U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-263/93011(DRSS)

Docket No. 50-263 License No. DPR-22

Licensee: Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Facility Name: Monticello Nuclear Generating Station

Inspection At: Monticello Site, Monticello, Minnesota

Inspection Conducted: May 24-28, 1993

Inspectors: N. Shah — Date: 6/11/93

S. K. Orth — Date: 6/11/93

Approved By: M. C. Schumacher, Chief
Radiological Controls Section 1 — Date: 6/11/93

Inspection Summary

Inspection on May 24-28, 1993 (Report No. 50-263/93011(DRSS))
Areas Inspected: Routine, announced inspection of the gaseous and liquid radioactive waste (radwaste) and chemistry programs (Inspection Procedure (IP) 84750), including non-radiological chemistry comparisons, audits and appraisals, quality assurance and quality control of laboratory measurements, water quality programs, dose assessment, air cleaning systems, and the radiological environmental monitoring program (REMP). Items identified in previous inspections were also reviewed.
Results: No violations or deviations were identified. Airborne effluent activity continues to decline, except for tritium, which increased slightly due to leakage from feedwater regulating valves (section 5). The licensee's analytical performance in the nonradiological chemistry comparisons (section 8) and control of water quality (section 6) were excellent. The REMP continued to be effectively implemented (section 11). The inspectors noted problems with licensee management review of chemistry documents (sections 7 and 9).

DETAILS

1. Persons Contacted

*W. Hill, Plant Manager
*J. Windchill, Superintendent Radiation Protection
G. Mathiasen, Lead Health Physicist
*K. Jepson, Superintendent Chemistry
*G. Crosby, Quality Superintendent
R. Brevig, Security and Emergency Planning Superintendent
*P. Yurczek, Radiation Protection Supervisor
*M. Holmes, Radiochemistry Supervisor
D. Selkin, Radiation Protection Supervisor
*C. Anderson, Radiation Protection Supervisor
*T. Beard, Senior Corporate Health Physicist
B. Denney, Health Physicist
*M. Davis, Emergency Planner
*M. Lunsford, Technical Instructor
*D. Loeffler, Technical Instructor
K. Schriver, Radiation Protection Specialist
D. Bistodeau, Radiation Protection Specialist
S. Quiggle, Radiation Protection Specialist
D. Carstens, Production Engineer

*S. Ray, USNRC, Senior Resident Inspector

The inspectors also interviewed other licensee personnel.

*Present at the Exit Meeting on May 28, 1993.

2. Licensee Action on Previous Inspection Finding (IP 92701)

(Closed) Violation 50-263/91008-04(DRSS): Licensee corrective actions for a violation involving a shipment of radioactive waste in drums that were improperly marked and closed. The main shipping procedure was revised to add requirements for pre-staging radwaste containers to verify closure and marking, a checklist with signoffs for verification of closure and marking during final loading, and using a second qualified person to verify shipping requirements. An inspector verified that these actions were taken, and that this event had not recurred.

(Closed) Inspector Followup Item (IFI) 50-263/92014-01(DRSS): Review condition of radioactive material stored in the Turbine Rotor Storage (TRS) building and other restricted areas outside the protected area. The licensee has segregated uncontaminated from contaminated materials in the onsite warehouses, and completed an inventory of all stored items in the TRS building. This inventory will be performed by radiation protection (RP) semiannually, and will also include all radioactive material stored for greater than one operating cycle (about 2 years). An inspector reviewed the inventory and toured the storage areas; no problems were identified.

(Closed) IFI 50-263/93007-02(DRSS): Control and tracking of radioactive sources. The licensee has revised procedure R6.01, "Radioactive Source Control," to add a requirement for logging radioactive sources. This log is maintained by RP. An inspector reviewed the source log and the procedural change; no problems were identified.

(Closed) IFI 50-263/92014-01(DRSS): Licensee evaluation and disposal of onsite contaminated soil. Soil and vegetation samples were collected by the licensee between May and October 1992, and during May 1993, to determine the contamination extent. The contamination, believed to be deposition from routine reactor vent releases, ranged from 50-100 dpm/100 cm^2 onsite, and below 100 dpm/100 cm^2 offsite, and was consistent with previous analyses (Inspection Report No. 92014(DRSS)). Area smears of building roofs were also collected and indicated radionuclides similar to those in the soil. The licensee plans to track the contamination pursuant to 10 CFR 50.75(g), by performing annual sampling of onsite soil and vegetation. Offsite sampling already occurs under the REMP. This item will be reviewed during routine inspections.

(Closed) IFI 50-263/91020-01(DRSS): Licensee to analyze a split liquid sample for H-3, Sr-90, Sr-89, gross alpha, and gross beta and provide results to the Region III office. Table 1 contains the licensee's results. Based on the low activity of the sample and the relatively poor counting statistics, the comparison criteria were relaxed resulting in agreements for the H-3 and gross beta comparisons. Analyses for gross alpha, Sr-90, and Sr-89 were not compared owing to the low resolution of the results. These analyses will be reviewed in subsequent radiological confirmatory measurements inspections.

3. Management Control and Organization (IP 84750)

The inspectors reviewed the chemistry unit organization and discussed it with the chemistry superintendent. The former radiochemistry supervisor was promoted to senior radiochemist, and one of the radiation protection specialists (RPS) was reassigned as the radiochemistry supervisor. Another senior radiochemist was on temporary reassignment to the computer group, to aid in the development of a plant-wide work scheduling program, but was expected back by the Fall of 1993. The staff remained stable and fully qualified.

Responsibility over REMP was transferred from the corporate Nuclear Radiation Services group to the site emergency planning and security (EPS) group in the middle of 1992, and later to the site radiation protection group in early May 1993. The corporate representative responsible for REMP sampling transferred to the station to assist the program transition and to train a new station sample collector. Sample collection continued under the corporate procedures until the site EPS group developed station procedures and surveillances. In addition to the designated sample collector, the licensee is planning to assign two persons as backup samplers. The RP group developed a training program for these individuals and annual retraining for all REMP sample collectors. Overall, the transition was very well coordinated.

No violations or deviations were identified.

4. Audits and Appraisals (IP 84750)

The inspectors reviewed several 1991 and 1992 audits and surveillances of the chemistry, REMP, and effluent radwaste areas. The audits were performance based and appeared to be technically sound and performed in sufficient depth. The inspectors noted that audit findings were evaluated by licensee management and resolved in a timely manner. As part of the REMP transfer (section 3), specific surveillances were developed to correct audit findings. Overall, the audits indicated that reviewed programs were effectively implemented.

No violations or deviations were identified.

5. Gaseous Radwaste (IP 84750)

The inspectors reviewed the gaseous radwaste program, including sampling and analysis, offsite doses, and activity released. Also reviewed were elevated tritium levels in 1992 gaseous effluent.

Gaseous activity released continues to decline following 1989 modifications to the offgas system. Activity in recent years were 3042 [113 terabecqurels (TBq)], I994 [74 TBq], and 1300 [48 TBq] curies (Ci) for 1990, 1991, and 1992, respectively. For the first quarter of 1993, total activity released is about 168 [6 TBq] Ci. For all periods, offsite doses were well below technical specification (TS) limits (section 12).

To date, in 1993 four batch releases have occurred. Batch releases typically consist of purging N_2 from containment after a reactor shutdown. Although most batch releases are through the standby gas treatment system, some may occur through the reactor building vents. In either case, samples are collected and a preliminary dose calculation (section I2) is performed. The inspectors verified that activity from batch releases was accounted for in semi-annual effluent reports.

An inspector accompanied a chemistry technician performing routine sample collection and analyses under TS 4.8.B.5 and 4.8.6.b. The technician was knowledgeable of both the TS requirements and equipment operation, and discharged his duties in a professional manner. The inspector also reviewed sampling and analyses records, including those for strontium 89/90 performed by a contract vendor; no problems were identified.

While reviewing semi-annual effluent reports, an inspector noted that tritium levels had increased between 199I (64 Ci [2.4 TBq]) and 1992 (104 Ci [4 TBq]). The cause was attributed to leakage from the feedwater regulating valves which had experienced operational problems during this period (Inspection Reports No. 92004(DRP) and 92009(DRP)). The inspector verified that, after repair of the valves, tritium levels had returned to normal.

No violations or deviations were identified.

6. Liquid Radwaste and Water Chemistry Control (IP 84750)

The inspectors reviewed the licensee's liquid radwaste and water chemistry control programs. Administrative limits on water quality, as defined in licensee Chemistry Manual 11.05, "Chemistry Limits," Revision 4, October 26, 1992, conform to the EPRI BWR Owners Group Guidelines.

The inspectors verified, through a review of records and discussions with the licensee, that no radwaste was released via liquid effluents.

The inspectors observed that sample panels and in-line instrumentation were well maintained. The licensee was modifying the in-line ion chromatograph (IC) to monitor anions (i.e., fluoride, chloride, and sulfate) instead of transition metals, because the licensee believes that dynamic monitoring of anions is more valuable. Also, a water purification system, consisting of a reverse osmosis system, an ultraviolet system, mixed bed demineralizers, and an in-line silica monitor, was installed to improve makeup water quality.

A review of the chemistry parameters over the last 18 months indicated excellent reactor water quality well within industry standards: reactor water conductivity averaged 0.1 microSiemen/cm (uS/cm) with an EPRI achievable level of 0.2 uS/cm; reactor water chlorides and sulfates were below 2 parts per billion (ppb) with an EPRI achievable level of 15 ppb; and feedwater concentrations of iron and copper were less than 3 and 0.025 ppb, respectively, with EPRI achievable values of 5 and 0.1 ppb, respectively. Chemistry management reviewed these parameters at an appropriate frequency and took corrective actions when necessary.

The inspectors reviewed data trends of the sodium pentaborate concentration in the standby liquid control tank, and the dose equivalent iodine activity in reactor coolant for the past year. Both parameters were maintained within TS requirements.

No violations or deviations were identified.

7. Process and Effluent Radiation Monitors (IP 84750)

The inspectors reviewed the licensee's calibration and maintenance of process radiation monitors, and measurements of air flow through the reactor building vent and elevated stack. Also reviewed was the ability of the gaseous effluent monitors to meet the TS lower limit of detection (LLD).

Initial calibrations of gaseous and liquid monitors were performed using gaseous (xenon-133, krypton-85) and liquid (cesium-137) sources, respectively, which were correlated to several solid sources for use in secondary calibrations. The inspectors reviewed calibration records and verified that they had been performed as required using sources

traceable to the National Institute of Standards and Testing. While accompanying a chemistry technician (section 5), an inspector verified that monitors were maintained operable and in good condition.

Also reviewed were licensee measurements of air flow through the reactor building vents and elevated stack. Vent flow is measured through two adjacent hot wire anemometers traversing the air flow centerline, while stack flow is determined via two opposing pitot tubes along the flow centerline. Sample flow is determined via a hot wire anemometer located at the process monitors. Each flow monitoring device is required to be calibrated once per operating cycle (about 2 years) in accordance with TS 4.8.2. Additionally, the chemistry group reviews stack and vent air flow rates for long term trends. If an adverse trend is identified, the system engineer is notified. The inspectors reviewed calibration records and air flow trends for the reactor building vents and elevated stack; no problems were identified.

Technical specification 4.8.4 requires an LLD of 1.0E-6 uCi/cc for the stack and vent noble gas monitors. Using this value, the licensee calculated the background count rate needed to reach the LLD. If the actual background exceeds half this calculated value, the monitor is declared inoperable and an investigation is begun. The inspectors noted that the licensee's calculation was in error, but that the monitors met the LLD. Although the licensee will redo the calculation, the inspectors felt that this was another example of weaknesses in management review of documents (section 9).

No violations were identified.

8. Confirmatory Measurements (IP 84750)

The inspectors submitted chemistry samples to the licensee for analyses to evaluate the laboratory's capabilities to monitor nonradiological chemistry parameters in various plant systems. These samples were prepared, standardized, and verified for the NRC by the Analytical Chemistry Division of Oak Ridge National Laboratory, and were analyzed by the licensee using routine methods and equipment.

Three dilutions were made for each sample by licensee personnel as necessary to bring the concentrations within the ranges normally analyzed by the laboratory and were analyzed in a manner similar to that of routine samples. The results are presented in Table 2, which also contains the criteria for agreement. These criteria are based on analyses of the standards and on the relative standard deviations (SD) derived from the results of the plants participating in the 1986 interlaboratory comparisons (Table 2.I, NUREG/CR-5422). The acceptance criteria are such that the ratio of the licensee's result and the standard value should be within 2 SD of the standard value for agreement and between 2 and 3 SD for a qualified agreement. A qualified agreement may indicate a bias in the assay.

The licensee's analytical results were excellent. The licensee determined 9 analytes at 3 concentrations and 1 analyte at 2 concentrations and achieved all agreements. Two of these agreements were qualified agreements.

The licensee's analysis of the high boron analyte was a qualified agreement. Upon reviewing the data, the inspectors noted that minor negative biases may be present in the licensee's boron and fluoride analyses. The inspector discussed these results with the licensee, who agreed to review the current analyses. These analyses will be reviewed in future inspections.

The inspectors observed the RPSs performing routine sampling, dilutions, and analyses and noted that very good analytical techniques were demonstrated. Laboratory space and housekeeping appeared good.

The licensee prepared a sample containing one milliliter of the anions from analyte A in Table 2 diluted with reactor feedwater to a volume of one liter. This sample was divided into two aliquots to be analyzed by the licensee and the NRC reference laboratory for chloride, sulfate, and fluoride. The results will be submitted to the Region III office for comparison (IFI 263/9301I-01).

No violations or deviations were identified.

9. Implementation of the Laboratory QA/QC Program (IP 84750)

The inspectors reviewed the licensee's QC program for laboratory and in-line analyses in accordance with the licensee's chemistry manual, Volume II, II.08, "Quality Control Program," Revision 7, October 7, 1992. The licensee continued to maintain multi-point calibrations, independent instrument performance control standards, interlaboratory and intralaboratory comparisons programs, and continuing technician training.

Control charts were well maintained for the laboratory instruments. Control charts were either computer generated or manually charted based on the analysis frequency, with frequent analyses being manually trended. Overall, the licensee controlled instrument performance with two and three SD warning and control limits, respectively; actions taken when instruments were out of control were properly denoted on the control charts. Analyses performed via induced coupled plasma (ICP) were controlled via limits based on a percent of the mean. The in-line chemistry instruments were compared with an independent analyses to ensure proper performance. Chemistry management reviewed the control charts at required frequencies to evaluate control limits and determine possible biases. The inspector noted that the control limits did not seem very dynamic with respect to changes in precision and discussed this with the licensee. The chemistry superintendent was hesitant to change control limits, but agreed that control bands should be adjusted for more significant changes in performance.

The licensee demonstrated very good performance in its quarterly interlaboratory program with its vendor. In the last 5 calendar quarters, the licensee achieved 248 agreements in 285 comparisons; analyses which were disagreements were repeated. The licensee also monitored the performance of analyses via a quarterly intralaboratory program. All licensee personnel responsible for laboratory analyses were required to analyze in-house prepared unknowns and achieve analytical results within two SD of the group's results. The inspectors reviewed the results for 1992 and verified all yearly required analyses were completed. Although the chemistry superintendent and plant chemist reviewed the intralaboratory documentation, the inspectors noted that several of the acceptance ranges were noticeably inconsistent with the data. The chemistry superintendent investigated the discrepancies and found an error in the computer software that calculated the acceptance ranges. These observations indicated a weakness in the licensee's management review process.

The licensee conducted continuing training for all RPSs, consisting of required subjects (i.e., PASS analyses, hazardous materials, and emergency plan training), and those requested by the chemistry unit. Training consisted of classroom and on-the-job training followed by a written exam. The inspectors verified that all RPSs had attended the required training for 1992. No problems were identified.

No violations or deviations were identified.

10. Post Accident Sampling System (PASS) (IP 84750)

The inspectors toured the licensee's PASS system and discussed its operability with licensee representatives. On October 20, 1992, the system was declared inoperable when it was determined that two flow check valves on the residual heat removal sample lines were not included in the proper ASME program; subsequently, an administrative out-of-service time limit was exceeded on October 27, 1992, as described in Inspection Report No. 263/92015(DRP). On October 28, 1992, the valves were successfully tested, and the system was returned to operation. At the time of this inspection, the system was fully operable.

The licensee's maintenance program for the PASS appeared to be good. Priorities for repair work requests were determined by the responsible production engineer and the engineering superintendent. Additionally, the licensee imposed an administrative seven day time limit in the event that any PASS sampling capability was lost. The inspectors verified that the system had been calibrated annually and tested semiannually.

The quality control program for the PASS system was very good. Comparisons were performed during semiannual testing to ensure that PASS samples were representative of primary coolant. Licensee comparisons between PASS isotopic determinations of radioiodines, and those determined by normal sample points, were in good agreement.

No violations or deviations were identified.

11. Radiological Environmental Monitoring Program (IP 84750)

The inspectors reviewed the implementation of the REMP, including the 1991 and 1992 annual reports, and toured the air sampling stations. Sampling was performed consistent with TS requirements, and the results were documented in the annual report. The inspectors also verified that results were within TS limits and that missed samples were documented in the report.

An inspector accompanied the licensee's sample collector on a routine replacement of selected air filters, and confirmed the sampling stations were operable and in good condition. The sample collector was knowledgeable of the equipment, and used good technique when testing the air filtration train for inleakage following installation of a new filter.

No violations or deviations were identified.

12. Air Cleaning Systems (IP 84750)

The inspectors reviewed the licensee's maintenance of the control room ventilation high efficiency particulate air (HEPA) filters and charcoal absorbers.

Dioctylphthalate (DOP) and halogenated hydrocarbon penetration tests for the HEPA filters and charcoal absorbers, respectively, are performed onsite by vendors. Representative charcoal samples are sent offsite for vendor laboratory analysis of methyl iodide removal efficiency. A selective review of surveillance test data indicated that the results met TS criteria, and were reviewed by the system engineers. Accompanied by a system engineer, an inspector toured the control room ventilation HEPA filters and charcoal absorbers to verify operability.

No violations or deviations were identified.

13. Dose Assessment (IP 84750)

The inspectors reviewed the licensee's calculation of offsite doses and the implementation of its Offsite Dose Calculational Manual (ODCM).

Monthly, 10 CFR 50 Appendix I calculations are performed using the programs DOSGAS and DOSPIT for gaseous and gaseous particulate releases, respectively. As needed, dose from liquid releases (section 6) can be calculated via program LIQDOS. Weekly, TS required site boundary dose calculations are performed. The inspectors reviewed selected dose calculations, and did a comparison calculation between the ODCM and regulatory guide 1.109. No problems or significant trends were identified.

Meteorological data is continuously updated via the MIDAS program. Although preliminary dose calculations prior to batch releases used current data, historical data was used for continuous gaseous releases. The inspectors observed the prerelease assessment for a batch release; no problems were identified.

Section 3.3.5 of the ODCM requires annual identification of the critical receptor location for gaseous radioiodine and long-lived (> 8 day half life) particulate releases. This determination is made by the corporate radiological services group, based on periodic land use surveys. The inspectors verified the critical receptor was identified as required, and that the most recent determination was used to calculate dose.

No violations or deviations were identified.

14. Exit Interview

The scope and findings of the inspection were reviewed with licensee representatives (section 1) at the conclusion of the inspection on May 28, 1993. There were no violations or deviations and the licensee did not identify any documents as proprietary. The following matters were specifically discussed by the inspectors:

- licensee performance in nonradiological confirmatory measurements (section 8)
- changes in administration of the REMP (section 3)
- management review of chemistry documents (sections 7 and 9)
- higher tritium levels in 1992 gaseous effluent (section 5)

Attachments:
1. Criteria for Comparing Analytical Measurements
2. Table 1, Confirmatory Measurements Program Results, 2nd Quarter 1993
3. Table 2, Non-Radiological Confirmatory Measurements Results, May 24-28, 1993

ATTACHMENT 1

CRITERIA FOR COMPARING ANALYTICAL MEASUREMENTS

This attachment provides criteria for comparing results of capability tests and verification measurements. The criteria are based on an empirical relationship which combines prior experience and the accuracy needs of this program.

In these criteria, the judgement limits are variable in relation to comparisons of the NRC's value to its associated one sigma uncertainty. As that ratio, referred to in this program as "Resolution," increases, the acceptability of a licensee's measurement should be more selective. Conversely, poorer agreement should be considered acceptable as the resolution decreases. The values in the ratio criteria may be rounded to fewer significant figures reported by the NRC Reference Laboratory, unless such rounding will result in a narrowed category of acceptance.

RESOLUTION	RATIO = LICENSEE VALUE/ NRC REFERENCE VALUE
	AGREEMENT
< 4	NO COMPARISON
4 - 7	0.5 - 2.0
8 - 15	0.6 - 1.66
16 - 50	0.75 - 1.33
51 - 200	0.80 - 1.25
> 200	0.85 - 1.18

Some discrepancies may result from the use of different equipment, techniques, and for some specific nuclides. These may be factored into the acceptance criteria and identified on the data sheet.

TABLE 1

U.S. NUCLEAR REGULATORY COMMISSION
REGION III
CONFIRMATORY MEASUREMENTS PROGRAM

FACILITY: MONTICELLO

FOR THE 2ND QUARTER OF 1993

SAMPLE	NUCLIDE	NRC VAL.	NRC ERR.	LIC.VAL.	LIC.ERR.	RATIO	RESOL.	RESULT
WASTE	G-ALPHA	1.60E-08	2.60E-08	<3.3E-08			0.6	N
TANK	G-BETA	1.28E-06	1.20E-07	2.36E-06		1.97	10.7	A*
SPLIT	H-3	8.70E-03	1.20E-04	9.21E-03		0.77	72.5	A*
	SR-89	9.00E-09	1.00E-10	<9.8E-09			1	N
	SR-90	4.00E-09	3.00E-09	<5.9E-09			1	N

TEST RESULTS:

A=AGREEMENT
D=DISAGREEMENT
*=CRITERIA RELAXED
N=NO COMPARISON

TABLE 2

NONRADIOLOGICAL CONFIRMATORY MEASUREMENTS RESULTS
MONTICELLO NUCLEAR POWER STATION
MAY 24-28, 1993

Analyte		Method[1]	Conc[2]	Ratio[3]	Acceptance Ranges[4] ± 2RSD	± 3RSD	Result[5]
			ppb				
Chloride	A	IC	5	0.940	0.933-1.067	0.900-1.100	A
	B		10	0.972	0.919-1.081	0.887-1.113	A
	C		20	0.950	0.926-1.074	0.895-1.105	A
Sulfate	A	IC	5	1.106	0.895-1.105	0.842-1.158	A+
	B		10	1.032	0.895-1.105	0.868-1.132	A
	C		20	0.974	0.900-1.100	0.867-1.133	A
Fluoride	A	IC	5	0.899	0.875-1.125	0.833-1.167	A
	B		10	0.921	0.875-1.125	0.833-1.167	A
	C		20	0.909	0.878-1.122	0.824-1.176	A
ca	T	SPEC	50	0.958	0.909-1.091	0.860-1.136	A
	U		100	1.015	0.907-1.093	0.857-1.143	A
			ppm				
Iron	G	ICP	2	1.032	0.904-1.096	0.854-1.146	A
	H		4	1.002	0.903-1.097	0.855-1.145	A
	I		8	1.038	0.903-1.097	0.855-1.145	A
Copper	G	ICP	2	1.021	0.905-1.095	0.859-1.141	A
	H		4	0.997	0.904-1.096	0.857-1.143	A
	I		8	1.017	0.904-1.096	0.857-1.143	A
Nickel	G	ICP	2	1.008	0.936-1.064	0.906-1.094	A
	H		4	0.962	0.938-1.062	0.908-1.092	A
	I		8	1.003	0.938-1.062	0.908-1.092	A
Chromium	G	ICP	2	1.021	0.905-1.095	0.855-1.145	A
	H		4	0.983	0.903-1.097	0.854-1.143	A
	I		8	1.026	0.903-1.097	0.853-1.147	A
Boron	D	ICP	1	0.986	0.979-1.021	0.968-1.032	A
	E		3	0.985	0.979-1.021	0.968-1.032	A
	F		5	0.972	0.979-1.021	0.968-1.032	A+

Zinc	X	ICP	1	0.952	0.902-1.098	0.853-1.147	A
	Y		5	0.968	0.899-1.101	0.851-1.149	A
	Z		10	0.985	0.900-1.100	0.849-1.151	A

1. Methods: IC - Ion Chromatography
   Spec - Ultraviolet/Visible Spectrophotometry
   ICP - Inductively Coupled Plasma

2. Conc: Approximate concentration analyzed.

3. Ratio of Licensee mean value to NRC mean value.

4. The standard deviation (SD) in the sixth and seventh columns represents the coefficient of variation obtained from averaging licensee data from the preceding cycle (Table 2.1 of NUREG/CR-5244). A result is considered to be in agreement if it falls within the $\pm$ 2 SD range; a qualified agreement if it lies outside $\pm$ 2 SD, but within $\pm$ 3 SD; and in disagreement if it is outside the $\pm$ 3 SD range.

5. Result:
   A = Agreement: Licensee value is within $\pm$2 SDs of the NRC mean value.
   A+ = Qualified agreement: Licensee is between $\pm$2 and $\pm$3 SDs of the NRC value.
   D = Disagreement: Licensee value is outside $\pm$3 SDs.