

NOTICE OF NONCONFORMANCE

Lisega GmbH
Zeven, Germany

Docket No. 99901235

Based on the results of a Nuclear Regulatory Commission (NRC) inspection conducted on August 18-21, 1992, it appears that certain of your activities were not conducted in accordance with NRC requirements.

- A. 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires that measures be established for the selection and review for suitability of materials, parts, equipment, and processes that are essential to the safety-related functions of structures, systems, and components.

The American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code is the basis for demonstrating suitability for application of component supports and hydraulic shock absorbers supplied by Lisega for use in the Grand Gulf, Arkansas, and Palo Verde nuclear power plants.

Contrary to the above, the material and test documentation for several items which were certified by Lisega as meeting the requirements of ASME Code, Section III, Subsection NF, did not fully support this certification. Specifically:

1. Lisega issued Certificate 113 377 for SA 479, TP 410 (1) bar used for piston rods in large hydraulic snubbers ordered by Arkansas Electric and Light Company (APL) for steam generator supports. Lisega obtained this material from Gustav Grimm Edelstahl-Werke GmbH (GG) as SA 182 FEA C12 forging. GG provided a Certified Material Test Report (CMTR) for this material, including the mill heat analysis, heat treatment description, and NDE certifications on their letterhead. However, GG is not a holder of a Quality Systems Certificate (QSC) nor did their certification to Lisega include the statement that this material had been produced under an NCA 5800 quality program (no evidence that GG had been qualified by Lisega to supply Code material). A CMTR from the melting mill was not included in this documentation and there was no evidence that the mill had been qualified either by GG or by Lisega.
2. Lisega issued Certificate 111 183 for A 668, Class C (and Lisega Specification J") material used for articulated joints in rigid struts supplied Arizona Public Service Company (APS) under their Purchase Order 33801236. Lisega obtained this material from Lenhauser Hammerwerk GmbH, (LH). LH provided a CMTR for this material, including the mill heat analysis on their letterhead.

LH is not a QSC holder and the LH CMTR did not demonstrate that this material was produced under an NCA 3800 program that had been approved by Lisega. CMTR from the melting mill was not included in the documentation and there was no evidence that the mill had been qualified either by LH or by Lisega. Additionally, although Lisega specification 122 restricts chromium content of this material to .30%, analysis for chromium content was marked as not applicable on the Lisega product analysis.

3. Lisega issued Certificate 115 217 for SA 53 S, Grade A pipe to be used for rigid struts supplied to APS. SA 53 contains restrictions on the maximum amounts of each of the following elements: copper, nickel, chromium, molybdenum, and vanadium as well as the requirement that the maximum combined level of these elements can not exceed 1.00%. The material was supplied by Benterer as complying with DIN 2448-81/17175-79 without analysis of trace elements. Lisega Certificate 115 217 (product analysis) reported only the average (combined) value of trace elements and restricted the total to less than 1.00%. This approach does not assure that the individual trace elements do not exceed permitted levels. Lisega Certifications 115 431, 115 233, 115 284, 115 232, and 115 243 contained similar deficiencies.
4. Lisega issued Certificate 115 399 for SA 479, TP 410 (1) material to be used for pin/bolt application in rigid struts supplied to APS. This material was procured from Krupp Stahlag who provided a CMTR. However, neither the Krupp CMTR nor the Lisega certification described the heat treatment of this material or reported the hardness level of the product as required by the applicable specification. Krupp provided this information by telefax during the progress of this inspection.

- B. 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires that measures be established for the selection and review for suitability of materials, parts, equipment, and processes that are essential to the safety-related functions of structures, systems, and components.

10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, as of August 21, 1992, neither the Lisega QA Manual nor the QA Program Procedural Guidelines (VQSP's) included any provisions for dedicating items purchased by Lisega as commercial grade and used as part of pipe support components that are sold by Lisega as safety-related 10 CFR Part 50, Appendix B items.

- C. 10 CFR Part 50, Appendix B, Criterion VII, "Control of Purchased Material, Equipment, and Services," requires that measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors conform to the procurement documents. The effectiveness of the control of quality by contractors and subcontractors shall be assessed by the applicant or designee at intervals consistent with the importance, complexity, and quantity of the product or services.

Contrary to the above, Lisega purchased items from suppliers who hold a current ASME QSC or are listed on the German government Register of Approved Material Manufacturers (TUV 1253/1) without performing any assessments, such as implementation audits for verification of the suppliers' quality programs or testing the supplied material.

Please provide a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Chief, Vendor Inspection Branch, Division of Reactor Inspection and Licensee Performance, Office of Nuclear Reactor Regulation, within 30 days of the date of the letter transmitting this Notice of Nonconformance. This reply should be clearly marked as a "Reply to a Notice of Nonconformance" and should include for each nonconformance: (1) a description of the steps that have or will be taken to correct these items; (2) a description of the steps that have been or will be taken to prevent recurrence; (3) the dates your corrective actions and preventive measures were or will be completed.

Dated at Rockville, Maryland
this 19th day of October, 1992