

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

September 25, 2007

NRC INFORMATION NOTICE 1991-09, REV. 1: COUNTERFEITING OF CRANE VALVES

**ADDRESSEES**

All holders of operating licenses or construction permits for nuclear power reactors.

**PURPOSE**

The U.S. Nuclear Regulatory Commission (NRC) is re-issuing this information notice (IN) to correct IN 1991-09, "Counterfeiting of Crane Valves," which was issued on February 5, 1991, to alert licensees to potential problems with counterfeit valves. This revision supersedes the original IN in its entirety. It is expected that recipients will review this information for applicability to their facilities and consider action, as appropriate, to avoid similar problems. However, suggestions contained in this IN do not constitute NRC requirements; therefore, no specific action or written response is required.

**DESCRIPTION OF CIRCUMSTANCES**

As a result of information obtained from officials of the U.S. Customs office, and as documented in the Settlement Agreements resulting from a civil suit brought by the Crane Company and settled out of court in October 1987, it was determined that counterfeit Crane Company (Crane) valves were sold to an Atlantic Richfield Company (ARCO) chemical plant near Houston, Texas. The NRC was informed that ARCO ordered eight 4-inch, 1500-psi, pressure-sealed Crane valves from the Baytown Supply Co. (Baytown). Baytown ordered the valves from International Valve Service, Inc. (International), and International ordered the valves from Southern California Valve Maintenance Company (SCV).

SCV had the valves manufactured in Taiwan. Upon arrival in the United States, the valves bore the mark "SCV". The valves were sent to the Amessee Welding Service (Amessee) where the name "Crane" was apparently welded to each valve body.

The valves failed pressure testing performed by ARCO before installation. During the testing, ARCO found newspapers printed with Chinese characters in the valves. An expert on Crane valves examined the valves and identified them as counterfeit. Six of the valves were repaired and used by ARCO. The remaining two valves that could not be repaired were returned to SCV.

**ML072500391**

The NRC verified that the following nuclear power plants did not have SCV, Baytown, or International on their approved vendor lists: Comanche Peak, River Bend, South Texas Project, Waterford, Palo Verde, and Diablo Canyon. These power plants were selected because they were located close to one of the three companies listed above and may have done business with them. Southern California Edison did have a contract with SCV to maintain and repair valves at the San Onofre Nuclear Generating Station, but has concluded that its established internal work assignment and control procedures provided adequate assurance of the work performed by SCV. The NRC does not have any direct evidence that SCV, Baytown, or International provided counterfeit valves to the U.S. nuclear power industry or violated any NRC regulations.

## **DISCUSSION**

The NRC determined that the SCV list of customers who purchased Crane valves, appended as Attachment 1, contained numerous vendors that are also on the list of purchasers/suppliers of CMA International (CMA) of Vancouver, Washington. CMA is the subject of IN No. 88-48, "Licensee Report of Defective Refurbished Valves." The inclusion of a company on the SCV customer list does not mean that the company knowingly or unknowingly supplied counterfeit or fraudulent products. It should also be noted that SCV was listed as a possible customer of CMA, through whom licensees may have purchased valves supplied by CMA, as noted in Attachment 1 to Supplement 2 of IN No. 88-48. Licensees may wish to review the list of SCV customers in Attachment 1 to confirm the acceptability of procured equipment.

A valve can go through two or more distributors before reaching the end-user facility. A nuclear power plant could buy a commercial-grade valve from a valve distributor for the purpose of dedicating the valve for safety-related use. The establishment and verification of procedures to trace procured equipment and material to the original equipment manufacturer is often an important prerequisite to meaningful inspection and testing which may be employed in the dedication process. Inadequate licensee verification of traceability of procured equipment may result in counterfeit or fraudulent equipment being installed.

This IN requires no specific action or written response. If you have any questions about this matter, please contact the technical contact listed below or the appropriate NRR project manager.

## CONTACT

This IN requires no specific action or written response. Please direct any questions about this matter to the technical contact listed below or the appropriate NRR project manager.

*/RA by TQuay for/*

Michael J. Case, Director  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

Technical Contact: Samir Darbali, NRR/DPR  
301-415-1360  
e-mail: [sxd7@nrc.gov](mailto:sxd7@nrc.gov)

Note: NRC generic communications may be found on the NRC public Web site, <http://www.nrc.gov>, under Electronic Reading Room/Document Collections.

Attachment:

1. List of Customers Who Purchased Crane Valves from Southern California Valve Maintenance

**CONTACT**

This IN requires no specific action or written response. Please direct any questions about this matter to the technical contact listed below or the appropriate NRR project manager.

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**Attachment:**

1. List of Customers Who Purchased Crane Valves from Southern California Valve Maintenance

Distribution:  
IN Reading File

ADAMS Accession Number: ML072500391

OFFICE	PGCB:DPR	TECH EDITOR	EQVB:DE	OGC
NAME	SDarbali	LCulp	PPrescott* for DThatcher	Beth Mizuno*
DATE	9/11/07	9/12/07	9/14/07	9/13/07

OFFICE	LA:PGCB:DPR	PGCB:DPR	BC:PGCB:DPR	D:DPR
NAME	CHawes	DBeaulieu	MMurphy	TQuay for MCase
DATE	9/13/07	9/17/07	9/24/07	9/25/07

\*With comments that have been incorporated

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CUSTOMERS WHO PURCHASED CRANE VALVES FROM  
SOUTHERN CALIFORNIA VALVE MAINTENANCE

AMFAC	Neilson
AMANS, W.F.	Palmeroy, J.H.
Bay Valve	P.E. OHair
B&M Trading	Piping Specialities
BHF	PITT, Norman
B&L Valve	R&D Valve
Bel Kal	Republic Supply
Berg Dorf	Roper Detroit
Burney Valve	Santa Maria Oil Field
Calatex	S. Central Valve
Crown Industrial	Supply Specialties
Flickenger	Valve Services
Grant Supply	Wallace, James
G.V.S.	Weslo Corp.
Illinois Valve	ARA Valve
Industrial Valve	Demunno/Kerdoon
International Valve	Floor Drilling
L.A. Valve Proc.	Nielson Valve
Jackson/Marcus	Petro Valve
Laundry Specialties	Phoenix Valve
M&N Valve	Union Oil
McCoy, Fred	Western Valve
Moody Olstad	

The inclusion of a company on this list does not mean that the company knowingly or unknowingly supplied counterfeit or fraudulent products.