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Vice President440-280-5382
Fax: 440-280-8029August 9, 2012
L-12-310ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001SUBJECT:
Perry Nuclear Power Plant
Docket No. 50-440, License No. NPF-58
Human Performance H.1(b) and H.2(c) Substantive Cross-Cutting Issues

On June 22, 2012, via letter L-12-187, the Perry Nuclear Power Plant (PNPP) provided a written response to the NRC describing the causes, corrective actions, and performance metrics to address Substantive Cross-Cutting Issues (SCCIs) in Human Performance Cross-Cutting Aspects H.1(b), Decision-Making, Conservative Assumptions and H.2(c), Resources, Documentation/Procedures.

Metrics were established to monitor key performance attributes in H.1(b) and H.2(c) and to demonstrate that sustained improvement is achieved. A subset of these indicators that demonstrate improved performance has been included as Enclosures to this letter. PNPP's applicable metrics are described below.

Operational Focus Index: This indicator applies to cross-cutting aspect H.1(b) and measures the success at resolving equipment problems that challenge the operator's ability to operate the plant safely and reliably. It is an indicator of PNPP's focus on using conservative assumptions in making decisions that affect an overall operational focus. The index is calculated by adding attribute values with weighting factors applied for a given month. The attributes include the number of operator workarounds, control room deficiencies, control room annunciators in alarm, open Operational Decision-Making Issues (ODMI), maintenance backlog, and open clearances. The goal is to have an index value of less than 1.0. The index has improved from January 2012 with a value of 1.88 to a current value of 1.41. This is acceptable performance in the white range.

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NRK

Unplanned Entries into Shutdown LCOs (Limiting Conditions for Operation): This indicator is a measure of PNPP's success in using conservative assumptions in making decisions that affect the timely resolution of equipment problems that challenge the plant. This indicator also applies to cross-cutting aspect H.1(b) and measures the number of unplanned entries into Technical Specification LCOs, Operational Requirements Manual actions, and Offsite Dose Calculation Manual controls that lead to a plant shutdown if not corrected. The goal is to have no unplanned entries into shutdown LCOs and to maintain the 12-month average less than 1.0. The 12-month average of unplanned shutdown LCO entries currently stands at 0.6. This is acceptable performance in the green range.

Conservative Decision-Making Index: This new indicator, established after causal analysis for cross-cutting aspect H.1(b), measures the effective use of conservative decision-making by calculating an index from the number of station clock resets, section clock resets, precursor errors, and unsatisfactory observations. A weighting factor is applied to each element. Inputs to the observation data are taken from the R.E.A.D.E. template which is a deliberate decision-making method to respond to uncertain situations that promotes better decision-making, more predictable results, and less risk. Inputs are also taken from the Operator Fundamentals template and the Safety and Human Performance template. The goal is to maintain an index of greater than 90. Performance with this indicator through July shows a three-month average at 82. This is acceptable performance in the white range.

Document Change Request (DCR) Throughput: This indicator, established for cross-cutting aspect H.2(c), measures the effectiveness of the timely processing of DCRs to provide accurate procedures and instructions for use. The number of new DCRs submitted versus the number of DCRs completed each month is recorded for the Maintenance, Operations, and Engineering organizations. The goal is to continue to complete more DCRs than those received on a monthly basis. Data has shown a steady reduction in DCR inventory. This is acceptable performance in the green range.

Document Change Request Backlog: These indicators, established for cross-cutting aspect H.2(c), reflect the effectiveness of the timely processing of DCRs for the major work groups of Maintenance, Operations and Engineering. Graphs are provided for the total DCR inventory as well as the priority DCRs. Year end goals are established for each group. The indicators demonstrate a steady improvement in the total number of DCRs for all three work groups. This reflects PNPP's efforts to improve the quality of documents to the workforce. Goals and progress of the individual departments are as follows:

- Maintenance DCRs (All) has a year end goal of 800. Current progress toward achieving the goal is acceptable performance in the green range.

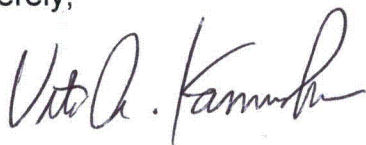
- Operations DCRs (All) has a year end goal of 690. Current progress toward achieving the goal is acceptable performance in the white range.
- Engineering DCRs (All) has a year end goal of 216. Current progress toward achieving the goal is acceptable performance in the green range.
- Maintenance DCRs (Priority) has a year end goal of 350. Current progress toward achieving the goal is acceptable performance in the white range.
- Operations DCRs (Priority) has a year end goal of 20. Current progress toward achieving the goal is acceptable performance in the green range.

Goals for all the performance indicators will be periodically reviewed by the management team to ensure the values remain consistent with industry performance. In addition, performance deficiencies or developing themes in any cross-cutting aspect will be entered into the corrective action program for causal evaluation and determination of appropriate corrective actions.

The enclosed metrics demonstrate improved performance in the cross-cutting aspects of conservative assumptions H.1(b) and in documentation/procedures H.2(c).

There are no regulatory commitments contained in this letter. If there are any questions, or if additional information is required, please contact Mr. Robert B. Coad, Manager - Regulatory Compliance, at (440) 280-5328.

Sincerely,



Vito A. Kaminskas

Enclosures:

- A Operational Focus Index
- B Unplanned Entries Into Shutdown LCOs
- C Conservative Decision-Making Index
- D Document Change Request Throughput
- E Document Change Request Backlog (All)
- F Document Change Request Backlog (Priority)

cc: NRC Region III Administrator
NRC Project Manager
NRC Resident Inspector

Enclosure A
L-12-310

Operational Focus Index

FirstEnergy Nuclear Operating Company - Perry

OPERATIONS

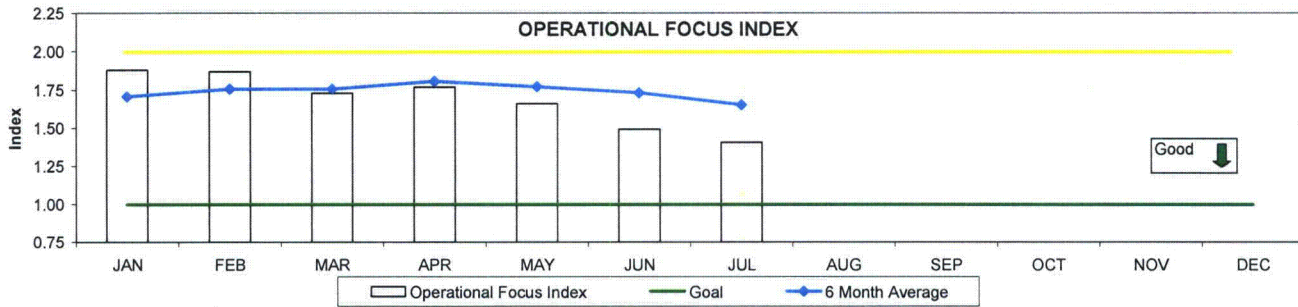
Sponsor:
Director Site Operations

Owner:
Operations Manager

Peer Group:
OP

Month:
July

Number:
P-OPS-03



PERFORMANCE

Month
Operational Focus Index

WHITE

Operational Focus Index
6 Month Average

WHITE

DEFINITION

The Site Operational Focus Indicator is a tool that measures our success at resolving equipment problems that challenge the ability of operators to operate the plant safely and reliably. It measures the Operations Staff's ability to cope with routine or off-normal equipment conditions. This indicator also is a measure of the results from H.1(b) Conservative Decision Making actions.

The value is determined by adding all the attribute values for a given month. The following formula will be used to apply weighting to each attribute: (0.08333 times the value for the month) / The GREEN value for acceptability. Example: Operator Burden Monthly value of 3 = $0.08333 \times 3 / 2 = 0.1154$

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Operator Workarounds (Non-Outage)	1	1	1	1	1	1	1					
Operator Burdens (Non-Outage)	4	4	2	2	2	2	1					
Control Room Deficiencies (Non-Outage)	10	9	8	6	6	5	5					
Control Room Annunciators	5	8	4	5	5	5	5					
Clearances > 90 Days	16	18	22	21	20	22	22					
Fire Impairments	11	6	8	11	11	8	4					
Corrective Critical Maintenance Backlog	3	2	2	2	1	2	3					
Deficient Critical Maintenance Backlog	38	38	37	26	28	33	35					
Temporary Modifications	18	18	5	6	6	6	6					
Open POD's & PFA's	2	2	5	5	4	4	4					
Open Operational Decision Making Issues	3	4	8	8	7	5	5					
Total Priority 200 & 300 Orders issued in the month	4	4	6	6	6	5	5					
Operational Focus Index	1.88	1.87	1.73	1.77	1.66	1.49	1.41					
6 Month Average	1.71	1.76	1.76	1.81	1.78	1.73	1.65					
Goal	1	1	1	1	1	1	1	1	1	1	1	1

RANKING CRITERIA

	OWNER	Green	White	Yellow	Red
Operator Workarounds (Non-Outage)	Ops Manager	≤ 1	2	3	≥ 4
Operator Burdens (Non-Outage)	Ops Manager	≤ 2	3	4	≥ 5
Control Room Deficiencies (Non-Outage)	Ops Manager	≤ 3	4 - 6	7 - 9	≥ 10
Control Room Annunciators	Ops Manager	≤ 3	4 - 6	7 - 9	≥ 10
Clearances > 90 Days	Ops Manager	≤ 20	21 - 25	26 - 30	≥ 31
Fire Impairments	Fin Superintendent	≤ 5	6 - 10	11 - 15	≥ 16
Corrective Critical Maintenance Backlog	Maint Manager	< 5	5 - 9	10 - 18	> 18
Deficient Critical Maintenance Backlog	Maint Manager	< 90	90 - 139	140 - 200	> 200
Temporary Modifications	Plant Eng Manager	≤ 3	4 - 6	7 - 9	≥ 10
Open POD's & PFA's	Ops Manager	≤ 2	3 - 4	5 - 6	≥ 7
Open Operational Decision Making Issues	Ops Manager	≤ 2	3 - 4	5 - 6	≥ 7
Total Priority 200 & 300 Orders issued in the month	Work Mgmt Manager	≤ 2	3 - 4	5 - 6	≥ 7
Operational Focus Index	Ops Manager	< 1.00	≥ 1.00 - < 2.00	≥ 2.00 - < 3.00	≥ 3.00

Enclosure B
L-12-310

Unplanned Entries Into Shutdown LCOs

FirstEnergy Nuclear Operating Company - Perry

OPERATIONS

Sponsor:
J. Grabnar

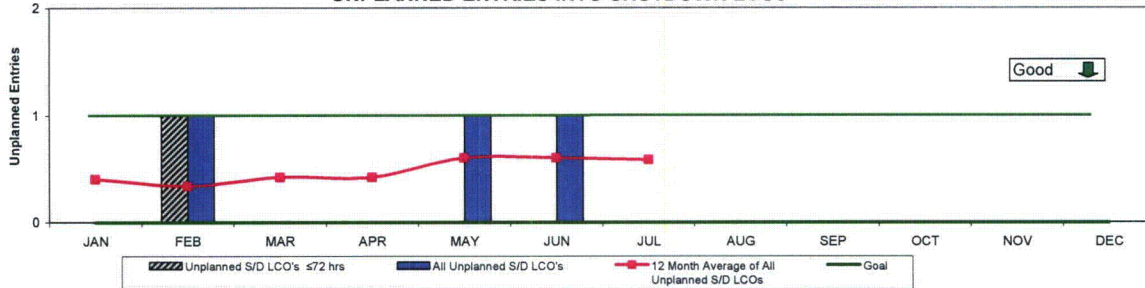
Owner:
J. Tufts

Peer Group:
OP

Month:
July

Number:
P-OPS-01

UNPLANNED ENTRIES INTO SHUTDOWN LCOs



PERFORMANCE

Month
All S/D LCO's:

GREEN

12 Month Avg
All S/D LCO's:

GREEN

Year-end Expectancy
(12 Month Avg):

GREEN

Definition: The number of unplanned entries into Tech Spec LCOs, ORM, TRM, LRM or ODCM action requirements when the action requirement leads to a shutdown if not corrected. (Shutdown LCO's ≤ 72 hrs tracked for ER Index) This indicator is a measure of the results from H.1(b) Conservative Decision Making actions.
Goal: Less than 2 per month.

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Unplanned S/D LCO's ≤ 72 hrs	0	1	0	0	0	0	0					
All Unplanned S/D LCO's	0	1	0	0	1	1	0					
12 Month Average of All Unplanned S/D LCOs	0.4	0.3	0.4	0.4	0.6	0.6	0.6					
Goal	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2

RANKING CRITERIA

Month All Unplanned S/D LCO's, 12 Month Average of All Unplanned S/D LCO's

Green ≤ 1

White >1 ≤ 2

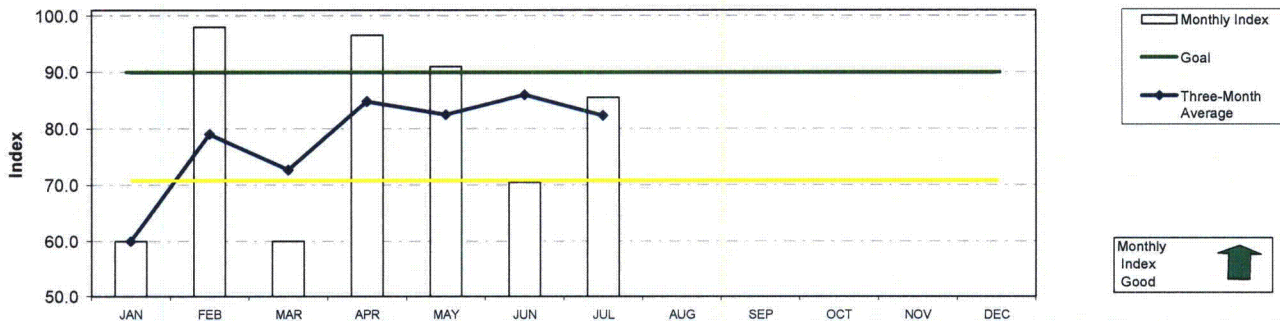
Yellow >2 ≤ 4

Red >4

Enclosure C
L-12-310

Conservative Decision-Making Index

Conservative Decision Making Index - PERRY 2012



PERFORMANCE

Month:	WHITE	Three-Month Ave.:	WHITE
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DEFINITION - This indicator measures the effective use of Conservative Decision-Making: H.1(b) The licensee uses conservative assumptions in decision making and adopts a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action. The licensee conducts effectiveness reviews of safety-significant decisions to verify the validity of the underlying assumptions, identify possible unintended consequences, and determine how to improve future decisions. (CR corrective action 2011-03966-12)

The data listed in the table below are determined as follows:

Station Clock Resets are those reflected in MPR indicator P-SPO-03 that were a result of inadequate conservative decision-making (number of resets)

Section Clock Resets are those reflected in MPR indicator P-SPO-04 that were a result of inadequate conservative decision-making (number of resets)

Precursor Errors are those reflected in MPR indicator P-SPO-04A that were a result of a weakness in conservative decision-making (number of PEs)

DevonWay Observation Data - READE template - all behaviors (number of UNSAT observations)

DevonWay Observation Data - Operator Fundamentals template - Operators have Conservative Bias behaviors (number of UNSAT observations)

DevonWay Observation Data - Safety and Human Performance template - Supervisor Oversight and Coaching - Workers Demonstrate an Understanding of Risk

behaviors (number of UNSAT observations)

Self Assessment - Results of Quarterly Snapshot Self Assessment conducted in accordance with CR CA 2011-03966-2 (Overall assessment rating). This is provided as information only, and is not included in the index calculation.

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Station Clock Resets (P-SPO-03)	1	0	1	0	0	0	0					
Section Clock Resets (P-SPO-04)	1	0	1	0	0	2	1					
Precursor Errors (P-SPO-04A)	0	2	0	3	9	8	3					
Observation Data - READE				0	0	1	0					
Observation Data - Operator Fundamentals template				1	0	0	0					
Observation Data - Safety and Human Performance template				0	0	2	3					
Self Assessment Results				0	0	0	0					
Monthly Index	60.0	98.0	60.0	96.5	91.0	70.5	85.5					
Three-Month Average	60	79	73	85	83	86	82					
Goal	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0

RANKING CRITERIA

	GREEN	WHITE	YELLOW	Red
Monthly and Three-Month Average Index	≥ 90	≥ 80 - < 90	≥ 70 - < 80	< 70

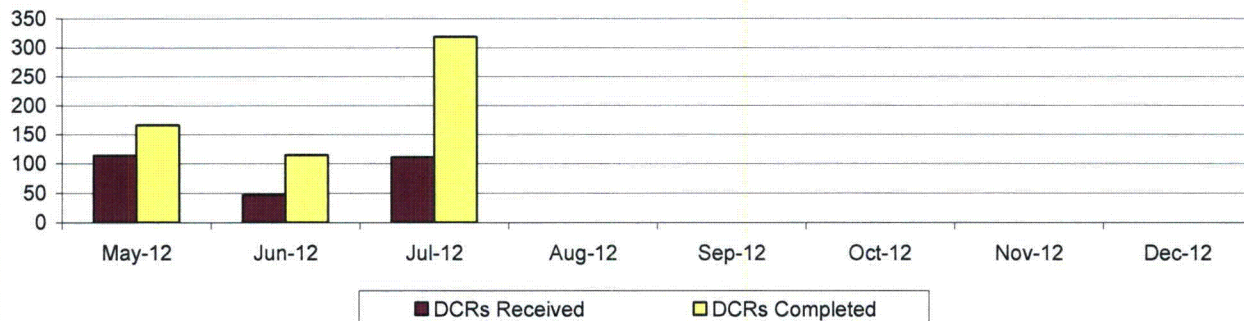
Enclosure D
L-12-310

Document Change Request Throughput

FirstEnergy Nuclear Operating Company - Perry

DCR Throughput (ALL)

Sponsor: Director Site Operations Owner: Section Mgrs Peer Group: Month: July-12 Number: N/A



PERFORMANCE

Month: **Green**

Year-end Expectancy: **Green**

DEFINITION

This metric depicts the number of new Document Change Requests (DCRs) submitted versus the number of DCRs completed each month for the Maintenance, Operations and Engineering Departments. This metric is linked to cross-cutting aspect H.2(c) as a station measure in producing quality documents for the workforce.

Month	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
DCRs Received	114	47	111					
DCRs Completed	166	115	319					
Maintenance Received	53	18	67					
Maintenance Completed	18	50	302 *					
Operations Received	38	26	32					
Operations Completed	31	48	8					
Engineering Received	23	3	12					
Engineering Completed	117	17	9					
Measures	G	G	G					

RANKING CRITERIA

Measures	Green = completing 11 more than received	White = completing 0 to 10 more than received	Yellow = completing 1 to 10 less than received	Red = completing 11 or less than received
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* There was a reduction in the DCR backlog due to consolidation and elimination of old DCR enhancements

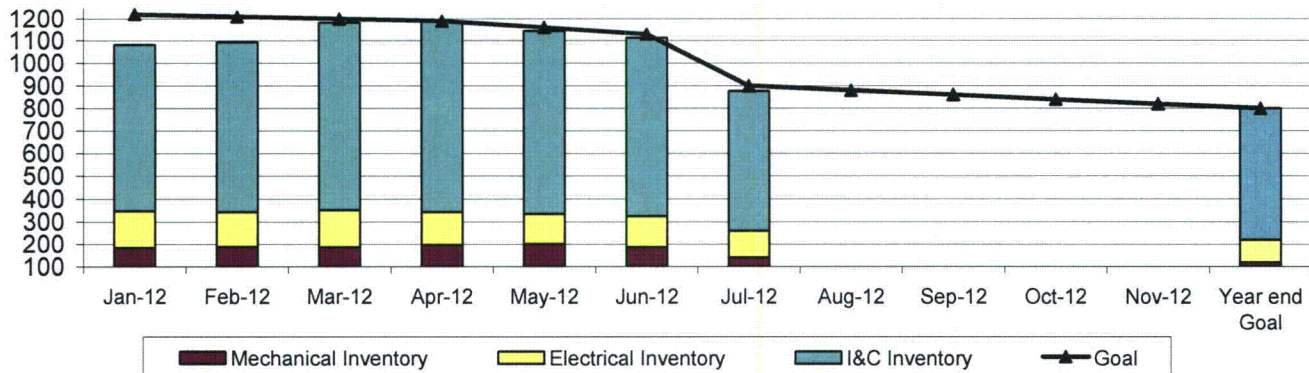
Enclosure E
L-12-310

Document Change Request Backlog (All)

FirstEnergy Nuclear Operating Company - Perry

Maintenance DCR's (ALL)

Sponsor: Director Site Maintenance Owner: Section Mgrs Peer Group: Maintenance Month: July-12 Number: N/A



PERFORMANCE

Month: **Green**

Year-end Expectancy: **Green**

DEFINITION

This metric reflects the total inventory of all open DCRs for the Mechanical, Electrical, & I&C Shops of the Perry Maintenance Department. The performance rating is based on total number against the projected goals set by the department for the end of the current year. This metric is linked to cross-cutting aspect H.2(c) as a station measure in producing quality documents for the workforce.

Month	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Year end Goal
Goal	1220	1210	1200	1190	1160	1130	900	880	860	840	820	800
Total	1082	1093	1183	1188	1145	1113	876 *					
Mechanical Inventory	185	189	187	197	202	187	140					120
Electrical Inventory	163	153	164	147	133	137	119					100
I&C Inventory	734	751	832	844	810	789	617					580
Measures	G	G	W	W	W	W	G					

RANKING CRITERIA

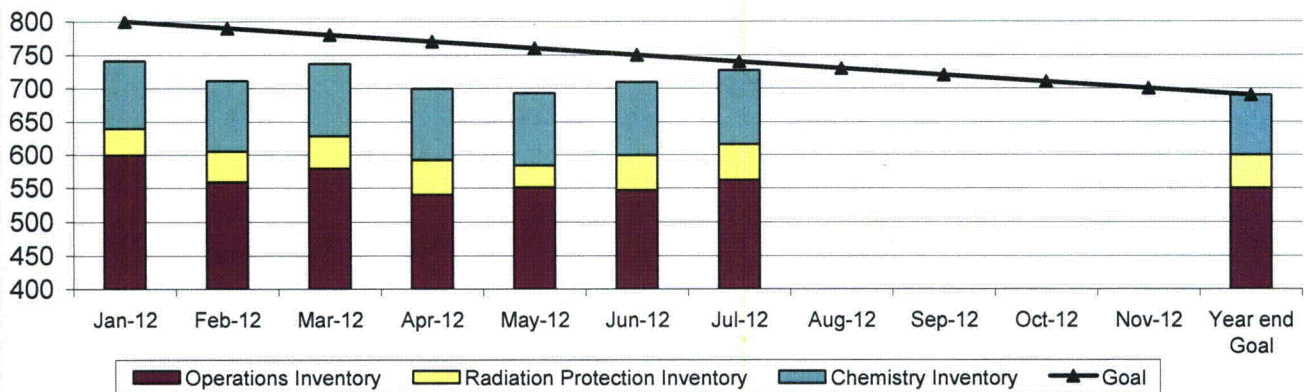
Measures	Green = Below goal (20+)	White = Below goal (0 to 19)	Yellow = Above goal (1 - 19)	Red = Above goal (20+)
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* There was a reduction in the DCR backlog due to consolidation and elimination of old DCR enhancements

FirstEnergy Nuclear Operating Company - Perry

Operations DCRs (All)

Sponsor: Director Site Operations Owner: Section Mgrs Peer Group: Operations Month: June-12 Number: N/A



PERFORMANCE

Month: **White**

Year-end Expectancy: **Green**

DEFINITION

This metric reflects the total inventory of all open DCRs for the Operations, Radiation Protection, and Chemistry sections of the Site Operations Department. The performance rating is based on total number against the projected goals set by the department for the end of the current year. This metric is linked to cross-cutting aspect H.2(c) as a station measure in producing quality documents for the workforce.

Month	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Year end Goal
Goal	800	790	780	770	760	750	740	730	720	710	700	690
Actual	741	711	737	699	693	709	727					
Operations Inventory	599	559	579	540	551	547	562					550
Radiation Protection Inventory	41	46	49	52	33	52	54					50
Chemistry Inventory	101	106	109	107	109	110	111					90
Measures	G	G	G	G	G	G	W					

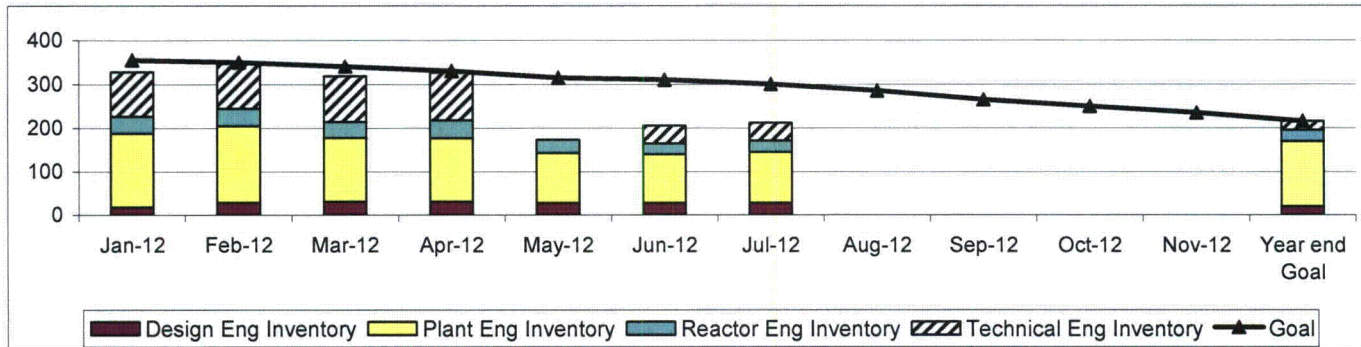
RANKING CRITERIA

Measures	Green = Below goal (20+)	White = Below goal (0 to 19)	Yellow = Above goal (1 to 19)	Red = Above goal (20+)
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FirstEnergy Nuclear Operating Company - Perry

Engineering DCRs (All)

Sponsor: Director Site Engineering Owner: Section Mgrs Peer Group: Engineering Month: July-12 Number: N/A



PERFORMANCE

Month: **Green**

Year-end Expectancy: **Green**

DEFINITION

This metric reflects the total inventory of all open DCRs for the Design, Plant, Reactor, and Technical Services sections of the Perry Engineering Department. The performance rating is based on total number against the projected goals set by the department for the end of the current year. This metric is linked to cross-cutting aspect H.2(c) as a station measure in producing quality documents for the workforce.

Month	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Year end Goal
Goal	355	350	340	330	315	310	300	285	265	250	235	216
Actual	328	347	318	326	220	206	212					
Design Eng Inventory	18	29	31	31	28	28	28					20
Plant Eng Inventory	170	176	147	146	115	112	117					150
Reactor Eng Inventory	39	39	37	41	31	25	26					25
Technical Eng Inventory	101	103	103	108	46 *	41	41					21
Measures	G	W	G	W	G	G	G					

RANKING CRITERIA

Measures	Green = Below goal (20+)	White = Below goal (0 to 19)	Yellow = Above goal (1 to 19)	Red = Above goal (20+)
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* There was a reduction in the DCR backlog due to consolidation and elimination of old DCR enhancements

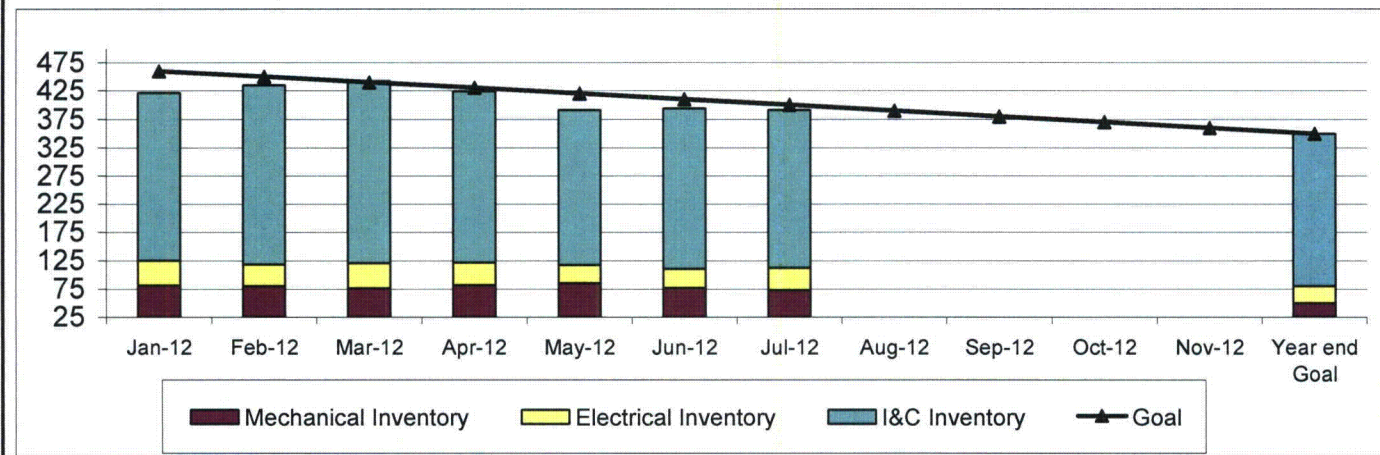
Enclosure F
L-12-310

Document Change Request Backlog (Priority)

FirstEnergy Nuclear Operating Company - Perry

Maintenance DCR's (Priority)

Sponsor: Director Site Maintenance	Owner: Section Mgrs.	Peer Group: Maintenance	Month: July-12	Number: N/A
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PERFORMANCE

Month: **White**

Year-end Expectancy: **Green**

DEFINITION

This metric reflects the total number of priority DCRs for the Mechanical, Electrical, & I&C Shops of the Perry Maintenance Department. Priority DCRs are described as requests from the following categories: Corrective Actions (CA), Restraints, DCR (not including enhancements), and Engineering Change Packages (ECP). The performance ranking is based on total number against the projected goals set by the department for the end of the current year. This metric is linked to cross-cutting aspect H.2(c) as a station measure in producing quality documents for the workforce.

Month	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Year end Goal
Goal	460	450	440	430	420	410	400	390	380	370	360	350
Actual	421	435	442	424	391	394	391					
Mechanical Inventory	81	80	76	82	85	77	73					50
Electrical Inventory	44	38	44	39	32	33	39					30
I&C Inventory	296	317	322	303	274	284	279					270
Measures	G	W	W	W	G	W	W					

RANKING CRITERIA

Measures	Green = Below goal (20+)	White = Below goal (0 - 19)	Yellow = Above goal (1 - 19)	Red = Above goal (20+)
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FirstEnergy Nuclear Operating Company - Perry

Operations DCRs (Priority)

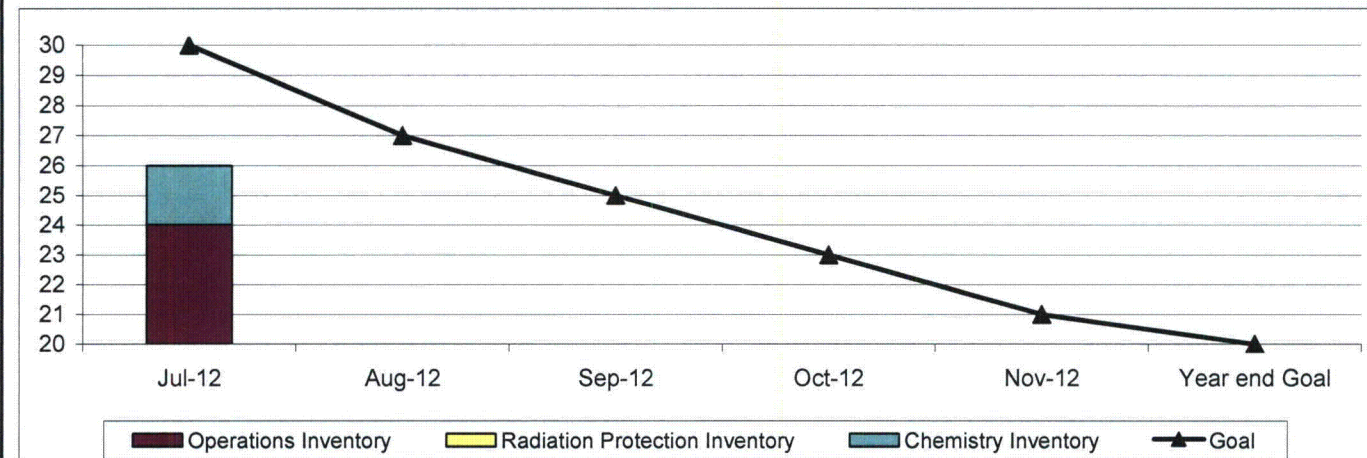
Sponsor:
Director Site Operations

Owner:
Section Mgrs

Peer Group:
Operations

Month:
July-12

Number:
N/A



PERFORMANCE

Month: **Green**

Year-end Expectancy: **Green**

DEFINITION

This metric reflects the total number of priority Document Change Requests (DCRs) for Operations, Chemistry and Radiation Protection sections of the Site Operations Department. Priority DCRs contain requests associated with one of the following categories: Corrective Actions (CA), Restraints, DCR (not including enhancements). The performance Rating is determined by comparing the number of priority DCR's to the monthly goals established by the Department Managers. This metric is linked to cross-cutting aspect H.2(c) as a station measure in producing quality documents for the workforce.

Month	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Year end Goal
Goal	30	27	25	23	21	20
Actual	26					
Operations Inventory	24					20
Radiation Protection Inventory	0					0
Chemistry Inventory	2					0
Measures	G					

RANKING CRITERIA

Measures	Green = Below goal (2+)	White = Below goal (0 to 1)	Yellow = Above goal (1 or 2)	Red = Above goal (3+)	
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