




UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

MEMORANDUM TO: Brenda J. Shelton, Chief
Records Management Branch
Information Management Division
Office of the Chief Information Officer

FROM: Paul E. Bird, Director 
Office of Human Resources

SUBJECT: TRANSFER OF DIFFERING PROFESSIONAL OPINION CASE
FILE, (DPO-2001-01) SUBJECT, "FREQUENCY OF PROBLEM
IDENTIFICATION AND RESOLUTION (PI&R INSPECTIONS)"

Attached is the official case file for Differing Official Opinion (DPO), DPO-2001-01, "Frequency of Problem Identification and Resolution (PI&R) Inspections", for disposition in accordance with the provisions of NRC Management Directive 10.159, Differing Professional Views or Opinions. A listing of releaseable documents and a redacted copy of the DPO case file are also attached (within the Freedom of Information/Local Public Document Room Branch's Freedom of Information Act review package) for NUDOCS processing and placement in the Public Document Room. If you have any questions contact me or Pam Easson at 415-7082.

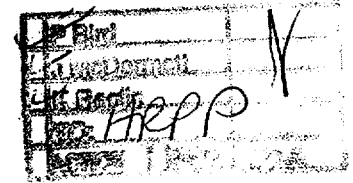
Attachments: As stated



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

MAR 22 2001



MEMORANDUM TO: Paul E. Bird, Director
Office of Human Resources

FROM: Carol Ann Reed *Carol Ann Reed*
Freedom of Information Act/Privacy Act Officer

SUBJECT: DIFFERING PROFESSIONAL OPINION FROM HOWARD
BUNDY, GARY JOHNSTON, MICHAEL MURPHY, STEPHEN
MCCRORY AND THOMAS STETKA (DPO-2001-01)

By memorandum dated March 7, 2001, you requested that my office coordinate the review for the release of records, in accordance with NRC Management Directive 10.159, relating to a Differing Professional Opinion (DPO), regarding frequency of problem identification and resolution (PI&R) inspections and for placement in the Public Document Rom (PDR). The review of the subject records has now been completed.

The records are identified on the enclosed Appendix A. Located behind Tab A are records that your office should make publicly available.

The records behind Tab B contain the background memoranda relating to the processing of this DPO by my office. These records should be included with the official DPO file which your office will transmit to the NRC File Center. These records should **not** be made publicly available.

Attachments: As stated

APPENDIX A

<u>NO.</u>	<u>DATE</u>	<u>DESCRIPTION/(PAGE COUNT)</u>
1.	5/31/00	Region IV Items of Interest, Differing Professional View in Region IV (1 page)
2.	6/15/00	Memorandum to W Travers from H Bundy et al., Subject: Differing Professional Opinion - Frequency of PIR Inspections (24 pages)
3.	6/16/00	Memorandum to W Travers from E Merschoff, Subject: Differing Professional Opinion - Frequency of PIR Inspections with enclosures (50 pages)
4.	6/28/00	Memorandum to J Zwolinski and C Christensen from W Travers, Subject: Differing Professional Opinion (DPO) Panel (3 pages)
5.	7/13/00	Memorandum to J Zwolinski from H Bundy et al., Subject: Differing Professional Opinion (DPO) Panel (1 page)
6.	8/15/00	Memorandum to W Travers from J Zwolinski, Subject: Differing Professional Opinion (DPO) Panel - IP71152, Problem Identification and Resolution Inspections (1 page)
7.	9/8/00	Memorandum to W Travers from J Zwolinski, Subject: Differing Professional Opinion (DPO) Panel Report - Inspection Procedure 71152, Problem Identification and Resolution Inspections (14 pages)
8.	10/2/00	Memorandum to S Collins from W Travers, Subject: Differing Professional Opinion - Frequency of Problem Identification and Resolution (PI&R) Inspections with enclosure (16 pages)
9.	10/2/00	Memorandum to H Bundy et al., from W Travers, Subject: Differing Professional Opinion - Frequency of Problem Identification and Resolution (PI&R) Inspections (3 pages)

NRC FORM 8
(7-94)
NRCMD 3.57

INCOMING AND SIGNATURE TAB

**USE THIS SIDE OF THE SHEET TO PRECEDE
THE INCOMING MATERIAL
WHEN ASSEMBLING CORRESPONDENCE**

(USE REVERSE SIDE FOR SIGNATURE TAB)

INCOMING

INCOMING AND SIGNATURE TAB
USE THIS SIDE OF THE SHEET TO PRECEDE
THE SIGNATURE PAGE
WHEN ASSEMBLING CORRESPONDENCE
(USE REVERSE SIDE FOR INCOMING TAB)

SIGNATURE



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 7, 2001

DPO - 2001 - 01
Rec'd 3/8/01

MEMORANDUM TO: Carol Ann Reed
Information Services Branch
Information Management Division
Office of the Chief Information Officer

FROM: Paul E. Bird *Paul Bird*
Office of Human Resources

SUBJECT: CASE FILE FOR DIFFERING PROFESSIONAL OPINION (DPO) -
"FREQUENCY OF PROBLEM IDENTIFICATION AND RESOLUTION
(PI&R) INSPECTIONS"

Attached for your review is a copy of the completed case file for a Differing Professional Opinion (DPO) on problem Identification and resolution (PI&E) inspections. Please coordinate the review of the documents for their release to the public as you would under a Freedom of Information Act request. Upon completing the review, return a statement of your findings, a list of the documents that are releasable to the public, a redacted version of the DPO case file that can be released to the public, and pertinent background materials. This request is in accordance with the provisions of NRC Handbook 10.159, Differing Professional Views or Opinions, section (C)(4)(b), to determine the identity of documents, or portions thereof, that can be released to the public. Should you have any questions, direct them to Pam Easson at 415-7082 or e-mail PXE.

Attachments: As stated



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 5, 2001

MEMORANDUM TO: Paul E. Bird, Director
Office of Human Resources

FROM: William D. Travers 
Executive Director for Operations

SUBJECT: CASE FILE FOR DIFFERING PROFESSIONAL OPINION (DPO) -
"FREQUENCY OF PROBLEM IDENTIFICATION AND RESOLUTION
(PI&R) INSPECTIONS"

In accordance with Management Directive (MD) 10.159, I am forwarding the completed case file on the Differing Professional Opinion (DPO) regarding the frequency of PI&R Inspections. This DPO was initiated pursuant to a Differing Professional View (DPV) on the same subject. The initiators of the DPV requested that all records related to the DPV be made available to the public in a memorandum to Ellis W. Merschoff, Regional Administrator, dated June 7, 2000.

An Ad-Hoc DPO panel was formed and did not find indications that the PI&R inspections were resulting in an unnecessary burden on licensees or impacting plant safety. Based on my review of the DPO concerns and the facts presented in their report, I agree with the recommendation of the DPO panel not to immediately change the inspection frequency of Inspection Procedure (IP) 71152. By memorandum dated October 2, 2000, the DPO report was transmitted to NRR for consideration of the recommendations during their self-assessment of the first year of implementation of the Revised Reactor Oversight Process (RROP).

I have reviewed the documents in the file, and all documents may be released to the public subject to a routine Freedom of Information Act review. The authors of the DPO have been contacted regarding this case file and have no objection to the release of their names with these documents. The e-mail confirming this is included as an enclosure to this memorandum.

The documents comprising the file in chronological order are (please note: Documents #1-10 relate to the DPV, Documents #11-18 relate to the DPO):

1. April 7, 2000, Memorandum on "Differing Professional View - Frequency of PIR Inspections," to Ellis W. Merschoff, Regional Administrator, from the following five Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas F. Stetka.
2. April 11, 2000, Memorandum on "Receipt of Differing Professional View - Frequency of PIR Inspections, Dated April 7, 2000," to Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas O. McKernon, from Ellis W. Merschoff, Regional Administrator.

3. April 11, 2000, Memorandum on "Ad Hoc Panel Assignment - Differing Professional View," to Charles S. Marschall, Kriss Kennedy, and Michael F. Runyon from Ellis W. Merschoff, Regional Administrator. By this memorandum, these individuals were appointed to the Ad Hoc Panel to review the DPV on Frequency of PIR Inspections.
4. May 10, 2000, Memorandum on "Recommended Actions to Address the DPV-Frequency of PIR Inspections, Dated April 7, 2000," to Ellis Merschoff, Regional Administrator, from Ad Hoc DPV Review Panel Members, Charles S. Marschall, Kriss Kennedy, and Michael F. Runyon.
5. May 16, 2000, Memorandum on "Supplement to Recommended Actions to Address the DPV - Frequency of PIR Inspections, Dated April 7, 2000," to Ellis Merschoff, Regional Administrator, from Ad Hoc DPV Review Panel Members, Charles S. Marschall, Kriss Kennedy, and Michael F. Runyon.
6. "Region IV Items of Interest, Week Ending May 31, 2000," "Differing Professional View in Region IV." This item addresses the Region IV Administrator's response to the recommendations of an Ad Hoc Panel to address the DPV.
7. May 31, 2000, Memorandum on "Differing Professional View Concerning the Frequency of Problem Identification and Resolution Inspections," to Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas F. Stetka, from Ellis W. Merschoff, Regional Administrator. By this memorandum, Mr. Merschoff provides his plans for implementation of the Ad Hoc Panel's recommendations for action.
8. June 7, 2000, Memorandum on "Differing Professional View Concerning the Frequency of Problem Identification and Resolution Inspections," to Ellis W. Merschoff, Regional Administrator, from Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas F. Stetka. This memorandum responds to the May 31st memorandum from Ellis W. Merschoff and requests that the issue be further reviewed by the Executive Director for Operations according to Handbook 10.159.
9. June 9, 2000, Memorandum on "Differing Professional View Concerning the Frequency of Problem Identification and Resolution Inspections," to Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas F. Stetka, from Ellis W. Merschoff, Regional Administrator. This memorandum requests a meeting with the DPV submitters to gain a better understanding of the additional information they have provided and the basis for their disagreement with the resolution of the DPV. It also states that an action has been initiated to make the records related to the DPV publically available, as the submitters requested and in accordance with Management Directive 10.159.
10. June 13, 2000, Memorandum on "DPV Concerning the Frequency of Problem Identification and Resolution Inspections," to Carol Ann Reed, FOIA and Privacy Act Officer, OCIO, from Ellis W. Merschoff, Regional Administrator. This memorandum transmits the complete subject DPV case file.

11. June 15, 2000, Memorandum on "Differing Professional Opinion - Frequency of PIR Inspections," to William D. Travers, Executive Director of Operations, from Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas F. Stetka. This memorandum initiates the DPO and provides a discussion of the submitter's principal concerns.
12. June 16, 2000, Memorandum on "Differing Professional Opinion - Frequency of PIR Inspections," to William D. Travers, Executive Director for Operations, from Ellis W. Merschoff, Regional Administrator. This memorandum transmits two attachments (1) the DPV case file, and (2) a statement of Mr. Merschoff's views on the unresolved issue (not in this file).
13. June 28, 2000, Memorandum on "Differing Professional Opinion (DPO) Panel to John A. Zwolinski, NRR, and Chris Christensen, Region II, from William D. Travers, Executive Director for Operations. This memorandum designates the DPO Panel Chair, a second panel member, and two advisors from OE and OGC. It also states that the DPO submitter can provide a list of qualified individuals to serve on the panel from which one will be selected by the panel Chair.
14. July 13, 2000, Memorandum on "Differing Professional Opinion (DPO) Panel," to John W. Zwolinski, NRR, from Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas F. Stetka. By this memorandum, the submitters nominate two individuals as potential DPO panel members.
15. August 15, 2000, Memorandum on "Differing Professional Opinion (DPO) Panel - IP71152, Problem Identification and Resolution Inspections," to William D. Travers, Executive Director for Operations, from John A. Zwolinski, NRR. This memorandum provides a status of the panel's activities and advises of a slippage in schedule to complete its report.
16. September 8, 2000, Memorandum on "Differing Professional Opinion (DPO) Panel Report - Inspection Procedure 71152, Problem Identification and Resolution Inspections," to William D. Travers, Executive Director for Operations, from John D. Zwolinski, Chairman, Ad-Hoc DPO Review Panel. This memorandum transmits the subject report.
17. October 2, 2000, Memorandum on "Differing Professional Opinion - Frequency of Problem Identification and Resolution (PI&R) Inspections," to Senior Operations Engineers, Howard F. Bundy, Gary W. Johnston, Michael Murphy, Stephen F. McCrory, and Thomas F. Stetka, from William D. Travers, Executive Director for Operations. This memorandum transmits the EDO's disposition of the issue defined in the DPO.
18. October 2, 2000, Memorandum on "Differing Professional Opinion - Frequency of Problem Identification and Resolution (PI&R) Inspections," to Samuel J. Collins, Director, NRR, from William D. Travers, Executive Director for Operations. This memorandum requests that NRR review the recommendations in the AD-Hoc DPO Review Panel report and consider them during the self-assessment of the first year of the RRDP.

Attachment: DPO case file

Region IV
Items of Interest
Week Ending May 31, 2000

Differing Professional View in Region IV

Ellis Merschoff, Region IV Administrator, has responded to the recommendations of an Ad Hoc Panel that was constituted, in accordance with Management Directive 10.159, to address a differing professional view (DPV). The DPV, raised by five Region IV reactor inspectors, focused on the regulatory burden imposed on licensees by the new baseline inspection program and, in particular, by the problem identification and resolution inspection procedure. The resolution of the DPV relies on the feedback processes and program reviews already planned and working for the initial implementation of the revised reactor oversight program.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

June 15, 2000

MEMORANDUM TO: William D. Travers, Executive Director for Operations

FROM:

Howard F. Bundy, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Gary W. Johnston, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Michael E. Murphy, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Stephen L. McCrory, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Thomas F. Stetka, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

SUBJECT:

DIFFERING PROFESSIONAL OPINION - FREQUENCY OF PIR
INSPECTIONS

We are initiating this Differing Professional Opinion (DPO) pursuant to a Differing Professional View (DPV) on the same subject, which was initiated on April 7, 2000. Recommendations for responding to the DPV were made to Ellis W. Merschoff, Regional Administrator, by a DPV panel in memoranda dated May 10 and 16, 2000. We received a response to this DPV from Mr. Merschoff, on May 31, 2000. We continued to differ with his approach regarding the performance frequency of Inspection Procedure (IP) 71152, "Identification and Resolution of Problems." He remained committed to the one year frequency during the initial year of implementation, while we remained concerned that this frequency was a regulatory burden imposed on the licensees with no concomitant increase in plant safety. In fact, we considered this approach to have the potential to cause a reduction in plant safety. Both his views and ours were further discussed in a meeting on June 13, 2000. As the result of this meeting, we both agreed that the differing opinion regarding the increased frequency of the IP 71154 inspection still existed. Therefore, in accordance with Management Directive Handbook 10.159, we now consider this issue to be a DPO. The following discussion outlines our principal concern. It contains the facts we originally presented modified, in part, by observations made by the DPV panel and input that Mr. Merschoff received from the program office in responding to the DPV.

In Manual Chapter (MC) 2515, Appendix A, Attachment 3, dated April 3, 2000 (which is attached to this DPO as Attachment 1), we note that IP 71152 (Attachment 5) is scheduled for annual performance with 210 inspection hours. In addition, as discussed in Section 03.01a of IP 71152, most of the baseline inspection procedures require inspection of problem identification and resolution (PI&R) performance. As discussed in IP 71152, Section 03.01e, the level of effort for routine reviews of PI&R activities is expected to equate to 10-15 percent of the resources estimated for the associated baseline cornerstone procedures. Based on the baseline inspection program annualized total of 2165 hours shown in MC 2515, Appendix A, Attachment 3, this could easily equate to an additional 200 inspection hours in this area. In addition, as discussed in IP 71152, Section 02.01, Appendix D, to Inspection Manual Chapter 2515, "Plant Status," resident inspectors are required to review PI&R issues. Although this is not considered inspection for accounting purposes, it is covered by the inspection guidance provided in IP 71152, Section 03.01.

Further, under IP 71152, we are no longer allowed to count in-office inspection of licensee corrective action documents, such as audits, self-assessments, and condition reports, as inspection time. This time was previously counted toward the scheduled inspection hours under the former IP 40500, "Effectiveness of Licensee Process to Identify, Resolve, and Prevent Problems," which was superseded by IP 71152. No matter what it is called, we cannot efficiently perform PI&R inspections without preparatory in-office inspection. Based on five inspectors at 30 hours each for 1 week of in-office inspection, this equates to 150 inspection hours, which must be added to each PI&R inspection to make a fair comparison to the inspection hours in the previous program.

Previously, PI&R was inspected every 18 months using IP 40500, with an average resource estimate of 192 hours. The annualized hours for IP 40500 equate to 128 hours. The increased annual hours of 560 [210 for IP 71152, plus ~200 hours for baseline cornerstone procedures (not considering plant status inspection activities), plus 150 hours for in-office inspection, which can no longer be counted toward the scheduled inspection hours], represent more than a four-fold increase in inspection hours in the PI&R area. Although we believe that PI&R is a very important area for inspection, we do not believe this substantial increase in inspection resources is justified. We understand that these numbers are our best estimate and others may wish to calculate the increase in inspection resources devoted to this activity differently. We have offset the inspections previously performed by the resident inspectors under IP 71701 with the inspections now performed by the resident inspectors under IP 71152 as a part of their plant status reviews. Although the time can no longer be counted as inspection hours, we believe the inspections performed by the resident inspectors under IP 71152 are more rigorous than those previously performed under IP 71701.

Our principal concern is the resource impact on the licensee of increasing the frequency of the PI&R inspection from 18 months to annually. We surveyed six Region IV licensees to determine what resources they applied to support the most recent PI&R inspections. The results of this survey are contained in Attachment 2. The average man-weeks to support each inspection were 16.25. As discussed above, the revised program requires more than a four-fold increase in inspection resources. These added inspection resources will place a considerable support burden on the licensee and could easily increase their average annual support effort to 20 man-weeks. As illustrated in Attachment 2, this figure could be less for licensees with few PI&R issues and much larger for licensees with serious PI&R issues.

Using conservatively low estimates, increasing the frequency of this inspection from 18 months to annually equates to an additional average annual resource expenditure of over 9 man-weeks for each licensee to support the PI&R inspections. This is a significant part of the annual budgeted hours for many of our licensees and, more importantly, will preclude them from applying these resources to resolution of problems. Again, we emphasize that the numbers presented are our best estimates. It should be noted that while we believe PI&R inspection hours have quadrupled under the new program, we have assumed only a fractional increase in support hours by the licensees.

Several licensees stated that supporting the PI&R inspection is the highest priority that they have. It is important to note that for several licensees, the personnel who support the inspection are intimately involved in the licensee's day-to-day PI&R program. Therefore, the support hours for the inspection are directly subtracted from the hours available to resolve problems.

Several licensees considered the PI&R inspection and the safety system design and performance capability inspection, which is to be performed biennially under IP 7111.21, "Safety System Design and Performance Capability," to be the two most resource demanding inspections. The latter inspection was previously performed under IP 93809, "Safety System Engineering Inspection (SSEI)." The estimated resources for IP 7111.21 are 210 hours biennially. They stated that when these inspections are performed in close proximity to each other, it has a significant adverse effect on their abilities to accomplish scheduled work. They also pointed out that these inspections often overlap. We can attest that this is true. For example, SSEI Inspection 50-483/98-18 focused on engineering issues associated with the essential service water system. Because of emergent issues associated with this system, a substantial percentage of the resources for PI&R Inspection 50-483/00-03 were focused on engineering issues associated with the essential service water system. Performance of SSEI and the PI&R inspections in close proximity could cause a substantial duplication of effort for both the NRC and licensee.

We have observed that the PI&R programs for most licensees are mature and change at a very slow rate. For the past 12 inspections, we have averaged 63 days between completion of the onsite inspection and issuance of the inspection reports. We try to advise the licensee at least 90 days in advance of the onsite inspection for our information needs. Using these timeliness numbers, it appears that we will be requesting information for the next PI&R inspection approximately 7 months after the licensee has received the report for the previous inspection. Further, the DPV panel pointed out that licensee or NRC scheduling conflicts could result in two annual inspections at the same site within 6 months of each other, based on an annual inspection frequency. This would result in us going directly from concluding one inspection to preparing for the next inspection. From our experience, we expect approximately 30 percent or more of the documentation requested in this time frame to be identical to the documentation, which had been supplied for the previous inspection. For these inspections to be of value, the licensee must have operated long enough since the last inspection for new data to be available. Otherwise, we will be unable to measure the effects of corrective actions to preclude recurrence of prior problems. For many issues, it may take 2 or 3 years to have sufficient data to measure the effectiveness of corrective actions.

Of the 14 licensee PI&R programs Region IV inspects, none are currently considered to have significant deficiencies as indicated in the "Corrective Action Program Performance Matrix" (Attachment 3). As illustrated in the PPR 00-01, "Operations Branch Issue and Recommendations," (Attachment 4) all of the most significant performance issues are opportunities for improvement, which have low priority for inspection resources and will not receive additional inspection. This data is based on the previous 18-month frequency for inspections performed under the former IP 40500. From a performance standpoint, there is nothing in this data to justify increasing the frequency of the PI&R inspections. In addition, since the resident inspectors now have a requirement to assess PI&R on a daily basis as a part of their plant status inspection, they will inform regional management if significant PI&R issues arise, which might justify supplemental inspections.

On the other hand, if significant programmatic defects are identified in a licensee's PI&R program, it usually takes more than a few months to assess the results of the corrective actions implemented by the licensee to prevent recurrence. Therefore, if the PI&R inspection is repeated in 1 year or less, the same issue will likely be identified in the next inspection and the licensee will have to expend resources explaining its actions as opposed to applying its resources to correcting the problem.

Feedback from the DPV panel and Mr. Merschhoff, in consultation with the program office, indicated that there was no quantitative basis for increasing the frequency of the periodic PI&R inspections. Rather, the motivation was a desire to compensate for reductions in other aspects of regulation. As discussed above, we believe this has placed us in the non-conservative position of excessive inspection activities. Since we cannot identify any discernable safety benefits by increasing the frequency of the PI&R inspection, we believe that supporting this additional inspection effort will divert critical licensee resources from resolving safety issues to supporting our inspection activities. Also, this does not appear to be in the spirit of our commitments to congress and our stakeholders. Specifically, we consider it counter to the following two performance goals cited in the draft Fiscal Year 2000 Strategic Plan: a) make NRC activities and decisions more effective, efficient, and realistic; and b) reduce unnecessary regulatory burden on stakeholders.

The appendix to the strategic plan discusses several strategies for achieving these performance goals. With regard to Performance Goal b, one strategy states that we will improve and execute our programs and processes in ways that reduce unnecessary costs to stakeholders. Part of the explanation states that, in particular, we will evaluate the timeliness of actions, and the necessity for multiple rounds of requests for information. Increasing the frequency of the PI&R inspection is contrary to this strategy, in that under the revised program, some of our requests for information will partially duplicate previous requests.

Another strategy related to Performance Goal b states that we will actively seek stakeholder input to identify opportunities for reducing unnecessary regulatory burden. Mr. Merschhoff's response implies that licensee burden was not considered prior to increasing the frequency of the PI&R inspections. Data collected for this DPO firmly supports not increasing the frequency of the PI&R inspection to avoid placing unnecessary regulatory burden on the licensees.

Based on these considerations, we recommend that Manual Chapter 2515, Appendix A, Attachment 3, be revised at this time to allow performance of IP 71152 biennially. It should be phased in over the next 2 years. As a result, some licensees will probably receive PI&R inspections in 18 months from their previous inspections, and all licensees will receive a PI&R inspection within 2 years. Half the plants should be inspected in one planning year and the remaining plants should be inspected in the subsequent planning year. We also recommend that PI&R and SSEI inspections be scheduled in alternate planning years for a given plant and that they not be closer than 6 months apart. This will permit licensees to level their work loads over a 2-year period in support of these manpower intensive inspections and will help preclude them pulling resources away from problem resolution activities.

From Mr. Merschoff's response, we understand that the program office will make adjustments to inspection programs based on self assessment of the reactor oversight process using metrics that have not yet been developed. However, we feel that, based on the data and assessment we have provided, the annual frequency of the PI&R inspection is non-conservative and the immediate impact on the licensees is not reflective of good regulatory practice and is inconsistent with our strategic plan. We further believe that conducting the program biennially will be conducive to providing higher quality PI&R assessments. Since this program is already implemented and is ongoing, we believe that time is of the essence in providing a satisfactory resolution of our concern.

Attachments:

- 1) Attachment 3 (Baseline Inspection Procedures and Estimated Resources) to MC 2515, Appendix A
- 2) Impact of Inspection Procedure 71152 Performance on Licensee Resources
- 3) Corrective Action Program Performance Matrix
- 4) PPR 00-01 Operations Branch Issues and Recommendations
- 5) Inspection Procedure 71152

cc:

Ellis W. Merschoff
Karla D. Smith
Charles Marschall
Kriss Kennedy
Michael Runyan

ATTACHMENT 1

**ATTACHMENT 3
(BASELINE INSPECTION PROCEDURES AND ESTIMATED RESOURCES)
TO MANUAL CHAPTER 2515**

ATTACHMENT 3

BASELINE INSPECTION PROCEDURES AND ESTIMATED RESOURCES

IP/IA No.	Title	Frequency ¹	Annualized Estimated Resources ²
71111 Reactor Safety—Initiating Events, Mitigating Systems, Barrier Integrity			1547
71111.01	Adverse Weather Protection	A	18
71111.02	Evaluation of Changes, Tests, or Experiments	A	32
	(Reserved)		
71111.04	Equipment Alignment	Q	80
71111.05	Fire Protection	Q/T	100
71111.06	Flood Protection Measures	A	20
71111.07	Heat Sink Performance	A/B	22
71111.08	Inservice Inspection Activities	B	16
	(Reserved)		
	(Reserved)		
71111.11	Licensed Operator Requalifications	A/B	60
71111.12	Maintenance Rule Implementation	Q/B	236
71111.13	Maintenance Risk Assessments and Emergent Work Evaluation	Q	120
71111.14	Personnel Performance During Nonroutine Evolutions	AN	102
71111.15	Operability Evaluations	AN	77
71111.16	Operator Workarounds	AN	35
71111.17	Permanent Plant Modifications	A/B	56
	(Reserved)		
71111.19	Post Maintenance Testing	Q	84
71111.20	Refueling and Outage Activities	B	107
71111.21	Safety System Design and Performance Capability	B	210
71111.22	Surveillance Testing	Q	132
71111.23	Temporary Plant Modifications	AN	40

IP/IA No.	Title	Frequency ¹	Annualized Estimated Resources ²
71114 Reactor Safety—Emergency Preparedness			72
71114.01	Exercise Evaluation	B	32
71114.02	Alert Notification System Testing	B	4
71114.03	Emergency Response Organization Augmentation Testing	B	4
71114.04	Emergency Action Level and Emergency Plan Changes	AN	16
71114.05	Correction of Emergency Preparedness Weaknesses and Deficiencies	B	6
71114.06	Drill Evaluation	A	10
71121 Occupational Radiation Safety			124
71121.01	Access Control to Radiologically Significant Areas	A	32
71121.02	ALARA Planning and Controls	B	60
71121.03	Radiation Monitoring Instrumentation	A	32
71122 Public Radiation Safety			48
71122.01	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	B	16
71122.02	Radioactive Material Processing and Transportation	B	16
71122.03	Radiological Environmental Monitoring Program	B	16
71130 Physical Protection			96
71130.01	Access Authorization	A	12
71130.02	Access Control	A	24
71130.03	Response to Contingency Events	B	52
71130.04	Security Plan Changes	A	8
Other Baseline Procedures			
71151	Performance Indicator Verification	A	50
71152	Identification and Resolution of Problems	A	210
71153	Event Followup	AN	18
Baseline Inspection Program Annualized Total ³ :			2165

Notes:

1. A = annual, B= biennial, T = triennial, Q = quarterly, AN = as needed
2. Annualized estimate is for a dual-unit site. Any adjustments for single- or triple-unit sites are contained in the inspection procedures.
3. Total does not include other resident activities, such as plant status, that are not considered direct inspection effort.

END

ATTACHMENT 1

DPV - FREQUENCY OF PIR INSPECTIONS

ATTACHMENT 2

**IMPACT OF INSPECTION PROCEDURE 71152
PERFORMANCE ON LICENSEE RESOURCES**

IMPACT OF IP 71152 PERFORMANCE ON LICENSEE RESOURCES

In responding to the survey, the licensee categorized the man-weeks expended in supporting the inspections in various categories such as data collection, document copying, direct onsite support, and exit attendance. Because the overall impact is much more important than how the data is categorized, we are only listing two categories - direct support and other impact. This data does not encompass the time and distractions to numerous licensee supervisors and managers incidental to the PI&R inspections. Neither does it include man-weeks devoted to addressing responses to findings which may have resulted from the inspections.

LICENSEE	DIRECT SUPPORT	OTHER IMPACT CONSIDERATIONS
1	25 man-weeks	18 individuals involved over 3 weeks in direct support, 7,000 pages of copying, 30 other individuals answered questions, 6-10 managers and 10-20 supervisors responded to interviews and questions, great impact in years in which SSEI occurs - should do in alternate years, greater impact when SSEI is performed in close proximity, primary focus of PI&R inspection was engineering, may have up to 3 team inspections in same year counting fire protection, appears there will be more inspection under revised program. Look at PI&R in every inspection.
2	4.25 man-weeks	No significant findings resulted from this inspection. Great impact when SSEI is conducted in close proximity.
3	6 man-weeks	No significant findings resulted from this inspection. Great impact when SSEI is performed in close proximity. NRC is now performing the same amount of inspection in 1 year that was previously performed in 18 months.
4	33.4 man-weeks	No significant findings. SSEI and PI&R were one month apart. Look at PI&R in every inspection; should be able to roll issues up over period and focus inspection. May not have to do complete IP.
5	13.75 man-weeks	No significant findings.
6	15.1 man-weeks	No significant findings. Very burdensome inspection because of complexity and subjectivity. Success criteria are not clearly defined. Results are difficult to assess. For example, it is very difficult to agree on timeliness of corrective actions. Difficult to define focus. Broad scope requires much preparatory work by multiple organization. More followup is required because of complexity and subjectivity of findings.

ATTACHMENT 2

DPV - FREQUENCY OF PIR INSPECTIONS

ATTACHMENT 3

CORRECTIVE ACTION PROGRAM PERFORMANCE MATRIX

CORRECTIVE ACTION PROGRAM PERFORMANCE MATRIX							
(AREAS REFLECTING SUBSTANTIALLY BELOW PAR PERFORMANCE ARE SHADED.)							
SITE	REPORTING THRESHOLD	RESOLUTION PRIORITY	PROGRAM EFFECTIVENESS	PROGRAM MEASUREMENT	PROGRAM UNDERSTANDING	REPEAT PROBLEMS	VIOLATION FOLLOW UP
ANO (IR 00-02, 3/00) LAST: MEDIUM NEXT: HIGH-EQUIP PERF	LOW.	APPROPRIATE PRIORITY SETTING.	NORMALLY EFFECTIVE. EXAMPLES OF SLOW CORRECTIVE ACTIONS.	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	PLANT PERSONNEL HAD A GOOD UNDERSTANDING OF THE CORRECTIVE ACTION PROGRAM. ONE EXCEPTION NOTED.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.
CALLAWAY (IR 00-003, 2/00) LAST: LOW NEXT: HIGH	ADEQUATE. SOME DEPARTMENTS NOT AS LOW AS LICENSEE EXPECTS.	ACCEPTABLE, BUT LIBERAL EXTENSIONS WITH LITTLE OVERSIGHT.	ADEQUATE, BUT CHALLENGED BY DELAYS, E.G., ESW.	TRACKING ADVERSE TRENDS BUT SOME MEASURES INCOMPLETE	GOOD, BUT RELUCTANCE ON INITIATING CONDITION REPORTS (SOS's) NOTED.	HIGH RATE. ADVERSE TREND IDENTIFIED.	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.
COMANCHE PEAK (IR 99-008, 5/99) LAST: LOW NEXT: LOW	LOW, HOWEVER PROCEDURE GUIDANCE WAS INCONSISTENT.	APPROPRIATE PRIORITY SETTING.	NORMALLY EFFECTIVE AND AGGRESSIVE.	TRENDING METHODS WERE IDENTIFYING ADVERSE TRENDS. AUDITS SUBSTANTIVE.	PLANT PERSONNEL HAD A GOOD UNDERSTANDING OF THE CORRECTIVE ACTION PROGRAM.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.
COOPER (IR99-003 9/99) LAST: HIGH NEXT: MEDIUM	LOW.	APPROPRIATE PRIORITY SETTING.	LONG HISTORY OF LOW EFFECTIVENESS. SITE-WIDE HUMAN PROBLEM.	RELATIVELY NEW TRENDING METHODS WORKING. RECENT AUDITS SUBSTANTIVE.	PLANT PERSONNEL HAD AN EFFECTIVE UNDERSTANDING OF THE CAP. STILL WORKING LONG-TERM STAFF RESISTANCE.	PROBLEMS. LONG TERM HIGH REPEAT RATE, E.G., UNTIMELY CORRECTIVE ACTIONS FOR RHR HX.	MISSSED TS SURVEILLANCES & GL RESPONSES WEAK FOLLOWING NCVs.
DIABLO CANYON (IR 00-005 2/00) LAST: MEDIUM NEXT: MEDIUM-SCWE	LOW. 2-TIERED SYSTEM.	APPROPRIATE PRIORITY SETTING	NORMALLY EFFECTIVE AND AGGRESSIVE.	LOW LEVEL SYSTEM NEEDS COMMITMENT FROM MANAGEMENT. AUDITS SUBSTANTIVE	PLANT PERSONNEL HAD A GOOD UNDERSTANDING OF THE CORRECTIVE ACTION PROGRAM.	EXCEPT FOR SOME ISOLATED ISSUES, THE PROCESS WAS EFFECTIVELY CONTROLLING.	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.
FT. CALHOUN (5/00) LAST: HIGH NEXT: MEDIUM	NOT INSPECTED WITH CURRENT VERSION OF 40500 OR 71152.						
GRAND GULF (IR 99-003, 4/99) LAST: HIGH NEXT: HIGH	LOW.	ACCEPTABLE, BUT LIBERAL EXTENSIONS WITH LITTLE OVERSIGHT.	PROBLEMS. USE OF CAP FOR LONG TERM HARDWARE MODS BYPASSED DESIGN CONTROLS.	TRACKING ADVERSE TRENDS OK. AUDITS SUBSTANTIVE.	GOOD UNDERSTANDING OF RECENTLY MODIFIED PROGRAM.	PROCESS WAS EFFECTIVE CONTROLLING.	NORMALLY, ENTERED AND RESOLVED IN TIMELY MANNER (ONE EXAMPLE, SRV TEST SWITCHES DELAYED).
PALO VERDE (IR99-018 11/99) LAST: MEDIUM NEXT: MEDIUM-EP	LOW.	APPROPRIATE PRIORITY SETTING.	NORMALLY EFFECTIVE AND AGGRESSIVE. NO EXPLANATION OF HPSI MISS CAUSE.	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.
RIVER BEND (IR 00-002 2/00) LAST: HIGH NEXT: HIGH-ENG/EP	LOW.	APPROPRIATE PRIORITY SETTING WITH SIGNIFICANT EXCEPTIONS.	IMPROVED EFFECTIVENESS SINCE LAST CAP. STILL WEAK.	TRENDING ISSUES, HOWEVER, NOT FULLY EFFECTIVE.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL EXCEPT GLG 1-18 ISSUES.	PROCESS WAS EFFECTIVELY CONTROLLING, BUT EDG ISSUES ONGOING.	ENTERED AND RESOLVED IN AN ADEQUATE MANNER, HOWEVER, NOT NECESSARILY TIMELY.
SAN ONOFRE (7/00) LAST: HIGH NEXT: MEDIUM-SCWE	NOT INSPECTED WITH CURRENT VERSION OF 40500 OR 71152.						
STP (IR 99-008, 6/99) LAST: LOW NEXT: LOW	VERY LOW. 10 TIMES # OF OTHER SITES.	APPROPRIATE PRIORITY SETTING.	CORRECTIVE ACTIONS WERE EFFECTIVE.	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.
WNP-2 (IR 00-001 1/00) LAST: HIGH NEXT: MEDIUM	LOW.	APPROPRIATE, SOME INCONSISTENCIES NOTED	IMPROVED, BUT SOME EXCEPTIONS OBSERVED (INCOMPLETE ACTIONS/TRACKING)	TRACKING ADVERSE TRENDS BUT SOME MEASURES INCOMPLETE	ACCEPTABLE UNDERSTANDING OF RECENTLY MODIFIED PROGRAM	PROCESS WAS EFFECTIVE CONTROLLING	NORMALLY, ENTERED AND RESOLVED IN TIMELY MANNER (SOME EXAMPLES OF LONG-STANDING ISSUES)
WATERFORD (IR 99-007, 6/99) LAST: HIGH NEXT: HIGH	LOW.	APPROPRIATE PRIORITY SETTING.	EFFECTIVE, BUT SLOW MPFF EVALUATIONS LED TO 50.65 NCV.	TRENDING ADEQUATE. AUDITS OF PROCESS NOT SUBSTANTIVE.	GOOD UNDERSTANDING OF RECENTLY MODIFIED PROGRAM. INCONSISTENT PROCEDURE REFERENCES.	PROBLEMS. NARROW SCOPE ROOT CAUSE CONTRIBUTED TO REPEATS, E.G., CONTROL ROOM HVAC DAMPER.	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.
WOLF CREEK (IR 00-0043/00) LAST: MEDIUM NEXT: MEDIUM	LOW.	APPROPRIATE PRIORITY SETTING.	EFFECTIVE IN MOST AREAS. CONTINUING CHALLENGE W/ MIS- POSITIONING EVENTS	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL.	PROCESS EFFECTIVELY CONTROLLED, EXCEPT FOR MIS- POSITIONING OCCURANCES	ENTERED AND RESOLVED IN A TIMELY AND ADEQUATE MANNER.

NOTE: THE SITE COLUMN ALSO CONTAINS THE LEVEL OF EFFORT FOR THE LAST AND THE NEXT CAP/PIR INSPECTION DISCUSSED IN PPR 00-01. SHOULD THAT OPTION BECOME AVAILABLE.

ATTACHMENT 4

PPR 00-01, OPERATIONS BRANCH ISSUES AND RECOMMENDATIONS

PPR 00-01 OPERATIONS BRANCH ISSUES AND RECOMMENDATIONS					
Area	Site	Priority	Performance Issue	Recommended Follow Up	Weeks
O	DC	LOW	Procedure adherence and adequacy issues have continued to be noted during the period.	RIBIP only	0
O	RB	LOW	Procedure adherence and adequacy issues have continued to be noted during the period.	RIBIP only	0
O	RB	LOW	Corrective action effectiveness is improved but remains below average.	RIBIP only	0
O	W3	LOW	Procedure adherence and adequacy issues have continued to be noted during the period.	RIBIP only	0

ATTACHMENT 4

DPV -FREQUENCY OF PIR INSPECTIONS

ATTACHMENT 5

INSPECTION PROCEDURE 71152

INSPECTION PROCEDURE 71152

IDENTIFICATION AND RESOLUTION OF PROBLEMS

PROGRAM APPLICABILITY: 2515

CORNERSTONES: ALL

INSPECTION BASIS: A fundamental goal of the NRC's reactor oversight process is to establish confidence that each licensee is detecting and correcting problems in a manner that limits the risk to members of the public. A key premise of the revised oversight process is that weaknesses in licensee's problem identification and resolution (PI & R) programs will manifest themselves as performance issues which will be identified during the baseline inspection program or by crossing predetermined performance indicator thresholds. However, there are several aspects of PI & R that are not specifically addressed by either the individual cornerstone performance indicators or other baseline inspections. These are detailed in the following objectives. Completion of the inspection objectives is accomplished by sampling issues during each inspectable area inspection, as well as during an annual focused PI & R inspection.

71152-01 INSPECTION OBJECTIVES ATTACHMENT 5

01.01 To provide an assessment of the effectiveness of licensee PI & R programs based upon a performance based review of specific issues.

01.02 To look for instances where a licensee may have missed identifying potential "generic" concerns, including specific problems involving safety equipment, procedure development, design control, etc..

01.03 To look for instances of risk significance associated with combinations of items in the corrective action backlog which may not have individual risk significance.

01.04 To verify that licensees are appropriately identifying and capturing issues that could affect the availability of equipment tracked by the performance indicators and the maintenance rule.

01.05 To assess whether conditions exist that would challenge the establishment of a safety conscious work environment.

71152-02 INSPECTION REQUIREMENTS

02.01 Routine Review of Identification and Resolution of Problems In Plant Status and Inspectable Area Procedures

As described in Appendix D to Inspection Manual Chapter 2515, "Plant Status" and by baseline inspectable area inspection procedures, conduct inspections of problem identification and resolution activities to:

- a. Verify that equipment, human performance, and program issues are being identified by the licensee at an appropriate threshold and are being entered into the problem identification and resolution program.
- b. Verify that corrective actions commensurate with the significance of the issue have been identified and implemented by the licensee.
- c. Verify that licensees are appropriately identifying and capturing issues that could affect the unavailability of equipment tracked by the performance indicators and the maintenance rule.

The primary focus of these routine reviews should be on verifying that licensees are identifying issues at an appropriate threshold and entering them into their corrective action program. This can be assessed by comparing those issues identified by the NRC during the conduct of the plant status and inspectable area portions of the program with those issues identified by the licensee. This requirement is normally to be accomplished by Resident Inspectors and Region based inspectors responsible for conducting Plant Status and baseline inspectable area inspections. The routine reviews also allow for follow-up to selected issues, to ensure that corrective actions commensurate with the significance of the issue have been identified and implemented by the licensee.

02.02 Annual Problem Identification and Resolution Inspection

Perform an annual inspection of the problem identification and resolution activities to:

- a. Verify that when issues are identified, they are appropriately characterized, and entered into the licensee's problem identification and resolution program.
- b. Verify that an appropriate analysis of the cause of the problem has been performed by the licensee for significant conditions adverse to quality.
- c. Verify that corrective actions commensurate with the issue have been identified and implemented by the licensee, including corrective actions to address common cause or generic concerns.
- d. Verify that licensees are appropriately identifying and capturing issues that could affect the unavailability of equipment tracked by the performance indicators and the maintenance rule.
- e. Verify that licensees are appropriately considering the risk (core damage frequency) associated with combinations of risk significant issues.
- f. Assess whether there is indication that licensee personnel may be reluctant to report safety issues.
- g. Develop insights into the licensee's performance in the PI and R area. Include in the documentation, a comparison of the team's results with the results of the licensee's own assessments in the PI & R area.
- h. Document the team's results in accordance with the guidance contained in IMC 0610*.

71152-03 INSPECTION GUIDANCE

General Guidance

To the extent possible, this inspection should follow a performance based approach. Emphasize the products and results of the licensee's PI & R program. Inspections performed under this procedure should concentrate on the identification of problems and the effectiveness of corrective actions for risk significant issues rather than on reviewing the administrative aspects of the corrective action program and associated procedures.

This inspection will examine, in part, a sample of licensee corrective action issues to provide an indication of overall problem identification and resolution performance.

Detailed Review Guidance

The following additional guidance should be used in conducting a review of licensee problem identification and resolution activities.

- The inspectors review should be of sufficient depth to understand the technical issues, to evaluate why they occurred, and to determine the roles played by the quality verification organizations and line management in identifying and resolving the issues. The inspectors review might include:
 - Determining the chain of events leading to the occurrence and identification of the problem,
 - Developing an understanding of the technical and work activities associated with resolving the problem,
 - Determining the information that is needed for understanding if there are generic implications or common causes associated with the problem, and if such implications were identified by the licensee,
 - Determining the extent to which the licensee identified potential precursors and investigated the facts surrounding the problem.
- While reviewing problems, be alert for cases where the licensee may have mis-classified a problem as non-significant. Some considerations to be considered in determining significance include the impact on plant system functionality, common cause concerns, the risk significance (core damage frequency) when combined with other previously identified issues, and the impact on the fulfillment of regulatory requirements.
- For significant conditions adverse to quality, review the effectiveness and validity of the licensee's root cause evaluation.
- If permanent corrective actions require significant time to implement, ensure that interim corrective actions are identified and implemented to minimize the problem until the permanent action could be implemented.

03.01 Routine Review of Identification and Resolution of Problems

a. Relationship to Baseline Inspectable Area Procedures

Most of the attachments to baseline inspection procedures contain a requirement to inspect problem identification and resolution performance within the attachment's area. The routine inspection of problem identification and resolution performance as part of baseline inspections is intended to ensure that, over the course of an assessment cycle, a sample of PI&R performance in all cornerstones is obtained. As stated in paragraph 02.01, the primary focus of this portion of the PI & R review should be on verifying that licensees are identifying issues at an appropriate threshold and entering them into their corrective action program.

b. Sample Selection

In addition to verifying that the licensee is identifying issues at an appropriate threshold, a sample of issues should be chosen for review to verify that the licensee has taken corrective actions commensurate with the significance of the issue. This sample can be chosen using information obtained from plant status reviews and from reviews conducted as part of the baseline inspection procedure attachments. Inspectable area procedures will provide additional guidance regarding the types of PI&R issues relevant to a particular area. In selecting issues for inspection, the inspectors should seek the broadest range of examples within the cornerstone including the following considerations:

- Licensee identified issues (including issues identified during audits or self assessments)
- NRC identified issues
- Issues related to NCVs (mandatory to review response to a sample of NCVs unless no NCVs were issued in the cornerstone)
- Issues identified through NRC generic communications
- Issues identified through industry operating experience exchange mechanisms (including Part 21 reports, NSSS vendor reports, EPRI reports, experience reports from similar facilities, LERs)
- Specific or cross cutting issues identified by safety review committees or other management oversight mechanisms
- Issues identified through employee concerns programs

The above considerations are presented as guidance and should not be construed as a requirement to select one of each type of issue listed. The guidance is intended to help ensure that, over the course of an assessment cycle and through the performance of the baseline inspections, an appropriate sample will be obtained by which the NRC can obtain indication of the performance of the various elements of a licensee's corrective action program.

In selecting issues for review, inspectors should also use relevant risk insights such as:

- Maintenance Rule program basis documents,
- Individual Plant Examination (IPE) or Individual Plant External Event Evaluation (IPEEE) for the facility, and
- Significance Determination Program (SDP) worksheets for the plant.

For example, in considering the inspection of licensee corrective actions associated with post maintenance testing (as required by IP 71111, Attachment 19), inspectors should review issues associated with high risk mitigating systems or issues which may have affected the likelihood of risk-significant initiating events. Additional insights for determining appropriate samples can be obtained by region based inspectors through discussion with resident inspectors or regional inspectors who are familiar with site issues and who are familiar with the licensee's problem identification and resolution process.

c. Performance Attributes

When evaluating the effectiveness of licensee corrective actions for a particular issue, the licensee's actions must be viewed against the nature and significance of the identified problem. While licensee corrective action programs may appropriately consider monetary, plant availability, and other concerns as factors in determining significance, risk should be a primary factor in the licensee's significance determination. Attributes to consider during review of licensee actions associated with individual issues include:

- Complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery,
- Evaluation and disposition of operability/reportability issues,
- Consideration of extent of condition, generic implications, common cause, and previous occurrences,
- Classification and prioritization of the resolution of the problem commensurate with its safety significance,
- Identification of root and contributing causes of the problem (this attribute will typically only be assessed as part of the annual inspection for significant conditions adverse to quality),
- Identification of corrective actions which are appropriately focused to correct the problem (may be deferred to annual inspection),
- Completion of corrective actions in a timely matter commensurate with the safety significance of the issue (may be deferred to annual inspection),
- Accurate accounting for equipment unavailability associated with the corrective action issue.

It is not expected that the inspectors assess each attribute for every issue selected for followup during these routine reviews. Rather, inspectors may choose to assess licensee performance against selected attributes, as necessary to be most effective.

d. Documentation

In order to support a more complete assessment of the effectiveness of the licensee's PI&R program, it is important that the NRC document the results of PI & R inspections conducted as part of the baseline procedure attachments. It is expected that documenting reviews of PI&R will help focus the annual PI&R inspection on areas where concerns have been identified. In general, issues associated with the PI & R program itself should be documented in the PI & R section of the inspection report. Technical issues associated

with the inspectable area and cornerstone should be documented in the associated areas of the inspection report. Specific guidance regarding documentation of inspection scope and thresholds for PI&R issues is contained in IMC 0610.

e. Level of Effort

While it is expected that routine reviews of PI & R activities should equate to approximately 10-15 percent of the resources estimated for the associated baseline cornerstone procedures, this is a general estimate only based upon the overall effort expected to be expended in each strategic performance area. It is anticipated that the actual hours required to be expended may vary significantly from attachment to attachment, depending upon the nature and complexity of the issues that arise at the particular facility. Overall, an effort should be made to remain within the 10 to 15 percent estimate on a strategic performance area basis. Inspection time spent assessing PI & R as part of the baseline procedure attachments should be charged to the procedure attachment.

03.02 Annual Problem Identification and Resolution Inspection

The annual inspection of problem identification and resolution is intended to complement and expand upon the routine reviews described in Section 03.01 of this procedure by:

- Evaluating additional examples of licensee problem identification and resolution,
- Reviewing the resolution of issues that earlier had been assessed for the licensee's identification efforts only,
- Comparing the NRC's results against the licensee's own assessment of performance in the PI & R area,
- Assessing whether PI & R deficiencies exist across cornerstones that might indicate potential programmatic issues,
- Assessing the risk significance (core damage frequency) of combinations of items in the corrective action backlog.

a. Planning

Obtain licensee administrative procedures that control the identification, evaluation, and resolution of problems. Selected licensee documents needed to support the inspection may be obtained prior to the inspection by the resident inspector. These documents should only be reviewed to provide the inspectors with sufficient knowledge of the licensee's programs and processes, as necessary to conduct an effective and efficient inspection.

Obtain and review documents for the in-office review, such as a list of corrective action documents issued from the time of the last annual PI & R inspection (e.g. a list of work orders, work requests, temporary modifications, calibration failures, condition/problem identification reports, operability evaluations and determinations, etc.).

Obtain and review all NRC inspection reports issued since the last annual PI&R inspection and:

- Determine the extent to which all cornerstones have been sampled by routine reviews of licensee PI&R activities and determine if additional PI&R samples are warranted in any cornerstone(s).
- Determine the extent to which licensee actions to NCVs have been sampled by routine reviews of licensee PI&R activities.
- Identify any trends or patterns in corrective action program issues or performance which may warrant additional sampling to confirm. For example, a series of issues associated with "failure to follow procedures" within one cornerstone may indicate a corrective action performance deficiency within a portion of the licensee's organization; a series of issues associated with failure to follow procedures in multiple cornerstones may indicate a broader concern. Also, a lack of licensee identified corrective action issues within a particular organization may be indicative of a problem with the identification threshold.

b. Annual Inspection Sample Selection

Based on the planning review, identify a sample of licensee corrective actions for review. The samples chosen for review should include a range of issues including:

- Licensee identified issues (including issues identified during audits or self assessments)
- NRC identified issues
- Issues related to NCVs (mandatory to review response to a sample of NCVs unless no NCVs were issued in the cornerstone)
- Issues identified through NRC generic communications
- Issues identified through industry operating experience exchange mechanisms (including Part 21 reports, NSSS vendor reports, EPRI reports, experience reports from similar facilities, LERs)
- Specific or cross cutting issues identified by safety review committees or other management oversight mechanisms
- Issues identified through employee concerns programs.

No specific number of previously reviewed or additional samples is specified. Rather, the annual inspection team leader should choose as many examples as warranted to complement the routine PI&R inspections and ensure a sufficient basis for evaluating the effectiveness of the licensee's PI&R program. An effort should however be made to maintain the total hours expended in completing this procedure to within the estimated level of resources contained in paragraph 03.02g..

c. Performance Attributes

When evaluating the effectiveness of licensee corrective actions for a particular issue, the licensee's actions must be viewed against the nature and significance of the identified problem. While licensee corrective action programs may appropriately consider monetary, plant availability, and other concerns as factors in determining significance, risk should be a primary factor in the licensee's significance determination. Attributes to consider during review of licensee actions associated with individual issues include:

- Complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery,
- Evaluation and disposition of operability/reportability issues,
- Consideration of extent of condition, generic implications, common cause, and previous occurrences,
- Classification and prioritization of the resolution of the problem commensurate with its safety significance,
- Identification of root and contributing causes of the problem for significant conditions adverse to quality,
- Identification of corrective actions which are appropriately focused to correct the problem (and to address the root and contributing causes for significant conditions adverse to quality),
- Completion of corrective actions in a timely matter commensurate with the safety significance of the issue (included within this attribute would be justifications for extending corrective action due dates),
- Accurate accounting for equipment unavailability associated with the corrective action issue.

d. Assessment of Safety Conscious Work Environment

In conducting interviews with or observing other activities involving licensee personnel during the inspection, be sensitive to areas where employees may be reluctant to raise concerns. Although the licensee may be implementing an employee concerns program regarding the identification of safety issues, the possibility of existing underlying factors that would produce a "chilling" effect or reluctance to report such issues could exist and the inspector should be alert for such indications.

Appendix 1 to this procedure provides a list of questions that can be used when discussing PI & R issues with licensee individuals to help assess whether there are impediments to the establishment of a safety conscious work environment. If, as a result of the interviews or observations, the inspector becomes aware of specific examples of employees being discouraged from raising safety or regulatory issues within the licensee's or contractor's organization or to the NRC, the inspector should get as complete a set of facts as possible. If the inspector becomes aware of a reluctance of employees to raise safety or regulatory issues unrelated to a specific event or incident, continue pursuing the issue during the remaining interviews and try to determine the reason employees are reluctant to raise issues. However, if any indication of a "chilling" effect is suspected, inform regional management for further review and follow-up.

e. Development of PI&R Program Performance Insights

By reviewing a sufficient number and breadth of samples, the inspection team should be able to develop insights into the effectiveness of the licensee's corrective action program. Compare the result of the team's review of corrective action issues with licensee performance reviews, including specific licensee reviews of the corrective action program. Determine whether licensee reviews are consistent with the NRC review of corrective action issues,

The intent of this inspection procedure (both the routine and annual inspection effort) is to provide insights into licensee performance in the PI & R area based upon a performance based review of corrective action issues. More detailed programmatic reviews of licensee performance in the PI & R area will be conducted during supplemental inspections, in accordance with the assessment action matrix, should established performance thresholds be crossed.

f. Documentation and Evaluation of Program Effectiveness

At the completion of inspection activities, the team should develop a clear and concise discussion of the results of their review. This discussion should be supported by the inspection activities conducted over the assessment cycle including both routine and annual inspection of PI&R activities. The discussion should be documented in the inspection report for the annual PI & R inspection and should be included in the PIM. Included in the documentation should be any issues associated with establishment of a safety conscious work environment that may have been detected during the inspection.

Additional evaluation of the licensee's PI & R programs will be conducted as part of the mid-cycle and/or end of cycle plant performance review by assessing licensee performance using the results of this inspection, as well as other information, including performance indicator data and the results of any supplemental inspections. Additional guidance on documenting the annual problem identification and resolution inspection is contained in IMC 0610.

71152-04 **RESOURCE ESTIMATE**
DPV - FREQUENCY OF PIR INSPECTIONS

The annual inspection will involve on average 210 hours. Participation (either full or part time) on the inspection team by a member of the resident inspector staff should be strongly considered.

END

APPENDIX 1

SUGGESTED QUESTIONS FOR USE IN DISCUSSIONS WITH LICENSEE INDIVIDUALS CONCERNING PI & R ISSUES

The following are suggested questions that may be used when discussing PI & R issues with licensee individuals. It is not intended that these questions be asked verbatim, but rather, that they form the basis for gathering insights regarding whether there are impediments to the formation of a safety conscious work environment.

Suggested Questions

1. How would the individual raise a safety or regulatory issue (e.g. inform supervisor, corrective action program, employee concern program (ECP), NRC)?
2. Why would they pick that approach (e.g. supervisor's preference, trying to keep numbers down, system difficult to use)?
3. Has the person ever submitted an issue to the corrective action program or the ECP? Was the issue adequately addressed? If not, did he or she pursue the issue? If not, why not?
4. Does the individual know whether employee concerns are tracked to completion and whether employees are informed of the result?
5. Does the individual believe the licensee's corrective action programs are successful in addressing issues submitted?
6. Is the individual aware of any specific instances in which another employee submitted an issue to the corrective action program or ECP and considered the licensee's response incomplete or unacceptable or was retaliated against for pursuing the issue? (Try to get enough specific information to followup with the other employee.)
7. Does the individual believe there has been a change in the amount of time necessary to resolve corrective action issues or employee concerns?
8. Is the individual aware of or have there been interactions with NRC personnel that suggest that some employees may be hesitant to raise concerns or present information to the NRC?
9. Is the individual aware of any events that would discourage employees from raising concerns (e.g. chastisement for submitting issues to corrective action program, ECP, or NRC; supervisors holding up submittal of concerns). Has there been an unexplainable change in the number or nature of concerns raised by employees to the licensee's corrective action program or employee concern program or the NRC?
10. Are there any unofficial corrective actions or tracking systems that exist because the existing formal systems are thought to be ineffective? (Unofficial corrective actions that bypass the recognized corrective action program have been previously in engineering and health physics areas.)

ATTACHMENT 5

DPV - FREQUENCY OF PIR INSPECTIONS



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

June 16, 2000

MEMORANDUM TO: Dr. William D. Travers, Executive Director for Operations
FROM: Ellis W. Merschoff, Regional Administrator
SUBJECT: DIFFERING PROFESSIONAL OPINION -
FREQUENCY OF PIR INSPECTIONS

This memorandum is provided in accordance with Management Directive 10.159, Handbook section (B) (6), Records. That section requires that, if a Differing Professional View (DPV) is not settled to the satisfaction of the submitter and the submitter requests in writing that the issue be further reviewed under formal Differing Professional Opinion (DPO) procedures, then I am to forward to you the original case file along with a statement of views on the unresolved issue.

By memorandum to you dated June 15, 2000, five senior reactor inspectors from Region IV submitted their DPO concerning the scheduled frequency of problem identification and resolution (PIR) inspections. This matter had previously been addressed by me in accordance with agency procedures for DPVs.

Attached you will find the original case file for the DPV on PIR inspections (attachment 1) and a brief statement of my views on the unresolved issue (attachment 2). Should you have any questions concerning this matter, I would be pleased to discuss it with you.

Attachments: As stated.

cc:

F. J. Miraglia
S. J. Collins
R. P. Zimmerman

REGION IV ADMINISTRATOR VIEWS CONCERNING PIR INSPECTION FREQUENCY

My views are clearly articulated in my May 31, 2000, response to the DPV. I met with the concerned inspectors on June 13, 2000 to better understand the basis for their June 9, 2000, response that stated their dissatisfaction with my response. Based on that meeting, it is clear that the substantive difference between my view on the frequency of PIR inspections and theirs relates to the timing of the agency review of experience under the new baseline inspection program.

As I understand their concern, the five senior reactor inspectors believe that sufficient information currently exists as a basis to judge that the PIR inspection burden on licensees is not justified by the value of the inspection results to the baseline inspection program. They provided their evidence in their submittal.

I believe it is appropriate to wait for the completion of the first round of PIR inspections before judging the overall adequacy and impact of the PIR inspection procedure and its implementation frequency. I note that we are only one of four NRC regional offices that are implementing this baseline inspection program. Informal inquiries with the other regions have not identified a similar concern.

DPV CASE FILE
FREQUENCY OF PIR INSPECTION

1. 6/13/2000 memo, from EMerschoff to FOIA & Privacy Act Officer, OCIO, concerning records releasability determination
2. 6/9/2000 memo, from EMerschoff to HBundy, GJohnston, M.Murphy, S.McCrory, T.Stetka, "DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY OF PROBLEM IDENTIFICATION AND RESOLUTION INSPECTIONS
3. 6/7/2000 memo, from Bundy, Johnston, Murphy, McCrory, Stetka, to Ellis W. Merschoff, "DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY OF PROBLEM IDENTIFICATION AND RESOLUTION INSPECTIONS
4. 5/31/2000 memo, from EMerschoff to HBundy, GJohnston, M.Murphy, S.McCrory, T.Stetka, "DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY OF PROBLEM IDENTIFICATION AND RESOLUTION INSPECTIONS"
5. 5/31/2000 Staff Note
6. 5/16/2000 memo, from C. Marschall, Chairman, Ad Hoc DPV Review Panel, Kriss Kennedy, Michael Runyan, Members "SUPPLEMENT TO RECOMMENDED ACTIONS TO ADDRESS THE DPV - FREQUENCY OF PIR INSPECTIONS"
7. 5/10/2000 memo, from C. Marschall, Chairman, Ad Hoc DPV Review Panel, Kriss Kennedy, Michael Runyan, Members "RECOMMENDED ACTIONS TO ADDRESS THE DPV - FREQUENCY OF PIR INSPECTIONS,
8. 4/11/2000 MEMO, from EMerschoff to Howard Bundy, Gary Johnston, Michael Murphy, Stephen McCrory, RECEIPT OF DIFFERING PROFESSIONAL VIEW - FREQUENCY OF PIR INSPECTION, DATED APRIL 7, 2000"
9. 4/11/2000 Memo, from EMerschoff to CMarschall, KKennedy, MRunyan, "AD HOC PANEL ASSIGNMENT - DIFFERING PROFESSIONAL VIEW"
10. 4/7/2000 Memo, from H. Bundy, G. Johnston, M. Murphy, S. McCrory, T. Stetka "DIFFERING PROFESSIONAL VIEW - FREQUENCY OF PIR INSPECTIONS"



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8084**

June 13, 2000

MEMORANDUM TO: Carol Ann Reed, FOIA and Privacy Act Officer, OCIO

FROM: Ellis W. Merschoff, Regional Administrator *WRAI*

SUBJECT: DPV CONCERNING THE FREQUENCY OF PROBLEM IDENTIFICATION
AND RESOLUTION INSPECTIONS.

In accordance with Management Directive 10.159, attached you will find a copy of the complete subject DPV case file for your coordination and review of these records for a releasability determination.

Attachments:

6/9/2000 memo, from EMerschoff to HBundy, GJohnston, M.Murphy, S.McCrory, T.Stetka,
"DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY OF PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTIONS"

6/7/2000 memo, from Bundy, Johnston, Murphy, McCrory, Stetka, to Ellis W. Merschoff,
"DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY OF PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTIONS/"

5/31/2000 memo, from EMerschoff to HBundy, GJohnston, M.Murphy, S.McCrory, T.Stetka,
"DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY OF PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTIONS"

5/16/2000 memo, from C. Marschall, Chairman, Ad Hoc DPV Review Panel,
Kriss Kennedy, Michael Runyan, Members "SUPPLEMENT TO RECOMMENDED
ACTIONS TO ADDRESS THE DPV - FREQUENCY OF PIR INSPECTIONS"

5/10/2000 memo, from C. Marschall, Chairman, Ad Hoc DPV Review Panel,
Kriss Kennedy, Michael Runyan, Members "RECOMMENDED ACTIONS TO ADDRESS
THE DPV - FREQUENCY OF PIR INSPECTIONS,"

4/11/2000 MEMO, from EMerschoff to Howard Bundy, Gary Johnston, Michael Murphy,
Stephen McCrory, RECEIPT OF DIFFERING PROFESSIONAL VIEW - FREQUENCY OF
PIR INSPECTION, DATED APRIL 7, 2000"

4/11/2000 Memo, from EMerschoff to CMarschall, KKennedy, MRunyan, "AD HOC PANEL
ASSIGNMENT - DIFFERING PROFESSIONAL VIEW"

4/7/2000 Memo, from H. Bundy, G. Johnston, M. Murphy, S. McCrory, T. Stetka "DIFFERING
PROFESSIONAL VIEW = FREQUENCY OF PIR INCEPTIONS"

cc:

K. Smith, Regional Counsel

RIV:ORA				
EW Merschoff				
6/ /2000				

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

June 9, 2000

MEMORANDUM TO: Howard F. Bundy, Senior Operations Engineer
Gary W. Johnston, Senior Operations Engineer
Michael E. Murphy, Senior Operations Engineer
Stephen F. McCrory, Senior Operations Engineer
Thomas F. Stetka, Senior Operations Engineer

FROM: Ellis W. Merschoff, Regional Administrator /RA/

SUBJECT: DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY
OF PROBLEM IDENTIFICATION AND RESOLUTION INSPECTIONS

This is in response to your June 7, 2000, memorandum on the subject in which you indicated that my response to your Differing Professional View (DPV) did not adequately address your principal concern. You also provided additional information on specific issues, requested that the DPV be forwarded to the EDO in accordance with Management Directive 10.159, and that the records related to this DPV be made publicly available.

I have scheduled a meeting with you, as a group, on June 13, 2000, at 1:30 p.m. I view this meeting as an opportunity for me to gain a better understanding of the additional information you have provided and of your basis for disagreement with the resolution of your DPV.

If subsequent to our June 13, 2000 meeting, you believe that the DPV should be addressed as a Differing Professional Opinion (DPO), then I direct your attention to Management Directive 10.159, Handbook paragraph (C)(1) Submittals, which states, in part, that "the formal DPO review process may be initiated . . . by submitting a written statement to the EDO" and "DPO submittals must meet the same criteria established for the submittal of a DPV . . .". At that time, I will implement paragraph (B)(6) of the Handbook, which requires that I forward the original case file along with a statement of views on the unresolved issue(s) to the EDO. In the interim, I have initiated an action to make the records related to the DPV publicly available, as you requested, in accordance with Management Directive 10.159.

cc:

R. Zimmerman, NRR (Mail Stop O5E7)

bcc:
RA File
PGwynn
KDSmith
CMarschall
KKennedy
MRunyan

DOCUMENT NAME: S:\RAS\RADIR\DPVMEMO1.WPD

RIV:DRA	RA			
TPGwynn/cjg	EW Merschoff			
/RA/	/RA/			
6/9/2000	6/9/2000	06/ /2000	06/ /2000	06/ /2000

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
811 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

June 7, 2000

MEMORANDUM TO: Ellis W. Merschhoff, Regional Administrator

FROM: Howard F. Bundy, Senior Operations Engineer /RAI
Gary W. Johnston, Senior Operations Engineer /RAI
Michael E. Murphy, Senior Operations Engineer /RAI
Stephen F. McCrory, Senior Operations Engineer /RAI
Thomas F. Stetka, Senior Operations Engineer /RAI

SUBJECT: DIFFERING PROFESSIONAL VIEW CONCERNING THE
FREQUENCY OF PROBLEM IDENTIFICATION AND RESOLUTION
INSPECTIONS

This is in response to your memorandum of May 31, 2000, which responded to the subject Differing Professional View (DPV). We feel that your response does not adequately address our principal concern, specifically - imposing unnecessary regulatory burden on our power reactor licensees by increasing the frequency of the problem identification and resolution (PI&R) inspections performed in accordance with Inspection Procedure 71152 to an annual inspection. We appreciate your work in responding to this DPV, as well as, the work of the panel in formulating its recommendations. However, we would like to provide additional information on some issues, which both you and the panel raised.

Your belief that the revised inspection program provides a net reduction in regulatory burden is controversial and remains to be seen. Several of the licensees surveyed, believed that their resource requirements will increase. In either case, it is not directly related to our concern. Pursuant to the strategic plan, we should be actively and continually seeking ways to reduce unnecessary regulatory burden.

We appreciate the thorough analysis and insightful observations of the panel. In most instances, we agree with their observations. However, we do not completely agree with the clarifications to the first observation in the memorandum of May 16, 2000. Specifically, they concluded that the corrective action work previously performed by the resident inspectors pursuant to Inspection Procedure (IP) 71701 counterbalanced the corrective action work now being performed pursuant to the new baseline procedures. We believe that more corrective action issue inspections are performed in the new oversight program because essentially all inspectors are tasked with devoting 10 to 15 percent of their inspection effort to IP 71152. In addition, the resident inspectors also perform corrective action inspections in accordance with IP 71152, as a part of their plant status reviews, even though this effort is no longer being counted as inspection effort. The new corrective action inspection required by IP 71152 is more rigorous than that previously required by IP 71707. Although a direct comparison of inspection hours is not possible, we believe the increased emphasis on routine inspection of corrective action issues should justify decreasing the

frequency of the periodic PI&R inspections.

With regard to the current program office plans, we do not believe it is appropriate to study the impact of the increased frequency of PI&R inspections for a year without clear evaluation criteria. We believe we have submitted ample evidence to suggest that one cannot expect an appreciable safety benefit by increasing the frequency of the PI&R inspections. We continue to believe that for many licensees the increased resource commitment for supporting these PI&R inspections will be diverted from addressing existing safety issues.

We hereby request that the issue involving the frequency of the PI&R inspections, discussed in our DPV and the panel's recommendations, together with the above clarifications, be further reviewed by the executive director for operations in accordance with Handbook 10.159. Also, pursuant to Handbook 10.159, we request that all records related to this DPV be made available to the public.

cc:

Karla D. Smith
Charles Marschall
Kriss Kennedy
Michael Runyan



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

May 31, 2000

MEMORANDUM TO: Howard F. Bundy, Senior Operations Engineer
Gary W. Johnston, Senior Operations Engineer
Michael Murphy, Senior Operations Engineer
Stephen F. McCrory, Senior Operations Engineer
Thomas F. Stetka, Senior Operations Engineer

FROM: Ellis W. Merschoff, Regional Administrator **IRA**

SUBJECT: DIFFERING PROFESSIONAL VIEW CONCERNING THE FREQUENCY
OF PROBLEM IDENTIFICATION AND RESOLUTION INSPECTIONS

This is in response to your April 7, 2000, memorandum to me on the same subject. An Ad Hoc Panel was established on April 11, 2000, in accordance with Management Directive 10.159, to review your Differing Professional View (DPV) and make recommendations to me for its resolution. A copy of the Panel's May 10, 2000, results, including its recommended actions, is attached. Subsequent to a briefing I received from the Ad Hoc Panel on May 12, 2000, the panel clarified its initial results. A copy of the May 16, 2000, clarifying information is also attached.

I want to thank each of you for the effort you have given to bring this matter to me. I genuinely appreciate and admire your attention to the Region IV Code of Conduct for Region Inspectors. I know, through my personal interactions with each of you since I became Regional Administrator, that your reference to the Code is sincere. It is the willingness of our employees to take that extra effort in ensuring the effective and efficient operation of the region that has caused Region IV to be recognized for its performance.

I have reviewed the Ad Hoc Panel's observations and recommendations for action. Although I agree in principle with all of the panel's results, I do not plan to implement the recommendations as written. In particular, the first recommended action to forward the DPV to the Executive Director for Operations (EDO) is inconsistent with the intent of the Management Directive. The EDO is tasked with handling Differing Professional Opinions, the process used to address the appeal of DPVs. I believe it is appropriate to retain the independence of the EDO from this DPV such that any appeal could be appropriately handled under the management directive. Therefore, I plan to forward the recommendations related to the first concern to the appropriate NRC line managers for action.

Before addressing the specific recommended actions, I would like to provide my view regarding the central issue of the DPV, that is the regulatory burden imposed by this new baseline inspection program problem identification and resolution (PIR) inspection procedure. I agree that, when compared to its predecessor under the core inspection program, the new procedure for PIR inspections increases the burden on the licensee. However, it is my belief that the new baseline

inspection program, taken as a whole, provides our licensees a significant net reduction in regulatory burden. The reduction in burden associated with our revised enforcement approach by itself has been lauded by the industry. When combined with the more predictable and scrutable baseline inspection program, this new inspection and assessment process is a major step forward in achieving the principles of the Government Performance and Reform Act within the NRC. It will take time and experience to determine the most efficient way to manage the new program, including the scheduling and conduct of the PIR inspections. I am confident that adjustments will be made as we gain experience in order to enhance effectiveness and efficiency further.

With respect to the first recommendation of the Ad Hoc Panel, I have discussed recommendations 1.a, 1.b, and 1.c with the Deputy Director, Office of Nuclear Reactor Regulation. He has reviewed these recommendations with his staff and has provided the following description of NRR's plans relative to each recommendation.

- 1.a NRR should assess the results of each inspection as a function of expended resources.

NRR plans to evaluate each inspection and the resources utilized under the reactor oversight process. These activities are already planned as a part of the inspection program self assessment following one year of implementation of the reactor oversight process.

- 1.b. The NRC should develop a method of measuring burden on licensee.

NRR plans to solicit feedback on the burden associated with the reactor oversight process. During the pilot, IIPB received feedback from the industry via NEI and during lessons learned workshops. This feedback was considered in adjusting the baseline inspection program. IIPB believes a similar process will be used during the review of the initial year of implementation of the reactor oversight process. However, we do not plan to develop a method of measuring burden.

- 1.c. NRR should adjust inspection scope and/or frequency based on result of inspection assessment and burden on licensee.

NRR will make adjustments to the reactor oversight process based on the results of the self assessment of the reactor oversight process. The staff is developing the metrics it will use to evaluate the first year of implementation of the reactor oversight process. As discussed above, IIPB is planning to evaluate inspection results and resources as part of this self assessment. It will consider, as appropriate, feedback on unnecessary burden.

Recommendations 1. d. and 1. e. are the responsibility of Region IV. Recommendation 1. d. will be accomplished as part of our overall response to NRR's request for evaluation of the first year's experience under the new baseline program. Recommendation 1. e. will be accomplished, on an as needed basis, by the Director, Division of Reactor Projects to obtain help from other Regions in accomplishing the inspection activity assigned to Region IV.

With respect to the second recommendation of the Ad Hoc Panel, each of the four sub-parts is a question that we have been dealing with and will require continuing attention throughout the year.

If you have any questions, or would like to discuss this further, I would be pleased to meet with you. Additionally, Management Directive 10.159 provides for DPVs to be placed in the Public Document Room upon the request of the submitter; otherwise, the records are maintained only in the region. Please advise me if you desire for the panel's results to be made public.

Attachments: As stated

cc w/o Attachments:

Charles Marschall, Chairman, Ad Hoc DPV Review Panel

Kriss Kennedy, Member, Ad Hoc DPV Review Panel

Michael Runyan, Member, Ad Hoc DPV Review Panel

bcc w/Attachments:
RZimmerman, NRR
EWMerschoff
TPGwynn
KSmith

DOCUMENT NAME: S:\RAS\RADI\DPV Response.wpd

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:DRA		RC		RA	
TPGwynn:jc \S\		KSmith \S\		EWMerschoff \RA\	
05/31/2000		5/31/2000		05/30/2000	

OFFICIAL RECORD COPY

Region IV
Items of Interest
Week Ending May 31, 2000

Differing Professional View in Region IV

Ellis Merschoff, Region IV Administrator, has responded to the recommendations of an Ad Hoc Panel that was constituted, in accordance with Management Directive 10.159, to address a differing professional view (DPV). The DPV, raised by five Region IV reactor inspectors, focused on the regulatory burden imposed on licensees by the new baseline inspection program and, in particular, by the problem identification and resolution inspection procedure. The resolution of the DPV relies on the feedback processes and program reviews already planned and working for the initial implementation of the revised reactor oversight program.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

MAY 16 2000

Memorandum
For:

Ellis Merschoff, Regional Administrator

From:

Charles Marshall

Charles Marschall, Chairman, Ad Hoc DPV Review Panel

Charles Marshall for (conferred by phone)
Kriss Kennedy, Member, Ad Hoc DPV Review Panel

Michael Runyan

Michael Runyan, Member, Ad Hoc DPV Review Panel

Subject:

Supplement to Recommended Actions to Address the DPV - Frequency of
PIR Inspections, dated April 7, 2000

Attachments:

As Stated

On May 12, 2000, the Ad Hoc Review Panel met with you to present our recommendations for actions to address the DPV concerning the frequency of PIR inspections. Subsequently, the panel met to discuss the need to provide clarification of observations and recommendations in our report dated May 10, 2000. The attachment to this memorandum contains clarifications to the content of our original report.

Should you have any questions, please feel free to contact us.

Supplement to the Ad Hoc Review Panel Report

Clarifications to Panel Observations for the First Concern

The first observation stated:

- The originators' comparison of resources does not consider time formerly charged by RIs to inspection procedure 71707 in inspecting licensee's corrective action programs. As a result, the originators' overestimated the increase in inspection hours as a result of performing the 71152 inspection annually. The panel concluded, however, that this discrepancy did not change the originators' conclusion. The originators agreed with the panel's observation.

The following paragraph provides a more detailed explanation of the comparison:

- The originators' comparison of resources did not consider time formally charged by Resident Inspectors to inspection procedure 71707 in inspecting licensee's corrective action programs. The panel concluded that the 10 percent corrective action effort currently included in most baseline inspection procedures is essentially counterbalanced by the previous corrective action work performed by resident inspectors. Therefore, the resource comparison should consider only the hours expended previously on Inspection Procedure 40500 to the hours allotted for Inspection Procedure 71152. Inspection Procedure 40500 was conducted every 18 months and was allotted 192 hours. This included time for 2 to 3 inspectors reviewing licensee records during the preparation week (charged to inspection effort) and a week onsite. This equates to 128 annualized hours expended on Inspection Procedure 40500. Inspection Procedure 71152, conducted annually, has 210 hours onsite plus 150 hours preparation. Although the preparation is not charged to inspection effort, it involves review of licensee records similar to that under Inspection Procedure 40500. Counting the preparation time as inspection results in total annualized expenditure under Inspection Procedure 71152 of 360 hours an increase of 180 percent over Inspection Procedure 40500. Another rough basis for comparison is that 2 to 3 inspectors spent 1 week onsite (traveling Monday or Friday) under Inspection Procedure 40500, and 5 inspectors spend a full week (exclusive of travel) onsite under Inspection Procedure 71152. Comparing an average of 2.5 inspectors onsite for Inspection Procedure 40500 with 5 inspectors onsite for Inspection Procedure 71152 results in an increase resource expenditure of 100 percent. The panel concluded that this comparison, though admittedly viewed independently from the effects of other changes made to the inspection program, represents a significant additional burden on the licensee to support inspections of corrective actions.

The second observation stated:

- The DPV does not consider the broader perspective of impact of the revised oversight

Supplement to the Ad Hoc Review Panel Report

program. The experience from the Pilot Plants may indicate that, overall, the revised oversight program has reduced impact on licensees.

The following paragraph provides more specific information about the basis for the observation:

- Performing the 71152 inspection annually increases the burden on licensees as a result of the time and resources needed to support this inspection. This increase in resources represents an increase in regulatory burden that distracts licensee personnel from the day-to-day plant activities and reduces the time available to focus on safety issues. However, the DPV does not consider the broader perspective of the overall impact of the revised oversight program on licensee resources. Feedback from managers at the pilot plants indicate that, overall, the revised oversight program has reduced the regulatory impact on licensees. During a meeting with the Region IV Pilot Plant licensees in December 1999, senior licensee managers observed that, overall, the revised reactor oversight program significantly reduced the impact of inspections on licensees. The licensee managers stated that they expended fewer resources developing documented responses to Severity Level IV violations.

The fourth observation stated:

- The scope of the "Identification and Resolution of Problems" inspection does not have a rigorous basis. The panel is unaware of any formal evaluation performed to determine the appropriate scope, breadth, and frequency of Inspection Procedure 71152. Although the intent of the inspection procedure is to assess the effectiveness of a licensee's corrective action program, the procedure does not specify how to evaluate corrective action or a standard for assessing the acceptability of the corrective action program.

The following paragraph provides additional clarification:

- As with other inspection procedures, Inspection Procedure 71152 has a basis in regulation (10 CFR 50, Appendix B, Criterion XVI.) Unlike other inspection procedures, however, Inspection Procedure 71152 does not have a clear systematic approach to evaluation of the subject area. For example, the NRC has no clearly established standards for acceptability of root cause evaluations. The inspection procedure might, for example, direct inspectors to independently analyze a statistically significant sample of identified problems to determine causes using the Performance Improvement International method. Then the inspectors could compare the results of the analysis with the causes identified by the licensee and assess the licensee performance in terms of similarity of results. Even using this method, however, the NRC has no clear basis for determining what results are acceptable. Is it 95 percent? Similar questions exist for timeliness of corrective actions. In addition, it is not clear that a basis exists for expending 200 hours each year, as opposed to expending 200 hours every other year.

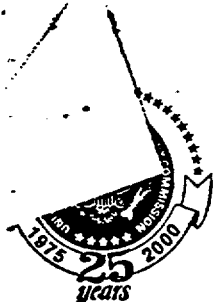
Supplement to the Ad Hoc Review Panel Report

The seventh observation stated:

- The increased impact on licensee resources during the Identification and Resolution of Problems inspection has the potential to adversely impact the licensee's ability to effectively manage its operation.

The following paragraph provides additional clarification:

- The panel observed that, during team inspections, licensee staff dedicated to the support of NRC inspection efforts were not available to perform their routine duties. As NRC team size increases, so does the demand for licensee resources to support the inspection. The panel did not intend to imply, nor does it believe, that NRC inspections such as the Identification and Resolution of Problems inspection, have impaired safe plant operation.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

MAY 10 2000

Memorandum

Ellis Merschoff, Regional Administrator

For:

From:

Charles Marshall, Chairman, Ad Hoc DPV Review Panel

Kriss Kennedy, Member, Ad Hoc DPV Review Panel

Michael Runyan, Member, Ad Hoc DPV Review Panel

Subject:

Recommended Actions to Address the DPV - Frequency of PIR Inspections,
dated April 7, 2000

Reference:

Management Directive 10.159, Differing Professional Views or Opinions
(Revised August 15, 1997)

Attachments:

As Stated

On April 12, 2000, the Ad Hoc Review Panel held our initial meeting to distribute the DPV, discuss the review process as presented in Management Directive 10.159, and to develop a course of action. Subsequently, the panel met on April 18, April 27, and May 3. In addition, panel members met with the DPV originators on several occasions, and interviewed the Director and Deputy Director, DRP, as well as the Chief, DRS Operator Licensing Branch to gather information. The panel documented the results of the meetings and panel deliberations in the report attached to this memorandum. You will also find a copy of the DPV attached to the report. The attached report contains a brief summary of the concerns in the DPV, as understood by the Ad Hoc Panel, a discussion of related facts and panel observations, and a detailed discussion of the Panel's recommended actions.

Should you have any questions, please feel free to contact us.

Ad Hoc Review Panel Report

Report on Differing Professional View - Frequency of PIR Inspections

Summary of Concerns in the DPV

The originators of the DPV expressed two concerns in their memorandum. Both concerns related to implementation of the new inspection procedure (71152) "Identification and Resolution of Problems."

Their first and primary concern identified that the current inspection procedure, dated April 3, 2000, called for a significant increase in inspection resource expenditure as compared with the previous inspection procedure (40500.) The increase in inspection hours also results in increased licensee burden in the form of increased support for the inspection. The originators do not believe that the increase in inspection resources can be justified in view of historical inspection results. They recommend reducing the inspection frequency to biennial.

The originators' second concern relates to commitment of DRP resources to support the 71152 inspection. They note that, in the past, resident inspectors would be tasked with duties at their sites that would negatively impact their focus on the 40500 inspection. The lack of dedicated support has affected the quality of the inspection results, in their view.

Panel Observations

The Ad Hoc Review Panel had the following observations about the details of the first concern:

- The originators' comparison of resources does not consider time formerly charged by RIs to inspection procedure 71707 in inspecting licensee's corrective action programs. As a result, the originators' overestimated the increase in inspection hours as a result of performing the 71152 inspection annually. The panel concluded, however, that this discrepancy did not change the originators' conclusion. The originators agreed with the panel's observation.
- The DPV does not consider the broader perspective of impact of the revised oversight program. The experience from the Pilot Plants may indicate that, overall, the revised oversight program has reduced impact on licensees.
- The NRC does not currently have a process to measure the impact of inspection efforts on the licensees.
- The scope of the "Identification and Resolution of Problems" inspection does not have a rigorous basis. The panel is unaware of any formal evaluation performed to determine the appropriate scope, breadth, and frequency of Inspection Procedure 71152. Although the intent of the inspection procedure is to assess the effectiveness of a licensee's corrective

Ad Hoc Review Panel Report

action program, the procedure does not specify how to evaluate corrective action or a standard for assessing the acceptability of the corrective action program.

- The Office of Nuclear Reactor Regulation must decide questions of appropriate scope and frequency to insure consistent application of the reactor oversight program across the Regions.
- During discussions between the originators and the panel members, the originators observed that it commonly takes two or three years before corrective actions for programmatic inspection observations begin to have an effect.
- The increased impact on licensee resources during the Identification and Resolution of Problems inspection has the potential to adversely impact the licensee's ability to effectively manage its operation.
- The increased demand on inspection resources impacts the Region's ability to respond to reactive needs. The lead inspectors can no longer support reactive inspections.
- The engineering team inspection (71111.21) provides an alternate year check of the corrective action program. In addition, each baseline inspection procedure requires inspectors to verify the effectiveness of the licensee's identification and resolution of problems in the specific area inspected.
- Refueling outages, the engineering team inspection, and the corrective action program inspection create severe scheduling challenges. They all place significant demands on licensee resources, and they occur at different frequencies (18 months, 24 months, and 12 months, respectively.)
- Scheduling the Identification and Resolution of Problems inspections so that at least one refueling outage (at one unit sites, in particular) has transpired since the last performance of the procedure would provide more data for review and increase the effectiveness of the inspection.
- Licensee or NRC scheduling conflicts could result in two annual inspections at the same site within six months of each other, based on an annual inspection frequency.

The panel had the following observations about the second concern identified in the DPV:

1. The DRP and DRS staff recently developed a list of DRS led inspections supported by DRP (including 71152, engineering design team, etc.) This list identifies specific DRP inspectors assigned to DRS led teams. DRP will provide approximately 142 staff weeks of support.
2. In conversations between the DPV originators and panel members the originators agreed that this concern should be addressed to Region IV management.

Ad Hoc Review Panel Report

3. This concern does not involve a question of policy and does not qualify as the subject of a DPV.

Recommendations for Action

The panel makes the following recommendations:

1. Forward the DPV to the Executive Director for Operations for review of the first concern with the following recommendations
 - a. NRR should assess the results of each inspection as a function of expended resources.
 - b. The NRC should develop a method of measuring burden on licensee.
 - c. NRR should adjust inspection scope and/or frequency based on result of inspection assessment and burden on licensee.
 - d. The Regions should assist NRR by providing input to the assessment based on experience.
 - e. NRR should review availability of resources from other Regions to supplement Region IV inspection resources.
2. Regarding DRP support of DRS inspections (including inspection procedure 71152):
 - a. Region IV DRP management should emphasize the need for dedicated DRP support throughout the inspection until completion of documentation.
 - i. DRP may need to supply other resources to cover baseline inspection (including response to emerging problems) at a plant while the RI is otherwise committed to the 71152 inspection and documentation.
 - b. The Region should conduct an integrated evaluation of inspection requirements vs. resources to determine if the Region has sufficient staff to complete BI, anticipated supplemental inspection, training, admin, prep/doc, Annual Leave, Sick Leave, Significance Determination Process, allegations, Project Engineer tasks, etc. The outcome should be a plan to insure that available FTE supports accomplishing the inspection program.
 - c. The Region should review scheduling of Identification and Resolution of Problems inspections and engineering inspections at each facility to insure the impact is minimized through effective coordination of team inspections.

Ad Hoc Review Panel Report

- d. DRS and DRP should review the resources supplied in support of 71152 and other baseline team inspections to insure that no branch bears an excessive share of the burden and to verify effective use of resources.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

April 11, 2000

MEMORANDUM TO: Howard F. Bundy, Senior Operations Engineer
Gary W. Johnston, Senior Operations Engineer
Michael Murphy, Senior Operations Engineer
Stephen F. McCrory, Senior Operations Engineer
Thomas O. McKernon, Senior Operations Engineer

FROM: Ellis W. Merschoff, Regional Administrator

SUBJECT: RECEIPT OF DIFFERING PROFESSIONAL VIEW -
FREQUENCY OF PIR INSPECTIONS, DATED APRIL 7, 2000

This is to acknowledge that I have received your memorandum, dated April 7, 2000, "Differing Professional View - Frequency of PIR Inspections." This Differing Professional View will be processed in accordance with Management Directive 10.159, "Differing Professional Management Provisions," and Regional Office Policy Guide 3002.4, "Differing Professional Views or Opinions."

cc: K. Smith
J. Pellet



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

April 11, 2000

MEMORANDUM TO: Charles S. Marschall, Chief, Projects Branch C,
Division of Reactor Projects (DPR)
Kriss M. Kennedy, Senior Project Engineer, DRP
Michael F. Runyan, Senior Reactor Inspector,
Division of Reactor Safety

FROM: Ellis W. Merschoff, Regional Administrator

SUBJECT: AD HOC PANEL ASSIGNMENT - DIFFERING PROFESSIONAL VIEW

You are hereby appointed to the Ad Hoc Panel established to review a differing professional view (DPV). As you know, I place great value on the diverse views of our employees and their ability to bring those views forward in a non-threatening environment. Your participation in the DPV process should be taken very seriously; this tasking demands your very best effort and personal attention.

A copy of the DPV is attached for your information and use. Mr. Marschall is hereby appointed panel Chair and will report to me for all matters related to this DPV. Mr. Runyan has been selected by the initiator of the DPV to serve on the panel.

You are hereby instructed to perform your activities in accordance with the procedures and requirements of Management Directive 10.159, Differing Professional Views or Opinions, as supplemented by Region IV Policy Guide 3002, Differing Professional Views or Opinions. Any questions concerning the proper implementation of the management directive should be discussed with Mr. J. David Woodend, Office of Human Resources. Since this DPV relates to NRC inspection program policy, you should feel free to contact the program office for information and to clarify policy matters. I have forwarded a copy of the DPV to Mr. R. P. Zimmerman of the Office of Nuclear Reactor Regulation for information.

In accordance with MD 10.159, you are tasked to review the DPV and make recommendations to me for its resolution. The ad hoc panel review is a high priority task. Your first function, to be completed by April 18, 2000, is to determine whether sufficient documentation was provided, by the initiator, for the panel to undertake a detailed review. Once that task is complete, you are to complete your review and make recommendations to me by May 11, 2000.

I would be pleased to discuss any questions you may have concerning this task.

Attachment: As stated

Multiple Addressees

bcc: J. Carson
C. Goines

DOCUMENT NAME: S:\DRS\Howell\DPV\Acknowledge.wpd

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

D:DRS	E	RA	E								
AHowell		EMerschoff									
04/1/00		04/11/00									

OFFICIAL RECORD COPY

cc w/Attachment:

EMerschhoff

PGwynn

KSmith

DOCUMENT NAME: S:\RAS\RADIR\dpvpanelmemo.wpd

o receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:DRA	N	RA					
TPGwynn/cjg		EWerschhoff					
04/11/0		04/11/0	04/ 10	04/ 10	04/ 10		

OFFICIAL RECORD COPY



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

APR - 7 2000

MEMORANDUM TO: Ellis W. Merschoff, Regional Administrator

FROM: Howard F. Bundy, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Gary W. Johnston, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Michael E. Murphy, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Stephen L. McCrory, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

Thomas F. Stetka, Senior Operations Engineer
Operations Branch
Division of Reactor Safety

SUBJECT: DIFFERING PROFESSIONAL VIEW - FREQUENCY OF PIR
INSPECTIONS

In Manual Chapter (MC) 2515, Appendix A, Attachment 3, dated April 3, 2000 (which is attached to this DPV as Attachment 1), we note that Inspection Procedure (IP) 71152, "Identification and Resolution of Problems," (Attachment 5) is scheduled for annual performance with 210 inspection hours. In addition, as discussed in Section 03.01a of IP 71152, most of the baseline inspection procedures require inspection of problem identification and resolution (PI&R) performance. As discussed in IP 71152, Section 03.01e, the level of effort for routine reviews of PI&R activities is expected to equate to 10-15 percent of the resources estimated for the associated baseline cornerstone procedures. Based on the baseline inspection program annualized total of 2165 hours shown in MC 2515, Appendix A, Attachment 3, this could easily equate to an additional 200 inspection hours in this area. In addition, as discussed in IP 71152, Section 02.01, Appendix D, to Inspection Manual Chapter 2515, "Plant Status," resident inspectors are required to review PI&R issues. Although this is not considered inspection for accounting purposes, it is covered by the inspection guidance provided in IP 71152, Section 03.01.

have practically?

Further, under IP 71152 we are no longer allowed to count in-office inspection of licensee corrective action documents, such as audits, self-assessments, and condition reports, as inspection time. This time was previously counted toward the scheduled inspection hours under IP 40500, "Effectiveness of Licensee Process to Identify, Resolve, and Prevent Problems." No matter what it is called, we cannot efficiently perform PI&R inspections without preparatory in-office inspection. Based on 5 inspectors at 30 hours each for one week of in-office inspection, this equates to 150 inspection hours, which must be added to each PI&R inspection to make a fair comparison to the inspection hours in the previous program.

Previously, PI&R was inspected every 18 months using IP 40500, with an average resource estimate of 192 hours. The annualized hours for IP 40500 equate to 128 hours. The increased annual hours of 560 [210 for IP 71152, plus ~200 hours for baseline cornerstone procedures (not considering plant status inspection activities), plus 150 hours for in-office inspection, which can no longer be counted toward the scheduled inspection hours], represent more than a four-fold increase in inspection hours in the PI&R area. Although we believe that PI&R is a very important area for inspection, we do not believe this substantial increase in inspection resources is justified.

increase of 9.17 mw/yw - see

The first consideration is the resource impact on the licensee of increasing the frequency of the PI&R inspection from 18 months to annually. We surveyed six Region IV licensees to determine what resources they applied to support the most recent PI&R inspections. The results of this survey are contained in Attachment 2. The average man-weeks to support each inspection were 16.25. As discussed above, the revised program requires more than a four-fold increase in inspection resources. These added inspection resources will place a considerable support burden on the licensee and could easily increase their average annual support effort to 20 man-weeks. As illustrated in Attachment 2, this figure could be less for licensees with few PI&R issues and much larger for licensees with serious PI&R issues. Using conservatively low estimates, increasing the frequency of this inspection from 18 months to annually equates to an additional average annual resource expenditure of over 13.75 man-weeks for each licensee to support the PI&R inspections. This is a significant part of the annual budgeted hours for many of our licensees and, more importantly, will preclude them from applying these resources to resolution of problems. Several licensees stated that supporting the PI&R inspection is the highest priority that they have. It is important to note that for several licensees, the personnel who support the inspection are intimately involved in the licensee's day-to-day PI&R program. Therefore, the support hours for the inspection are directly subtracted from the hours available to resolve problems.

Several licensees considered the PI&R inspection and the safety system design and performance capability inspection, which is to be performed biennially under IP 71111, Attachment 21, to be the two most resource demanding inspections. The latter inspection was previously performed under IP 93809, "Safety System Engineering Inspection (SSEI)." The estimated resources for IP 71111, Attachment 21, are 210 hours biennially. They stated that when these inspections are performed in close proximity to each other, it has a significant adverse effect on their abilities to accomplish scheduled work. They also pointed out that these inspections often overlap. We can attest that this is true. For example, SSEI Inspection 50-483/98-18 focused on engineering issues associated with the essential service water system. Because of emergent issues associated with this system, a substantial percentage of the resources for PI&R Inspection 50-483/00-03 were focused on engineering

issues associated with the essential service water system. Performance of SSEI and the PI&R inspections in close proximity could cause a substantial duplication of effort for both the NRC and licensee.

We have observed that the PI&R programs for most licensees are mature and change at a very slow rate. We usually require the entire 45 days after completion of the onsite inspection and sometimes more to issue the inspection reports. We try to advise the licensee at least 90 days in advance of the onsite inspection for our information needs. Using these timeliness numbers, it appears that we will be requesting information for the next PI&R inspection approximately 7 months after the licensee has received the report for the previous inspection. From our experience, we expect approximately 30 percent or more of the documentation requested in this time frame to be identical to the documentation, which had been supplied for the previous inspection.

Of the 14 licensee PI&R programs we inspect, none are currently considered to have significant deficiencies as indicated in the "Corrective Action Program Performance Matrix" (Attachment 3). As illustrated in the PPR 00-01, "Operations Branch Issue and Recommendations" (Attachment 4), all of the most significant performance issues are opportunities for improvement, which have low priority for inspection resources and will not receive additional inspection. This data is based on the previous 18-month frequency for inspections performed under IP 40500. From a performance standpoint, there is nothing in this data to justify increasing the frequency of the PI&R inspections. In addition, since the resident inspectors now have a requirement to assess PI&R on a daily basis as a part of their plant status inspection, they will inform regional management if significant PI&R issues arise, which might justify supplemental inspections.

On the other hand, if significant programmatic defects are identified in a licensee's PI&R program, it usually takes more than a few months to assess the results of the corrective actions implemented by the licensee to prevent recurrence. Therefore, if the PI&R inspection is repeated in 1 year or less, the same issue will likely be identified in the next inspection and the licensee will have to expend resources explaining its actions as opposed to applying its resources to correcting the problem.

We cannot identify any discernable safety benefits by increasing the frequency of the PI&R inspection. On the contrary, we believe that supporting this additional inspection effort will divert critical licensee resources from resolving safety issues in a timely manner. Also, it is not in the spirit of our commitments to congress and our stakeholders. Specifically, it is counter to the following two performance goals cited in the draft Fiscal Year 2000 Strategic Plan: a) Make NRC activities and decisions more effective, efficient, and realistic; and b) reduce unnecessary regulatory burden on stakeholders.

The appendix to the strategic plan discusses several strategies for achieving these performance goals. With regard to Performance Goal b, one strategy states that we will improve and execute our programs and processes in ways that reduce unnecessary costs to stakeholders. Part of the explanation states that, in particular, we will evaluate the timeliness of actions, and the necessity for multiple rounds of requests for information. Increasing the frequency of the PI&R inspection is contrary to this strategy. As discussed above, under the revised program some of our requests for information will partially duplicate previous requests.

Another strategy related to Performance Goal b states that we will actively seek stakeholder input to identify opportunities for reducing unnecessary regulatory burden. Data collected for this DPV firmly supports not increasing the frequency of the PI&R inspection to avoid placing unnecessary regulatory burden on the licensees.

A secondary issue is that we have the responsibility, but not the resources within our branch, to perform all the PI&R inspections. We estimate that we have approximately 50 percent of the required inspection resources. It has been proposed that we take the lead on all the inspections and borrow additional inspectors to complete the teams, as required. The problem with this approach is that it is difficult to obtain an adequate commitment on inspection preparation and documentation from borrowed inspectors and their branch chiefs. This increases the burden on the lead inspector in producing a quality product. In view of the fact that we are in the throes of implementing a significantly revised inspection program, this is not a good time to be placing an additional burden on lead inspectors. We believe the quality of the PI&R inspections is much more important than the quantity.

Recently, you quoted the Code of Conduct for Region Inspectors in the Region IV Roundup. We subscribe to that Code and believe that the following four ideals apply to this issue: 1) we will be cognizant of our limitations, 2) we will not abuse our authority and will respect the licensee's time and resources, 3) we will take the lead in establishing and maintaining high professional standards by practicing the principles of good regulation, and 4) we will ensure that our activities will be directed toward protecting the health and safety of the public.

Based on these considerations, we recommend that Manual Chapter 2515, Appendix A, Attachment 3, be revised at this time to allow performance of IP 71152 biennially. It should be phased in over the next 2 years. As a result, some licensees will probably receive PI&R inspections in 18 months from their previous inspections, and all licensees will receive a PI&R inspection within 2 years. Half the plants should be inspected in one planning year and the remaining plants should be inspected in the subsequent planning year. We also recommend that PI&R and SSEI inspections be scheduled in alternate planning years for a given plant and that they not be closer than 6 months apart. This will permit licensees to level their work loads over a 2-year period in support of these manpower intensive inspections and will help preclude them pulling resources away from problem resolution activities.

We understand that this is a pilot program and it is planned to evaluate whether the PI&R inspection frequency is appropriate in the future. However, we feel that the impact on the licensees from this annual PI&R inspection is not reflective of good regulatory practice and is inconsistent with our strategic plan. We further believe that conducting the program biennially will be conducive to providing higher quality PI&R assessments.

Attachments:

- 1) Attachment 3 (Baseline Inspection Procedures and Estimated Resources) to MC 2515, Appendix A
- 2) Impact of Inspection Procedure 71152 Performance on Licensee Resources
- 3) Corrective Action Program Performance Matrix
- 4) PPR 00-01 Operations Branch Issues and Recommendations
- 5) Inspection Procedure 71152

Attachments:

- 1) Attachment 3 (Baseline Inspection Procedures and Estimated Resources) to MC 2515, Appendix A**
- 2) Impact of Inspection Procedure 71152 Performance on Licensee Resources**
- 3) Corrective Action Program Performance Matrix**
- 4) PPR 00-01 Operations Branch Issues and Recommendations**
- 5) Inspection Procedure 71152**

cc:

Arthur T. Howell III
John L. Pellet
Karla D. Smith

ATTACHMENT 1

**ATTACHMENT 3
(BASELINE INSPECTION PROCEDURES AND ESTIMATED RESOURCES)
TO MANUAL CHAPTER 2515**

ATTACHMENT 3

BASELINE INSPECTION PROCEDURES AND ESTIMATED RESOURCES

IP/IA No.	Title	Frequency ¹	Annualized Estimated Resources ²
71111 Reactor Safety—Initiating Events, Mitigating Systems, Barrier Integrity			1547
71111.01	Adverse Weather Protection	A	18
71111.02	Evaluation of Changes, Tests, or Experiments	A	32
	(Reserved)		
71111.04	Equipment Alignment	Q	80
71111.05	Fire Protection	Q/T	100
71111.06	Flood Protection Measures	A	20
71111.07	Heat Sink Performance	A/B	22
71111.08	Inservice Inspection Activities	B	16
	(Reserved)		
	(Reserved)		
71111.11	Licensed Operator Requalifications	A/B	60
71111.12	Maintenance Rule Implementation	Q/B	236
71111.13	Maintenance Risk Assessments and Emergent Work Evaluation	Q	120
71111.14	Personnel Performance During Nonroutine Evolutions	AN	102
71111.15	Operability Evaluations	AN	77
71111.16	Operator Workarounds	AN	35
71111.17	Permanent Plant Modifications	A/B	56
	(Reserved)		
71111.19	Post Maintenance Testing	Q	84
71111.20	Refueling and Outage Activities	B	107
71111.21	Safety System Design and Performance Capability	B	210
71111.22	Surveillance Testing	Q	132
71111.23	Temporary Plant Modifications	AN	40

IP/IA No.	Title	Frequency ¹	Annualized Estimated Resources ²
71114 Reactor Safety—Emergency Preparedness			72
71114.01	Exercise Evaluation	B	32
71114.02	Alert Notification System Testing	B	4
71114.03	Emergency Response Organization Augmentation Testing	B	4
71114.04	Emergency Action Level and Emergency Plan Changes	AN	16
71114.05	Correction of Emergency Preparedness Weaknesses and Deficiencies	B	6
71114.06	Drill Evaluation	A	10
71121 Occupational Radiation Safety			124
71121.01	Access Control to Radiologically Significant Areas	A	32
71121.02	ALARA Planning and Controls	B	60
71121.03	Radiation Monitoring Instrumentation	A	32
71122 Public Radiation Safety			48
71122.01	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	B	16
71122.02	Radioactive Material Processing and Transportation	B	16
71122.03	Radiological Environmental Monitoring Program	B	16
71130 Physical Protection			96
71130.01	Access Authorization	A	12
71130.02	Access Control	A	24
71130.03	Response to Contingency Events	B	52
71130.04	Security Plan Changes	A	8
Other Baseline Procedures			
71151	Performance Indicator Verification	A	50
71152	Identification and Resolution of Problems	A	210
71153	Event Followup	AN	18
Baseline Inspection Program Annualized Total ³ :			2165

Notes:

1. A = annual, B= biennial, T = triennial, Q = quarterly, AN = as needed
2. Annualized estimate is for a dual-unit site. Any adjustments for single- or triple-unit sites are contained in the inspection procedures.
3. Total does not include other resident activities, such as plant status, that are not considered direct inspection effort.

END

ATTACHMENT 1

DPV - FREQUENCY OF PIR INSPECTIONS

ATTACHMENT 2

**IMPACT OF INSPECTION PROCEDURE 71152
PERFORMANCE ON LICENSEE RESOURCES**

IMPACT OF IP 71152 PERFORMANCE ON LICENSEE RESOURCES

In responding to the survey, the licensee categorized the man-weeks expended in supporting the inspections in various categories such as data collection, document copying, direct onsite support, and exit attendance. Because the overall impact is much more important than how the data is categorized, we are only listing two categories - direct support and other impact. This data does not encompass the time and distractions to numerous licensee supervisors and managers incidental to the PI&R inspections. Neither does it include man-weeks devoted to addressing responses to findings which may have resulted from the inspections.

LICENSEE	DIRECT SUPPORT	OTHER IMPACT CONSIDERATIONS
1	25 man-weeks	18 individuals involved over 3 weeks in direct support, 7,000 pages of copying, 30 other individuals answered questions, 6-10 managers and 10-20 supervisors responded to interviews and questions, great impact in years in which SSEI occurs - should do in alternate years, greater impact when SSEI is performed in close proximity, primary focus of PI&R inspection was engineering, may have up to 3 team inspections in same year counting fire protection, appears there will be more inspection under revised program. Look at PI&R in every inspection.
2	4.25 man-weeks	No significant findings resulted from this inspection. Great impact when SSEI is conducted in close proximity.
3	6 man-weeks	No significant findings resulted from this inspection. Great impact when SSEI is performed in close proximity. NRC is now performing the same amount of inspection in 1 year that was previously performed in 18 months.
4	33.4 man-weeks	No significant findings. SSEI and PI&R were one month apart. Look at PI&R in every inspection; should be able to roll issues up over period and focus inspection. May not have to do complete IP.
5	13.75 man-weeks	No significant findings.
6	15.1 man-weeks	No significant findings. Very burdensome inspection because of complexity and subjectivity. Success criteria are not clearly defined. Results are difficult to assess. For example, it is very difficult to agree on timeliness of corrective actions. Difficult to define focus. Broad scope requires much preparatory work by multiple organization. More followup is required because of complexity and subjectivity of findings.

ATTACHMENT 2

DPV - FREQUENCY OF PI&R INSPECTIONS

ATTACHMENT 3

CORRECTIVE ACTION PROGRAM PERFORMANCE MATRIX

CORRECTIVE ACTION PROGRAM PERFORMANCE MATRIX							
SITE	REPORTING THRESHOLD	RESOLUTION PRIORITY	PROGRAM EFFECTIVENESS	PROGRAM MEASUREMENT	PROGRAM UNDERSTANDING	REPEAT PROBLEMS	VIOLETION FOLLOW UP
AND (IR 00-02, 3/00) LAST: MEDIUM NEXT: HIGH-CHOW PER	LOW.	APPROPRIATE PRIORITY SETTING.	NORMALLY EFFECTIVE. EXAMPLES OF SLOW CORRECTIVE ACTIONS.	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	PLANT PERSONNEL HAD A GOOD UNDERSTANDING OF THE CONNECTIVE ACTION PROGRAM. ONE EXCEPTION NOTED.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
CALLAWAY (IR 00-03, 2/00) LAST: LOW NEXT: HIGH	ADJUDICATE. SOME DEPARTMENTS NOT AS LOW AS LICENSEE EFFECTS.	ADJUDICATE. BUT USUAL CRACKING WITH LITTLE VIBRATION.	ADJUDICATE. BUT CHALLENGES BY SEVERE, C.B. CRY.	TRENDING ADVERSE TRENDS BUT SOME VIBRATION INCREASING.	GOOD BUT RELIANCE ON TRENDS FOR MONITORING REPORTS NOT 100% RELIABLE.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
COMANCHE PEAK (IR 90-08, 5/90) LAST: LOW NEXT: LOW	LOW. HOWEVER PROCEDURE GUIDANCE WAS INCONSISTENT.	APPROPRIATE PRIORITY SETTING.	NORMALLY EFFECTIVE AND ADJUDICATE.	TRENDING METHODS WERE IDENTIFYING ADVERSE TRENDS. AUDITS SUBSTANTIVE.	PLANT PERSONNEL HAD A GOOD UNDERSTANDING OF THE CONNECTIVE ACTION PROGRAM.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
COOPER (IR 90-03 0/90) LAST: HIGH NEXT: MEDIUM	LOW.	APPROPRIATE PRIORITY SETTING.	LOW VIBRATION OF LOW EFFECTIVENESS. SENSITIVE HUMAN PROBLEM.	RELATIVELY NEW TRENDING METHODS WORKING. RECENT AUDITS SUBSTANTIVE.	PLANT PERSONNEL HAD A GOOD UNDERSTANDING OF THE CONNECTIVE ACTION PROGRAM.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
DIABLO CANYON (IR 00-05 2/00) LAST: MEDIUM NEXT: MEDIUM-CHOW	LOW 2-NERED SYSTEM	APPROPRIATE PRIORITY SETTING	NORMALLY EFFECTIVE AND ADJUDICATE.	LOW LEVEL SYSTEM NEEDS IMPROVEMENT FROM 3	PLANT PERSONNEL HAD A GOOD UNDERSTANDING OF THE CONNECTIVE ACTION PROGRAM.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
NOT INSPECTED WITH CURRENT VERSION OF 40500 ON 71192.							
FT. CALHOUN (15/00) LAST: HIGH NEXT: MEDIUM							
GRAND GULF (IR 90-03, 4/90) LAST: HIGH NEXT: HIGH	LOW.	ADJUDICATE. BUT USUAL CRACKING WITH LITTLE VIBRATION.	PROBLEMS. USE OF CAP FOR LOW TRENDS MONITORING. SENSITIVE HUMAN PROBLEM.	TRENDING ADVERSE TRENDS OK. AUDITS SUBSTANTIVE.	GOOD UNDERSTANDING OF RECENTLY MODIFIED PROGRAM.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
PALO VERDE (IR 90-01 1/90) LAST: MEDIUM NEXT: MEDIUM-CHOW	LOW.	APPROPRIATE PRIORITY SETTING.	NORMALLY EFFECTIVE AND ADJUDICATE. NO EXPLANATION FOR SENSITIVE HUMAN PROBLEM.	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
RIVER BEND (IR 00-02 2/00) LAST: HIGH NEXT: HIGH-CHOW	LOW.	ADJUDICATE. BUT CHALLENGES BY SEVERE, C.B. CRY.	ADJUDICATE. BUT CHALLENGES BY SEVERE, C.B. CRY.	TRENDING ADVERSE TRENDS BUT SOME VIBRATION INCREASING.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL. EXCEEDANCES WAS 100%.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
NOT INSPECTED WITH CURRENT VERSION OF 40500 ON 71192.							
SAN ONOIRE (17/00) LAST: HIGH NEXT: MEDIUM-CHOW							
STP (IR 90-08, 6/90) LAST: LOW NEXT: LOW	VERY LOW. 10 TIMES # OF OTHER SITES.	APPROPRIATE PRIORITY SETTING.	CORRECTIVE ACTIONS WERE EFFECTIVE.	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
WMP-2 (IR 00-00 1/00) LAST: HIGH NEXT: MEDIUM	LOW.	APPROPRIATE. SOME INCONSISTENCIES NOTED	ADJUDICATE. BUT CHALLENGES BY SEVERE, C.B. CRY.	TRENDING ADVERSE TRENDS BUT SOME VIBRATION INCREASING.	ACCEPTABLE UNDERSTANDING OF RECENTLY MODIFIED PROGRAM.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
WATERFORD (IR 90-07, 6/90) LAST: HIGH NEXT: HIGH	LOW.	APPROPRIATE PRIORITY SETTING.	ADJUDICATE. BUT CHALLENGES BY SEVERE, C.B. CRY.	TRENDING ADVERSE TRENDS BUT SOME VIBRATION INCREASING.	GOOD UNDERSTANDING OF RECENTLY MODIFIED PROGRAM. INCONSISTENT PROCEDURE REFERENCES.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.
WOLF CREEK (IR 00-00 2/00) LAST: MEDIUM NEXT: MEDIUM	LOW.	APPROPRIATE PRIORITY SETTING.	EFFECTIVE IN MOST AREAS. CONTINUING CHALLENGE W/ HIR POSITIONING EVENTS	TRENDING METHODS IDENTIFIED ADVERSE TRENDS. AUDITS SUBSTANTIVE.	LICENSEE STAFF UNDERSTOOD THE PROGRAM WELL.	PROCESS WAS EFFECTIVE CONTROLLING.	ENTERED AND RESOLVED IN A THIRTY AND ADEQUATE MANNER.

NOTE: THE RATE COLUMN ALSO CONTAINS THE LEVEL OF EFFORT FOR THE LAST AND THE NEXT CAP/PIR INSPECTION DISCUSSED IN PPR 00-01, SHOULD THAT OPTION BECOME AVAILABLE.

ATTACHMENT 4

PPR 00-01, OPERATIONS BRANCH ISSUES AND RECOMMENDATIONS

PPR 00-01 OPERATIONS BRANCH ISSUES AND RECOMMENDATIONS					
Area	Site	Priority	Performance Issue	Recommended Follow Up	Weeks
O	DC	LOW	Procedure adherence and adequacy issues have continued to be noted during the period.	RIBIP only	0
O	RB	LOW	Procedure adherence and adequacy issues have continued to be noted during the period.	RIBIP only	0
O	RB	LOW	Corrective action effectiveness is improved but remains below average.	RIBIP only	0
O	W3	LOW	Procedure adherence and adequacy issues have continued to be noted during the period.	RIBIP only	0

ATTACHMENT 4

DPV -FREQUENCY OF PIR INSPECTIONS

ATTACHMENT 5

INSPECTION PROCEDURE 71152

INSPECTION PROCEDURE 71152

IDENTIFICATION AND RESOLUTION OF PROBLEMS

PROGRAM APPLICABILITY: 2515

CORNERSTONES: ALL

INSPECTION BASIS: A fundamental goal of the NRC's reactor oversight process is to establish confidence that each licensee is detecting and correcting problems in a manner that limits the risk to members of the public. A key premise of the revised oversight process is that weaknesses in licensee's problem identification and resolution (PI & R) programs will manifest themselves as performance issues which will be identified during the baseline inspection program or by crossing predetermined performance indicator thresholds. However, there are several aspects of PI & R that are not specifically addressed by either the individual cornerstone performance indicators or other baseline inspections. These are detailed in the following objectives. Completion of the inspection objectives is accomplished by sampling issues during each inspectable area inspection, as well as during an annual focused PI & R inspection.

71152-01 INSPECTION OBJECTIVES **ATTACHMENT 5**

01.01 To provide an assessment of the effectiveness of licensee PI & R programs based upon a performance based review of specific issues.

01.02 To look for instances where a licensee may have missed identifying potential "generic" concerns, including specific problems involving safety equipment, procedure development, design control, etc..

01.03 To look for instances of risk significance associated with combinations of items in the corrective action backlog which may not have individual risk significance.

01.04 To verify that licensees are appropriately identifying and capturing issues that could affect the availability of equipment tracked by the performance indicators and the maintenance rule.

01.05 To assess whether conditions exist that would challenge the establishment of a safety conscious work environment.

71152-02 INSPECTION REQUIREMENTS

02.01 Routine Review of Identification and Resolution of Problems In Plant Status and Inspectable Area Procedures

As described in Appendix D to Inspection Manual Chapter 2515, "Plant Status" and by baseline inspectable area inspection procedures, conduct inspections of problem identification and resolution activities to:

- a. Verify that equipment, human performance, and program issues are being identified by the licensee at an appropriate threshold and are being entered into the problem identification and resolution program.
- b. Verify that corrective actions commensurate with the significance of the issue have been identified and implemented by the licensee.
- c. Verify that licensees are appropriately identifying and capturing issues that could affect the unavailability of equipment tracked by the performance indicators and the maintenance rule.

The primary focus of these routine reviews should be on verifying that licensees are identifying issues at an appropriate threshold and entering them into their corrective action program. This can be assessed by comparing those issues identified by the NRC during the conduct of the plant status and inspectable area portions of the program with those issues identified by the licensee. This requirement is normally to be accomplished by Resident Inspectors and Region based inspectors responsible for conducting Plant Status and baseline inspectable area inspections. The routine reviews also allow for follow-up to selected issues, to ensure that corrective actions commensurate with the significance of the issue have been identified and implemented by the licensee.

02.02 Annual Problem Identification and Resolution Inspection

Perform an annual inspection of the problem identification and resolution activities to:

- a. Verify that when issues are identified, they are appropriately characterized, and entered into the licensee's problem identification and resolution program.
- b. Verify that an appropriate analysis of the cause of the problem has been performed by the licensee for significant conditions adverse to quality.
- c. Verify that corrective actions commensurate with the issue have been identified and implemented by the licensee, including corrective actions to address common cause or generic concerns.
- d. Verify that licensees are appropriately identifying and capturing issues that could affect the unavailability of equipment tracked by the performance indicators and the maintenance rule.
- e. Verify that licensees are appropriately considering the risk (core damage frequency) associated with combinations of risk significant issues.
- f. Assess whether there is indication that licensee personnel may be reluctant to report safety issues.
- g. Develop insights into the licensee's performance in the PI and R area. Include in the documentation, a comparison of the team's results with the results of the licensee's own assessments in the PI & R area.
- h. Document the team's results in accordance with the guidance contained in IMC 0610*.

71152-03 INSPECTION GUIDANCE

General Guidance

To the extent possible, this inspection should follow a performance based approach. Emphasize the products and results of the licensee's PI & R program. Inspections performed under this procedure should concentrate on the identification of problems and the effectiveness of corrective actions for risk significant issues rather than on reviewing the administrative aspects of the corrective action program and associated procedures.

This inspection will examine, in part, a sample of licensee corrective action issues to provide an indication of overall problem identification and resolution performance.

Detailed Review Guidance

The following additional guidance should be used in conducting a review of licensee problem identification and resolution activities.

- The inspectors review should be of sufficient depth to understand the technical issues, to evaluate why they occurred, and to determine the roles played by the quality verification organizations and line management in identifying and resolving the issues. The inspectors review might include:
 - Determining the chain of events leading to the occurrence and identification of the problem,
 - Developing an understanding of the technical and work activities associated with resolving the problem,
 - Determining the information that is needed for understanding if there are generic implications or common causes associated with the problem, and if such implications were identified by the licensee,
 - Determining the extent to which the licensee identified potential precursors and investigated the facts surrounding the problem.
- While reviewing problems, be alert for cases where the licensee may have mis-classified a problem as non-significant. Some considerations to be considered in determining significance include the impact on plant system functionality, common cause concerns, the risk significance (core damage frequency) when combined with other previously identified issues, and the impact on the fulfillment of regulatory requirements.
- For significant conditions adverse to quality, review the effectiveness and validity of the licensee's root cause evaluation.
- If permanent corrective actions require significant time to implement, ensure that interim corrective actions are identified and implemented to minimize the problem until the permanent action could be implemented.

03.01 Routine Review of Identification and Resolution of Problems

a. Relationship to Baseline Inspectable Area Procedures

Most of the attachments to baseline inspection procedures contain a requirement to inspect problem identification and resolution performance within the attachment's area. The routine inspection of problem identification and resolution performance as part of baseline inspections is intended to ensure that, over the course of an assessment cycle, a sample of PI&R performance in all cornerstones is obtained. As stated in paragraph 02.01, the primary focus of this portion of the PI & R review should be on verifying that licensees are identifying issues at an appropriate threshold and entering them into their corrective action program.

b. Sample Selection

DPV: FREQUENCY OF PIR INSPECTIONS

In addition to verifying that the licensee is identifying issues at an appropriate threshold, a sample of issues should be chosen for review to verify that the licensee has taken corrective actions commensurate with the significance of the issue. This sample can be chosen using information obtained from plant status reviews and from reviews conducted as part of the baseline inspection procedure attachments. Inspectable area procedures will provide additional guidance regarding the types of PI&R issues relevant to a particular area. In selecting issues for inspection, the inspectors should seek the broadest range of examples within the cornerstone including the following considerations:

- Licensee identified issues (including issues identified during audits or self assessments)
- NRC identified issues
- Issues related to NCVs (mandatory to review response to a sample of NCVs unless no NCVs were issued in the cornerstone)
- Issues identified through NRC generic communications
- Issues identified through industry operating experience exchange mechanisms (including Part 21 reports, NSSS vendor reports, EPRI reports, experience reports from similar facilities, LERs)
- Specific or cross cutting issues identified by safety review committees or other management oversight mechanisms
- Issues identified through employee concerns programs

The above considerations are presented as guidance and should not be construed as a requirement to select one of each type of issue listed. The guidance is intended to help ensure that, over the course of an assessment cycle and through the performance of the baseline inspections, an appropriate sample will be obtained by which the NRC can obtain indication of the performance of the various elements of a licensee's corrective action program.

In selecting issues for review, inspectors should also use relevant risk insights such as:

- Maintenance Rule program basis documents,
- Individual Plant Examination (IPE) or Individual Plant External Event Evaluation (IPEEE) for the facility, and
- Significance Determination Program (SDP) worksheets for the plant.

For example, in considering the inspection of licensee corrective actions associated with post maintenance testing (as required by IP 71111, Attachment 19), inspectors should review issues associated with high risk mitigating systems or issues which may have affected the likelihood of risk-significant initiating events. Additional insights for determining appropriate samples can be obtained by region based inspectors through discussion with resident inspectors or regional inspectors who are familiar with site issues and who are familiar with the licensee's problem identification and resolution process.

c. Performance Attributes

When evaluating the effectiveness of licensee corrective actions for a particular issue, the licensee's actions must be viewed against the nature and significance of the identified problem. While licensee corrective action programs may appropriately consider monetary, plant availability, and other concerns as factors in determining significance, risk should be a primary factor in the licensee's significance determination. Attributes to consider during review of licensee actions associated with individual issues include:

- Complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery,
- Evaluation and disposition of operability/reportability issues,
- Consideration of extent of condition, generic implications, common cause, and previous occurrences,
- Classification and prioritization of the resolution of the problem commensurate with its safety significance,
- Identification of root and contributing causes of the problem (this attribute will typically only be assessed as part of the annual inspection for significant conditions adverse to quality),
- Identification of corrective actions which are appropriately focused to correct the problem (may be deferred to annual inspection),
- Completion of corrective actions in a timely matter commensurate with the safety significance of the issue (may be deferred to annual inspection),
- Accurate accounting for equipment unavailability associated with the corrective action issue.

It is not expected that the inspectors assess each attribute for every issue selected for followup during these routine reviews. Rather, inspectors may choose to assess licensee performance against selected attributes, as necessary to be most effective.

d. Documentation

In order to support a more complete assessment of the effectiveness of the licensee's PI&R program, it is important that the NRC document the results of PI & R inspections conducted as part of the baseline procedure attachments. It is expected that documenting reviews of PI&R will help focus the annual PI&R inspection on areas where concerns have been identified. In general, issues associated with the PI & R program itself should be documented in the PI & R section of the inspection report. Technical issues associated

with the inspectable area and cornerstone should be documented in the associated areas of the inspection report. Specific guidance regarding documentation of inspection scope and thresholds for PI&R issues is contained in IMC 0610.

e. Level of Effort

While it is expected that routine reviews of PI & R activities should equate to approximately 10-15 percent of the resources estimated for the associated baseline cornerstone procedures, this is a general estimate only based upon the overall effort expected to be expended in each strategic performance area. It is anticipated that the actual hours required to be expended may vary significantly from attachment to attachment, depending upon the nature and complexity of the issues that arise at the particular facility. Overall, an effort should be made to remain within the 10 to 15 percent estimate on a strategic performance area basis. Inspection time spent assessing PI & R as part of the baseline procedure attachments should be charged to the procedure attachment.

03.02 Annual Problem Identification and Resolution Inspection

The annual inspection of problem identification and resolution is intended to complement and expand upon the routine reviews described in Section 03.01 of this procedure by:

- Evaluating additional examples of licensee problem identification and resolution,
- Reviewing the resolution of issues that earlier had been assessed for the licensee's identification efforts only,
- Comparing the NRC's results against the licensee's own assessment of performance in the PI & R area,
- Assessing whether PI & R deficiencies exist across cornerstones that might indicate potential programmatic issues,
- Assessing the risk significance (core damage frequency) of combinations of items in the corrective action backlog.

a. Planning

Obtain licensee administrative procedures that control the identification, evaluation, and resolution of problems. Selected licensee documents needed to support the inspection may be obtained prior to the inspection by the resident inspector. These documents should only be reviewed to provide the inspectors with sufficient knowledge of the licensee's programs and processes, as necessary to conduct an effective and efficient inspection.

- (Obtain and review documents for the in-office review, such as a list of corrective action documents issued from the time of the last annual PI&R inspection (e.g. a list of work orders, work requests, temporary modifications, calibration failures, condition/problem identification reports, operability evaluations and determinations, etc.).

Obtain and review all NRC inspection reports issued since the last annual PI&R inspection and:

- Determine the extent to which all cornerstones have been sampled by routine reviews of licensee PI&R activities and determine if additional PI&R samples are warranted in any cornerstone(s).
- Determine the extent to which licensee actions to NCVs have been sampled by routine reviews of licensee PI&R activities.
- Identify any trends or patterns in corrective action program issues or performance which may warrant additional sampling to confirm. For example, a series of issues associated with "failure to follow procedures" within one cornerstone may indicate a corrective action performance deficiency within a portion of the licensee's organization; a series of issues associated with failure to follow procedures in multiple cornerstones may indicate a broader concern. Also, a lack of licensee identified corrective action issues within a particular organization may be indicative of a problem with the identification threshold.

b. Annual Inspection Sample Selection

Based on the planning review, identify a sample of licensee corrective actions for review. The samples chosen for review should include a range of issues including:

- Licensee identified issues (including issues identified during audits or self assessments)
- NRC identified issues
- Issues related to NCVs (mandatory to review response to a sample of NCVs unless no NCVs were issued in the cornerstone)
- Issues identified through NRC generic communications
- Issues identified through industry operating experience exchange mechanisms (including Part 21 reports, NSSS vendor reports, EPRI reports, experience reports from similar facilities, LERs)
- Specific or cross cutting issues identified by safety review committees or other management oversight mechanisms
- Issues identified through employee concerns programs.

No specific number of previously reviewed or additional samples is specified. Rather, the annual inspection team leader should choose as many examples as warranted to complement the routine PI&R inspections and ensure a sufficient basis for evaluating the effectiveness of the licensee's PI&R program. An effort should however be made to maintain the total hours expended in completing this procedure to within the estimated level of resources contained in paragraph 03.02g..

c. Performance Attributes

When evaluating the effectiveness of licensee corrective actions for a particular issue, the licensee's actions must be viewed against the nature and significance of the identified problem. While licensee corrective action programs may appropriately consider monetary, plant availability, and other concerns as factors in determining significance, risk should be a primary factor in the licensee's significance determination. Attributes to consider during review of licensee actions associated with individual issues include:

- Complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery,
- Evaluation and disposition of operability/reportability issues,
- Consideration of extent of condition, generic implications, common cause, and previous occurrences,
- Classification and prioritization of the resolution of the problem commensurate with its safety significance,
- Identification of root and contributing causes of the problem for significant conditions adverse to quality,
- Identification of corrective actions which are appropriately focused to correct the problem (and to address the root and contributing causes for significant conditions adverse to quality),
- Completion of corrective actions in a timely matter commensurate with the safety significance of the issue (included within this attribute would be justifications for extending corrective action due dates),
- Accurate accounting for equipment unavailability associated with the corrective action issue.

d. Assessment of Safety Conscious Work Environment

In conducting interviews with or observing other activities involving licensee personnel during the inspection, be sensitive to areas where employees may be reluctant to raise concerns. Although the licensee may be implementing an employee concerns program regarding the identification of safety issues, the possibility of existing underlying factors that would produce a "chilling" effect or reluctance to report such issues could exist and the inspector should be alert for such indications.

Appendix 1 to this procedure provides a list of questions that can be used when discussing PI & R issues with licensee individuals to help assess whether there are impediments to the establishment of a safety conscious work environment. If, as a result of the interviews or observations, the inspector becomes aware of specific examples of employees being discouraged from raising safety or regulatory issues within the licensee's or contractor's organization or to the NRC, the inspector should get as complete a set of facts as possible. If the inspector becomes aware of a reluctance of employees to raise safety or regulatory issues unrelated to a specific event or incident, continue pursuing the issue during the remaining interviews and try to determine the reason employees are reluctant to raise issues. However, if any indication of a "chilling" effect is suspected, inform regional management for further review and follow-up.

e. Development of PI&R Program Performance Insights

By reviewing a sufficient number and breadth of samples, the inspection team should be able to develop insights into the effectiveness of the licensee's corrective action program. Compare the result of the team's review of corrective action issues with licensee performance reviews, including specific licensee reviews of the corrective action program. Determine whether licensee reviews are consistent with the NRC review of corrective action issues.

The intent of this inspection procedure (both the routine and annual inspection effort) is to provide insights into licensee performance in the PI & R area based upon a performance based review of corrective action issues. More detailed programmatic reviews of licensee performance in the PI & R area will be conducted during supplemental inspections, in accordance with the assessment action matrix, should established performance thresholds be crossed.

f. Documentation and Evaluation of Program Effectiveness

At the completion of inspection activities, the team should develop a clear and concise discussion of the results of their review. This discussion should be supported by the inspection activities conducted over the assessment cycle including both routine and annual inspection of PI&R activities. The discussion should be documented in the inspection report for the annual PI & R inspection and should be included in the PIM. Included in the documentation should be any issues associated with establishment of a safety conscious work environment that may have been detected during the inspection.

Additional evaluation of the licensee's PI & R programs will be conducted as part of the mid-cycle and/or end of cycle plant performance review by assessing licensee performance using the results of this inspection, as well as other information, including performance indicator data and the results of any supplemental inspections. Additional guidance on documenting the annual problem identification and resolution inspection is contained in IMC 0610.

71152-04 RESOURCE ESTIMATE
DPV - FREQUENCY OF PIR INSPECTIONS

The annual inspection will involve on average 210 hours. Participation (either full or part time) on the inspection team by a member of the resident inspector staff should be strongly considered.

END

Mark



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 28, 2000

MEMORANDUM TO: John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Chris Christensen, Deputy Director
Division of Reactor Safety
Region II

FROM:

William D. Travers
Executive Director for Operations

Frank J. Miraglia

SUBJECT:

DIFFERING PROFESSIONAL OPINION (DPO) PANEL

I hereby designate John Zwolinski as the Chair of the ad-hoc DPO review panel for the attached DPO on frequency of problem identification and resolution (PI&R) inspections. Chris Christensen is identified as a second panel member. Terrence Reis, Office of Enforcement, and Jack Goldberg, Office of the General Counsel, will be available to advise.

The submitter of the DPO can provide a list of qualified individuals to serve on the panel from which one individual will be selected by the panel Chair.

Please complete your review in accordance with Management Directive 10.159, "Differing Professional Views or Opinions," and provide your recommendation to me by August 18, 2000.

Attachments:

1. DPO dtd 6/15/00 re Frequency of PIR Inspections
2. Memo to Travers frm Merschoff dtd 6/16/00 re Differing Professional Opinion - Frequency of PIR Inspections
3. Memo to Reed, FOIA and Privacy Act Officer, OCIO, frm Merschoff dtd 6/13/00 re DPV Concerning the Frequency of Problem Identification and Resolution Inspections
4. Memo to Multiple Addressees frm Merschoff dtd 6/9/00 re Differing Professional View Concerning the Frequency of Problem Identification Resolution Inspections
5. Memo to Merschoff frm Multiple Addressees dtd 6/7/00 re Differing Professional View Concerning the Frequency of Problem Identification Resolution Inspections
6. Memo to Multiple Addressees frm Merschoff dtd 5/31/00 re Differing Professional View Concerning the Frequency of Problem Identification Resolution Inspections
7. May 31, 2000 Staff Note, Region IV, Item of Interest
8. Memo to Merschoff frm Marschall, Kennedy, Runyan dtd 5/16/00 re Supplement to Recommended Actions to Address the DPV - Frequency of PIR Inspections, dated April 7, 2000
9. Memo to Merschoff frm Marschall, Kennedy, Runyan, dtd 5/10/00 re Recommended Actions to Address The DPV - Frequency of PIR Inspections
10. Memo to Multiple Addressees frm Merschoff dtd 4/11/00 re Receipt of Differing Professional View - Frequency of PIR Inspections, Dated April 7, 2000

4

11. Memo to Marschall, Kennedy, Runyan from Merschoff dtd 4/11/00 re Ad Hoc Panel Assignment - Differing Professional View
12. Memo to Merschoff frm Multiple Addressees dtd 4/7/00 re Differing Professional View - Frequency of PIR Inspections
13. NUREG/BR-0161
14. Management Directive and Handbook 10.159

cc w/attachments (14):

T. Reis, OE
J. Goldberg, OGC

cc w/o attachments:

R. Zimmerman
D. Diec
B. Sheron
J. Johnson
E. Merschoff, RIV
H. Bundy, RIV
G. Johnston, RIV
M. Murphy, RIV
S. McCrory, RIV
T. Steika, RIV

15. Memo to Marschall, Kennedy, Runyan from Merschoff dtd 4/11/00 re Ad Hoc Panel Assignment - Differing Professional View
16. Memo to Merschoff frm Multiple Addressees dtd 4/7/00 re Differing Professional View - Frequency of PIR Inspections
17. NUREG/BR-0161
18. Management Directive and Handbook 10.159

cc w/attachments (14):

T. Reis, OE
J. Goldberg, OGC

cc w/o attachments:

R. Zimmerman
D. Diec
B. Sheron
J. Johnson
E. Merschoff, RIV
H. Bundy, RIV
G. Johnston, RIV
M. Murphy, RIV
S. McCrory, RIV
T. Stetka, RIV

Accession Number ML003726690
Template EDO-004

DOCUMENT NAME: g:dpopanelpir.wpd

*see previous concurrence

To receive a copy of this document, indicate in the box: "C" = copy without attachment/enclosure, "E" = copy with attachment/enclosure, "N" = no copy

OFFICE	DONRR*		DONRR*		DONRR*		EDO		
NAME	D Diec		R Zimmerman		S Collins (RZ for)		W Travers		
DATE	6/26/00		6/26/00		6/26/00		6/27/00		
OFFICE									
NAME									
DATE									

OFFICIAL RECORD COPY



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

JUL 13 2000

To: Satorius,
G20000320

cys: EDO
DEDMRS
DEDR
DEDM
AO
NRR

MEMORANDUM TO: John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Regulation

FROM: Howard F. Bundy, Senior Operations Engineer
Gary W. Johnston, Senior Operations Engineer
Michael E. Murphy, Senior Operations Engineer
Stephen L. McCrory, Senior Operations Engineer
Thomas F. Stetka, Senior Operations Engineer

SUBJECT: DIFFERING PROFESSIONAL OPINION (DPO) PANEL

Pursuant to the memorandum from William D. Travers to yourself, same subject, dated June 28, 2000, we wish to nominate Michael F. Runyan and Raymond P. Mullikin as potential panel members for the DPO on frequency of problem identification and resolution inspections. Whereas you are only required to select one of these individuals for the panel, we prefer selection of Mr. Runyan. This is because he is more familiar with the issues as result of his participation on the associated differing professional view panel and can provide valuable background information to the panel.

cc:
W. Travers
K. Smith
M. Runyan
R. Mullikin



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

Satorius, OEDO

August 15, 2000

cys: EDO
DEDMRS
DEDR
DEDM
AO

920000320

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: DIFFERING PROFESSIONAL OPINION (DPO) PANEL - IP71152,
PROBLEM IDENTIFICATION AND RESOLUTION INSPECTIONS

By memorandum dated June 28, 2000, you appointed me the Chair of the ad-hoc DPO review panel on the frequency of Problem Identification and Resolution (PI&R) Inspections and requested that the panel provide you with its recommendations by August 18, 2000. The purpose of this memorandum is to provide you with a status of the panel's activities, inform when the panel expects to finish its review and documentation, and advise you that the panel will not complete its report in sufficient time to meet your requested completion date. The slippage in schedule is due primarily to the extensive personal involvement in the handling of ANO-2 steam generator issues and the ongoing efforts with Indian Point 2.

On August 9-11, 2000, the DPO ad-hoc panel members (myself, Mr. H. "Chris" Christensen, Deputy Director of Division of Reactor Safety, Region II, and Mr. Michael Runyan, Senior Reactor Inspector, Region IV) met in Region II and Region IV. We had each reviewed materials believed relevant to the DPO. During the August 9, 2000, meeting, held in Region II, the panel discussed the content of the DPO, its related issues, and came to a consensus on how the panel would review the DPO issues. As part of the panel's review, data was collected which related to Region II's PI&R inspection activities, reviewed PI&R inspection report findings, and reviewed the level of resources needed to perform the PI&R inspections in Region II. In addition, the panel interviewed two Region II Senior Resident Inspectors that have been team leaders for PI&R inspections and Region II managers responsible for scheduling and implementing these inspections. On August 10-11, 2000, the panel reconvened its meeting in Region IV and met with four of the five DPO originators. In addition, the panel interviewed the managers directly responsible for scheduling and implementing the Region IV PI&R inspections. The panel also interviewed the members of the ad-hoc DPV panel, Region IV DRS and DRP Division Directors and Regional Administrator and reviewed PI&R inspection report findings, and collected data relating to the level of effort needed to perform the IP71152 inspections in Region IV.

The ad-hoc panel is in the process of finishing its review of the DPO, interviewing selected headquarters staff, and drafting its report. Currently, it is the panel's plan to complete the review and documentation activities by September 1, 2000 and issue its report by September 8, 2000. If you should have any questions, please feel free to contact me at 415-1453.

cc:

F. Miraglia, DEDO
S. Collins, NRR
R. Zimmerman, NRR
B. Sheron, NRR
J. Johnson, NRR
H. Christensen, RII
M. Runyan, RIV

E. Merschoff, RIV
M. Murphy, RIV
G. Johnston, RIV
S. McCrory, RIV
T. Stetka, RIV
H. Bundy, RIV

4



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 8, 2000

Action To: Mark Satorius, OEDO

cys: EDO
DEDMRS
DEDR
DEDM
AO
OGC
G20000320

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: John A. Zwolinski, Chairman
Ad-Hoc DPO Review Panel

SUBJECT: DIFFERING PROFESSIONAL OPINION (DPO) PANEL REPORT -
INSPECTION PROCEDURE 71152, PROBLEM IDENTIFICATION AND
RESOLUTION INSPECTIONS

By memorandum dated June 28, 2000, you appointed me the Chair of the ad-hoc DPO review panel to review the concerns expressed in a DPO on the frequency of Problem Identification and Resolution (PI&R) Inspections dated June 15, 2000. On August 9-11, 2000, the three designated DPO ad-hoc panel members (myself, Mr. Chris Christensen, Deputy Director of Division of Reactor Safety, Region II, and Mr. Michael Runyan, Senior Reactor Inspector, Region IV, and Patrick Madden, Technical Assistant, Division of Licensing Project Management, NRR, who provided technical support to the panel) met in Region II and Region IV.

Recommendations for responding to the DPV were made to Mr. Ellis Merschoff, Regional Administrator, Region IV by the DPV panel in a memorandum dated May 10, 2000. On May 31, 2000, Mr. Ellis W. Merschoff, Regional Administrator for Region IV, responded to the DPV originators. The originators, Howard Bundy, Gary Johnston, Michael Murphy, Stephen McCrory, and Thomas Stetka, which are all Senior Operations Engineers in Region IV, continued to differ with Regional Administrator's approach and initiated this Differing Professional Opinion (DPO) concerning the frequency of PI&R inspections pursuant to a Differing Professional View they had on same the subject.

As part of this effort, the panel reviewed PI&R inspection and resource data it collected and interviewed some of the Region II inspectors that have been team leaders for PI&R inspections and Region II and IV managers responsible for scheduling and implementing these inspections. In addition, the panel met with four of the five DPO originators, interviewed the members of the ad-hoc Differing Professional View (DPV) panel, Region IV DRS and DRP Division Directors, and the Regional Administrator, and surveyed the other Regional Division Directors to obtain their views on the PI&R inspection effort.

The purpose of this memorandum is to inform you that the panel has completed its assessment of the DPO. The panel has made its findings and is recommending that certain actions be taken in response to the concerns expressed by the DPO as identified in the attached report. Based on its review of the DPO concerns, the DPO panel does not recommend an immediate change to the Inspection Procedure (IP) 71152 inspection frequency but, the panel does note that the various points discussed in its report should be considered by NRR's formal self-assessment of the first year implementation of the revised reactor oversight process (RROP). If you should have any questions, please feel free to contact me at 415-1453.

7

W. Travers

- 2 -

Attachment: As stated

cc: F. Miraglia, DEDO
S. Collins, NRR
R. Zimmerman, NRR
B. Sheron, NRR
J. Johnson, NRR
C. Christensen, RII
M. Runyan, RIV
E. Merschoff, RIV

***Ad Hoc Differing Professional Opinion Panel Report
Frequency of Problem Identification and Resolution Inspections***

1.0 INTRODUCTION

On January 8, 1999, the staff issued SECY 99-007, "Recommendations for Reactor Oversight Process Improvements," which presented the staff's recommendations to the Commission for a revised reactor oversight process (RROP) for commercial nuclear power plants. The staff recommended a framework for regulatory oversight that established the seven cornerstones¹ of safe operation. In addition to the cornerstones, the staff suggested that the RROP include three "cross-cutting" elements (so named because they affect and are considered to be a part of each of the cornerstones). These elements are (1) human performance, (2) management attention to safety and workers' ability to raise safety issues, and (3) finding and fixing problems.

Through the implementing of its RROP, the NRC revised its inspection, assessment, and enforcement programs. This new reactor oversight process uses a more objective, predictable, timely, and safety-significant criteria in assessing operational safety performance. The motivation behind these comprehensive program changes in approach came from the NRC's reviews of its regulatory program as part of the "reinventing government" process and from concerns expressed by public interest groups, the nuclear industry, and Congress.

In 1999, the NRC pilot tested certain portions of the new program at eight commercial reactor sites. The purpose of this pilot was to identify what worked well and what changes were needed before beginning initial implementation of the program at all nuclear power plants. An important outcome of this pilot program resulted in the NRC receiving specific stakeholder feedback and comments. This feedback revealed that (1) the resource estimates for many of the individual inspection procedures were too low, (2) the scope and frequency of many inspections should account for site-specific differences, (3) the program should more clearly define the role of cross-cutting issues such as human performance and problem identification and resolution, and (4) the threshold for documenting inspection observations and findings needs to be clarified to avoid documenting insignificant issues, yet allow the documentation of issues that could potentially lead to more significant programmatic problems.

As part of its continuing development of the RROP, the Inspection Program Branch (IPB) of the Office of Nuclear Reactor Regulation (NRR) evaluated the comments received from the pilot program and revised the inspection program procedures accordingly. In some cases, inspectable areas were combined into other procedures to place the inspection objective into a better context and provide the appropriate

¹ These seven cornerstones of safe operations are related to initiating events, mitigating systems, barrier integrity, emergency preparedness, operational radiation safety, public radiation safety, and physical protection.

emphasis. Adjustments were made to the scope, frequency, and resource estimates for some of the inspection procedures.

In SECY 00-0049, "Results of the Revised Reactor Oversight Process Pilot Program," dated February 24, 2000, IPB reported that based on industry and agency feedback, the regulatory burden associated with the RROP appears to be appropriate. More licensee resources are required to support the data collection and reporting associated with performance indicators (PIs). However, the increase in burden has been more than offset by the changes to the inspection, assessment, and enforcement processes, which have allowed licensees to focus their resources more efficiently on those issues with the greatest safety significance. Most internal and external stakeholders agree that the RROP provides an enhanced level of assessment of licensee performance in a manner that is more objective, understandable, and predictable than the inspection program of just a few years ago. The submittal of PIs by the licensee provides performance data that are more timely and relevant.

Also, in SECY 00-0049, IPB informed the Commission that sufficient data were not able to be generated during the pilot program to accurately quantify any efficiency changes associated with the RROP. The staff also informed the Commission that additional experience with implementing specific portions of the inspection program will be required during the first year or more following the initial implementation to collect and evaluate lessons learned. Specifically, the staff will need to collect additional feedback and lessons learned on how the cross-cutting issues are addressed by the inspection program. In addition, the staff indicated that more substantial data are required before a more accurate evaluation of resource requirements can be accomplished and the need to make changes to the program will be evaluated and incorporated to address the lessons learned during the first year of initial implementation. The staff intends to address the resource implications of the RROP more fully in its report to the Commission on the first year of initial implementation, currently planned for June 2001.

2.0 BACKGROUND

On April 7, 2000, five Senior Reactor Operations Engineers (Howard F. Bundy, Gary W. Johnston, Michael E. Murphy, Stephen L. McCrory, and Thomas F. Stetka) in Region IV originated a Differing Professional View (DPV). This DPV expressed two concerns associated with the implementation of Inspection Procedure (IP) 71152, "Identification and Resolution of Problems."

2.1 DPV Concerns

The first and primary concern identified that the current inspection procedure, IP 71152, dated April 3, 2000, called for a significant increase in inspection resources as compared to the level required by the previous inspection procedure (IP 40500). According to the originators, the increase in inspection hours also resulted in additional burden on the licensee to support the added inspection hours. The DPV originators also did not believe that the increase in inspection resources could be justified in view of the historical record associated with the findings identified by these inspections (few findings with generally little

or no safety significance). The DPV originators recommended that the frequency for the IP 71152 inspections be changed from annual to biennial (once every 2 years).

The second DPV concern was related to the participation of the Region IV Division of Reactor Project resources (resident inspectors) in support of the IP 71152 inspection. The DPV originators noted that in the past, resident inspectors would be tasked with duties at their sites that would negatively impact their focus on the IP 40500 inspection effort. According to the DPV originators, this lack of dedicated support has affected the quality of the inspection results.

2.2 DPV Panel Report

On April 11, 2000, the Regional Administrator for Region IV established an Ad-Hoc DPV review panel to assess the issues. Mr. Charles Marschall, Chief Projects Branch C, Division of Reactor Projects (DRP), Region IV, Mr. Kriss Kennedy, Senior Project Engineer, DRP, Region IV, and Mr. Michael Runyan, Senior Reactor Inspector, Division of Reactor Safety, Region IV, (who was selected by the DPV originators to serve on the panel) were appointed to serve on this panel. Mr. Marschall was appointed to chair the panel.

On April 12, 18, and 27, and May 3, 2000, the ad-hoc DPV panel met. In addition, the panel met with the DPV originators on several occasions, and interviewed the Director and Deputy Director, DRP, Region IV, as well as the Chief, DRS Operator Licensing Branch, Region IV, to gather information. On May 10, 2000, the DPV panel issued its report. In this report the Panel made several recommendations related to the frequency and burden associated with IP 71152. The DPV panel recommendations focused on the RROP as a whole and were more global than the original DPV. These recommendations were: (1) NRR should assess the results of each inspection as a function of expended resources; (2) NRC should develop a method of measuring burden on a licensee; (3) NRR should adjust inspection scope and/or frequency based on results of inspection assessment and burden on the licensee; (4) Regions should assist NRR by providing input to the assessment based on experience; and (5) NRR should review availability of resources from other Regions to supplement Region IV inspection resources.

In addition, the panel made recommendations related to the concern associated with dedicated inspection resources and quality. These recommendations were: (1) Region IV DRP management should emphasize the need for dedicated DRP support throughout the inspection until the documentation has been completed; (2) The Region should conduct an integrated evaluation of inspection requirements vs. required resources to determine if the Region has sufficient staff to complete baseline inspections; (3) The Region should review scheduling of "Identification and Resolution or Problems" inspections and engineering inspections at each facility to ensure the impact is minimized through effective coordination of team inspections; and (4) DRS and DRP should review the

resources supplied to support IP 71152 and other baseline team inspections to ensure that no branch bears an excessive share of the burden and to verify the effective use of resources.

The DPV ad-hoc panel report did not recommend an immediate change to the frequency of the IP 71152, Problem Identification and Resolution (PI&R) inspections from annual to biennial.

2.3 Regional Administrator's Response to the DPV Originators

On May 31, 2000, Mr. Ellis W. Merschoff, Regional Administrator for Region IV, responded to the DPV originators. In this response, the Regional Administrator took exception to the DPV panel's recommendation to forward the DPV to the EDO but, he did initiate the actions to forward the DPV panel recommendations related to the DPV first concern (frequency of the PI&R inspections and burden) to the appropriate NRC line managers for action. In addition, the Regional Administrator's DPV response outlined NRR's plans to review the inspection resources, inspection scope, and frequency as part of its self-assessment of the RROP's first year of implementation.

2.4 Differing Professional Opinion (DPO)

The DPV originators did not concur with recommendations/corrective actions proposed by the Regional Administrator. On June 15, 2000, the originators initiated a DPO. In the DPO, the originators identified three concerns: (1) the performance frequency of IP 71152 causes an unnecessary resource impact on the licensee; (2) the annual inspection frequency could result in a potential reduction in plant safety; and (3) there was a lack of a fully developed program office evaluation criteria for making adjustments to inspection programs based on its self-assessment process of the RROP.

2.5 EDO Establishment of Ad-hoc DPO Panel

By a June 28, 2000, memorandum, Dr. William Travers, Executive Director for Operations (EDO) established the ad-hoc DPO review panel. Mr. John Zwolinski, Director, Division of Licensing Project Management, NRR, was designated by the EDO to chair this panel. In addition, Mr. H. "Chris" Christensen, Deputy Director, Division of Reactor Safety, Region II, Mr. Michael Runyan, Senior Reactor Inspector, Division of Reactor Safety, Region IV, and Mr. Patrick M. Madden, Acting Technical Assistant, Division of Licensing Project Management, NRR, who provided technical support to the panel, were designated as panel members.

Mr. Michael Runyan, who was identified as an acceptable member of the staff by the DPO originators to serve on this panel, also served as a member on the DPV panel and was very knowledgeable of the related DPV panel activities.

The ad-hoc DPO panel expended approximately 144 hours to review the DPO, develop a panel review plan, implement the review plan, and document its activities, findings, and recommendations.

3.0 PANEL ACTIVITIES AND INITIATIVES

3.1. Reviewed the Written Record

Prior to the panel meetings in Regions II and IV, the panel reviewed IP 71152 and IP 40500 and collected and reviewed inspection reports related to the annual baseline portion of IP 71152, inspection resource utilization data, and Regions I and III feedback data related to their implementation of the IP 71152/PI&R effort. In addition, the panel developed an initial review plan and potential outcomes associated with its review of the DPO. The panel's review approach focused on the DPO concerns and considered the potential impact these concerns could have on the overall RROP (e.g., inspection resource allocations to the Regions) if the DPO concerns were accepted and implemented without any further program office analysis.

3.2 Region II Activities

During the August 9, 2000, meeting, held in Region II, the panel discussed the content of the DPO, its related issues, and came to a consensus on how the panel would review the DPO concerns. The panel collected data that was related to Region II's PI&R inspection activities, reviewed PI&R inspection report findings, and reviewed the level of resources needed to perform the PI&R inspections in Region II.

A. DPO Panel's Initial Review Approach

During its meeting in Region II, the DPO panel came to a consensus on how it should assess the concerns identified by the DPO. The panel, from its review of the written record, determined that it would be appropriate to focus on five topical areas. It should be noted that some of these topical areas were not explicitly expressed in the DPO but were inferred by the panel in its interpretation of the DPO. From its review of the written record, it was the panel's belief that these topical areas had a nexus to the DPO. These areas were:

- (1) Sufficiency of having adequate resources applied by Region IV to implement the "New Oversight Program,"
- (2) Impact of inspection frequency of IP 71152 on licensee burden,
- (3) Adequacy of IP 71152,
- (4) Broadness and adequacy of the DPV panel's evaluation of the issues, and
- (5) Adequacy of DPV panel response.

These topical areas formed the bases of the panel's efforts and helped to focus the interviews with Region II and Region IV staffs.

B. Region II interviews

The panel interviewed two Region II Senior Resident Inspectors that have been team leaders for PI&R inspections. The following comments summarize the insights gained through the interview the panel had with these team leaders:

- Via a feedback form, questions have been raised concerning the IPs ability to effectively assess a safety-conscious work environment. It was the view of the inspectors that the assessment of the safety-conscious work environment should be accomplished by residents and not the team assigned to perform this inspection.
- IP 71152 requires that the inspection sample should be picked from areas associated with the cornerstones. The inspectors opinion was that the procedure should be changed to address the PI&R efforts related to identifying and correcting potential safety-significant conditions.
- The inspectors were not comfortable with assessing the adequacy of the PI&R program through the implementation of the current IP 71152 procedure. In addition, it was the inspectors' views that the IP lacked procedural measures on how to judge the adequacy of a PI&R program. The inspectors suggested that the procedure be revised to focus on evaluating problems/issues identified from within and outside the organization and determine their potential risk significance against the Significance Determination Process (SDP). It was the inspectors' opinion that a PI&R program is as good as the SDP color determination associated with an open problem or set of problems in the PI&R program inventory and that the IP should assess the PI&R program ability to focus on the right set of conditions to fix or resolve the out-of-standard condition. In addition, it was the view of these inspectors that this IP should be removed from the program and revised after enough performance information is obtained.
- With respect to the inspection imposing a burden on the licensee, it was the view of the inspectors that this effort was not an inordinate burden. The inspectors indicated that during the inspection, they primarily interfaced with their licensing contact, personnel assigned to the licensee's PI&R program, and various in-plant managers. They also indicated that during these inspections the licensee did not mention that it was not able to support other plant-related safety issues because of its need to support the inspection.

3.3 Region IV Activities

On August 10-11, 2000, the panel reconvened its meeting in Region IV and met with four of the five DPO originators. In addition, the panel interviewed the managers directly responsible for scheduling and implementing the Region IV PI&R inspections. The panel also interviewed the members of the ad-hoc DPV panel, Region IV DRS and DRP Division Directors and the Regional Administrator. The panel also reviewed PI&R inspection report findings, and collected data relating to the level of effort needed to perform the IP 71152 inspections in Region IV. The following comments summarize some of the insights gained through these interviews:

- The DPO originators expressed that their main problem with IP 71152 was that its annual implementation frequency was a licensee burden.
- Managers responsible for inspection planning expressed that the planning cycle should be based on a 24-month cycle in lieu of current 12-month cycle.
- DPO originators felt that the scope of the procedure was adequate based on the fact that PI&R cross-cuts the cornerstones. It was the view of the originators that a SDP needs to be developed for PI&R issues.
- Some managers and the DPO originators felt the procedure lacked a good link to risk and PIs.
- The DPO originators had no confidence that IP 71152 is being implemented in a consistent manner by all regions.
- The DPO originators did not feel that the implementation expectations of IP 71152 were predictable, scrutable, and independent of team leaders' focus.

3.4 Survey of Regional DRS/DRP Division Directors

In order to get a broader view of the DPO concerns associated with IP 71152 Burden/Safety impact, the panel performed a survey of all Regional DRP and DRS Division Directors. The survey focused on three areas: (1) unnecessary burden; (2) impact on plant safety; and (3) IP 71152 level of effort and inspection scope appropriateness. The following comments summarize the insights gained through this survey:

Unnecessary Burden

Based on feedback obtained from the Regional Division Directors (the Regions), during their periodic plant visits and meetings with licensee senior managers, the Directors did not identify any cases where the licensees claimed that this inspection created an unnecessary burden. Some of the feedback from the licensees pertaining to IP 71152 was related to IP's area of focus and that licensees hope that the NRC is being thorough in the PI&R area. In general, licensees were viewing the PI&R inspections as being positive and insightful.

Impact on Plant Safety

The Regions have not received any feedback from licensees related to the current inspection effort associated with IP 71152 as having an impact on plant safety or an impact on activities related to maintaining safe plant operations.

IP 71152 Level of Effort/Inspection Scope

The following summarizes the regions' feedback on IP 71152's level of effort and inspection scope:

- One region, due to the uniqueness of its plants, thought the frequency of this inspection was appropriate at a frequency of 1 year and that the level of effort was a little low. Based on past PI&R inspection experience, two Regions believed that the inspection frequency should be about once every 2 years and one region wanted flexibility in the inspection implementation frequency.
- One region was concerned with some low risk events and issues. The region felt that the annual frequency may not properly measure the adequacy of a licensee's PI&R evaluations and corrective actions related to low risk events. There was a concern that evaluating the program annually may have the effect of masking a gradual decline in performance that would be easier to measure over a 2-year interval.
- Regarding the scope of IP 71152, all the regions expressed concern over the conduct of the Safety-Conscious Work Environment (SCWE) portion of the procedure, one region expressed concerns that this inspection should not look at the licensees' employee concerns program.

3.5 RROP Review

The DPO panel requested the IPB to provide the IP 71152 feedback forms it has received from the Regional Offices. The panel reviewed these forms. Currently, the Regions have expressed concerns related to conflicts between IP 71152 and IP 71111.9 in the area of post maintenance testing, conduct of the SCWE portion of the procedure, follow-up on Non-Cited Violations, and the use of a vertical slice approach to steer sample selection.

The DPO Panel discussed with the IPB, the plans the IPB has to assess the data it collected during the first year of the RROP implementation and how the IPB intends to assess the resource implications. From its discussion with members of the IPB, the DPO panel ascertained that the self-assessment process of RROP will evaluate several factors and that program changes will be considered based on the feedback the IPB receives from its internal review of the RROP and from the input it receives from counterpart meetings, lessons learned workshops, internal and external stakeholder surveys, and a program review by a panel established under the auspice of the Federal Advisory Committee Act.

3.6 DPO Panel Consensus on DPO Concerns

Based on the DPO panel's review of the DPO written record, its interviews and survey, the panel refocused its initial review approach and developed a consensus on the following four topical areas: the original issues cited in the originators DPO (inspection frequency, burden/safety reduction, lack of program office evaluation criteria), IP 71152 adequacy issues; broadness of DPV panel report; and its evaluation criteria and inspection resource utilization. Based on its review refocus, the DPO panel developed its findings (see Report Section 4.0) and its recommendations (see Report Section 5.0).

4.0 DPO PANEL FINDINGS

4.1 DPO Concern 1 - IP 71152 Annual Frequency

The DPO originators expressed a concern with the IP 71152 annual frequency being an unnecessary burden on a licensee and that this increase in burden results in an impact on plant safety (see DPO Concern 2). In addition, the originators expressed that the annual frequency does not afford the licensee sufficient time for corrective actions to take place. The originators are concerned that the annual frequency would not allow inspectors to measure the effects of corrective actions to preclude recurrence of prior problems.

Panel Finding

The DPO panel acknowledges the originators' concerns associated with the annual frequency of PI&R inspections and the assertion that it takes more than a year for some corrective actions to take place. The DPO panel, from its interviews and survey, found that there are varying views on what is the appropriate frequency for the PI&R inspections. From a broader perspective, the DPO panel determined that the inspection frequency may have to be discretionary in order to support Regional concerns related to licensee PI&R performance. Based on this finding, the DPO panel supports the recommendations made in the May 10, 2000, DPV panel report and the actions proposed by the May 31, 2000, Region IV Regional Administrator's response to the DPV originators concern related to inspection frequency.

4.2 DPO Concern 2 - Safety/Burden

The DPO originators expressed a concern that the annual PI&R inspection frequency results in an unnecessary burden on a licensee and that this burden results in an impact on plant safety.

Panel Finding

The DPO panel acknowledges that the previous PI&R inspection procedure, IP 40500, had a frequency of 18 months with a resource allocation of 192 hours (128 hours annualized). The frequency for its replacement inspection procedure, IP 71152, is annual and the resource allocation is estimated at 210 hours. This increase in inspection effort results in an increase in burden on the licensee.

However, it is the DPO panel's view that the RROP has resulted in an overall decrease in licensee burden. This burden reduction is a result of the changes to the inspection, assessment (e.g., suspension of the SALP process), and enforcement processes. In its survey of the Regional DRS and DRP Division Directors, the panel did not receive feedback that licensee senior managers were concerned with the burden associated with the PI&R inspections. In addition, the panel did not receive feedback from Regional Division Directors that licensees felt that the implementation of the PI&R inspections resulted in an impact on plant safety. The DPO panel did not find any indications that confirmed that these inspections were resulting in an unnecessary burden or resulting in an impact on plant safety.

4.3 DPO Concern 3 - Evaluation Criteria

The DPO originators expressed a concern regarding the appropriateness of the Program Office studying the impact of the increased frequency of PI&R inspections for a year without clear evaluation criteria.

Panel Finding

In SECY 00-0049, the IPB made a commitment to the Commission to address the resource implications of the RROP more fully in its report to the Commission on the first year of initial implementation (planned for June 2001). Currently, as part of its program assessment, IPB plans to perform a self-assessment of each RROP inspection and the resources utilized, solicit feedback from licensees, the regions, and industry on burden associated with the RROP, and based on this process, will make adjustments to the reactor oversight program. The IPB is currently in the process of developing the metrics it intends to use to evaluate the initial year of RROP implementation. The DPO panel finds that IPB, consistent with the commitment IPB made in SECY 00-0049 to the Commission, is developing its process for performing a self-assessment of the RROP and that any program adjustment requires considerable time. It is the opinion of the DPO panel that the IPB self-assessment efforts being planned and implemented will adequately address the necessary RROP adjustments in overall allocation of inspection resources, the resources to be applied to individual IPs, the scope and adequacy of individual IPs, and adjustments in IP frequencies. Therefore, the panel finds that no further actions are necessary to address this DPO concern.

4.4 IP 71152 Related Concerns

The DPO panel, as part of its review efforts, identified that several concerns were expressed by various individuals about the scope, content, and implementation of IP 71152. These concerns were related to the following:

SCWE

Regarding the scope of IP 71152, the regions expressed concern over the conduct of the SCWE portion of the procedure. The regions expressed questions concerning the IPs ability to effectively assess an SCWE. It was the view of the inspectors and some managers that the assessment of the SCWE

should be completed by residents and not the team assigned to perform the PI&R inspections.

Non-Cited Violations (NCV)

It was felt by some inspectors that IP 71152 leads them to look at the corrective actions associated with NCVs not related to PI&R. It was also felt that it would be more efficient to have the resident inspectors perform the NCV follow-up effort and not the team assigned to this inspection.

PI&R Inspection Implementation Process

Concerns were expressed regarding consistency of implementation and the variability of resources being applied. Specifically, the variability of the inspectors (generalist versus specialist) may yield inconsistent results. Three of the regions scheduled a 2-week onsite inspection while the remaining region scheduled a 1-week onsite inspection. DRP leads the PI&R inspections in Regions II and III and DRS leads these inspections in Regions I and IV. Region III conducts its inspection using a back-to-back onsite approach. Some regions use a Senior Resident Inspector and a Resident Inspector that are from a different site on the team in order to accomplish the objectivity inspection goals. Region I schedules an onsite preparation week for the team leader and a 1-week onsite inspection by a Plant Support Inspector. Region IV primarily uses inspectors from its Operations Branch and supplements its team with DRP project engineers.

Scope of Guidance

It was the view of some inspectors that they were not comfortable with assessing the adequacy of the PI&R program through the implementation of the current IP 71152 procedure. In addition, it was the view of some inspectors that the IP lacked procedural measures on how to judge the adequacy of a PI&R program. The inspectors suggested that the procedure be revised to focus on evaluating problems/issues identified from within and outside the organization and determine their potential risk significance against the SDP. It was also the opinion of some inspectors that a PI&R program is as good as the SDP color determination associated with an open problem or set of problems in the PI&R program inventory and that the IP should assess the PI&R program ability to focus on the right set of conditions to fix or resolve.

Desk Guide

One region found it necessary to develop a desk guide for IP 71152. The purpose of this desk guide is to clarify what is required by the procedure and provide the basic process for planning and conducting PI&R inspections.

Cornerstones and Risk

The procedure requires that the inspection sample should be picked from areas associated with the cornerstones. It was the opinion of some inspectors that the

procedure should be changed to address the PI&R efforts related to identifying and correcting potential safety significant conditions.

5.0 RECOMMENDATIONS

1. The DPO panel recommends no immediate change to the IP 71152 inspection frequency but notes that the various points discussed in this report be considered in the formal assessment of the first year implementation of the RROP and the June 2001 report to the Commission.
2. The DPO panel supports the observations and recommendations made by the DPV panel and recommends that they be implemented. Specifically, the following DPV panel recommendations relate to the NRR's self-assessment of the RROP and its initial first year of implementation:
 - NRR should assess the results of each inspection as a function of expended resources.
 - NRR should adjust inspection scope and/or inspection frequency based on results of inspection assessment and burden on the licensee.
 - The regions should assist NRR by providing input to the assessment based on experience.
 - NRR should review the availability of resources from other regions to supplement Region IV inspection resources.
3. The IP 71152 concerns identified in Section 4.4 of this report should be referred to the IPB for resolution.

October 2, 2000

MEMORANDUM TO: Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

FROM: William D Travers
Executive Director for Operations

Original signed by
William D. Travers

SUBJECT: DIFFERING PROFESSIONAL OPINION - FREQUENCY OF PROBLEM
IDENTIFICATION AND RESOLUTION (PI&R) INSPECTIONS

By memorandum dated September 8, 2000, Mr. John Zwolinski, Chairman, Ad-Hoc Differing Professional Opinion (DPO) Review Panel, reported the results and recommendations of the DPO panel. The report from the panel is attached.

The Office of Nuclear Reactor Regulation (NRR) should review the recommendations in this report and consider these recommendations during the self assessment of the first year of implementation of the revised reactor oversight process (RROP).

Attachment: As stated

cc: F. Miraglia, DEDO
R. Zimmerman, NRR
B. Sheron, NRR
J. Johnson, NRR
J. Zwolinski, NRR
E. Merschoff, RIV

DISTRIBUTION

EDO R/F
DEDR R/F
MSatorius
TMcMurtray
G20000320
DWoodend, HR

*see previous concurrence

To receive a copy of this document, indicate in the box: "C" = Copy without enclosures "E" = Copy with enclosures

"N" = No copy ML003754330

OFFICE	ROPMS*	<	ROPMS*	DEDR*	EDO
NAME	AMcMurtray		MSatorius	FMiraglia	WTravers
DATE	09/28/00		09/28/00	09/28/00 W/CHANGES	09/28/00

OFFICIAL RECORD COPY

8



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 2, 2000

MEMORANDUM TO: Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

FROM: William D Travers 
Executive Director for Operations

SUBJECT: DIFFERING PROFESSIONAL OPINION - FREQUENCY OF PROBLEM
IDENTIFICATION AND RESOLUTION (PI&R) INSPECTIONS

By memorandum dated September 8, 2000, Mr. John Zwolinski, Chairman, Ad-Hoc Differing Professional Opinion (DPO) Review Panel, reported the results and recommendations of the DPO panel. The report from the panel is attached.

The Office of Nuclear Reactor Regulation (NRR) should review the recommendations in this report and consider these recommendations during the self assessment of the first year of implementation of the revised reactor oversight process (RROP).

Attachment: As stated

cc: F. Miraglia, DEDO
R. Zimmerman, NRR
B. Sheron, NRR
J. Johnson, NRR
J. Zwolinski, NRR
E. Merschoff, RIV



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

September 8, 2000

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: John A. Zwolinski, Chairman
Ad-Hoc DPO Review Panel

SUBJECT: DIFFERING PROFESSIONAL OPINION (DPO) PANEL REPORT -
INSPECTION PROCEDURE 71152, PROBLEM IDENTIFICATION AND
RESOLUTION INSPECTIONS

By memorandum dated June 28, 2000, you appointed me the Chair of the ad-hoc DPO review panel to review the concerns expressed in a DPO on the frequency of Problem Identification and Resolution (PI&R) Inspections dated June 15, 2000. On August 9-11, 2000, the three designated DPO ad-hoc panel members (myself, Mr. Chris Christensen, Deputy Director of Division of Reactor Safety, Region II, and Mr. Michael Runyan, Senior Reactor Inspector, Region IV, and Patrick Madden, Technical Assistant, Division of Licensing Project Management, NRR, who provided technical support to the panel) met in Region II and Region IV.

Recommendations for responding to the DPV were made to Mr. Ellis Merschoff, Regional Administrator, Region IV by the DPV panel in a memorandum dated May 10, 2000. On May 31, 2000, Mr. Ellis W. Merschoff, Regional Administrator for Region IV, responded to the DPV originators. The originators, Howard Bundy, Gary Johnston, Michael Murphy, Stephen McCrory, and Thomas Stetka, which are all Senior Operations Engineers in Region IV, continued to differ with Regional Administrator's approach and initiated this Differing Professional Opinion (DPO) concerning the frequency of PI&R inspections pursuant to a Differing Professional View they had on same the subject.

As part of this effort, the panel reviewed PI&R inspection and resource data it collected and interviewed some of the Region II inspectors that have been team leaders for PI&R inspections and Region II and IV managers responsible for scheduling and implementing these inspections. In addition, the panel met with four of the five DPO originators, interviewed the members of the ad-hoc Differing Professional View (DPV) panel, Region IV DRS and DRP Division Directors, and the Regional Administrator, and surveyed the other Regional Division Directors to obtain their views on the PI&R inspection effort.

The purpose of this memorandum is to inform you that the panel has completed its assessment of the DPO. The panel has made its findings and is recommending that certain actions be taken in response to the concerns expressed by the DPO as identified in the attached report. Based on its review of the DPO concerns, the DPO panel does not recommend an immediate change to the Inspection Procedure (IP) 71152 inspection frequency but, the panel does note that the various points discussed in its report should be considered by NRR's formal self-assessment of the first year implementation of the revised reactor oversight process (RROP). If you should have any questions, please feel free to contact me at 415-1453.

W. Travers

- 2 -

Attachment: As stated

cc: F. Miraglia, DEDO
S. Collins, NRR
R. Zimmerman, NRR
B. Sheron, NRR
J. Johnson, NRR
C. Christensen, RII
M. Runyan, RIV
E. Merschoff, RIV

***Ad Hoc Differing Professional Opinion Panel Report
Frequency of Problem Identification and Resolution Inspections***

1.0 INTRODUCTION

On January 8, 1999, the staff issued SECY 99-007, "Recommendations for Reactor Oversight Process Improvements," which presented the staff's recommendations to the Commission for a revised reactor oversight process (RROP) for commercial nuclear power plants. The staff recommended a framework for regulatory oversight that established the seven cornerstones¹ of safe operation. In addition to the cornerstones, the staff suggested that the RROP include three "cross-cutting" elements (so named because they affect and are considered to be a part of each of the cornerstones). These elements are (1) human performance, (2) management attention to safety and workers' ability to raise safety issues, and (3) finding and fixing problems.

Through the implementing of its RROP, the NRC revised its inspection, assessment, and enforcement programs. This new reactor oversight process uses a more objective, predictable, timely, and safety-significant criteria in assessing operational safety performance. The motivation behind these comprehensive program changes in approach came from the NRC's reviews of its regulatory program as part of the "reinventing government" process and from concerns expressed by public interest groups, the nuclear industry, and Congress.

In 1999, the NRC pilot tested certain portions of the new program at eight commercial reactor sites. The purpose of this pilot was to identify what worked well and what changes were needed before beginning initial implementation of the program at all nuclear power plants. An important outcome of this pilot program resulted in the NRC receiving specific stakeholder feedback and comments. This feedback revealed that (1) the resource estimates for many of the individual inspection procedures were too low, (2) the scope and frequency of many inspections should account for site-specific differences, (3) the program should more clearly define the role of cross-cutting issues such as human performance and problem identification and resolution, and (4) the threshold for documenting inspection observations and findings needs to be clarified to avoid documenting insignificant issues, yet allow the documentation of issues that could potentially lead to more significant programmatic problems.

As part of its continuing development of the RROP, the Inspection Program Branch (IPB) of the Office of Nuclear Reactor Regulation (NRR) evaluated the comments received from the pilot program and revised the inspection program procedures accordingly. In some cases, inspectable areas were combined into other procedures to place the inspection objective into a better context and provide the appropriate

¹ These seven cornerstones of safe operations are related to initiating events, mitigating systems, barrier integrity, emergency preparedness, operational radiation safety, public radiation safety, and physical protection.

emphasis. Adjustments were made to the scope, frequency, and resource estimates for some of the inspection procedures.

In SECY 00-0049, "Results of the Revised Reactor Oversight Process Pilot Program," dated February 24, 2000, IPB reported that based on industry and agency feedback, the regulatory burden associated with the RROP appears to be appropriate. More licensee resources are required to support the data collection and reporting associated with performance indicators (PIs). However, the increase in burden has been more than offset by the changes to the inspection, assessment, and enforcement processes, which have allowed licensees to focus their resources more efficiently on those issues with the greatest safety significance. Most internal and external stakeholders agree that the RROP provides an enhanced level of assessment of licensee performance in a manner that is more objective, understandable, and predictable than the inspection program of just a few years ago. The submittal of PIs by the licensee provides performance data that are more timely and relevant.

Also, in SECY 00-0049, IPB informed the Commission that sufficient data were not able to be generated during the pilot program to accurately quantify any efficiency changes associated with the RROP. The staff also informed the Commission that additional experience with implementing specific portions of the inspection program will be required during the first year or more following the initial implementation to collect and evaluate lessons learned. Specifically, the staff will need to collect additional feedback and lessons learned on how the cross-cutting issues are addressed by the inspection program. In addition, the staff indicated that more substantial data are required before a more accurate evaluation of resource requirements can be accomplished and the need to make changes to the program will be evaluated and incorporated to address the lessons learned during the first year of initial implementation. The staff intends to address the resource implications of the RROP more fully in its report to the Commission on the first year of initial implementation, currently planned for June 2001.

2.0 BACKGROUND

On April 7, 2000, five Senior Reactor Operations Engineers (Howard F. Bundy, Gary W. Johnston, Michael E. Murphy, Stephen L. McCrory, and Thomas F. Stetka) in Region IV originated a Differing Professional View (DPV). This DPV expressed two concerns associated with the implementation of Inspection Procedure (IP) 71152, "Identification and Resolution of Problems."

2.1 DPV Concerns

The first and primary concern identified that the current inspection procedure, IP 71152, dated April 3, 2000, called for a significant increase in inspection resources as compared to the level required by the previous inspection procedure (IP 40500). According to the originators, the increase in inspection hours also resulted in additional burden on the licensee to support the added inspection hours. The DPV originators also did not believe that the increase in inspection resources could be justified in view of the historical record associated with the findings identified by these inspections (few findings with generally little

or no safety significance). The DPV originators recommended that the frequency for the IP 71152 inspections be changed from annual to biennial (once every 2 years).

The second DPV concern was related to the participation of the Region IV Division of Reactor Project resources (resident inspectors) in support of the IP 71152 inspection. The DPV originators noted that in the past, resident inspectors would be tasked with duties at their sites that would negatively impact their focus on the IP 40500 inspection effort. According to the DPV originators, this lack of dedicated support has affected the quality of the inspection results.

2.2 DPV Panel Report

On April 11, 2000, the Regional Administrator for Region IV established an Ad-Hoc DPV review panel to assess the issues. Mr. Charles Marschall, Chief Projects Branch C, Division of Reactor Projects (DRP), Region IV, Mr. Kriss Kennedy, Senior Project Engineer, DRP, Region IV, and Mr. Michael Runyan, Senior Reactor Inspector, Division of Reactor Safety, Region IV, (who was selected by the DPV originators to serve on the panel) were appointed to serve on this panel. Mr. Marschall was appointed to chair the panel.

On April 12, 18, and 27, and May 3, 2000, the ad-hoc DPV panel met. In addition, the panel met with the DPV originators on several occasions, and interviewed the Director and Deputy Director, DRP, Region IV, as well as the Chief, DRS Operator Licensing Branch, Region IV, to gather information. On May 10, 2000, the DPV panel issued its report. In this report the Panel made several recommendations related to the frequency and burden associated with IP 71152. The DPV panel recommendations focused on the RROP as a whole and were more global than the original DPV. These recommendations were: (1) NRR should assess the results of each inspection as a function of expended resources; (2) NRC should develop a method of measuring burden on a licensee; (3) NRR should adjust inspection scope and/or frequency based on results of inspection assessment and burden on the licensee; (4) Regions should assist NRR by providing input to the assessment based on experience; and (5) NRR should review availability of resources from other Regions to supplement Region IV inspection resources.

In addition, the panel made recommendations related to the concern associated with dedicated inspection resources and quality. These recommendations were: (1) Region IV DRP management should emphasize the need for dedicated DRP support throughout the inspection until the documentation has been completed; (2) The Region should conduct an integrated evaluation of inspection requirements vs. required resources to determine if the Region has sufficient staff to complete baseline inspections; (3) The Region should review scheduling of "Identification and Resolution of Problems" inspections and engineering inspections at each facility to ensure the impact is minimized through effective coordination of team inspections; and (4) DRS and DRP should review the

resources supplied to support IP 71152 and other baseline team inspections to ensure that no branch bears an excessive share of the burden and to verify the effective use of resources.

The DPV ad-hoc panel report did not recommend an immediate change to the frequency of the IP 71152, Problem Identification and Resolution (PI&R) inspections from annual to biennial.

2.3 Regional Administrator's Response to the DPV Originators

On May 31, 2000, Mr. Ellis W. Merschoff, Regional Administrator for Region IV, responded to the DPV originators. In this response, the Regional Administrator took exception to the DPV panel's recommendation to forward the DPV to the EDO but, he did initiate the actions to forward the DPV panel recommendations related to the DPV first concern (frequency of the PI&R inspections and burden) to the appropriate NRC line managers for action. In addition, the Regional Administrator's DPV response outlined NRR's plans to review the inspection resources, inspection scope, and frequency as part of its self-assessment of the RROP's first year of implementation.

2.4 Differing Professional Opinion (DPO)

The DPV originators did not concur with recommendations/corrective actions proposed by the Regional Administrator. On June 15, 2000, the originators initiated a DPO. In the DPO, the originators identified three concerns: (1) the performance frequency of IP 71152 causes an unnecessary resource impact on the licensee; (2) the annual inspection frequency could result in a potential reduction in plant safety; and (3) there was a lack of a fully developed program office evaluation criteria for making adjustments to inspection programs based on its self-assessment process of the RROP.

2.5 EDO Establishment of Ad-hoc DPO Panel

By a June 28, 2000, memorandum, Dr. William Travers, Executive Director for Operations (EDO) established the ad-hoc DPO review panel. Mr. John Zwolinski, Director, Division of Licensing Project Management, NRR, was designated by the EDO to chair this panel. In addition, Mr. H. "Chris" Christensen, Deputy Director, Division of Reactor Safety, Region II, Mr. Michael Runyan, Senior Reactor Inspector, Division of Reactor Safety, Region IV, and Mr. Patrick M. Madden, Acting Technical Assistant, Division of Licensing Project Management, NRR, who provided technical support to the panel, were designated as panel members.

Mr. Michael Runyan, who was identified as an acceptable member of the staff by the DPO originators to serve on this panel, also served as a member on the DPV panel and was very knowledgeable of the related DPV panel activities.

The ad-hoc DPO panel expended approximately 144 hours to review the DPO, develop a panel review plan, implement the review plan, and document its activities, findings, and recommendations.

3.0 PANEL ACTIVITIES AND INITIATIVES

3.1. Reviewed the Written Record

Prior to the panel meetings in Regions II and IV, the panel reviewed IP 71152 and IP 40500 and collected and reviewed inspection reports related to the annual baseline portion of IP 71152, inspection resource utilization data, and Regions I and III feedback data related to their implementation of the IP 71152/PI&R effort. In addition, the panel developed an initial review plan and potential outcomes associated with its review of the DPO. The panel's review approach focused on the DPO concerns and considered the potential impact these concerns could have on the overall RROP (e.g., inspection resource allocations to the Regions) if the DPO concerns were accepted and implemented without any further program office analysis.

3.2 Region II Activities

During the August 9, 2000, meeting, held in Region II, the panel discussed the content of the DPO, its related issues, and came to a consensus on how the panel would review the DPO concerns. The panel collected data that was related to Region II's PI&R inspection activities, reviewed PI&R inspection report findings, and reviewed the level of resources needed to perform the PI&R inspections in Region II.

A. DPO Panel's Initial Review Approach

During its meeting in Region II, the DPO panel came to a consensus on how it should assess the concerns identified by the DPO. The panel, from its review of the written record, determined that it would be appropriate to focus on five topical areas. It should be noted that some of these topical areas were not explicitly expressed in the DPO but were inferred by the panel in its interpretation of the DPO. From its review of the written record, it was the panel's belief that these topical areas had a nexus to the DPO. These areas were:

- (1) Sufficiency of having adequate resources applied by Region IV to implement the "New Oversight Program,"
- (2) Impact of inspection frequency of IP 71152 on licensee burden,
- (3) Adequacy of IP 71152,
- (4) Broadness and adequacy of the DPV panel's evaluation of the issues, and
- (5) Adequacy of DPV panel response.

These topical areas formed the bases of the panel's efforts and helped to focus the interviews with Region II and Region IV staffs.

B. Region II interviews

The panel interviewed two Region II Senior Resident Inspectors that have been team leaders for PI&R inspections. The following comments summarize the insights gained through the interview the panel had with these team leaders:

- Via a feedback form, questions have been raised concerning the IPs ability to effectively assess a safety-conscious work environment. It was the view of the inspectors that the assessment of the safety-conscious work environment should be accomplished by residents and not the team assigned to perform this inspection.
- IP 71152 requires that the inspection sample should be picked from areas associated with the cornerstones. The inspectors opinion was that the procedure should be changed to address the PI&R efforts related to identifying and correcting potential safety-significant conditions.
- The inspectors were not comfortable with assessing the adequacy of the PI&R program through the implementation of the current IP 71152 procedure. In addition, it was the inspectors' views that the IP lacked procedural measures on how to judge the adequacy of a PI&R program. The inspectors suggested that the procedure be revised to focus on evaluating problems/issues identified from within and outside the organization and determine their potential risk significance against the Significance Determination Process (SDP). It was the inspectors' opinion that a PI&R program is as good as the SDP color determination associated with an open problem or set of problems in the PI&R program inventory and that the IP should assess the PI&R program ability to focus on the right set of conditions to fix or resolve the out-of-standard condition. In addition, it was the view of these inspectors that this IP should be removed from the program and revised after enough performance information is obtained.
- With respect to the inspection imposing a burden on the licensee, it was the view of the inspectors that this effort was not an inordinate burden. The inspectors indicated that during the inspection, they primarily interfaced with their licensing contact, personnel assigned to the licensee's PI&R program, and various in-plant managers. They also indicated that during these inspections the licensee did not mention that it was not able to support other plant-related safety issues because of its need to support the inspection.

3.3 Region IV Activities

On August 10-11, 2000, the panel reconvened its meeting in Region IV and met with four of the five DPO originators. In addition, the panel interviewed the managers directly responsible for scheduling and implementing the Region IV PI&R inspections. The panel also interviewed the members of the ad-hoc DPV panel, Region IV DRS and DRP Division Directors and the Regional Administrator. The panel also reviewed PI&R inspection report findings, and collected data relating to the level of effort needed to perform the IP 71152 inspections in Region IV. The following comments summarize some of the insights gained through these interviews:

- The DPO originators expressed that their main problem with IP 71152 was that its annual implementation frequency was a licensee burden.
- Managers responsible for inspection planning expressed that the planning cycle should be based on a 24-month cycle in lieu of current 12-month cycle.
- DPO originators felt that the scope of the procedure was adequate based on the fact that PI&R cross-cuts the cornerstones. It was the view of the originators that a SDP needs to be developed for PI&R issues.
- Some managers and the DPO originators felt the procedure lacked a good link to risk and PIs.
- The DPO originators had no confidence that IP 71152 is being implemented in a consistent manner by all regions.
- The DPO originators did not feel that the implementation expectations of IP 71152 were predictable, scrutable, and independent of team leaders' focus.

3.4 Survey of Regional DRS/DRP Division Directors

In order to get a broader view of the DPO concerns associated with IP 71152 Burden/Safety impact, the panel performed a survey of all Regional DRP and DRS Division Directors. The survey focused on three areas: (1) unnecessary burden; (2) impact on plant safety; and (3) IP 71152 level of effort and inspection scope appropriateness. The following comments summarize the insights gained through this survey:

Unnecessary Burden

Based on feedback obtained from the Regional Division Directors (the Regions), during their periodic plant visits and meetings with licensee senior managers, the Directors did not identify any cases where the licensees claimed that this inspection created an unnecessary burden. Some of the feedback from the licensees pertaining to IP 71152 was related to IPs area of focus and that licensees hope that the NRC is being thorough in the PI&R area. In general, licensees were viewing the PI&R inspections as being positive and insightful.

Impact on Plant Safety

The Regions have not received any feedback from licensees related to the current inspection effort associated with IP 71152 as having an impact on plant safety or an impact on activities related to maintaining safe plant operations.

IP 71152 Level of Effort/Inspection Scope

The following summarizes the regions' feedback on IP 71152's level of effort and inspection scope:

- One region, due to the uniqueness of its plants, thought the frequency of this inspection was appropriate at a frequency of 1 year and that the level of effort was a little low. Based on past PI&R inspection experience, two Regions believed that the inspection frequency should be about once every 2 years and one region wanted flexibility in the inspection implementation frequency.
- One region was concerned with some low risk events and issues. The region felt that the annual frequency may not properly measure the adequacy of a licensee's PI&R evaluations and corrective actions related to low risk events. There was a concern that evaluating the program annually may have the effect of masking a gradual decline in performance that would be easier to measure over a 2-year interval.
- Regarding the scope of IP 71152, all the regions expressed concern over the conduct of the Safety-Conscious Work Environment (SCWE) portion of the procedure, one region expressed concerns that this inspection should not look at the licensees' employee concerns program.

3.5 RROP Review

The DPO panel requested the IPB to provide the IP 71152 feedback forms it has received from the Regional Offices. The panel reviewed these forms. Currently, the Regions have expressed concerns related to conflicts between IP 71152 and IP 71111.9 in the area of post maintenance testing, conduct of the SCWE portion of the procedure, follow-up on Non-Cited Violations, and the use of a vertical slice approach to steer sample selection.

The DPO Panel discussed with the IPB, the plans the IPB has to assess the data it collected during the first year of the RROP implementation and how the IPB intends to assess the resource implications. From its discussion with members of the IPB, the DPO panel ascertained that the self-assessment process of RROP will evaluate several factors and that program changes will be considered based on the feedback the IPB receives from its internal review of the RROP and from the input it receives from counterpart meetings, lessons learned workshops, internal and external stakeholder surveys, and a program review by a panel established under the auspice of the Federal Advisory Committee Act.

3.6 DPO Panel Consensus on DPO Concerns

Based on the DPO panel's review of the DPO written record, its interviews and survey, the panel refocused its initial review approach and developed a consensus on the following four topical areas: the original issues cited in the originators DPO (inspection frequency, burden/safety reduction, lack of program office evaluation criteria), IP 71152 adequacy issues; broadness of DPV panel report; and its evaluation criteria and inspection resource utilization. Based on its review refocus, the DPO panel developed its findings (see Report Section 4.0) and its recommendations (see Report Section 5.0).

4.0 DPO PANEL FINDINGS

4.1 DPO Concern 1 - IP 71152 Annual Frequency

The DPO originators expressed a concern with the IP 71152 annual frequency being an unnecessary burden on a licensee and that this increase in burden results in an impact on plant safety (see DPO Concern 2). In addition, the originators expressed that the annual frequency does not afford the licensee sufficient time for corrective actions to take place. The originators are concerned that the annual frequency would not allow inspectors to measure the effects of corrective actions to preclude recurrence of prior problems.

Panel Finding

The DPO panel acknowledges the originators' concerns associated with the annual frequency of PI&R inspections and the assertion that it takes more than a year for some corrective actions to take place. The DPO panel, from its interviews and survey, found that there are varying views on what is the appropriate frequency for the PI&R inspections. From a broader perspective, the DPO panel determined that the inspection frequency may have to be discretionary in order to support Regional concerns related to licensee PI&R performance. Based on this finding, the DPO panel supports the recommendations made in the May 10, 2000, DPV panel report and the actions proposed by the May 31, 2000, Region IV Regional Administrator's response to the DPV originators concern related to inspection frequency.

4.2 DPO Concern 2 - Safety/Burden

The DPO originators expressed a concern that the annual PI&R inspection frequency results in an unnecessary burden on a licensee and that this burden results in an impact on plant safety.

Panel Finding

The DPO panel acknowledges that the previous PI&R inspection procedure, IP 40500, had a frequency of 18 months with a resource allocation of 192 hours (128 hours annualized). The frequency for its replacement inspection procedure, IP 71152, is annual and the resource allocation is estimated at 210 hours. This increase in inspection effort results in an increase in burden on the licensee.

However, it is the DPO panel's view that the RROP has resulted in an overall decrease in licensee burden. This burden reduction is a result of the changes to the inspection, assessment (e.g., suspension of the SALP process), and enforcement processes. In its survey of the Regional DRS and DRP Division Directors, the panel did not receive feedback that licensee senior managers were concerned with the burden associated with the PI&R inspections. In addition, the panel did not receive feedback from Regional Division Directors that licensees felt that the implementation of the PI&R inspections resulted in an impact on plant safety. The DPO panel did not find any indications that confirmed that these inspections were resulting in an unnecessary burden or resulting in an impact on plant safety.

4.3 DPO Concern 3 - Evaluation Criteria

The DPO originators expressed a concern regarding the appropriateness of the Program Office studying the impact of the increased frequency of PI&R inspections for a year without clear evaluation criteria.

Panel Finding

In SECY 00-0049, the IPB made a commitment to the Commission to address the resource implications of the RROP more fully in its report to the Commission on the first year of initial implementation (planned for June 2001). Currently, as part of its program assessment, IPB plans to perform a self-assessment of each RROP inspection and the resources utilized, solicit feedback from licensees, the regions, and industry on burden associated with the RROP, and based on this process, will make adjustments to the reactor oversight program. The IPB is currently in the process of developing the metrics it intends to use to evaluate the initial year of RROP implementation. The DPO panel finds that IPB, consistent with the commitment IPB made in SECY 00-0049 to the Commission, is developing its process for performing a self-assessment of the RROP and that any program adjustment requires considerable time. It is the opinion of the DPO panel that the IPB self-assessment efforts being planned and implemented will adequately address the necessary RROP adjustments in overall allocation of inspection resources, the resources to be applied to individual IPs, the scope and adequacy of individual IPs, and adjustments in IP frequencies. Therefore, the panel finds that no further actions are necessary to address this DPO concern.

4.4 IP 71152 Related Concerns

The DPO panel, as part of its review efforts, identified that several concerns were expressed by various individuals about the scope, content, and implementation of IP 71152. These concerns were related to the following:

SCWE

Regarding the scope of IP 71152, the regions expressed concern over the conduct of the SCWE portion of the procedure. The regions expressed questions concerning the IPs ability to effectively assess an SCWE. It was the view of the inspectors and some managers that the assessment of the SCWE

should be completed by residents and not the team assigned to perform the PI&R inspections.

Non-Cited Violations (NCV)

It was felt by some inspectors that IP 71152 leads them to look at the corrective actions associated with NCVs not related to PI&R. It was also felt that it would be more efficient to have the resident inspectors perform the NCV follow-up effort and not the team assigned to this inspection.

PI&R Inspection Implementation Process

Concerns were expressed regarding consistency of implementation and the variability of resources being applied. Specifically, the variability of the inspectors (generalist versus specialist) may yield inconsistent results. Three of the regions scheduled a 2-week onsite inspection while the remaining region scheduled a 1-week onsite inspection. DRP leads the PI&R inspections in Regions II and III and DRS leads these inspections in Regions I and IV. Region III conducts its inspection using a back-to-back onsite approach. Some regions use a Senior Resident Inspector and a Resident Inspector that are from a different site on the team in order to accomplish the objectivity inspection goals. Region I schedules an onsite preparation week for the team leader and a 1-week onsite inspection by a Plant Support Inspector. Region IV primarily uses inspectors from its Operations Branch and supplements its team with DRP project engineers.

Scope of Guidance

It was the view of some inspectors that they were not comfortable with assessing the adequacy of the PI&R program through the implementation of the current IP 71152 procedure. In addition, it was the view of some inspectors that the IP lacked procedural measures on how to judge the adequacy of a PI&R program. The inspectors suggested that the procedure be revised to focus on evaluating problems/issues identified from within and outside the organization and determine their potential risk significance against the SDP. It was also the opinion of some inspectors that a PI&R program is as good as the SDP color determination associated with an open problem or set of problems in the PI&R program inventory and that the IP should assess the PI&R program ability to focus on the right set of conditions to fix or resolve.

Desk Guide

One region found it necessary to develop a desk guide for IP 71152. The purpose of this desk guide is to clarify what is required by the procedure and provide the basic process for planning and conducting PI&R inspections.

Cornerstones and Risk

The procedure requires that the inspection sample should be picked from areas associated with the cornerstones. It was the opinion of some inspectors that the

procedure should be changed to address the PI&R efforts related to identifying and correcting potential safety significant conditions.

5.0 RECOMMENDATIONS

- 1. The DPO panel recommends no immediate change to the IP 71152 inspection frequency but notes that the various points discussed in this report be considered in the formal assessment of the first year implementation of the RROP and the June 2001 report to the Commission.**
- 2. The DPO panel supports the observations and recommendations made by the DPV panel and recommends that they be implemented. Specifically, the following DPV panel recommendations relate to the NRR's self-assessment of the RROP and its initial first year of implementation:**
 - NRR should assess the results of each inspection as a function of expended resources.**
 - NRR should adjust inspection scope and/or inspection frequency based on results of inspection assessment and burden on the licensee.**
 - The regions should assist NRR by providing input to the assessment based on experience.**
 - NRR should review the availability of resources from other regions to supplement Region IV inspection resources.**
- 3. The IP 71152 concerns identified in Section 4.4 of this report should be referred to the IPB for resolution.**



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 2, 2000

MEMORANDUM TO: Howard F. Bundy, Senior Operations Engineer, Region IV
Gary W. Johnston, Senior Operations Engineer, Region IV
Michael Murphy, Senior Operations Engineer, Region IV
Stephen F. McCrory, Senior Operations Engineer, Region IV
Thomas F. Stetka, Senior Operations Engineer, Region IV

FROM:

William D. Travers
Executive Director for Operations

SUBJECT: DIFFERING PROFESSIONAL OPINION - FREQUENCY OF PROBLEM
IDENTIFICATION AND RESOLUTION (PI&R) INSPECTIONS

By memorandum dated June 15, 2000, you initiated a Differing Professional Opinion (DPO) concerning the frequency of PI&R inspections pursuant to a Differing Professional View (DPV) on the same subject. On June 28, 2000, I tasked Mr. John Zwolinski, Director, Division of Licensing Project Management, Office of Nuclear Reactor Regulation (NRR), to chair an ad-hoc panel to review the concerns expressed in your DPO. The DPO panel completed its review of your concerns and the report from the panel is attached.

As you are aware, NRR has been tasked to perform an overall assessment of the revised reactor oversight program (RROP) after the first year of initial implementation. The Inspection Program Branch (IPB) of NRR will make changes to the program based the results of its own self-assessment, the lessons learned during this first year of initial implementation, and internal and external stakeholder feedback. In addition, the staff intends to address the resource implications of the RROP more fully in a report to the Commission on the first year of initial implementation, currently planned for June 2001.

I have reviewed the report from the DPO panel and their recommendations. The DPO panel did not find indications that the PI&R inspections were resulting in an unnecessary burden on licensees or impacting plant safety. Based on my review of your concerns and the facts presented in their report, I agree with the recommendation of the DPO panel not to immediately change the inspection frequency of Inspection Procedure (IP) 71152. By memorandum, I have forwarded the DPO report to NRR for consideration of the recommendations during their self-assessment of the first year implementation of the RROP.

I want to thank each of you for bringing your concerns about the frequency of the PI&R inspections to my attention. As a result of your concerns and the independent reviews of your issues by the DPV and DPO panels, several additional insights surfaced related to the scope and implementation of PI&R inspections. These insights provided good feedback for integration into the RROP self-assessment process being performed by IPB and should help to improve how we perform and focus our PI&R inspections.

If you should have any further questions concerning the actions to resolve your DPO, please feel free to contact Tony McMurtray, EDO coordinator for Region IV, at (301) 415-8709.

Attachment: As stated

cc: F. Miraglia, DEDO
S. Collins, NRR
R. Zimmerman, NRR
B. Sheron, NRR
J. Johnson, NRR
J. Zwolinski, NRR
P. Madden, NRR
Ellis Merschoff, RIV
C. Christensen, RII
M. Runyan, RIV

Mark
Isabella

2

If you should have any further questions concerning the actions to resolve your DPO, please feel free to contact Tony McMurtray, EDO coordinator for Region IV, at (301) 415-8709.

Attachment: As stated

cc: F. Miraglia, DEDO
S. Collins, NRR
R. Zimmerman, NRR
B. Sheron, NRR
J. Johnson, NRR
J. Zwolinski, NRR
P. Madden, NRR
Ellis Merschoff, RIV
C. Christensen, RII
M. Runyan, RIV

DISTRIBUTION:

EDO r/f

ROPMS r/f

DEDR R/F

TMcMurtray

G20000320 DWoodend, HR

DOCUMENT NAME: P:\DPO_EDO_LETTER.WPD

Accession #: ML003749647

To receive a copy of this document, indicate in the box: "C" = Copy without enclosures "E" = Copy with enclosures
"N" = No copy

OFFICE	ROPMS ^{ad}	E	ROPMS ^{may}	DEDR	EDO
NAME	AMcMurtray		MSatorius	FMiraglia	WTravers
DATE	09/2/00		09/2/00	09/2/00	09/2/00

OFFICIAL RECORD COPY