



A Centenor Energy Company

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Docket Number 50-346

License Number NPF-3

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United States Nuclear Regulatory Commission  
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Washington, D. C. 20555

NP 33-96-011  
AB-97-0016

Subject: Voluntary Report on Pressurizer Code Safety Valve Setpoint Drift

Ladies and Gentlemen:

During the Tenth Refueling Outage (10RFO) in the Spring of 1996, the two installed Pressurizer Code Safety Valves were removed from service and delivered to an offsite laboratory for testing in accordance with the requirements of Section XI of the American Society of Mechanical Engineers (ASME) Code. The valves were tested in November 1996. One of the two valves' as-found initial lift setpoint exceeded the maximum setpoint of 2525 psig as specified in Technical Specification (TS) 3.4.3. This occurrence was evaluated and was determined to not be subject to the reporting requirements of 10CFR50.72 or 10CFR50.73. Since this event is of potential interest to the industry in view of ongoing efforts to address relief valve setpoint drift, this information is being submitted as a Voluntary Report.

During the 10RFO, conducted at the Davis-Besse Nuclear Power Station (DBNPS) between April 8, 1996, and June 2, 1996, the two installed Pressurizer Code Safety Valves were removed and replaced with pretested spares. The removed valves were delivered to an offsite laboratory for testing. At the laboratory, as-found testing was conducted on November 4 and 5, 1996, in accordance with ANSI/ASME OM-1-1981. During the testing, one valve exhibited an acceptable lift setpoint below the maximum allowable lift setpoint of 2525 psig specified in TS 3.4.3 and within the  $\pm 3\%$  of nameplate setpoint established for the as-found condition by ANSI/ASME OM-1-1981. However, the initial lift setpoint of the other valve exceeded the 2525 psig limit specified in TS 3.4.3 and was also outside the  $\pm 3\%$  of nameplate setpoint established for the as-found condition by ANSI/ASME OM-1-1981. The results of the as-found testing are summarized below.

| Valve Serial<br>Number | Nameplate<br>Setpoint | Initial Lift<br>Pressure | Percent Deviation From<br>Nameplate Setpoint |
|------------------------|-----------------------|--------------------------|--|
| N54891-00-0002         | 2500 psig             | 2577 psig                | + 3.08%                                      |
| N59303-00-0001         | 2500 psig             | 2495 psig                | - 0.20%                                      |

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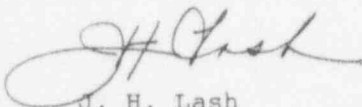
The two safety valves were refurbished and their setpoints adjusted to within the  $\pm 1\%$  as-left tolerance specified by the ASME Code. The valves were satisfactorily tested at the laboratory and will be returned to the DBNPS for installation during the Eleventh Refueling Outage (11RFO).

The Pressurizer Code Safety Valves at the DBNPS are manufactured by Crosby Valve and Gage Company, Type HB-86-BPE. The function of the Pressurizer Code Safety Valves is to prevent the Reactor Coolant System (RCS) from being pressurized above its Safety Limit of 2750 psig. An analysis performed as a result of previous occurrences of Pressurizer Code Safety Valve setpoints found out of tolerance concluded that a single safety valve with a lift setpoint less than or equal to 2525 psig is sufficient to mitigate all overpressure events. Therefore the as-found lift setpoints do not represent a safety concern for the DBNPS.

The apparent cause of the valve test failure was determined to be setpoint drift, a recognized industry concern. As was stated above, the Pressurizer Code Safety Valves were refurbished as necessary and their lift setpoints were returned to within the  $\pm 1\%$  as-left tolerance band. The valves have been returned to the DBNPS for reinstallation during 11RFO.

If you have any questions or require additional information, please contact Mr. James L. Freels, Manager - Regulatory Affairs, at (419) 321-8466.

Very truly yours,



J. H. Lash  
Plant Manager

GMW/dlc

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