

Fourth Quarter 2011 Fire Protection Program Health Report

Program: PGN | Brunswick | FP - Fire Protection / Nuclear Safety Capability Assessment

Period: Q4-2011

72.63 Y

Program Health Report (10/1/2011 - 12/31/2011)

Fleet	Fleet	Program Manager	Rouns, Timothy	Overall Status 72.63 Y
Facility	Brunswick	Backup Program Manager	Becker, John	
Program	FP			
Frequency				
PM Complete Status	Complete	Review Status	Complete	
Program Desc	Fire Protection / Nuclear Safety Capability Assessment			<div> <div>12 MO</div> <div>9 MO</div> <div>6 MO</div> <div>3 MO</div> <div>0 MO</div> <div>3 MO</div> <div>6 MO</div> <div>9 MO</div> <div>12 MO</div> </div> <div> <div>Historic</div> <div>Future</div> </div>

Scorecard

The current health of the BNP Fire Protection Program for BNP is YELLOW for end of 4th Q 2012.

The trend is declining.

Additional management attention is warranted at this time due to the staffing challenges in both FP and SSA/ SBO.

Monthly site leadership updates of program health was secured in 2011, with the intent to rely on the plant health committee review process.

1. Red/ Yellow indicators:

- Self identified and external findings: During the quarter the NRC tri-ennial inspection occurred. This inspection had the positive result of no NRC findings or open issues. The inspection process did initiate a number of S3 NCRs to address minor issues identified during the inspection process. Separate from the NRC inspection process, S2 NCRs related to our own inspection activities were identified. These included cable raceway separation issues noted as not compliant with our existing SSA as well as NFPA 805 future requirements. These two issues have been responded to with the implementation of roving fire watches as a compensatory action. This has placed an unplanned burden on supporting departments of operations, and security. Corrective actions are to be developed as part of the the NFPA 805 project.
- Training and Qualification: Replacements for vacancies are actively being pursued, but there has been a 10 month gap in the SSA position. This has placed a high reliance on contract personnel for technical expertise. One qualified FPE now works in systems with other assignments than fire protection.
- Corrective Action Backlog: Progress has not been made in addressing average age of fire protection actions.
- Failure rate of emergency lighting units continues as an equipment issue.

2. Backup Program Managers concerns:

- Design and Project support of EC development and implementation continues to challenge existing resources. With increased projects planned for 2012 and 2013 this will likely be an increasing burden and a potential distraction from program activities. Additional contract FP engineering expertise has been aligned to assist in this workload as well as additional positions in corporate roles.
- The data collection process for the performance indicators needs to be validated for BNP 4th quarter.

3. Summary of proactive actions scheduled to assuer longterm program health:

- The project to clean out the transformer pits and convert to an open pit design has been developed and a project manager assigned. This will provide a resolution to a longstanding degraded condition.

	Value	Weight	Score	Contribution
COMPLIANCE			75	
Self-Identified and External Findings	No Significance Level 1 NCRs AND any of the following: 1 Significance Level 2 NCR OR > 4 Significance Level 3 NCRs OR 1 external finding. Y	12.50	50	6.25
Regulatory/Industry Forecast	One recent / pending NRC or industry issues which require significant (> 100 MH) effort to investigate a position / condition. W	12.50	75	9.38
Program Human Performance	No clock resets in the past 12 months associated with the program or Program Manager Performance, and demonstrated proactive actions to improve human performance issues associated with the program. G	12.50	100	12.50
EFFECTIVENESS			60	
Training and Qualification	Program manager not qualified, or training guidelines do not exist. R	6.50	0	0
Self Assessment	Program assessed within the last 24 months and the most recent comprehensive self assessment within the last 36 months. G	6.50	100	6.50
Benchmarking	Documented benchmarking activity within the previous 12 months. G	6.50	100	6.50
Operating Experience	Actions from OE incorporated within 1 year; no OPEX evaluation >90 days. G	6.50	100	6.50
Open Corrective Action Program Items	2 or more CAPR or CA extended more than 3 times or greater than 3 years in age. R	6.50	0	0
PERFORMANCE			83.33	
Frequency of LOCT on Safe Shutdown procedures	Less than or equal to two years and no CRs resulting from LOCT. G	5	100	5
SSD Equipment impairments from periodic/surveillance testing	5 R	5	0	0
Fire Events	.5 G	5	100	5
Property Loss Control Performance Indicator	G	5	100	5
Fire Protection Equipment Reliability per NEIL reporting criteria.	.833 G	5	100	5
Fire Protection Power Block related Corrective Maintenance Backlog	3 G	5	100	5
Total Score:			72.63	Y

Expected Green: Not Set

Expected White: Not Set

Indicator: Self-Identified and External Findings**Score:** 50 Y**Justification:**

4th quarter NCR data needs to be developed/verified.
 There were the following 3 S2 NCRs in the 4th quarter:
 499666 cable not identified as APP R
 503011 deisel driven fire pump battery charger failure
 503132 SSA cable raceway impacts

9 S3 NCRs related to impariments:

491873
 492408
 494808
 494976
 499013
 499535
 502625
 503656
 504611

Triennial related NCRs

496983, LABELS READING "HOT" ON 120 VAC/125 VDC PANELS IN 4KV E-BUS
 496998, DRAWING 1-FP-81283 ERRONEOUS INFORMATION
 497159, MWT BUILDING ROOF LEAK ABOVE DIESEL FIRE PUMP BATTERIES
 497468, PROCEDURE 1ASSD-05 INCORRECTLY LISTS MCC 1XB
 497514, AVAILABILITY OF LOCKED HIGH RAD AREA KEYS FOR ERO
 497529, DRAWING LL-09234 SHEET 27 SHOULD BE LABELED UNITS 1 AND 2
 497553, REVISE THE BCAMS DATA BASE TO CAPTURE EXPOSED CABLING
 497681, DETERMINATION OF CREDITED COMMUNICATION METHOD FOR EDMGS
 499144, MAINTAINING CONTROL ROOM MIN STAFFING DURING ASSD PROCEDURES
 499600, ADDITIONAL CLARIFICATION NEEDED FOR EVAL 85-125-0-27-F
 499666, CABLE DW1-L6G/1 NOT IDENTIFIED AS APPENDIX R RELATED
 499773, LETTER OF AGREEMENT WITH OFF-SITE SUPPORT AGENCIES (SOUTHPORT FD)
 499786, OFF-SITE MOU RENEWAL REQUIREMENTS DON'T MATCH IN PROCEDURES
 499962, AMPACITY CALCULATION BNP-E-5.036 CONTAINS AN ERROR
 499975, COORDINATION CALCULATION BNP-E-8.010 CONTAINS AN ERROR
 500079, HOT SHORT OR FAULT MAY POTENTIALLY IMPACT E2 FIRE DAMPER

Yellow for 3rd Q 2011 with a total of 14 Severity Level 3 NRC's listed below.

DATE	PRIORITY	NCR	AR SUBJECT
20110715S3		476749	NEIL REPORT FOR FIRE SUPPRESSION SYSTEM OUTAGE
20110811S3		481844	NEIL NOTIFICATION FROM IMP 2013 DG FIRE PUMP INOP
20110817S3		482978	FIRE BRIGADE RADIOS NOT WORKING DURING FIRE DRILL
20110906S3		486464	SA #440002, D1, CONFIGURATION CONTROL - NFPA CODE COMP CALCS
20110907S3		486586	SA #440002, D3, INSUFFICIENT SITE PRIOR. ON FP PROG. MAINT.
20110907S3		486587	SA #440002, D4, PROCEDURAL NON-COMPLIANCE
20110907S3		486588	SA #440002, D5, FIRE BRIGADE TRAINING
20110912S3		487388	BNP - FIRE EXTINGUISHERS MISSED MONTHLY INSPECTION
20110915S3		488058	7 DAY FIRE BARRIER PENETRATION IMPAIRMENT EXPIRING
20110915S3		488059	7 DAY FIRE BARRIER PENETRATION IMPAIRMENT EXPIRING
20110915S3		488062	7 DAY FIRE BARRIER PENETRATION IMPAIRMENT EXPIRING
20110915S3		488068	7 DAY FIRE BARRIER PENETRATION IMPAIRMENT EXPIRING
20110925S3		489976	7 DAY FIRE IMPAIRMENT WILL BE EXCEEDED
20110929S3		491157	SCAFFOLD POTENTIALLY BLOCKS FIRE FIGHTING ACCESS TO RB2 SRHR

5 NRCs written for planned expired impairments due to implementation of ECs. All were associated with EC 50934 to install new fire detection and deluge valves for the Four Day Fuel Tank Rooms. 2 NCRs written for NEIL notification of suppression systems out of service for greater than 48 hours.

Harris applies a different standard and does not write MCRs for planned expired impairment and NEIL notifications. NCR 495257 written to address.

Indicator: COMPLIANCE**Score:** 75 -**Justification:**

New Self-Identified & External Findings criterion is implemented for the 2011 program health report. Using the criteria, this indicator was green for the 1Q 2011. Experience in 2011 to date found Significance Level 3 NCRs will keep this indicator YELLOW. Low level events in areas planned expired impairments and NEIL notifications for suppression systems out of service for maintenance have caused 50% of the S3 NCRs. Less than two S3 NCRs are needed to have a white indicator. OE found BNP writes NCRs for NEIL notification and planned expired impairments while other sites do not. Remaining COMPLIANCE indicators are green and no change is expected for the remainder of 2011.

Indicator: Regulatory/Industry Forecast**Score:** 75 W**Justification:**

NFPA 805,

Indicator: Program Human Performance**Score:** 100 G**Justification:**

Criteria met for 4th Q 2011 year.

Indicator: Training and Qualification**Score:** 0 R**Justification:**

Position became vacant in Jan 2012 due to promotion. Backup not qualified.

Indicator: Self Assessment**Score:** 100 G**Justification:**

Green for 4th Q 2011

FP Program Self assessment SA # 440002 completed in September 2011.
NOS Assessment of the Fire Protection Program debriefed in July 2010.

Indicator: EFFECTIVENESS**Score:** 60 -**Justification:**

Currently, two aged corrective actions are open causing an indicator to remain RED. These corrective actions require greater than 40 man-hours under level of effort to complete. This level of effort is not built into the program manager's work load resulting in several extensions. Remaining EFFECTIVENESS indicators are green and no change is expected for 2011.

Indicator: Benchmarking**Score:** 100 G**Justification:**

Criteria met for 4th Q 2011.
Benchmarking activity used to prepare for the 2011 NRC Fire Protection Triennial Inspection. Experience from HNP Triennial used during preparation, pre-job brief and post job critique for the NRC information gathering trip in October 2011. NRC Question database adopted for use at BNP as a result. PM supporting INPO FP assessment of Calvert Cliffs in December 2011

Indicator: Operating Experience**Score:** 100 G**Justification:**

Criteria met thru 4th Q 2011.

OE from HNP Triennial used during preparation, pre-job brief and post job critique for the NRC information gathering trip in October 2011. NRC Question database adopted for use at BNP as a result.

No open OE found for Fire Protection Program

Indicator: Open Corrective Action Program Items**Score:** 0 R**Justification:**

Scored red due to continued lack of progress in reducing age of CAP backlog. This criteria needs revision by the fleet program team to meet current CAP timeliness expectations. For example, white or SAT should be less than 180 days average age for CORR.

Open Corrective Actions exceeding criteria at end of 3rd Q 2011 include;

NCR 358391-20 UPDATE DRAWINGS DEPICTING SPRINKLER SPRAY SHIELDS extended 4 times.

NCR 382623-05 PREPARE CALC FOR ALLOWABLE LIMIT OF UN-COATED CABLES IN CABLE SPREAD ROOM extended 5 times

Other open CORRs with extensions include (not counted against criteria)

NCR 413438-06 UPDATE SUBTYPE FPC CALCULATIONS <1 year & 1 extension

NCR 411611-16 UPDATE OVERDUE SUBTYPE FPC CALCULATIONS <1 year & 2 extensions

No CAPRs open.

Indicator: PERFORMANCE**Score:** 83.33 -**Justification:**

Data not updated for 4th quarter.

The Property Loss Control Performance Indicator returned to GREEN in March 2011.

An area of concern is the Fire Events category. BNP had three fires in February and March 2010. During the 2011 Unit 2 refuel outage, hot work controls were closely observed by Operations and NOS. No fire events occurred during the B220R1 outage.

Remaining PERFORMANCE indicators are green and no change is expected for 2011.

Indicator: Frequency of LOCT on Safe Shutdown procedures**Score:** 100 G**Justification:**

Met for 3rd Q 2011.

Review of LOCT schedule found ASSD Review and Walkdowns presented during cycle 2010-5.

Station Blackout & AOP-36.2 training given during cycle 2011-3.

Indicator: SSD Equipment impairments from periodic/surveillance testing**Score:** 0 R**Justification:**

A total of five (5) impairments on ASSD equipment found in 2011 due to surveillance testing.

Review of OTS found four impairments on ASSD equipment due to failed surveillance test in 3rd Q 2011.

7/13/11 2-EDCL-2D360 failed MST-ELU11SA.

7/13/11 1-EDCL-1D44 failed OMST-ELU11SA

7/14/11 1-EDCL-1D22 failed OMST-ELU11SA

8/14/11 2-SPP-JAC-JF9 failed OPT-48.4, ASSD Sound Powered Phone System Functional Test.

Maintenance rule allows a 10% failure rate for ELUs. NCR 495261 written to address disconnect between this indicator and MR criteria for ELUs.

Review of OTS found one impairment on ASSD equipment due to failed surveillance test in 2nd Q 2011.

6/28/2011 2-2XDB-B35 - During OMST-RCIC42R Normal/Local Switch unable to insert key T112 into the RCIC Barometric Condenser Vacuum Pump.

Indicator: Fire Events**Score:** 100 G**Justification:**

No fire events in 2011 thru October 2011.
Three fire events during the 2010 calendar year.
NCR 373793 - January 2010
NCR 385082 - March 2010
NCR 389641 - March 2010
No fire events in 2008 and 2009.

Value = 0.5 = Number of fires (rolling three year average) / year / unit

Indicator: Property Loss Control Performance Indicator**Score:** 100 G**Justification:**

NEIL Property Indicator is 1.30 (GREEN) as calculated after the 3/16/2011 inspection. This indicator improved from WHITE after the November 2011 inspection.
No change for 3rd Q 2011.
Next inspection in November 2011 and new score will be issued at that time.

Indicator: Fire Protection Equipment Reliability per NEIL reporting criteria.**Score:** 100 G**Justification:**

Met for 3rd Q 2011. Review of NEIL Event Reporting Web application found 5 system impairments entered from July 1st, 2011 thru September 30st, 2011. Average is 0.833 per month per unit.

Indicator: Fire Protection Power Block related Corrective Maintenance Backlog**Score:** 100 G**Justification:**

Three (3) corrective maintenance work orders found in active status in Passport search on 10/12/2011 for fire protection systems.
Criteria met for 3rd Q 2011.

Indicator Comments**COMPLIANCE****Self-Identified and External Findings**

Rouns, Timothy (10/13/2011 8:56:53 PM) - Run filter under Action Tracking / Action Requests / Action Requests Attributes in Passport Reporting for details.

EFFECTIVENESS**Open Corrective Action Program Items**

Rouns, Timothy (7/21/2011 10:22:35 PM) - NCR 411611-16 REVIEW AND REVISE NFPA CODE COMPLIANCE CALCULATIONS will not be included. This corrective action is dependent on progress of the NFPA 805 transition project.

Rouns, Timothy (10/13/2011 8:58:54 PM) - Run filter under Action Tracking / Assignment and Subs /Action Request Assignment with Attributes in Passport Reporting for count.

Rouns, Timothy (5/4/2011 5:02:19 PM) - Open corrective actions for routine NEIL notifications and NFPA 805 Transition Project are not included.

Benchmarking

Rouns, Timothy (7/26/2011 6:11:14 PM) - OE from Perry event was used during 2nd Q 2010 as an action incorporated from benchmarking. Need to incorporate new benchmarking action in 2011 to keep indicator green.

PERFORMANCE**Frequency of LOCT on Safe Shutdown procedures**

Rouns, Timothy (7/26/2011 6:49:36 PM) - This indicator is redundant to the same indicator in the Appendix R Health Report.

SSD Equipment impairments from periodic/surveillance testing

Rouns, Timothy (7/26/2011 6:49:20 PM) - This indicator is redundant to the same indicator in the Appendix R Health Report.

Rouns, Timothy (10/13/2011 8:59:41 PM) - OTS database will be used for ASSD equipment impairment search beginning 2nd Q 2011. Since the LCOS database has been retired, equipment out of service cannot be easily searched prior to 2011. The rolling 12 month average will begin with the second quarter 2011.

Fire Events

Rouns, Timothy (1/31/2011 5:57:52 PM) - Criteria Guidance;
Fire Events = Number events/year/unit on a 3 year rolling average in power production areas of the nuclear plant.

Fire Protection Equipment Reliability per NEIL reporting criteria.

Rouns, Timothy (7/26/2011 6:56:41 PM) - NEIL reporting for suppression equipment taken out of service for modification will not be count in this indicator. An example is EC 50933 Deluge Valve upgrade and control replacement.

Fire Protection Power Block related Corrective Maintenance Backlog

Rouns, Timothy (10/13/2011 9:38:09 PM) - Use filter under Work Management / General / Active Work Order Tasks - Simple in Passport Reporter for count.

Indicator Automated Data

No Records Returned

Fleet Summary**Executive Summary**

Alan Holder is the Fleet Program Manager.

Overall Fleet Health of the Fire Protection Program is YELLOW (Administratively set).
As reported, BNP is WHITE, CR3 is YELLOW, HNP is YELLOW and RNP is GREEN.
The Trend in the Fleet Program Health is STEADY over the past 2 quarters.
Additional management attention IS warranted at this time.

1. Discussion of non-green indicators common to multiple sites:

Commonalities in KPI's, other than GREEN, focus in the areas of;

- 1) Self-Identified and External Findings
- 2) Self-Assessment
- 3) Open Corrective Action Program Items
- 4) SSD Equipment Impairments

Some cross counting may be present within these categories and between Program and System Health Reporting. Identification of significance and external deficiencies, along with duration of resolution, present challenges to the resource capabilities assigned at each site.

2. Program Managers' Concerns:

2 of 4 sites failed to report Program Health status for 2011 Q4. CR-513462 was generated noting same.

Continued concern is focused on acquisition, training and retention of qualified resources for the FP and SSA Program Manager functional area. Currently, 2 of 8 primary PM positions are vacant and a 3rd expected to be vacated based on personnel re-assignment.

3. Summary of proactive actions scheduled to assure long-term health:

During January 2012 face-to-face meetings for both FP and SSA Program Managers refinement of the Program Health Reporting KPIs and weighting were undertaken. Implementation of the refined metrics will begin with the 2012 Q1 reporting. This is expected to better align the metrics with current expected performance, provide a single reporting structure and provide separation in Program and System Health Reporting data.

	Brunswick	Crystal River	Harris	Robinson
COMPLIANCE		* Y		
Self-Identified and External Findings	Y	R	R	G
Regulatory/Industry Forecast	W	W	R	W
Program Human Performance	G	G	G	G
EFFECTIVENESS		* Y		
Training and Qualification	R	G	G	G
Self Assessment	G	G	W	G
Benchmarking	G	G	W	G
Operating Experience	G	G	G	G
Open Corrective Action Program Items	R	R	Y	G
PERFORMANCE		* Y		
Frequency of LOCT on Safe Shutdown procedures	G	G	G	G
SSD Equipment impairments from periodic/surveillance testing	5 R	0 G	0 G	0 G
Fire Events	0.50 G	1.33 G	0 G	1.33 G
Property Loss Control Performance Indicator	G	G	G	G
Fire Protection Equipment Reliability per NEIL reporting criteria.	0.8330 G	0 G	0 G	1 G
Fire Protection Power Block related Corrective Maintenance Backlog	3 G	22 R	1 G	16 Y
Total:	72.63 Y	72.88 Y	68.51 R	94.38 G