

Fourth Quarter 2013 Fire Protection Program Health Report

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

Period: Q4-2013

80.22 W

Program Health Report (10/1/2013 - 12/31/2013)

Fleet	Fleet	Program Manager	Soffen, Tanya	Overall Status 80.22 W
Facility	Brunswick	Backup Program Manager		
Program	FP			
Frequency				
PM Complete Status	In Progress	Review Status	Not Reviewed	
Program Desc	Fire Protection / Nuclear Safety Capability Assessment			<div> <div>Y -12 MO -9 MO -6 MO -3 MO</div> <div>W -3 MO -6 MO -9 MO -12</div> </div> <div> <div>Historic</div> <div>Future</div> </div>

Scorecard

The current health of the BNP Fire Protection Program is YELLOW for Q3 2013

The trend in the program health is INCREASING. (improving)

Additional management attention IS warranted at this time due to site performance in regards to transient combustibles, resources, and impairments.

1. Discussion of Indicators

- External findings (RED) are red from NEIL inspection that occurred in June. All but one issue has been resolved (SAS receiver) indicator will not improve for 36 months with no other findings being identified during inspections/audits.
- Training and Qualification (RED) The FPPM lacked qualifications in Q3, this indicator will move to white in Q4 since completion of qualifications has been completed. See below for current concerns.
- Transient combustibles (RED) 26 TC violations were recorded over the 12 month rolling period. FIR-NGGC-0009 will be implemented in December for AOT Diesel LAR and in turn will assist the site to address the issue. The issue was addressed in PHC and more scrutiny is being placed on housekeeping.

2. Program Managers Concerns

- Resources -- Lack of resources is affecting program health. Current Fire protection workload for regular work, 805, and Fukushima is high. There is a lack of a dedicated Fire Protection System Engineer. Contractors are assisting with work currently, which does not reflect a high degree of site ownership of the FP program on site which is vital to the excellence of the program.

There has been a lack of a dedicated Fire Protection Systems Engineer since June 2013. The FP Systems role is going to be split between several working groups. Civil will own barriers/seals, BOP systems will own suppression/mechanical aspects, and digital systems will own detection. The splitting into groups could potentially dilute the focus on the FP System itself and potentially create issues to the System when problems are over looked or missed. There also will not be ownership by just one person for the system but many. Concerns have been raised on quality of EC reviews, how NFPA 805 monitoring will occur, and completion of System Health reports for Fire Protection. Fleet FP personnel at DEP plants were unaware of the change and are staying with a dedicated FP Programs Manager and System Engineer. DEC plants have a similar alignment to the above, but have noticed gaps in the FP System due to lack of dedication. See indicator for more details under Performance.

- Housekeeping is still an issue at BNP. More focus needs to be placed site wide on cleaning works areas and making sure areas are organized. After site wide communications were sent out there has been a heightened awareness and some improvement, but the site still needs to determine how this is going to be improved upon. Ops FPC and FPPM performed quarterly housekeeping walkdowns and confirmed there is still an issue. Management attention is now focused on the housekeeping standards. Adverse trend CR 634396 has been assigned to maintenance to determine issues with general housekeeping per OAI-114 Housekeeping procedure.

- Assurance of long term health -- FPPM and Ops FPC will continue to track impairments on the ops focus list and action register to drive impairments to completion. A monthly meeting has been occurring with PGM and FPPM to discuss any concerns with FP that can be resolved quickly and ways to improve program excellence. Monthly meetings are also occurring between all personnel involved in fire protection. New System Engineers with FP responsibilities have also been included to harmonize the FP group and ensure no gaps are occurring at an early phase.

Reviewed by Alan Holder on 10/14/2013

	Value	Weight	Score	Contribution
COMPLIANCE	*	W	58.35	
Self-Identified Findings	*	W	8.33	75
External Findings	*	R	8.33	0
Triennial Findings	No findings or open items from most recent triennial inspection.*	8.34	100	8.34
EFFECTIVENESS	*	W	87.50	
Training and Qualification	The site primary program manager or fleet backup program manager have been qualified for less than one operating cycle.	12.50	75	9.38
Self Assessment	Program assessed within the last 24 months and the most recent comprehensive self assessment within the last 36 months.	12.50	100	12.50
PERFORMANCE			87.50	
Frequency of LOCT on Safe Shutdown procedures	Less than or equal to two years and no CRs resulting from LOCT.	10	100	10
SSD Equipment impairments from periodic/surveillance testing	2	G	10	100
Violations of procedural requirements associated with Transient Combustibles	26	R	5	0
Percentage of Hot Work Permits in which the work is performed in accordance with the FIR-NGGC-0003	100	W	5	100
Percentage of impairments that are returned to service within the administrative requirements of FPP-013, OPLP-01.2, FPP or FP-012 as applicable	97	W	5	75
Percentage of fire brigade drills failures	0	G	5	100
Fire brigade drills objective failures	0	G	5	100
Fire Brigade response times	-1	G	5	100
			Total Score:	80.22 W

Expected Green: 5/30/2014

Indicator: COMPLIANCE**Score:** 58.35 W**Justification:**

Compliance for FPP is currently white. The External findings indicator contains 12 CRs issued during NEIL inspections that will not drop out until the 36 months has elapsed. 1 out of the 12 issues has not been resolved. See External Findings indicator for more details.

Indicator: Self-Identified Findings**Score:** 75 W**Justification:**

2 Significance Level 2 CR's were initiated in Q4 2013

634397 -- TREND IN FIRE EXTINGUISHER CRS AT BNP
640964 -- U1 VFD PDC TROUBLE ALARMS

Indicator: External Findings**Score:** 0 R**Justification:**

NEIL inspection was conducted on June 18th to the 20th 2013. During this time 12 findings were identified. Out of the 12 findings 1 is unresolved. The unresolved issue is below.

CR 607656-04 -- The SAS receiver is not operable. Currently no outlying buildings are tied into the alarm station and only alarm locally. Although the detection system is operable, it does not alarm to a 24 hour manned area. Therefore fire watches must go through the area on a once per shift basis. There is a long range plan to replace the receiver through a different vendor.(LRPF 614365) Resolution of the above item has been made aware to upper management during PHC. SAS receiver is in FP System Health Report as an ongoing issue. LTAM BNP-13-0014 has been created and the concerned owner is Digital Systems who is taking over the digital components of FP Systems(i.e. detection). The SAS receiver is now on the action register.

The plan to restore the SAS is in progress. Currently several different vendors are being considered. During a walkdown it was noted that all panels are analog that tied into the SAS and not digital. The upgrade will require an EC. The plan is currently being worked through by Digital Systems.

Indicator: Triennial Findings**Score:** 100 G**Justification:**

No findings from 11/2011 triennial inspection.

Next NRC triennial is scheduled for August 2014.

Indicator: Training and Qualification**Score:** 75 W**Justification:**

FPPM did not have qualifications the end of Q3 2013, but are completed for Q4. Contract personnel are still performing work for FPPM (EC reviews/mod reviews, CR close outs).

No on site backup FPPM. However, contractors have a qualified FPPM and corporate also has several qualified FPPMs to assist with resolution of problems and signing off on key FP milestones.

New Ops Fire Protection Coordinator has had no effective turnover from the previous Ops FPC. Potential gaps have been identified in certain areas (Ref CR 00634397, 00634398, and 00634396). Mention of the lack of training has been raised to his supervision, but as of yet no actions have been taken. IDP to be developed by his supervision per NTM CR 00649154

See Effectiveness overview for more details.

Indicator: EFFECTIVENESS**Score:** 87.50 W**Justification:**

The Fire Protection Program Manager is still dependent on contract expertise. There is currently a very high work load due to several inspections in 2014 (INPO (Jan), Self Assessment (April), NOS(May), NEIL(June) and NRC(Aug-Sept)) and the upcoming outage (Feb-April) as well as balancing NFPA 805 implementation activities.

There has been a lack of a dedicated Fire Protection Systems Engineer since June 2013. As stated in the executive summary, the FP Systems role is going to be split between several working groups. Civil will take barriers/seals, BOP systems will own suppression/mechanical aspects, and digital systems will own detection. The splitting into groups could potentially dilute the focus on the FP System itself and potentially create issues to the System when problems are over looked or missed. There also will not be ownership by just one person for the system but many. Concerns have been raised on quality of EC reviews, how NFPA 805 monitoring will occur, and completion of System Health reports for Fire Protection.

Fleet FP personnel at DEP plants were unaware of the change and are staying with a dedicated FP Programs Manager and System Engineer. DEC plants have a similar alignment to the above, but have noticed overlooks in the FP System due to lack of dedication.

OE from Southern Company revealed that their sites diluted the system role in the same way as BNP is going. Many items were over looked on the System and problems arose. Since then, they have reverted back to a FPPM and FP System Eng.

Development of packages and information by FPPM to parties involved is ongoing to ensure competency. Relationship building is occurring to ensure lines of communication are constantly open to create a harmonious FP ownership from all parties.

Self assessment and NRC reviews have confirmed a quality program.

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

FP Program Self assessment SA # 440002 completed in August 2011.

A self assessment was completed in August 2011 to determine overall program effectiveness. 5 deficiencies and 9 recommendations with respect to improving the fire protection program management were given. Code compliance calcs needed attention as well as staffing needs for the program. Also more focus needs to be given to the training programs involving the fire brigade to ensure proper practices are being followed at all times.

All CRs have been addressed and closed.

Next Self Assessment will be scheduled for April 2014 before the NRC Triennial

INPO Assessment in Jan 2014

NOS Assessment May 2014

NEIL inspection June 2014

NRC Triennial Aug-Sept 2014

Indicator: PERFORMANCE**Score:** 87.50 -**Justification:**

Red indicators are transient combustible issues.

Transient Combustibles will continue to stay in the red indicator for at least another year. Site wide communications on housekeeping have been sent out. Upper management has been made aware of the housekeeping standards and the site has been placing more focus and attention on housekeeping. The resultant of that is more CRs being issued in the package.

FIR-NGGC-0009 will be implemented on 12/03/2013 which will alleviate a lot of housekeeping concerns for FP. The procedure ensures everything coming into the PA/critical areas is going to be monitored via permitting by WCC/Fire Protection personnel.

Percentage of impairments returned to service within LCO time requirements in OPLP-01.2 has increased in effectiveness but is still lacking the required attention.

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

Review of LOCT schedule found ASSD Review and Walkdowns presented throughout the cycle. No CRs have been generated against LOCT for Q4 2013

Indicator: SSD Equipment impairments from periodic/surveillance testing**Score:** 100 G**Justification:**

Impairments on ELUs during surveillance and testing requirements. All ELU issues have been resolved within their 14 day time frame with the exception of:

Indicator: Violations of procedural requirements associated with Transient Combustibles**Score:** 0 R**Justification:**

26 CRs related to transient combustibles the past 12 months against the Fire Protection Program per OFPP-014 requirements List refined to include only OFPP-014 discrepancies:

583124	2/12/2013	INADEQUATE POSTING AND ADHERENCE TO UNDERSTAIR STORAGE
592271	3/1/2013	COMBUSTIBLES STAGED WITH NO WORK STAGING SIGN IN U2 TB
592275	3/2/2013	COMBUSTIBLES UNDER STAIRWELLS
592555	3/4/2013	BLACK MATTING STORED UNDER STAIRWELL ON 38' TO 45'; TB2
593096	3/6/2013	HOUSEKEEPING IN U2 TURBINE LAYDOWN COMBUSTIBLES UNDER STAIRS
593394	3/6/2013	COMBUSTIBLES UNDER STAIRWELL U2 EHC ROOM
595169	3/14/2013	AIR COMPRESSOR STAGED UNDER STAIRWELL
595662	3/16/2013	COMBUSTIBLES UNDER STAIRWELL 50' RXB U2 SE CORNER
595840	3/17/2013	IMPROPERLY STAGED FLAMMABLE MATERIAL STORAGE LOCKER
597171	3/24/2013	FLAMMABLE MATERIAL STORED UNDER STAIRWELL
597944	3/27/2013	BREAKER STORED IN NO TRANSIENT COMBUSTIBLE ZONE
598545	4/1/2013	INADEQUATE STORAGE OF FLAMMABLE LIQUIDS
599609	4/5/2013	ACETYLENE CYLINDER NOT ON CYL. CART AND NOT TAGGED.
599637	4/5/2013	NON-FIRE RETARDANT WOODEN PALLET LOCATED IN U2 TURBINE BLDG.
599837	4/7/2013	UNAUTHORIZED COMBUSTIBLES IN 2A FWH ROOM
600364	4/10/2013	UNATTENDED ACETYLENE CYLINDERS DID NOT HAVE ID TAGS
603384	4/26/2013	FLAMMABLE CABINET DOES NOT COMPLY WITH REGULATIONS
607006	5/16/2013	HOUSEKEEPING ISSUE-ROPE FOUND HANGING IN -17 RHR U2
609254	5/30/2013	MATERIALS STORED IN A NO COMBUSTIBLE STORAGE ZONE
617692	7/18/2013	Fire Hose station access
618945	7/25/2013	Mixed Basket of corrosives
619052	7/25/2013	OFPP-014 discrepancy
622340	8/13/2013	Material identified in DG Sep Zone
630442	9/14/2013	Material Stored Under Stairwell
633024	10/4/2013	UNSAT housekeeping in U2 north core spray
633297	10/7/2013	Combustible material stored under stairs

FIR-NGGC-0009 will be implemented on 01/09/2014 to support the AOT diesel LAR submittal and commitments. The procedure will be tracking combustibles that go into the plant. Tracking and trending of the revised program will occur during the first outage implementation in 2014. The goal for BNP is to have 6 or less NCRs related to FIR-NGGC-0009 within the first two quarters of 2014.

Indicator: Percentage of Hot Work Permits in which the work is performed in accordance with the FIR-NGGC-0003 **Score:** 100 W**Justification:**

Number of permits for Hot work in Q4 2013

Oct -- 34

Nov -- 16

Dec -- 15

For a total of 65 hot work permits released.

0 NCRs were written on hot work for Q4 2013 with a percentage of 100% efficiency.

Indicator: Percentage of impairments that are returned to service within the administrative requirements of FPP-013, OPLP-01.2, FPP or FP-012 as applicable **Score:** 75 W**Justification:**

The number of impairments against OPLP-01.2 and the FPP program was 68 for Q4 2013. Out of those 68 impairments, 2 exceeded the time requirements for being out of service.

The following CRs were initiated:

634613 2-RB2-DR-EL050-301 REPAIRS EXCEED 7 DAY REQUIREMENT

651626 NEIL NOTIFICATION REQUIRED FOR FIRE PROTECTION TANK

$100 - (2/68) * 100 = 97\%$

Indicator: Percentage of fire brigade drills failures **Score:** 100 G**Justification:**

There have been no drill failures in the past 12 months.

Indicator: Fire brigade drills objective failures

Score: 100 G

Justification:

There have been no objective failures in the past 12 months.

Indicator: Fire Brigade response times

Score: 100 G

Justification:

Based on procedure, the brigade has a commitment to complete their drills in 25 minutes for ASSD scenarios and 40 minutes for non ASSD scenarios. The Brigade is currently well below that limit, making the program excellent.

The following data reflects 45 drills over the past 6 quarters

The average response time from the alarm sounding to the fire out was 22.75 minutes for Q3 2012. The time between the drill initiation and the first mitigating action was 17.5 minutes for Q3 2012.

The average response time from the alarm sounding to the fire out was 22 minutes for Q4 2012. The time between the drill initiation and the first mitigating action was 16 minutes for Q4 2012.

The average response time from the alarm sounding to the fire out was 14.6 minutes for Q1 2013. The time between the drill initiation and the first mitigating action was 12.2 minutes for Q1 2013.

The average response time from the alarm sounding to the fire out was 15.4 minutes for Q2 2013. The time between the drill initiation and first mitigating action was 11.4 minutes.

The average response time from the alarm sounding to the fire out was 21.6 minutes for Q3 2013. The time between the drill initiation and first mitigating action was 16.4 minutes.

The average response time from the alarm sounding to the fire out was 23.1 minutes for Q4 2013. The time between the drill initiation and first mitigating action was 18.7 minutes.

The average response time from alarm to fire out was 19.9 minutes and time between drill initiation and first mitigating action was 15.3 minutes.

There has been a slight increase since Q3 2013 in response time. This could be subject to new AOs coming into BNP and getting used to drills on site.

Indicator Comments**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 (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.

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

Violations of procedural requirements associated with Transient Combustibles

Soffen, Tanya (10/10/2013 11:51:02 AM) - Tracked against PU&A for OFPP-014 and OFPP-013. NEIL insured buildings that are not included in NRC FP areas are included in area for trending/tracking but do not count against indicator.

Percentage of Hot Work Permits in which the work is performed in accordance with the FIR-NGGC-0003

Soffen, Tanya (10/16/2013 8:06:16 AM) - Get HWP's issued from Ops Utilities database. CAP review would reveal any discrepancies. FITS tool also lists deficiencies.

Fire brigade drills objective failures

Soffen, Tanya (7/12/2012 12:53:08 PM) - Spoke with Bill Matthias on 7/3. No objective failures were reported for the past 12 months.

Soffen, Tanya (7/16/2012 6:09:27 PM) - A note during one of the fire drills discovered in an NCR that will be addressed to Bill Matthias and Mike White ASAP. One report on AR 541749 Fire Drill Simulated Activity Vulnerability should be brought to attention of the fleets just in case they have similar experiences. On 6/05/2012 during a NOS observation two vulnerabilities were identified. **COPIED FROM PASSPORT** 1) The responding non-licensed operator simulated manual closure of the DG building fire dampers over the doors in the fire area (required by the pre-fire plan) This was simulated using a hot stick. Hands-on practice of manual damper closure has not occurred with the non-licensed operators. Manually forcing the dampers closed could lead to binding if not properly performed. 2) The coordination of offsite fire support was simulated during the drill. Both security and the SIC simulated activities to interface with the responding offsite fire resources. In that an actual fire could require multiple offsite fire response vehicles and many responding offsite fire fighters, the coordination of this activity with actual response forces should be practiced more than currently being performed.

Fire Brigade response times

Soffen, Tanya (7/10/2012 9:08:40 AM) - Spoke with Mike White and Bill Matthias to confirm data collection on fire brigade response times. Data will be collected from the next drill on so that BNP can better track the response times of the brigade.

Indicator Automated Data

No Records Returned

Fleet Summary**Executive Summary**

Alan Holder is the Fleet FP Program Manager, Tom Cheslak is the Back-up.

Overall Fleet Health of the Fire Protection Program for Q3 2013 continued as YELLOW.
As reported, the CNS program is GREEN, MNS program is WHITE, with BNP, HNP, RNP and ONS YELLOW.
CR3 has discontinued use of the Program Health Reporting under Program IQ.

1. Discussion of Yellow and Red indicators common to multiple sites:

Commonalities in KPI's, categorized as YELLOW or RED, are focused in the areas of;

- 1) Self-Identified Findings (BNP, HNP, ONS)
- 2) External Findings (BNP, HNP, MNS, ONS, RNP)
- 3) Triennial Findings (ONS, RNP)
- 4) Training and Qualifications (BNP, HNP, RNP)
- 5) Violations of procedural requirements associated with Transient Combustibles (BNP, CNS, HNP, ONS)
- 6) Percentage of impairments that are returned to service within the administrative requirements of FPP-013, OPLP-01.2, FPP or FP-012 as applicable. (BNP, HNP, RNP)

Detailed discussion of the YELLOW or RED KPIs is included in the individual site reports.

2. Program Managers' Concerns:

All sites met the reporting due dates for Program Health status for Q3-2013.

Three areas of concern were noted at the fleet level:

1. Recurring concern is focused on acquisition, training and retention of qualified resources for the FP and NSCA Program Manager functional areas. A number of FP vacancies remain or have been created within the quarter or weeks since. The qualification time requirement of three years limits the effective and efficient resolution of the concern. Continued efforts to fill the vacant positions and retain currently qualified staff should be a management priority.

2. Considerable work exists on the road to excellence in the area of Fire Protection / NSCA Programs. INPO FP evaluations are scheduled at BNP, MNS and RNP in 2014. Clear communications regarding the roles and responsibilities and priorities within the FP/NSCA organizations are needed to ensure success.

3. While some sites have made significant moves to standardize the fleet organization regarding fire protection staffing impacts has allowed for the BNP site to alter the standard organization of the fire protection System Engineer and fragment this role cross three disciplines (Civil, ME, EE). Noted in the BNP report was evidence of industry OE showing this to be marginally or less effective. A NCR will be generated to identify this outlier structure within the fleet organization.

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

With the inclusion of the Duke West sites into the Program Health Reporting process, further refinement of the KPIs to ensure alignment the metrics with current industry performance and excellence guidance is being discussed. This will remain a priority and a subject of discussion during the Fleet Program Peer Team meetings and Bi-Monthly Teleconferences. Fleet-wide bi-monthly teleconferences are being utilized to distribute and collaborate on various fleet, and industry issues and OE.

	Brunswick	Harris	Robinson
COMPLIANCE	* W	* W	
Self-Identified Findings	* W	* G	G
External Findings	* R	* R	Y
Triennial Findings	* G	G	* Y
EFFECTIVENESS	* W	* Y	
Training and Qualification	W	Y	Y
Self Assessment	G	W	G
PERFORMANCE		* W	
Frequency of LOCT on Safe Shutdown procedures	G	G	G
SSD Equipment impairments from periodic/surveillance testing	2 G	0 G	0 G
Violations of procedural requirements associated with Transient Combustibles	26 R	11 Y	2 W
Percentage of Hot Work Permits in which the work is performed in accordance with the FIR-NGGC-0003	100 W	97.75 W	100 W
Percentage of impairments that are returned to service within the administrative requirements of FPP-013, OPLP-01.2, FPP or FP-012 as applicable	97 W	96.80 Y	82 R
Percentage of fire brigade drills failures	0 G	0 G	0 G
Fire brigade drills objective failures	0 G	1.37 G	0 G
Fire Brigade response times	-1 G	-1 G	-2.63 G
Total:	80.22 W	76.05 Y	81.26 W

