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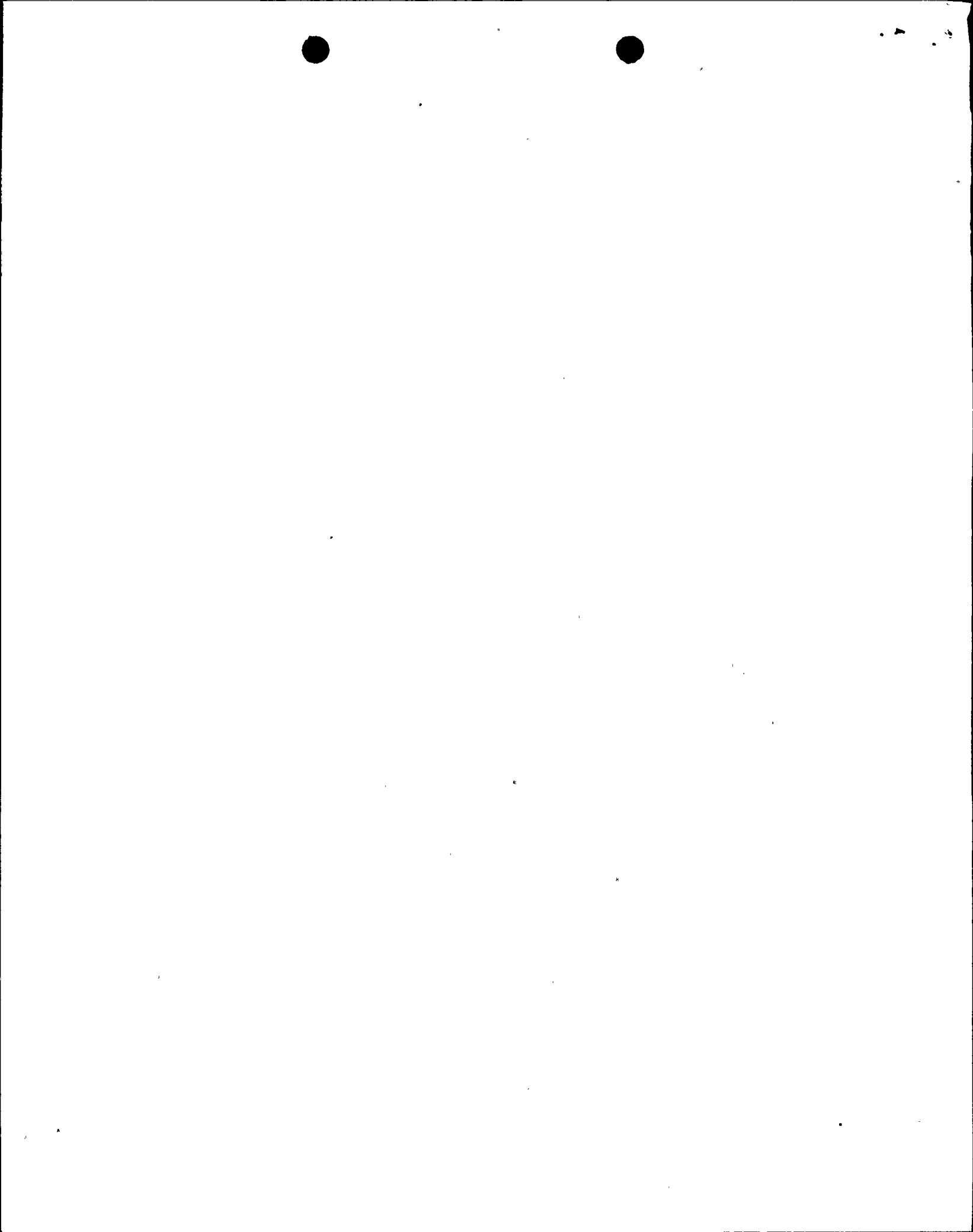
EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

An inspection and test program per Nuclear Regulatory Commission I. E. Bulletin 7902 is currently being implemented at Nine Mile Point Unit 1. The attached Table shows the status of this program. The following deficiencies in regard to concrete anchor bolts were found on Class I seismic piping systems:

- 1) Bolts loose, missing or cut and welded to the underside of plates
- 2) Oversized plate holes
- 3) Skewed bolts
- 4) Other bolts and plate installation deviations
- 5) Missing seismic restraints.

With the exception of the missing seismic restraints, it is our judgment that the consequences of these deficiencies are relatively minor due to the substantial margins present in both base plates and piping system original designs. In most cases, the effects of skewed bolts and oversized plate holes are believed to be within the original design margins, (including factors of safety as discussed in Bulletin 79-02). For plates with missing bolts, rigid plate analyses would show that most loads would not be substantially below the safety factors discussed in Bulletin 79-02. Therefore, without flexible plate effects, the Nine Mile Point Unit 1 repair program would be reduced.

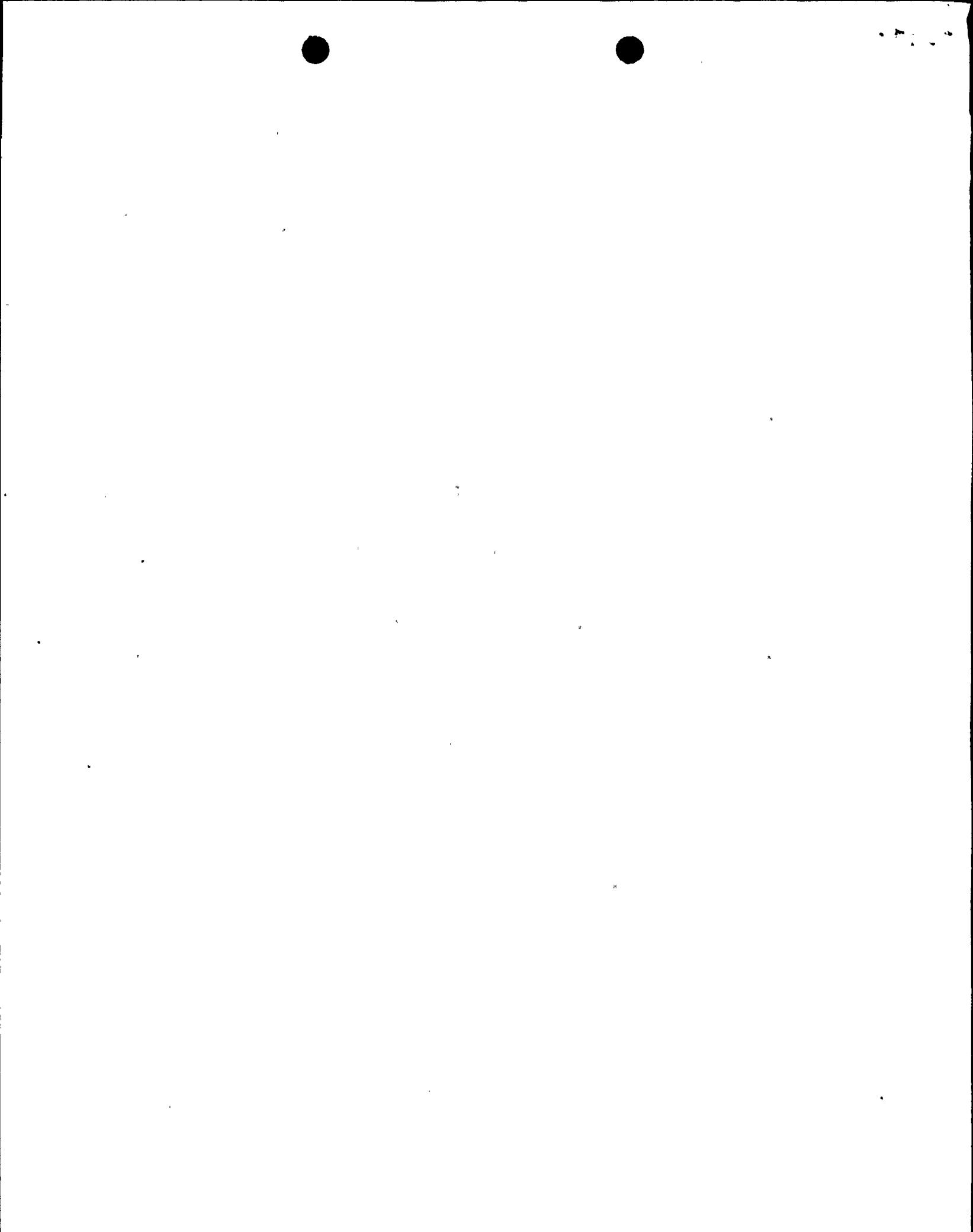
During the evaluation effort, flexible plate effects as described in Bulletin 79-02 were included. This increased the calculated working loads on anchor bolts resulting in an increase in those needing repair. Niagara Mohawk believes the flexible plate effects are somewhat overstated. Because of this, Niagara Mohawk believes the deficiencies discovered would not significantly effect the operation of Class I seismic piping systems during accident conditions.



EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

(Continued)

With regard to the missing seismic restraints, approximately 22 restraints included on Niagara Mohawk construction drawings are not installed. All the missing restraints are outside the drywell on the Containment Spray System. The consequences on operation of the Containment Spray System are unknown. Since Niagara Mohawk plans to add restraints, the effects will not be calculated.



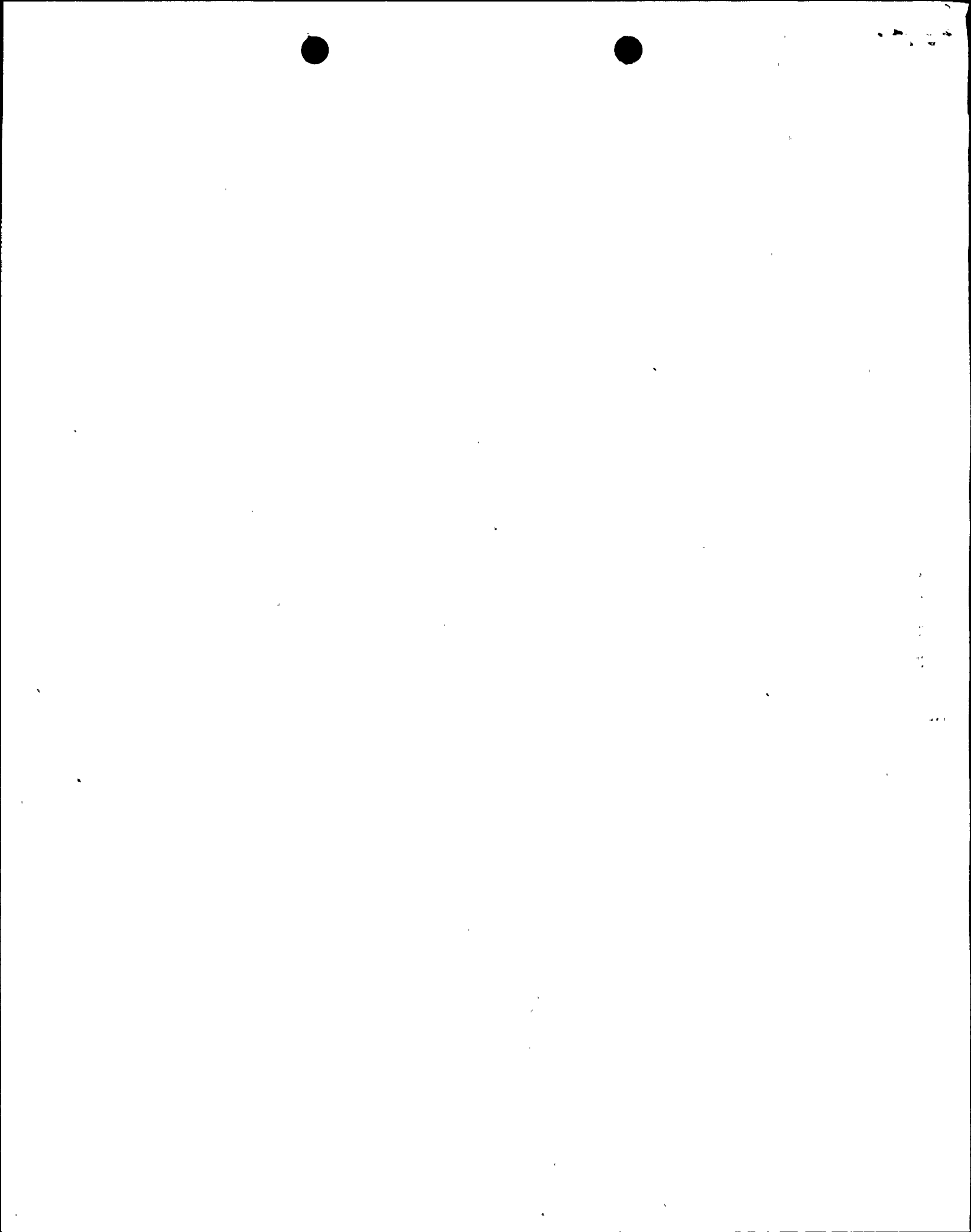
CAUSE DESCRIPTION AND CORRECTIVE ACTION

The cause of the identified concrete anchor bolt deficiencies and missing restraints are due to incorrect installation. Loose, missing or welded bolts will be replaced. Washers will be welded to base plates to account for oversized holes. Beveled washers will be used to correct skewed bolts. Restraint and plate modifications will be made to correct other deficiencies. Additional seismic restraints will be installed on the Containment Spray System to assure original design criteria are met. Flexible plate effects as discussed in Bulletin 79-02 will be included in Niagara Mohawk's repair program.

The following will be accomplished prior to plant startup:

- 1) Repairs will be made to all deficiencies in areas which are inaccessible during plant operation.
- 2) Concrete anchor bolts on these inaccessible base plates will be pull tested to assure adequate factors of safety exists in accordance with Bulletin 79-02.
- 3) Repairs will be made to all deficiencies in the Core Spray, Emergency Condenser and Control Rod Drive Systems.
- 4) Seismic restraints will be added to the Containment Spray System to assure stresses are within allowable values.

Before December 31, 1979, Niagara Mohawk will complete the inspection, testing and repair program for all concrete anchor bolts on Class I seismic piping systems.



SUMMARY TABLE OF INSPECTION PROGRAM FOR
BASE PLATES¹ ANCHORED IN CONCRETE

	<u># of Plates</u>	<u># of Plates Inspected²</u>	<u># of Plates With Deficiencies³</u>
High Energy Systems Including Main Steam ⁴ , Feedwater ⁴ , Emergency Condenser and Control Rod Drive Systems	357	327	116
Other Safety Related Systems Which Have Been Inspected Including Core Spray, Reactor Instrumentation, Shutdown Cooling, Liquid Poison, Condensate Transfer, Reactor Building Close Loop Cooling, and Containment Spray Systems	776	729	130
Other Safety Related Systems ⁵ Which Have Not Been Inspected Including Cleanup, Vacuum Relief, Diesel Generator Cooling, Instrument Air, Diesel Generator Starting Air, N ₂ , Vent and Purge and Drywell Instrumentation Systems	<u>158</u>	<u>0</u>	<u>--</u>
TOTAL	1291	1056	246

¹ Average of 4 bolts per base plate

² 20% of those base plates inspected have been pull tested with only one failed bolt as of June 4, 1979.

³ 43 repairs have been made as of June 4, 1979. Although the repairs may require a complete new base plate, the deficiency may only be with one bolt.

⁴ All base plates anchored in concrete in the Main Steam and Feedwater Systems are non-safety related.

⁵ The Containment Atmosphere Dilution System is not included since this was installed and inspected within the last 24 months.

