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Docket Number 50-346

License Number NPF-3

Serial Number 1-1430

August 22, 2005

Mr. James L. Caldwell, Administrator  
United States Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

Subject: Submittal of Independent Assessment Report of Operations Performance for the  
Davis-Besse Nuclear Power Station, Year 2005

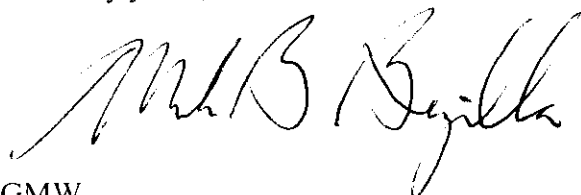
Dear Mr. Caldwell:

The purpose of this letter is to submit the 2005 Operations Performance Independent Assessment Report for the Davis-Besse Nuclear Power Station (DBNPS). This submittal is in accordance with the Nuclear Regulatory Commission (NRC) letter dated March 8, 2004, "Approval to Restart the Davis-Besse Nuclear Power Station, Closure of Confirmatory Action Letter, and Issuance of Confirmatory Order."

The Operations Performance Independent Assessment was conducted from June 13 to June 24, 2005, at the DBNPS in accordance with the Independent Operations Performance Assessment Plan submitted via letter Serial Number 1-1406 dated March 15, 2005. The final debrief marking the end of the assessment was conducted on July 8, 2005. The enclosed report contains the results of the Independent Assessment. No issues rising to the level of an area for improvement were identified in the Independent Assessment; therefore, no action plans are included to address areas for improvement.

If you have any questions or require additional information, please contact Mr. Clark A. Price, Manager - Regulatory Compliance, at (419) 321-8585.

Sincerely yours,



GMW

AUG 23 2005

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Enclosures:

- 1) Confirmatory Order Independent Assessment of Operations Performance for the Davis-Besse Nuclear Power Station
- 2) Commitment List

cc: W. A. Macon, DB-1 NRC/NRR Project Manager  
C. S. Thomas, DB-1 Senior Resident Inspector  
USNRC Document Control Desk  
Utility Radiological Safety Board

Docket Number 50-346  
License Number NPF-3  
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Enclosure 1

**Enclosure 1**

CONFIRMATORY ORDER INDEPENDENT ASSESSMENT  
OPERATIONS PERFORMANCE  
DAVIS-BESSE NUCLEAR POWER STATION

(33 pages follow)

**Confirmatory Order Independent Assessment  
Operations Performance  
Davis-Besse Nuclear Power Station**

**Report Number**      **COLA-OPS-2005**

**Facility:**            **Davis-Besse Nuclear Power Station**

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

**On-site  
Observation:**        **June 13 – 24, 2005**

**Final Debrief:**      **July 8, 2005**

**Final Report:**

*Larry E. Briggs*      *July 12, 2005*  
**Independent Assessor Lead**      **Date**

**Reviewed and  
Accepted:**

*Michael B. Byrle*      *8/22/05*  
**Site Vice President**      **Date**

*Jamie M. Penickel*      *8-22-05*  
**Vice President, Oversight**      **Date**

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## **A. EXECUTIVE SUMMARY**

### **Overall Conclusions of Operations Performance**

The team concluded, based on observations of Control Room and Simulator operations, interviews, observations of classroom training and Condition Report evaluations, that the plant is being operated safely, both in the Control Room and in the plant. Personnel practice and display a questioning and safety conscious attitude. Good self and peer checking were practiced by those observed by the team. Operations personnel are knowledgeable of the plant. All Control Room operations observed were conducted using plant procedures as necessary, although there was one procedure adherence issue in the Simulator. Control Room demeanor was more relaxed than observed last year, but did not seem to affect the operators' level of performance. There are some minor differences between the operations of the different operating crews, but this should be resolved when the new Conduct of Operations procedure is approved and implemented (NOTE: The Conduct of Operations procedure was effective on July 15, 2005). The team did not identify any issue this year that rose to the level of an AFI, although reactivity management would have if appropriate corrective actions had not been taken.

The team concluded that Operations' performance is Effective. The more significant observations of the assessment are as follows:

- Crews are more relaxed and less formal in their duties than they were during last year's Operations Assessment, but operator knowledge and actual performance of their duties continues to be Effective.
- Management's expectations are not being communicated/enforced the same across all crews resulting in some differences in the conduct of certain Control Room operations and behavior. Management's expectations and enforcement of them needs to be communicated to operating crews. This should be resolved when the new Conduct of Operations procedure is approved and crews are trained.
- Expectations for procedure usage were well-known. Proficiency in this area was evident during both the control room and equipment operator observations.
- The threshold for problem identification appears to be low considering all the Green Deficiency Tags observed throughout the plant and the Control Room.
- Personnel are kept well-informed of plant status and emergent plant equipment conditions via the well-organized shift turnover and daily management meetings. Standardization of shift turnover meetings was evident for all five crews.
- Based on observations, the licensed- and non-licensed personnel continue to operate the plant in a safe manner. Based on the team's observations, the crews are operating Effectively.

- Operations personnel understand, are on board with, and are working to implement a safety conscious work environment.
- All personnel interviewed appear to be dedicated employees carrying out their responsibilities to the best of their abilities regardless of morale, pay or work schedule issues.
- Actions to address Confirmatory Order Independent Assessment (COIA) Areas for Improvement (AFIs) were Marginally Effective. Continued emphasis on ongoing efforts is needed to complete corrective actions for the AFIs identified in the 2004 COIA.
- Ownership assignment of Corrective Actions (CAs) and continued oversight to prevent recurrence was Highly Effective.
- Actions to address reactivity management seem to be working; however, continuing focus needs to be maintained in this area.
- Actions to address some 2004 Operations Performance Independent Assessment AFIs are still taking place in Area 3 – Condition Report Reviews; therefore, this Area was considered Marginally Effective by the team.
- Overall actions to address other Condition Reports (CRs) were considered Effective.
- Similarities in performance were noted in both the Simulator and the Control Room.
- Operators are highly appreciative of the training that they are now receiving on a regularly scheduled basis.
- The training department is responsive to the needs of the operators, indicating, to some extent, that the feedback process is in place and working.
- Classroom presentations observed indicate a need for review regarding quantity versus quality.
- Procedural adherence must be emphasized by the training staff in the Simulator.
- The team considers overall training performance to be Effective.

#### **Overall Conclusions of Self -Assessment Capability**

The Company Nuclear Review Board (CNRB) and Davis Besse Oversight (DBOV) assessments continue to be factual, in-depth, and accurate in identifying various weaknesses within the Operations department, just as noted last year. Findings were

being appropriately captured within the Corrective Action Program. A significant improvement was noted over the quality and depth in which the Operations department is now assessing their performance, including an emphasis on safe and efficient plant operations.

Operation's self-assessments, coupled with DBOV and CNRB assessments, appear to be Effective.

## **B. INTRODUCTION**

A condition of the March 8, 2004, NRC Confirmatory Order Modifying License No. NFP-3, for restart of the Davis-Besse Nuclear Power Station following the reactor vessel head degradation event, was to conduct an annual comprehensive, independent outside assessment of the Operations performance area. The assessment will be used to identify Areas For Improvement (AFI), requiring corrective actions with action plans, and Areas in Need of Attention (ANA) for other improvement opportunities. The assessment will also be used to assess the rigor, criticality, and overall quality of available Davis-Besse internal self-assessment activities in this performance area.

## **C. SCOPE OF ASSESSMENT**

The scope of the Operations Assessment was defined to include an evaluation of the following Operations activities occurring during the assessment period using current industry standards and applicable Davis-Besse procedures:

- Shift turnovers
- Control manipulations
- Communications
- Interdepartmental interfaces
- Procedural use
- Awareness of plant and equipment status and workarounds
- Pre-job/activity briefings
- Non-shift Operations management interface and oversight
- Shift management command and control
- Shift management's evaluation, prioritization, and disposition of maintenance activities and emergent issues
- Operations behaviors in the areas of questioning attitude and safety
- Shift handling of off-normal operations
- Observation of operator simulator training to compare crew performance, demeanor, and communication skills with actual control room operations

The assessment team reviewed the ten CRs initiated by Davis-Besse to address the ten AFIs identified during the August 2004 Operations Performance Assessment.

The assessment team also reviewed selected CRs related to Operations Department performance and independently assessed the corrective actions recommended and taken by Davis-Besse.



The assessment team reviewed the referenced procedure/documents listed in Appendix A during the preparation period prior to site arrival and while on-site.

The assessment team also reviewed a number of the Davis-Besse Nuclear Power Station's self-assessment activities associated with Operations to evaluate:

- The results of their Quarterly Quality Assessments that evaluated Operations performance and to determine if the assessments were comprehensive and if effective actions were taken, or planned to be taken, to correct problems or weaknesses identified.
- The effectiveness of self-assessment capability by reviewing corrective actions associated with self-assessment reports, audits (including audits of both onsite and offsite safety committee activities), and evaluations conducted on Operations performance.
- The significance of a sample of other self-assessment findings to determine the effectiveness of the self-assessment effort.
- The aggressiveness of the Davis-Besse Operations staff in correcting self-assessment findings and to determine whether the corrective actions taken are adequate, timely, and properly prioritized.

The on-site team consisted of two independent consultants and two nuclear industry peer representatives. The industry peers participated for one week (June 13 through 17, 2005) and the two independent consultants participated for two weeks, including the weekend (June 13 through 24, 2005). Abbreviated biographies of the team members are presented in Attachment 2 of this report.

## **D. METHODOLOGY**

The independent assessment team used the listed references (Attachment 1) as guidance to evaluate performance of the Operations Department personnel. The assessment methodology included, but was not limited to the following:

The team observed licensed, non-licensed and Operations Management personnel in the performance of their assignments. Assessment team members' shift assignments overlapped shift turnovers to compare consistency of crew operations.

The team observed Control Room shift activities of at least portions of all five crews and shift turnovers of all five crews. The team conducted ten Control Room observations, including evening and weekend observations, and attended nine shift turnover meetings. The team observed portions of three different Non-Licensed Operator (NLO) rounds.

The team interviewed selected Control Room, Non-Licensed, and Operations Management personnel. The team interviewed eight licensed operators (reactor operators and senior reactor operators through the Shift Manager position), six non-licensed

operators and four management personnel. The team also informally interviewed several members of the Operations staff during the process of conducting the assessment.

The team reviewed selected CRs and their corrective actions to evaluate safety perspective, appropriate cause determination, and corrective action effectiveness.

The team reviewed 11 Operations-related CRs during the off-site preparation weeks and while on site. The team also reviewed the CRs implemented to address the ten Areas for Improvement (AFI) identified in the 2004 Operations Performance Independent Assessment. Several other CRs were also reviewed during the assessment.

The team observed portions of simulator training exercises, during routine and abnormal operating conditions, to compare crew behaviors in the simulator to those observed in the Control Room. The team used the guidance of NUREG-1021 as guidance and as a comparison with actual Control Room observations. The team also observed classroom training, including one session led by the Operations Manager.

## **E. DETAILS AND RESULTS**

### **SECTION I**

The details and results are presented in the four major areas of assessment: Shift and Meeting Observations, Interviews, Condition Reports, and Licensed Operator Continuing Training.

#### **Area 1 - Shift and Meeting Observations**

##### **Scope - Area 1**

The utility currently has five rotating shifts of Operations personnel. The shifts are eight hours long. The team observed portions of day and evening shift activities during the assessment. A portion of one midnight shift was also observed. Partial shifts of three non-licensed Equipment Operators were also observed during the assessment period. The team attended nine shift turnover meetings and also attended five of the 8:00 a.m. Management Alignment and Ownership Meetings (MAOM) .

## **Observations and Findings - Area 1**

### **Control Room Shift Observation**

- General Control Room demeanor was more relaxed and less formal than during the 2004 assessment. The team observed the reactor operator “At the Controls” (ATC) and the secondary operator relieve one another without performing a proper turnover of the watch station and did not perform an “update briefing” to alert the rest of the control staff of the change in responsibility. The Unit Supervisor (US) was also not aware of the change in responsibility. This practice of not conducting a formal turnover with pertinent information and alerting the US of the change in responsibility is contradictory to Operations Management expectations. ***This is an Area in Need of Attention.***
- There are numerous green deficiency tags on the control boards (~23) and for computer points (~45). When comparing the number of tags in the Control Room to the performance indicator (4), there was a large difference. Additionally, to an outside observer it is unclear which deficiency tags are for outages, on-line deficiencies, or installed for information only.
- Some Control Room operators tended to remain at their computer consoles for extended periods, while others more frequently monitored their panels. The new Conduct of Operations will require hourly tours of the control panels; and some Shift Managers (SM) are enforcing the new draft procedure, while others are not.
- Observed Unit Supervisors brief crews on Technical Specifications (TS) Limiting Conditions for Operations (LCO) entry stating the reason for the entry, the actions and the time limits.
- Most pre-job briefs observed were formal, professional and covered all attributes of an effective brief. During the pre-job briefing for No. 1 emergency diesel generator (EDG) surveillance, several positive attributes were noted during the briefing; for example who was the test leader, the limits and precautions of the procedure, and termination criteria. However, the roles and responsibilities, human performance error reduction tools, such as peer checking when paralleling the diesel to the grid and the use of current operating experience, was not included in the pre-job briefing.
- During the pre-job briefing for No.1 EDG, the system engineer directed the equipment operator not to chase the diesel power factor and to maintain the diesel voltage in the low end of the band due to high grid voltage. The direction provided by the system engineer is not spelled out in the procedure and could lead the operator to take inappropriate actions. ***This is an Area in Need of Attention.***

- While preparing to perform DB-SC-03070 (EDG 1 Monthly Surveillance), the NLO noted that the procedure did not require him to bleed the starting air downstream of the air start isolation valves, as required by DB-OP-06316 (EDG Operating Procedure). The Shift Engineer directed him to bleed the air and documented configuration control in the Work Control Center. CR-05-02137 had been issued on April 8, 2005, to address this issue. The System Engineer noted that due to the barring device configuration, any air applied while barring the diesel would disengage the device and not injure anyone. The actions by the NLO demonstrated a questioning attitude and are considered an *Area of Strength*.
- Peer checks were used for all control room main control board valve and switch manipulations observed by the team. *This is an Area of Strength.*
- Reactor Operators conducting the surveillances that are performed each shift verified that the data attachments used to record data were the correct revision. When questioned, the operators knew what to do if a reading was out of specification or was not operating properly. Procedures observed were, DB-SC-03200, Shift Channel Check of the Radiation Monitoring System, and DB-OP-03006, Miscellaneous Instrument Shift Check. Two performances by two different crews were observed.
- On June 14, 2005 the containment purge ventilation tripped. The control room operator noticed it immediately and took proper action. The Senior Reactor Operator (SRO) referred to DB-OP-06503, Containment Purge System, procedure for direction; but the system could not be restarted. A Condition Report (CR-05-03353) was initiated. A split air-line supplying the damper was identified and replaced the next day and the system restarted. Operator and SRO actions were prompt and in accordance with procedures. *This is an Area of Strength.*
- Night Orders were being implemented as directed.
- Required Reading Log was reviewed and personnel are reviewing information on a regular basis, within the required time frame, a contrast to observations noted during the 2004 Operations Performance Independent Assessment.
- Operations personnel are aware of and know the contingency actions to address Control Room Operator Work Arounds.
- Control Room activity level seemed to be well-controlled.

*Licensed operator performance was Effective.*

### **Equipment Operator Shift Observations**

The team observed Equipment Operators (EO) on rounds of zones one, two, and three. The rounds included the main turbine, turbine support equipment, switchgear rooms, the switchyard and the auxiliary building. The purpose of these observations was to ascertain the level of behaviors, standards and expectations of the non-licensed operators. The following attributes were observed:

- Proper use of personnel protective equipment, including the use of gloves.
- Excellent usage of human performance tools. These include the use of STAR and three-way communications.
- Observed operation and testing of the No. 1 Emergency Diesel Generator (EDG), which was under a seven-day TS LCO as a result of a 500KW surge during monthly testing. The EO and test personnel maintained control throughout the testing process. Peer checking was observed when performing any local operation of the EDG.
- Testing of the EDG did not identify any problems with the EDG or its control circuitry. Operations Management made a conservative decision to perform a 24-hour load test on the diesel to see if any problems could be identified; none were. Management has also increased surveillance frequency on No. 1 EDG in the interim. Surveillance frequency will decrease to normal if the diesel continues to perform satisfactorily.
- Procedures were at the stations and used throughout the testing process observed.
- A questioning attitude was exhibited. Equipment Operators (EOs) contacted the Control Room on several occasions about equipment issues such as a burnt out light bulb on a main feed water valve solenoid and during the addition of Hydrogen to the makeup tank.
- Operations personnel were aware of and knew the contingency actions to address Equipment Operator Work Arounds.
- The Zone 1 and 2 sections of the plant were clean, although there were many green deficiency tags throughout the areas toured.
- The auxiliary building (Zone 3) housekeeping and material condition was below industry standards. There was scaffolding built in the Emergency Core Cooling System (ECCS) room, and temporary equipment staged throughout Zone 3. Examples include housekeeping equipment in the ventilation room, test equipment in the Control Rod Drive (CRD) room, and stored scaffolding. In addition, there were eight light bulbs burnt out in the spent fuel pool area. All equipment was properly secured with the exception of the cleaning equipment. ***Material condition in Zone 3 is an Area in Need of Attention.***
- EOs cleaned up oil leaks and loose material during their rounds.
- EOs frisked appropriately when exiting a radioactive materials area (RMA).

- The team did not identify any equipment deficiency that did not have a deficiency tag attached.

***EO job performance was Effective.***

***Due to the large number of green deficiency tags throughout the plant and in the Control Room, material condition of the plant appears to be Marginally Effective.***

**Shift Turnover Meetings (6:30 a.m., 2:30 p.m. and 10:30 p.m.)**

The team attended three 6:30 a.m., five 2:30 p.m. and one 10:30 p.m. shift turnover (TO) meetings.

- The team observed at least one turnover of each crew.
- These meetings were controlled by the Shift Manager (SM). The meetings started with plant status. Both peer observers were accustomed to the meeting starting with an industry personnel safety topic to make personnel aware of certain industry occurrences in case something similar occurs during their shift. The safety topic is the last item covered in the TO meetings. The team noted that it was the first topic covered in the 8:00 a.m. MAOM. ***This is an Area in Need of Attention.***
- The “At the Controls” (ATC) reactivity briefing included makeup operations performed by the previous shift and the current control rod index. The peer observers noted that current industry practice included more detailed information such as the expected makeup quantity for the shift, rod heights for certain power levels, percent of rod insertion or amount of boration needed for percentage of power change. This information is currently available on the Reactor Operating Guidance sheet in the Control Room. ***This is an Area in Need of Attention.***
- Meetings were attended by supervisors from the various plant departments such as chemistry, health physics, maintenance, etc. The morning meeting was also attended by senior plant management, such as the Site Vice President, the Plant Manager and the Operations Manager.
- The SM discussed activities planned for the shift, any problem areas, any special operating conditions, and any Technical Specification LCOs that were applicable and their time constraints.
- Each EO presented expected activities and standing issues with their assigned watch stations, such as operator work arounds.

***The team considers the Shift Turnover Meetings to be Effective.***

### **Management Alignment and Ownership Meeting (MAOM) (8:00 a.m.)**

Team members attended five of the 8:00 a.m. meetings.

- These meetings had senior management personnel from all site departments.
- The meetings were well run by the Operations Manager.
- The SM provided plant status.
- The meetings were not excessively long.
- The discussions during the meeting were pertinent and open.
- Equipment issues were adequately presented at the 8:00 am and shift turnover meetings, such that all department personnel were kept informed of plant equipment issues, i.e., No.1 diesel generator operability, main transformer increased concentrations of acetylene and ethylene gases.
- Good conservative decision-making was exhibited concerning testing of the No. 1 EDG.
- Ownership of problems and issues were clearly defined.
- Three-way communications when making ownership assignments was observed by the team.

*The team considers the 8:00 a.m. management meetings to be Effective.*

### **Areas of Strength – Area 1**

- Equipment Operators demonstrated a questioning attitude during performance of the EDG 1 Surveillance and during routine tours.
- Control Room personnel consistently demonstrated self and peer checking during plant operations.
- Control Room personnel responded promptly and correctly during the unexpected containment purge ventilation trip.

### **Areas in Need of Attention -Area 1**

- Contrary to management's expectations, Control Room personnel demeanor has become more relaxed and less formal when compared to last year's observations. Shift Managers and Unit Supervisors need to consistently enforce upper management's expectations regarding Control Room formality and the execution of watch standing responsibilities.
- Management should expedite issuance of the new Conduct of Operations Procedure so all crews will carry out their operational responsibilities in a similar manner across all levels in the organization.
- Personnel should avoid providing directions for equipment operation during pre-job briefs that are not included in the operating procedure (one observation).
- Shift turnover meetings should include more reactivity management information and consider moving the industry personnel safety topic to the beginning of the meeting to mimic industry standards.
- Material conditions in Zone 3 are not up to industry standards.

### **Areas For Improvement - Area 1**

- None Observed

### **Conclusions - Area 1**

Crews are more relaxed and less formal in their duties than they were during last year's Operations Performance Independent Assessment, but operator knowledge and actual performance of their duties continues to be Effective.

Management's expectations are not being communicated/enforced the same across all crews, resulting in some differences in the conduct of certain Control Room operations and behavior. This should be resolved when the new Conduct of Operations procedure is approved and crews are trained.

Expectations for procedure usage were well-known. Proficiency in this was evident during both the control room and equipment operator observations.

The threshold for problem identification appears to be low considering all the Green Deficiency Tags observed throughout the plant and the Control Room.

Personnel are kept well-informed of plant status and emergent plant equipment conditions via the well-organized shift turnover and daily management meetings. Standardization of shift turnover meeting was evident for all five crews.

Based on observations, the licensed and non-licensed personnel continue to operate the plant in a safe manner. Based on the team's observations, the crews are operating Effectively.

### **Area 2 - Interviews**

#### **Scope - Area 2**

The team formally interviewed 19 individuals that were randomly selected by the team leader. Those interviewed were Senior Reactor Operator and Reactor Operator licensed personnel (8); non-licensed personnel (6), both on and off shift; and Operations management personnel. In addition, there were numerous other discussions/interviews during the conduct of the assessment. The following is a summary of issues that were voiced by most personnel (over half of the non-management personnel) during the formal interviews.



## **Observations and Findings - Area 2**

- Personnel have a safety conscious attitude and would not hesitate to identify a problem or concern to their supervisor, none expressed fear of reprisal if problems were identified.
- Vertical communications are good from the Operations Superintendent and above and down to the Shift Managers. There still seems to be a gap in the information given to the Reactor Operators (ROs) and EOs concerning management's expectations. An example is the response to annunciators. The Operations Superintendent and Operations Manager specify the balance-of-plant (BOP) operators read the annunciator response to the ATC operator in accordance with the draft Conduct of Operations procedure. One crew is dividing the panels at mid point (Panel 8). To the right, the BOP reads and performs the actions; and to the left, the ATC reads and performs the actions. Another shift stated that since the final Conduct of Operations procedure has not been issued yet, they are responding under the old method of using the Green Book. Since there are routine and frequent meetings between upper management and the SMs concerning management's expectations, it appears that SMs are either not communicating expectations to the ROs and EOs on their shifts or not enforcing them. ***Vertical communications are an Area in Need of Attention.***
- Almost everyone interviewed dislikes the current five-shift, eight-hour schedule, primarily because there is only one weekend off every five weeks. Morale due to the schedule is at a low. Since implementation of the new schedule, five EOs have requested reassignment to other departments within Davis-Besse. A majority of EOs interviewed expressed a desire to leave Operations due in part to the schedule and one EO3, due to transfer next month, said the schedule was one of the primary reasons for the request to transfer.

This schedule was voted in by the Union members due to ambiguity of union-management rules, distrust of management, or disagreement about pay and meals concerning the five-shift, 12-hour schedule they were on. Davis-Besse management and union personnel alike would like to see a six-shift, 12-hour schedule. A different shift schedule is in the beginning stage of negotiation. Personnel interviewed also expressed a distrust of upper management, much of it because of the 12-hour versus the eight-hour shift debate and the lack of a "letter of understanding" between management and the union. The schedule as it currently stands is effective in operating the plant, no safety issues were identified because of it; however, most Operations personnel are not pleased. ***The shift schedule is an Area in Need of Attention before it becomes a problem.*** Only one EO expressed a desire to move upwards to licensed duties, and he was not ready at this point.

- Most interviewed feel that pre-job briefs are well-performed and they have helped them to perform a job more effectively and safely. Quality of pre-job briefs has improved, and the Operations personnel are more frequently conducting post job briefs. ***This area, based on the interviews, appears to be Effective.***
- All those interviewed thought that the Duty Team support of Operations was excellent. ***The Duty Team appears to be an Area of Strength.***
- Most of those interviewed still feel the work schedule does not fully incorporate or account for available on-shift manpower. This item was also identified during the 2004 Operations Performance Independent Assessment. Discussions with Work Control Center personnel indicate that the schedule is based on the minimum complement required by TS. A two-hour block of time is set aside from 0500 to 0700 for day shift turnover when no work activities (except highly important or TS activities) are scheduled (this time block was established when crews were on 12-hour shifts). Manpower considered available does not account for time lost due to routine shift surveillances or emergent work. Pre-job briefs times are included in the times assigned to a task. Personnel did not stress that they feel as much pressure to finish all tasks like they did last year. ***Operations Shift Personnel understanding the work schedule continues to be an Area in Need of Attention.***
- Personnel stated that since the continuing training program for licensed and non-licensed operators had been re-implemented near the end of 2004, it is performing well. One operator said that it was the best he had participated in for several years.
- Most operators were familiar with the training Mentor Program but only the SM knew who was assigned to the crew. This appears to be an example of marginally effective communication between training and Operations or vertical between the SM and the shift crews. ***Effective implementation of the Mentor Program is an Area in Need of Attention.***
- During a discussion with a tagging RO, it was noted that current practice has one operator hang tags and a second operator later independently verify the tag out. Current industry practice is to have two operators hang tags, so a peer check can be provided. Following placement of tags, a third operator performs an independent verification. Davis-Besse has a very good record of correct tagging with minimal errors. The additional peer review may provide some minimal error reduction. ***Previous performance in this area has been Highly Effective.***

## **Areas of Strength – Area 2**

- All personnel interviewed thought that Duty Team support of Operations was very good.

### **Areas in Need of Attention – Area 2**

- Vertical communications of management's expectations or the enforcement of them from the Shift Manager level downward to the operating staff and EOs is in need of strengthening. In addition, continued discussions between upper management and licensed and non-licensed operators should continue to help build trust.
- Resolution of the current scheduling issue needs to take place before it becomes a morale issue that could cause operational problems.
- Shift Operations personnel still do not fully understand how their available hours are factored into the daily work schedule, but they do not feel as pressured to complete all assigned tasks as they did during last year's assessment.
- Perform effective implementation of the Mentor Program.

### **Areas for Improvement - Area 2**

- None observed.

### **Conclusions - Area 2**

Operations personnel understand, are on board with, and are working to implement a safety conscious work environment.

Management's expectations and enforcement of them needs to be communicated to operating crews. Issuance of the new Conduct of Operations procedure will help minimize or eliminate this problem.

All personnel interviewed appear to be dedicated employees carrying out their responsibilities to the best of their abilities, regardless of morale, pay or work schedule issues.

## **Area 3 - Condition Report Review**

### **Scope - Area 3**

The team reviewed the Condition Reports (CR) that were initiated to address the ten Areas for Improvement identified during the 2004 Operations Performance Independent Assessment.

As part of the Assessment Plan, the team reviewed 11 additional CRs to independently evaluate the cause determination and corrective actions taken.

## **Observations and Findings - Area 3**

### **Condition Reports Initiated to Address 2004 Operations Performance Independent Assessment AFIs**

- COIA-OPS-2004-(AFI-01)-CR-04-05907: Operations work scheduling improvement.  
Comments: Operations personnel interviewed still feel the work schedule does not fully incorporate or account for available on-shift manpower. Discussions with Work Control Center personnel indicate that the schedule is based on the minimum complement required by TS. A two-hour block of time is set aside from 0500 to 0700 for day shift turnover when no work activities are scheduled. The 2-hour window was established when crews were on 12-hour shifts and has not yet been removed. High priority work or work needed to exit a TS LCO could be scheduled. Manpower considered available does not account for time lost due to routine shift surveillances or emergent work. Pre-job briefs times are included in the times assigned to a task. ***Corrective Actions were Marginally effective.***
- COIA-OPS-2004-(AFI-02)-CR-04-05908: Operations Improvement, Ensure Shift Management understands that they have the authority and responsibility to stop work if that activity compromises their ability to safely operate the plant.  
Comments: Management issued a memo to Shift Managers on January 28, 2005, that stressed their authority to stop work, along with other responsibilities and authorities. A similar memo had been issued on February 3, 2004. The memo was signed by the Site Vice-Presidents of all FENOC sites and the Chief Operating Officer. Corrective Action (CA) 2 of this CR had end-of-shift critiques added to the work implementation schedule. That action was effective on September 20, 2004, when the crews were on five shift rotation with 12-hour watches. Now the crews are on five-shift rotation with eight-hour shifts. Most crews are not holding their end-of-shift critiques due to the work load on the eight-hour shifts. This is especially true of the day shift crews. The team thinks that end-of-shift critiques are a good tool for improving crew operations and making sure that both problem and good areas are addressed while the crew's memory is still fresh. ***This is an Area in Need of Attention.***  
Corrective Action No. 4 of this CR established meetings to be held between Operations Management and Shift Managers to increase personnel interaction. The meetings are held every two weeks. ***Overall Actions were Effective.***

- COIA-OPS-2004-(AFI-03)-CR-04-05915: Develop and pursue a plan to reduce the large Number of Operations procedure changes outstanding.  
Comments: The open procedure changes were fixed at a date of November 1, 2004. Procedure changes prior to November 1 were the old backlog changes and would be worked aggressively to reduce the number. It was about 500 when the Operations Performance Independent Assessment was completed in August 2004. The number of old procedure changes is now (June 2005) about 135. There is a backlog of new procedure changes of about 272. There is about a 400 procedure change backlog at this time. Currently there are four contract procedure writers, two are working off the old backlog and two are working the new procedure changes. The contract for the two contractors working the old backlog runs out at the end of July 2005, and the contract for the two working the new procedure changes expires at the end of 2005.  
***Efforts appear to be Effective in reducing the backlog at this point;*** however, two procedure writers will not be able to finish the remains of the old backlog and keep up with new procedure changes requested especially with the new 375 surveillance procedures that Operations has taken ownership from Engineering. ***This area is an Area in Need of Attention.***
- COIA-OPS-2004-(AFI-04)-CR04-05916: Timeliness of actions taken does not always match the importance of the CR. Operations should prioritize and correct the important ones first.  
Comments: Operations reviewed their CRs and moved the priority of ten CRs and nine CAs to an earlier date. Several of the dates that were moved to an earlier date were later reevaluated and relaxed by plant management. The dates for final closure appear to be acceptable to the team based on their significance to plant safety. ***Overall action for this CR appears to be Effective.***
- COIA-OPS-2004-(AFI-05)-CR-04-05917: Reduce the large number of unassigned CAs, so work can begin to address identified problems.  
Comments: All CAs were provided an assigned individual to implement action. Corrective Actions are reviewed each week to ensure that both CRs and CAs are assigned to an Operations individual. A review of Operations CRs and CAs indicated that there was an owner assigned unless the CR was initiated in the last few days. ***Action take to address this CR appears to be Highly Effective.***
- COIA-OPS-2004-(AFI-06)-CR-04-05920: Cause determinations do not go deep enough.  
Comments: Corrective actions for this CR are not due until 10/15/2005. Effectiveness was not reviewed at this time.
- COIA-OPS-2004-(AFI-07)-CR-04-05921: Implementation of a continuous LO/NLO training program.  
Comments: The training program has been successfully reinitiated. Operators feel training is functioning very well. ***Training Program Performance is Effective.***

- COIA-OPS-2004-(AFI-08)-CR-04-05922: Focus on full implementation of the operator training feedback program.  
Comments: Feedback program implementation appears to be effective based on end-of-training cycle observations; however, CA 1 does not appear to be closed at this point. Training Manager noted that more program improvements are necessary to get to excellence. ***Performance is Effective.***
- COIA-OPS-2004-(AFI-09)-CR-04-05923: Implementation of the shift Mentor Program.  
Comments: This program has been implemented; however, interviews with the Operations Personnel indicate that with the exception of the SM, they did not know who their mentor was. Industry standard and TNS-04-00270 memo would be for the mentors to meet with the crews twice between training cycles. ***Implementation of the Mentor Program is Marginally Effective.***
- COIA-OPS-2004-(AFI-10)-CR-04-05924: Clear ownership of the required reading program.  
Comments: During the 2004 Operations Assessment, there were two procedures, one Training and one Operations that appeared to control the required reading process. The Training procedure has been eliminated allowing the Operations procedure to be the controlling procedure. ***Action to address this CR was Effective.***

***The team considers the overall performance with AFI CRs to be Marginally Effective.***

#### **Other Condition Reports**

- CR-05-00790, Possible Overtime (OT) rules violation: There were no concerns with action on this CR.
- CR-05-00288, Decrease in  $T_{ave}$  below TS limit during plant shutdown (1/17/2005), and CR-05-01427, Group 7 and Reactor Power perturbations during #2 Demin Operations (2/20/2005). The first reactivity management event, CR-05-00288, resulted when Boron was added to the primary system at low power operations, resulting in reactor power decreasing faster than steam loads could be removed and resulted in an unintentional entry into TS LCO 3.1.1.4. The second reactivity management event resulted from a 2000-gallon batch addition (213 gallons of Boron added to the makeup tank first with 1800 gallons of demineralized water added to the tank following the Boron addition, in accordance with procedure). Actions taken to address these CRs, such as SAFER briefs, fundamentals training and event-specific training in Licensed Operator Continuing Training appears to be working. There were no reactivity management events during this assessment; however, similar reactivity management issues were discussed during the 2004 Operations Performance Independent Assessment (CR-04-02453 and CR-04-01810). The 2004 team did not think that these CRs were being treated as seriously as they should have been with one CR having been extended twice and the other being downgraded from an “apparent cause” to CF (fix). The fourth quarter

2004 DB Oversight report (DB-C-04-04) identified similar concerns with Davis-Besse reactivity management because the existing Davis-Besse reactivity management procedure did not comply with the guidelines of INPO-04-001. The new Reactivity Management procedure, NOP-OP-1004 was finally made effective June 6, 2005. In light of the two recent (2005) events and prior identification in 2004, the team considers action during the past year to address reactivity management issues to be an Area for Improvement; however, corrective actions initiated since the 2005 events discussed above seem to be having an effect. ***This area will continue to be observed and is considered an Area in Need of Attention at this time.***

- CR-05-00801, PCR WPG-2, Operations Equipment Issues Enhancement. This CR was administrative in nature and dealt with a couple of WPG-2 steps that referenced WPG-1, which was no longer in effect. The corrective action documentation was lacking and somewhat confusing, resulting in difficulty in reconstructing what was wrong and what was done, from a third party perspective.
- CR-05-00827, SRO review of condition report lacks rigor. Appears that corrective actions taken to address this issue were acceptable. There are no concerns with this CR.
- CR-05-01123, Shortage of high pressure Nitrogen to fill Core Flood Tanks. There were no concerns with corrective actions taken on this CR.
- CR-05-02102, Qualification Manuals being signed by individuals with lapsed on-the-job training/task performance evaluation (OJT/TPE) qualifications. Corrective actions taken were acceptable; however, the CR was classified as CF and there was no explanation of how the individuals did not know their qualifications had lapsed. CR-05-02146, initiated to address concerns of the Operations Training Program self assessment, 2004-0071, will address the issue of using the web-based qualification matrix.
- CR-05-01529, SFAS operability during repair of Reactor Coolant System (RCS) Pressure Lo Block Bistable. No concerns with this CR after discussions with Operations Support Superintendent and review of the shift log.
- CR-04-06364, Partial restoration of a system before the independent verification is performed, is this acceptable. The CA adequately addressed this item.
- CR-04-07001, Corrective Action Review Board (CARB) comments on Operator Collective Significance Review CR-04-08828. There were no concerns identified during the review of this CR.
- CR-04-06759, “Green” inspector identified issue relating to Operations Performance. There were no concerns identified during the review of this CR.

The team determined for the selected CRs the performance was Effective.

### **Area of Strength – Area 3**

- Actions taken to address CA 04-05917. Assignment of ownership of CAs and the continued oversight by an assigned individual will ensure that CAs and CRs belonging to Operations will have an owner assigned within procedural time constraints.

### **Areas in Need of Attention – Area 3**

- Although the 2004 Operations Performance Independent Assessment AFIs were appropriately captured under the facility's Condition Report system along with planned corrective actions, there still appears to be a need for further implementation and follow up in some areas. These areas include the following:
  - Work scheduling
  - End-of-shift critiques
  - Manpower for continued procedure backlog reduction
  - Full and effective implementation of the shift Mentor Program
  - Continued focus on reactivity management.

### **Areas for Improvement - Area 3**

- None observed.

### **Conclusions - Area 3**

Continued emphasis on ongoing efforts is needed to complete corrective actions for the AFIs identified in the 2004 Operations Performance Independent Assessment.

Ownership assignment of CAs and continued oversight to prevent recurrence was highly effective.

Actions to address reactivity management seem to be working; however, continuing focus needs to be maintained in this area.

Actions to address some 2004 Operations Performance Independent Assessment AFIs are still taking place; therefore, this Area was considered Marginally Effective by the team.

Overall actions to address other CRs were considered Effective.



## Area 4 - Licensed Operator Continuing Training

### **Scope - Area 4**

Through a series of observations and discussions, the team observed simulator and classroom training to assess the effectiveness and usefulness of licensed operator continuing training. Also, reviews were performed in various areas in an effort to ensure that program requirements were being met. Discussions were held with licensed operators, instructors and management personnel. These observations were compared with what the team observed in the Control Room during normal operations to verify that the demeanor of the crew and the way that they performed was consistent and standardized in both environments.

The following areas were assessed:

- Conduct of simulator training
- Conduct of classroom training
- Post-scenario critiques
- Classroom and simulator participants' demeanor
- Scenario content
- Lesson plan objectives
- Student/Instructor interaction
- Classroom environment
- Management oversight
- Simulator scenario team communications

### **Observations and Findings - Area 4**

#### **Simulator**

The team observed the conduct of two scenarios by two different crews (total of four) during the inspection period. Of the two scenarios, one was an "as-found scenario," and the subsequent scenario was an unannounced graded scenario that was performed the following day. Similar to last year's observations, the crews' performance was substantially better in the second scenario than the first. This performance improvement was a direct result of the "plus/deltas" identified during the post scenario critique that was performed following the conduct of the "as-found scenario." Utilizing a new scenario critique format, as a result of several benchmarking trips made by the senior licensed operators, the crews were able to identify strengths and weakness and subsequently improve upon their

performance during the next day's unannounced scenario. Areas in which improvements during the second scenario were noted included the following:

- Plant announcements
- Briefs, mini-briefs and crew updates
- Plant status board maintenance
- Reactor operator's (RO) utilization of alarm response procedures, thus enabling the unit supervisor to concentrate on overall plant status, (maintaining the "big picture").
- Use of "Task Complete."

### **Other General Observations**

- Three-way communications were consistently used, only minor exceptions were observed.
- Consistent use of the phonetic alphabet was observed.
- Use of STAR and peer checking was observed.
- Adherence to procedures was observed, with one exception during the very first scenario (week of June 13, 2005) when the US did not transition to DB-OP-02000, Response to Overcooling when pressurizer level went below 0 inches. ***This is a procedural adherence issue and an Area in Need of Attention.***
- During the first "as found scenario" of the first crew observed, only two transient briefings were held, and one of those was nine (9) minutes long. The US during this scenario also did not follow procedure sequence when pressurizer level reached 40 inches. There were no adverse consequences of these actions; however, they do not meet management's expectations or procedural adherence requirements. ***This a procedural adherence issue and an Area in Need of Attention.***

### **Post-Simulator Scenario Critiques**

Following the conduct of each simulator scenario, the crews critiqued their performance of the scenario. For the "as-found scenario," the Operations Superintendent, the training simulator evaluator, and the off-crew (peer) and training evaluators critiqued the crew's performance. The critique was led by the Shift Manager. For the unannounced scenario, the Shift Manager again led the critique, however the Operations Superintendent was not present. The following observations were noted:

- The Shift Manager and the crew exhibited uneasiness with the new critique format.
- The crews were self-critical of their performance. In one instance, a reactor operator identified a mistake, involving a valve manipulation he had made. No evaluators had identified the error; there were no consequences to the error.

- The Operations Superintendent interjected on numerous occasions to reinforce his expectations.
- The plus/deltas (strengths/weaknesses) were appropriately listed and captured by the Shift Manager and lead training evaluator for focus areas of improvement during future training and in-between training cycles
- The plus/deltas observed by the team evaluators were also identified by the crew.
- The crews expressed some difficulty with the new “Task Complete” use that will be in the new Conduct of Operations procedure, particularly in the need for eye contact with the US to verify that he/she knows that the action was taken.

### **Classroom**

- The team observed the conduct of three training sessions. The training sessions dealt with industry current events; such as a recent condition report (CR 05-00288) dealing with a decrease in  $T_{ave}$  below TS limit during the mid-cycle outage shutdown at Davis-Besse and the correct way of completing condition reports that deal with past operability and/or reportability of equipment. The three training sessions were one hour scheduled training sessions. Classroom interaction between students and the instructors was noted. Available training tools were effectively utilized during their presentations. Course objectives were discussed initially and again covered at the end of the training session. For the two training sessions on current events and CR 05-00288, it was noted that time constraints came into play for both sessions. In particular, the end of session training objectives were covered in such rapid fashion, that the operators (students) did not have time to read the line items presented on the screen as presented by the instructor, nor did they have ample opportunities to ask any follow-up questions. This was discussed with the instructors, to which they indicated that they had a lot of material to cover in a short time period. It was recommended that the quantity of material presented be evaluated prior to the next crew’s training session in an effort to streamline that material presented in an effort to afford the opportunity for discussion.
- The team observed the presentation of the upcoming weekly cycle training program schedule, which was presented to the crew by the Operations Superintendent and the crew’s shift mentor. A training package was given to each member of the crew, which was subsequently reviewed and discussed. The Operations management representative presented the present cycle focus area and the crew’s Shift Manager presented crew focus areas, together with previously identified strengths and weaknesses. The shift mentor presented the upcoming weekly schedule, along with previous cycle strengths and weaknesses and individual operator report cards. The team found this session to be beneficial in starting off the training week by readily identifying areas in which individuals and the crew needed to concentrate their efforts.

- During the interviews with licensed and non-licensed operators, it was determined that many individuals did not know who their assigned shift mentor was. A memorandum was sent out designating shift mentors for each shift; however, it is evident that the word was not provided to all involved. The shift Mentor Program, although defined and in place, needs to be fully implemented. Instances were noted where crew members were not aware of who their mentor was. Also, instances were noted where some crew shifts were kept abreast of newly-instituted management expectations, whereas other crew shifts were not, i.e., the new scenario critique form and the “task complete” tool. Discussions with the Training Manager indicated to the team that an individual had been assigned the responsibility of defining exactly the responsibilities and expectations of the shift mentor; however, these efforts had yet to get underway because of the assigned individual’s involvement in the licensee’s audit exam of the upcoming NRC RO/SRO license exam. These forthcoming shift mentor expectations would be over and above the guidelines specified in DBBP-TRAN-0020, “Shift Mentor.”

***Actions to fully implement the Shift Mentor Program are an Area in Need of Attention.***

- Since the Operations department has gone to a five-shift rotation, licensed operator requalification training has occurred on a regular basis. Operators interviewed indicated that the frequency and quality of training is greatly appreciated. The shift managers now meet every two weeks, in an effort to coordinate the plant’s efforts in ensuring uniformity of crew performance across all levels of the five shifts. Although the team was unable to attend the only scheduled meeting during this inspection, they were able to review and discuss with the Operations Superintendent the shift manager meeting agenda held on June 16, 2005. Also, a shift manager was assigned to training on a rotational basis several months ago. This assignment has greatly helped both departments in assuring that training needs are met. Also, this has greatly enhanced communications between the two departments.

#### **Areas of Strength – Area 4**

- Licensed operator requalification training is occurring on a regularly scheduled basis, with few cancellations or interruptions.

#### **Areas in Need of Attention – Area 4**

- Full implementation of all aspects of the shift Mentor Program needs to be carried out.
- Review and implementation of the draft Conduct of Operations procedure needs to be completed so that training can train and verify implementation of procedure requirements uniformly across all five shifts.

- Procedural adherence, in particular during transient conditions, should be emphasized by the training staff and prompt remedial action taken when procedural violations occur.

#### **Areas for Improvement - Area 4**

- None Identified.

#### **Conclusions - Area 4**

Similarities in performance were noted in both the Simulator and the Control Room.

Operators are highly appreciative of the training that they are now receiving on a regularly scheduled basis.

The training department is responsive to the needs of the operators, indicating to some extent, that the feedback process is in place and working.

Classroom presentations observed indicate a need for review regarding quantity versus quality.

Procedural adherence must be emphasized by the training staff in the simulator.

*The team considers overall training performance to be Effective.*

#### **Overall Conclusions of Operations Performance for Section I**

The team concluded, based on observations of Control Room and simulator operations, interviews, observations of classroom training and Condition Report evaluation, that the plant is being operated safely both in the Control Room and in the plant. Personnel practice and display a questioning and safety conscious attitude. Good self and peer checking were practiced by those observed by the team. Operations personnel are knowledgeable of the plant. All Control Room operations observed were conducted using plant procedures, as necessary, although there was one procedure adherence issue in the Simulator. Control Room demeanor was more relaxed than observed last year, but did not seem to affect the operators' level of performance. There are some minor differences between the operations of the different operating crews, but this should be resolved when the new Conduct of Operations procedure is approved and implemented (NOTE: The Conduct of Operations procedure was effective on July 15, 2005). The team did not identify any issue this year that rose to the level of an AFI, although reactivity management would have if appropriate corrective actions had not been taken.

The team concluded that Operation's performance is Effective.

## **SECTION II**

### **Davis-Besse Self Assessments**

#### **Scope**

The team reviewed several assessments dealing with the conduct of operations within the Operations Department at Davis-Besse. The purpose of these reviews was to assess the rigor, criticality, and overall quality of these assessments. These assessments included a review of the following:

- Company Nuclear Review Board Minutes, November 18, 2004, (only meeting since the 2004 Operations Performance Independent Assessment)
- Davis-Besse Oversight Quarterly Assessment Reports (April 15, 2005, January 12, 2005, and October 18, 2004)
- Operations Integrated Performance Assessment, November 1, 2004, through April 30, 2005.
- DB Operations Department Collective Significance Self-Assessment, April 1, 2004, Through September 30, 2004.
- Self-Assessment 2004-0108, "Risk Management," October 11- 15, 2004.

#### **Observations and Findings**

The team, following their review of the Company Nuclear Review Board (CNRB) and the Davis-Besse Oversight (DBOV) reports, agreed that these two groups were appropriately identifying and prioritizing areas of concern within the Operations Department. Findings were being appropriately captured within the CR system. This assessment was similar to that noted during last year's inspection. The team noted there were Reactivity Management issues in the Fourth Quarter report.

The team noted significant improvement of the Operations Department internal self-assessments when compared with that reviewed during last year's inspection. Noticeable improvements were noted in the following areas:

- Binning of condition reports helped the Operations Self Assessment team identify areas of weaknesses.
- Internal self-assessments were in-depth, well written, and substantive in nature.
- Strengths and Areas for Improvement were succinctly stated up-front in the assessment report.
- Information was relevant and reiteration of material was minimal.

- The threshold for problem identification appears to have been significantly lowered from last year's Operations Performance Independent Assessment.
- Areas for Improvement have been accurately identified regarding reactivity control. Training has included this as a focus area during requalification training cycles
- The team noted that although observations made by other groups were reviewed by the self-assessment team, they did not personally perform actual observations.

### **Areas of Strength: – Section II**

- None identified

### **Areas in Need of Attention: – Section II**

- Conduct actual observations of different Operations crews performing their duties both in plant and in the simulator.

### **Areas For Improvement: - Section II**

- None identified.

### **Conclusions - Area 3**

The CNRB and DBOV assessments continue to be factual, in-depth, and accurate in identifying various weaknesses within the Operations Department, just as noted last year. Findings were being appropriately captured within the Corrective Action Program. A significant improvement was noted over the quality and depth in which the Operations Department is now assessing their performance, including an emphasis on safe and efficient plant operations.

Operations' Self-assessments, coupled with DBOV and CNRB appear to be Effective.

### **ATTACHMENT 1: REFERENCES:**

- DB-OP-00000, Conduct of Operations
- DB-OP-00004, Operator Aids Control
- DB-OP-00005, Operators Logs and Rounds
- DB-OP-00006, Night Orders and Standing Order Log
- DB-OP-00016, Temporary Configuration Control
- DB-OP-00018, Inoperable Equipment Tracking Log
- DB-OP-00100, Shift Turnover
- DB-OP-00200, Shift Engineer
- DB-OP-01002, Component Operation and Verification
- DB-OP-01003, Operations Procedure Use Instructions
- DB-OP-01200, Reactor Coolant Leakage Management
- DB-OP-03006, Miscellaneous Instrument Shift Check
- DB-OP-06503, Containment Purge System Procedure
- DB-OP-06316, Diesel Generator Operating Procedure
- DB-SC-03070, Emergency Diesel Generator 1 Monthly Test
- DB-SC-03200, Shift Channel Check of the Radiation Monitoring System
- DB-DP-00007, Control of Work
- NG-DB-00018, Operability Determinations
- NOP-WM-2001, Work Management Process
- NOP-LP-2001, Condition Report Process
- NOP-OP-1002, Conduct of Operations, Revision 2, Draft E (Not Approved)
- GP-03, Conduct of Pre-job Briefs and Post-job Reviews
- Work Process Guideline (WPG) – 2, Operation's Equipment Issues
- NRC Inspection Procedure (IP) 71715, "Sustained Control Room and Plant Observation
- NRC IP 71707, Plant Operations
- NRC IP 93802, Operational Safety Team Inspection (OSTI)
- NRC IP 93806, Operations Readiness Assessment Team Inspections
- The "Work Week Schedule" for the on-site assessment weeks;
- The licensed operator training schedule for the on-site assessment weeks;
- DBBP-TRAN-0020, Shift Mentor
- Last three Quality Assurance quarterly assessments, DB-C-04-03 (July 1 through October 1, 2004), DB-C-04-04 (October 1 through December 31, 2004), DB-C-05-01 (January 3 through March 31, 2005)
- Applicable recent internal Operation's self-assessments, IPA 2005-01 (November 1, 2004 through April 30, 2005), and Davis-Besse Operations Department Collective Significance Self-Assessment (April 1 through September 30, 2004).
- Applicable Company Nuclear Review Board minutes from the Davis-Besse Meeting dated November 18, 2004.



## **ATTACHMENT 2: ASSESSMENT TEAM BIOGRAPHIES**

**Larry E. Briggs  
Independent Consultant  
Silver Fox Synergies, LLC**

- 2004 - *Silver Fox Synergies, LLC*; Team Lead, Davis-Besse Nuclear Power Station (DBNPS) Operations performance area independent assessment to identify areas for improvement and other improvement opportunities as required by the DBNPS Restart Confirmatory Order. A similar Operations performance assessment was conducted at the Perry Nuclear Power Plant.
- 2001 - 2004: *Onsite Inc.*; Senior Consultant - Developed NRC written examination for the Oyster Creek Facility (May 2002 examination).
- 1977 - 2001: *U. S. Nuclear Regulatory Commission (NRC)*; Held various positions with the NRC. Duties included: Senior Operations Engineer (Chief License Examiner and Senior Inspector) - Certified Chief Examiner on General Electric (GE), Westinghouse, and Combustion Engineering plants. Responsible for review, oversight, and administration of licensed operator examinations. Scheduled and made personnel assignments for Region I licensed operator examinations and re-qualification inspections. Responsible for leading team inspections as assigned, such as maintenance rule and for cause re-qualification inspections. Also led numerous NRC routine operator licensing examination teams and re-qualification inspections. Participated in nuclear event response both in Region 1 and at the facility.

NRC Senior Resident Inspector - Responsible for NRC inspection program at assigned facility and maintained constant interface with utility and NRC concerning plant activities and status; Senior Engineer - Responsible for oversight of NRC pre-operational testing inspection program for Region I facilities; Project Engineer - Responsible for general inspection of assigned NRC Region I facilities and coordinated NRC inspection activities at assigned facilities.

- 1972 - 1977: *Burns and Roe Inc*; Senior Startup Engineer - Responsible for development, implementation, and coordination of pre-operational test and startup procedures for assigned systems at Three Mile Island (TMI) Units 1 and 2. Also, provided on-site engineering resolution to Unit 2 problem reports during construction.
- 1960 - 1972: *U. S. Navy*; Leading CPO (USS Whale SSN 638) for Reactor Control Division. Leading In-hull instructor/Reactor Control Division Officer on D1G Prototype. Engineering Office of the Watch (EOOW) qualified on D1G Prototype. Qualified on S3G Prototype, S2Wa, and S5W Navy power plants.

**Paul Bissett**  
**Independent Consultant**

**Silver Fox Synergies, LLC**

- 2004 - *Silver Fox Synergies, LLC*; Davis-Besse Nuclear Power Station (DBNPS) Operations performance area independent assessment to identify areas for improvement and other improvement opportunities as required by the DBNPS Restart Confirmatory Order. A similar Operations performance assessment was conducted at the Perry Nuclear Power Plant.
- 2004 – *Performance, Safety & Health Associates, Inc.*; Independent Consultant – Assisted in the conduct of Licensed Operator audit examinations at the St. Lucie Nuclear Power Plant.
- 1989-2003: *U. S. Nuclear Regulatory Commission (NRC)*; Senior Operations Engineer (Chief License Examiner/Inspector) - Certified Chief Examiner on Babcock and Wilcox (1990), Westinghouse (1988) and General Electric (1999) facilities. Effectively led and conducted licensing examinations, and requalification examinations/inspections at Region I facilities.

Assisted in the administration of operator licensing examinations in Region II (Surry) and Region III (Davis-Besse).

Responsible for leading team inspections, including, but not limited to, operator licensing requalification, maintenance rule, problem identification and resolution, Event-V, PRA, Emergency Operating Procedure (EOPs) and operational startup inspections.

Participated in numerous Region I plant restart inspections (TMI-1, IP-2, Salem 1/2, etc.), primarily focusing on operational safety assessments.

- 1982-1989: *U. S. Nuclear Regulatory Commission (NRC)*; Responsible for the conduct of reactor operations inspections, including the areas of maintenance, surveillance and calibration, and in-service testing of pumps and valves, including the review and approval of a licensee's 10 year In-service Test program submittal. Responsible for the review of licensee QA plan submittals and subsequent inspection of licensee QA/QC programs.
- 1977-1982: *U. S. Nuclear Regulatory Commission (NRC)*; Responsible for the accountability and security of special nuclear materials at fuel fabricating facilities, including the decommissioning of one major nuclear facility, utilizing non-destructive assay techniques.
- 1970-1976: *U. S. Navy*; Four year assignment on the USS California (CGN-36) included the participation in the construction and testing of the engineering plant, nuclear core installation, pre-critical testing, initial criticality, power range testing and sea trials. As the Leading Machinery Watch (LMW), supervised aft engine room mechanical work activities. Administered preventive maintenance program.

**Freddie Forrest**  
**Nuclear Oversight Manager**  
**Point Beach Nuclear Plant**

- March 2005 to present: *Nuclear Management Company, Point Beach*; Nuclear Oversight Manager - Responsible for Quality Control, Quality Assurance and Receipt inspection to ensure that work performed at the site is accomplished in accordance with the requirements of 10CFR 50, Appendix "B".
- 2003-March 2005: *Arkansas Nuclear One (ANO) - Unit One (B&W)*; Operations Manager - Provides planning, direction and overall supervision of Unit One Operations Department.
- 2002-2003: *ANO-Unit 2 (CE plant)*; Instrumentation and Control Superintendent - Ensured accountability in accordance with established standards and expectations including efficient and timely work scheduling, comprehensive outage preparation, attention to detail, ALARA considerations, compliance with quality assurance requirements, and aggressive corrective actions.
- 2001-2002: *Institute of Nuclear Power Operations (INPO)*; Operations Evaluator - Part of team that evaluated the operations, maintenance, work management, human performance, industrial safety and safety culture at nuclear power plants. Lead teams of operation and training evaluators to evaluate operating crews on plant specific simulators.
- 2000-2001: *ANO-Unit 2 (CE plant)*; Assistant Project Manager Unit 2 Steam Generator Replacement - Coordinated the scheduling and interface of departments/groups and contract personnel during Unit 2 Steam Generator replacement outage. Assistant Operations Manager-assist the Operations Manager in planning, direction, control and overall supervision of the operations department.
- 1998-2000: *ANO-Unit 2 (CE plant)*; Shift Manager - Managed operations of 900-megawatt electric nuclear generating station. Analyzed and resolved operating problems to ensure continuity and economy of operations within technical specifications and corporate policy. Responsible for safe operation, adherence to procedures and regulatory requirements. Ensured Operating Crew was properly trained and qualified to perform duties, supervised preparation of work schedules and records for nuclear plant operating personnel to assure effective administrative control.
- 1996-1998: *ANO-Unit 2 (CE plant)*; Planning and Scheduling Liaison - Responsible for managing, planning and directing on-line maintenance activities to ensure compliance with probabilistic risk assessment and business goals. Responsible for implementation of forced outage schedules a transition from outage to on-line maintenance activities.
- 1992-1996: *ANO-Unit 2 (CE plant)*; Control Room Supervisor - Supervised licensed and non-licensed operators, directed performance of normal, abnormal, and emergency procedures to maintain plant in a safe condition, and approved all plant safety tagging and work order releases.
- 1988-1991: *ANO-Unit 2 (CE plant)*; Reactor Operator - Responsible for reactivity manipulations and operations of secondary plant equipment to produce electricity. Monitored plant instrumentation to maintain unit in a safe condition.
- 1984-1988: *ANO-Unit 2 (CE plant)*; Waste Control Operator - Responsible for all operational activities executed outside of the control room associated with reactor auxiliary components and systems including radioactive waste treatment.
- 1981-1984: *ANO-Unit 2 (CE plant)*; Auxiliary Operator - Responsible for all operational activities executed outside of the control room associated with secondary auxiliary components and systems.

**Tracy Rhodes**  
**Operations Work Process Manager**  
**McGuire Nuclear Station**

- 2002 – present: *MNS Units 1&2 (Westinghouse)*; Nuclear Operations Work Process Manager. Provides planning, direction and supervision of Unit 1 and 2 on-line operational activities, including work release and safety tagging. Manages on-line activities to ensure compliance with probabilistic risk assessment and technical specifications.
- 1998-2002: *MNS Units 1&2 (Westinghouse)*; Nuclear Operations Shift Manager. Managed the daily Operational activities of two 1200 MWE nuclear generating units. Evaluated and resolved operating problems to ensure the safe and reliable operation of the units within the limits of technical specifications and corporate policies. Responsible for ensuring that the units operated within the procedural and regulatory guidelines. Ensured proper training and qualification of operating crews to perform their assigned duties.
- 1996-1998: *MNS Units 1&2 (Westinghouse)*; Nuclear Assistant Shift Operations Manager. Assisted the Shift Operations Manager in the staffing of the operating shifts. This included scheduling of the on-line and off-line resources, interviewing and hiring of new employees for the Operations group, and supervising the basic operator training classes.
- 1986-1996: *MNS Units 1&2 (Westinghouse)*; Nuclear Shift Supervisor. Supervised licensed and non-licensed operators; directed the performance of plant operations in the control room, including directing the control room crews through abnormal and emergency procedures; as well as all other plant operations.
- 1981-1986: *MNS Units 1&2 (Westinghouse)*; Nuclear Reactor Operator. Performed reactivity changes, including the initial startup and testing of McGuire Units 1 and 2.
- 1975-1981: *MNS Units 1&2 (Westinghouse)*; Non-licensed Nuclear Operator. Operated plant equipment, including much of the initial testing of plant system and components. Prepared and placed safety tags for personnel and equipment protection.

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### **COMMITMENT LIST**

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station in this document. Any other actions discussed in the submittal represent intended or planned actions by Davis-Besse. They are described only as information and are not regulatory commitments. Please notify the Manager – Regulatory Compliance (419) 321-8585 at Davis-Besse of any questions regarding this document or associated regulatory commitments.

#### **COMMITMENTS**

None

#### **DUE DATE**

N/A