer

Ebasco Services, Inc. (EBASCO)

*M. R. Harris, Senior QA Specialist
R. Heiser, EBASCO Engineering

Quality Technology Company

*W. G. Hubacek, Representative
*W. S. Schum, Representative

NRC Personnel

*G. L. Constable, Senior Resident Inspector
*T. Flippo, Resident Inspector
*K. Whittlesey, Resident Inspector

*Denotes those attending the exit interview.

The NRC Inspector also interviewed other licensee and contractor personnel.

2. Review Of Licensee Significant Construction Deficiency (SCD)

(Open) SCD-63. Inadequate Procurement Document Packages for Spare Parts

Previous review of this item is documented in NRC Inspection Report 84-24, paragraph 2.k., which identified that no detailed procedures existed defining the Burns and Roe (B&R) review of LP&L spare parts procurement.

The only documentation of the accomplishment of the B&R review was a "Procurement Status Summary" sheet, with attachments as appropriate, for each purchase order reviewed.

The NRC inspector reviewed a sample of LP&L procurement packages for spare parts to establish a confidence level in the B&R review. Procurement packages reviewed were:

<u>Purchase Order</u>	<u>Comments</u>	<u>Description</u>
A94068D	(1)	Thermocouples
L08423D	(2)	Annunciator spare parts
L01660D	(3)	Fuses
L16414D	(4)	Agastat Relays
L03169D	(5)	Safety-Related Cable Ties for Radiation Areas
L01272D	(6)	Calibration of Ion Chambers
L02474D		Station Battery Charger parts
L19913D		Spare Reactor Trip Parts
L14433D		Associated Valve Company (ASCO) Solenoid valves
L12624D		ASCO solenoid valves
L14207D	(7)	Electroswitch transfer switches
L16435D	(8)	High Pressure Safety Injection (HPSI) pump parts
L18816D		HPSI and Core Spray (CS) pump parts
L07880D		ASCO valve parts
L19483D		Steam Generator and Reactor Coolant Pump snubber silicone fluid
L05745D		Rosemont pressure transmitters
L14206D		Swaglok instrumentation fittings
A98597D		CS and HPSI pump motor parts
A94304D		Amp electric termination lugs

Comments:

(1) Thermocouples

Thermocouples were purchased nonsafety-related; several issues were made for unidentified safety-related applications, which could be unacceptable.

(2) Annunciator Spare Parts

Vendor identified a service life, not shelf life, limitation on spare power supplies because of the use of electrolytic capacitors. The spare power supply was under a control system for service life, but licensee personnel could not provide documentation that original power supplies were under service life control. Licensee personnel told the NRC inspector that a review of vendor manuals was used to establish service life. No licensee documentation of which manuals were reviewed was identified. Problems in control and use of vendor manuals was identified in NRC Inspection Report 84-25, paragraph 4.

(3) Fuses

No EBASCO specification was listed covering fuses.

(4) Agastat Relays

The Agastat Relays are safety-related. The licensee vendor manual for Agastat Relays, Document access number 457000854, shows it as not being safety-related.

(5) Safety-Related Cable Ties

The vendor took exception to the invoking in EBASCO specification 1564.249L, Revision 2, of specification MIL-S-23190D for cable ties in radiation areas. B&R and subsequent LP&L reviews accepted this exception without documenting the technical basis. EBASCO specification 1564.249L, Revision 2, has not been subsequently revised to delete MIL-S-23190D requirements. Radiation resistance and other design characteristics of the cable ties are not covered elsewhere in the EBASCO specification. Specification MIL-S-23190D was not available for review.

(6) Calibration of Ion Chambers

The calibration was accepted by B&R with the caveat that the Ion detectors were not the high range containment gamma detectors required by NUREG-0737. There was no documented verification of the use of the Ion detectors in the package.

(7) Electros witch Transfer Switches

No EBASCO specification was listed for design.

(8) HPSI pump parts:

B&R downgraded HPSI pump parts to nonsafety-related because they were not covered by ASME. LP&L comments, in this case, took exception to this downgrading.

The NRC inspector also attempted to determine, by procedural requirements and by quality assurance documentation, if the LP&L procurement packages had received a quality review for completeness and correctness. There is no documentation or procedure showing how B&R determined that the procurement packages used in their review were complete and correct.

The NRC inspector reviewed procedures UNT-AP-616, Revision 1, "Warehouse Filing Procedure," effective from July 26, 1979, until August 2, 1983; and UNT-8-016, Revision 0, "Filing and Transmittal of Stores Documents," effective from August 2, 1983, until the present.

Neither of these licensee procedures governing procurement documents contained a quality review for completeness nor correctness for completed procurement documentation packages.

The NRC inspector found a number of examples where documents were included in completed procurement packages which were not included on the completed Document Package Checklist. Some examples were purchase orders L19913D, A94303D, L03169D, and L01272D. In the case of purchase order L19913D, the "Completed Document Package Checklist" (CDPC), listed the "Procurement Package Control Log" (PPCL) which in turn listed three pages of documentation with greater specificity than the CDPC. For instance, the CDPC stated "major exceptions taken by suppliers," without identifying how many exist. The PPCL showed five such exceptions. Verification of completeness and accuracy of procurement packages would require a significant review, since missing documents would not be obvious. All procurement packages do not have Procurement Package Control Logs.

B&R quality assurance plan for performance of the evaluation and analysis of LP&L Spare Parts procurement; W.O. 3747-01, Revision 0, dated December 31, 1982, Sections 3.2.1 and 3.2.2 states:

- 3.2.1 Review the specifications, or other base documents, to identify requirements such as codes, standards, regulatory requirements, certifications or testing requirements, and the safety-related classification of the material or item.
- 3.2.2 Evaluate the requirements specified in the procurement packages against the defined requirements in paragraph 3.2.1.

No other detailed procedures were identified to the NRC inspector. The NRC inspector was told the B&R reviewers utilized the copy of the applicable EBASCO specification in document control at the time that the review was performed. No documentation exists of which revisions of the EBASCO specifications were used; no documentation exists of review of changes representing the as-built configuration which were not incorporated in the EBASCO specifications. The date of specific reviews is not documented. In summary, there is no way to verify specifically what was done by B&R reviewers.

Licensee audit SA-W3-QA-83-04 audited the B&R review and found three deficient procurement actions. The recommended corrective action was:

- B&R rereviewed the LP&L documentation packages, they classified "unacceptable for intended application" to insure all discrepancies have been identified.

There was no basis given for not performing a rereview of accepted packages, since the findings were that B&R reviewers had not addressed such requirements as seismic qualification and electrical equivalency, and had missed such deficiencies as:

- Items not capable of being IE qualified.
- No ASME class specified for manufacture.
- Required operating ranges of switches on specification vs. drawing were in conflict and not resolved.
- Items stated as non IE when intended use was IE.

The NRC inspector found inadequate licensee documentation to permit verification of the satisfactory closure of SCD-63 including inadequate documentation to confirm that it is not reportable under 10 CFR 50.55(e). This SCD will not be closed until the licensee has documentation available to permit a meaningful review to determine if there was, and is, no programmatic problem with safety-related spare parts presently on site, including those which have been installed.

The acceptability of safety-related cable ties on LP&L purchase order L01369D for use in radiation zones 1-4 will remain an unresolved item (50-382/8435-01) pending further review by the NRC inspector during a subsequent inspection.

The end use of all nonsafety-related parts on LP&L purchase order A94068D is not defined for safety-related applications will remain an unresolved item (50-382/8435-02) pending further review by the NRC inspector during a subsequent inspection.

3. Maintenance of the Dry Cooling Tower Fan Motor Speed Reducers

As an independent inspection effort, the NRC inspector reviewed licensee maintenance on the Dry Cooling Tower fans, since these towers are the ultimate heat sink in the event of a loss-of-coolant accident (LOCA).

The manufacturer of the motor speed reducers for these fans specifies lubricant viscosity; lubricant type, such as Extreme Pressure (EP); and periodicity for changing lubricant.

The licensee's copy of the manufacturer's service manual, Philadelphia Gearmotor Service Manual, EMDRAC No. 5817-4340R1, dated January 13, 1983, licensee document control No. 457000180, page 8, had been changed without a formal revision or documented authority to specify only EP oil, AGMA No. 4EP, viscosity range "700-1000 SUV @ 100°F," for "use year round."

Prior to modification by LP&L, the manual limited the use of 4EP oil to a minimum of 50°F. The licensee stated that the specific 4EP oil used was suitable to 25°F, but no documentation was provided showing manufacturer concurrence. The NRC inspector was told that site ambient temperature has been below 25°F during fan operation. The minimum design ambient temperature is 14°F. Also, the manual stated emphatically that "EP oils are not to be used in units equipped with a built-in back stop. However, EP oils can be used in units having an external back stop providing the EP oil is not used in the back stop."

The NRC inspector could find no documentation showing that the Waterford 3 speed reducers did not have back stop design, nor were licensee or EBASCO personnel able to determine this fact.

This will remain an unresolved item (50-482/8435-03) pending further review by the NRC inspector during a subsequent inspection.

4. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations. Three unresolved items disclosed during the inspection are discussed in paragraphs 2 and 3.

5. Exit Interview

The NRC inspectors met with the licensee representatives (denoted in paragraph 1) and the NRC resident inspectors at the conclusion of the inspection on July 13, 1984. The NRC inspectors summarized the purpose, scope, and findings of the inspection.