

Davis-Besse Nuclear Power Station

***Restart Performance
Indicators***

February 22, 2004



FOR INFORMATION ONLY

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Date: 2/26/04 3:30PM
Subject: Davis-Besse Restart Performance Indicators for February 22, 2004

(See attached file: Perf_Pkg_02_22_04.pdf)

Attached are the Davis-Besse Nuclear Power Station Restart Performance Indicators for February 22, 2004.

Please call me if you have any questions.

Thank you,

Kathy
419-321-8214

(See attached file: Perf_Pkg_02_22_04.pdf)

B-41

Davis-Besse Nuclear Power Station

Restart Performance Indicators

Distribution:

FENOC Executives:

G. R. Leidich	A-GO-19
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FOR INFORMATION ONLY

Restart Performance Indicators

Notes for Week ending February 22, 2004:

- **No significant changed for this week**

Davis-Besse Nuclear Power Station Restart Performance Indicators

BUILDING BLOCK & NRC 0350 RESTART ACTIONS

Performance Indicator	Owner	Goal at Startup	Current Status
Reactor Vessel Head Resolution			
<i>(Indicators complete and no longer in the package)</i>			
- Reactor Vessel Head Replacement Project	Dave Baker	Project Scope Complete	Complete
- Licensing Issues Resolution	Kevin Ostrowski	Zero to Complete	Complete
Containment Health Assurance			
<i>(Indicators complete and no longer in the package)</i>			
- EOC Re-Inspections	Tim Chambers	Zero to Complete	Complete
- Containment Focus Areas	Tim Chambers	Complete Restart Actions	Complete
- Open Containment Health Restart CR Evaluations	Tim Chambers	Zero to Complete	Complete
- Open Containment Health Restart CAs	Tim Chambers	Zero to Complete	Complete
System Health Assurance			
<i>(Indicators complete and no longer in the package)</i>			
- System Readiness Reviews	Bob Hovland	Zero to Complete	Complete
- Latent Issues Reviews	Bob Hovland	Specified 5 Complete	Complete
- BA Systems Outside CTMT - Inspections	Bob Hovland	Zero to Complete	Complete
- Open Sys. Health Assurance Restart CR Evaluations	Jim Powers	Zero to Complete	Complete
- Open System Health Assurance Restart CAs	Jim Powers	Zero to Complete	Complete
Program Compliance			
<i>(Indicators complete and no longer in the package)</i>			
- Phase 1 Program Reviews	Allen McAllister	Zero to Complete	Complete
- Phase 2 Program Reviews	Allen McAllister	Specified 7 Complete	Complete
- Open Program Compliance Restart CR Evaluations	Jim Powers	Zero to Complete	Complete
- Open Program Compliance Restart CAs	Jim Powers	Zero to Complete	Complete
Management & Human Performance			
<i>(Indicators complete and no longer in the package)</i>			
- Management & Human Performance Restart Plan	Mark Bezilla	Zero Milestones to Complete	Complete
Restart Test Plan			
<i>(Indicators complete and no longer in the package)</i>			
- Restart Test Plan	Tony Stallard	Zero Restart Tests to Complete	Complete
Restart Action Plan			
- Total Open Restart CR Evaluations	Clark Price	Zero to Complete	1
- Total Open Restart Corrective Actions	Clark Price	Zero to Complete	4

Davis-Besse Nuclear Power Station Restart Performance Indicators

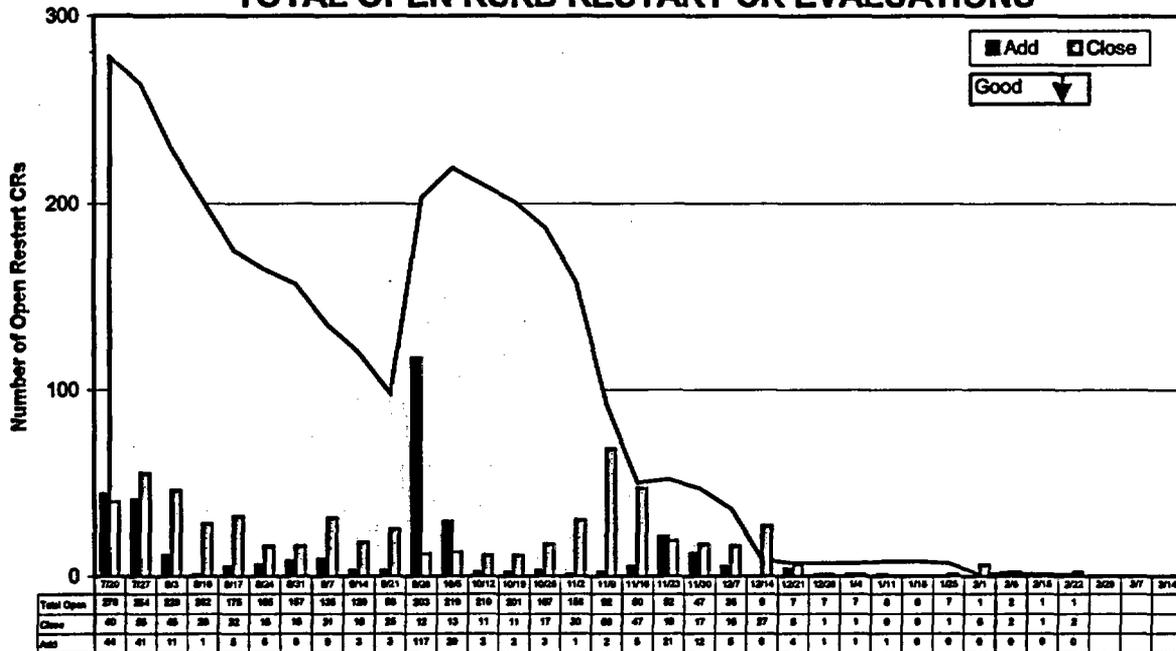
RESTART & SUSTAINED OPERATIONAL EXCELLENCE

Performance Indicators	Owner	Goal at Startup	Current Status
<i>Operational Readiness</i>			
- On-Line Corrective Maintenance Backlog	Mike Stevens	Less than 250	98
- Open Restart Modifications	Jim Powers	Zero to Complete	0
- Open Temporary Modifications	Jim Powers	Zero Temporary Modifications	1
- Open Procedure Change Requests	Linda Dohrmann	100 or Less	13
- Open Control Room Deficiencies	Kevin Ostrowski	Zero to Correct	11
- Open Operator Work Arouns	Kevin Ostrowski	Zero to Correct	8
- Open Restart Restraints (Mode 4/3) (Indicator complete and no longer in the package)	Kevin Ostrowski	Zero to Complete	0
- Open Restart Restraints (Mode 2/1)	Kevin Ostrowski	Zero to Complete	20
- Condition Report SRO Review	Linda Dohrmann	95% or better	87%
- Condition Report Evaluation	Linda Dohrmann	Decreasing Trend	Decreasing
- Corrective Action Resolution	Linda Dohrmann	Decreasing Trend	Leveled
<i>Organizational Readiness</i>			
- Condition Reporting - Self-Identified Rate	Linda Dohrmann	85% or Better	87%
- Root Cause Evaluation Quality	Linda Dohrmann	90% or Better	78%
- Condition Report Category Accuracy	Linda Dohrmann	90% or Better	94%
- Individual Error Rate	Linda Dohrmann	< 0.45 per 10,000 hrs	0.30
- Program & Process Error Rate	Linda Dohrmann	< 0.50 per 10,000 hrs	0.05
- Engineering Quality	Jim Powers	Average Score of 1.0 or Less	0.9
- Management Observations	Mark Bezilla	90% or Better	93%

DAVIS-BESSE NUCLEAR POWER STATION

RESTART ACTION PLAN

TOTAL OPEN RSRB RESTART CR EVALUATIONS



DEFINITION

This indicator tracks the work off of Condition Reports (CRs) which have been classified as requiring evaluation prior to Restart by the Restart Station Review Board (RSRB).

The vertical bar indicator monitors the weekly addition and completion of these Restart CRs. These Restart Condition Reports are considered complete when they have been evaluated and appropriate Corrective Actions have been initiated.

GOAL AT STARTUP

Zero to Complete

ANALYSIS/ SUMMARY

- As of 2/22/2004, the RSRB has reviewed 16,589 Condition Reports.
- 6,651 Condition Reports have been classified as Restart
 - 6,650 complete
 - 1 open
- of the 6,651 Restart Condition Reports, 2,057 have been classified as 0350
 - 2,057 complete
 - 0 open

Effective August 4, 2003, the Restart Station Review Board discontinued the general augmented review and restart classification of Condition Reports initiated on or after August 1, 2003. The RSRB continues to review new Condition Reports associated with NRC 0350 Restart Checklist Items.

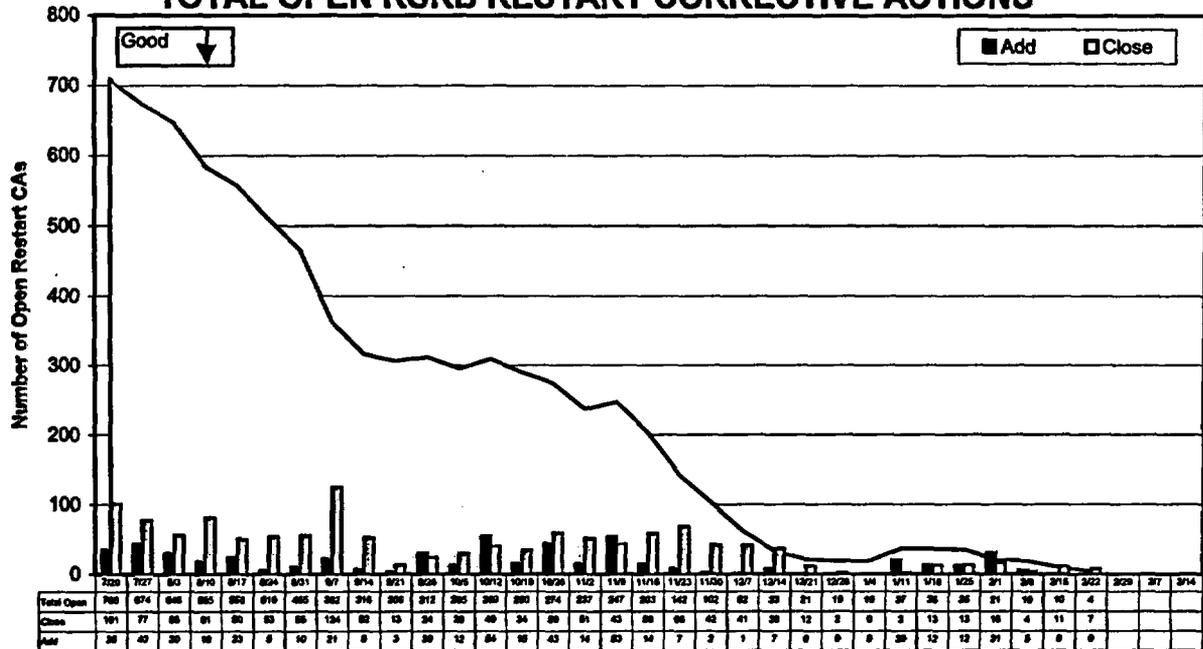
RA-01

Owner - C. Price
Oversight - L. Myers

DAVIS-BESSE NUCLEAR POWER STATION

RESTART ACTION PLAN

TOTAL OPEN RSRB RESTART CORRECTIVE ACTIONS



DEFINITION

This indicator tracks the work off of Corrective Actions (CAs) which have been classified as requiring completion prior to Restart by the Restart Station Review Board (RSRB).

The vertical bar indicator monitors the weekly addition and closure of these Restart CAs. These Restart CAs are considered closed when the Corrective Action is completed and updated as closed in the Condition Report Evaluation & Status Tracking Program (CREST).

GOAL AT STARTUP

Zero to Complete

ANALYSIS/ SUMMARY

As of 2/22/04, the RSRB has reviewed 16,494 Corrective Actions associated with Restart Condition Reports.

- 7,521 Corrective Actions have been classified as Restart
 - 7,517 complete
 - 4 open
- of the 7,521 Restart Corrective Actions, 4,057 have been classified as 0350
 - 4,055 complete
 - 2 open

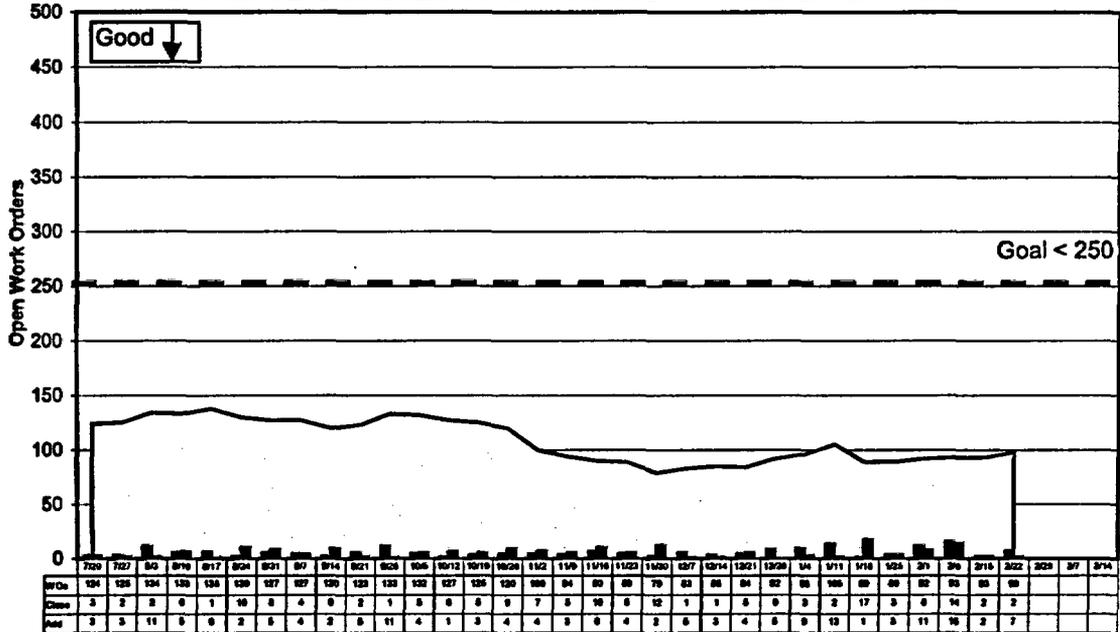
RA-02

Owner - C. Price
Oversight - L. Myers

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

ON-LINE CORRECTIVE MAINTENANCE BACKLOG



DEFINITION

Number of open on-line corrective maintenance work orders (WOs) as defined by INPO AP-928, Work Management Process Description is the repair and restoration of power production related equipment, components, or structures that have failed or are malfunctioning and are not performing their intended function.

GOAL AT STARTUP

Less than 250 open WOs

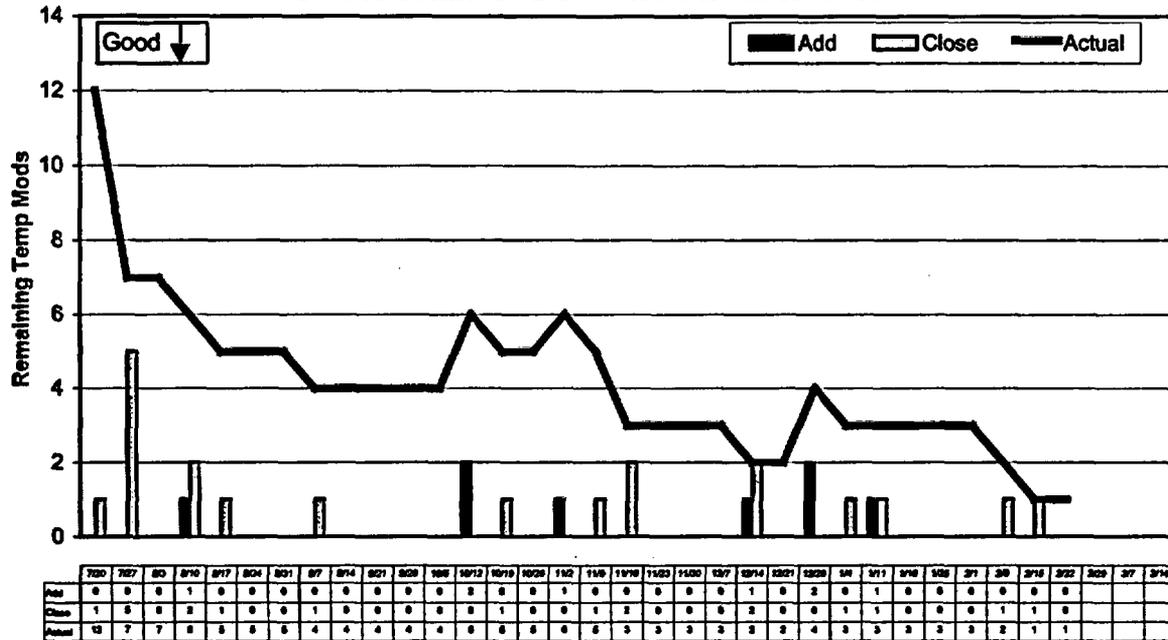
ANALYSIS/ SUMMARY

During the week ending 2/22/04, 7 new corrective orders were initiated and 2 completed. The organizational focus remains on emergent work and preventive maintenance activities. The Backlog Reduction Plan is being implemented starting January 2004 to support achieving Corrective Maintenance Backlog goals within the Operational Improvement Plan.

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

OPEN TEMPORARY MODIFICATIONS



DEFINITION

This indicator tracks the closeout of all open Temporary Modifications identified before Mode 2.

GOAL AT STARTUP

Zero Temporary Modifications

ANALYSIS/ SUMMARY

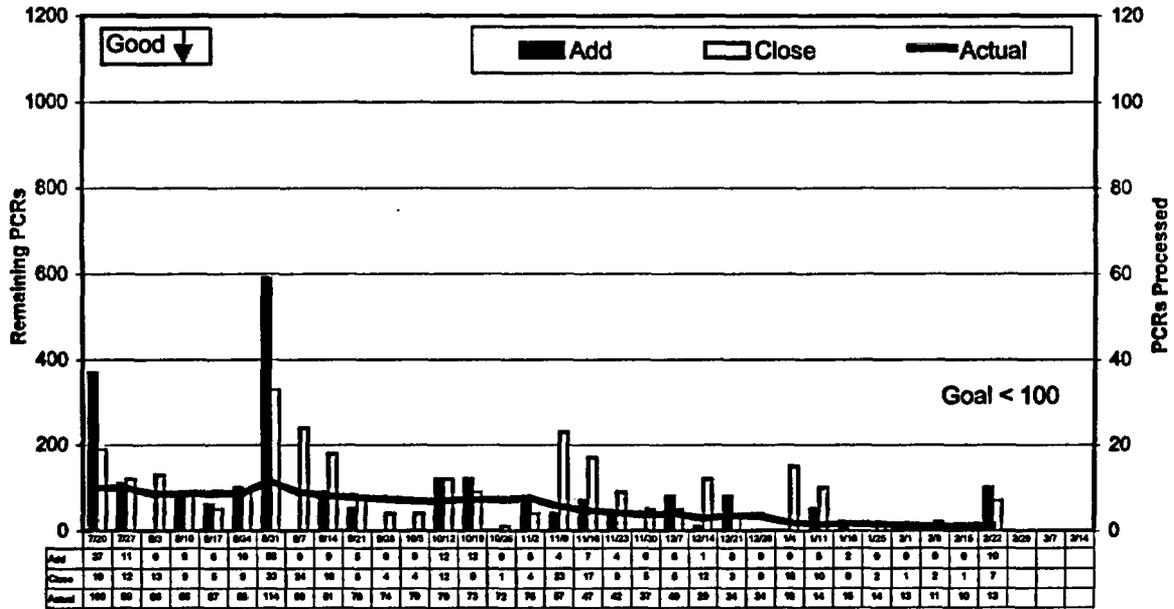
Significant progress has been made in eliminating Temporary Modifications. Since July 2003, 20 Temporary Modifications have been eliminated leaving the 1 described below, which will remain open until shortly after restart.

Temporary Modification 03-0028 will remain installed until after restart and will be removed shortly after plant startup during the next scheduled Auxiliary Boiler Outage. This Temporary Modification is for Auxiliary Boiler Feedwater Control Valve AS1678 which was reassembled without a pusher plate and handwheel. An Auxiliary Boiler outage is required to repair the valve and remove this Temporary Modification. This work can not be completed prior to restart due to the need for station heating and establishing a vacuum. Once the Station is on line, the auxiliary boiler can be removed from service to repair AS1678 and remove TM 03-0028.

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

OPEN PROCEDURE CHANGE REQUESTS



DEFINITION

This indicator measures the number of Category / Priority 1 & 2 Procedure Change Requests (PCRs) which are awaiting incorporation into Davis-Besse procedures. The term PCR includes change requests initiated as Condition Reports. The above count does not include category / priority 3 PCRs as these PCRs are enhancements not affecting procedure adequacy or quality, and category/priority 4 PCRs as these PCRs are restrained by plant modifications, license amendment requests, etc. and cannot be closed until these restraints are completed. A PCR is considered completed when it is incorporated into an effective procedure or when the PCR is cancelled.

GOAL AT STARTUP

Restart goal is to be at less than 100 open targeted PCRs

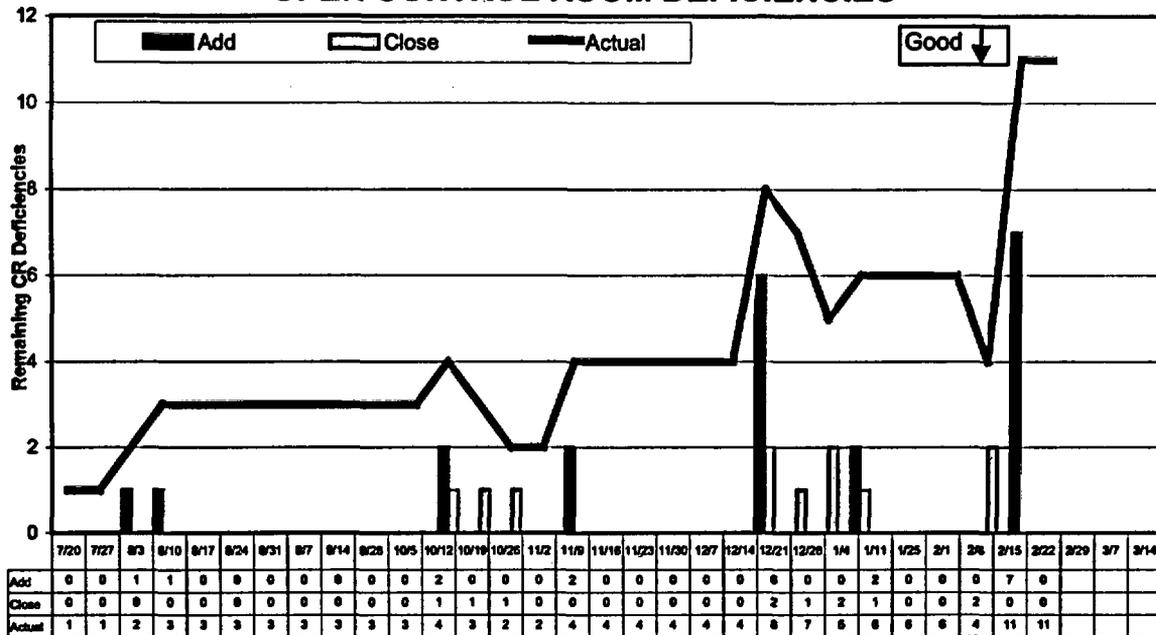
ANALYSIS/ SUMMARY

As of February 22, 2004, there are 13 open Priority 1/2 change requests.

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

OPEN CONTROL ROOM DEFICIENCIES



DEFINITION

The deficiencies in a Control Room component such as an inoperable process indicator, alarm function, or component status light and those deficiencies that prevent the operation of an automatic control system or hand operated control switch. Deficiencies corrected in the field but awaiting testing for final closeout are not included as an open control room deficiency.

GOAL AT STARTUP

The goal for Control Room deficiencies is zero at restart.

ANALYSIS/ SUMMARY

Init Date	Priority	ECD	Description
11/04/03	300	TBD	Annunciator 9-5-D DSL OIL STRG TK LVL comes into alarm early.
12/15/03	300	2/27/04	EI6277, Y1 Bus Voltage reads low in CTRM compared to local indicator.
12/15/03	300	MCO	CV5006 SAM Light did not respond as expected. (Mid-Cycle Outage)
01/05/04	300	TBD	Cooling Tower Blowdown failed open and must be controlled manually.
02/09/04	300	TBD	HICDH14A position indication does not match actual
02/13/04	300	TBD	SFRCS red reset light bulbs broken in socket
02/13/04	300	TBD	SG 1 FW S/U Control Valve indication not responding (remains at 0%)
02/13/04	600	TBD	SG 2 Operating Level Recorder changed & computer points didn't
02/13/04	300	TBD	TPCW High Level Tank LI reads 1 foot lower than local indication
02/13/04	300	TBD	FWST Control Room LI reads low compared to local indication
02/13/04	300	TBD	2nd Stage MSR Blanketing Steam throttle valve will not throttle from CTRM

- During the week prior to 2/15/04, a thorough review of Control Room tags was performed and a decision was made to add six existing conditions to the list.
- As part of Restart, beginning December 15, 2003, Davis-Besse transitioned from Outage Scheduling to the normal FENOC On-line Scheduling process and transitioned to work planning, prioritization and scheduling in accordance with FENOC Work Management Process Nuclear Operating Procedures. Control Room Deficiencies are now prioritized and scheduled in accordance with these procedures and may be elevated at the discretion of Operations based on their significance.

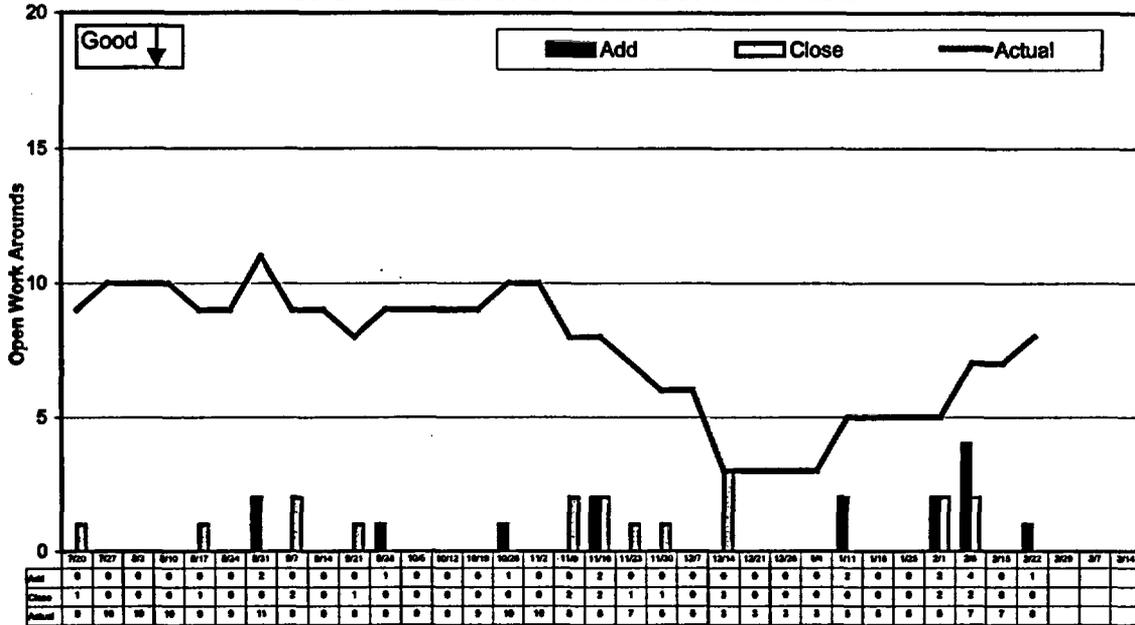
Owner - K. Ostrowski
Analysis - J. Fawcett

OP-01

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

OPEN OPERATOR WORK AROUNDS



DEFINITION

A Level One Operator Work Around is defined as any equipment deficiency or change in plant conditions which, during abnormal or emergency conditions, will require an operator to perform compensatory actions. A Level Two Operator Work Around is any equipment deficiency or change in plant conditions which, during normal operations, will require an operator to perform compensatory actions. The above indicator tracks the number of open Level 1 and 2 Work Arounds. Work Arounds corrected in the field but awaiting testing for final closeout are not included as an Operator Work Around.

GOAL AT STARTUP

Zero Level 1 and 2 Operator Work Arounds at restart.

ANALYSIS/ SUMMARY

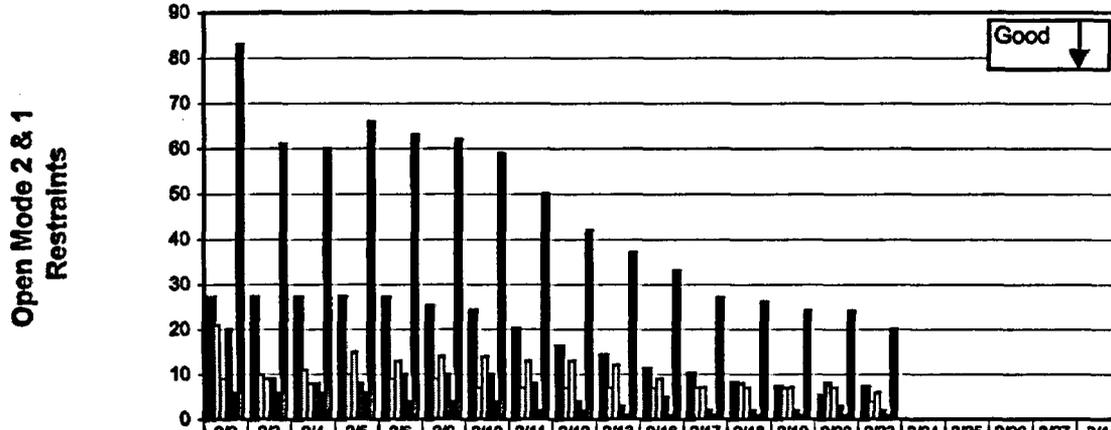
Init Date	Priority	ECD	Level	Description
1/30/01	300	4/22/04	1	DFP Day Tank Fill Valve DO1131,isolated
6/3/03	400	RFO	2	DH2733, DH Pump 1 Suction leaks by potentially lifting DH1508
1/29/04	500	Mid-Cycle	2	SW1358, CAC#3 Outlet TCV not reopening when it auto-closes
2/4/04	300	2/28/04	2	LG2571, LP Condenser Boot Seal Sight Glass isolated.
2/4/04	(CR)	TBD	2	#1 SG Wet Layup System isolations leakby
2/4/04	(CR)	RFO	2	MFPT 1 will not stay on Turning Gear due to steam valve leakby
2/6/04	(CR)	RFO	2	DH2734, DH Pump 2 Suction leaks by potentially lifting DH1509
2/19/04	300	TBD	1	Turbine steam packing unloader valves leak by.

As part of Restart, beginning December 15, 2003, Davis-Besse transitioned from Outage Scheduling to the normal FENOC On-line Scheduling process and transitioned work planning, prioritization and scheduling in accordance with FENOC Work Management Process Nuclear Operating Procedures. Operator Work Arounds are now prioritized and scheduled in accordance with these procedures and may be elevated at the discretion of Operations based on their significance.

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

OPEN MODE 2 & 1 RESTRAINTS



	2/2	2/3	2/4	2/5	2/6	2/9	2/10	2/11	2/12	2/13	2/16	2/17	2/18	2/19	2/20	2/23	2/24	2/25	2/26	2/27	3/1
CA's	27	27	27	27	27	25	24	20	16	14	11	10	6	7	6	7					
Mode 21 CR's	21	10	11	10	9	9	7	7	7	7	7	7	8	7	8	4					
ORDER - 1R13 Field Work	9	9	8	15	13	14	14	13	13	12	9	7	7	7	7	6					
ORDER -PMT	20	9	8	8	10	10	10	8	4	3	5	2	2	2	3	2					
SURV	6	6	6	6	4	4	4	2	2	1	1	1	1	1	1	1					
Total	63	61	60	66	63	62	69	50	42	37	33	27	26	24	24	20	0	0	0	0	0

DEFINITION

Any item that would prevent plant mode change based upon open CREST Restart CA's, CREST RSRB Restart CR's requiring evaluation, OPS/Admin Mode Restraint CR's, 13RFO coded Orders, Orders requiring Post Maintenance Testing, required Surveillance Testing.

GOAL

Clear ALL Restart Restraints prior to station restart.

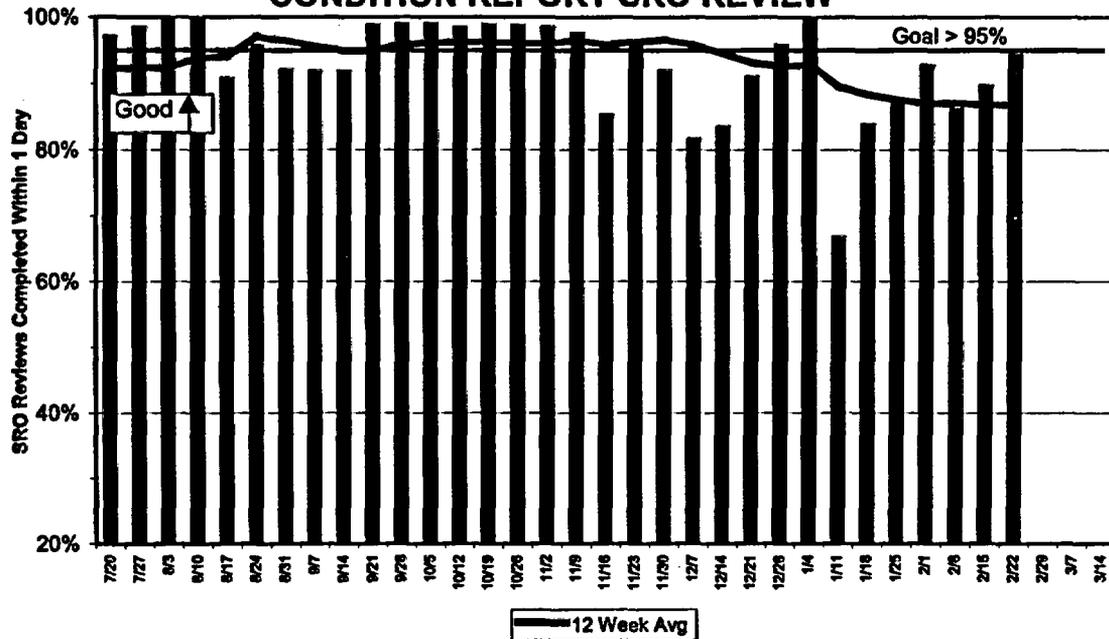
ANALYSIS/ SUMMARY

- 02/20/2004 - Field work increase related to H2 Dilution Blower, 1 new CA, 1 new CR
- 02/05/2004 - Field work increase related to AFW2, HX01
- 02/04/2004 - CR Mode Hold Resolutions Awaiting Approval = 0
- 1/30/2004 - CA increase following RSRB reviews
- 1/16/2004 - CR increase following RSRB reviews

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

CONDITION REPORT SRO REVIEW



DEFINITION

This indicator measures the percent of Condition Report (CR) Senior Reactor Operator (SRO) reviews completed within one day after the review by the originator's supervision to ensure timely review of plant configuration and operability concerns. The SRO reviews requested by the Management Review Board (MRB) are excluded from this indicator.

GOAL AT STARTUP

Restart goal is for 95% or more of the SRO reviews to be completed within one day.

ANALYSIS/ SUMMARY

Ninety-four percent (50/53) of the SRO reviews were completed within one day after the review by the originator's supervision with the remaining three SRO reviews having a duration of up to three days. The decrease can be contributed to resources focusing on plant start-up activities, training activities and operating crews benchmarking at Perry and Beaver Valley. Major plant activities have been completed and this trend is expected to improve. The 12-week average (12/1/03 - 2/22/04) is 87 percent of the SRO reviews completed within one day.

This performance indicator has been adjusted through week ending 2/8/04 to remove the time Operations staff were performing peer reviews of the Initial SRO Condition Report review. The purpose of the indicator is to measure the timeliness of SRO reviews of potential plant concerns. This is accomplished on the initial SRO review. The performance indicator was adjusted back to week ending 11/2/03.

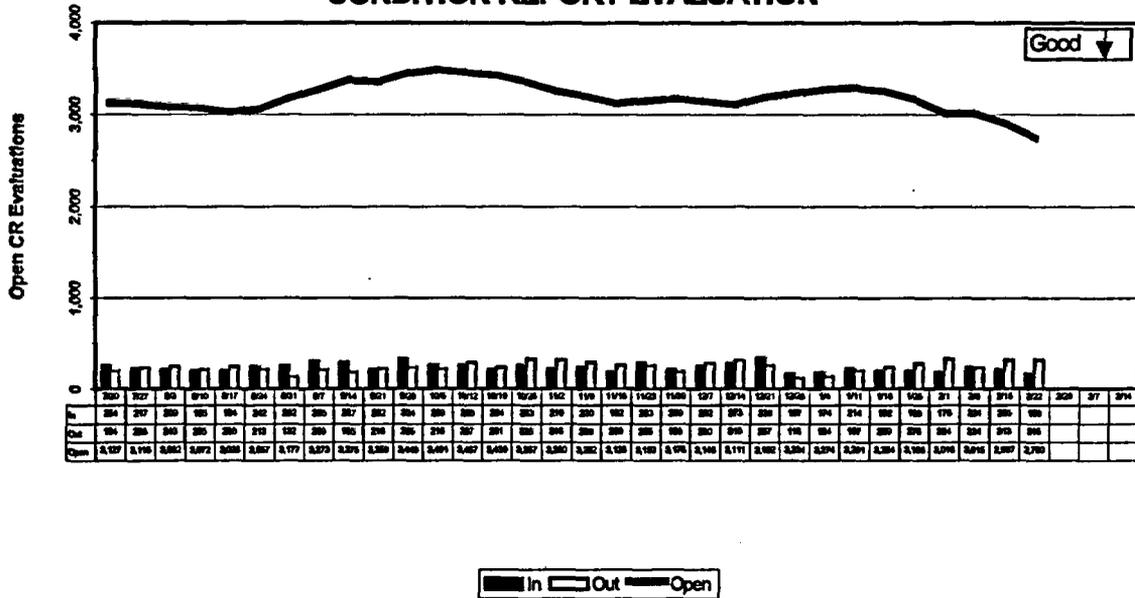
CA-01

Owner - L. Dohmann
Analysis - S. Gatter

DAVIS-BESSE NUCLEAR POWER STATION

OPERATIONAL READINESS

CONDITION REPORT EVALUATION



DEFINITION

This indicator measures the number of Restart and Non-Restart Condition Reports (CR) currently open for completion of their evaluation. The CR Senior Reactor Operator (SRO) review date is used as the starting point for new evaluation assignments.

GOAL AT STARTUP

The restart goal is a decreasing trend of open CR evaluations.

ANALYSIS/ SUMMARY

The trend of open CR evaluations has decreased by 18 percent over the last six weeks. The 2,750 open CR evaluations consist of 1,660 (60.4%) - NCAQ (Conditions Not Adverse to Quality), 1,087 (39.5%) - CAQ (Conditions Adverse to Quality), and 3 (0.1%) - SCAQ (Significant Conditions Adverse to Quality). The organizations with the highest number of open CR evaluations are:

- Plant Engineering - 1,049 open (decreased by six percent)
- Design Engineering - 608 open (decreased by five percent)
- Maintenance - 282 open (increased by nine percent)
- Operations - 296 open (decreased by 21 percent)
- Radiation Protection - 127 open (decreased by five percent)
- Project Management - 117 open (increased by one percent)

- CR & CA reduction meetings are being set up to begin in February to address the prioritization and scheduling of work-off by section. These meetings will be chaired by the Plant Manager.

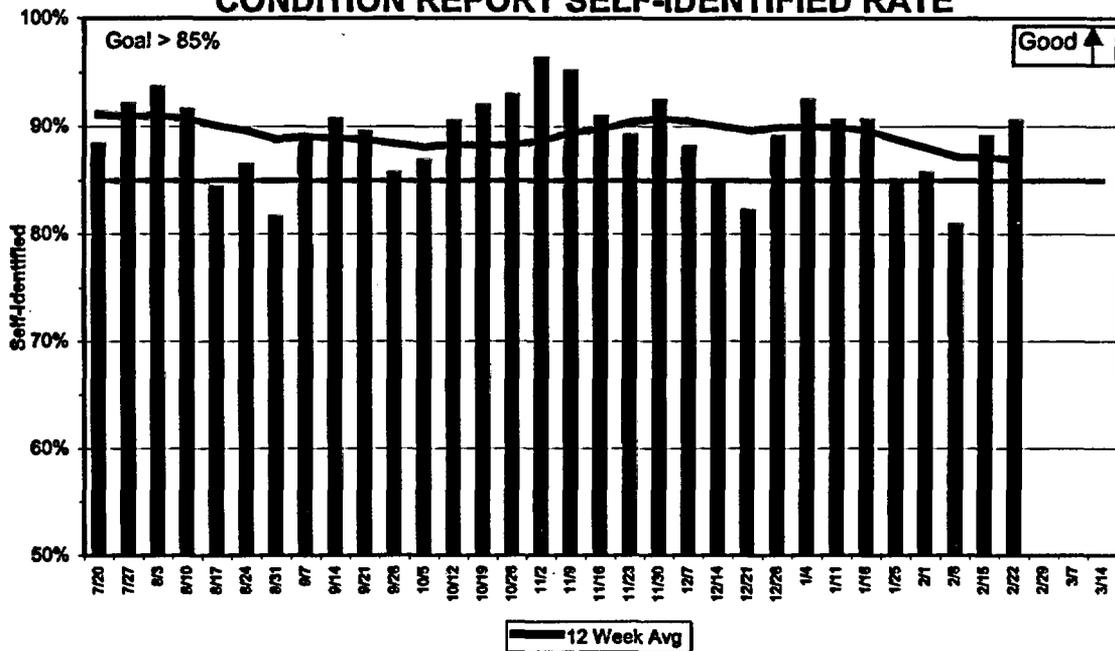
CA-02

Owner - L. Dohmann
Analysis - S. Gatter

DAVIS-BESSE NUCLEAR POWER STATION

ORGANIZATIONAL READINESS

CONDITION REPORT SELF-IDENTIFIED RATE



DEFINITION

This indicator reviews the population of Condition Reports (CRs) originated and calculates the percent self-identified compared to the total. CRs originated as a result of QA/NPO/NRC input/feedback or CRs originated as a result of a self-revealed issue are not considered self-identified. The CR Senior Reactor Operator (SRO) review date is used as the starting point for determining the self-identified rate.

This indicator assesses the Davis-Besse organization's ability to internally identify conditions adverse to quality. A high value is representative of an organization that is engaged and committed to the Corrective Action Process.

GOAL AT STARTUP

Restart goal is for a twelve week rolling average of 85% or more of the CRs originated to be self-identified.

ANALYSIS/ SUMMARY

Ninety-one percent (143/158) of the CRs originated were self-identified. The 12-week average (12/1/03 - 2/22/04) is 87 percent of the CRs originated were self-identified.

- Internal Oversight - six percent (10/158)
- External Oversight - one percent (2/158)
- Self-Revealing - two percent (3/158)

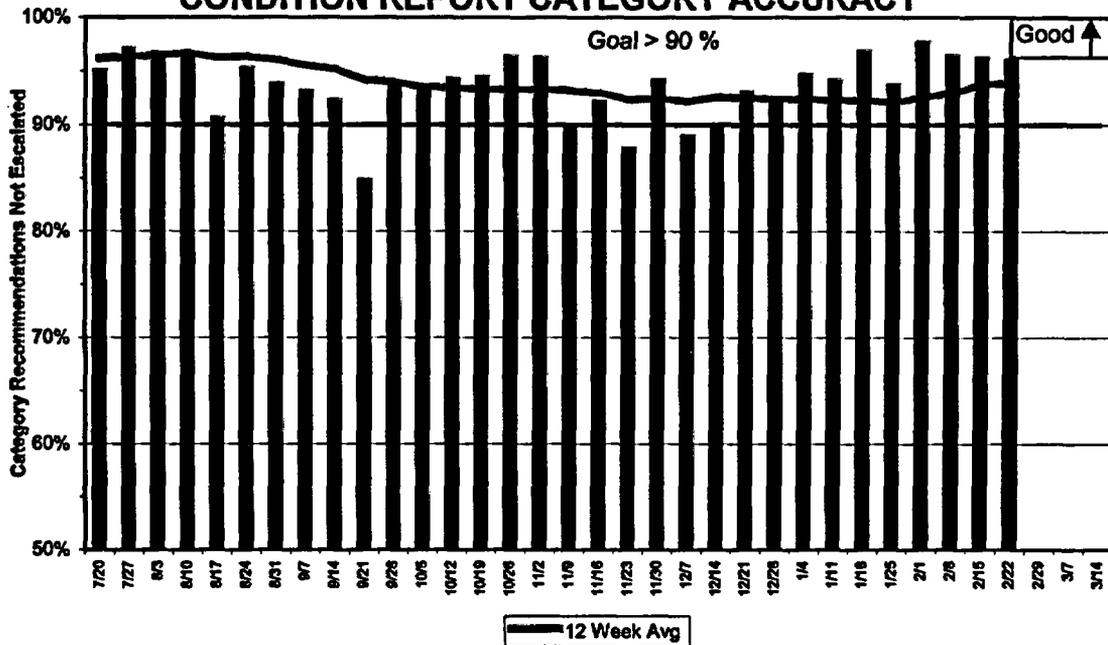
CA-04

Owner - L. Dohmann
Analysis - S. Gatter

DAVIS-BESSE NUCLEAR POWER STATION

ORGANIZATIONAL READINESS

CONDITION REPORT CATEGORY ACCURACY



DEFINITION

This indicator measures the percent of Condition Report (CR) categories recommended by the originator's supervision that do not require escalated categorization by the Management Review Board (MRB).

GOAL AT STARTUP

Restart goal is to maintain a Twelve Week Rolling Average level of 90% or better.

ANALYSIS/ SUMMARY

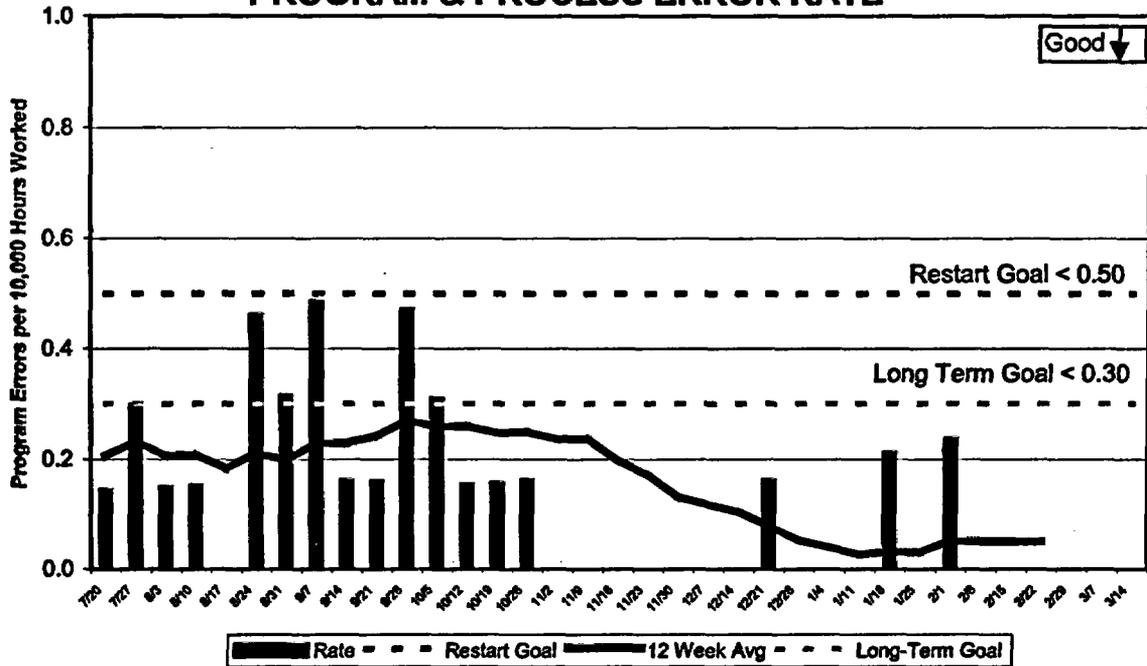
The MRB changed the supervisory recommended category to a higher level on four percent (7/177) of the CRs. One category change resulted in an increase from a condition adverse to quality (CAQ) to a significant condition adverse to quality (SCAQ). The 12-week average (12/1/03 - 2/22/04) of CR category recommendations not escalated by the MRB is 94 percent.

CA-08

Owner - L. Dohrmann
Analysis - S. Gatter

ORGANIZATIONAL READINESS

PROGRAM & PROCESS ERROR RATE



DEFINITION

A Program and Process Error is an undesirable situation caused by the lack of sufficient information for the performer to complete the task or evolution successfully. It is a human performance barrier breakdown not specific to any individual because the insufficient barriers would exist for any other person attempting to complete the task. The error had a reasonable potential to affect plant safety, regulatory position, financial liability, environmental impact or power production. The program error rate is the number of program and process errors per 10,000 person-hours worked.

GOAL AT STARTUP

Restart goal is twelve week rolling average < 0.50 program errors per 10,000 hours

ANALYSIS/ SUMMARY

During the week, there were no Condition Reports (CR) that met the screening criteria for this indicator resulting in a program error rate of 0.0 errors per 10,000 hours worked for the week. The 12-week rolling average is 0.05 program errors per 10,000 hours worked.

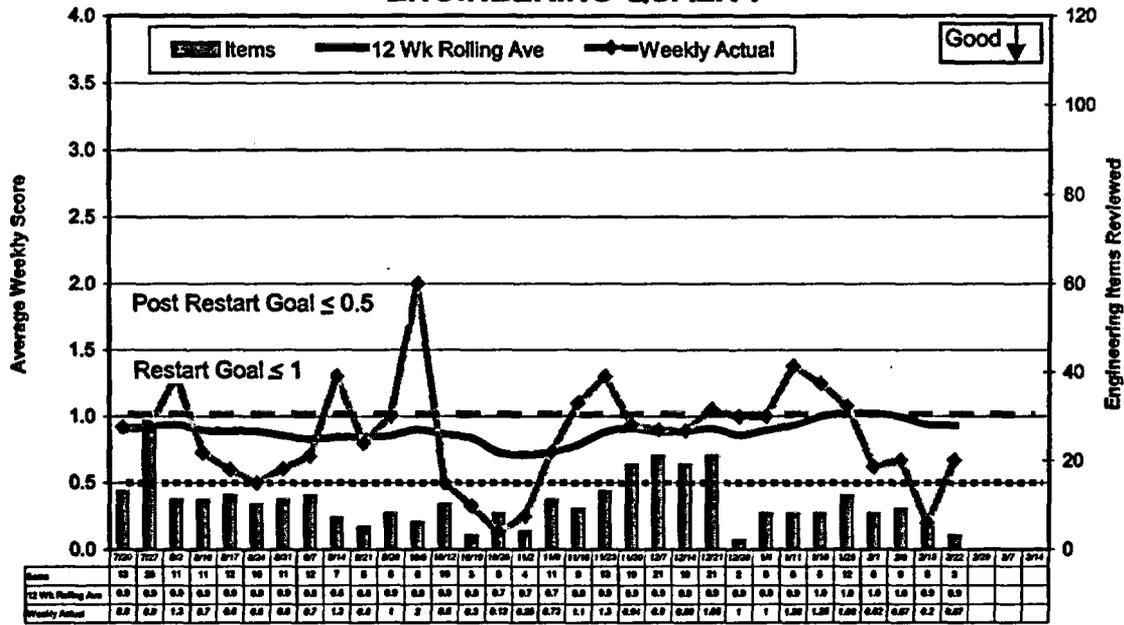
CA-07

Owner - J. Reddington
Analysis -J. Grimm

DAVIS-BESSE NUCLEAR POWER STATION

ORGANIZATIONAL READINESS

ENGINEERING QUALITY



DEFINITION

This indicator measures the score for quality of Engineering products as assigned by the Engineering Assessment Board (EAB). The score is based on an assessment of quality in the following areas: Procedural Performance/Implementation, Rigor in Problem Solving, Team Approach, Analysis/Evaluation/Design, Design Basis Maintenance, and Licensing Basis Maintenance.

- Score summary:
- 0 No comment, product is acceptable as presented.
 - 1 Omission or error has negligible effect on results.
 - 2 Omission or error has minor effect but requires revision of document.
 - 3 Significant effect on results.
 - 4 Attribute unsatisfactory.

GOAL AT STARTUP

The goal at restart is to achieve a twelve week rolling average score of 1.0 or less.

ANALYSIS/ SUMMARY

For week ending February 22, 3 products were assessed with weekly average score of 0.67 with 2 products being scored as a 1, and 1 being scored as 0. The 12-week rolling average is 0.9.

Product	Title	Responsible Org
OE 2004-006	Door 303 HELB	DES-APU (graded 0)
Calc C-NSA-049.02-031,R.1	Clean Strain. Head Loss DB Sump	Enercon
SCN A-8F-8	Structural Steel Fireproofing	DES-SMU

Engineering Assessment Board has established a Post Restart Goal of 0.5 or less. This Post Restart Goal has been added to graph and is intended to be reached prior to the end of Operating Cycle 14.

DAVIS-BESSE NUCLEAR POWER STATION

MANAGEMENT AND HUMAN PERFORMANCE EXCELLENCE

MANAGEMENT OBSERVATIONS

