



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I
970 BROAD STREET
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MAR 6 1973

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REVIEW OF OYSTER CREEK'S ELECTRICAL REPORTS AND INSPECTION OF OYSTER
CREEK CONDUCTED ON NOVEMBER 9, 10 and 13, 1972

INSPECTOR'S EVALUATION

The events reported and the items discussed covered a wide range of electrical and instrumentation and control subjects. A summary of events discussed during the inspection follows:

1. A circuit breaker that failed to close when signaled. The reasons for failure, as reported, seemed illogical.
2. A butterfly valve whose actuator was jammed because of an improperly adjusted linkage. This item was inaccurately reported.
3. Motor-operated valves that had been jammed shut when they were tightened manually to curb leakage. The driving motor was incapable of overcoming the added torque. In this case the report simply stated that the valve failed to open.
4. Differential cells that were discovered to have been connected backwards. This smacks of a dismal failure of construction QC. It is also surprising that it should have taken so long to discover this error.
5. A circuit design that rendered a redundant control scheme inoperative when one breaker was racked out. This deficiency was discovered by pure chance. It leaves one with the queasy feeling that there is much more remaining to be discovered.
6. A valve motor operator that flooded its motor with oil causing it to fail. This was a manufacturer's design or application problem that was passed on to his customer. The licensee jury-rigged a solution, successfully, but the problem should not have been passed on to him in the first place.

7. An improperly specified delay for a flow transient. A five second delay was specified by the vendor, whereas actual tests showed that the delay required was some 25 seconds. Hasty and unchecked engineering seems to have been at fault here.
8. An error in re-assembling a tubing system after having dismantled it for a test. Poor performance on the part of the technicians was responsible for this and perhaps, a lack of specific procedures.

This plethora of small problems indicates that a methodical sustained effort in surveillance and maintenance and training is required. While little can be done to avoid problems that spring up due to design or construction deficiencies, all effort should be bent toward trying to bring them to light. Normal surveillance testing, evidently, does not. Witness item 5 above, I would suspect occasional lapses in attention to small details (Items 2 and 8) and an attempt to gloss over large errors when reporting (Items 1 and 2). The lack of candor in some of the reports was pointed out to the licensee, who promised to mend his ways.

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