UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

July 7, 2008

Randall K. Edington, Executive
Vice President, Nuclear/CNO
Mail Station 7602
Arizona Public Service Company
P.O. Box 52034
Phoenix, AZ 85072-2034

SUBJECT: MEETING SUMMARY FOR PUBLIC MEETING ON JUNE 30, 2008

Dear Mr. Edington:

On June 30, 2008, the NRC held a public meeting to discuss the current status of the Palo Verde Nuclear Generating Station Site Integrated Improvement Plan at the Tonopah Valley High School Auditorium in Tonopah, Arizona. The meeting attendance list, NRC's presentation, and Palo Verde's presentation are enclosed.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

Michael C. Hay

Michael Hay, Chief
Project Branch D
Division of Reactor Projects

Dockets: 50-528, 50-529, 50-530
Licenses: NPF-41, NPF-51, NPF-74

Enclosures:
1. Meeting Attendance List
2. Nuclear Regulatory Commission Presentation
3. Palo Verde Nuclear Generating Station Presentation

Mr. Steve Olea
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Chairman
Maricopa County Board of Supervisors
301 W. Jefferson, 10th Floor
Phoenix, AZ 85003

Mr. Scott Bauer, Director
Regulatory Affairs
Palo Verde Nuclear Generating Station
Mail Station 7636
P.O. Box 52034
Phoenix, AZ 85072-2034

Mr. Jeffrey T. Weikert
Assistant General Counsel
El Paso Electric Company
Mail Location 167
123 W. Mills
El Paso, TX 79901

Mr. James Ray
Public Service Company of New Mexico
2401 Aztec NE, MS Z110
Albuquerque, NM 87107-4224

Mr. Robert Henry
Salt River Project
6504 East Thomas Road
Scotttsdale, AZ 85251

Mr. Douglas Kent Porter, Senior Counsel
Southern California Edison Company
Law Department, Generation Resources
P.O. Box 800
Rosemead, CA 91770

Mr. Aubrey V. Godwin, Director
Arizona Radiation Regulatory Agency
4814 South 40 Street
Phoenix, AZ 85040

Mr. Dwight C. Mims, Vice President
Regulatory Affairs and Plant Improvement
Palo Verde Nuclear Generating Station
Mail Station 7605
P.O. Box 52034
Phoenix, AZ 85072-2034

Mr. Eric Tharp
Los Angeles Department of Water & Power
Southern California Public Power Authority
P.O. Box 51111, Room 1255-C
Los Angeles, CA 90051-0100

Mr. Geoffrey M. Cook
Southern California Edison Company
5000 Pacific Coast Hwy. Bldg. D21
San Clemente, CA 92672

Mr. Brian Almon
Public Utility Commission
William B. Travis Building
P.O. Box 13326
1701 North Congress Avenue
Austin, TX 78701-3326

Ms. Karen O' Regan
Environmental Program Manager
City of Phoenix
Office of Environmental Programs
200 West Washington Street
Phoenix, AZ 85003

Mr. John C. Taylor
Director, Nuclear Generation
El Paso Electric Company
340 East Palm Lane, Suite 310
Phoenix, AZ 85004

Electronic distribution by RIV:
Regional Administrator (Elmo.Collins@nrc.gov)
DRP Director (Dwight.Chamberlain@nrc.gov)
DRP Deputy Director (Anton.Vegel@nrc.gov)
DRS Director (Roy.Caniano@nrc.gov)
DRS Deputy Director (Troy.Pruett@nrc.gov)
Senior Resident Inspector (Ryan.Treadway@nrc.gov)
Resident Inspector (Michelle.Catts@nrc.gov)
Branch Chief, DRP/D (Michael.Hay@nrc.gov)
Senior Project Engineer, DRP/D (Don Allen@nrc.gov)
Public Affairs Officer (Victor.Dricks@nrc.gov)
Team Leader, DRP/TSS (Chuck.Paulk@nrc.gov)
RITS Coordinator (Marisa.Herrera@nrc.gov)

Only inspection reports to the following:
DRS STA (Dale.Powers@nrc.gov)
J. Adams, OEDO RIV Coordinator (John.Adams@nrc.gov)
P. Lougheed, OEDO RIV Coordinator (Patricia.Lougheed@nrc.gov)
ROPreports
PV Site Secretary (Patricia.Coleman@nrc.gov)

SUNSI Review Completed: MCH ADAMS: ☑ Yes No Initials: MCH
☑ Publicly Available Non-Publicly Available Sensitive ☑ Non-Sensitive

R:_REACTORS_PV\PV 7-3-08MS.doc ML

RIV:SPE:DRP/D	C:DRP/D			
DBAllen	MCHay			
/RA/	/RA/			
7/7/2008	7/7/2008			

OFFICIAL RECORD COPY T=Telephone E=E-mail F=Fax

NRC PUBLIC MEETING ATTENDANCE

LICENSEE/FACILITY	Palo Verde Nuclear Generating Station
DATE/TIME	June 30, 2008; 6:30 to 8:30 pm (MST)
LOCATION	Tonopah Valley High School Auditorium

NAME (PLEASE PRINT)	ORGANIZATION	PHONE
Rob Henry	SRP	602-236-6446
Louis Contopassi	APS	623 734 6418
Jose A "Tony" Marco	APS	623-393-6887
Larry Gibb	DZ Atlantic	623-393-5535
Scott Bauer	APS	623-393-5978
DAN WOOL	APS	602 250 3127
Mike Glezsa	Ace	602-542-3207
BILL PAST	APS	602 250 2588
Jeff Summy	APS	623 256-0706
Greg Werner	NRC	817-860-8156
Mike Markley	NRC	301-415-5723
Michael Hay	NRC	817-860-8100
MIKE POWELL	APS	623-393-6564

NRC PUBLIC MEETING ATTENDANCE

LICENSEE/FACILITY	Palo Verde Nuclear Generating Station
DATE/TIME	June 30, 2008; 6:30 to 8:30 pm (MST)
LOCATION	Tonopah Valley High School Auditorium

NAME (PLEASE PRINT)	ORGANIZATION	PHONE
Mo Karbassian	APS	623-393-5970
ALYSON KARARIS	DZ ATLANTIC	623 393-5772
Pam Miller	CAP-APS	623-386-2171
Rex Miller		623-386-2171
JOHN GAFFney	APS	623-877-3530
Chris King	APS	623-393-5793
AK Krainik	APS	623/393-6710
Michelle Catts	NRC	623 393 3737
Don Brandt	APS	602-250-5602
Jim Molden	APS	623-986-9438
Giancarlo Estrada	ACC	602 542-3622
MONICA RAY	APS	623 393 6778
GEORGE ANDREWS	APS	623-393-5709

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LOCATION	Tonopah Valley High School Auditorium

NAME (PLEASE PRINT)	ORGANIZATION	PHONE
Steve Olea	ACC	602-542-7270
Terry L. Radtke	APS	602-390-0668
Bill Smith	APS	623-249-9913
Bob Bement	APS	623 393 6116
W Grover Hester	APS	623-393-7650
Terry Young	APS	602-769-1526
Randy Edington	APS	602-319-4040
Doug Cox	APS	623-393-3366
Patricia Paramithiotis	APS	623-393-4706
Carl Fowler	APS	480-219-2251
James Ray	PNM	505-241-2018
Casey Corcoran	APS	623-393-5234
John Hesser	APS	623-393-5553

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LOCATION	Tonopah Valley High School Auditorium

NAME (PLEASE PRINT)	ORGANIZATION	PHONE
PETE BONCHENT	APS	602 615-2715
Mark Fallan	APS	602-510-1410
Mike Sontag	APS	602 993 5346
RUSS DEMERS	APS/LHH	602 619 3664
JOHN TAYLOR	El Paso Electric	602 287 3197
Ken Brockman	Public	206-974-7458
MATTHEW BENAC	APS	602 206 2871
TRELA JACOBSON	APS-PV	623 393 6860
Mike Winsor	APS-PV	623-393-5102
Gary Shanker	APS-PV	623-225-7338
Mike Navin	APS	623-393-3101
TW Weaver	APS	623-393-5764
[illegible]	APS	623 393 6692

NRC PUBLIC MEETING ATTENDANCE

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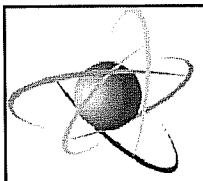
DATE/TIME	June 30, 2008; 6:30 to 8:30 pm (MST)
LOCATION	Tonopah Valley High School Auditorium

NAME (PLEASE PRINT)	ORGANIZATION	PHONE
Fred Baker	Int	602-393-6566
Michael Green	PV	623 393 5313
W Baer	MCB	702 739 5454
Marie Levie	Torres Consulting	6026268805



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Protecting People and the Environment

Palo Verde Nuclear Generating Station Performance Improvement Meeting

Nuclear Regulatory Commission – Region IV

June 30, 2008

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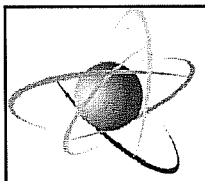
Protecting People and the Environment

Purpose of Today's Meeting

- A public forum for discussion of Palo Verde's performance improvement initiatives
- Open dialogue between Palo Verde and NRC
- Open dialogue with the public



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NRC Representatives

- Michael Hay, Branch Chief, DRP
- Eliot Brenner, Director, Office of Public Affairs
- Victor Dricks, RIV, Office of Public Affairs
- Michael Markley, Senior Project Manager, NRR
- Ryan Treadway, PVNGS Senior Resident Inspector
- Michelle Catts, PVNGS Resident Inspector
- Jim Melfi, PVNGS Resident Inspector
- Joseph Bashore, PVNGS Resident Inspector
- Greg Werner, RIV Senior Project Engineer
- Theresa Buchanan, RIV Project Engineer

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Protecting People and the Environment

Overview

- Confirmatory Action Letter (CAL) issued June 2007 and revised in February 2008
  - 12 Key Performance Areas Identified for Improvement
- NRC Plans to perform five quarterly CAL inspections
- Continuous inspections performed by regional and resident inspectors

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Confirmatory Action Letter

- Actions that need to be satisfactorily implemented to address the fundamental causes for performance problems at Palo Verde

- 12 Key Areas:
  - Yellow finding
  - White finding
  - Problem identification and resolution
  - Human performance
  - Engineering programs
  - Resolution of past problems

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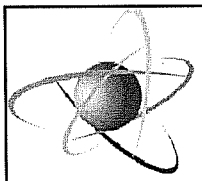
Protecting People and the Environment

Confirmatory Action Letter (cont.)

- 12 Key Areas (cont.):
  - Safety culture survey
  - Accountability
  - Change management
  - Emergency Preparedness
  - Longstanding equipment concerns
  - Backlog



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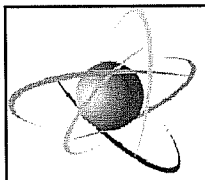
Licensee Response and Remarks



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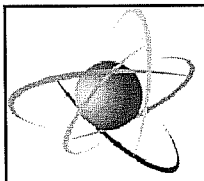
Questions and Answers

Facilitated by

Greg Werner

and

Theresa Buchanan



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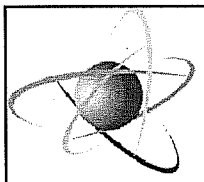
Protecting People and the Environment

Contacting the NRC

- Report an emergency
  - (301) 816-5100 (call collect)
- Report a safety concern:
  - (800) 695-7403
  - Allegation@nrc.gov
- General information or questions
  - www.nrc.gov
  - Select "What We Do" for Public Affairs
- Victor Dricks, Public Affairs Officer, RIV
  - 817-860-8128
  - Victor.Dricks@nrc.gov



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Protecting People and the Environment

Reference Sources

- Reactor Oversight Process
  - http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html
- Public Electronic Reading Room
  - http://www.nrc.gov/reading-rm.html
- Public Document Room
  - 1-800-397-4209 (Toll Free)

Nuclear Regulatory Commission
Quarterly Public Meeting

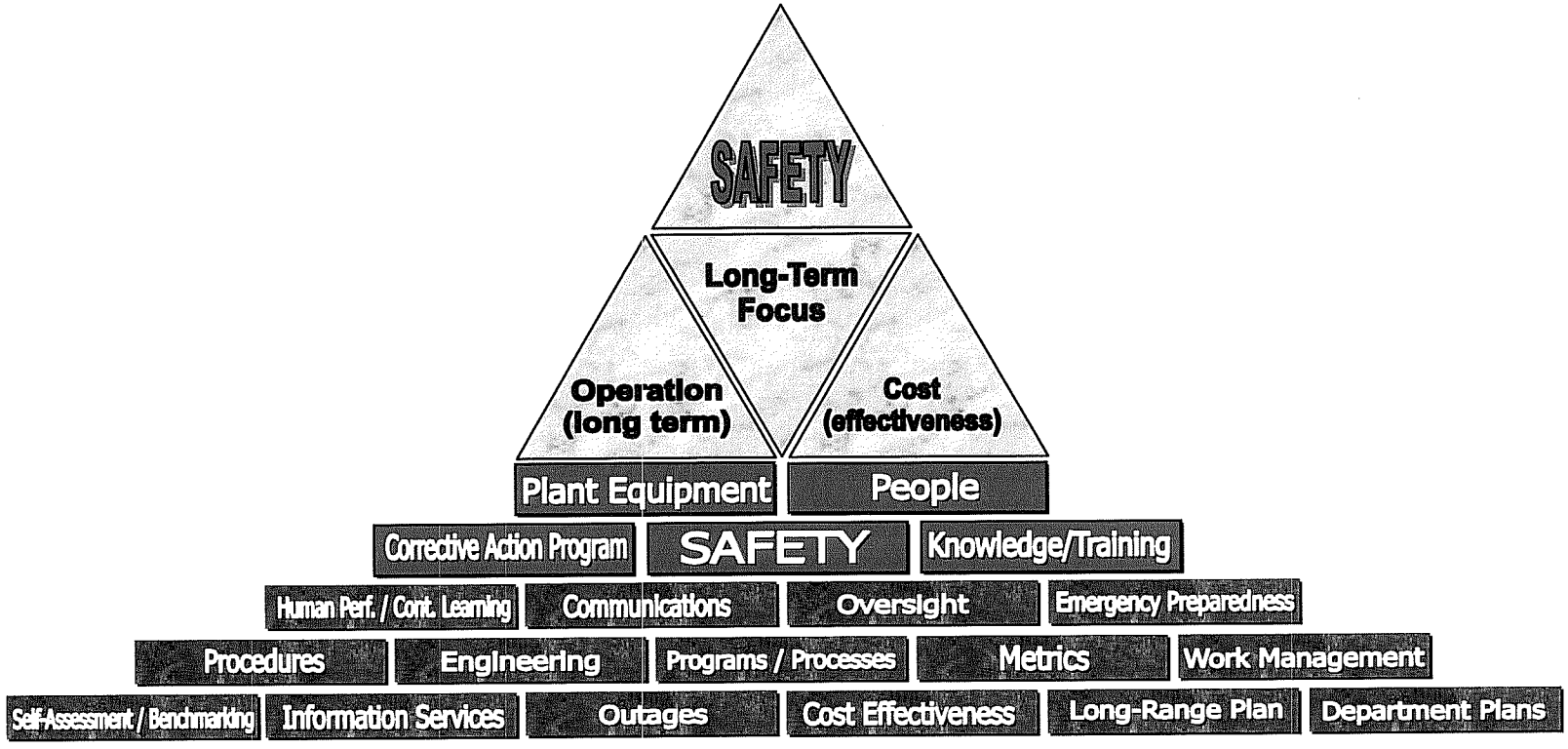
Palo Verde Nuclear Generating Station
June 30, 2008

Opening Remarks

Randy Edington

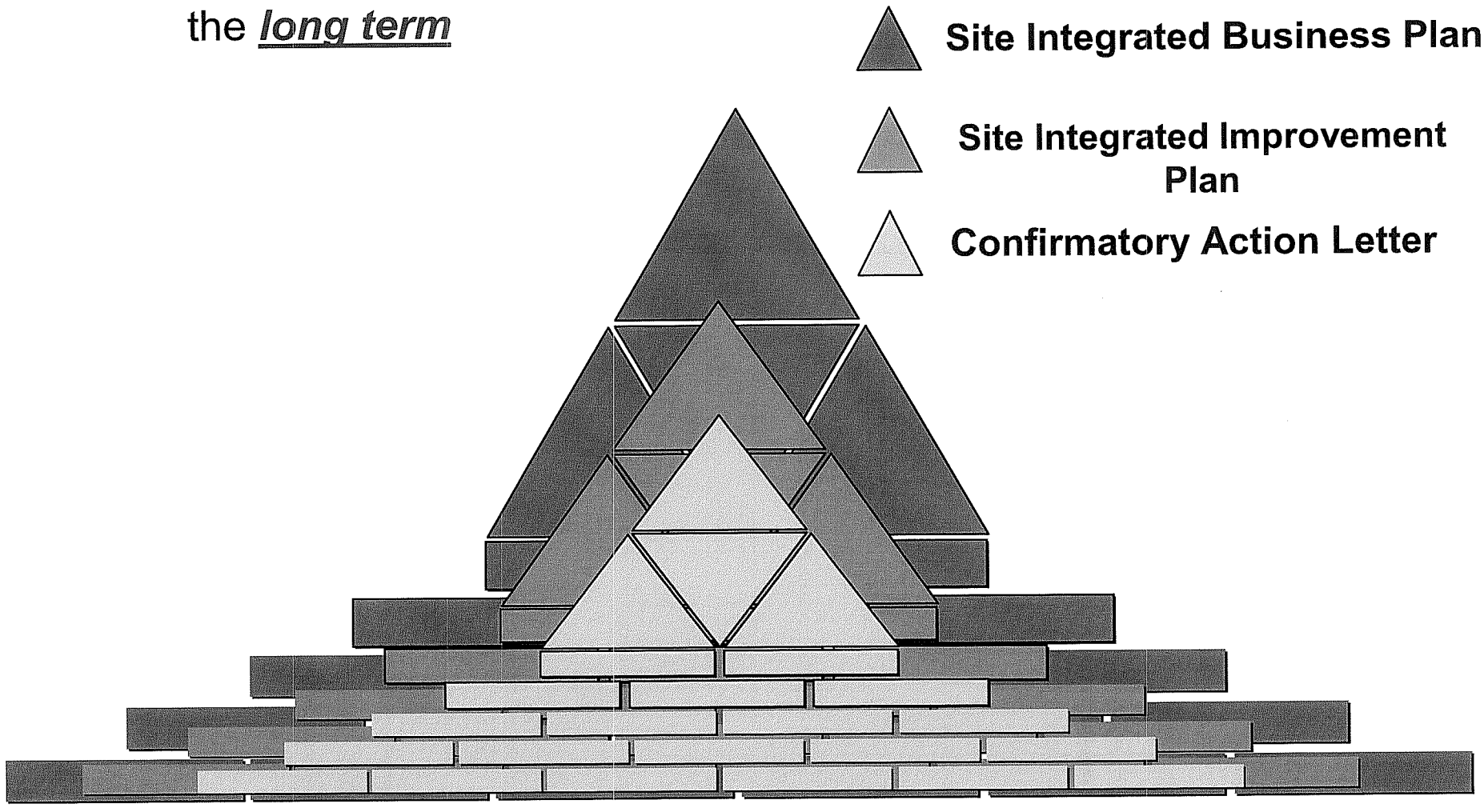
Executive Vice President and Chief Nuclear Officer

Core Mission



We **SAFELY** and efficiently ***generate*** electricity for the ***long term***

We **SAFELY** and efficiently
generate electricity for
the ***long term***



Agenda

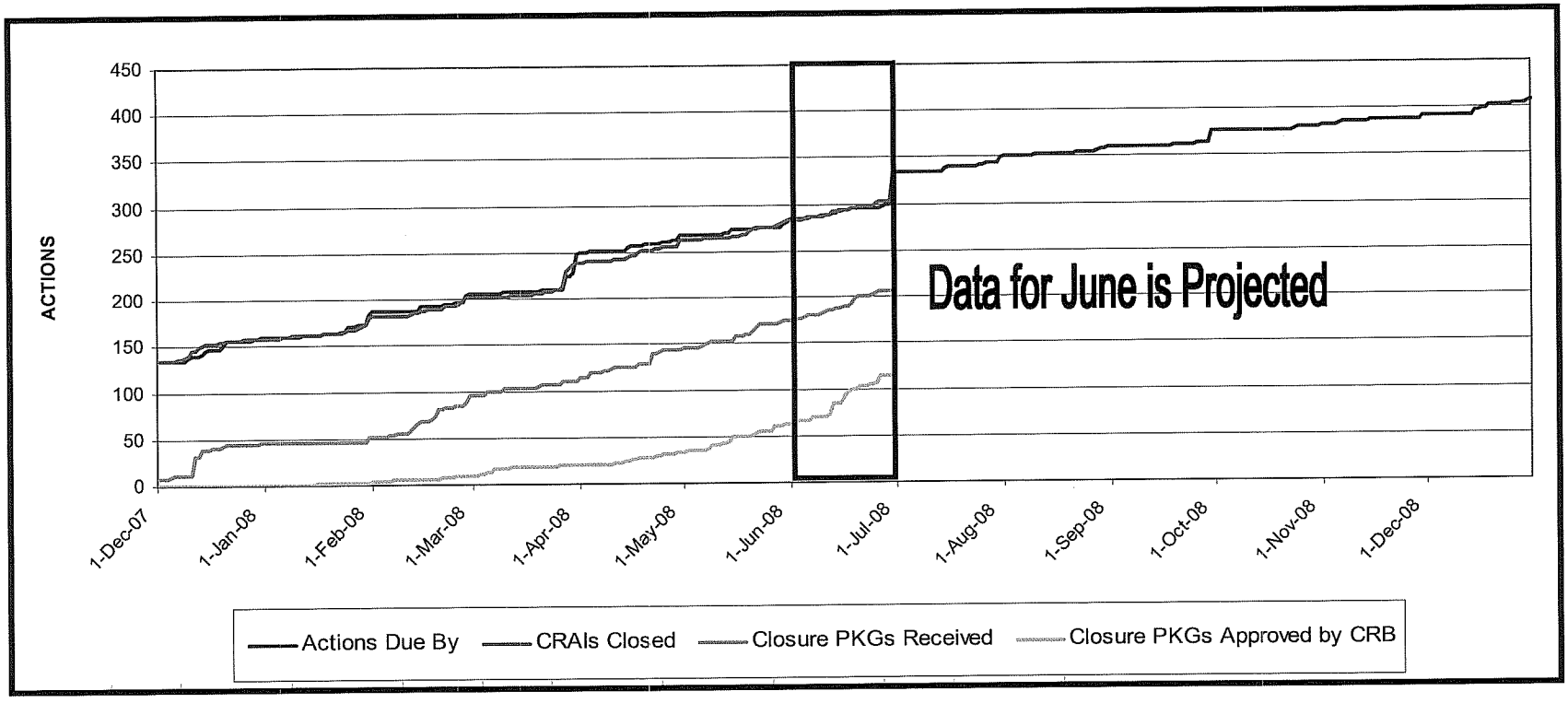
• Opening remarks	Randy Edington
• SIIP/CAL Status	Dwight Mims
• SIIP Metrics	Bob Bement
• Key Performance Area 3 Problem Identification and Resolution	George Andrews
• Key Performance Area 4 Human Performance	Bill Smith Grover Hettel
• Key Performance Area 5 Engineering Programs	Jeff Summy
• Key Performance Area 6 Equipment Evaluations	Lou Cortopassi
• Closing Remarks	Randy Edington

Site Integrated Improvement Plan/Confirmatory Action Letter Status

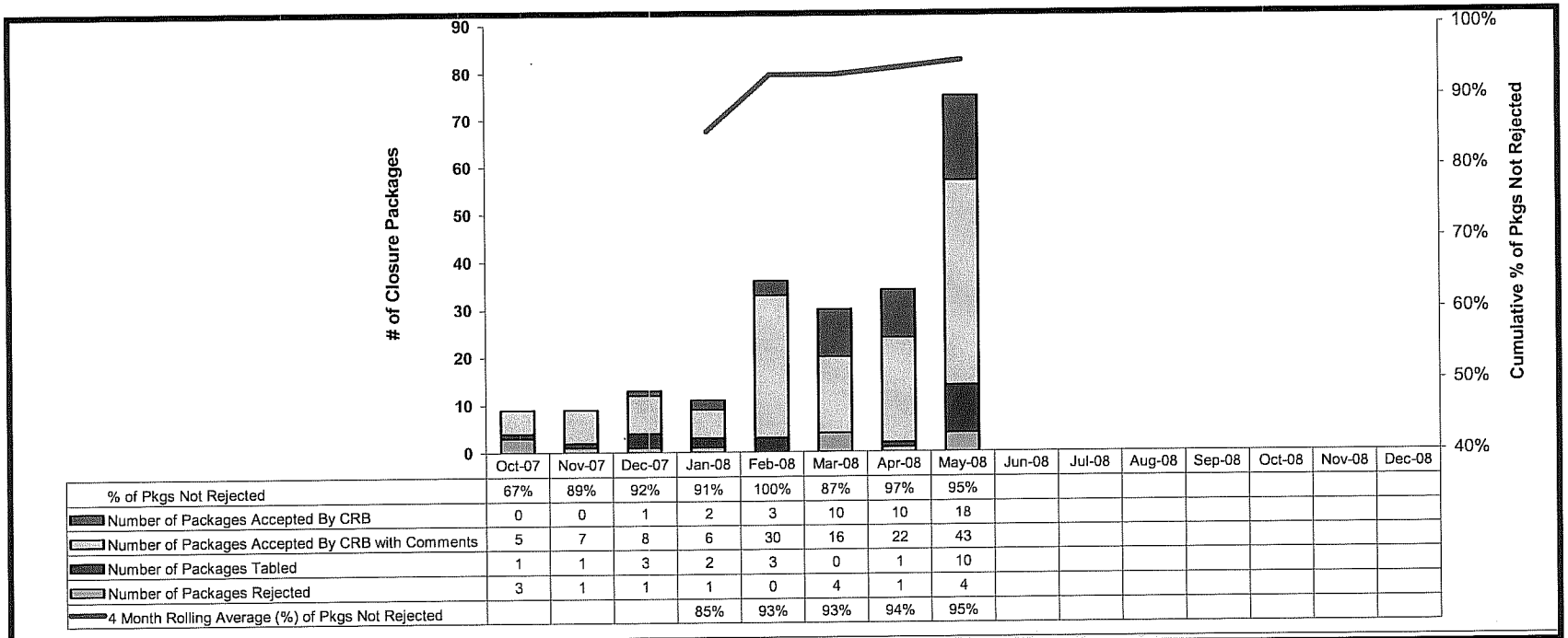
Dwight Mims

Vice President, Regulatory Affairs and Plant Improvement

Schedule Adherence CAL Actions and CRB Closure Packages



Document Quality (All Packages)

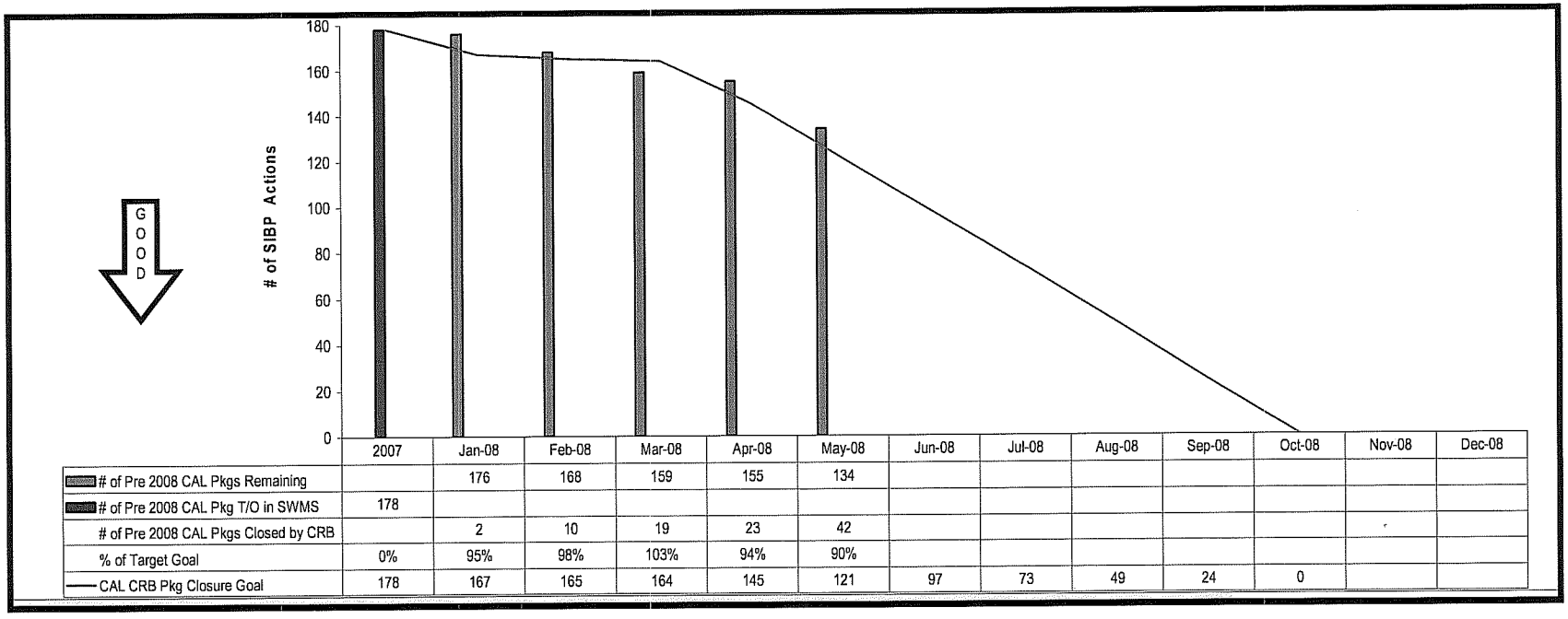


	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
% of Pkgs Not Rejected	67%	89%	92%	91%	100%	87%	97%	95%							
Number of Packages Accepted By CRB	0	0	1	2	3	10	10	18							
Number of Packages Accepted By CRB with Comments	5	7	8	6	30	16	22	43							
Number of Packages Tabled	1	1	3	2	3	0	1	10							
Number of Packages Rejected	3	1	1	1	0	4	1	4							
4 Month Rolling Average (%) of Pkgs Not Rejected				85%	93%	93%	94%	95%							

Threshold

- Strength - ≥90 % pkgs submitted to CRB not rejected first time through CRB Review.
- Satisfactory - ≥80% but < 90% pkgs submitted to CRB not rejected first time through.
- Needs Improvement - ≥75% but < 80% of pkgs submitted to CRB - not rejected.
- Unsatisfactory - < 75% of pkgs submitted to CRB - not rejected.

2007 CAL Closure Package Backlog



	2007	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
# of Pre 2008 CAL Pkgs Remaining		176	168	159	155	134							
# of Pre 2008 CAL Pkg T/O in SWMS	178												
# of Pre 2008 CAL Pkgs Closed by CRB		2	10	19	23	42							
% of Target Goal	0%	95%	98%	103%	94%	90%							
CAL CRB Pkg Closure Goal	178	167	165	164	145	121	97	73	49	24	0		

Monitor / Check / Adjust

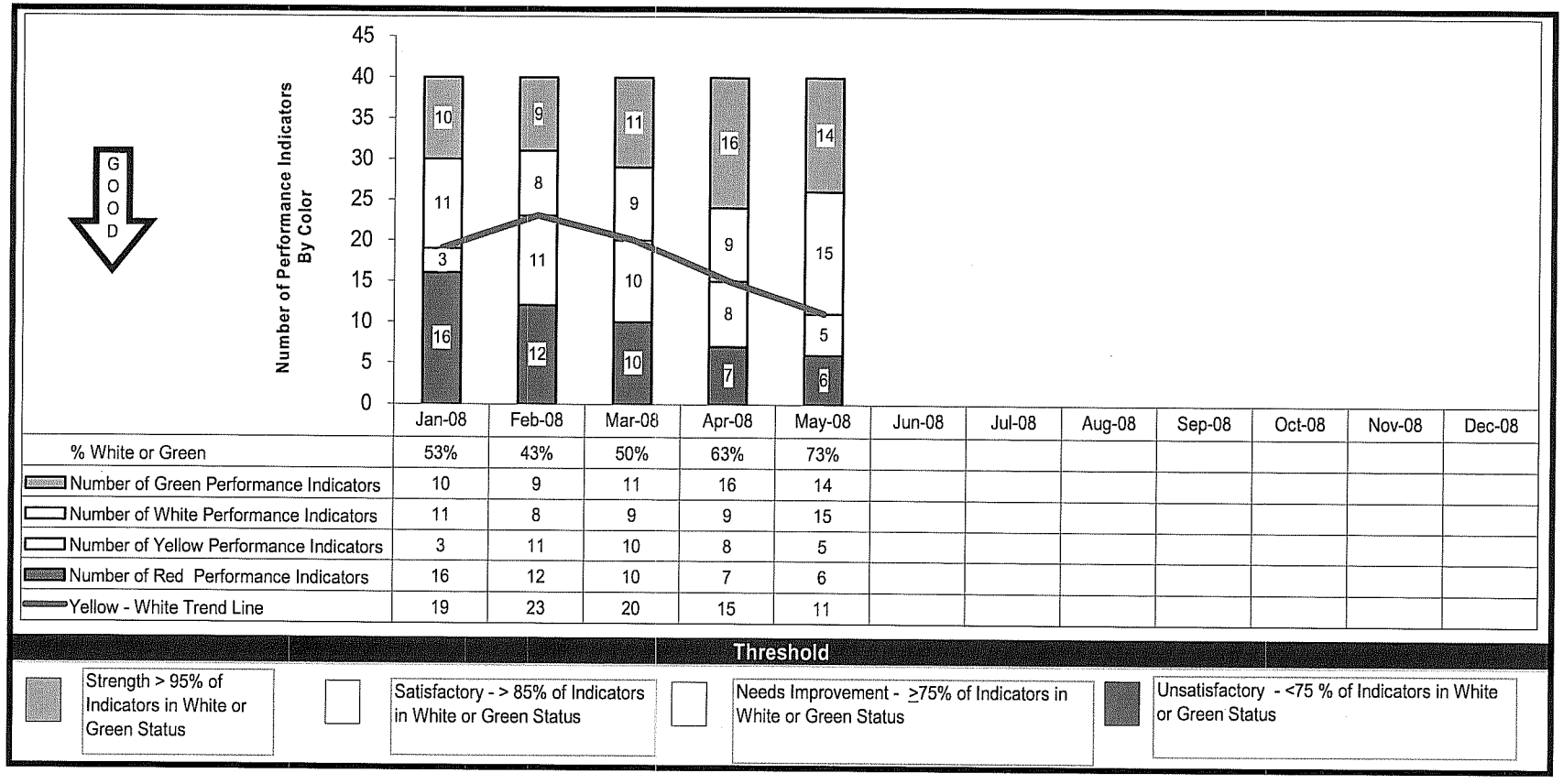
- Effectiveness Reviews
- Effectiveness Review Challenge Boards
- Self Assessments
- Nuclear Assurance Department
- Off-Site Safety Review Committee

Site Integrated Improvement Plan Metrics

Bob Bement

Vice President, Nuclear Operations

Status of Core Performance Indicators



	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
% White or Green	53%	43%	50%	63%	73%							
Number of Green Performance Indicators	10	9	11	16	14							
Number of White Performance Indicators	11	8	9	9	15							
Number of Yellow Performance Indicators	3	11	10	8	5							
Number of Red Performance Indicators	16	12	10	7	6							
Yellow - White Trend Line	19	23	20	15	11							

Threshold

- Strength > 95% of Indicators in White or Green Status
- Satisfactory - > 85% of Indicators in White or Green Status
- Needs Improvement - ≥75% of Indicators in White or Green Status
- Unsatisfactory - <75 % of Indicators in White or Green Status

SIIP Performance Indicators

Operations	1 Site Operational Focus Indicator	2 Operator Work Arounds	3 Operator Burdens	4 Lit Annunciators	5 Control Room Discrepancy Logs	6 Long-Term Tagouts	7 Fire System Component Condition Records	8 $ Temporary Modifications	9 Unplanned Entries into Limiting Conditions of Operations	10 Site Corrective Maintenance
	11 Site Elective Maintenance	12 Site Chemistry Effectiveness Indicator	13 Forced Loss Rate	14 Unplanned Power Change (NRC Indicator)	15 Unplanned Power Change (PVNGS Site Indicator)	16 Operability Determination	17 Engineering Systems Health Report Total Color Progress			
Engineering	18 CDBR Project Schedule Adherence	19 Quality of the Resolution of CDBR Related Actions	20 Engineering CRDR/CRAI Reduction	21 Engineering Work Product Quality	22 Engineering Program Health Report Total Color Progress					
Site Programs and Processes	23 CRDR Inventory	24 CAP Quality Index	25 CRDR Evaluation Age	26 Avg Age of Open Corrective Actions to Prevent Recurrence	27 Timeliness of Operating Experience Screening	28 ERO Drill/Exercise Performance (NRC Indicator)	29 ERO Drill/Exercise Performance (PVNGS Site Indicator)	30 Emergency Drill Participation (NRC Indicator)	31 Alert and Notification System (NRC Indicator)	32 Online Schedule Adherence
	33 Online Scope Stability T5 Through T1	34 Total / Adverse Procedure Change Inventory								
Organization	35 Site Plant Performance Indicator (Annualized)	36 Site Clock Resets	37 Consequential Human Error Rate	38 APS/PVNGS ISAR	39 Non-Utility ISAR	40 Industrial Safety Work Orders and Average Age				

Site Operational Focus Indicator

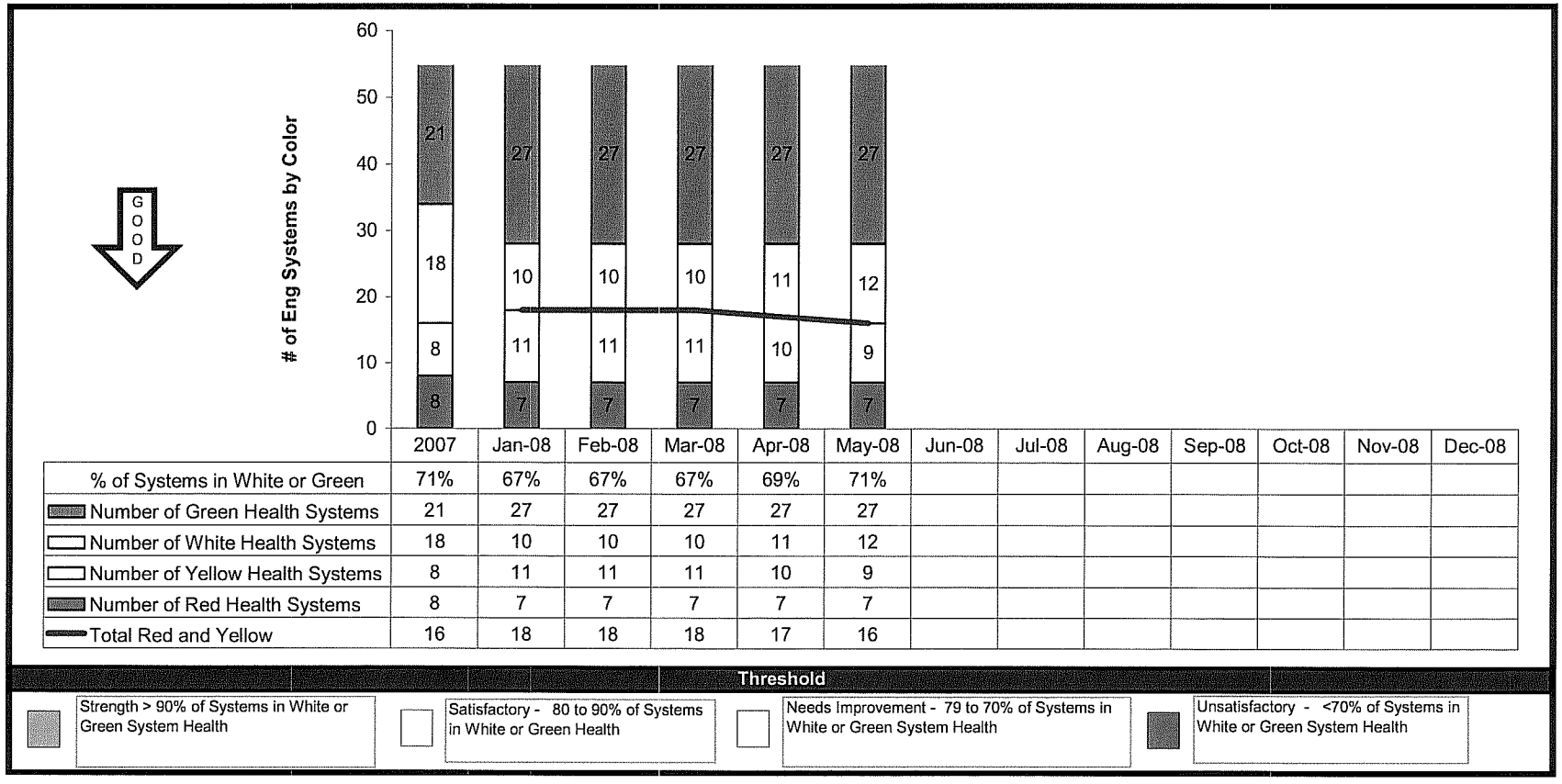
OPS Aggregate Impact	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Operator Work Arounds	0	0	0	0	0	0	0	0				
Operator Burdens	14	14	20	18	20	15	15	16				
Lit Annunciators	4	4	4	3	5	3	2	4				
CRDLs	58	120	82	81	62	51	52	47				
Long-Term Tagouts	81	86	85	85	85	83	79	78				
Fire Impairments (FSCCRs)	153	135	94	88	90	80	63	56				
Temporary Modifications (T-Mods)	29	27	21	19	16	15	15	19				
Unplanned LCOs	11	14	15	13	25	18	6	5				
Corrective Maintenance Inventory	16	28	28	34	49	47	30	24				
Plant Elective Maintenance Inventory	1313	1313	1347	1387	1424	1480	1329	1248				
Window Color	**Yellow**	**White**	**Yellow**	**White**	**Yellow**	**Yellow**	**White**	**White**				

SITE CRITERIA	GREEN	WHITE	YELLOW	RED
Operator Work Arounds	0	1 - 3	4 - 6	>6
Operator Burdens	=< 12	13 - 18	19 - 24	>24
Lit Annunciators	=<6	7 - 12	13 - 18	>18
CRDLs	=<27	28 - 35	36 - 40	>40
Long-Term Tagouts	=<60	61 - 75	76 - 90	>90
Fire Impairments (FSCCRs)	=<30	31 - 45	46 - 60	>60
TMODs	=<24	25 - 27	28 - 30	>30
Unplanned LCOs	=<9	10 - 14	15 - 18	>18
Corrective Maintenance Inventory	=<45	46 - 60	61 - 75	>75
Plant Elective Maintenance Inventory	=<1200	1201 - 1250	1251 - 1300	>1300

THRESHOLD

- Significant Strength - 8 + Green/White Windows
- Satisfactory - 7 or 6 Green/White Windows
- Needs Improvement - 5 or 4 Green/White Windows
- Unsatisfactory - 3 or less Green/White Windows

Engineering Systems Health Report
Total Color Progress

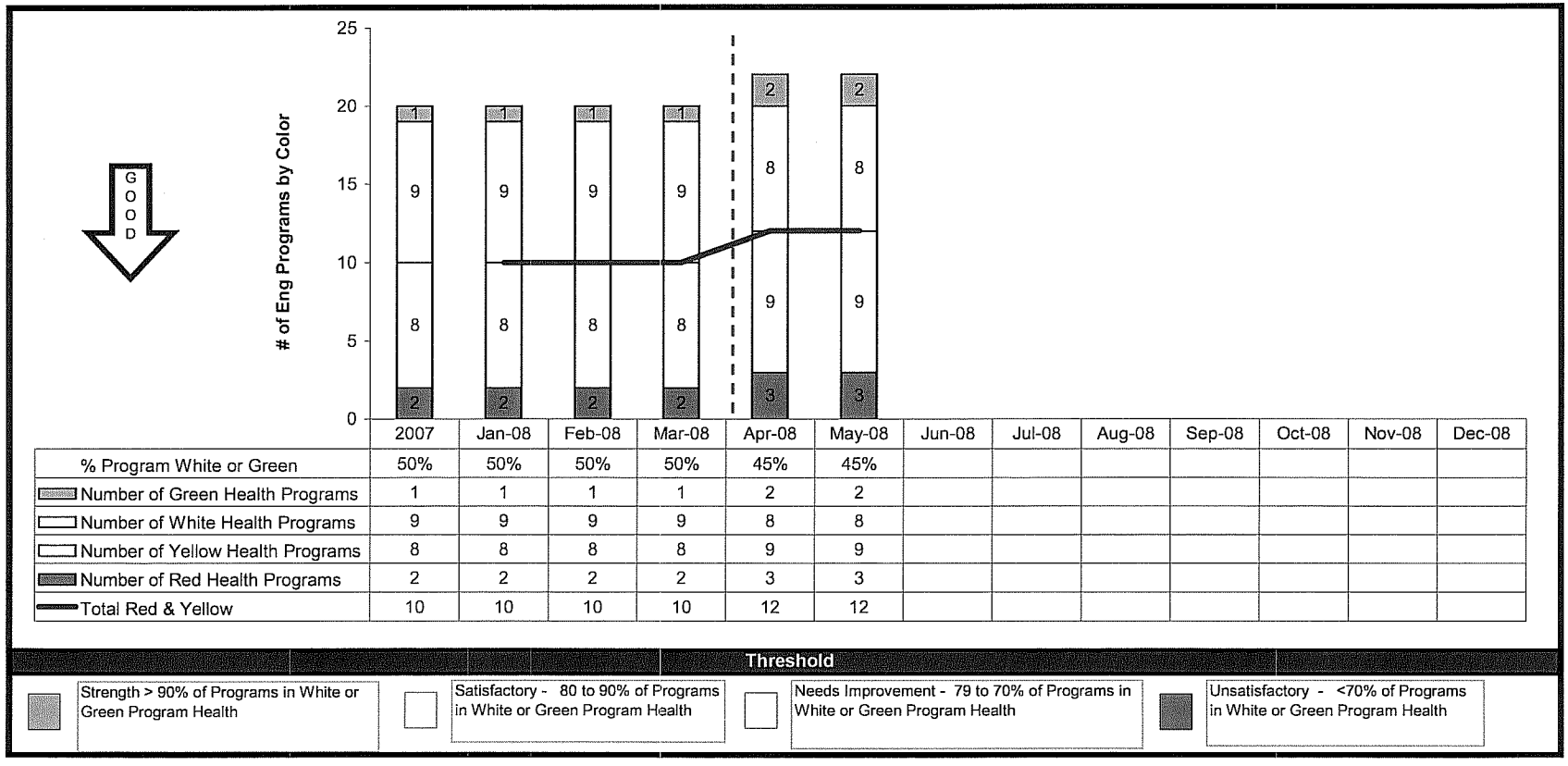


	2007	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
% of Systems in White or Green	71%	67%	67%	67%	69%	71%							
Number of Green Health Systems	21	27	27	27	27	27							
Number of White Health Systems	18	10	10	10	11	12							
Number of Yellow Health Systems	8	11	11	11	10	9							
Number of Red Health Systems	8	7	7	7	7	7							
Total Red and Yellow	16	18	18	18	17	16							

Threshold

- Strength > 90% of Systems in White or Green System Health
- Satisfactory - 80 to 90% of Systems in White or Green Health
- Needs Improvement - 79 to 70% of Systems in White or Green System Health
- Unsatisfactory - <70% of Systems in White or Green System Health

Engineering Program Health Report
Total Color Progress

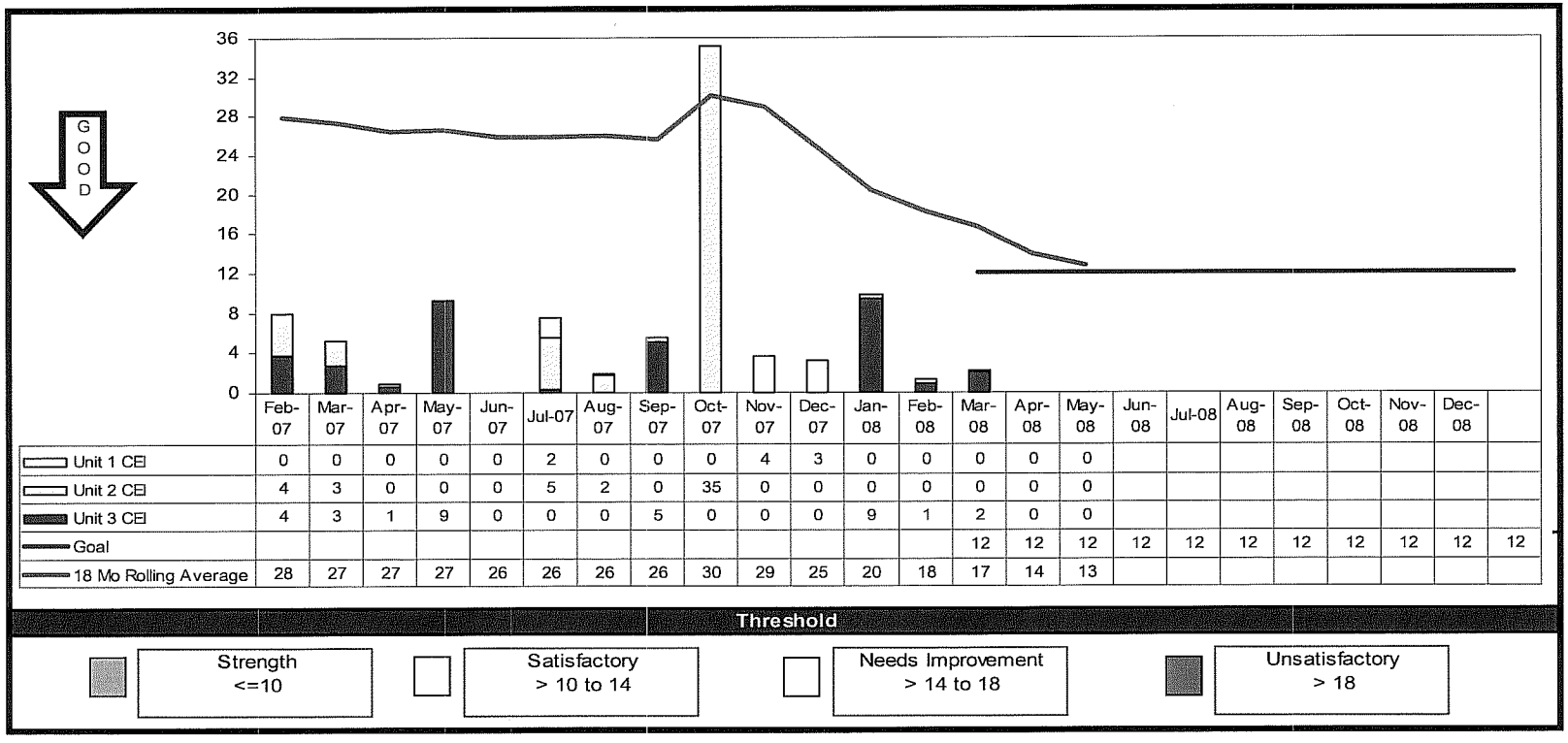


	2007	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
% Program White or Green	50%	50%	50%	50%	45%	45%							
Number of Green Health Programs	1	1	1	1	2	2							
Number of White Health Programs	9	9	9	9	8	8							
Number of Yellow Health Programs	8	8	8	8	9	9							
Number of Red Health Programs	2	2	2	2	3	3							
Total Red & Yellow	10	10	10	10	12	12							

Threshold

Strength > 90% of Programs in White or Green Program Health	Satisfactory - 80 to 90% of Programs in White or Green Program Health	Needs Improvement - 79 to 70% of Programs in White or Green Program Health	Unsatisfactory - <70% of Programs in White or Green Program Health

Site Chemistry Effectiveness Indicator

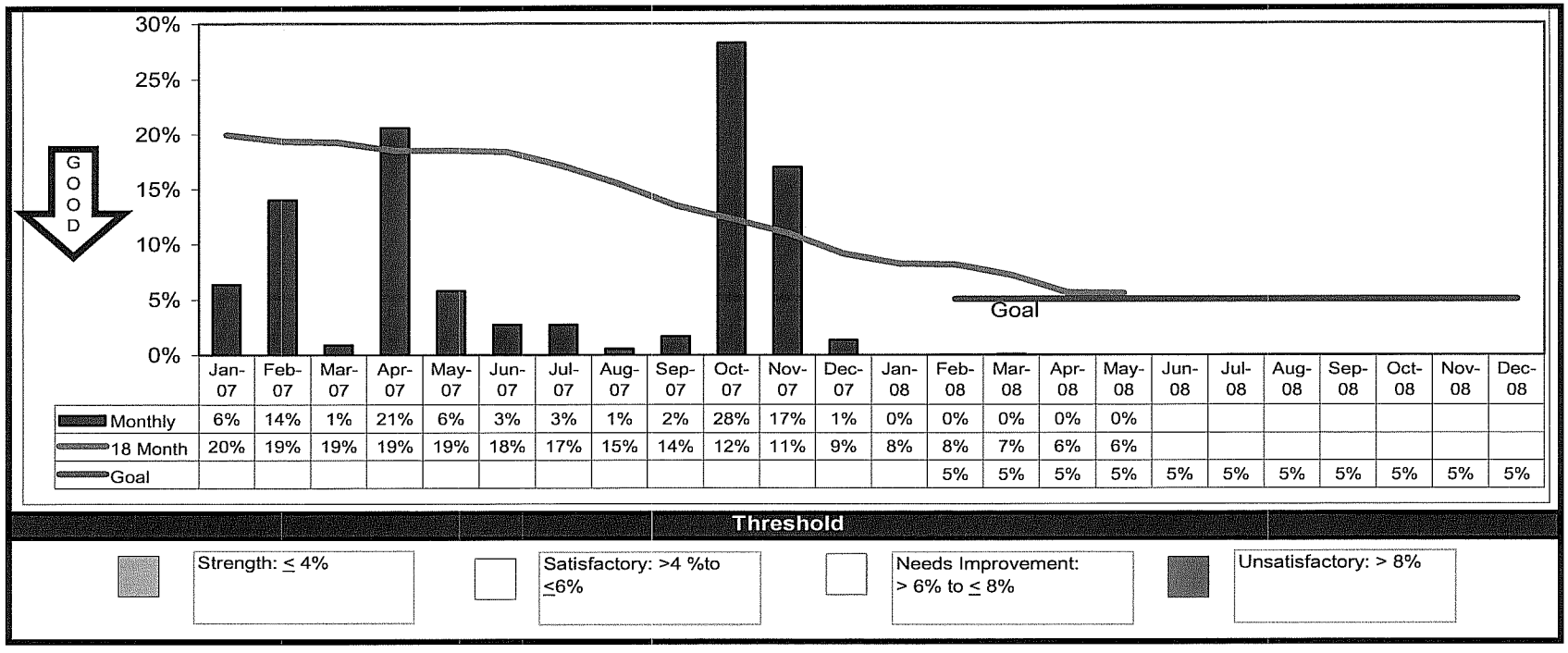


	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	
Unit 1 CEI	0	0	0	0	0	2	0	0	0	4	3	0	0	0	0	0								
Unit 2 CEI	4	3	0	0	0	5	2	0	35	0	0	0	0	0	0	0								
Unit 3 CEI	4	3	1	9	0	0	0	5	0	0	0	9	1	2	0	0								
Goal														12	12	12	12	12	12	12	12	12	12	12
18 Mo Rolling Average	28	27	27	27	26	26	26	26	30	29	25	20	18	17	14	13								

Threshold

Strength	Satisfactory	Needs Improvement	Unsatisfactory
<=10	> 10 to 14	> 14 to 18	> 18

Forced Loss Rate

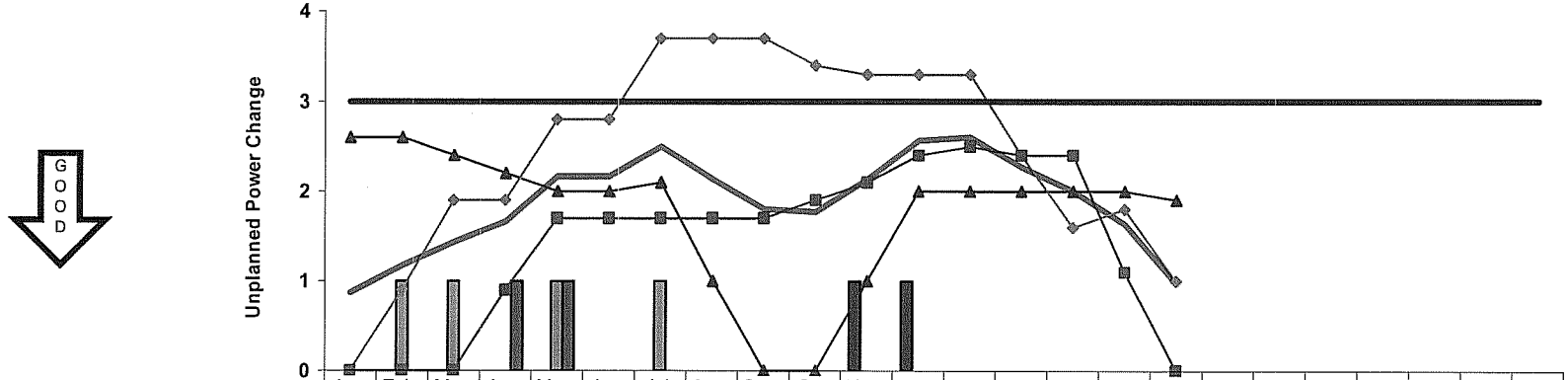


	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Monthly	6%	14%	1%	21%	6%	3%	3%	1%	2%	28%	17%	1%	0%	0%	0%	0%	0%							
18 Month	20%	19%	19%	19%	19%	18%	17%	15%	14%	12%	11%	9%	8%	8%	7%	6%	6%							
Goal														5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%

Threshold

Strength: ≤ 4%	Satisfactory: >4 %to ≤6%	Needs Improvement: > 6% to ≤ 8%	Unsatisfactory: > 8%

Unplanned Power Change (PVNGS Site Indicator)



	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Unit 1 Power Change events (month)	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0							
Unit 2 Power Change events (month)	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0							
Unit 3 Power Change events (month)	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0							
Monthly Ave	0.9	1.2	1.4	1.7	2.2	2.2	2.5	2.1	1.8	1.8	2.1	2.6	2.6	2.3	2.0	1.6	1.0							
Unit 1 Value (7000 hours)	2.6	2.6	2.4	2.2	2.0	2.0	2.1	1.0	0.0	0.0	1.0	2.0	2.0	2.0	2.0	2.0	1.9							
Unit 2 Value (7000 hours)	0.0	0.9	1.9	1.9	2.8	2.8	3.7	3.7	3.7	3.4	3.3	3.3	3.3	2.4	1.6	1.8	1.0							
Unit 3 Value (7000 hours)	0.0	0.0	0.0	0.9	1.7	1.7	1.7	1.7	1.7	1.9	2.1	2.4	2.5	2.4	2.4	1.1	0.0							
Goal	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Threshold

Strength - < 2	Satisfactory - 2 to 4	Needs Improvement - >4 to 5	Unsatisfactory - >5

Key Performance Area 3
Problem Identification and Resolution

George Andrews

Director, Performance Improvement

KPA-3 Problem Identification and Resolution

- KPA-3 Aspects
  - Corrective Action Program (CAP)
  - Self Assessment
  - Operability Determinations (ODs)
  - Operating Experience (OE)
- Progress
  - Quality and Timeliness are improving
  - Knowledge is increasing
  - Barriers are in place to ensure quality

KPA-3 Problem Identification and Resolution: Operability Determinations

- Corrective Actions *(In-Progress Activities)*
  - Dedicated Engineering Resources
  - Targeted Training
  - Quality Review and Feedback Mechanism

KPA-3 Problem Identification and Resolution: Corrective Action Program

- Corrective Actions *(In-Progress Activities)*
  - Causal Analysis Quality Review
  - Closure Quality Review
  - Backlog Review/Reduction
  - Department Level Performance Indicators
  - Trending

KPA-3 Problem Identification and Resolution: Corrective Action Program

Performance Improvement Scorecard

Composite Window Color: White

Score= 19

No. of Evaluations:

< 30 Days Old: 5
> 30 Days Old: 0
100% < 30 Days

> 95% = Green | 95 - 90 = White | 89 - 80 = Yellow | 79 and below = Red

No. of CRDR Age:

< 180 Days Old: 26
> 180 Days Old: 61
30% < 180 Days

> 95% = Green | 95 - 90 = White | 89 - 80 = Yellow | 79 and below = Red

Evaluation Quality:

CARB Rejects: 0

0= Green | 1= White | 2= Yellow | 3 or more=Red
(Factor of 2)

Closure Quality:

PID Rejects: 1

0= Green | 1= White | 2= Yellow | 3 or more= Red
(Factor of 2)

CAPRs (Priority 2) Age:

Number Open: 7
Average Age: 226

<=170 = Green | >170 - <=190 = White | >190 - <=210 = Yellow | >210 = Red

Effectiveness Reviews:

Number Open: 14
Average Age: 176

<=340 = Green | >340 - <=380 = White | >380 - <=420 = Yellow | >420 = Red

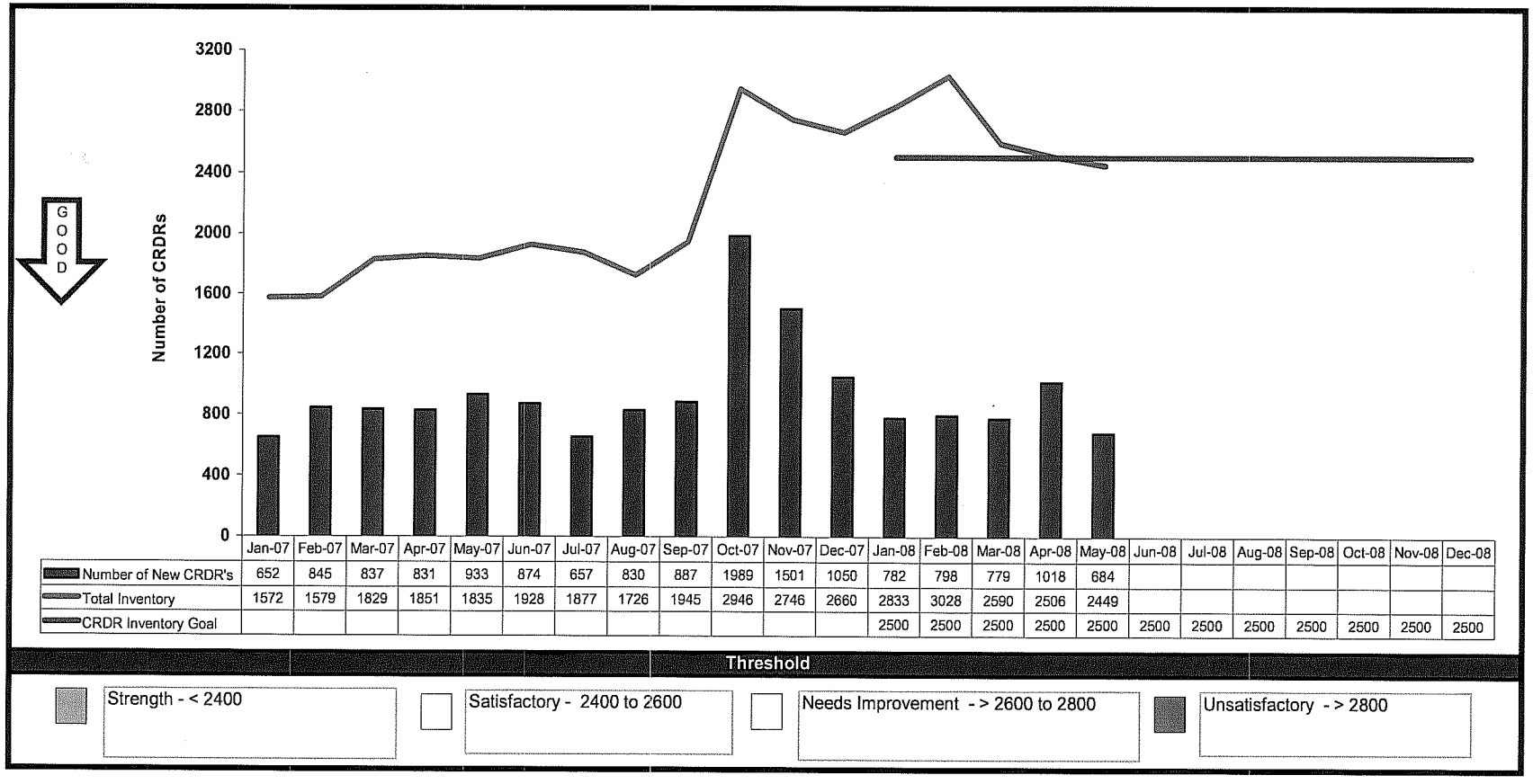
Number of CRAI Extensions:

1st = 7
2nd = 3
3rd = 0
4th= 0
4% Extended

0 - 4% = Green | 5% - 10% = White | 11% - 15% = Yellow | >15% = Red

Window Color Scoring:	Composite Window Color:
0= Red	[27= Max]
1= Yellow	24 - 27= Green
2= White	19 - 23= White
3= Green	15 - 18= Yellow
	<15= Red

KPA-3 Problem Identification and Resolution: Corrective Action Program



	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Number of New CRDR's	652	845	837	831	933	874	657	830	887	1989	1501	1050	782	798	779	1018	684							
Total Inventory	1572	1579	1829	1851	1835	1928	1877	1726	1945	2946	2746	2660	2833	3028	2590	2506	2449							
CRDR Inventory Goal													2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500

Threshold

Strength - < 2400	Satisfactory - 2400 to 2600	Needs Improvement - > 2600 to 2800	Unsatisfactory - > 2800

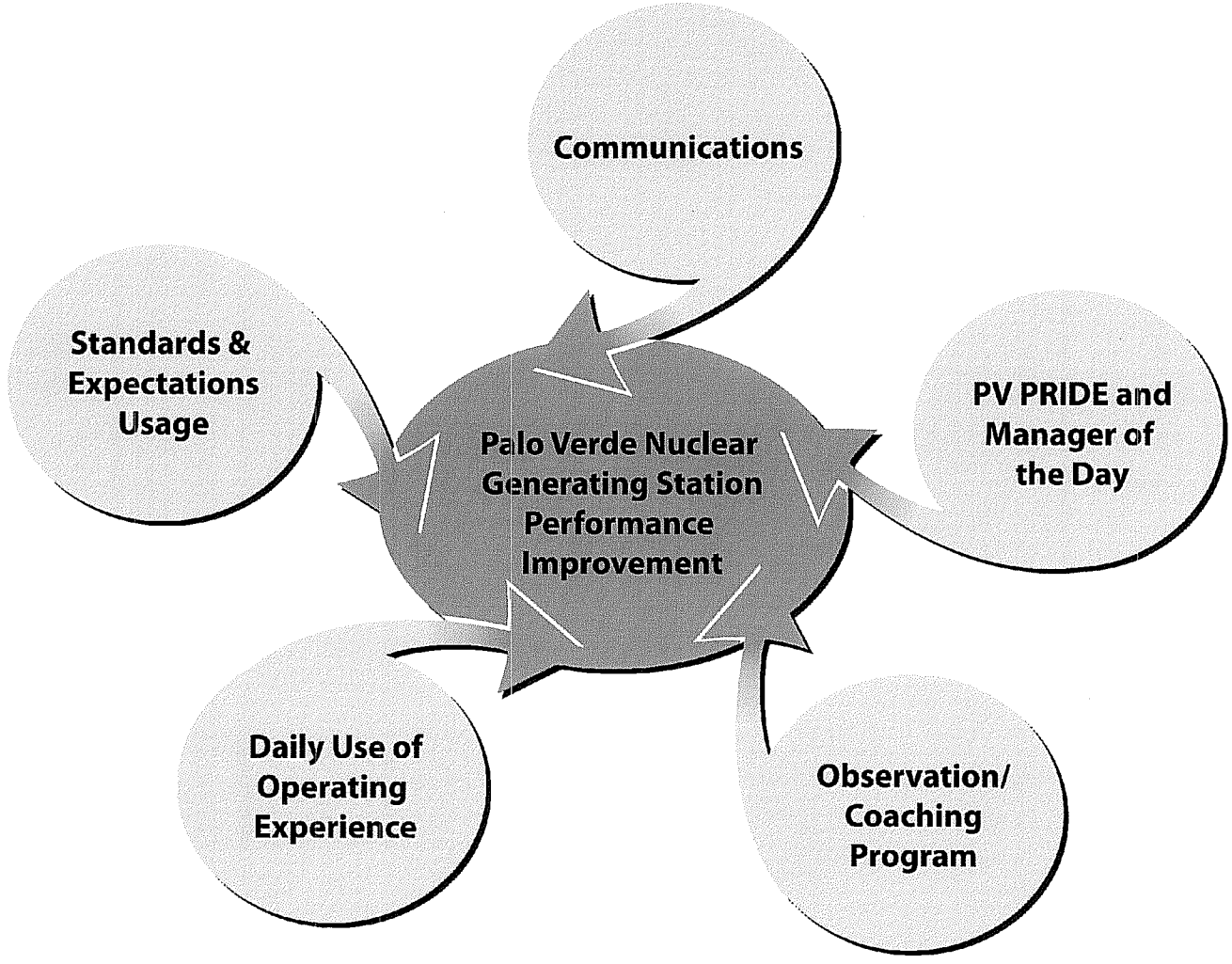
KPA-3 Problem Identification and Resolution: Self Assessment

- Corrective Actions *(In-Progress Activities)*
  - Governing Procedure
  - Required Training
  - Quality Review Board

Key Performance Area 4
Human Performance

Bill Smith
Dept. Leader, Performance Improvement
Grover Hettel
Director, Operations

KPA-4 Human Performance



KPA-4 Human Performance

- PV PRIDE
  - PRIDE – Positive Performance Reduces Incidents and Decreases Errors
  - Multi-discipline team
  - Involvement improved to 66 full and rotating members during 2R14
    - 1R13 – 4 members
    - 3R13 – 10 members

KPA-4 Human Performance

- PV PRIDE
  - Each member provided training on coaching, observations and use of error prevention tools prior to conducting field observations
  - PV PRIDE members conducted over 1250 quality observations during 2R14
  - Implemented "What have I done for SAFETY today" program in which over 1750 individual examples submitted by station and supplemental employees
  - PV PRIDE coordinated with the Manager of the Day to identify observation trends and to evaluate the days work schedule to focus on high risk activities

KPA-4 Human Performance

- Observation Program
  - Observations provide coaching of performance, of at risk and desired behaviors, as well as providing trending data
  - A "quality" observation is defined as an observation identifying at least one attribute which is rated as meets or exceeds expectation as well as at least one attribute which is rated as an improvement opportunity or below expectation

KPA-4 Human Performance

- Observation Program
  - 8081 quality observations performed during 3R13 in 112 days
  - During 2R14, 5904 quality observations were performed in 68 days
    - Of the 5904 total observations, 1858 quality observations were performed on the non-outage locations
    - 688 PVAR's written from observations
  - Trend data published in the Daily Operational Focus Meeting Report, the daily outage update and the weekly newsletter

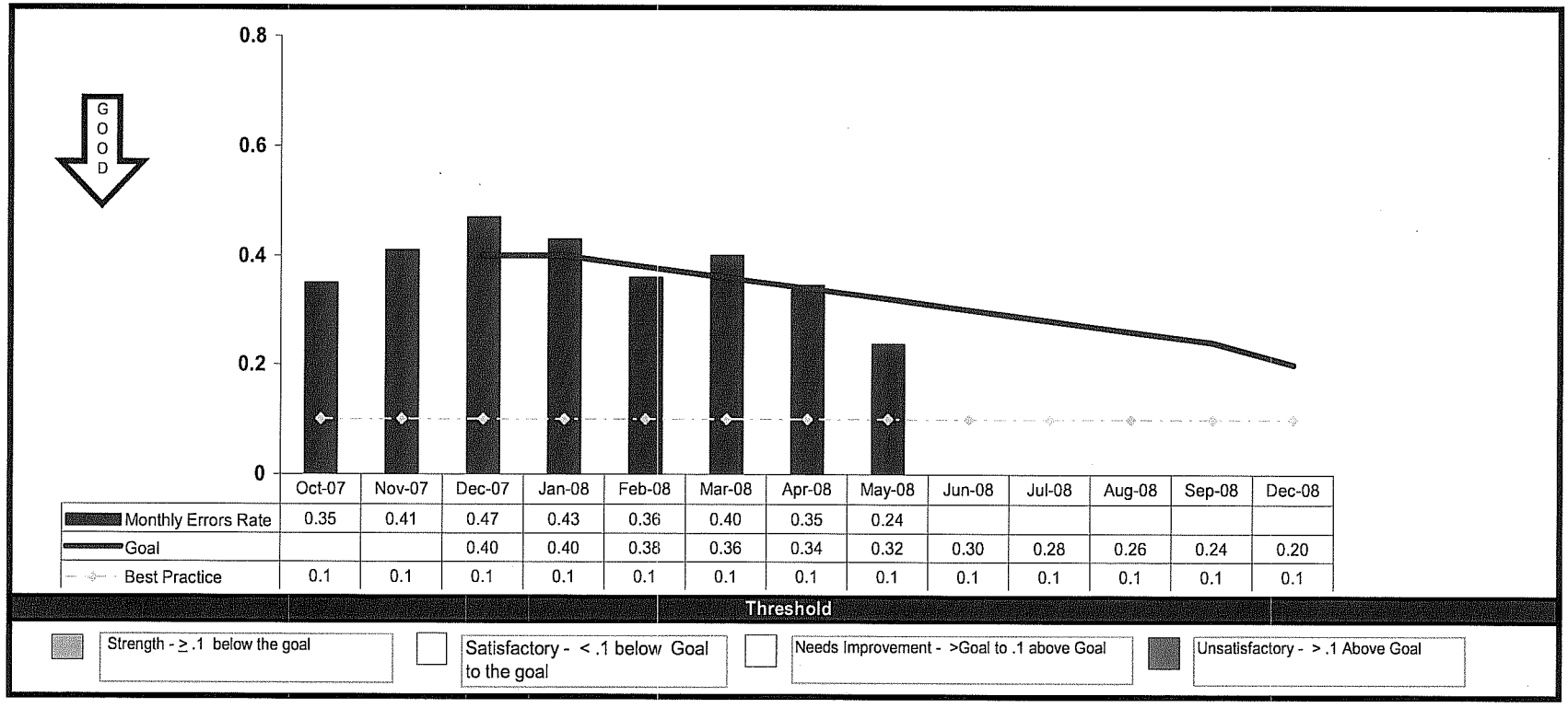
KPA-4 Human Performance

- Improvement Data

	3R13	2R14
Injuries	114	34
Slips, Falls	17	7
Dropped Items	51	17

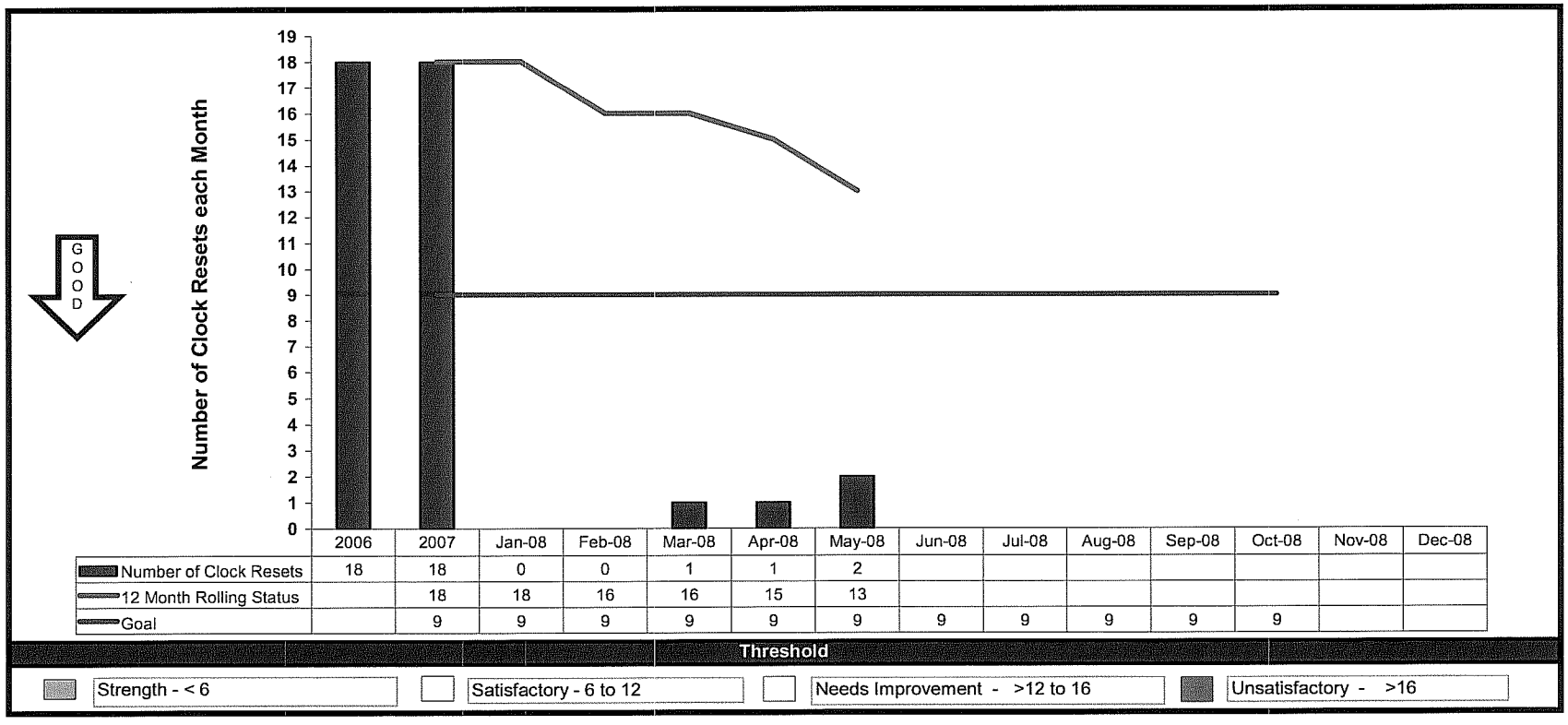
Industrial Safety Accident Rate
ISAR in 1R13 – 0.69
ISAR in 2R14 – 0.31

KPA-4 Human Performance
Consequential Human Error Rate



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Dec-08
Monthly Errors Rate	0.35	0.41	0.47	0.43	0.36	0.40	0.35	0.24					
Goal			0.40	0.40	0.38	0.36	0.34	0.32	0.30	0.28	0.26	0.24	0.20
Best Practice	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

KPA-4 Human Performance
Site Clock Reset



	2006	2007	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Number of Clock Resets	18	18	0	0	1	1	2							
12 Month Rolling Status		18	18	16	16	15	13							
Goal		9	9	9	9	9	9	9	9	9	9	9		

Threshold

Strength - < 6 | Satisfactory - 6 to 12 | Needs Improvement - >12 to 16 | Unsatisfactory - >16

Key Performance Area 5
Engineering Programs

Jeff Summy
Director, Nuclear Engineering

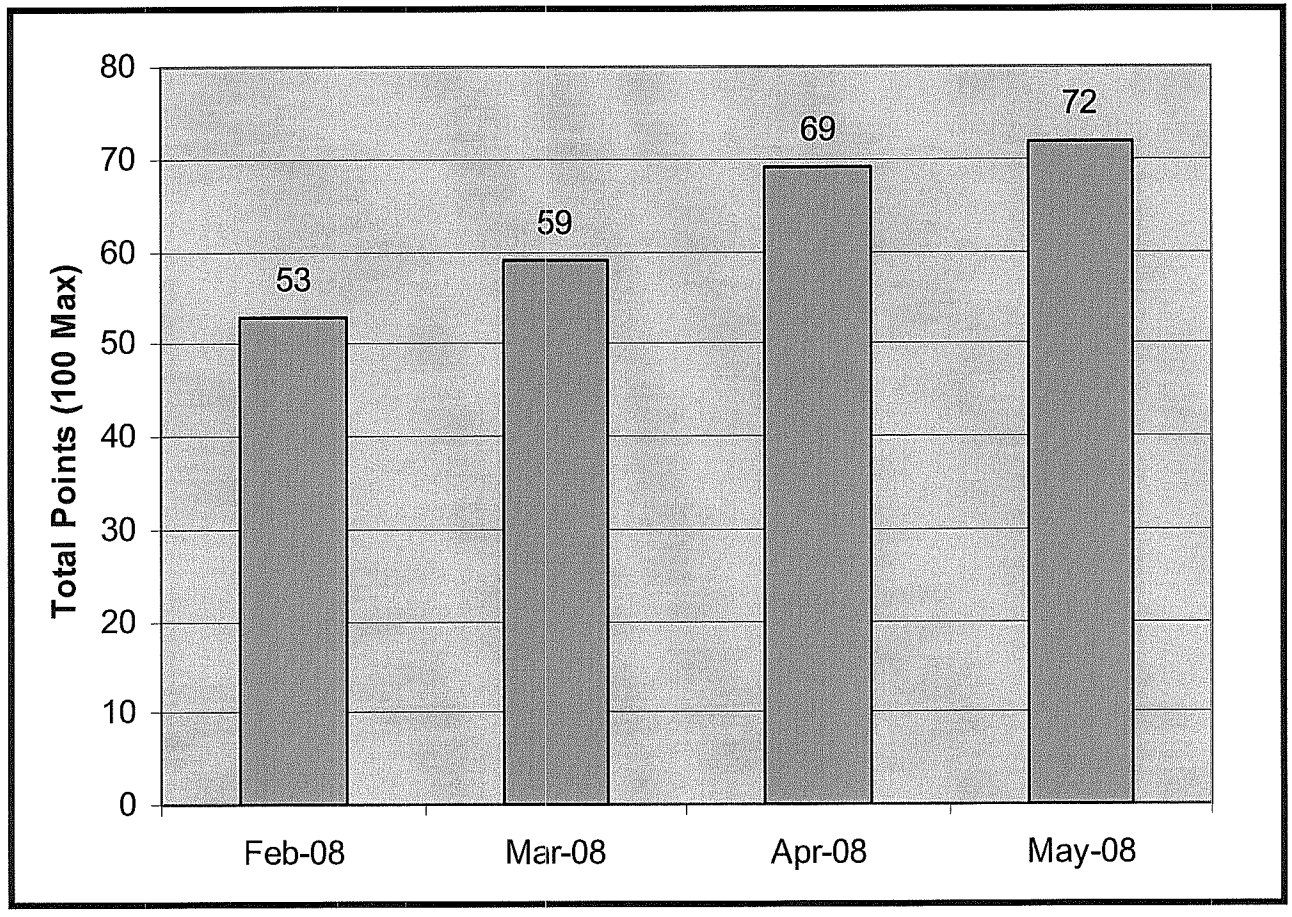
Engineering Programs

- Restructured engineering programs
  - Industry best practices / benchmarking
- New Engineering Programs Department
  - Focused on program management
  - "Program Managers" assigned / qualified
- Maintenance Rule Program consolidated
- Rigorous program self assessments
  - 9 completed year to date
  - 13 total by year end

Equipment Reliability

- Improved root cause evaluations
  - Training in root cause / problem solving
- Increased focus on red / yellow systems
  - Plant Health Committee Oversight
  - Improvement actions under CAP
- Focused Minor Mods Group
- Long range plan for continual improvement
- Improved Equipment Reliability Index
  - Considered "white" (satisfactory) in May

Equipment Reliability Index

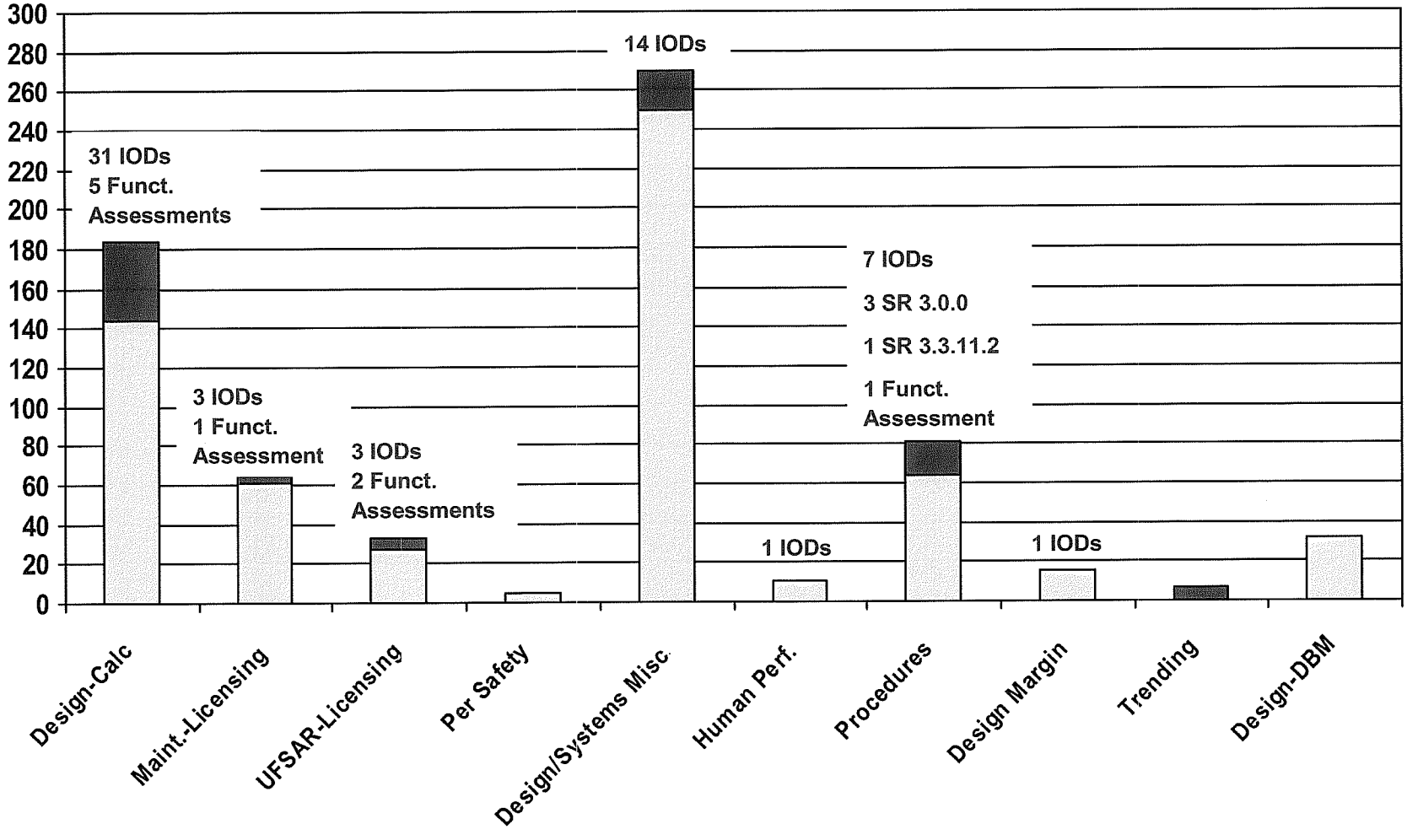


Design Control / Configuration Management

- Upgraded processes and procedures
  - Configuration Management
  - Temporary Mod / Design Control
- Continued progress on Component Design Basis Review (CDBR)
  - "Time-critical" operator actions completed
  - 75 of 325 risk rated components completed
  - Project on schedule

704 CRDRs / PVARs as of 6/24/08

Blue = ODs/Functional Assessments/Personnel Safety (~10%)



Technical Rigor

- Improved quality / timeliness of Operability Determinations
  - Engineering Fix It Now (EFIN)
  - Increased training
  - Improved interface with Operations
- Improved troubleshooting process
  - Shift Manager determines level
  - Problem solving training (K-T)

Key Performance Area 6
Equipment Evaluations

Louis Cortopassi
Plant Manager

KPA-6 Equipment Evaluations

- Review of selected documents reflecting decision-making between 2002 and 2007 (In-progress activities)
  - Equipment failure causal evaluations performed on the risk significant safety systems
  - Preventive maintenance scheduling

KPA-6 Equipment Evaluations

- Operability Determinations (OD)
  - Daily OD Review Board in effect
    - Board provides additional oversight and feedback to Shift Managers in "real time"
  - Completed procedure upgrade
  - Completed training
  - Reviewing active ODs written prior to April 2008

KPA-6 Equipment Evaluations

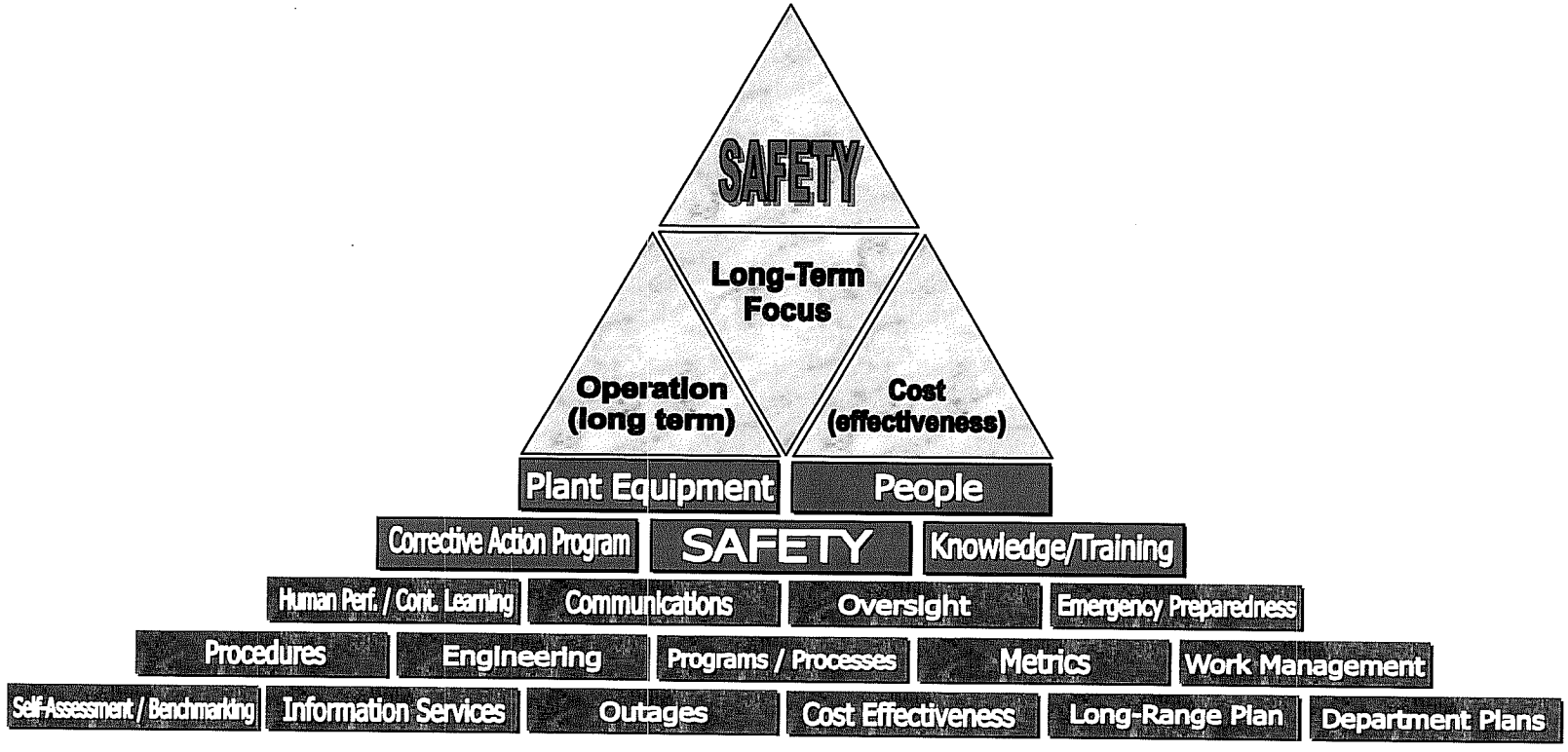
- Operating Experience (OE)
  - Completed validation and effectiveness review of selected Significant Operating Experience Reports
  - Identified gaps and integrated into Site Integrated Improvement Plan (SIIP)
  - Strengthened INPO relationship
  - Publishing applicable OE daily
  - Implemented detailed OE books for refueling outages

Closing Remarks

Randy Edington

Executive Vice President and Chief Nuclear Officer

Core Mission



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