



April 2, 1974

Mr. John F. O'Leary
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. O'Leary:

TURKEY POINT UNIT NOS. 3 AND 4
DOCKET NUMBERS 50-250 AND 50-251
SUPPLEMENT TO SPECIAL MAINTENANCE REPORT NO. 73-1
TORQUE CHECK OF FISCHER AND PORTER COMPANY
ELECTRONIC DIFFERENTIAL PRESSURE TRANSMITTERS

I. INTRODUCTION

On December 11, 1973, Special Maintenance Report No. 73-1 was submitted in accordance with section 6.6.3.d. of the Technical Specifications. This report is submitted to advise you of the additional investigation conducted on this matter and of the resulting final corrective action.

II. ADDITIONAL INVESTIGATION

Investigation by Fischer and Porter Company revealed that the high failure rate of their Model Nos. 2495 and 2496 Electronic Differential Pressure Transmitters was caused by inadequate clamping force exerted on the transmitter process flanges by the flange through-bolts. The insufficient clamping forces resulted in the extrusion of the flange "O" ring seal and ultimate loss of the transmitter fill fluid. Fischer and Porter Company further determined that the insufficient clamping force resulted from utilizing a torque value which did not account for the high friction between the stainless steel nuts and the stainless steel flange through-bolts. However, when utilizing the torque value required to establish the proper clamping force it was determined that the nuts would seize on the bolt threads.

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Therefore, Fischer and Porter Company recommended that the nut faces and threads be lubricated with a dry film lubricant that was free of any halogens. Dow Corning's Molykote Grade G paste was recommended as fulfilling these requirements.

The specific torque values recommended to be utilized in conjunction with the lubricant were as follows:

- a) For 3000 psig working pressure transmitters, 60 ft-lbs was to be used, and
- b) For 1500 psig working pressure transmitters, 40 ft-lbs was to be used.

III. FINAL CORRECTIVE ACTION

Florida Power and Light Company personnel lubricated Unit Nos. 3 & 4 differential pressure transmitter fasteners with Dow Corning's Molykote Grade G paste and retorqued them. The high pressure transmitter bolts were torqued to 80 ft-lbs. Utilization of 80 ft-lbs resulted from a verbal recommendation received from Fischer and Porter Company prior to the issue of their written report. Subsequent to receipt of the written report, Fischer and Porter Company confirmed the acceptability of using 80 ft-lbs of torque on the high pressure transmitter through-bolts.

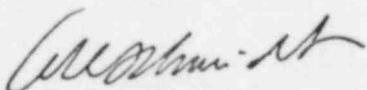
The low pressure transmitter fasteners were lubricated and retorqued to 40 ft-lbs in accordance with the final Fischer and Porter Company recommendation.

There have been no failures of these transmitters since accomplishing the above corrective action. Unit No. 3 has operated for approximately three months and Unit No. 4 for approximately two months since the corrective action was accomplished.

IV. CONCLUSIONS

The cause of the high failure rate of the Fischer and Porter Company differential pressure transmitters (Model Nos. 2495 and 2496) has been determined. Satisfactory corrective action has been developed and carried out.

Very truly yours,



A. D. Schmidt
Director of Power Resources

HNP/kmw

cc: Mr. Norman C. Moseley
Mr. Jack R. Newman