

DRAFT SUPPORTING STATEMENT
FOR
ANTICIPATED TRANSIENT WITHOUT SCRAM

10 CFR 50.62

DESCRIPTION OF THE INFORMATION COLLECTION

Section 50.62 requires the installation of certain equipment in nuclear power plants to prevent and mitigate anticipated transient without scram (ATWS) events. The licensee for a nuclear power plant is required, by 10 CFR 50.62(c)(6), to submit a copy of equipment design and installation plans to the NRC to ensure that the equipment will perform its intended safety function.

In addition, 10 CFR 50.62(d) requires the licensee to submit a schedule to the NRC for implementing the requirements of 50.62. This provision allows the establishment of implementation schedules that are tailored to the safety priority needs and resources of the individual licensee.

All licensees for nuclear power plants have submitted design and installation plans to NRC as required by 10 CFR 50.62. Licensees have also submitted schedules for implementing these requirements. Thus, all information collection is now complete.

A. JUSTIFICATION

1. Need for and Practical Utility of the Collection of Information

An ATWS is an expected operational transient (such as a loss of feedwater, loss of condenser, or loss of offsite power to the reactor) which is accompanied by a failure of the reactor trip system (RTS) to shut down the reactor. The RTS consists of those power sources, sensors, initiation circuits, logic matrices, bypasses, circuit breakers, interlocks, racks, panels and control boards, and actuation and actuated devices, that are required to initiate reactor shutdown, and includes the control rods and control rod mechanisms as well. That portion of the RTS exclusive of the control rods and control rod mechanisms is referred to as the scram system. ATWS is a cause of concern because under certain postulated conditions it could lead to severe core damage and release of radioactivity to the environment. The ATWS question involves safe shutdown of the reactor during a transient if there is a failure of the RTS. There have been precursors to an ATWS such as the failure of the automatic portion of the RTS at the Salem 1 nuclear generating station on February 25, 1983, although manual shutdown was accomplished after 30 seconds, and no core damage or release of radioactivity occurred. Section 50.62 requires improvements in the design and operation of nuclear power plants to reduce the likelihood of failure of the reactor protection system to shut down the reactor following anticipated transients and to mitigate the consequences of ATWS events. This will significantly reduce the risks of nuclear power plant operation.

2. Agency Use of Information

The NRC has reviewed the design and installation plans to ensure that the equipment will perform its intended safety function.

3. Reduction of Burden Through Information Technology

Not applicable. Task is complete.

4. Effort to Identify Duplication and Use Similar Information

Not applicable. Task is complete.

5. Effort to Reduce Small Business Burden

Not applicable. Task is complete.

6. Consequences to Federal Program or Policy Activities if the Collection is Not Conducted or is Conducted Less Frequently

This was a one-time requirement for each respondent, and it has been completed.

7. Circumstances which Justify Variation from OMB Guidelines

The information collection did not vary from OMB guidelines.

8. Consultations Outside the NRC

Not applicable. Task is complete.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is protected in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

No sensitive information was requested.

12. Estimated Industry Burden and Burden Hour Cost

None.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

None.

15. Reasons for Changes in Burden or Cost

All licensees for nuclear power plants have submitted design and installation plans to NRC as required by 10 CFR 50.62. Licensees have also submitted schedules for implementing the requirements of 10 CFR 50.62. NRC has completed its review of the proposed schedules and the design and installation plans and has completed inspections of the installed systems. Therefore, the information collection requirement for the ATWS issue is complete.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.