

October 17, 2004

Mr. Lew W. Myers  
Chief Operating Officer  
FirstEnergy Nuclear Operating Company  
Davis-Besse Nuclear Power Station  
5501 North State Route 2  
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION  
NRC SPECIAL INSPECTION - MANAGEMENT AND HUMAN  
PERFORMANCE CORRECTIVE ACTION EFFECTIVENESS -  
REPORT NO. 05000346/2004013(DRP)

Dear Mr. Myers:

On August 13, 2004, the NRC completed a Special Inspection at FirstEnergy Nuclear Operating Company's (FENOC) Davis-Besse Nuclear Power Station. The purpose of this inspection was to review the effectiveness of FENOC's corrective actions taken in response to deficiencies identified through the November Safety Conscious Work Environment (SCWE) survey and subsequent FENOC evaluation, to assure the adequacy of organizational effectiveness and human performance.

Following the identification of organizational effectiveness and human performance as one of the principal causes of the reactor pressure vessel head degradation, the NRC's Davis-Besse Oversight Panel (Panel) determined that the evaluation of the effectiveness of FENOC's corrective actions in this area was necessary to have confidence in the safe restart and operation of the facility. A series of special inspections of the management and human performance area were completed. The overall inspection plan was designed to assure that an appropriate root cause analysis had been completed (Phase 1- Report No. 05000346/2002015), that appropriate corrective actions had been identified and implemented (Phase 2 Report No. 05000346/2002018), and that the effectiveness of those corrective actions was assessed (Phase 3 Report No. 05000346/2003012).

During the final stages of the Phase 3 inspection, FENOC provided the NRC with detailed results from its November 2003 SCWE survey. Because several key departments had responded more negatively to some questions than in the March 2003 survey, the Panel determined that a follow up inspection (Report No. 05000346/2004003) would be conducted. The purpose of the inspection was to better understand the causes for the increase in negative responses and the actions FENOC had taken to address those issues. That inspection concluded that the licensee identified the causes of the decline, that actions were taken to address some of the causes, and the methods for assessing the effectiveness of those actions were appropriate.

Because of the importance of Davis-Besse maintaining a healthy SCWE, the Panel approved another inspection to review the long term effectiveness of the corrective actions. The attached inspection report describes the results of the effectiveness review. During this inspection, the

NRC evaluated FENOC's subsequent external assessment of the corrective action effectiveness and independently assessed the effectiveness of those corrective action addressing the deficiencies from the November 2003 SCWE survey. In accomplishing the inspection, the NRC evaluated the perceptions and beliefs obtained from individuals, keeping in mind that the perceptions and beliefs may not directly translate to actual performance.

The inspection concluded that the corrective actions implemented at Davis-Besse to improve its SCWE following the November SCWE survey have in general had a positive effect. Further, the Team concluded that while Davis-Besse management increased its communications with the staff, it did not have a mechanism to assess the effectiveness of those communications, which limited the effectiveness of its efforts to improve the SCWE at the site. The absence of a communication feedback tool resulted in inadequate and ineffective communications regarding two events which not only limited the effectiveness of the corrective actions but in some cases negatively impacted specific individuals' willingness to self report errors. No safety significant findings were identified during the inspection.

Based on the results of this inspection, we have concluded that the SCWE at Davis Besse is acceptable to support continued facility operation

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Sincerely,

*/RA/*

John A. Grobe, Chairman  
Davis-Besse Oversight Panel

Docket No. 50-346  
License No. NPF-3

Enclosure: Inspection Report 05000346/04-13  
w/attachments:

1. Supplemental Information
2. Focus Group Interview Guide
3. Davis-Besse Condition Report Summary
4. Inspection Plan

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L. Myers

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cc w/encl: The Honorable Dennis Kucinich  
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-346  
License No: NPF-3

Report No: 05000346/2004013

Licensee: FirstEnergy Nuclear Operating Company

Facility: Davis-Besse Nuclear Power Station

Location: 5501 North State Route 2  
Oak Harbor, OH 43449-9760

Dates: July 19, 2004, through August 12, 2004

Inspectors: G. Wright, Team Lead, Region III

Team Members: J. Persensky, RES  
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Approved by: J. Grobe, Chairman  
Davis Besse Oversight Panel

## SUMMARY OF FINDINGS

IR 05000346/2004013, FirstEnergy Nuclear Operating Company, on 07/19/2004 to 08/12/2004, Davis-Besse Nuclear Power Station. Special Inspection.

This report covers a special inspection continuing the NRC's review of the long term effectiveness of the licensee's corrective actions (CA) associated with the condition reports written to address the deficiencies identified through the November 2003 SCWE survey and subsequent licensee evaluation. The inspection was conducted by NRC inspectors and specialists (Team). The inspection concluded that in general the CAs were effective, with exceptions noted below.

### A. Corrective Action Appropriateness (Section IV.A)

The CAs that addressed the issues documented in 12 condition reports (CRs) resulting from the November SCWE survey were reviewed to assess the appropriateness of the licensee's CAs. These CAs focused on the five cross cutting areas identified by the licensee's external assessment of its November 2003 survey: (1) less than effective communication; (2) long work hours for an extended period of time; (3) lack of credibility in the station daily work schedule; (4) management comments that were inconsistent with Leadership in Action principles; and (5) lack of understanding of the basis for the station's low threshold for initiating condition reports. Overall, the Team concluded the CAs appropriately addressed the types of problems identified by the CRs.

### B. Corrective Action Effectiveness (Section IV.B)

The Team independently assessed the effectiveness of the licensee's CAs in improving the four pillars of SCWE: Willingness to Raise Concerns, Normal Problem Resolution Process, Employee Concerns Program, and Preventing and Detecting Retaliation. The Team concluded the CAs were in general effective. However, ineffective and inadequate communications associated with two events limited the effectiveness of CAs and in some areas had a negative impact on SCWE. The impact was particularly noticeable in the Operations and Maintenance departments, where the willingness of some individuals to identify individual errors or challenge upper management decisions had declined.

### C. SCWE Survey Review Team Effectiveness (Section IV.C)

The Team assessed the licensee's SCWE Survey Review Team's effectiveness in assessing the CAs generated from the November 2003 SCWE survey. The SCWE Review Team focused on the CAs' effectiveness in improving conditions in the five cross cutting factors that contributed to the decline in the positive response to some survey questions. The Team concluded that the site's CA effectiveness assessment was appropriate and for the most part captured the appropriate issues. The Team noted that the CA effectiveness assessment observations were consistent with the NRC's observations in the area of communications.

### D. Quarterly Safety Culture Monitoring Business Practice (Section IV.D)

The Team assessed the effectiveness of the Quarterly Safety Culture Monitoring Business Practice. The Team concluded that the licensee's practice of bringing its senior managers together to discuss common issues continues to be a strength. However, the Team also concluded that the rating criteria used by the quarterly business practice was not consistently applied or understood, which limited the Practice's effectiveness.

E. Safety Conscious Work Environment Review Team (Section IV.E)

To provide a continuing assessment of SCWERT, the Team observed two SCWERT meetings and met with SCWERT members to discuss their role in specific circumstances. The Team found that SCWERT's review of personnel changes proposed for the New Organization was appropriate and well executed. The Team concluded that in general, the SCWERT process continues to mature. However, management and SCWERT's response to one issue, while a step in the right direction, significantly underestimated the scope of a potential problem. As a result, actions to mitigate the potential chilling effect were too narrow and did not provide the staff sufficient information to understand the issue.

F. Teamwork, Ownership, Pride (TOP) Team (Section IV.F)

The Team reviewed the TOP Team Charter and met with several of its members and the senior manager sponsoring their efforts. The Team found that the TOP Team is not being implemented per its charter. Further, it does not appear that the team, in its present state, can positively impact the site's SCWE.

G. Change Management Process (Section IV.G)

Because implementation of the site's change management process had been an issue during inspection 05000346/2004003, the Team reviewed the licensee's implementation of the Change Management Process and associated communication plan application with the recent organizational changes. The Team concluded that the Change Management Process had been applied to the New Organization and the associated communications plan was appropriate. However, its effectiveness was suspect, given the number of individuals who knew little about the timing or process to be used to select individuals for specific positions.

H. Communications (Section IV.H)

The Team concluded that many of the issues identified above have resulted from Davis-Besse's management not routinely monitoring the effectiveness of their communications and not taking prompt action to supplement their communications when appropriate. The licensee's evaluation of the November 2003 SCWE survey results identified communications as a contributing factor. Davis-Besse management has taken steps to improve information flow to the staff; this is recognized as a positive. However, not all the information reached its audience, and in some areas it did not have the desired effect. The Team concluded that the licensee did not have a mechanism for assessing the effectiveness of its communications and therefore did not have a means for determining whether additional efforts need to be taken to achieve the desired results.

## Inspection Details

### I. Scope

The inspection was accomplished by a special inspection team consisting of NRC inspectors and specialists (Team). The inspection was designed to assess the licensee's compliance with 10 CFR 50 Appendix B Criterion XVI, by evaluating the effectiveness of the licensee's management and human performance corrective actions (CAs) developed from its assessment of the November 2003 SCWE survey. The inspection focused on (1) the effectiveness of the licensee's CAs put in place in response to the results of the November 2003 SCWE survey and (2) the licensee's assessment of the effectiveness of its CAs. In addition, the Team evaluated CAs taken subsequent to NRC Inspection Reports No. 05000346/2003012 and No. 05000346/2004003 that had not been completely developed at the time of those reports, but were described by FENOC as actions that would support FENOC's management and human performance corrective action program (CAP). These actions included: the quarterly SC monitoring business practice and its implementation, the implementation of the Teamwork, Ownership, and Pride (TOP) Team, and continued observation of the Safety Conscious Work Environment Review Team (SCWERT).

### II. Objective

The follow-up Inspection to the Management and Human Performance Assessment was designed to independently assess the effectiveness of the licensee's CAs related to the decline in performance between the March and November SCWE surveys. The inspection also evaluated the licensee's external assessment of the effectiveness of its CAs. The Team used a modified Management and Human Performance Phase 3 inspection plan to accomplish the task (Attachment 2).

### III. Assessment Process

#### A. Inspection Basis

The follow-up inspection plan consisted of a review of the CAs identified by the licensee, an independent assessment of the effectiveness of the CAs, a review of the licensee's assessment method and report, and observations and discussions with individuals from a number of licensee departments.

The Team used focus group interviews and discussions with the TOP team and SCWERT, along with document review as input to its assessment. The Team conducted eleven focus group interviews and, at the licensee's request, individual interviews with a small sample of Security staff. The Team also reviewed related documents listed in Attachment 1.

#### B. Inspection Approach

The Team used the following techniques to perform the inspection:

1. Independent review of documents, e.g.;
  - a. Teamwork, Ownership, and Pride (TOP) Team minutes
  - b. Employee Concerns Program (ECP) data
  - c. Safety Conscious Work Environment Review Team (SCWERT) information
  - d. Monthly Safety Culture (SC) Performance Indicators (PIs)
  - e. CA Effectiveness evaluation team
    - 1) Report
    - 2) Comments
  - f. Condition Reports (CRs) and Corrective Actions (CAs)
2. Interviews of staff and supervisors selected by the NRC. Refer to Attachment 3 for the interview guide.
3. Focus group interviews were conducted with staff from:
  - a. Operations (two groups)
  - b. Maintenance
  - c. Chemistry
  - d. Plant Engineering
  - e. Nuclear Quality Assessment (NQA)
  - f. Rapid Response
  - g. Design Engineering
  - h. Outage Management/Work Control

And with:

- a. Supervisors, all departments
- b. Contractors, all departments available

To minimize the impact on security staffing, Security personnel were interviewed as individuals

3. Discussions with a member of the licensee's Corrective Action Evaluation Team, the TOP Team, and SCWERT members
4. Observations of SCWERT proceedings and the Monthly Safety Culture Monitoring business practice meeting.
5. SCWE Aspects of the New Organization plan
  - a. Communication plan
  - b. Change Management Process
  - c. SCWERT involvement

#### IV. Assessment, Observations, and Conclusions

##### A. Corrective Actions Appropriateness

##### 1. Scope

To assess the appropriateness of the licensee's CAs, the Team reviewed the CAs that addressed the issues documented in 12 CRs resulting from the November 2003 SCWE survey. These CAs focused on addressing the five cross cutting areas identified by the licensee's external assessment of its November 2003 survey: (1) less than effective communication; (2) long work hours for an extended period of time; (3) lack of credibility in the station daily work schedule; (4) management comments that were inconsistent with Leadership in Action principles; and (5) lack of understanding of the basis for the station's low threshold for initiating condition reports. The Team also assessed CAs taken for several specific workgroups. The list of CRs can be found in Attachment 4.

## 2. Observations

Condition Report 03-11315 was prepared to investigate the reasons for the decline in results between the March and November 2003 SCWE survey in certain areas. The cause analysis portion of the CR identified five contributing factors to explain the decline: (1) less than effective communication; (2) long work hours for an extended period of time; (3) lack of credibility in the station daily work schedule; (4) management comments that were inconsistent with Leadership in Action principles; and (5) lack of understanding of the basis for the station's low threshold for initiating condition reports. A number of common/apparent causes were identified, and CAs were created to address each cause. FENOC management also took several immediate actions, such as discussing survey results with employees, improving the work schedule, giving time off, and providing refresher SCWE training to managers. Other CAs included establishment of the Teamwork, Ownership and Pride (TOP) Team to address emergent SCWE issues, plans to assess the effectiveness of the CAs associated with the CR, and increasing the visibility of the ECP and SCWERT. Additionally, a number of CRs were generated as a result of the analysis to address each of the five factors and for specific workgroups with apparent declines

### CRs for Contributing Factors

#### a. Less than effective communication;

CR 04-00292, addressed the factor of communications. The probable cause was found to be failure of the management team to ensure that information had been conveyed throughout the organization and that the contents were clear and understood by employees. Immediate actions taken to address the problems identified included discussing survey results, tracking data from daily employee surveys, periodic site wide emails sent by the site Vice President, a new communication process, and enhancements to information provided on company website. CAs were planned to implement changes in the process of handling feedback from supervisor briefings, developing and scheduling various meetings to increase communication, and providing formal communications training for supervisors and managers.

#### b. Long work hours for an extended period of time;

CR 04-00291 addressed the issue of work hours. The analysis identified the causes as limited communications on work hours, incorrect perception of

number of hours worked, and no formal communication regarding the schedule after restart. Immediate actions taken in response were implementation of a change in the requirement for overtime deviation, providing time off during the holiday season, finalizing the scheduling plan, reducing work hours, discussing employee fatigue, and evaluating employees' fitness for duty by management. CAs were also planned to provide a performance indicator on overtime hours for each work group to correct employee misconceptions on overall hours worked. Finally, a team was to review overtime hours worked on a monthly basis to determine if any additional CAs would be necessary.

c. Lack of credibility in the station daily work schedule;

CR 04-00247 addressed schedule credibility. The causes of the survey decline in this area were found to be less than adequate review and involvement of scheduling, continual extensions of the schedule due to emergent work, and the implementation of a rigorous scope control process. The CAs taken to address the problems were to provide communication on expectations of Operations on the work schedule and discussion on preventative maintenance deferral. Additionally, the licensee stated that restart activities evolving into normal operating practices would be necessary to improve schedule integrity.

d. Management comments that were inconsistent with Leadership in Action principles;

CR 04-00245 focused on management comments. Causes identified included management frustration of the long term outage and lack of awareness of potential employee interpretations of statements made. The CAs created in response were to develop and implement actions to hold managers accountable for behaviors, implement SCWE refresher training for supervisors, and provide information to assist the TOP team in the monitoring of management behaviors.

e. Lack of understanding of the basis for the stations' low threshold for initiating condition reports;

CR 04-00246 addressed the low CR reporting threshold issue. The analysis of the issue concluded that the threshold for writing CRs is set intentionally low and is expected to result in a high number of CRs written. The analysis also indicated that the high number of reports did not burden the process or result in important issues being overlooked, and, additionally, a single tracking system facilitates prioritizing and monitoring workloads. Since the threshold was found to be appropriate, the CA related to this issue was for management to explain the expectations and benefits of a single, low threshold system. Although the analysis and resultant CAs focused on the general factor of low CR threshold, it did not specifically address the concerns brought to the attention of the licensee from a previous inspection regarding the CR process (inspection number 05000346/2004003). The previous inspection found employee concerns with the ability of the process to handle the high number of CRs due to the low threshold, but not necessarily with the threshold itself. Specifically, the concerns involved the effects of a high number of CRs on the system, including increased workload and longer time needed to resolve issues. The inspection team could not identify any CAs related directly to these concerns identified in the previous inspection.

Specific Workgroups

The following CRs focused on, in combination with the five general themes, specific workgroups which experienced declines in the November survey results.

CR 04-00256 focused on Plant Engineering. Actions taken to address the issues included providing communication on expectations to supervisors, reducing work hours and giving time off, tracking adherence to schedule, and increasing communications in various formats. CR 04-00253 addressed Chemistry, and CAs created as a result of the analysis were to better define SC, create a group to monitor human performance, and improve the Safety and Human Performance plan. The next CR, 04-00226, focused on Nuclear Quality Assessment (NQA). CAs taken due to the analysis included reviewing management performance during specific events, reviewing quarterly reports for examples of the five general themes and/or NQA concerns, and confirming identified issues are in the corrective action program. The Maintenance work group was addressed by CR 04-00271. Actions taken to resolve the problems found were providing discussion of survey results and improving various means of monitoring employee concerns.

CR 04-00411 addressed the decline in survey results for Operations. The CAs taken as result of the analysis were related to the CAs documented for CR 03-08418 for each of the general themes. CR 03-08418 provided evaluation of several Operations events and errors. A variety of CAs were created as result of the evaluation. These included providing clearer definitions of roles, responsibilities, standards, and expectations, and improving communications oversight and monitoring practices. In addition, CAs also focused on reinforcing expectations in the importance of maintaining a questioning attitude and providing communications regarding any deviations from the work schedule. Other issues addressed by the CAs were in regard to improving information provided by the nightly orders, integrating Operations activities in the plant work schedule, better matching of activities to resources available, and holding individuals accountable for schedule adherence.

### 3. Conclusions for Section IV.A, "Corrective Actions Appropriateness"

Overall, the Team found the CAs to be appropriate in addressing the types of problems identified by the CRs as a result of the November SCWE survey. The Team did note that concerns from a previous inspection (Report No. 05000346/2004003) regarding the impact of the CR threshold on the site's ability to process CRs were not specifically addressed by any CAs. However, the interview results did not provide any indication of problems in the level of output of the CR system at the time the interviews were conducted.

#### B. Corrective Action Effectiveness

##### 1. Scope

The Team used the focus group interview approach described in Section 3.B.2. to assess the effectiveness of the licensee's CAs. The Team used the four pillars of SCWE: Willingness to Raise Concerns, Normal Problem Resolution Process, Employee Concerns Program, and Preventing and Detecting

Retaliation, as the basis for its interviews. This was done to better relate its observations to those survey areas that showed decline.

## 2. Observations:

Observations are presented by SCWE Pillar.

### a. Willingness to Raise Concerns:

Overall the CAs have been effective at maintaining or improving the organization's willingness to raise concerns, with two notable exceptions. Some individuals in the Maintenance and Operations departments stated that some individuals in those departments were less likely to self report errors because of the situation surrounding the self reporting of an Instrumentation & Control (I&C) individual's voltage reading error. Some individuals mistakenly believed the I&C technician who had self-reported the error had been fired, and they didn't understand the punishment verses the "minor" nature of the event. Some individuals also indicated they would not question non conservative decisions made by upper management. This resulted from perceived management actions relative to the feed water system valve FW 780 repair activity. Some individuals believed excessive pressure was inappropriately applied to get the job done by changing the work plan, rather than following the plan that had been evaluated, even after concerns with the new plan had been raised. In addition, there were other concerns raised over deferral of "low priority issues," and a hesitancy to address concerns over schedule credibility in one department. Some staff indicated that they thought there was "production over safety" pressure put on the first line supervisors in Operations. Some comments were made regarding some managers making comments that were viewed as belittling.

The Team also received comments from many of the groups that the focus is now more on safety over production, that there is a greater willingness in some departments to raise safety concerns, and that conservative decision making was evident during startup.

### b. Normal Problem Resolution Process

Overall, individuals felt that the CAP was effective and improvements had been made. A few individuals believed the threshold was still too low but acknowledged that improvements have been made. There were a few issues raised related to the timeliness of the process. Specifically, the concern related to writing a CR to identify issues with a proposed corrective action; however, the corrective action was implemented before the CR could be reviewed.

### c. Employee Concerns Program

There were few comments about the ECP, and most employees appeared to be neutral on the subject. Many individuals indicated the CAP provided the outlet they needed for raising concerns and, thus, they didn't have to use the ECP. A few individuals didn't believe the ECP to be a viable alternative and indicated they would take their

concerns directly to the NRC. Contractors did not view the ECP as available to them. Review of the ECP PI data indicated that case review time is increasing, although the average closure time remained less than 30 days. There was a general belief that management was supportive of the ECP.

d. Preventing and Detecting Retaliation

The processes for preventing and detecting retaliation are maturing; however, they were not fully effective in preventing the perception of retaliation in two instances. The I&C issue and the FW780 valve repair issue were cited by several individuals as cases of retaliation. Communications appeared to be a common factor. First, FENOC's communications were not sufficiently broad to ensure all potentially affected individuals were aware of the event. Further, the communications were not sufficiently detailed to ensure individuals understood the connection between the errant voltage reading, described by many as a "minor issue," and the punishment. In addition, the inadequate communications resulted in many individuals incorrectly believing, as late as 3 months after the event, that the individual who self-reported the event had been terminated. This resulted in some individuals stating that they would not self report their errors. Relative to the FW 780 valve repair, ineffective communications resulted in some individuals perceiving that retaliation would occur if they questioned management decisions.

The Team's interviews also elicited more isolated examples of SCWE principals not being practiced: for example, an individual being admonished for not being a team player because they raised concerns, and a manager publically ridiculing an individual's concerns raised via the "3-question survey." Both types of behavior can have a negative impact on SCWE.

To ensure a healthy SC and SCWE, perceived retaliation has to be addressed. Because perceptions influence SC and SCWE, the Team did not validate all of the issues described above. The Team focused on whether the licensee's CAs were preventing and detecting real or perceived retaliation. In the I&C and FW 780 cases, the Team did obtain detailed information. Part of the additional information included a time line of management actions in the I&C issue. The time line indicated that the TOP team had provided feedback to senior management regarding misunderstanding of the issue at the staff level; however, action to expand distribution of a "white paper," used by management to communicate the issue, was not taken until the licensee's SCWE Effectiveness Review Group provided the same feedback.

The Team, during its review of the implementation of the New Organization, noted that the licensee appropriately included SCWERT reviews of selections associated with the New Organization.

3. Conclusions for Section IV.B, "Corrective Action Effectiveness"

Corrective actions, implemented in response to the November 2003 SCWE survey and subsequent cause assessment, have improved some aspects of SC and SCWE in some departments. Ineffective communication regarding two conditions limited the effectiveness of CAs and in some areas had a negative impact on SC and SCWE. The negative impact was most noticeable in the Operations and Maintenance departments where the willingness of some individuals to identify individual errors or challenge upper management decisions has declined. The licensee's actions to ensure that employees are willing to raise concerns by appropriately responding to their concerns and improving communications about events, that could be perceived as retaliatory, have not been fully effective.

C. SCWE Survey Review Team Effectiveness

1. Scope

The licensee's SCWE Survey Review Team identified a number of causes for the decline in positive responses to some questions in the November 2003 SCWE survey. The SCWE Survey Review Team also identified that the following cross cutting factors contributed to the decline in the positive responses: (1) less than effective communication; (2) long work hours for an extended period of time; (3) lack of credibility in the station daily work schedule; (4) management comments that were inconsistent with Leadership in Action principles; and (5) lack of understanding of the basis for the station's low threshold for initiating condition reports. In May 2004, the SCWE Survey Review Team assessed the effectiveness of the CAs taken by the site to address the causes.

The Team reviewed the licensee's SCWE Survey Review Team's assessment of the effectiveness of the CAs. In addition, the Team discussed the SCWE Survey Review Team's observations with one of its members.

2. Observations

The Team determined that the SCWE Survey Review Team's observations were generally consistent with the Team's observations. The Survey Review Team concluded that the licensee's corrective actions, in response to the November 2003 survey results, were generally effective but ensuring effective communication continued to be an issue at the site.

- a. The SCWE Survey Review Team noted that site management's response to I&C and FW 780 issues had a negative impact on some individuals' willingness to self report errors on their part or to challenge perceived non conservative decisions by management. The SCWE Survey Review Team also determined that site management had not effectively communicated the reasons for the decisions made with regard to these incidents.

Regarding the FW 780 valve repair described in Section 4B, the SCWE Survey Review Team found that the event involved communications failures including poor shift turnovers and failure to provide information to one operating crew on the event.

- b. The SCWE Survey Review Team identified that the site had made an effort to increase communications through twice daily e-mails provided to inform the staff of plant issues. However, they also received feedback that the quality of these communications has decreased. Specifically, earlier versions included the reasoning behind management decisions, while current versions did not.

The Team noted that the SCWE Survey Review Team's report clearly addressed each of the cross cutting issues identified in January 2004 and was of sufficient scope. The Team also observed that with respect to the issue of communication, the Review Team's conclusion was not completely representative of the observations included in the report. For example, the report concluded that CAs have been generally effective and that communications had improved since January 2004; however, the report included a number of negative issues which were not included in the summary.

### 3. Conclusions for Section IV.C, "SCWE Survey Review Team Effectiveness"

The Team concluded that the site's CA effectiveness assessment was appropriate and over all captured the appropriate issues. The CA effectiveness assessment observations were consistent with the NRC's observations in the area of communications. Both the SCWE Survey Review Team and the NRC Team concluded that additional efforts are needed in the area of communication to improve the SCWE at the site. While the Team recognizes that site management has increased the amount of information being provided to the staff, not all the information is effective.

## D. Quarterly Safety Culture Monitoring Business Practice

### 1. Scope

To assess the Quarterly Safety Culture Monitoring Business Practice, the Team reviewed the business practice and observed a Quarterly Safety Culture Monitoring Meeting. The team noted that the site was implementing the practice on a monthly basis.

### 2. Observations

The monthly meeting was run efficiently and members demonstrated an appropriate understanding of the purpose of the business practice. The Vice President-Nuclear ran the meeting and was responsible for the process. The discussions were at an appropriate level. All senior managers were in one place to discuss SC issues and status.

The Team noted that there was inconsistent application and understanding of the "UP, DOWN, and NEUTRAL" arrows. Specifically, panel members appeared to lack a clear and consistent understanding of the application of the rating criteria. Correlation between the starting performance for an area or attribute and the arrows was confusing. In particular, the arrows sometimes were independent of previous performance and sometimes were dependent on previous performance. Because of the mixed understanding of the rating and criteria, the Practice's effectiveness was limited.

The quarterly business practice assesses the same high level functions as the more detailed restart readiness business practice. However, the two business practices treated CRs differently. For example, under the quarterly system, CRs are only written for declining AREAS. In the expanded restart readiness version, declining ATTRIBUTES would be documented on a CR. This inconsistency may lead to some confusion as to when actions are to be taken for declining AREAS and declining ATTRIBUTES.

After reviewing the business practice document, the Team questioned whether some attributes, e.g., substantiated retaliation, should turn an area RED independent of the trend.

### 3. Conclusions for Section IV.D, “Quarterly Safety Culture Monitoring Business Practice”

The quarterly business practice assesses the same high level functions as the more detailed restart readiness business practice. The criteria used for rating the quarterly business practice was not consistently applied and understood, and, therefore the programs’ effectiveness was limited. Although the Team did not identify any specific issues, it did note that the practice of senior managers meeting to discuss SC continues to be a positive practice.

At the close of the inspection, the licensee was assessing the frequency and content of the meeting.

## E. Safety Conscious Work Environment Review Team

### 1. Scope

As part of the NRC’s ongoing assessment of SCWERT, one member of the Team observed two SCWERT meetings. Both meetings involved decisions regarding personnel positions in the new organization. In addition to these observations, information gathered during employee interviews provided insights with regard to the SCWERT’s effectiveness in preventing the perception of retaliation for engaging in protected activities. The Team also met with SCWERT members to discuss their role in an incident involving the discipline of I&C personnel.

### 2. Observations

The SCWERT meetings were run efficiently, and the members demonstrated a thorough understanding of the SCWERT’s charter and an improving comprehension of important SCWE principles. However, SCWERT’s effectiveness at preventing perceptions of retaliation among the workforce has not been completely effective. During interviews, a number of individuals stated their reluctance to self-identify errors for fear of retaliation. The reason cited was an issue involving a self-identified voltage reading error and subsequent disciplinary action taken against two of the three I&C individuals. The disciplinary process involved removing all three I&C employees from the site while the investigation into the circumstances of the event was conducted and ultimately,

disciplinary actions being taken against two of the individuals. SCWERT members confirmed that they had reviewed the proposed disciplinary actions and, recognizing the potential for misinterpretation, recommended a communication instrument (i.e., white paper) to mitigate any potential chilling effect resulting from the event. The effectiveness of that communication is discussed in this report in Section VI, "Communication Effectiveness."

### 3. Conclusions for Section IV.E, "Safety Conscious Work Environment Review Team"

The SCWERT's review of personnel changes proposed for the New Organization was appropriate and well executed. In general, the SCWERT process continues to mature. However, SCWERT's response to the I&C issue, while a step in the right direction, significantly underestimated the scope of the potential problem. This resulted in actions to mitigate the potential chilling effect being aimed at too narrow an audience and not providing sufficient information for individuals to understand what had happened and why.

## F. Teamwork, Ownership, and Pride (TOP) Team

### 1. Scope

To assess the functioning of the TOP Team, the Team reviewed the TOP Team Charter and met with several of its members including the manager sponsoring its efforts.

### 2. Observations

TOP Team leadership and members were enthusiastic about their efforts and activities. However, a number of issues limit TOP's impact on the SCWE and its effectiveness as an organization. Senior management's expectations regarding the team's role in SCWE were not well defined or understood. Although the team's charter asks TOP members to "pulse the organization after significant communication forums" to assess their effectiveness, the members were not being proactive in obtaining such feedback. Operations and Security, two departments identified by the licensee's November SCWE surveys as having challenges in this area, were not represented on the team. There were no plans to benchmark similar groups in the industry. The roll out of the new TOP was not fully effective as many site personnel still believed its purpose was to organize parties or similar functions. The TOP team had not been provided with the tools needed to accomplish their charter, e.g., they were not provided with information on management actions and activities affecting the staff prior to the activity being implemented. Nor were they expected to provide input to FENOC's SC assessments.

### 3. Conclusions for Section IV.F, "Teamwork, Ownership, and Pride Team"

The Team concluded that the TOP Team is not being implemented per its charter, and, as currently implemented, would not have a significant positive impact on SCWE.

## G. Change Management Process - Applied to New Organization:

## 1. Scope

During the conduct of inspection 05000346/2004003, the NRC confirmed the licensee's conclusion that communication was a factor in the increase in negative responses in the November 2003 SCWE survey. Some of the communications issues stemmed from organizational changes which had not been effectively communicated to the staff. To assess the extent to which the licensee implemented its Change Management Process and its effectiveness, the Team reviewed how the change management process and associated communication plan had been implemented for the recent organizational changes. The Team also reviewed the information provided to the licensee's staff in accordance with the communication plan.

## 2. Observations

The licensee implemented its Change Management Process and associated communications plan to address the timing and type of information to be provided to FENOC staff regarding the pending organizational changes. Review of documentation distributed to the licensee's staff confirmed that the information provided to the staff was consistent with the communication plan and change management process. In addition, discussions with licensee management identified that the information provided to the staff was consistent with the organizational changes.

While the change management process was followed, interviews with staff revealed that few individuals were aware of the process for filling the New Organization's positions.

## 3. Conclusions for Section IV.G, "Change Management Process - Applied to New Organization"

The Team concluded that the implementation of the Change Management Process and associated communications plan, as applied to the New Organization, was appropriate. However, the communications appeared to be ineffective as most of the individuals the Team interviewed knew little about the timing or process being used to select individuals for specific positions.

## H. Communication

### 1. Scope

In Inspection Report 05000346/2004003, the NRC noted that the licensee's characterization of "Communication" as a problem area was very broad and developing effective CAs would be difficult. To better understand the extent to which communications affected corrective actions, the Team reviewed the issues identified during the current inspection for potential roots in communications.

### 2. Observations

The following observations were made regarding issues and communications.

- a. Understanding the New Organization. Many documents, in various formats, were provided to the staff explaining the process for

selecting individuals for positions, yet few, if any, individuals the Team interviewed understood the process. While the documents provided the appropriate information, they weren't effective in having the staff understand the process.

- b. TOP Team Mission. The new TOP team was rolled out and information was provided to the staff on its activities. However, most individuals the Team interviewed were not aware of TOP's expanded roll of identifying potentially negative contributors to SCWE.
- c. Management's Response to I&C and FW 780 issues. Both issues had a negative impact on some individuals' willingness to self report errors or to challenge what they may perceive as non conservative decisions by management. The TOP team and the CA Effectiveness Review Team had provided feedback to management that actions to accurately communicate the I&C incident had not been effective. However, a month and a half after the event, the NRC interviewed many individuals who were either unaware of the issue or misinformed. Despite licensee management's efforts to communicate the facts surrounding the I&C incident, many interviewees incorrectly believed the individual who raised the concern was also disciplined. This perception led them to express their reluctance to similarly report their own errors, particularly if they perceived the errors to be minor in nature. The Team reviewed the "white paper" used to communicate the facts surrounding the incident and found its content lacking and its distribution too limited to accomplish its objectives.
- d. Twice daily e-mails are still appreciated by the staff; however, the Team received comments that their quality has decreased. Specifically, the earlier version included "why" an action was being taken. The perception of some individuals now, is that they are getting more "what" is happening and less "why."

### 3. Conclusions for Section IV.H, "Communication"

The Team concluded that many of the issues identified in this report resulted from inadequate and ineffective communication from management to the staff.

The licensee's evaluation of the November 2003 SCWE survey results identified communications as a contributing factor. Site management has taken steps to increase the amount of information being provided to the staff, which is recognized as a positive. However, not all the information is reaching its audience, and in some areas it's not having the desired effect. The Team has concluded that Davis-Besse's management does not monitor the effectiveness of its communications and therefore has no mechanism to prompt action to supplement communications when necessary.

## V. Exit Meeting

The Team met with Mr. Lew Myers and members of his staff on August 13, 2004, to discuss the results of this inspection. Mr. Myers acknowledged the Team's conclusions.

## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

B. Allen	Plant Manager
J. Brassar	Manager, Design Engineering
M. Bezilla	Site Vice President
B. Boles	Manager, Plant Engineering
G. Dunn	Manager, Regulatory Affairs
L. Griffith	Manager, Employee Concerns Program
R. Hansen	Vice President, Oversight
D. Haskins	Manager, Human Resources
R. Hruby	Manager, Oversight
D. Imlay	Operations Superintendent
G. Kendrick	Superintendent, I&C Maintenance
S. Loehlein	Director, Station Engineering
P. McCluskey	Manager, Chemistry - TOP Management Sponsor
L. Myer	Chief Operating Officer FENOC
C. Price	Manager, 0350 Project
R. Schrauder	Director, Support Services
M. Stevens	Director, Maintenance
M. Trump	Manager, Training
D. Wahlers	Supervisor, NQA

## LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

### May 2004 SCWE Survey Review Team Assessment

Scope of SCWE Survey Review Team Assessment; 4/23/2004  
Davis-Besse SCWE Survey Review Team Power Point Presentation – Follow up Assessment; 6/23/2004  
CR 04-04184 SCWE Survey Review Team Assessment Recommended Corrective Actions; 6/23/2004  
Davis-Besse SCWE Survey Review Team Follow-up Assessment; 6/23/2004  
SWCE Assessment Team Meeting Minutes; 5/17/2004  
Monthly Safety Culture Monitoring Reviews: Condition Reports and Meeting Minutes  
Condition Report 04-02909 Davis-Besse April Safety Culture Monitoring Meeting Meeting Summary Safety Culture Meeting on Tuesday, April 20, 2004  
Condition Report 04-03438 Davis-Besse May Safety Culture Monitoring Meeting Meeting Summary Safety Culture Meeting Tuesday, May 18, 2004  
Condition Report 04-04021 Davis-Besse June Safety Monitoring Meeting Meeting Summary Safety Culture Meeting Tuesday, June 15, 2004  
Condition Report 04-04014 Davis Bessie Safety Culture Monitoring, Declining Trend- Individual Commitment Area  
Meeting Summary CARB Meeting Results

### SCWE Action Plan: Listing of Condition Reports and Corrective Actions from December 2003 SCWE Survey Review Team Assessment

SCWE Action Plan  
CR 03-11315 November 2003 SCWE Survey Identifies Declining Trends in Some Departments Response

### November 2003 SCWE Survey Declining Trends Condition Report

CR 03-11315 November 2003 SCWE Survey Identifies Declining trends in Some Departments

### Cross-Cutting Theme Condition Reports and Corrective Actions

Condition Report CR 04-00245 SCWE Survey Review Team Cross-Cutting Theme – Management Comments; 01/09/2004  
Condition Report CR 04-00246 SCWE Survey Review Team Cross-Cutting Theme – Low CR Threshold; 01/09/2004  
Condition Report CR 04-00247 SCWE Survey Review Team Cross-Cutting Theme – Schedule Credibility; 01/09/2004  
Condition Report CR 04-00291 SCWE Survey Review Team Cross-Cutting Theme – Work Hours; 01/09/2004  
Condition Report CR 04-00292 SCWE Survey Review Team Cross-Cutting Theme – Communications; 01/09/2004

## Target Section Condition Reports and Corrective Actions

Condition report CR 04-00226 SCWE: March – November 2003 Survey Results  
Discussion: Decline in Quality Assurance; 01/08/04  
Condition report CR 04-00253 SCWE: March – November 2003 Survey Results  
Discussion: Decline in Chemistry; 01/09/04  
Condition report CR 04-00256 SCWE: March – November 2003 Survey Results  
Discussion: Decline in Plant Engineering; 01/09/04  
Condition report CR 04-00271 SCWE: March – November 2003 Survey Results  
Discussion: Decline in Maintenance; 01/10/2004  
Condition Report CR 04-00411 SCWE: March – November 2003 Survey Results  
Discussion: Decline in Operations; 01/15/2004  
Condition Report CR 03-08418 Operations Events – Collective Significance Review;  
10/01/2003

## Previous Shift Survey Trend Data

Previous Shift/Day Survey Results, Jan. 23; Feb. 13; March 12; March 26; April 9;  
April 23; May 7; May 21; June 18; July 2; July 16 (2004)  
Previous Shift/Day Survey, Jan. 23; Feb. 13; March 12; March 26; April 9; April 23;  
May 7; May 21; June 18; June 15-29; July 2; June 30 – July 12; July 16 (2004)

## 2nd Quarter 2004 SCWE Collective Assessment Performance Indicators

Davis-Besse Power Station Results (Preliminary Report), June 30, 2004  
Davis-Besse Safety Conscious Work Environment 1st Quarter 2004 Collective  
Assessment Preliminary Report, July 19, 2004  
Figure 1 – SCWE Collective Assessment Review Template, SCWE Pillar 1 Health  
Assessment Results,  
Davis-Besse Nuclear Power Station SCWE Collective Assessment Review: SCWE  
Results for Pillar 1, Nov. 20, 2003  
Davis-Besse Nuclear Power Station SCWE Collective Assessment Review: NRC  
Allegation Ratio, July 14, 2004  
Davis-Besse Nuclear Power Station SCWE Collective Assessment Review: NRC  
Retaliation Allegation Ratio, July 14, 2004  
Davis-Besse Nuclear Power Station SCWE Collective Assessment Review: ECP  
Retaliation Concern Ratio, July 16, 2004  
Davis-Besse Nuclear Power Station SCWE Collective Assessment Review: ECP  
Confidentiality-Anonymity Ratio, July 16, 2004  
Figure 1 – SCWE Collective Assessment Review Process: SCWE Pillar 2 Health  
Assessment Results  
Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: Survey  
Results for Pillar 2, Jan. 7, 2004  
Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: Condition  
Report Self-Identified Rate, July 16, 2004  
Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP  
Technical Issues Ratio, July 16, 2004  
Figure 1 – SCWE Collective Assessment Review Template SCWE Pillar 2 Health  
Assessment Results  
Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: SCWE  
Survey Results for Pillar 3, Nov. 20, 2003  
Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP  
Concern / NRC Allegation Ratio, July 16, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP Retaliation Concern / NRC Retaliation Allegation Ratio, July 14, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP User Satisfaction, July 14, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP Evaluation Substantiation Ratio, July 16, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP Review Timeliness, July 16, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP Corrective Action Timeliness, July 16, 2004

Figure 1 – SCWE Assessment Review Template SCWE Pillar 4 Health Assessment Results

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: SCWE Survey Results for Pillar 4, Nov. 20, 2003

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP Retaliation Concern Substantiation Ratio, July 14, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP Chilling Effect Concern Ratio, July 16, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: ECP Chilling Effect Substantiation Ratio, July 16, 2004

Davis-Besse Nuclear Power Station: SCWE Collective Assessment Review: SCWERT Non-Concurrence Ratio, July 14, 2004

Employee Concerns Program 2004 Results Davis Besse, July 19, 2004

#### SCWE Training Information

FENOC Management Actions to Detect and Prevent Retaliation, Feb. 2004

FENOC Safety Conscious Work Environment Refresher Supervisor Continuing Training, June 2004

#### FENOC Reorganization Plan

Reorganization Q & A

New FENOC Organization

Change Management Plan for FENOC's New Organization, July 19, 2004

Communications Plan for 2004 FENOC Reorganization, May 12, 2004

Organization Implementation Plan Template, The New FENOC, June 22, 2004

Major Milestones, The New FENOC, June 23, 2004

Seating (by table), The New FENOC, June 23, 2004

Reorganization Management Training

Personnel Transfer Worksheet

Transfer of Organizational Function Plan

FENOC Employee Biographical Data

#### **LIST OF ACRONYMS USED**

CA	Corrective Action
CAP	Corrective Action Program
CFR	Code of Federal Regulations

CR	Condition Report
ECP	Employee Concerns Program
FENOC	First Energy Operating Comapny
FW	Feedwater
NQA	Nuclear Quality Assessment
PI	Performance Indicator
SC	Safety Culture
SCWE	Safety Conscious Work Environment
SCWERT	Safety conscious Work Environment Review Team

## FOCUS GROUP INTERVIEW GUIDE

### Focus Group Interviews

#### I. Introduction

Why we are all here? What we do with the information?

We are here as a follow up to our inspections of Davis-Besse management and human performance initiatives. Our primary focus today is on the effectiveness of corrective actions taken since the findings from the ECP survey done last November.

The information from these interviews will be combined with interviews from other groups and individuals, our review of documents and reports from FENOC and their contractors, and some observations we will be doing. The information will be aggregated and will serve as the basis for and inspection report.

Intro self and time in current organization/D-B

Ground rules

- No supervisors
- No names in report aggregate findings
- Everybody encouraged to talk

#### II. Hand out list of issues from November Survey

In November there was a large number of people in your organization who .....

Do you believe that this is the case now? Has it improved or gotten worse?

Why do you think this is so?

What specific actions have been taken or events have occurred to cause the change?

##### 1. Willingness to raise concerns

- a. Management cares more about safety than cost schedule.
- b. Management expectations on safety and quality are reflected in appraisals, rewards, and discipline. (Probe why)
- c. Management does not tolerate retaliation of any kind for raising concerns.
- d. I could challenge a non-conservative management decision.
- e. Management will address concerns brought to them.
- f. My work environment is free of Harassment, Intimidation, Retaliation, or Discrimination (HIRD).
- g. I can raise nuclear safety or quality concern without fear of retaliation.

2. Normal problem resolution process
  - a. Identification of nuclear safety or quality issues using CRs is effective in my organization.
  - b. Resolution of nuclear safety and quality issues, including Root Cause, is effective in our organization.
  - c. CR process is effectively utilized by DB to resolve quality issues in a timely manner.
  
3. Employee concerns program (ECP)
  - a. ECP will keep my identity confidential at my request.
  - b. Upper management supports the ECP.
  
4. Preventing and detecting retaliation
  - a. I am not aware of others who have been subjected to Harassment, Intimidation, Retaliation, and Discrimination (HIRD) within the last 6 months.

III. Handout List of Cross-cutting topics

FENOC/Davis-Besse identified cross-cutting themes to address these problems and corrective actions.

Communication  
 Working ours/scheduling  
 Schedule credibility  
 Low threshold/High volume CRs  
 Management comments

For each

What has been done to address each of these areas

How effective have they been in addressing the areas of concern

Give specific examples.

Probe Questions for Department Specific Focus Groups Based on Previous Inspection Findings and Licensee Corrective Actions:

Plant Engineering:

- (1) How have your work hours impacted your willingness to raise safety issues since November 2003?
- (2) Is there schedule pressure to complete modifications? Do you challenge this pressure? How is it received? Give examples
- (3) Has the criteria for getting overtime approved changed?

(4) How has the backlog in PM been addressed? Were appropriate decisions made? Did you challenge these decisions? How were these challenges received?

Chemistry:

(1) Are there issues with the operability of chemistry equipment that have not been addressed (a previous inspection finding)? Have you raised these issues? How were equipment issues resolved?

(2) Have you received feedback for concerns you raised? ( a finding from the licensee's follow up to the November 2003 survey)

Maintenance:

(1) Did the Director's focused group discussions regarding the results of the November 2003 survey improve the SCWE? Why or why not? (Corrective action for CR 04-00271)

(2) Have you used the daily surveys developed in response to the November 2003 survey results? Have you received feedback on any comments you made? Is this a viable system for reporting issues?

(3) Does there continue to be a backlog of preventive maintenance? How is this communicated to/from management? How does this affect schedule and your ability/willingness to raise issues regarding preventive maintenance and the schedule?

(4) Are you aware of any individuals who have been discriminated against?

(5) Do individuals self identify errors?

(6) Have you raised concerns about the quality of work packages? How were these concerns addressed? ( A finding from the licensee's follow up assessment)

Operations:

(1) Have fatigue/FFD concerns been raised? How were these issues addressed?

(2) Is operations involved in scheduling? How are proposed revisions to the schedule received?

(3) Are decisions regarding operations communicated effectively (a finding from the licensee's follow up assessment)

Questions for supervisors:

(1) Did you attend the SCWE following the November 2003 surveys? What impact did the training have on the manner in which employee concerns are addressed?

(2) Have you received communications training (Corrective action 4 of CR 04-00292) What impact did the training have on supervisors' responses to employees concerns and the manner in which information is shared in the organization?

(3) Have periodic supervisory briefings established following the November 2003 survey been effective?

Questions for the TOP Members:

(1) Is there a charter for your group? What is it?

(2) Were you provided the results of the SCWE survey review team report (corrective action in response to CR 04-00245)? If so, what has been done to address the findings of the report?

(3) How were the findings regarding management comments which negatively impacted the SCWE addressed?

- (4) How is the potential affect of the reorganization on the SCWE and the perception that these changes have not been effectively communicated being addressed?
- (5) How is the perception of discrimination against an I &C technician being addressed?
- (6) What is being done to address the perception that the 3- question survey is not effective ( a finding from the licensee's follow up assessment)

**Davis Besse CR Summary (CA's in underline & bold not completed yet)**

<b>CR 03-11315: Investigate reason for November survey decline</b>	
<b>Analysis/details</b>	<b>Associated corrective actions written</b>
<p>Established team (external). Five common themes found for declines in some questions for some groups (communication, work hours, schedule credibility, management comments, &amp; CR threshold). However, overall site SCWE concluded to have improved. Major issues &amp; events that contributed to declines have been identified &amp; corrective actions will further improve SCWE. The four attributes of SCWE exist at the site.</p>	<p>CR04-00245: Management comments            CR04-00246: Low CR threshold            CR04-00247: Schedule credibility            CR04-00291: Work hours            CR04-00292: Communications</p>
	<p>Targeted sections:            CR04-00226: NQA            CR04-00253 Chemistry            CR04-00256 Engineering            CR04-00271 Maintenance            CR04-00411 Operations</p>
	<p>Non targeted sections:            CR04-00301 Supply chain            CR04-00307 Project management            CR04-00369 Training            CR04-00382: Quality services            CR04-00392 Reactor engineering            CR04-00393 Design engineering            CR04-00394 Business services            CR04-00405 Security            CR04-00407 Outage management &amp; work control            CR04-00416 Regulatory affairs            CR04-00486 Radiation protection            CR04-00544 Human resources            CR04-00599 Rapid response</p>

	<p>CA1: Determined operating experience report does not need to be issued.</p> <p>CA2: Refresher training on SCWE provided to supervisors.</p> <p>CA3: CRs generated for targeted departments with survey declines.</p> <p>CA4: TOP Team charter revised, members selected. E-mail identifying members distributed site wide. Team met for the first time.</p> <p>CA5: Will perform assessment of effectiveness of correction actions (no response yet).</p> <p>CA6: Action plan to increase visibility of ECP and SCWERT developed and activities completed (presentation, video, informal website, site newsletter).</p> <p>CA7: Generated CRs for each of the cross cutting themes.</p> <p>CA8: Generated CRs for each of non-target section.</p> <p>CA9: Provide periodic refresher training on SCWE to supervisors and above.</p> <p>CA10: One individual in Maintenance completed Positive Leader Newsletter training.</p> <p>CA11: One individual in Maintenance completed Positive Leader Newsletter training.</p>
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**CR 04-00245: Capture all actions completed and planned to address the cross-cutting issue of management comments**

Analysis/details	Associated corrective actions written
<p>Comments made by senior managers not consistent with SCWE expectations and Leadership in Action principles; resulted in perception that management does not fully support SCWE. Causes: senior management frustrated due to long term outage, some supervisors not comfortable at holding upper management accountable for statements made. Upper management lack acute awareness of how statements interpreted, need greater sensitivity.</p>	<p>CA1: Develop and implement actions to hold managers accountable for Leadership in Action behaviors.</p> <p>CA2: SCWE training incorporated into Cycle 1 by newsletter and site wide refresher training &amp; Cycle 2 through supervisor training (tips &amp; tools). Cycle 3 will be updated, and refresher to be provided once per year in following years.</p> <p>CA3: Provided the TOP team with the SCWE Survey Review Team report to help them monitor management behaviors.</p>

<b>CR04-00292: SCWE Survey Review Team cross cutting theme: communications</b>	
Analysis/details	Associated corrective actions written
<p>Communications issue appear to be result of less than effective and complete communication. Many issues discussed with section &amp; plant management, who were able to explain actions &amp; reasons and believed were effectively communicated to the work force. Probable cause: failure of management team to ensure communication reached through entire organization and is clear &amp; understood.</p>	<p>Actions taken to date:</p> <ol style="list-style-type: none"> <li>1. Section managers held discussion with employees on survey results.</li> <li>2. All hands meeting in December with discussion on survey.</li> <li>3. Daily survey to all employees. Data tracked &amp; tabulated.</li> <li>4. Site VP provides periodic emails.</li> <li>5. Periodic Supervisory Briefings. Supervisors then brief employees, with feedback sheets provided.</li> <li>6. CA #4 Develop a process and team to address SCWE issues.</li> <li>7. Communication Section to provide additional information to supplement FENOC On Line, information also emailed to employees &amp; hard copies available.</li> </ol>
	<p>Corrective actions:</p> <p>CA1. Supervisory briefing feedback forms reviewed for communication to be handled through DB rather than FENOC.</p> <p>CA2. Schedule developed &amp; published on web for all hands meeting. Quarterly meetings scheduled &amp; dates posted.</p> <p>CA3. Schedule developed &amp; published on web for Town Hall meetings. Meeting scheduled &amp; posted.</p> <p>CA4. Communications training to be provided as part of supervisor training.</p>
<b>CR 04-00256: SCWE: March-November 2003 Survey Results Discussion: Decline in Plant Engineering</b>	
Analysis/details	Associated corrective actions written
<p>Efforts required to assess contributing causes of survey decline for Plan Engineering. Actions: supervisors will conduct morning meetings, work hours reduced &amp; time off given, indicators to track schedule adherence, daily communication to all employees (for management comments), and low CR threshold viewed positively by management &amp; outside scope of this CR.</p>	

<b>CR 04-00253: SCWE: March-November 2003 Survey Results Discussion: Decline in Chemistry</b>	
Analysis/details	Associated corrective actions written
<p>Efforts required to assess the contributing causes of survey decline in Chemistry. Discussions focused on CAP &amp; ECP. Identified long stand equipment issues and impaired effectiveness of the CAP. Proposed actions include discussion of categorization process and to visit Management Review Boards. For ECP, problems included low visibility, relative infancy, issue of confidentiality, lack of awareness of SCWERT. Actions include better define safety culture and attributes to staff &amp; to create a group to monitor human performance.</p>	<p>CA1: Conduct session to provide better understanding of safety culture and relationship to SCWE for the department. Follow up sessions are planned.  CA2: Environmental and Chemistry Human Performance Evaluation (HEAT) Assessment Team charter developed and issued.  CA3: Memo regarding HEAT Team participation issued.  CA4: Safety and Human Performance Plan for Environmental &amp; Chemistry revised to reaffirm expectations and identify key attributes.</p>
<b>CR 04-00226: SCWE: March-November 2003 Survey Results Discussion: Decline in Nuclear Quality Assurance</b>	
Analysis/details	Associated corrective actions written
<p>CR written to capture outcomes from interviews with department on survey declines. Issues discussed include pressure during NOP testing (decreased NQA confidence in safety culture), management not fully consider NQA observations, &amp; CR threshold too low.</p>	<p>CA1: Discussion held with Site VP regarding management performance during NOP testing.  CA2: Reviewed quarterly reports from 2003. Two areas of concern identified: CAP and procedural compliance.  CA3: Confirm cross cutting issues identified in fourth quarter 2003 report are appropriately identified in the CAP. Issues documented on CRs related to the issue identified.</p>

**CR 04-00291: SCWE Survey Review Team Cross Cutting Theme: Work Hours**

Analysis/details	Associated corrective actions written
<p>Purpose is to capture actions to address work hours issue. Discrepancy between what many are working and perception of hours. Reason is limited communication on actual hours worked, and people believe everyone is working over 60 hours. Also no formal communication on schedule once back to service.</p>	<p>Actions taken to date:</p> <ol style="list-style-type: none"> <li>1. Change in requirement for approval of overtime deviation changed from 72 to 60 hours on Oct. 16, 2003.</li> <li>2. Provided holiday time off.</li> <li>3. Management team met to discuss and finalize work week plan and implementation date.</li> <li>4. Implementation of first quarter Work Week Plan reduced hours for most to 40-50 hours.</li> <li>5. Management Team discussed issue of employee fatigue and fitness for duty at Restart Readiness Review meeting.</li> <li>6. Management Team discussed employee fatigue and fitness for duty to ensure team believed employees ready for restart. Managers documented and provided evaluation for their sections. All identified employees fit for duty.</li> </ol>
	<p>Corrective Actions:</p> <p>CA1: complete a performance indicator on overtime hours worked in Rad Protection on monthly basis through July 2004. Post indicators in a visible location.</p> <p>CA2: same, for Chemistry</p> <p>CA3: same, for Plant Engineering</p> <p>CA4: same, for Rapid Response Team</p> <p>CA5: same, for Reactor Engineering</p> <p>CA6: same, for Quality Services</p> <p>CA7: same, for Security</p> <p>CA8: same, for Supply Chain</p> <p>CA9: same, for Business Services</p> <p>CA10: same, for Work Management</p> <p>CA11: same, for Client Services</p> <p>CA12: same, for Mechanical maintenance</p> <p>CA13: same, for E&amp;C</p>

	<p>CA14: same, for FIN Team Maintenance  CA15: same, for Maintenance  CA16: same, for Training  CA17: same, for Design Engineering  CA18: same, for Project Management Engineering  CA19: same, for Regulatory Affairs  CA20: same, for Quality Assessment  CA21: same, for Human Resources  CA22: same, for Operations  CA23: the Senior Leadership Team will review overtime hours at the Monthly Performance Review meeting to determine if additional corrective actions needed. Will be completed after 6 months after Work Week Plan implemented.</p>
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**CR 04-00246: SCWE Survey Review Team Cross-Cutting Theme–Low CR Threshold**

Analysis/details	Associated corrective actions written
<p>Purpose is to capture all actions to address low CR threshold perception, resulting in too many written and overtaxing the system. Few understood management expectations for process. Discussion on specific examples of CRs written at too low of a threshold is provided with the basis of why they were placed in the system (i.e. cited standards, guidance documents). Conclude threshold intentionally set low and expected to result in high number. Discussion for reason for high numbers in each department provided. Discussion of barriers in place to ensure important issues are not overlooked provided. Conclude number does not burden process or in overlooking important issues. Single tracking system facilitates prioritizing and monitoring workload. Apparent cause: management expectations not communicated/understood or worker accountability not at desired level.</p>	<p>CA1: The manager of Quality Services needs to explain expectations and benefits of a single/low threshold CR process and examples of methods to do so are provided. Particular emphasis on Maintenance, Chemistry, and Plant Engineering.</p>

<b>CR 04-00271: SCWE: March-November 2003 Survey Results Discussion: Decline in Maintenance</b>	
Analysis/details	Associated corrective actions written
Purpose to track actions to improve SCWE in maintenance as result of focused interviews. Director discussed results with personnel in small groups. Daily surveys to fill out. Overall discussion group results positive. Will continue to monitor concerns through CAP, ECP, SCWE surveys.	
<b>CR 04-00411: SCWE: March-November 2003 Survey Results Discussion: Decline in Operations</b>	
Analysis/details	Associated corrective actions written
Operations manager held meetings with personnel to gain insights into the decline, focusing on the five themes. In response to CR 03-08419, Operations management implemented many initiatives to address communications. For work hours, have been reduced to minimum possible, allowed time off during holidays, changed process to working over 60 hours need VP approval. For fatigue, CR 03-08418 addresses. For schedule credibility, actions taken under CR 03-08418 addresses. For CR threshold, lower indicative of a healthy culture, and CR 03-08418 addresses. Management comments are being addressed through communication with employees.	

<b>CR 03-08418: Operations Events-Collective Significance Review</b>	
<b>Analysis/details</b>	<b>Associated corrective actions written</b>
<p>This CR is to evaluate collective significance of Operations Events and errors to address weaknesses/shortcomings of organization.</p>	<p>CA4: Define on shift organization, reporting structure, and responsibilities of each position. Shift organization chart developed with roles and responsibilities.</p> <p>CA5: The site VP/plant manager conducted interviews with shift managers and supervisors to ensure expectations understood.</p> <p>CA6: Work Support Center supervisor has responsibility to assign owners to activities.</p> <p>CA7: Operations manager discussed with operators the impact of “position authority” and differentiation of inquiry, comments, suggestions, and directions.</p> <p>CA8: Evaluated the operations standards and expectations regarding oversight vs. command and control responsibilities for each shift management member. Determined no revision necessary. Expectations and roles reinforced as part of oral boards.</p> <p>CA9: Operations Oversight Manager Charter created to address shortcomings. The team has been trained and performed baseline observations, already had a positive effect.</p> <p>CA14: Reviewed guidance from INPO and other sites to evaluate if training needed for Operations Expectations and Standards. DB guidance consistent with others, no changes or training necessary.</p> <p>CA18: Ensure personnel providing oversight familiarity with DBBP-OPS-001, Operations Expectations &amp; Standards. FENOC Observations Database enhanced to provide all users the ability to review and added to General Information for added guidance.</p>

	<p>CA41: Questioning attitude reinforced through: operator oral boards question, Cycle B training, training simulator drills, email.</p> <p>CA56: Issue night orders with additional information. Memo issued to Leadership Team with guidance on major operational activities.</p> <p>CA57: Reinforce expectation to communicate to management deviations from the work schedule, contained in Night Orders on a continuing basis.</p> <p>CA58: Develop for Leadership Team and scheduler a list of responsibilities for scheduler and types of activities that should be scheduled.</p> <p>CA59: Integrate Operations activities into the plant work schedule, match resource availability. Activities broken down, assigned owners, reflects new standards.</p> <p>CA? (illegible number): Several changes made to monitor schedule implementation and holding accountable for schedule adherence.</p>
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**CR 04-00247: SCWE Survey Review Team Cross-Cutting Theme: Schedule Credibility**

Analysis/details	Associated corrective actions written
<p>Capture all actions completed and planned for addressing schedule credibility. Reasons given are discussed. Three issues: operations activities not effectively managed in schedule, preventative maintenance tasks not being incorporated, and end date for restart extended continually. Causes: less than adequate review and involvement with schedule by Operations, and continual extensions to restart schedule. Communicated with Work Support Center, Operations Manager, and VP to define expectations for Operations related to work schedule. Discussed preventive maintenance deferral during section meeting. Final restart is essential for improving schedule integrity.</p>	

**APPROVAL SHEET**  
**FOR**  
**CORRECTIVE ACTION EFFECTIVENESS REVIEW FROM THE NOVEMBER 2003 SAFETY**  
**CULTURE/SAFETY CONSCIOUS WORK ENVIRONMENT SURVEY**

**Inspection Dates:**

July 19 through July 30, 2004

**Exit:** TBD

**Applicable Inspection Procedures:**

93812, "Special Inspection"

**Inspection Procedure:**

Prepared by: <u>/RA/</u>	<u>7/16/04</u>
G. C. Wright, RIII, DRP	Date
Project Engineer/Team Lead	
Reviewed by: <u>/RA/</u>	<u>7/19/04</u>
Christine Lipa	Date
Chief, Projects Branch 4, DRP	
Approved by: <u>/RA/</u>	<u>8/6/04</u>
John A. Grobe, Chairman,	Date
Davis-Besse 0350 Oversight Panel	

Corrective Action Effectiveness Review from the November 2003 Safety Culture/safety Conscious Work Environment Survey

*The inspection will be accomplished by a team of NRC inspectors and specialists.*

I. Inspection team make-up:

Team Leader: Geoffrey Wright, Region III  
Team Members: Clare Goodman, NRR  
Julius Persensky, RES  
Lisamarie Jarriel, OE  
Andrea Kock, OE

II. Inspection Activities:

Docket	=	05000346
Report No.	=	50-346/2004013
Insp. Proc.	=	93812
Inspection IPE	=	ER
Preparation IPE	=	SEP
Documentation IPE	=	SED
Travel	=	AT
Entrance Meeting:		July 19, 2004
Inspection Time:		July 19 - 23, 2004 On-site July 26 - 30, 2004 In-office
0350 Panel Briefing:		TBD
Exit Meeting:		TBD.

III. Inspection Deliverables:

This special inspection is designed to provide the NRC's 0350 Panel (Panel) with an evaluation of the following aspects of the licensee's continuing efforts to improve and monitor the safety culture and safety conscious work environment at Davis-Besse:

- A. The corrective actions taken by the licensee in response to the SCWE survey conducted in November 2003 and the licensee's assessment of the survey.
- B. The effectiveness assessment conducted by the licensee for the corrective actions in "A."
- C. An assessment of the licensee's quarterly safety culture monitoring business practice and its implementation.

IV. Inspection Details

A. Corrective Action Review

- 1. Review Condition Reports generated as a result of the November 2003 survey and associated assessment.
- 2. Evaluate corrective actions associated with the Condition Reports to determine whether they address the causes for the conditions.

- B. Evaluate the licensee's corrective action effectiveness team assessment conducted in 2<sup>nd</sup> quarter of 2004.
1. Assess methodology
  2. Review Licensee team composition
  3. Conduct Focused Group Interviews
    - a. Staff within organizations (8-10 individuals per group).
      - 1) Ops
      - 2) Maintenance
      - 3) Chem
      - 4) Plant Eng
      - 5) NQA
      - 6) Rapid Response/Design Engineering
      - 7) Security
      - 8) Outage Management/Work Control
      - 9) Supervisors
      - 10) Contractors
    - b. Special groups.
      - 1) TOP Team
      - 2) SCWERT
      - 3) "Volunteers"
      - 4) Independent Review Team
  4. Document Review (As available and time permitting):  
 Review the following items for the listed areas:  
 Charter, if new or changed since Jan 04  
 Procedures, if new or changed since Jan 04  
 Minutes  
 Reports
    - a. TOP
    - b. ECP
    - c. SCWERT
    - d. Independent Team
      - 1) Report
      - 2) Comments
    - e. CR/CAs
    - f. Monthly Safety Culture PIs
    - g. SCWE PIs
    - h. "3 Question" survey
  5. SCWE Aspects of the Reorganization Plan
    - a. Communication Plan
    - b. Change Management Process
    - c. SCWERT involvement.
  6. Activity Observations (as available):
    - a. TOP Team
    - b. SCWERT
    - c. Shift Turnover
    - d. Safety Culture Monitoring
    - e. Work Planning
    - e. All Hands

- f. SCWE/Supervisory Training
- g. 4 Cs
- h. Town Meeting

C. Evaluate licensee's quarterly safety culture monitoring business practice and its implementation.

1. Review NOBP-LP-2502 Rev 0 for quarterly monitoring safety culture and evaluate:
  - a. the appropriateness of monitored items;
  - b. the criteria used to assess effectiveness; and
  - c. the process used when an item does not meet criteria
  - d. any weaknesses that would limit its effectiveness as the tool to monitor safety culture at Davis-Besse prior to restart.  
(Note: During recent public meeting, the licensee indicated they were only looking at 1 months worth of information/data. They were NOT using a rolling 2/4/6 month type of look - they were getting a 1 month snap shot look rather than an integrated look)
2. Review results from implementation of NOBP-LP-2502 against interviews.
3. Review the licensee's actions to address areas which do not meet goals or metrics with declining trends and evaluate:
  - a. the system used to address issues;
  - b. how the issues are tracked;

V. Brief 0350 Oversight Panel on findings and conclusions from inspection.

VI. Exit Meeting