

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D. C. 20555-0001

November 29, 2000

NRC INFORMATION NOTICE 2000-18: SUBSTANDARD MATERIAL SUPPLIED BY CHICAGO
BULLET PROOF SYSTEMS

Addressees

All 10 CFR¹ Part 50 Licensees and Applicants.
All Category I Fuel Facilities.
All 10 CFR¹ Part 72 Licensees and Applicants.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to inform addressees of substandard material supplied by Chicago Bullet Proof Systems (CBPS) to Fort St. Vrain and Susquehanna nuclear power plants. It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. However, suggestions contained in this information notice are not NRC requirements; therefore, no specific action or written response is required.

Description of Circumstances

CBPS supplied substandard materials to two NRC licensees.

Fort St. Vrain

Public Service Company Colorado (PSCo,) a contractor for the U. S. Department of Energy, the licensee for the independent spent fuel storage installation (ISFSI) at Fort St. Vrain, notified the NRC that CBPS supplied substandard steel plating for a security alarm station at Fort St. Vrain. CBPS was required to provide a Certificate of Compliance to certify that materials conformed to Underwriters Laboratory (UL) Standard 752, Level 4. This UL Standard was specified on the PSC purchase order. With regard to the steel plating, the purchase order listed Shot-Tex #4 Bullet Resistant Steel Wall Armor (CBPS's proprietary name for material that conforms with UL Standard 752, Level 4). CBPS's subcontractor, Metaltek Fabricating, Inc., actually shipped the steel to Fort St. Vrain. PSC asked CBPS to provide a certified material test report for the steel, but CBPS declined to do so, claiming that the information was proprietary. CBPS told PSC that the material supplied, Shot-Tex #4, conformed to the UL standard and subsequently provided

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a Certificate of Compliance. PSC had the steel independently tested and determined it to be similar to A-36 type mild carbon steel, which is not in conformance with UL Standard 752, Level 4.

Susquehanna

A contractor for Pennsylvania Power and Light (PP&L), the licensee for Susquehanna, issued a purchase order to CBPS for a replacement gun port, including a mounting plate and side plate, for the Susquehanna plant. The purchase order specified that the gun port, the mounting plate and the side plate, were to be constructed of Shot Tex #4 Bullet Resistant Steel Wall Armor. After supplying the gun port to PP&L, CBPS provided PP&L a Certificate of Compliance certifying that the gun port material conformed with UL Standard 752, Level 4. A PP&L metallurgist independently did a nondestructive test of the gun port mounting plate and slide plate. The test showed that the mounting plate had the hardness of A-36 type mild carbon steel, and was not in conformance with UL Standard 752, Level 4.

Discussion

The regulations in 10 CFR 73.51, "Requirements for the physical protection of stored spent nuclear fuel and high-level radioactive waste," and 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," state that structures must be constructed of bullet-resistant material. NUREG-0908, "Acceptance Criteria for the Evaluation of Nuclear Power Reactor Security Plans," states that an acceptable security plan defines bullet-resistant material as capable of resisting a high-power rifle round (Level 4), as described in UL Standard 752.

In the two cases described above, CBPS supplied material that was not in conformance with specifications of the purchase orders and not in conformance with NRC guidance documents (NUREG-0908). CBPS certified by Certificates of Compliance that the steel wall armor material supplied to Fort St. Vrain and Susquehanna conformed with UL Standard 752, Level 4, when in fact metallurgical testing by licensees determined the material to be substandard. PSC's procurement program identified the material as substandard before installing it at Fort St. Vrain. PP&L, after determining that its installed gun port was not in compliance with UL Standard 752, Level 4, took appropriate corrective action.

The NRC staff found that although CBPS was responsible for material certification and verification at the Metaltek facility, CBPS did not adequately perform material quality and chemical verification activities. The NRC also found that CBPS did not typically request certified material test reports for any of the steel used for UL Standard 752, Level 4 applications.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) or Office of Nuclear Material Safety and Safeguards (NMSS) project manager.

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LIST OF RECENTLY ISSUED
 NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
2000-17 S1	Crack In Weld Area of Reactor Coolant System Hot Leg Piping At V.C. Summer	11/16/2000	All holders of OL for nuclear power reactors except those who have ceased operations and have certified that fuel has been permanently removed from the reactor vessel
2000-17	Crack In Weld Area of Reactor Coolant System Hot Leg Piping At V.C. Summer	10/18/2000	All holders of OL for nuclear power reactors except those who have ceased operations and have certified that fuel has been permanently removed from the reactor vessel
2000-16	Potential Hazards Due to Volatilization of Radionuclides	10/5/2000	All NRC licensees that process unsealed byproduct material
2000-15	Recent Events Resulting in Whole Body Exposures Exceeding Regulatory Limits	9/29/2000	All radiography licensees
2000-14	Non-Vital Bus Fault Leads to Fire and Loss of Offsite Power	9/27/2000	All holders of OL for nuclear power reactors
2000-13	Review of Refueling Outage Risk	9/27/2000	All holders of OL for nuclear power reactors
2000-12	Potential Degradation of Firefighter Primary Protective Garments	9/21/2000	All holders of licenses for nuclear power, research, and test reactors and fuel cycle facilities
2000-11	Licensee Responsibility for Quality Assurance Oversight of Contractor Activities Regarding Fabrication and Use of Spent Fuel Storage Cask Systems	8/7/2000	All U.S. NRC 10 CFR Part 50 and Part 72 licensees, and Part 72 Certificate of Compliance holders