

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

April 26, 1990

NRC INFORMATION NOTICE NO. 89-70, SUPPLEMENT 1: POSSIBLE INDICATIONS OF
MISREPRESENTED VENDOR
PRODUCTS

Addressees:

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

Purpose:

This information notice is intended to provide supplementary information to that provided in Information Notice 89-70 which discussed possible indications of misrepresented vendor products. It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. Suggestions contained in this information notice do not constitute NRC requirements; therefore, no specific action or written response is required.

Background:

On October 11, 1989, the NRC issued Information Notice 89-70 which provided the industry with some tips for detecting misrepresented vendor products, including a list of some common characteristics of misrepresented products. The notice was prompted by a concern about the growing number of instances of misrepresented vendor products which had been identified by the NRC and the nuclear industry. On several occasions equipment which has been procured as new has not conformed to original manufacturer specifications, procurement documentation requirements and applicable plant design requirements even though it was represented to be in conformance with stated specifications.

Description of Circumstances:

Detecting misrepresented products is difficult and most quality assurance programs are not designed to easily detect counterfeit or fraudulent practices. The criteria used to confirm the quality of products during receipt inspection and testing generally have assumed vendor integrity and are not focused on identifying an intent to deceive. The NRC has continued to study the misrepresented products issue and has discovered additional information that may be helpful to the industry. In addition to the list of common characteristics of misrepresented vendor products which was included in the original information

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notice (IN 89-70), an additional list of characteristics that may make products vulnerable to misrepresentation, fraudulent practices, and counterfeiting is provided in Attachment 1 of this supplement.

Attachment 2 presents a summary listing of components, products, and services that have been previously identified as having been misrepresented and notes the information notice or bulletin that discussed the particular item in more detail.

As part of our continuing effort to increase the likelihood of detection of misrepresented products in other areas of the plant, the NRC has drawn on its experience and has developed a list of components that may be vulnerable to misrepresentation. This list is included as Attachment 3.

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 NRR project manager.


Charles E. Rossi, Director
Division of Operational Events Assessment
Office of Nuclear Reactor Regulation

Technical Contacts: S. L. Magruder, NRR
(301) 492-0985

G. C. Cwalina, NRR
(301) 492-3221

Attachments:

1. Characteristics That May Make Products Vulnerable to Misrepresentation, Fraudulent Practices, and Counterfeiting
2. Components, Products, and Services That Have Been Misrepresented
3. Components and Products That May Be Vulnerable to Misrepresentation
4. List of Recently Issued NRC Information Notices

CHARACTERISTICS THAT MAY MAKE PRODUCTS VULNERABLE TO
MISREPRESENTATION, FRAUDULENT PRACTICES, AND COUNTERFEITING

- High turnover usage rate
- No easy or practical way to uniquely mark the component itself
- Critical characteristics, including environmental qualification, not easily discernible in external visual inspection or characteristics that are difficult to verify through receipt testing
- May be widely used in noncritical and critical applications
- Use may not result in a used appearance
- Often marketed through a supplier and drop shipped from locations other than that of the original supplier
- Special processes for ASME materials may be subcontracted (heat treating, testing, and inspections)
- Easily copied by secondary market suppliers
- Viable salvage market
- Reduced number of original equipment manufacturers
- Obsolete or hard-to-get components
- Components manufactured by a company that is no longer in business
- Items with documentation from a plant where construction has been suspended, cancelled, or deferred
- Moderate or low cost
- High profit potential (rejected heats of a material are purchased and recertified)

COMPONENTS, PRODUCTS, AND SERVICES THAT HAVE BEEN MISREPRESENTED

- Replacement Parts
 - Valve (Information Notice (IN) 88-97)
 - Circuit Breaker (IN 88-46, Bulletin (B) 88-10)
- Circuit Breakers
 - Metal Clad (IN 89-45)
 - Molded Case (IN 88-46, B 88-10)
- Circuit Breaker Parts (IN 89-45)
- Fuses (IN 88-19)
- Fasteners (IN 89-22, IN 89-59, B 87-02)
- Steel Products (IN 89-18, IN 89-56)
- Fittings and Flanges (B 88-05)
- Valves (IN 88-48)
- Services - Eddy Current Testing (IN 89-18)

COMPONENTS AND PRODUCTS THAT MAY BE VULNERABLE TO MISREPRESENTATION

I. GENERAL ITEMS

- Spare/replacement kits from vendors other than the original equipment manufacturer
- Elastomers - "O" rings, seals
- Lubricants
- Adhesives
- Electrical connectors

II. ELECTRICAL ITEMS

- Motor control centers
 - Complete units
 - Components
 - Starters
 - Starting coils
 - Contactors
 - Contactor kits
 - Overload relays
 - Starter control relays
 - Overload heaters
- Protective/control relays
- DC power supplies/chargers
- AC inverters
- Current/potential transformers
- Exciters/regulators
- Bus transfers/auto bus transfers
- Motor generator sets
- Generators
- Rewindable motors

**COMPONENTS AND PRODUCTS THAT MAY BE VULNERABLE TO MISREPRESENTATION
(continued)**

- Printed circuit boards
- Bulk commodity items
 - Fuses
 - Splices
- Vacuum breakers (BWR)
- Indicators/controllers
- Panel lights/switches
- Transmitters/instrument switches
- Isolation devices

III. MECHANICAL ITEMS

- Welding materials
 - Rod
 - Wire
 - Flux
- Small piping products
- Small structural members (pipe supports)
- Spent fuel pool cooling pumps and similar pumps
- Ultimate heat sink supply manual valves and similar valves

IV. DIESEL GENERATOR ITEMS

- Diesel speed governors
- Diesel fuel transfer pumps
- Diesel injection pumps

LIST OF RECENTLY ISSUED
 NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
90-26	Inadequate Flow of Essential Service Water to Room Coolers and Heat Exchangers for Engineered Safety-Feature Systems	4/24/90	All holders of OLs or CPs for nuclear power reactors.
90-25	Loss of Vital AC Power with Subsequent Reactor Coolant System Heat-Up	4/16/90	All holders of OLs or CPs for nuclear power reactors.
90-24	Transportation of Model Spec 2-T Radiographic Exposure Device	4/10/90	All NRC licensees authorized to use, transport, or operate radiographic exposure devices and source changers.
90-23	Improper Installation of Patel Conduit Seals	4/4/90	All holders of OLs or CPs for nuclear power reactors.
90-22	Unanticipated Equipment Actuations Following Restoration of Power to Rosemount Transmitter Trip Units	3/23/90	All holders of OLs or CPs for nuclear power reactors.
90-21	Potential Failure of Motor-Operated Butterfly Valves to Operate Because Valve Seat Friction was Under-estimated	3/22/90	All holders of OLs or CPs for nuclear power reactors.
90-20	Personnel Injuries Resulting from Improper Operation of Radwaste Incinerators	3/22/90	All NRC licensees who process or incinerate radioactive waste.
90-19	Potential Loss of Effective Volume for Containment Recirculation Spray at PWR Facilities	3/14/90	All holders of OLs or CPs for PWRs.

OL = Operating License
 CP = Construction Permit

notice (IN 89-70), an additional list of characteristics that may make products vulnerable to misrepresentation, fraudulent practices, and counterfeiting is provided in Attachment 1 of this supplement.

Attachment 2 presents a summary listing of components, products, and services that have been previously identified as having been misrepresented and notes the information notice or bulletin that discussed the particular item in more detail.

As part of our continuing effort to increase the likelihood of detection of misrepresented products in other areas of the plant, the NRC has drawn on its experience and has developed a list of components that may be vulnerable to misrepresentation. This list is included as Attachment 3.

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Document Name: IN 89-70 SUPP - MAGRUDER, CARL

*SEE PREVIOUS CONCURRENCES

*VIB:DRIS:NRR	*AC:VIB:DRIS:NRR	*C/VIB:DRIS:NRR	*D/DRIS:NRR	*RPB:ADM
SMagruder:nrp	WHaass	EWBrach	BKGrimes	TechEd
02/13/90	02/13/90	03/12/90	03/14/90	02/14/90

D/DOEA:NRR *C/OGCB:DOEA:NRR
CERossi CNBerlinger
04/20/90 04/18/90

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Attachment 2 includes a summary of components, products, and services that have been identified as being misrepresented and notes the information notice or bulletin that discusses the particular item in more detail.

In the interest of increasing the likelihood of detecting misrepresented products in other areas of the plant should they exist, the NRC has drawn on its experience and developed a list of components that may be vulnerable to misrepresentation. This list is included as Attachment 3.

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NAME	:CERossi						
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