

DRAFT SUPPORTING STATEMENT
FOR
VOLUNTARY REPORTING OF PERFORMANCE INDICATORS
3150-0195

REVISION

Description of the Information Collection.

In mid-1998, the nuclear industry offered to voluntarily send selected performance attributes known as performance indicators (PIs) to the NRC as part of a larger effort to improve the NRC's oversight process. In April 2000, the NRC implemented a new oversight process that uses PI information to form a basis for NRC conclusions regarding plant performance and necessary regulatory response. Licensees transmit PIs electronically to reduce burden on themselves and the NRC.

To improve the PI program, the NRC meets monthly with public stakeholders, industry representatives, and the Nuclear Energy Institute (NEI)¹. Based on the results of these meetings, NEI issues guidance to licensees for use in collecting and reporting PI data to the NRC. Licensees already collect most of the PIs and report some of them to various industry groups. There is widespread industry support for the revised oversight process and all reactor licensees have voluntarily submitted PIs since its implementation.

A. JUSTIFICATION

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

The NRC revised its oversight process for commercial nuclear power plants in response to concerns expressed by congressional committees, the nuclear industry, public interest groups, as well as the NRC's own internal reviews. The new process, called "the reactor oversight process" (ROP), is more objective, predictable, and understandable. The use of PI information is a basic tenet of the ROP.

The ROP uses PIs and inspection results to evaluate licensee performance. PIs objectively measure the performance of plant systems and licensee programs in specific risk-significant areas. The use of PIs allows the ROP to be more objective and allows for a reduction in the amount of time licensees support NRC inspections. For those attributes for which PIs could not be identified or were not sufficiently comprehensive, the NRC developed inspection activities to obtain necessary information.

Under the ROP, licensees report PIs quarterly and retain records as long as necessary to calculate specific indicators, but in no case longer than 3 years.

¹ NEI is a utility group whose mission is to "foster and encourage the continued safe utilization and development of nuclear energy in order to meet the nation's energy, environmental, and economic goals."

Public information related to the security PI is limited due to the events of September 11, 2001. The ROP PIs provide the following information:

- a. The number of:
 - unplanned scrams per 7,000 hours of critical operation
 - unplanned scrams with complications over the previous 4 quarters
 - unplanned power changes per 7,000 hours of critical operation
 - safety system functional failures over the previous 4 quarters
 - non-conformance with 10 CFR Part 20 requirements for high or very high radiation areas, or unintended personnel exposures over the previous 4 quarters
 - occurrences of radiological effluent releases that exceed values derived from the Radiological Effluent Technical Specifications or the Offsite Dose Calculation Manual, over the previous 4 quarters
 - one security PI

- b. The unavailability and unreliability of systems that perform the functions listed below. Unavailability is the time the system was unavailable due to planned or unplanned maintenance or test during the preceding 12 quarters. Unreliability is the time the system would not perform as required in the preceding 12 quarters.
 - high-pressure injection
 - heat removal
 - residual heat removal
 - emergency AC power
 - cooling water support

- c. The percentage of:
 - reactor coolant activity (as a percent of the Technical Specification limit)
 - reactor coolant leakage (as a percent of the Technical Specification limit)
 - successful (accurate and timely) classifications, notifications, and protective action recommendations (as a percent of all such actions) by the Emergency Response Organization (ERO) during drills, exercises, and actual events over the previous 8 quarters
 - key ERO members who participated in emergency drills, exercises, or actual events over the previous 8 quarters
 - sirens that operated reliably in the preceding 4 quarters

2. Agency Use of Information.

The NRC uses PIs, along with the results of inspections, as the basis for determining whether performance thresholds have been exceeded. The oversight process relies, in part, on performance insights gained from PI data to assess plant performance and trigger regulatory actions. PIs, along with the results of inspections, are made publically available on the Internet shortly after the end of each quarter, with the exception of the security PI.

3. Reduction of Burden Through Information Technology.

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it

would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of special Web-based interface, or other means. It is estimated that 100 percent of the potential responses are filed electronically.

4. Effort To Identify Duplication and Use Similar Information.

The PIs were selected to maximize insights into licensee performance, thus they track specific performance over predetermined periods. Although licensees may report similar information for 4 of the 17 indicators, this information is usually not reported timely enough or in sufficient detail to properly characterize issues to meet the requirements of the ROP. The industry expressed a strong preference, and continues to support this preference, to report PIs separately from other reporting requirements to expedite the development and implementation of the ROP.

5. Effort to Reduce Small Business Burden.

Not applicable.

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

The NRC could not implement the ROP as it is currently structured if PI information were limited or not available. The PI information is a critical element of the ROP. The PIs establish an objective basis for assessing licensee performance and allocating NRC inspection resources. The NRC would be forced to increase the number of inspections at licensee facilities to obtain assessment information to the extent that PI information is not available.

7. Circumstances which Justify Variation from OMB Guidelines.

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC.

The NRC has worked closely with the nuclear-power industry and public stakeholders to improve PIs during development and implementation of the reactor oversight process. The NRC, industry representatives, and public stakeholders have met at least monthly since 1999. This supporting statement uses a burden estimate developed by industry licensees dated April 1, 2008.

There is broad agreement among the working group members on the usefulness of collecting PI data. The working group meetings typically last 6 hours and discuss PI attributes, including the clarity of each indicator and the data to be reported. As a result of these meetings, NEI issued a revision to the guidance document (NEI 99-02, Revision 5 "Regulatory Assessment Performance Indicator Guideline") for industry reporting of PIs in July 2007.

Opportunity to comment on the information collection was published in the Federal Register.

9. Payment or Gift to Respondents.

Not applicable.

10. Confidentiality of the Information.

No confidential information is required, except for proprietary information which is handled in accordance with 10 CFR 2.390(b) NRC's regulations. The NRC displays PI information (except the security PI) on its Web site for public viewing.

11. Justification for Sensitive Questions.

Not applicable.

12. Estimate of Industry Burden and Burden Hour Cost.

Table 1 reflects licensee burden to provide PI information and is based on information from industry. The estimates include only additional hours needed above those already expended by licensees to report indicators to the Institute of Nuclear Power Operations or to comply with other regulatory requirements (e.g., the maintenance rule, 10 CFR 50.73 reporting).

The NRC assumes there will be one response per reactor unit on a quarterly basis ($4 \times 104 = 416$ annual responses) and that each response will take 200 hours. Thus, the total reporting burden is 83,200 hours (416 responses \times 200 hrs/response) and costs are estimated at \$19,801,600 (83,200 hours \times \$238/hr).

Table 2 reflects the licensee recordkeeping burden. The recordkeeping estimate includes time to maintain utility procedures and occasionally refine the PIs and related procedures to incorporate improvements learned from experience. Procedure development and recordkeeping are performed by each utility and there are currently 26 utilities. The industry estimates 50 hours of annual recordkeeping time annually per utility, for a total of 1,300 hours (26 recordkeepers \times 50 hours per recordkeeper) and a cost of \$309,400 (1,300 hrs \times \$238/hr).

The total reporting and recordkeeping burden is 84,500 hours (83,200 reporting and 1,300 recordkeeping) and the total cost is \$20,111,000.

13. Estimate of Other Additional Costs.

NRC has determined that the quantity of records to be maintained is roughly proportional to the recordkeeping burden. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 percent of the recordkeeping burden cost. Therefore, the storage cost for this clearance is insignificant - \$124 (1,300 recordkeeping hours \times \$238/Hr \times .0004).

14. Estimated Annualized Cost to the Federal Government.

The information provided by these indicators was reviewed as a routine part of the previous inspection process and, therefore, incur minimal incremental cost to the government. This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Change in Burden or Cost.

The burden has decreased from 84,520 hours/449 responses (416 responses plus 33 recordkeepers) to 84,500 hours/442 responses (416 responses plus 26 recordkeepers), a decrease of 20 hours. The previous burden of 84,520 was based on 104 licensees responding quarterly at 200 hours per response (83,200 hours), plus 33 recordkeepers at 40 hours per recordkeeper (1,320 hours), for a total of 84,520 hours. The current burden of 84,500 hours is based on 104 licensees responding quarterly at 200 hours per response (83,200 hours), plus 26 recordkeepers at 50 hours per recordkeeper (1,300 hours), for a total of 84,500 hours.

A number of improvements to the PIs were recently recommended by a joint NRC/industry working group. These improvements added and deleted some reporting requirements. There were four changes that impacted the burden:

1. The working group determined that the NRC needed to consider the cumulative significance of system failures (unreliability) as well as the unavailability of five important safety systems to more accurately determine overall plant performance. Licensees already report unavailability information for four of the five safety systems. The group developed specific technical guidance for reporting both unreliability and unavailability for these five safety systems.

Licensees now report unavailability information for the new system (cooling water support), as well as unreliability information for the following systems: high-pressure injection, heat removal, residual heat removal, emergency AC power, and cooling water support.

As a result of these new reporting requirements, the burden increased from 40 to 50 hours per recordkeeper. This burden estimate was updated using input from NEI as of April 1, 2008.

2. The working group recommended, and the Commission agreed, that two security PIs be discontinued due to their marginal usefulness, given changes in the security inspection program and the limited insights gained beyond information already required to be reported to the NRC.
3. The working group also recommended that one PI, the Unplanned Scrams with Loss of Normal Heat Removal, be modified and renamed, Unplanned Scrams with Complications. The modified PI reduces industry burden, uses broader performance measures, and uses more current performance, 1-year rolling time-frame instead of 3 years.

4. Industry burden was further reduced by consolidation within the industry resulting in fewer (33 to 26) recordkeepers.

16. Publication for Statistical Use.
None.

17. Reason for Not Displaying the Expiration Date.
The expiration date will be displayed.

18. Exceptions to the Certification Statement.
Not applicable.

- B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS
Not applicable.

TABLE 1
Annual Reporting Burden

	Number of Respondents	Responses per Respondent	Total Responses	Burden per Response	Total Annual Burden Hours	Cost @ \$238/Hr.
PI Reporting	104	4	416	200	83,200	\$19,801,600

TABLE 2
Annual Recordkeeping Burden

	Number of Recordkeepers	Hours per Recordkeeper	Total Annual Burden Hours	Cost at \$238/hour
PI Recordkeeping	26	50	1,300	\$309,400

Total Annual Burden: 84,500 (83,200 hours plus 1,300 burden hours).
Total Burden Hour Cost: \$20,111,000 (83,200 hrs. + 1,300 hrs x \$238/hr)
Total Responses: 442 (416 responses + 26 recordkeepers)