

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

May 24, 1990

NRC INFORMATION NOTICE NO. 90-36: APPARENT FALSIFICATION OF STATE OF  
CONNECTICUT WEIGHT CERTIFICATES

Addressees:

All holders of operating licenses or construction permits for nuclear power reactors, and 10 CFR 70 licensees.

Purpose:

This information notice alerts addressees to the need for ensuring that certifications of master weights to be used for the calibration of torque wrenches, dynamometers, and other devices are not outdated, thereby precluding the potential for invalid and inaccurate calibrations. The event cited in this notice received local media and press attention and also resulted in inquiries from licensees for any information NRC may have on this matter. It is expected that recipients will review the information for applicability to their facilities and consider appropriate actions to avoid similar problems. However, suggestions contained in this information notice do not constitute NRC requirements, since no specific action or written response is required.

Description of Circumstances:

During a source inspection of AKO, Incorporated, Enfield, Connecticut, by Northeast Utilities on July 19-20, 1989, the utility determined that the certification of standard weights used to calibrate torque wrenches, torque multipliers, and dynamometers for use in safety-related activities at Northeast Utilities' nuclear power plants had apparently been falsified. AKO test reports and copies of certificates issued by the State of Connecticut, Department of Consumer Protection, Division of Weights and Measures (WM) given to Northeast Utilities by AKO stated that the weights used to calibrate these devices were accepted by WM and could be traced to the National Institute of Standards and Technology. However, the documents that the vendor claimed were official certifications of weights were determined by Northeast Utilities and confirmed by the State to have been altered to extend their expiration dates.

Test reports supplied by AKO to Northeast Utilities for 52 devices calibrated on March 17, 1988; April 7, 1988; September 22, 1988; January 5, 1989;

9005180001

IN 90-36  
May 24, 1990  
Page 2 of 3

April 17, 1989; and July 19, 1989, refer to WM certifications that had expired in March 1986 or that did not exist. The licensee arranged for another firm to recalibrate all the suspect devices. This firm determined that all the devices had been calibrated within their required tolerances and that no corrections were necessary. The licensee indicated that the tolerance requirements for their devices are of the order of +/- 3 to 5 percent. Some of the AKO standard weights were condemned for use by the State of Connecticut using +/- 0.01 percent tolerance limits. These limits are generally well within most licensee tolerance requirements as noted above. Nevertheless, licensees should be aware that the calibration of measuring devices can only be considered accurate if the certification of calibrated weights has not been allowed to expire.

The NRC conducted an inspection at AKO and reviewed pertinent AKO records. Based on this review, the following licensees were identified as procuring calibration services or calibration equipment or both from AKO during the period in question:

Alabama Power Company  
Arizona Public Service  
Boston Edison Company  
Combustion Engineering  
Duke Power Company  
General Electric Company  
Illinois Power Company  
Louisiana Power and Light Company  
Northeast Nuclear Energy Company  
Public Service Electric and Gas Company  
Southern California Edison Company  
Tennessee Valley Authority  
Texas Utilities Generating Company  
UNC Naval Products Division  
Virginia Electric Power Company  
Washington Public Power Supply System  
Westinghouse Electric Corporation

The above list may not be all inclusive in that other companies may have used AKO services, but were not identified in the NRC record review. During the NRC inspection in December 1989, the NRC was informed by AKO that they have now purchased a new set of master weights which are certified to nationally recognized standards. Although this specific matter may not have high safety significance, licensees should view this occurrence as application-dependent and consider this experience in future reviews and audits of calibration service companies and other vendors.

IN 90-36  
May 24, 1990  
Page 3 of 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: H. Wescott, NRR  
(301) 492-3216

W. P. Haass, NRR  
(301) 492-3219

Attachment: List of Recently Issued NRC Information Notices  
ENDEN