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**FirstEnergy Nuclear Operating Company**

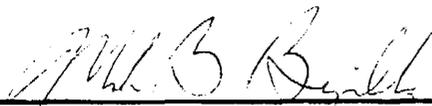
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**Davis-Besse Nuclear Power Station  
Operational Improvement Plan  
Operating Cycle 14**

**REVISION 3**

February 17, 2004

Approvals:

  
\_\_\_\_\_  
Mark Bezilla, Vice President Davis-Besse

  
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Lew Myers, Chief Operating Officer

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# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

Cycle 14

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# **Davis-Besse Nuclear Power Station**

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## **Operational Improvement Plan**

**Cycle 14**

### **Introduction**

To ensure continued improvements and sustained performance in Nuclear Safety and Plant Operation at the Davis-Besse Nuclear Power Station, the Leadership Team has developed this Improvement Plan to focus on key improvement initiatives and safety barriers essential to safe restart from the Reactor Pressure Vessel Head degradation extended plant outage and into subsequent operating cycles. **This plan provides for a managed transition from the organizational and programmatic actions taken to support the Davis-Besse Return to Service Plan and Building Block Plans to that of normal plant operations and refueling outages.**

The initiatives discussed in this plan were derived from lessons learned during the extended plant outage which resulted from the significant Reactor Pressure Vessel Head degradation identified at the beginning of the 13<sup>th</sup> Refueling Outage. During the extended outage, numerous improvements were made in the areas of Safety Culture, Management, Human Performance, System Health and Programs as described in the Return to Service Plan and the Building Block Plans. However, additional improvements are required to achieve world class performance and to ensure that the safety barriers that failed to detect the significant RPV Head degradation are maintained to prevent a recurrence of an event in the future.

As described in the Return to Service Plan, the numerous root causes associated with the Reactor Pressure Vessel Head degradation could be grouped into the areas of Nuclear Safety Culture; Management/Personnel Development; Standards and Decision-making; Oversight and Assessments; and Programs/Corrective Actions/Procedure Compliance. Actions described in each of the Building Blocks were designed to address numerous significant improvements in each of those areas. This transition plan of Operational Improvements focuses on the four primary safety barriers of **Individual, Programs, Management, and Oversight** (as described in the following pages) to ensure improvements realized during the extended outage remain in place and are further built upon to improve performance in the future. This plan will ensure that the improvements made to Davis-Besse are “built to last”.

This plan will be used by the Davis-Besse Leadership Team on a monthly basis to monitor safety barrier attributes that would provide early detection of declining trends in performance and to focus on major initiatives to achieve operational excellence. This plan is a living document and will be periodically updated and revised to address completed actions and add new initiatives as determined and approved by the Senior Leadership Team.

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# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### Barriers To Ensure Nuclear Safety

The safety of nuclear power relies heavily on the “defense in depth” concept. Nuclear power plants are designed with robust systems and redundant back-up safety systems in the unlikely event of a failure. However, systems and equipment must still be operated, maintained and designed by people to ensure reliability and availability if called upon to perform an intended safety function. The first barrier to ensure safety is the **Individual**. The operator, maintenance technician, engineer and all the other support personnel play an integral role in monitoring plant status and maintaining systems and equipment in top-notch condition. Thus, ensuring that the individuals that support nuclear power plant operation are highly qualified, trained and motivated to do the best job possible is an essential barrier to ensure nuclear safety.

To guide the individual in performing their required job functions, numerous **Programs** have been put in place to address the operations, maintenance, design and licensing basis activities performed daily at the station. Programs are implemented by procedures and other written documents to ensure a consistent approach by the individual. Thus, programs are another essential barrier to ensure nuclear safety.

**Management** also plays a key role in nuclear safety. Management is responsible for providing the proper focus on priorities that ensure the plant is operated and maintained to high standards and expectations. Management is also responsible for creating a work environment that is conducive to a safety conscious work environment and strong safety culture, and to ensure there are adequate staffing levels of qualified and motivated individuals in every department. Management, therefore, is also considered one of the barriers essential to nuclear safety.

To ensure that the individual and management (using established programs and associated procedures) performs their duties to high standards and maintains the proper safety focus, **Oversight** organizations provide another barrier for nuclear safety. Oversight checks for adverse trends in performance and is independent of other pressures. Independent oversight, when properly used, can identify differences from industry norms for early detection of potential weaknesses developing in the safety barriers.

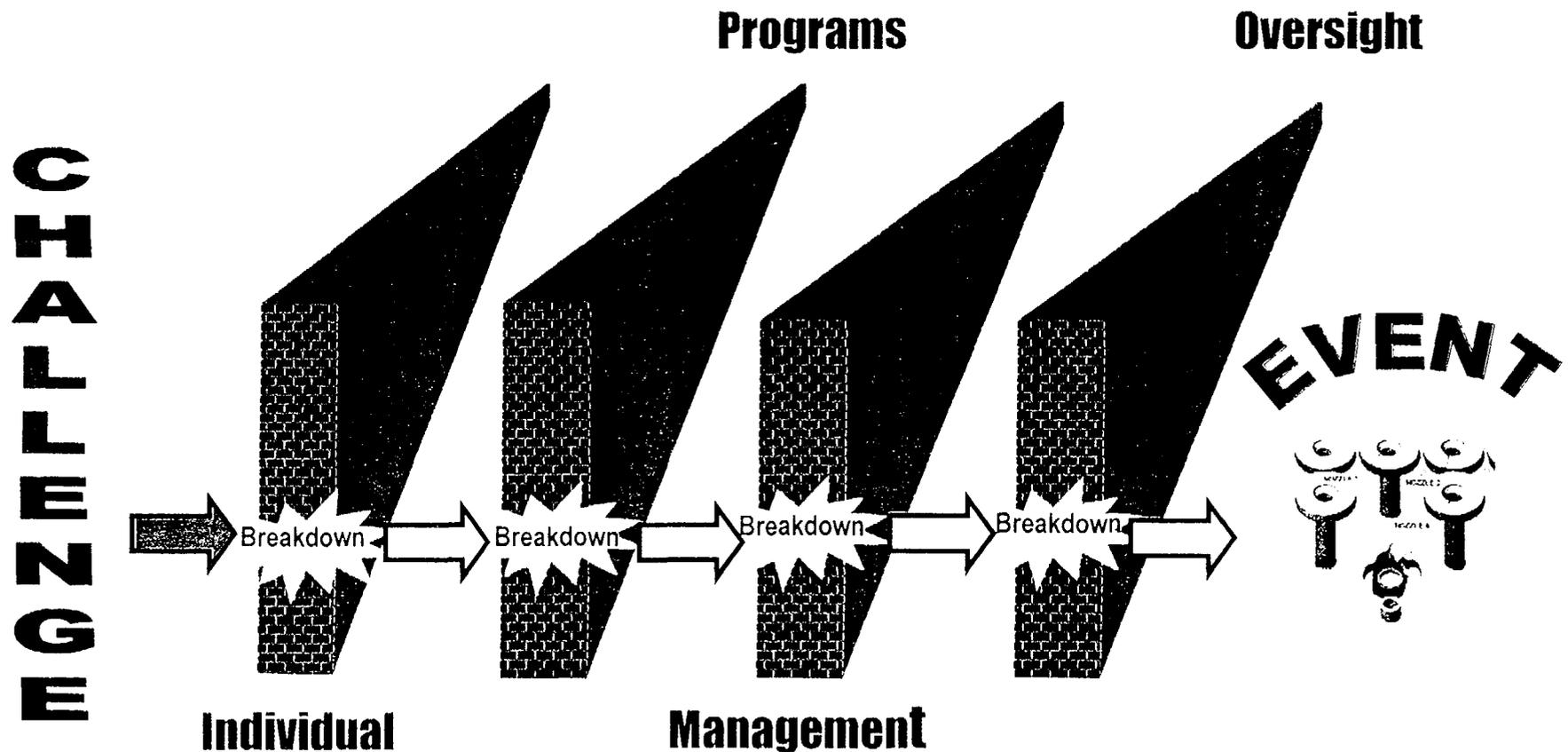
Together these four barriers work in conjunction to contribute to the safe operation of Davis-Besse.

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

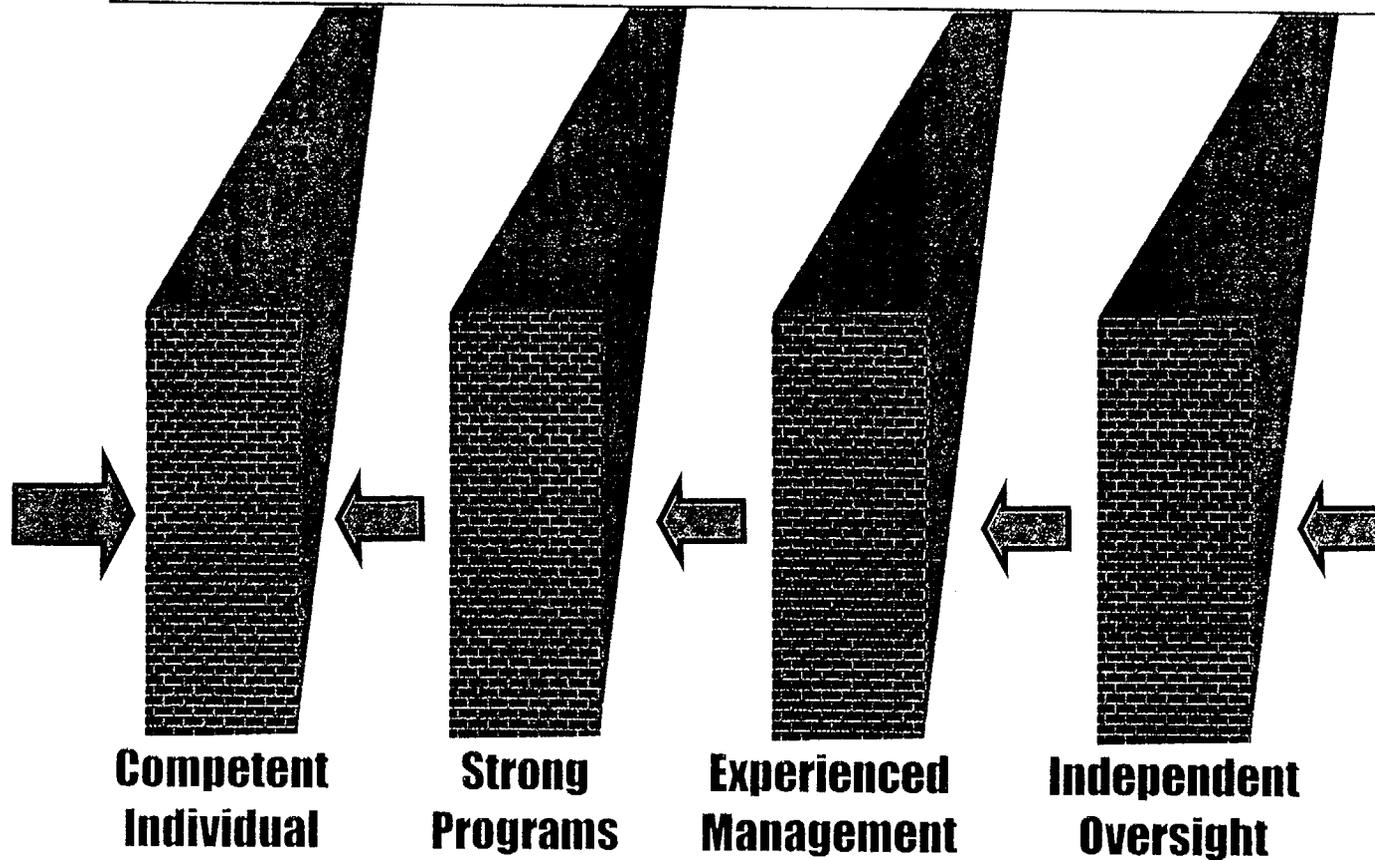
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This illustration represents how the four safety barriers failed, allowing the degradation of the RPV Head to go undetected for several years and serves to anchor the lessons learned and corrective actions taken to prevent recurrence.



**Barriers Demonstrating FENOC's Strong Safety Focus**

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**FENOC Vision:**  
*'People with a strong safety focus delivering top fleet operating performance'*

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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Davis-Besse Initiatives:

Based on lessons learned from the Reactor Pressure Vessel Head degradation and during the extended plant outage, a series of key initiatives have been developed by the Leadership Team to focus on opportunities for continued improved performance. These initiatives extend beyond those significant improvements already realized during the extended outage and achieved prior to restart. These initiatives will provide additional improvements to further strengthen each of the four barriers. Details for each initiative are provided in the following pages.

Davis-Besse Initiatives		Barriers Enhanced			
		Individual	Programs	Management	Oversight
Sponsor					
M. Bezilla	1. Organizational Effectiveness Improvement		X	X	
B. Allen	2. Operations Improvement	X	X	X	X
B. Allen	3. Maintenance Improvement	X	X	X	
B. Allen	4. Training Improvement	X	X	X	
B. Allen	5. Work Management Improvement	X	X	X	
J. Powers	6. Engineering Improvement	X	X	X	X
M. Bezilla	7. Continuous Safety Culture Improvement	X		X	X
R. Schrauder	8. Procedure Improvement	X	X		
R. Schrauder	9. Corrective Action Program Improvement	X	X	X	X
L. Myers	10. Internal and External Oversight Improvement			X	X

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### 1. Organizational Effectiveness Improvement Initiative

**DESIRED OUTCOME:** *Improved Human Performance, Leadership and Team Alignment through Critical Self-assessments, Use of Operating Experience, Industry Benchmarking and Communications*

Sponsor: M. Bezilla

Key Actions	Owner	Completion
1. Improve individual and organizational performance and alignment through development and utilization of "alignment maps" at the Department/Section levels	J. Reddington	3 <sup>rd</sup> Qtr 2004
2. Implement FENOC Business Practices for: a) Focused Self-Assessments b) Ongoing Self-Assessments c) Benchmarking d) Quarterly Collective Significance Reviews	L. Dohrmann	1 <sup>st</sup> Qtr 2004 1 <sup>st</sup> Qtr 2004 2 <sup>nd</sup> Qtr 2004 2 <sup>nd</sup> Qtr 2004
3. Directors and Managers to attend a Leadership Academy to improve management skills	D. Haskins	3 <sup>rd</sup> Qtr 2004
4. Provide formal Management Observation Skills Training	J. Reddington	2 <sup>nd</sup> Qtr 2004

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### 1. Organizational Effectiveness Improvement Initiative continued

Sponsor: M. Bezilla

Key Actions	Owner	Completion
5. Enhance the Management Observation Program by ensuring personnel providing oversight monitoring are familiar with DBBP-OPS-0001, "Operations Expectations and Standards"	K. Fehr	2 <sup>nd</sup> Qtr 2004
6. Implement actions to improve trending of major plant evolutions utilizing the Management Observation Program to track performance and feedback	K. Fehr	2 <sup>nd</sup> Qtr 2004
7. Provide face-to-face communications training to all site supervisors and above	D. Haskins	2 <sup>nd</sup> Qtr 2004
8. Re-evaluate all Davis-Besse supervisors to assess competency for current positions	D. Haskins	4 <sup>th</sup> Qtr 2005
9. Conduct Supervisor and Manager Talent Management Talks	D. Haskins	1 <sup>st</sup> Qtr 2004
10. Continue with the 4 Cs meetings, D-B Team Meetings, Town Hall Meetings in accordance with Davis-Besse Business Practices	M. Lark-Landis	through Cycle 14

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### 2. Operations Improvement Initiative

**DESIRED OUTCOME:** *Establish the clear leadership role of Operations through improved Organizational Effectiveness and Alignment to the FENOC Processes*

Sponsor: B. Allen

Key Actions	Owner	Completion
1. Implement Operations Improvements: <ul style="list-style-type: none"> <li>a. Initiate Operations Leadership Improvements</li> <li>b. Initiate the 5 year staffing plan</li> <li>c. Implement improvements to Operations work stations</li> <li>d. Implement common FENOC Operations work process tools</li> </ul>	K. Ostrowski K. Ostrowski D. Imlay T. Stallard	1 <sup>st</sup> Qtr 2004 1 <sup>st</sup> Qtr 2004 3 <sup>rd</sup> Qtr 2004 4 <sup>th</sup> Qtr 2004
2. Improve Operator knowledge, skills and abilities through testing, training and mentoring	J. Reddington	4 <sup>th</sup> Qtr 2004

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### 2. Operations Improvement Initiative continued

Sponsor: B. Allen

Key Actions	Owner	Completion
3. Implement the Operations Improvement Implementation Action Plan, including: <ul style="list-style-type: none"> <li>a. Strengthening Operating Crews, including assessment of operators, training on procedure use, and improving command and control</li> <li>b. Strengthening Operating Procedures, including validation of key operating procedures and use of reverse pre-job briefs</li> <li>c. Strengthening Operations Management, including use of Operations Oversight Managers until no longer needed</li> <li>d. Strengthening Independent Oversight of Operations</li> </ul>	K. Ostrowski	Complete
4. Strengthen Communications within Operations	K. Ostrowski	1 <sup>st</sup> Qtr 2004
5. Benchmark Conduct of Operations	K. Ostrowski	2 <sup>nd</sup> Qtr 2004
6. Align Performance Indicators to Conduct of Operations	K. Ostrowski	2 <sup>nd</sup> Qtr 2004

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### 3. Maintenance Improvement Initiative

**DESIRED OUTCOME:** *Improved Ownership and Materiel Condition of the Davis-Besse Nuclear Power Station*

Sponsor: B. Allen

Key Actions	Owner	Completion
1. Utilize post-job evaluations, operating experience, and lessons learned from rework activities to identify improvements in Maintenance training and standards	M. Stevens	2 <sup>nd</sup> Qtr 2004
2. Perform an assessment of Maintenance effectiveness in work planning, scheduling, and implementation of critical equipment outages to identify improvements	M. Stevens	3 <sup>rd</sup> Qtr 2004
3. Implement improvements of Maintenance Supervision through training and development	M. Stevens	3 <sup>rd</sup> Qtr 2004
4. Implement actions in the Maintenance individual commitment area to establish improved ownership and accountability of Plant materiel condition	M. Stevens	4 <sup>th</sup> Qtr 2004
5. Perform testing of Maintenance staff knowledge, skills and abilities to identify improvement actions and incorporate into training	J. Reddington	4 <sup>th</sup> Qtr 2004

**4. Training Improvement Initiative**

**DESIRED OUTCOME:** *Improved Individual And Organizational Performance through Training*

Sponsor: B. Allen

<b>Key Actions</b>	<b>Owner</b>	<b>Completion</b>
1. Implement actions to improve individual and organizational performance and alignment by developing and providing training on design and configuration control to appropriate site staff	J. Reddington	3 <sup>rd</sup> Qtr 2004
2. Establish engineering positional qualification requirements based on the standard FENOC Engineering Organization and complete qualification training for incumbent and new engineers	J. Reddington	4 <sup>th</sup> Qtr 2004

**5. Work Management Improvement Initiative**

**DESIRED OUTCOME:** *Provide for the effective and efficient cross-organizational utilization of resources in achieving a high standard of plant materiel condition by conducting the right work at the right time for the right reasons*

Sponsor: B. Allen

Key Actions	Owner	Completion
1. Common Process a. Complete training and mentoring to support the effective transition into the FENOC Work Management Process b. Resolve gaps in process implementation and station procedures c. Perform quarterly assessments of Condition Reports and Work Week critiques to ensure opportunities for improvement are addressed d. Implement Risk Management process to improve station knowledge and awareness e. Monitor and improve Order quality	W. Mugge	2 <sup>nd</sup> Qtr 2004  3 <sup>rd</sup> Qtr 2004  through Cycle 14  2 <sup>nd</sup> Qtr 2004  2 <sup>nd</sup> Qtr 2004

**5. Work Management Improvement Initiative** continued

Sponsor: B. Allen

Key Actions	Owner	Completion
2. Maintenance Backlog Reduction <ul style="list-style-type: none"> <li>a. Complete walk-down and validation of the Order backlog to ensure proper category, priority, consolidation and elimination of invalid orders</li> <li>b. Complete Cycle Plan identifying equipment outages and providing the framework for addressing backlog Order priorities and results of the System Health Report</li> <li>c. Develop performance indicators to monitor and manage Order backlog</li> </ul>	W. Mugge	Complete  2 <sup>nd</sup> Qtr 2004  Complete
3. Outage Performance <ul style="list-style-type: none"> <li>a. Forced Outage Schedule template and readiness</li> <li>b. Mid-Cycle Outage Preparation</li> <li>c. Clarify expectations and improve contractor performance</li> <li>d. 14<sup>th</sup> Refueling Outage Preparation</li> </ul>	W. Mugge	1 <sup>st</sup> Qtr 2004 1 mo. prior to Mid-Cycle Outage 4 <sup>th</sup> Qtr 2004 4 <sup>th</sup> Qtr 2005

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

Cycle 14

### 6. Engineering Improvement Initiative

**DESIRED OUTCOME:** *Improved quality of Engineering products, increased access to Design Basis information, and continued improvement in Safety Margins of the Station*

Sponsor: J. Powers

Key Actions	Owner	Completion
1. Implement actions to improve Safety Margin: <ul style="list-style-type: none"> <li>a. Determine the Safety Margin for the top 10 Risk Significant Systems and develop a plan to improve safety margins</li> <li>b. Electrical System coordination improvements</li> <li>c. Masonry/block wall re-analyses and design changes</li> <li>d. Service Water improvements</li> </ul>	J. Grabnar	2 <sup>nd</sup> Qtr 2004  4 <sup>th</sup> Qtr 2005 4 <sup>th</sup> Qtr 2005 through Cycle 14
2. Perform additional Latent Issues Reviews	B. Boles	through Cycle 14
3. Implement the Design Calculation Improvement Plan	J. Grabnar	through Cycle 14
4. Enhance plant equipment performance through the FENOC Equipment Reliability Program	J. Rogers	through Cycle 14
5. Develop and implement the plan to enhance System Engineering ownership of plant systems in support of Operations	B. Boles	4th Qtr 2004

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

Cycle 14

### 6. Engineering Improvement Initiative continued

Sponsor: J. Powers

Key Actions	Owner	Completion
6. Schedule and conduct additional Program Compliance Reviews including: a. Qualification of Program Owners b. Development of Program Manuals c. Creation of Performance Indicators	J. Powers	4 <sup>th</sup> Qtr 2004
7. Establish the appropriate level of workload for Engineering Change Requests and develop a plan to reduce and maintain the backlogs to that level	J. Grabnar	2 <sup>nd</sup> Qtr 2004
8. Perform semiannual effectiveness reviews to determine if the problem solving process, NOP-ER-3001 has been properly implemented during the previous period	B. Boles	through Cycle 14
9. Perform independent outside assessments of the effectiveness of Engineering corrective and improvement actions in the areas of modifications, System Engineering, corrective actions, and calculations	J. Powers	through Cycle 14
10. Implement electronic accessibility of design basis information and populate with 5 systems	C. Hawley	3 <sup>rd</sup> Qtr 2004

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

Cycle 14

### 6. Engineering Improvement Initiative continued

Sponsor: J. Powers

Key Actions	Owner	Completion
11. Expand the role of the Engineering Assessment Board (EAB) to include the review of Engineering Root Causes and Apparent Causes and Engineering Calculations	J. Wilcox	Complete
12. Establish criteria and modify appropriate procedures to restrict the use of At-Risk Changes in the plant modification process	J. Grabnar	2 <sup>nd</sup> Qtr 2004
13. Re-institute the use of Quarterly System Health Reports and Design Basis Assessment Reports	B. Boles J. Grabnar	Complete
14. Assign a Program Owner for the Problem Solving Process	B. Boles	1 <sup>st</sup> Qtr 2004
15. Develop and begin implementation of the Technical Issues Resolution Process	C. Hawley	2 <sup>nd</sup> Qtr 2004

**7. Continuous Safety Culture Improvement Initiative**

**DESIRED OUTCOME:** *Demonstrate a continuously improving Safety Culture at the Davis-Besse Nuclear Power Station*

Sponsor: M. Bezilla

Key Actions	Owner	Completion
1. Monitor Safety Culture on a monthly basis	M. Bezilla	through Cycle 14
2. Assess Safety Culture using the FENOC Business Practice	M. Bezilla	4 <sup>th</sup> Qtr 2005
3. Perform a Safety Culture assessment utilizing an independent outside organization	M. Bezilla	4 <sup>th</sup> Qtr 2004
4. Provide SCWE training to Site employees who have not completed the SCWE portion of the Site Employee Orientation Manual	L. Griffith	1 <sup>st</sup> Qtr 2004
5. Provide refresher training on SCWE and Safety Culture to Davis-Besse Supervisors and above	J. Reddington	1 <sup>st</sup> & 3 <sup>rd</sup> Qtr 2004
6. NQA to perform two Safety Culture Assessments	S. Loehlein	4 <sup>th</sup> Qtr 2004/05
7. Employee Concerns Program group to perform two surveys of the Safety Conscious Work Environment	L. Griffith	4 <sup>th</sup> Qtr 2004/05
8. Perform an effectiveness assessment of the corrective actions taken in response to the November 2003 SCWE survey results	F. VonAhn	2 <sup>nd</sup> Qtr 2004

**8. Procedure Improvement Initiative**

**DESIRED OUTCOME:** *Improved procedure use and adherence and standardized procedure change process*

Sponsor: R. Schrauder

<b>Key Actions</b>	<b>Owner</b>	<b>Completion</b>
1. Perform Self-Assessments on procedure use and adherence	R. Schrauder	through Cycle 14
2. Review the Davis-Besse procedure change process to ensure alignment with FENOC standards for procedure preparation and revisions	L. Dohrmann	2 <sup>nd</sup> Qtr 2004
3. Provide training on procedure use and adherence	J. Reddington	2 <sup>nd</sup> Qtr 2004
4. Perform follow-up effectiveness reviews on procedure use and adherence	L. Dohrmann	4 <sup>th</sup> Qtr 2004

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### 9. Corrective Action Program Improvement Initiative

**DESIRED OUTCOME:** *Improved effectiveness and implementation of the Corrective Action Program demonstrated through improved Station performance*

Sponsor: R. Schrauder

Key Actions	Owner	Completion
1. Implement the Apparent Cause Improvement Plan:		
a. Strengthen procedural requirements for apparent cause evaluations, including analytical methods to be used	L. Dohrmann	Complete
b. Corrective Action Review Board review of Apparent Cause Evaluations until standards are consistently met	L. Dohrmann	Complete
c. Identify Apparent Cause Evaluators	Managers	Complete
d. Develop Training Program and Expectations and provide training to the Apparent Cause Evaluators (Initial Evaluator Classes and Additional Classes in 2004)	J. Reddington	Initial Complete / Additional 1 <sup>st</sup> Qtr 2004
e. Qualify the trained Apparent Cause Evaluators using the Systematic Approach to Training	J. Reddington	1 <sup>st</sup> Qtr 2004
f. On an interim basis, rotate team of apparent cause evaluators to Support Services	L. Dohrmann	Complete
g. Company Nuclear Review Board (CNRB) review of selected Apparent Cause Evaluations	F. VonAhn	through Cycle 14

**9. Corrective Action Program Improvement Initiative** continued

Sponsor: R. Schrauder

<b>Key Actions</b>	<b>Owner</b>	<b>Completion</b>
2. Establish the appropriate level of workload for Condition Report Evaluations and Corrective Actions and develop a plan to reduce the backlogs to those levels	L. Dohrmann	2 <sup>nd</sup> Qtr 2004
3. Perform a focused Self-Assessment of implementation of the Corrective Action Program using industry peers	L. Dohrmann	3 <sup>rd</sup> Qtr 2004
4. Reestablish the Corrective Action Program trending process	L. Dohrmann	Complete
5. Provide Apparent Cause training to Managers	L. Dohrmann	1 <sup>st</sup> Qtr 2004

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### 10. Internal and External Oversight Improvement Initiative

**DESIRED OUTCOME:** *Oversight activities are provided to ensure improved Station performance and the integrity of the Safety Barriers are sustained at the highest levels*

Sponsor: L. Myers

Key Actions	Owner	Completion
1. Supplement quality oversight with off-site assistance to improve objectivity and ensure assessments are sufficiently critical	S. Loehlein	Complete
2. Supplement management oversight with off-site assistance to improve objectivity and ensure assessments are sufficiently critical	K. Ostrowski	Complete
3. Focus more quality oversight on cross-functional activities and interfaces	S. Loehlein	1 <sup>st</sup> Qtr 2004
4. Review and revise the master assessment plan at all three FENOC sites	S. Loehlein	2 <sup>nd</sup> Qtr 2004
5. Conduct an external assessment to evaluate the progress of organizational improvements in the areas of Critical Self-Assessments and Performance Observations	L. Myers	2 <sup>nd</sup> Qtr 2004
6. Utilize INPO Assist Visits to assess the effectiveness of Improvement Initiatives	M. Bezilla	4 <sup>th</sup> Qtr 2004

**10. Internal and External Oversight Improvement Initiative** continued

Sponsor: L. Myers

<b>Key Actions</b>	<b>Owner</b>	<b>Completion</b>
7. Perform Quality Oversight of Engineering using the Continuous Assessment Process	S. Loehlein	through Cycle 14
8. Conduct assessment activities of the Corrective Action Program to evaluate effectiveness of corrective actions taken to improve implementation and improve trend evaluation	S. Loehlein	through Cycle 14

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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### Safety Barrier Attributes and Goals

Safety Barrier attributes and goals have been identified within this plan to provide a focus on key parameters to assess and ensure that safety barriers are being maintained. These attributes, which are grouped by each of the four barriers, will be monitored monthly by the Davis-Besse Leadership Team.

Performance indicators contain the criteria for monitoring each attribute. Some attributes will be monitored by periodic assessments such as surveys or self-assessments to determine if the goal for that attribute is being met. Monitoring sources for the performance indicators referenced in the Barrier Attributes are identified in the table below:

<u>Key</u>	<u>Performance Indicator Monitoring Sources</u>
OIP	Operational Improvement Plan Performance Indicator Report
MPR	FENOC Monthly Performance Report
SHAR	SCWE Health Assessment Report

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<u>Individual Barrier Attributes</u>					
Item	Attribute	Goal	Owner	PI Reference	Monitoring Source
I-01	Human Performance Success Days (Event Free Clock)	≥ 40 days on average	Reddington	SPO-03	MPR
I-02	OSHA Recordable Injuries (Industrial Safety Performance)	≤ 4 OSHA Recordable Injuries per year	Farrell	SPO-02	MPR
I-03	Radiation Protection Events	≤ 2 events in any 4 consecutive quarters	Farrell	NRC Performance Indicator	MPR
I-04	Individual Error Rate	≤ 0.36 individual errors per 10,000 hours worked based on a 12 week rolling average	Reddington	SPO-04	MPR
I-05	Employee willingness to raise concerns	≥ 90% of individuals are willing to raise concerns to their supervisors or the Employee Concerns Program	Loehlein	NQA Interviews	OIP
I-06	Operator Work Arounds	Level 1 and 2 Work Arounds goal in accordance with FENOC Monthly Performance Indicator	Ostrowski	EMC-10	MPR
I-07	Control Room Deficiencies	Control Room Deficiencies goal in accordance with FENOC Monthly Performance Indicator	Ostrowski	EMC-09	MPR
I-08	Condition Report Self-Identified Rate	≥ 90% of Condition Reports are self-identified	Dohrmann	P-05	OIP

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<u>Individual Barrier Attributes</u>					
Item	Attribute	Goal	Owner	PI Reference	Monitoring Source
I-09	Risk Performance Indicator (indicator of Cross-functional teamwork)	<p>≥ 75 Risk Assessment Indicator</p> <p>The Risk Assessment Indicator assesses each unit's risk of achieving safe and reliable operation. This indicator accomplishes this by measuring elements related to the probability and consequence of station events. Examples of elements making up this indicator include Probabilistic Safety Assessment, Aggregate System Health, Schedule Adherence, Activities Resulting in Reduced Trip-Logic, Schedule Stability, Scrams, Derates, Unplanned entry into Tech Specs, Entry into Abnormal Procedures</p>	Mugge	SPO-01	MPR
I-10	Condition Report SRO Review (SRO reviews for Operability are performed in a timely manner)	≥ 95% of SRO review required Condition Reports were reviewed for operability within 24 hours	Ostrowski	CA-01	OIP
I-11	Employee willingness to use the Corrective Action Program	≤ 5% of individuals are not willing to use the Corrective Action Program	Griffith	SCWE/NQA Surveys	OIP
I-12	Worker confidence in raising safety concerns	> 90% of workers believe they can raise nuclear safety or quality concerns without fear of retaliation	Griffith	SCWE/NQA Surveys	OIP

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<u>Individual Barrier Attributes</u>					
Item	Attribute	Goal	Owner	PI Reference	Monitoring Source
I-13	Training Programs meet industry standards and effectively improve station performance as measured by NOBP-TR-1501	> 2.5 Training Program Performance Indicator	Reddington	P-02	OIP
I-14	Licensed Operator Requalification Training	≥ 95% pass rate in the Licensed Operator Requalification Training Program	Reddington	To be developed	OIP

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Programs Barrier Attributes					
Item	Attribute	Goal	Owner	PI Reference	Monitoring Source
P-01	Corrective Action Program (Effectiveness of Corrective Action Program)	≥ 9 Corrective Action Program Index Rating	Dohrmann	FEE-01	MPR
P-02	Condition Report (CR) category accuracy	≥ 90% CR category accuracy rate	Dohrmann	CA-08	OIP
P-03	Apparent Cause evaluation quality	≥ 90% acceptance rate of Apparent Cause evaluations (as determined by the CARB Apparent Cause Subcommittee)	Dohrmann	To be developed	OIP
P-04	Maintenance Rule System Reliability	≥ 0.987 Reliability	Boles	S-05	OIP
P-05	Number of Maintenance Rule (a)(1) Systems	No repeat Maintenance Rule (a)(1) systems within the operating cycle	Boles	To be developed	OIP
P-06	Program and Process Error Rate	≤ 0.36 Program and Process Errors per 10,000 hours worked	Reddington	SPO-05	MPR
P-07	Maintenance Rework	≤ 2.5 % rework	Steagall	Maintenance Rework PI	OIP
P-08	Number of late Preventative Maintenance Activities	0 PMs past their late or defer to date <u>AND</u> < 10% of PMs closed beyond 60% of the allowed grace period	Mugge	KPI-WM-06	OIP

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

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<u>Management Barrier Attributes</u>					
Item	Attribute	Goal	Owner	PI Reference	Monitoring Source
M-01	The Quality of Engineering Products	≤ 0.5 score based on a 12 week rolling average (as measured by the Engineering Assessment Board)	Grabnar	EN-03	OIP
M-02	Satisfaction of employees using the Employee Concerns Program (ECP)	> 75% of employees that use the Employee Concerns Program report being satisfied with the process	Griffith	SCWE 3-4	SHAR
M-03	NRC Allegation Ratio	≤ 2 times the industry average of NRC allegations	Griffith	SCWE 1-2	SHAR
M-04	Effectiveness of Safety Conscious Work Environment Review Team (SCWERT) in avoiding discrimination claims	≤ 15% SCWERT Non-Concurrence Ratio <u>AND</u> ≤ 2 times the industry average of NRC retaliation allegations	Schrauder	SCWE 4-5  SCWE 1-3	SHAR  SHAR
M-05	Management Field Observations are self critical	> 80% of the management field observations performed are self-critical	Fehr	Semiannual Assessments	OIP
M-06	Effectiveness of Management and Supervisors	Managers and supervisors are generally effective with a few exceptions	Loehlein	NQA Field Assessments	OIP
M-07	Talent Management and Personnel Development	Goal in accordance with FENOC Monthly Performance Indicator	D. Haskins	PDE-01	MPR
M-08	Leadership Development	Goal in accordance with FENOC Monthly Performance Indicator	D. Haskins	PDE-02	MPR

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

Cycle 14

<u>Management Barrier Attributes</u>					
Item	Attribute	Goal	Owner	PI Reference	Monitoring Source
M-09	Reactivity Management	$\leq$ 1 Level 2 Reactivity Management Event per year AND 0 Level 1 Reactivity Management Events per year.	Ostrowski	Operations Reactivity Management PI	OIP
M-10	Fuel Reliability	Zero fuel defects	Kelley	SPO-07	MPR
M-11	Maintenance Order Backlog	<u>Online:</u> $<$ 50 Corrective Maintenance Orders AND $<$ 450 Elective Maintenance Orders <u>Outage</u> (prior to the startup from 14RFO): $<$ 250 Corrective/Elective Maintenance Orders	Mugge	KPI-WM-02  KPI-WM-02  MA-01	OIP  OIP  OIP
M-12	Number of Temporary Modifications	$\leq$ 5 during the Operating Cycle And 0 related to equipment and design deficiencies after restart from major outages	Boles	Plant Engineering PI	OIP

# Davis-Besse Nuclear Power Station

## Operational Improvement Plan

Cycle 14

<u>Oversight Barrier Attributes</u>					
Item	Attribute	Goal	Owner	PI Reference	Monitoring Source
O-01	Field Activity Assessments	≥ 45 Observations completed per unit per month	Loehlein	DB-01	OIP
O-02	Responsiveness to QA Identified Issues	≤ 45 days for SCAQ Condition Report Investigations AND ≤ 60 days for CAQ Condition Report Investigations	Loehlein	DB-02	OIP
O-03	Condition Report NQA Review	≥ 90% of Condition Report Investigations reviewed by NQA are accepted or rejected within 15 days after the investigation was complete	Loehlein	DB-03	OIP
O-04	Corrective Action NQA Verification	≥ 90% of Corrective Actions verified or rejected by NQA within 30 days	Loehlein	DB-04	OIP
O-05	Timeliness of NQA Audit Report Issuance	≤ 25 working days from the date of the exit conference	Loehlein	DB-05	OIP
O-06	Use of Industry Peer Support	100% utilization of the scheduled INPO Assist Visits for 2004	Bezilla	To be developed	OIP