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November 20, 2001

NRC Document Control Desk
NRC Operations Center
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Fax: 301-816-5151

Re: **10CFR-21 Interim Report**

Dear Sir or Madam:

Hunt Valve Company is aware of information indicating that 1" UF6 Valve packing nuts, or individual replacement packing nuts, manufactured in accordance with ANSI N14.1 and made from ASTM-B150-95a C61300 HR50 may contain material conditions that could contribute to cracking in the packing nuts that is not detectable using the inspection techniques specified by currently applicable standards. Hunt Valve does not know whether a "substantial safety hazard" may exist with respect to the use of these valves, because we are not familiar with the details of the intended applications. However, out of an abundance of caution, we are informing our users of the potential for cracks in packing nuts. We believe that the suspect material condition is limited to packing nuts made from the material as noted above and marked with the material designator "613" on the top surface of the packing nut.

We are currently seeking determination of the root cause of the suspect material condition but have not concluded this effort at this time. The following is a review of information leading to this report:

- In December 2000 we issued a 10 CFR-21 Report of Deviation, under event #37576, for select packing nut heat codes AFD and AXP based upon the discovery of questionable surface conditions identified visually on the hex flats of a packing nut discovered during visual inspection. Further visual inspection identified another nut with a similar condition. Both nuts were from heat codes AFD and AXP. These two nuts were then dye penetrant inspected and were found to exhibit cracks. Sample visual inspection of an additional 200 packing nuts containing heat codes AFD, AXP and others revealed no cracks in those nuts.

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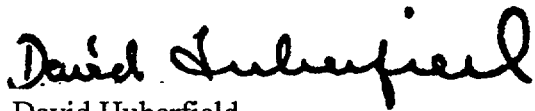
Dye penetrant inspection of the same sample revealed two nuts exhibiting cracks from the heat codes AFD and AXP.

- In January 2001 we implemented dye penetrant inspection, above and beyond the ANSI N14.1 requirements, for all packing nuts and bar stock used in the production of packing nuts. All nuts shipped from that time forward were successfully dye penetrant tested and stamped "PT" on the top surface of the packing nut.
- Additionally, all AFD and AXP heat codes were recalled from the field and dye penetrant inspected before being used for customer shipments.
- Since December 2000 we have identified additional dye penetrant failures of certain packing nuts from the following heat codes: **AFD, AFM, AXP, ATE, AFB, AFC, AXN, BXP, and CCG**. Such packing nuts failing the dye penetrant tests were not shipped to customers.
- A sample of the packing nuts which failed dye penetrant inspection has been analyzed for lead content and has been found to be according to specification. Additionally, the manufacturer of the packing nut material confirmed that its chemical analysis equipment was accurate to detect the appropriate lead levels per the specification.
- A summary of these findings was reported to our primary customer, USEC, for evaluation and advice during October and November 2001.
- In October 2001, a sample of ten (10) cracked and four (4) acceptable packing nuts was submitted to USEC for evaluation and testing. At of this date no report has been issued by USEC but we were recently informed that preliminary metallurgical data reveals that the average of five (5) hardness readings on eight (8) cracked and nine (9) other nuts are low and the individual readings are erratic. Additionally, there is some evidence of large grain structure and some evidence of inclusions or voids.
- Finally, we are aware of a report prepared for USEC in November 1997 which analyzed isolated instances of cracking of certain packing nuts manufactured under a similar specification, using CDA 636 material, as that in issue in this notice. The report also notes that UF6 packing nuts have, on occasion, failed by stress corrosion cracking throughout the history of their use.

Customers receiving packing nuts made from this material include Lockheed Martin, USEC, Allied Signal, Cameco, Siemens, Starmet, and Urenco. Individual notification to these customers will be forthcoming. Hunt Valve pledges that efforts to determine the root cause of this issue will continue and that any conclusions regarding same will be

communicated to our customers. Hunt Valve welcomes information from our customers to assist us in reaching the appropriate determination.

Sincerely,



David Huberfield
President/Chief Executive Officer
Hunt Valve Company



Larry Kelly
Vice-President/General Manager
Hunt Valve Company