



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

August 30, 2004

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-04-0111

TITLE: RECOMMENDED STAFF ACTIONS  
REGARDING AGENCY GUIDANCE IN THE  
AREAS OF SAFETY CONSCIOUS WORK  
ENVIRONMENT AND SAFETY CULTURE

The Commission (with Chairman Diaz approving and Commissioners McGaffigan and Merrifield approving in part and disapproving in part) acted on the subject paper as recorded in the Staff Requirements Memorandum (SRM) of August 30, 2004.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in black ink, reading "Annette Vietti-Cook".

Annette L. Vietti-Cook  
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
OGC  
EDO

VOTING SUMMARY - SECY-04-0111

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. DIAZ	X				X	7/30/04
COMR. McGAFFIGAN	X	X			X	8/18/04
COMR. MERRIFIELD	X	X			X	7/22/04

COMMENT RESOLUTION

In their vote sheets, Chairman Diaz approved and Commissioners McGaffigan and Merrifield approved in part and disapproved in part the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on August 30, 2004.

## Commissioner Comments on SECY-04-0111

### Chairman Diaz

I approve this document in part as follows:

#### 1. Industry Guidance on a Safety Conscious Work Environment (SCWE):

I approve Option 1A - Continue to engage stakeholders by noticing the attached draft document in the Federal Register for a brief comment period. This option is responsive to stakeholders' requests to allow further comment before issuance.

#### 2. Industry Guidance on Safety Culture:

I approve option 2A - Revise the 1989 Policy Statement. The 1989 policy statement focused on control room operations. It is worthwhile to update that statement and broaden the focus. The staff should consider broadening the scope by addressing some of the attributes of "Safety Management", especially where these attributes can contribute to making safety culture more measurable and more clearly connected to safety performance. Good discussions on Safety Management can be found in INSAG-13, "Management of Operational Safety in Nuclear Power Plants", and in my speech to INPO on November 6, 2003, which is available on the NRC website under Commission speeches.

#### 3. NRC Inspector Guidance on SCWE and Safety Culture:

I approve Option 3B - Enhance the ROP treatment of cross-cutting issues to more fully address Safety Culture, to allow for more agency action as the result of the identification of a cross-cutting issue, and develop training for inspectors on this methodology. Considering the discussion above on Safety Management, the staff should consider if the cross-cutting issue may be more appropriately labeled Safety Management than Safety Culture. The staff should not use surveys of licensee personnel, but rather should rely on inspector observations and other indicators already available to the NRC.

I am not in favor of any significant resource expenditures on the other options. Focusing staff resources on those options that are most targeted toward the desired results should expedite the implementation of these enhancements. The staff should continue to monitor developments by foreign regulators as directed by the SRM for SECY-02-0166, but should limit the expenditure of resources in this area.

### Commissioner McGaffigan

Before voting on the individual items in this paper. I would note that, while the paper outlined a series of options, it did not provide a very complete discussion of some of those options. For example, the paper lacks any real discussion of the limitations of attempts to regulate safety culture abroad and at times implies that there are existing international standards that we should emulate. I am aware of no such standards. Commissioner Merrifield's vote does a far better job than the paper in discussing international practice. Second, the paper contains no discussion of our allegation program, although it has probably led to the most NRC

interventions on safety culture matters, for example recently at Salem/Hope Creek and earlier at plants such as South Texas. The allegation program clearly provides one indicator, albeit an imperfect one, of potential safety culture issues. Omission of any discussion of it is a major gap in the paper. Finally, the paper has no discussion of recent INPO initiatives on safety culture. INPO clearly is on the right track. For example, I believe that INPO, rather than NRC, has far more credibility when it comes to inspecting the financial incentives of senior plant managers to insure that safety is given priority over strictly economic matters (such as keeping outages short). Again Commissioner Merrifield's vote has a better discussion of INPO's initiatives than does the paper.

Some stakeholders seem to believe that regulating safety culture will provide a leading indicator of declining licensee performance. If it were easy to develop such leading indicators, it would have been done a long time ago. As Ed Jordan, then Deputy Executive Director for Operations, and former Commissioner Ken Rogers warned the Commission in briefings in the spring of 1997, the NRC has long been searching for leading indicators of declining performance. But each time what appeared initially to be a promising leading indicator just has not proven valid when tested in a broader context.

I believe that the reactor oversight process (ROP), which has been in effect now for over four years, is an enormous improvement over the SALP/watch list processes that preceded it. It has been effective in identifying some licensees' declining performance before serious issues arose, most notably at Cooper and more recently at Perry. That is clearly our goal, a goal we fell short of at Davis-Besse. If we can make improvements to the ROP that will help us get out in front of problems, we should clearly do so. Indeed, we have established a process precisely to consider ROP enhancements. But we should be under no illusion that it will be easy to improve the ROP to the point that it will catch all significant problems at an early stage. Quite the opposite is the reality.

Turning to the specific issues raised by staff I disapprove most of the staff's recommended options and approve some in part as follows:

1. Industry Guidance concerning SCWE

I join my fellow Commissioners in rejecting the staff's recommendation for option 1B, to issue the attachment as a RIS without further public comment. Instead, I join them in approving Option 1A. Further, I attach numerous edits to this document, mostly grammatical, for the staff's consideration before it is issued for comment.

2. Industry Guidance or Safety Culture

I join my fellow Commissioners in not approving the staff's proposed Option 2B. I also do not support Option 2A because we already have too full a plate in the rulemaking area, and revising the policy statement is well down my list of rulemaking priorities. I join Commissioner Merrifield in essentially supporting Option 2C. As he notes, INPO, in response to the Davis-Besse event, has issued a safety culture guidance document that has the right focus. I absolutely do not have the staff's concern that industry initiatives will prove too "limited or move in directions not in accordance with Commission preferences and/or internationally accepted standards." There

are no internationally accepted standards and there is absolutely no evidence the industry's efforts will be limited or not in accord with Commission preferences.

### 3. NRC Inspection Guidance on SCWE and Safety Culture

I approve exploring the feasibility of Option 3B within the context of our established procedures for improving the ROP, which include stakeholder involvement, subject to the following comments. I join Commissioner Merrifield in expressing concern about survey tools in non-professional hands. However, I do not agree with Commissioner Merrifield that a specific safety culture evaluation is appropriate for every plant that enters Column 3 of the action matrix. Such an evaluation may be appropriate in such circumstances, but it also may not be, depending on the nature of the inspection findings/performance indicator data that led to the Column 3 status.

I also assume that this option will look at enhancements to NRC's handling of the existing problem identification and resolution (PI&R) cross-cutting issue. It strikes me that PI&R problems are potentially an objective indicator of safety culture weaknesses. Doing additional inspections at plants that have PI&R weaknesses, even if they otherwise are in Columns 1 and 2 of the action matrix, is entirely appropriate and the most objective way that I am aware of to address safety culture problems in regulatory space.

Like the Chairman and Commissioner Merrifield, I support monitoring foreign regulator efforts (Option 3C) within previously programmed resources, consistent with the SRM for SECY-02-0166.

I do not support the other options at this time, although Option 2C, which I do support may in time lead to Option 3D, which I would support if that were the result.

Let me conclude by responding to a suggestion in the last paragraph of the paper that the Commission may need to reconsider its determination not to initiate rulemaking in the subjective area of safety culture, depending on the Commission decisions on options in the paper. I see no need for such reconsideration. The fact is that we do not currently know how to draft such a rule or how to implement such a rule. Launching rulemaking in the absence of such fundamental building blocks would be a colossal waste of resources.

#### Commissioner Merrifield

I want to commend the staff for bringing forward a wide-range of options for the Commission to consider for encouraging licensees to establish a Safety Culture, including an environment where employees feel free to raise safety issues. I approve in part, and disapprove in part, the staff's recommendations for the following reasons.

#### 1. Industry Guidance concerning a Safety Conscious Work Environment (SCWE)

I recommend Option 1A, to notice the staff's guidance document, "Establishing and Maintaining a Safety Conscious Work Environment," in the Federal Register for a brief comment period. I do not approve the staff's recommendation to issue the document as a Regulatory Information Summary without further comment (1B). As the staff points out, to not allow for public comment would be inconsistent with the staff's indications at a February 2004 public meeting. At that time, only a detailed outline of the staff's proposal was available to the public and industry to

review. Having had requests for further public comment and giving an indication that it would be provided, to short cut the public's and industry's participation now would be inconsistent with our strategic goal of openness and would significantly detract from the staff's previous efforts to encourage input from the public and industry in developing this document.

Although I am recommending that the document be issued for public comment, I do not recommend inviting further discussion on whether to issue the document. It should be clear to our stakeholders that the comments should address the content of the document only.

As for the content of any notice attached to the document, I recommend that it explicitly reflect the connection between a Safety Conscious Work Environment and Safety Culture. At a minimum the staff should explain as it did in the paper that SCWE is an attribute of Safety Culture. The Commission is taking steps to address other attributes of Safety Culture as well, but it is important to communicate to our stakeholders our expectation that improving SCWE programs will result in strengthening the Safety Culture of our licensees.

## 2. Industry Guidance on Safety Culture

At this time, I do not support the staff's recommendation to develop another guidance document on Safety Culture, in addition to the document on SCWE, Option 2B. For matters other than SCWE, I believe our resources would be better spent on efforts to improve our programs for oversight of licensees' Safety Culture. As I discuss in further detail below, we should ensure that the staff has the necessary tools to examine a licensee's Safety Culture and identify and resolve issues in this area before they lead to safety problems. Because the industry took corrective action itself in the wake of Davis-Besse to provide licensees with guidance on Safety Culture, NRC's further guidance on these same issues would seem to be redundant. For example, last November INPO issued a preliminary version of *Principles for a Strong Nuclear Safety Culture*.<sup>1</sup>

Keeping in mind that the industry's efforts may be a work in progress, it nevertheless seems that the industry is on the right track to assist licensees in building a strong Safety Culture. For example, the principles discussed by industry are:

1. Nuclear safety is everyone's responsibility.
2. Leaders demonstrate commitment to safety.
3. Trust permeates the organization.
4. Decision-making reflects safety first.
5. Nuclear is recognized as different.
6. A "what if" approach is cultivated.
7. Organizational learning is embraced.
8. Nuclear safety undergoes constant examination.<sup>2</sup>

As industry works to develop guidance in this area, the NRC must use its resources to ensure that it has programs and procedures in place that encourage licensees to establish strong Safety Culture programs.

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<sup>1</sup> *Sorting Out Safety Culture, The Nuclear Professional*, Second Quarter 2004, p. 28.

<sup>2</sup> Id.

### 3. NRC Inspector Guidance on SCWE and Safety Culture

I agree with the staff's recommendations to enhance the Reactor Oversight Process (ROP) treatment of cross-cutting issues to more fully address Safety Culture and to develop training for inspectors on this methodology, Option 3B, subject to the following comments.

In Option 3B the staff discusses tools for inspectors to use in making observations, such as surveys. After significant discussions with our foreign counterparts, I remain very concerned about the use of inspector surveys of Safety Culture. I am aware that our foreign counterparts considered using inspector surveys, but these surveys are mired in subjective determinations. I am not aware of any that are now being used. Indeed, our counterparts at the Canadian Nuclear Safety Commission after conducting a pilot project using inspector surveys, concluded that surveys were more appropriately conducted by licensees rather than by the regulator. As we have seen with our previous SALP program, the more subjective the observation, the more difficult it is to make conclusions, respond to questions from the licensee and the public, and to use such conclusions as a basis for further regulatory action. Consequently, the staff should develop tools that allow inspectors to rely on more objective findings. Most important, the staff should ensure that the inspectors are properly trained in the area of Safety Culture. The staff should consider developing an enhanced training program for its inspectors and resident inspectors on Safety Culture that uses both insights from INPO's work in this area and insights from the international community.

As a further enhancement to the ROP, I recommend that the staff include as part of its enhanced inspection activities for plants in the Degraded Cornerstone Column (referred to as Column Three) of the ROP Action Matrix, a specific evaluation of the licensees Safety Culture. The staff should interact with our stakeholders to develop a process for conducting the evaluation. To be clear, I am not suggesting that the staff's methodology for using the treatment of cross-cutting issues to more fully address Safety Culture be directed only at Column Three plants. A plant in any column may show signs of a weak Safety Culture. However, for plants in Column Three, I am recommending a specific evaluation.

I agree in part with Option 3C, to continue to monitor and work with the international community. I agree that the staff should continue to monitor and work with the international community to gain insight on Safety Culture issues, Option 3C. These insights should be used to better train our inspectors on more objective indications of Safety Culture issues. However, this effort should be conducted within existing resources.

I do not agree with staff's recommendation of Option 3D, to engage with industry to develop an industry process to assess the Safety Culture at individual facilities, with NRC oversight of this process. At this time NRC oversight of the industry's efforts in this area does not appear necessary, but the staff should continue to monitor the efforts of INPO and the industry. As industry has a substantial program in process, our resources would be better spent on enhancing the ROP and training our inspectors.

I agree with the staff's recommendation to develop criteria for and possible intervention strategies for the NRC to take when downward trends in the area of SCWE and/or other facets of Safety Culture already exist and the licensee has failed to take appropriate action, Option 3E.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: CHAIRMAN DIAZ  
SUBJECT: **SECY-04-0111 - RECOMMENDED STAFF ACTIONS  
REGARDING AGENCY GUIDANCE IN THE AREAS OF  
SAFETY CONSCIOUS WORK ENVIRONMENT AND  
SAFETY CULTURE**

Approved XX Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

See attached comments.

Chris J. Diaz  
SIGNATURE

July 30, 04  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_



## Comments of Chairman Diaz on SECY-04-0111

I approve this document in part as follows:

### 1. Industry Guidance on a Safety Conscious Work Environment (SCWE):

I approve Option 1A - Continue to engage stakeholders by noticing the attached draft document in the Federal Register for a brief comment period. This option is responsive to stakeholders' requests to allow further comment before issuance.

### 2. Industry Guidance on Safety Culture:

I approve option 2A - Revise the 1989 Policy Statement. The 1989 policy statement focused on control room operations. It is worthwhile to update that statement and broaden the focus. The staff should consider broadening the scope by addressing some of the attributes of "Safety Management", especially where these attributes can contribute to making safety culture more measurable and more clearly connected to safety performance. Good discussions on Safety Management can be found in INSAG-13, "Management of Operational Safety in Nuclear Power Plants", and in my speech to INPO on November 6, 2003, which is available on the NRC website under Commission speeches.

### 3. NRC Inspector Guidance on SCWE and Safety Culture:

I approve Option 3B - Enhance the ROP treatment of cross-cutting issues to more fully address Safety Culture, to allow for more agency action as the result of the identification of a cross-cutting issue, and develop training for inspectors on this methodology. Considering the discussion above on Safety Management, the staff should consider if the cross-cutting issue may be more appropriately labeled Safety Management than Safety Culture. The staff should not use surveys of licensee personnel, but rather should rely on inspector observations and other indicators already available to the NRC.

I am not in favor of any significant resource expenditures on the other options. Focusing staff resources on those options that are most targeted toward the desired results should expedite the implementation of these enhancements. The staff should continue to monitor developments by foreign regulators as directed by the SRM for SECY-02-0166, but should limit the expenditure of resources in this area.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MCGAFFIGAN  
SUBJECT: **SECY-04-0111 - RECOMMENDED STAFF ACTIONS  
REGARDING AGENCY GUIDANCE IN THE AREAS OF  
SAFETY CONSCIOUS WORK ENVIRONMENT AND  
SAFETY CULTURE**

Approved  *right* Disapproved  *in part* Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

See attached comments and edits.

*Edward M. McGaffigan*  
\_\_\_\_\_  
SIGNATURE

*August 18, 2004*  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

## Commissioner McGaffigan's Comments on SECY-04-0111

Before voting on the individual items in this paper. I would note that, while the paper outlined a series of options, it did not provide a very complete discussion of some of those options. For example, the paper lacks any real discussion of the limitations of attempts to regulate safety culture abroad and at times implies that there are existing international standards that we should emulate. I am aware of no such standards. Commissioner Merrifield's vote does a far better job than the paper in discussing international practice. Second, the paper contains no discussion of our allegation program, although it has probably led to the most NRC interventions on safety culture matters, for example recently at Salem/Hope Creek and earlier at plants such as South Texas. The allegation program clearly provides one indicator, albeit an imperfect one, of potential safety culture issues. Omission of any discussion of it is a major gap in the paper. Finally, the paper has no discussion of recent INPO initiatives on safety culture. INPO clearly is on the right track. For example, I believe that INPO, rather than NRC, has far more credibility when it comes to inspecting the financial incentives of senior plant managers to insure that safety is given priority over strictly economic matters (such as keeping outages short). Again Commissioner Merrifield's vote has a better discussion of INPO's initiatives than does the paper.

Some stakeholders seem to believe that regulating safety culture will provide a leading indicator of declining licensee performance. If it were easy to develop such leading indicators, it would have been done a long time ago. As Ed Jordan, then Deputy Executive Director for Operations, and former Commissioner Ken Rogers warned the Commission in briefings in the spring of 1997, the NRC has long been searching for leading indicators of declining performance. But each time what appeared initially to be a promising leading indicator just has not proven valid when tested in a broader context.

I believe that the reactor oversight process (ROP), which has been in effect now for over four years, is an enormous improvement over the SALP/watch list processes that preceded it. It has been effective in identifying some licensees' declining performance before serious issues arose, most notably at Cooper and more recently at Perry. That is clearly our goal, a goal we fell short of at Davis-Besse. If we can make improvements to the ROP that will help us get out in front of problems, we should clearly do so. Indeed, we have established a process precisely to consider ROP enhancements. But we should be under no illusion that it will be easy to improve the ROP to the point that it will catch all significant problems at an early stage. Quite the opposite is the reality.

Turning to the specific issues raised by staff I disapprove most of the staff's recommended options and approve some in part as follows:

1. Industry Guidance concerning SCWE

I join my fellow Commissioners in rejecting the staff's recommendation for option 1B, to issue the attachment as a RIS without further public comment. Instead, I join them in approving Option 1A. Further, I attach numerous edits to this document, mostly grammatical, for the staff's consideration before it is issued for comment.

2. Industry Guidance or Safety Culture

I join my fellow Commissioners in not approving the staff's proposed Option 2B. I also do not support Option 2A because we already have too full a plate in the rulemaking area, and revising the policy statement is well down my list of rulemaking priorities. I join Commissioner Merrifield in essentially supporting Option 2C. As he notes, INPO, in response to the Davis-Besse event, has issued a safety culture guidance document that has the right focus. I absolutely do not have the staff's concern that industry initiatives will prove too "limited or move in directions not in accordance with Commission preferences and/or internationally accepted standards." There are no internationally accepted standards and there is absolutely no evidence the industry's efforts will be limited or not in accord with Commission preferences.

3. NRC Inspection Guidance on SCWE and Safety Culture

I approve exploring the feasibility of Option 3B within the context of our established procedures for improving the ROP, which include stakeholder involvement, subject to the following comments. I join Commissioner Merrifield in expressing concern about survey tools in non-professional hands. However, I do not agree with Commissioner Merrifield that a specific safety culture evaluation is appropriate for every plant that enters Column 3 of the action matrix. Such an evaluation may be appropriate in such circumstances, but it also may not be, depending on the nature of the inspection findings/performance indicator data that led to the Column 3 status.

I also assume that this option will look at enhancements to NRC's handling of the existing problem identification and resolution (PI&R) cross-cutting issue. It strikes me that PI&R problems are potentially an objective indicator of safety culture weaknesses. Doing additional inspections at plants that have PI&R weaknesses, even if they otherwise are in Columns 1 and 2 of the action matrix, is entirely appropriate and the most objective way that I am aware of to address safety culture problems in regulatory space.

Like the Chairman and Commissioner Merrifield, I support monitoring foreign regulator efforts (Option 3C) within previously programmed resources, consistent with the SRM for SECY-02-0166.

I do not support the other options at this time, although Option 2C, which I do support may in time lead to Option 3D, which I would support if that were the result.

Let me conclude by responding to a suggestion in the last paragraph of the paper that the Commission may need to reconsider its determination not to initiate rulemaking in the subjective area of safety culture, depending on the Commission decisions on options in the paper. I see no need for such reconsideration. The fact is that we do not currently know how to draft such a rule or how to implement such a rule. Launching rulemaking in the absence of such fundamental building blocks would be a colossal waste of resources.



## INTRODUCTION

The guidance in this document is intended to augment existing information that was communicated in the 1996 Policy Statement. The expanded elements of a SCWE summarized within this document were developed utilizing information obtained from reactive inspections of problematic licensee programs as well as reviews of successful progressive SCWE programs, and insights obtained during discussions with nuclear industry professionals, including individuals who provide training to the industry on the subject and attorneys who have represented licensees and whistleblowers in proceedings.

The NRC recognizes that some of the practices outlined in this guidance may not be practicable or appropriate for every NRC licensee or contractor depending on the existing work environment and/or the size or complexity of the licensed activities. In addition, practices not included in this guidance may be effective in establishing and maintaining a SCWE. The NRC staff continues to emphasize that licensees are responsible for establishing and maintaining a SCWE and implementation of the following guidance may not improve a SCWE without additional efforts by site management. However, the NRC does believe that the elements in this guidance could be helpful to NRC licensees and their contractors when developing or enhancing existing SCWE programs, or when attempting to identify and correct potential problems within a program.

## **ELEMENTS OF A SAFETY CONSCIOUS WORK ENVIRONMENT**

### Effective Processes for Problem Identification and Resolution

Effective processes for problem identification and resolution are essential to ensuring the safe use of nuclear materials and operation of facilities. Attributes of the work environment that encourage individuals to look for and articulate safety concerns and effectively and efficiently address and resolve the concerns raised, are discussed in the following guidance.

#### **A. Employees are Encouraged to Raise Safety Concerns**

##### **SCWE Policy**

A-SCWE Policy statement which: (a) is applicable to employees and contractors; (b) asserts that it is everyone's responsibility to promptly raise concerns; and (c) retaliation for doing so will not be tolerated, helps establish a SCWE and communicate senior management's expectations for maintaining it. In addition, the policy may include:

*makes clear that*

- A statement that, to the extent appropriate, employees are allowed and encouraged to use work hours to report concerns;
- Sanctions for retaliation by supervisors, managers, or peers;
- Expectations for management behavior that fosters employee confidence in raising concerns;
- Information on the various avenues available for raising concerns; and
- The rights of employees to raise concerns externally.

### SCWE Training

*principles* SCWE training for managers, supervisors, and employees helps reinforce the principals outlined in the licensee's SCWE Policy. The scope of the training given to managers and employees should include applicable laws, regulations and policies underlying SCWE expectations including an understanding of:

- What, besides raising safety concerns, constitutes a "protected activity."

The term "protected activity" has been broadly interpreted by the Department of Labor and the US Courts. Protected activity is defined by NRC regulation as including, but not limited to:

- Providing the Commission or employer information about alleged or possible violations of the Atomic Energy Act, the Energy Reorganization Act or requirements imposed under either statute;
- Refusing to engage in any practice made unlawful under either statute or the requirements, if the employee has identified the alleged illegality to the employer;
- Requesting the Commission to institute action against the employer for the administration or enforcement of these requirements;
- Testifying in any Commission proceeding, or before Congress, or at any Federal or State proceeding regarding a provision of either statute;
- Assisting or participating in, or *being* about to assist or participate in, these activities.

- What constitutes an "adverse action."

An "adverse action" is generally defined as an adverse change of the terms, conditions, or benefits of the employee's work. Adverse employment actions may include changes in employment status,

regardless of whether the individual's pay is affected, and threats to employment.

- What constitutes "retaliation" under the NRC's regulations.

An adverse action is deemed retaliatory if it is taken, in whole or in part, because the individual was engaged in a protected activity.

The scope of the training given should also include consequences for deviations from applicable laws, regulations and policies underlying SCWE expectations.

The training for should identify appropriate gateways for employees and contractors to identify concerns, i.e., manager, quality assurance, corrective action programs, appeal processes, alternative processes for raising concerns, if applicable (e.g., Employee Concerns Program/Ombudsman), NRC and DOL. The training should include a description of how the programs function, and the role for a manager within each program. *programs*

Expectations for management behavior should be included in the training. For example, managers should be expected to make themselves available to the workforce by various means, including an "open-door" policy in the office and when a manager is in the field. The expectations might include the need for the manager to be sensitive to an employee's potential reluctance to raising concerns and, therefore, the need to protect their identity or the identity of others involved. Basic listening skills, effective ways to seek input, and expressing appreciation to those who raise concerns, are other behaviors one might expect of managers. Management should be knowledgeable of and periodically use various media instruments to communicate their SCWE principles. Management should establish timeliness goals for responding to concerns, which consider safety significance, and provide periodic updates to the individual who identified a concern. A manager should evaluate the effectiveness of their responses to determine whether they adequately addressed the employee's concerns.

Management should be sensitive to ensure operational or maintenance goals do not result in supervisors being less receptive to safety concerns, particularly those which may result in significant costs or schedule delays?

Finally, training for managers, in particular, should include information to help them identify and address signs of a "chilled environment," that is, one in which employees are afraid to raise safety concerns for fear of retaliation.

Managers who model positive traits of availability, receptiveness, sensitivity, encouraging communications, timeliness, and responsiveness associated with a SCWE will promote employee confidence in identifying and resolving concerns. Managers who have exhibited success in this area should consider training or mentoring other managers in an effort to duplicate the success.

Similarly, expectations for employee behavior, should also be included in their training. Consider emphasizing the following employee behaviors during training:

- Individual responsibility for reporting concerns;
- Clear communication of the concern and confirmation of understanding with the person receiving the concern;
- Willingness to share suggested solutions to concerns and participate (or not) in their resolution;
- Follow-up to ensure concern is adequately addressed; and,
- Need for every employee to demonstrate respect for others who identify concerns.

?  
WHAT MESSAGE IS THIS?

Initial training of recently hired employees or recently promoted managers should be conducted as soon as practicable and refresher training for existing staff should be conducted annually or more frequently, as determined by the needs and complexity of the organization. Annual refresher training for employees and managers should review key points from initial training and include lessons learned, as appropriate, from successes and/or problem areas.

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### SCWE Incentive Programs

An incentive program can be developed which provides recognition/rewards for individual/team efforts in identifying and/or resolving safety issues. In addition, implementation of site-wide bonus/incentive programs which reflect safety objectives over production goals may also encourage reporting of safety concerns. However, some care should be taken to ensure that incentive programs do not inadvertently discourage reporting concerns, e.g., some employees may not want recognition.

While it is important to hold employees accountable for personnel errors, licensee personnel management practices, to the extent practicable, should consider that actions against personnel who self report errors can, in some circumstances, discourage employees from raising concerns, near misses, etc. Consider discussing self-identification and prompt, effective corrective actions as mitigating circumstances for consideration in addressing personnel errors.

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**B. Management is Promptly Notified of Concerns** P Aside from the practices discussed above concerning policies, training, and incentive programs designed to create a work environment where employees feel free to raise safety concerns without fear of retaliation, there are other behaviors and processes which may help employees promptly identify and notify management of concerns. Employees and management that demonstrate an open and questioning attitude by asking "why" and "what if" type questions help to ensure concerns are promptly identified. Processes for identifying concerns should be accessible and user-friendly. A



corrective action program which is flexible in its use of paper forms and/or terminals, conveniently placed throughout the facility, also helps ensure prompt notification of safety concerns. An accessible and approachable management team further motivates employees to report concerns including communications that ensure an understanding of the concerns prior to their proposed resolution and inspection. As appropriate, employees should be allowed and encouraged to spend needed work hours to report concerns.

C. Concerns are Promptly Prioritized and Reviewed Safety should be a primary factor in the concern prioritization scheme and in determining the breadth and depth of the evaluation. Effective communication plans should ensure the sharing of information between affected departments so that the identified concern's potential impact on safety can be appropriately assessed. In addition, management and employees should develop expectations concerning timeliness to complete the evaluation and resolution of issues. The process for screening issues should include a review for operability and reportability as applicable. For significant conditions adverse to quality, the evaluation should be sufficient to identify the root and contributing causes of the issue. In addition, the root cause analysis should address both the extent of the condition and the cause of the issue.

D. Concerns are Appropriately Resolved Timeliness of the corrective actions should be commensurate with the safety significance of the issue. Processes should be in place to ensure that appropriate actions are taken in response to all conditions adverse to quality. For significant conditions adverse to quality, corrective actions should be taken to address the root causes, contributing causes, and the extent of the condition caused by the identified concern.

E. Feedback is Provided to the Concerned Individual Feedback should be provided at appropriate points during the concern resolution process. Upon receipt of the concern, the individual receiving the information may need to discuss the concern with the employee raising the concern to ensure understanding of issue and its safety significance. Additional feedback may be necessary during the evaluation when it is apparent that resolution may take longer than anticipated. Follow-up with the concerned individual when the evaluation is complete is important to share proposed actions to address the issue, if appropriate. The feedback process which is sufficiently flexible to permit a concerned individual who wants anonymity to obtain feedback, can be most effective.

F. Appeal Process for Concerns An appeal process which facilitates an additional review to ensure issues were thoroughly addressed (e.g., differing professional opinion or alternate dispute resolution processes) can provide added assurance that concerns are appropriately resolved.

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**G. Self-Assessments of Problem Identification & Resolution (PI&R) Processes**

It is a good practice to periodically evaluate the adequacy and timeliness of responses, as well as the satisfaction of the concerned individual with the response and process. In addition, a self-assessment should address whether employees feel free to raise issues using the various processes employed by the licensee and whether these processes are viewed as effective, and why or why not. An assessment should include an appraisal of the effectiveness of the root cause analyses for significant issues and the effectiveness of associated corrective actions. Management should have a plan to promptly review the findings of such self assessments and implement appropriate corrective actions.

**H. An Alternative Process to Line Management**

to address the situation where an individual may wish to raise a concern to someone other than their management or through the corrective action program, an alternative process, such as an Employee Concerns Program, can be useful. Given the nature of many of the issues one may wish to raise outside of line management, such a process should ensure identity protection and/or anonymity to the extent appropriate. Such an alternative process should be accessible through multiple inputs, e.g. walk-ins, hot lines, drop boxes, etc. In considering the physical location of the personnel operating the alternative process, one should consider both its accessibility to the workforce as well as its visibility. An overly visible office may not allow for discreet visits. Personnel training programs, advertising posters, and facility news articles help provide notification of the process. Like concerns brought to the corrective action program, concerns brought to the alternative program must receive appropriate operability and reportability reviews and be properly prioritized utilizing safety as a primary factor for determining the breadth, depth, and timeliness of the evaluation. While independent from line organizations involved in the concerns, the process is most effective if directly accountable to senior management. Senior management provides appropriate support and resources including staffing and access to necessary documents and materials to conduct inspections. The process should provide timely feedback on the status and resolution of concerns, and status reports to senior management with analysis of program data and observations.

accessibility

**Tools to Assess the SCWE**

Information gathered from the following tools should be considered for program enhancements, training enhancements, coaching and counseling opportunities, organizational changes, and survey topic suggestions.

Not a sentence

**A. Lessons Learned** Periodically evaluate information from pertinent organizations and processes which may contribute to or negatively affect the SCWE to identify enhancements or adjustments to the organizations and processes. The organizations and processes with pertinent information may include: the primary process for raising concerns (e.g., Correction Action Program), an alternative

Evaluations: It may be useful to

process for raising concerns (e.g., Employee Concerns Program (ECP) or Ombudsman), Human Resources (regarding work environment concerns, etc.), legal counsel (regarding Department of Labor files, etc.) and/or Regulatory Affairs (regarding NRC findings or observations). Discussions about specific documentation or events should take into considerations privacy and attorney-client restrictions. Lessons learned from external organizations can also be useful.

- B. Benchmarking** - Participation in applicable industry forums or peer-group assessments of other SCWE programs, where ideas and practices are exchanged and various SCWE elements compared, can also provided valuable insights.
- C. Performance Indicators** - Parameters should be identified and monitored that help indicate the effectiveness of the SCWE training and problem identification and resolution processes. For example, the number and trend of NRC allegations compared to the number and trend of internally raised concerns may be an indication of employee willingness to raise concerns internally. Similarly, the percent of anonymous concerns raised may give insights into employee willingness to raise concerns without fear of retaliation.

An indication of licensee effectiveness in preventing retaliation claims may be indicated by the number and trend of NRC retaliation allegations compared to the number and trend of internally raised retaliation concerns.

Employees with a questioning attitude and a willingness and ability to raise safety concerns may be indicated by the comparison of risk significant concerns that are self-revealing, self-identified or externally identified by INPO, NRC, OSHA, etc.

Finally, the backlog and age of concerns may indicate a lack of effectiveness of processes for resolving concerns.

No single indicator is sufficient in identifying weaknesses in the SCWE, nor are there absolute measurements that indicate an unhealthy environment.

Nonetheless, monitoring the trends in various characteristics of the SCWE with performance indicators like those mentioned above and others provide some insights into the strengths and weaknesses of the SCWE at a site.

- D. Survey and Interview Tools** - Survey instruments and interview questionnaires implemented by organizations independent of the groups being surveyed or interviewed, can be useful tools and complement other tools used to assess the SCWE.

Pre-survey or pre-interview communications are a very important part of such a tool. Communications with the workforce prior to the implementation of the survey or interview should include a request for participation, the need for input,

protection of participant's identity, the intended use of gathered information, and the intent to share results with the workforce.

Regular employee business hours should be made available to conduct surveys or interviews.

The scope of SCWE surveys should include the following:

- Awareness of company policies and practices with regard to raising safety concerns and avenues available for raising concerns;
- Management behaviors encouraging the workforce to raise safety concerns;
- Workforce willingness to raise safety concerns;
- Effectiveness of the processes available (normal and alternative) for raising concerns;
- Management's ability to detect and prevent retaliation for raising safety concerns.

Space should be provided on surveys for written comments.

Survey or interview follow-up action plans should be developed to address findings that are specific to work groups and generic to the facility. In addition, management commitments should be made to share the results and action plans to address findings with the workforce. The results of survey or interviews may indicate employee beliefs, attitudes and satisfaction with key SCWE attributes, as well as ways to improve the SCWE.

E. **Direct Behavior Observations** Direct observations of individuals' behavior provides information regarding the effectiveness of any SCWE training. Management behaviors observed may indicate a supervisor's receptiveness and support to employees for raising concerns, including how such action is rewarded, etc. While direct observation of employees in the work environment can provide valuable insights into the employee's questioning attitude and willingness to challenge perceived unsafe behavior.

F. **Exit Interviews/Surveys** Exit interviews and surveys, conducted to facilitate the identification of safety issues from exiting employees, provide an opportunity to capture concerns an individual may not have been comfortable raising while working at the facility. These activities should be conducted while ensuring identity protection and include follow-up mechanisms for exiting employees who want to be informed of the resolution of their concerns.

G. **360-Degree Appraisals** Consideration should be given to the implementation of a "360-degree" appraisal program where employees are asked to provide feedback on manager SCWE behavior.

Improving Licensee Contractor Awareness of SCWE Principles

The Commission's long-standing policy has been and continues to be to hold its licensees responsible for compliance with NRC requirements, even if licensees use contractors for products or services related to licensee activities. Thus, licensees are responsible for ensuring that their contractors maintain an environment in which contractor employees are free to raise concerns without fear of retaliation. In considering whether enforcement action should be taken against licensees for contractor actions, the NRC considers, among other things, the reasonableness of the licensee's involvement and oversight of the contractor environment for raising concerns.

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A. Communicating Licensee SCWE Expectations to Contractors Licensee SCWE expectations of contractor responsibilities as they relate to creating and maintaining a SCWE should be communicated to contractors engaged in regulated activities. It should be the licensee's expectation that the contractors and their subcontractors are aware of applicable regulations. Furthermore, a licensee may want to communicate to its contractors and subcontractors that they expect them to demonstrate that either an effective program exists that a) prohibits discrimination of contractor employees for engaging in protected activity and b) fosters a SCWE, or adopt and comply with the licensee's SCWE program for their employees.

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B. Licensee Oversight of Contractor SCWE Activities Aside from communicating its SCWE-related expectations to their contractors, licensees may wish to oversee contractor SCWE-related activities. Such oversight may include:

- Reviewing contractor programs and processes to prohibit discrimination and foster a SCWE;
- Assessing the contractor management's commitment to SCWE principles/policy through document review or behavioral observations;
- Reviewing contractor training, both for content and effectiveness;
- Monitoring the contractor's actions to address concerns, such as reviewing contractor investigations to determine the need to conduct independent licensee investigations; and,
- Evaluating actions, if any, the contractor takes to mitigate a concern's potential impact on the SCWE.

C. Licensee Management Involvement in Contractor Cases of Alleged Discrimination Given that the SCWE is most challenged when changes are made to the employment conditions of the workforce, it can be very beneficial to licensees to monitor such changes when proposed or executed by the contractor. Licensee oversight in this area might include evaluating contractor processes for making changes to employment conditions, such as Disciplinary Policies and/or Reduction-In-Force Plans, to ensure they are well-defined, defensible, and communicated to the workforce in advance of their implementation.

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Furthermore, licensee management should evaluate contractor proposed changes to employment conditions to ensure the proposed changes follow defined processes and are non-retaliatory. The licensee can also assess whether the contractor has taken into consideration the potential impact their actions might have on the SCWE, and, if appropriate, actions to mitigate those impacts.

Finally, contractor changes to employment conditions that are alleged or perceived to be retaliatory should be reviewed to ensure the changes are not retaliatory or could adversely impact the SCWE.

- D. **Contractor SCWE Training** Contractor SCWE training can be provided by the contractor or licensee. As with the training given to licensee employees, the contractor training should cover the laws, regulations, and policies underlying the licensee's SCWE expectations; the licensee's governing SCWE policy; the avenues available to contractor staff to raise concerns; and the licensee's expectations for contractor management and employee behavior regarding raising safety concerns. The contractor training should also include an explanation of licensee contractual rights to oversee the contractor's safety conscious work environment. Training should be conducted during business hours.

#### **Involvement of Senior Management in Employment Actions**

Management should ensure that programs and processes involving changes to employment conditions, such as Disciplinary Policies or Reductions-In-Force plans, are well-defined, defensible and communicated to the workforce prior to their implementation.

An effective way for senior licensee management to prevent retaliatory actions by their supervisory staff is to review proposed employment actions before the actions are taken to determine whether any of the factors of retaliation are present. Employment actions above an oral reprimand should be considered for prior review.

The factors include:

- Protected Activity - Has the individual against which the action is being taken engaged in protected activity?;
- Adverse Action - Is an adverse employment action being proposed?;
- Licensee or contractor Knowledge of Protected Activity - Such knowledge can be attributed to other than the individual's direct supervisor;
- Relationship Between the Adverse Action and Protected Activity - Is there evidence that the adverse action is being taken, at least in part, because of the protected activity? Even if there are other legitimate, defensible business reasons to have taken the action, if one of the contributing causes of the action was protected, a violation of the NRC's regulations has occurred.

NOTATION VOTE

RESPONSE SHEET


TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MERRIFIELD  
SUBJECT: SECY-04-0111 - RECOMMENDED STAFF ACTIONS  
REGARDING AGENCY GUIDANCE IN THE AREAS OF  
SAFETY CONSCIOUS WORK ENVIRONMENT AND  
SAFETY CULTURE

Approved in part Disapproved in part Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

*See attached comments.*

  
SIGNATURE

DATE 7/22/04

Entered on "STARS" Yes \_\_\_ No \_\_\_

## Commissioner Merrifield's Comments on SECY-04-0111

I want to commend the staff for bringing forward a wide-range of options for the Commission to consider for encouraging licensees to establish a Safety Culture, including an environment where employees feel free to raise safety issues. I approve in part, and disapprove in part, the staff's recommendations for the following reasons.

### 1. Industry Guidance concerning a Safety Conscious Work Environment (SCWE)

I recommend Option 1A, to notice the staff's guidance document, "Establishing and Maintaining a Safety Conscious Work Environment," in the Federal Register for a brief comment period. I do not approve the staff's recommendation to issue the document as a Regulatory Information Summary without further comment (1B). As the staff points out, to not allow for public comment would be inconsistent with the staff's indications at a February 2004 public meeting. At that time, only a detailed outline of the staff's proposal was available to the public and industry to review. Having had requests for further public comment and giving an indication that it would be provided, to short cut the public's and industry's participation now would be inconsistent with our strategic goal of openness and would significantly detract from the staff's previous efforts to encourage input from the public and industry in developing this document.

Although I am recommending that the document be issued for public comment, I do not recommend inviting further discussion on whether to issue the document. It should be clear to our stakeholders that the comments should address the content of the document only.

As for the content of any notice attached to the document, I recommend that it explicitly reflect the connection between a Safety Conscious Work Environment and Safety Culture. At a minimum the staff should explain as it did in the paper that SCWE is an attribute of Safety Culture. The Commission is taking steps to address other attributes of Safety Culture as well, but it is important to communicate to our stakeholders our expectation that improving SCWE programs will result in strengthening the Safety Culture of our licensees.

### 2. Industry Guidance on Safety Culture

At this time, I do not support the staff's recommendation to develop another guidance document on Safety Culture, in addition to the document on SCWE, Option 2B. For matters other than SCWE, I believe our resources would be better spent on efforts to improve our programs for oversight of licensees' Safety Culture. As I discuss in further detail below, we should ensure that the staff has the necessary tools to examine a licensee's Safety Culture and identify and resolve issues in this area before they lead to safety problems. Because the industry took corrective action itself in the wake of Davis-Besse to provide licensees with guidance on Safety Culture, NRC's further guidance on these same issues would seem to be redundant. For example, last November INPO issued a preliminary version of *Principles for a Strong Nuclear Safety Culture*.<sup>1</sup>

Keeping in mind that the industry's efforts may be a work in progress, it nevertheless seems that the industry is on the right track to assist licensees in building a strong Safety Culture. For example, the principles discussed by industry are:

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<sup>1</sup> *Sorting Out Safety Culture, The Nuclear Professional*, Second Quarter 2004, p. 28.



1. Nuclear safety is everyone's responsibility.
2. Leaders demonstrate commitment to safety.
3. Trust permeates the organization.
4. Decision-making reflects safety first.
5. Nuclear is recognized as different.
6. A "what if" approach is cultivated.
7. Organizational learning is embraced.
8. Nuclear safety undergoes constant examination.<sup>2</sup>

As industry works to develop guidance in this area, the NRC must use its resources to ensure that it has programs and procedures in place that encourage licensees to establish strong Safety Culture programs.

### 3. NRC Inspector Guidance on SCWE and Safety Culture

I agree with the staff's recommendations to enhance the Reactor Oversight Process (ROP) treatment of cross-cutting issues to more fully address Safety Culture and to develop training for inspectors on this methodology, Option 3B, subject to the following comments.

In Option 3B the staff discusses tools for inspectors to use in making observations, such as surveys. After significant discussions with our foreign counterparts, I remain very concerned about the use of inspector surveys of Safety Culture. I am aware that our foreign counterparts considered using inspector surveys, but these surveys are mired in subjective determinations. I am not aware of any that are now being used. Indeed, our counterparts at the Canadian Nuclear Safety Commission after conducting a pilot project using inspector surveys, concluded that surveys were more appropriately conducted by licensees rather than by the regulator. As we have seen with our previous SALP program, the more subjective the observation, the more difficult it is to make conclusions, respond to questions from the licensee and the public, and to use such conclusions as a basis for further regulatory action. Consequently, the staff should develop tools that allow inspectors to rely on more objective findings. Most important, the staff should ensure that the inspectors are properly trained in the area of Safety Culture. The staff should consider developing an enhanced training program for its inspectors and resident inspectors on Safety Culture that uses both insights from INPO's work in this area and insights from the international community.

As a further enhancement to the ROP, I recommend that the staff include as part of its enhanced inspection activities for plants in the Degraded Cornerstone Column (referred to as Column Three) of the ROP Action Matrix, a specific evaluation of the licensees Safety Culture. The staff should interact with our stakeholders to develop a process for conducting the evaluation. To be clear, I am not suggesting that the staff's methodology for using the treatment of cross-cutting issues to more fully address Safety Culture be directed only at Column Three plants. A plant in any column may show signs of a weak Safety Culture. However, for plants in Column Three, I am recommending a specific evaluation.

I agree in part with Option 3C, to continue to monitor and work with the international community. I agree that the staff should continue to monitor and work with the international community to

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<sup>2</sup> Id.

gain insight on Safety Culture issues, Option 3C. These insights should be used to better train our inspectors on more objective indications of Safety Culture issues. However, this effort should be conducted within existing resources.

I do not agree with staff's recommendation of Option 3D, to engage with industry to develop an industry process to assess the Safety Culture at individual facilities, with NRC oversight of this process. At this time NRC oversight of the industry's efforts in this area does not appear necessary, but the staff should continue to monitor the efforts of INPO and the industry. As industry has a substantial program in process, our resources would be better spent on enhancing the ROP and training our inspectors.

I agree with the staff's recommendation to develop criteria for and possible intervention strategies for the NRC to take when downward trends in the area of SCWE and/or other facets of Safety Culture already exist and the licensee has failed to take appropriate action, Option 3E.