April 17, 1989

Mr. Owen Rothberg U.S. Nuclear Regulatory Commission Mail Stop NLS 302 Washington, D.C. 20555

Dear Mr. Rothberg:

We have reviewed the industry implementation and operation sections of NUREG/CR-5140 as you requested and confirm that the cost estimates presented are valid given the assumptions that were . 'e. In the advance copy of the NUREG that we have, there is one obvious er or in the calculated cost for test reports on page 5-30. The report states that "\$400 x 100 = \$4000". This error was carried through the analysis resulting in an understatement of cost by \$36,000.

In recent ACRS meetings on the draft MOV generic letter, industry representatives have also made a valid point that these testing costs can be much higher. Some of the situations that can contribute to higher testing costs include the following:

- While it is reasonable to expect that two valves can be tested in a 1. ten-hour shift, it is clear that delays in valve availability can impact this schedule. Since most of the costs are determined by the total length of the test program rather than by the time spent in actual testing, any delays in turning the valves over to the test group will increase the total cost. Therefore, testing costs can vary significantly depending on how efficiently the test program is coordinated.
- The cost estimates presented in the NUREG assume that, as a result of IEB 85-03, plants have established MOV programs and are prepared to undertake a testing program. This is a key assumption since the upfront engineering, i.e., procedure development, assembling engineering records on equipment, establishing control switch setting policy, reviewing design bases, and developing setpoint documents, can be very time consuming and costly. If this is not accomplished before testing begins, significant delays and retesting can result and lead to much

Original of Reg Files

Por Original of Reg Files

higher costs. E. IGNE-ACRS

- 3. Plants that choose to full pressure test more than 10% of their safetyrelated valves will incur higher testing costs. Testing delays due to
 valve unavailability are much more common when full pressure testing is
 required. Given the present wording of the draft generic letter, plants
 will probably full pressure test more than 10% of their valves.
- 4. If plants perform additional follow-on testing beyond the periodic two-hour tests described in the NUREG, testing costs will increase. The draft generic letter implies that a test similar to the initial test would be required at a five-year or three refueling outages interval.
- 5. During the course of MOV testing, there are often numerous other non-testing activities related to MOVs that are also in progress. These activities might include such items as valve and actuator refurbishment, EQ upgrades, repair of degradations discovered during testing, or grease change-out. If the costs for all of the MOV-related activities occurring during an outage are lumped together under the heading of MOV testing, the testing costs will appear to be much higher.

It has been our experience that $testin_5$ time and costs decrease substantially after plants have established MOV programs and have gained experience in the overall testing process.

We hope these comments will help in your assessment of the generic letter implementation costs. If you have any further questions, please call me at (404) 424-6343.

J.N. Nadeau

incerely,

Senior Vice President Technical Resources Group

kam034