

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

April 26, 2010

Randall K. Edington, Executive Vice President, Nuclear and Chief Nuclear Officer Mail Station 7602 Arizona Public Service Company PO Box 52034 Phoenix, AZ 85072-2034

### SUBJECT: MEETING SUMMARY FOR PUBLIC MEETING WITH ARIZONA PUBLIC SERVICE COMPANY

Dear Mr. Edington

On March 30, 2010, the NRC held a public meeting to present the NRC annual assessment of Palo Verde Nuclear Generating Station's safety performance for the period January 1 through December 31, 2009. Also discussed was the status of performance improvement actions to address the revised Confirmatory Action Letter items. The meeting was held at the Tonopah High School Auditorium in Tonopah, Arizona. The meeting attendance list, a copy of the NRC presentation, and a copy of the licensee presentation are included as Enclosures 1, 2, and 3.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management 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 the matter, we will be pleased to discuss them with you.

Sincerely,

/RA/

Ryan Lantz, Chief Project Branch D Division of Reactor Projects

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

- 1. Attendance List
- Nuclear Regulatory Commissions Slides
   Palo Verde Nuclear Generating Station Presentation

- 3 -

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

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

Mr. Douglas K. Porter, Esquire Southern California Edison Company 2244 Walnut Grove Avenue Rosemead, CA 91770

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

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

Chairman, Board of Supervisors 301 W. Jefferson, 10<sup>th</sup> Floor Phoenix, AZ 85040

Ronald A. Barnes, Director Regulatory Affairs Palo Verde Nuclear Generating Station MS 7638 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

Michael S. Green Senior Regulatory Counsel Pinnacle West Capital Corporation P.O. Box 52034, MS 8695 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. James Ray Public Service Company of New Mexico 2401 Aztec NE, MS Z110 Albuquerque, NM 87107-4224

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

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

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

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 Chief, Technological Hazards Branch FEMA Region IX 1111 Broadway, Suite 1200 Oakland, CA 94607-4052

Institute of Nuclear Power Operations (INPO) Records Center 700 Galleria Parkway SE, Suite 100 Atlanta, GA 30339 Electronic distribution by RIV: Regional Administrator (Elmo.Collins@nrc.gov) Deputy Regional Administrator (Chuck.Casto@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) Branch Chief, DRP/D (Ryan.Lantz@nrc.gov) Senior Project Engineer, DRP/D (Don.Allen@nrc.gov) Senior Resident Inspector (Ryan.Treadway@nrc.gov) Branch Chief, DRS/TSB (Michael.Hay@nrc.gov) RITS Coordinator (Marisa.Herrera@nrc.gov) Public Affairs Officer (Victor.Dricks@nrc.gov) Public Affairs Officer (Lara.Uselding@nrc.gov) Team Leader, DRP/TSS (Chuck.Paulk@nrc.gov) RITS Coordinator (Marissa.Herrera@nrc.gov) Acting Regional Counsel (Christine.Boote@nrc.gov) Congressional Affairs Officer (Jenny.Weil@nrc.gov) **OEMail Resource** Regional State Liaison Officer (Bill.Maier@nrc.gov) RA Administrative Assistant (Lucy.Owen@nrc.gov) DRA Administrative Assistant (Anita.Tannenbaum@nrc.gov) OEDO RIV Coordinator (Leigh.Trocine@nrc.gov) ROPreports.Resource@nrc.gov

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SUNSI Rev Compl.	🗹 Yes 🗆 No	ADAMS		🗹 Yes 🗆 No		Reviewer Initials		DBA
Publicly Avail	🗹 Yes 🗆 No	Sensitive		□ Yes	☑ No Sens. Ty		pe Initials	DBA
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PUBLIC MEETING ATTEND	ANCE af	tendance			
LICENSEE/FACILITY	Palo Verde Nuclear Generating S	clear Generating Station			
DATE/TIME	March 30, 2010 6:30 MST				
CONFERENCE LOCATION	Tonopah Valley High School 38201 W. Indian School Road Tonopah, AZ				
NAME (PLEASE PRINT)	ORGANIZATION	TITLE			
JOHN HESSER	APS	VP ENGINEERING			
Betty Day 40	APS	Comm Conseilt			
Mohamma Harbassian	APS	ENGINEERING			
MIKE POWER	APS	DIRECTOR, NEM			
Den Brandt	APS	CEO			
Rob Henry Marty Eroh	SRP	Site Rep.			
Marty Eroh	AP5	Site Rep. Env. Daft.			
HARVEY LESAN	APS	SAN. DEPT			
Charles Karlson	APS	Eng Section peopler			
Diana Bohr	APS	Comm. Rel			
AKKrainik	APS/PVN4S	Ucense Renewal Dept Idr.			
Scotto Zartal	APS PUNES	Des Dept. Lohr-Training			
Dwayne Carnes	APS PUNCS	Asst. Plant Myr			
SEARCH ANDREWS	APS /PVNGS	ASST PLANT MER			
JEANNE COPSEY	APS/PVNUS	ASST PLANT MER ECP MANAGER			

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<b>PUBLIC MEETING ATTEND</b>	1	· · · · · ·		
DATE/TIME	Palo Verde Nuclear Generating Station March 30, 2010 6:30 MST			
CONFERENCE LOCATION	Tonopah Valley High School 38201 W. Indian School Road Tonopah, AZ			
NAME (PLEASE PRINT)	ORGANIZATION	TITLE		
M.Bail	WEF/APS	Plant Marager		
Donne Thomas	APS	Diractor, Executive Projects		
Dow Wheeler	APS	DC-PID		
Gary Shanker	APS	Dir Site Programs		
Fara Preshack	APS	Dir Site Programs Compliance Constant		
JOHN TRYLOR	EPE	owner 1-ep		
Dwight Mims	APS	VP Fig Attains / PH-Imp		
Jamie Livoesi	APS	Consultant Safety Cult		
Jun Compas	Westinghouse	Vice Resident		
MATTHEW BENAC	APS	DIRECTOR		
Larry Juhndry RUSTY STRAID	APS	Manager		
RUSTY STRAID	APS	LICENSING		
W. GEOVER HETTEL	APS	OFERATIONS		
Doug Coron	APS	Opereduins		
Zyan Kandani	Arizona Republic	Reporter		

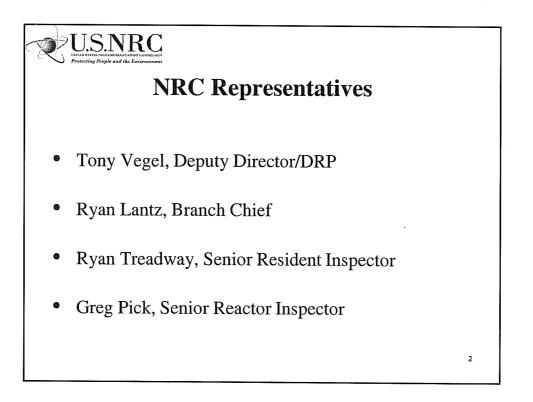
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PUBLIC MEETING ATTENDA	an a tha an				
	Palo Verde Nuclear Generating Station				
	March 30, 2010 6:30 MST				
CONFERENCE LOCATION	Tonopah Valley High School 38201 W. Indian School Road Tonopah, AZ				
NAME (PLEASE PRINT)	ORGANIZATION	TITLE			
Tim Healine	PWNGS, OCS Grp.	Team Member			
Mile Hooshmand	PUNGS, Engr	DL			
TErry Young	Palo Verde	Dir. Comm.			
Ton BARSUL	PL	SR EP COORS			
WALM Pierce	PV	EP Facilities			
MRay	PV	EDDIE			
Fred Cake	PV	CAP DL.			
Antonius Char	PV	Sile Finance Mar.			
JOHN GAFFINY	PV	R.P. PIRECTON			
Tom Weber	PV	DL Neg Alan			
Peter McSpurran	PV	Training			
LUAN NAUYEN	L.A. JEPT. OF WATER	POWER PROJECT ADMINISTRAT			
•	·				

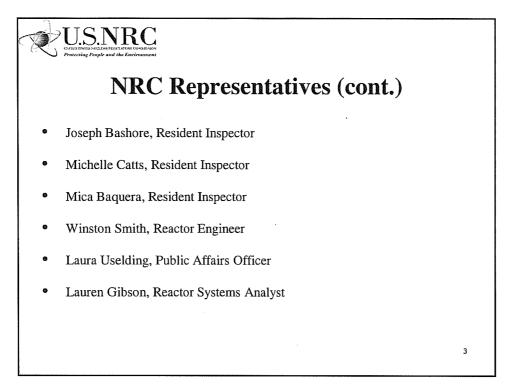


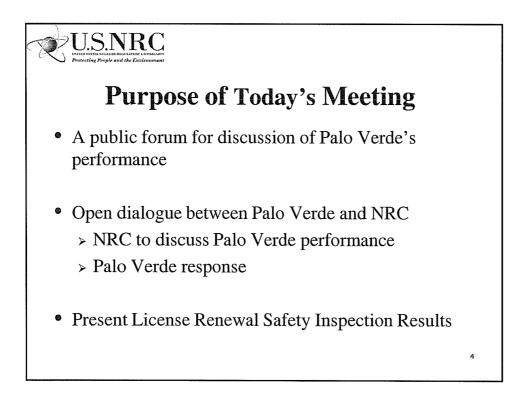
### Palo Verde Nuclear Generating Station Annual Assessment and Confirmatory Action Letter Status Meeting

Reactor Oversight Program - CY 2009

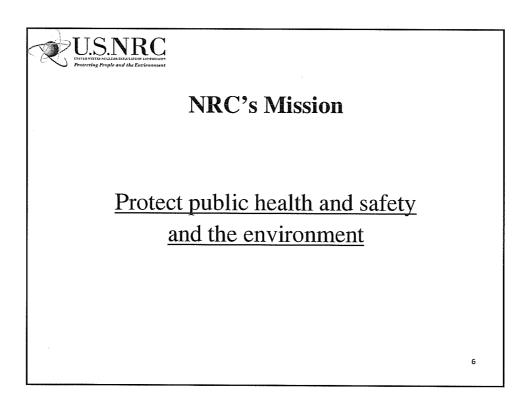
Nuclear Regulatory Commission - Region IV March 30, 2010







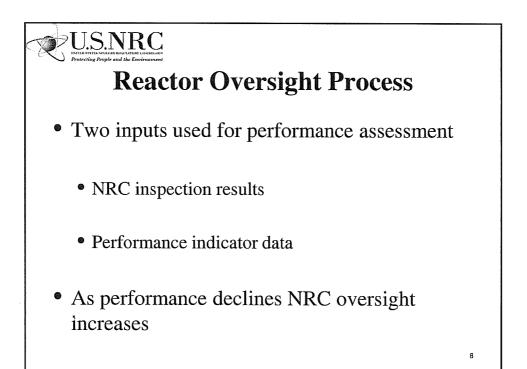
# VISING Strength Process Reactor Oversight Process NRC Oversight Activities Plant Performance Results Licensee Response NRC Closing Remarks License Renewal Inspection Results Question and Answer Session

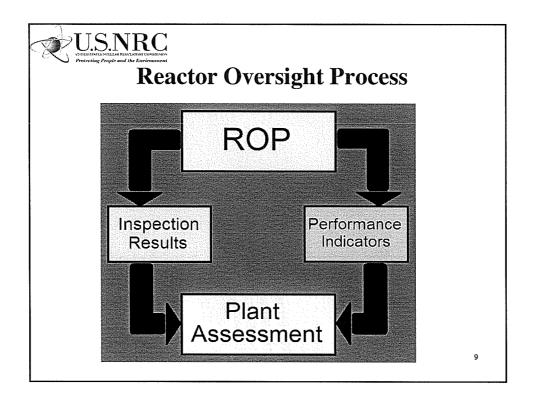


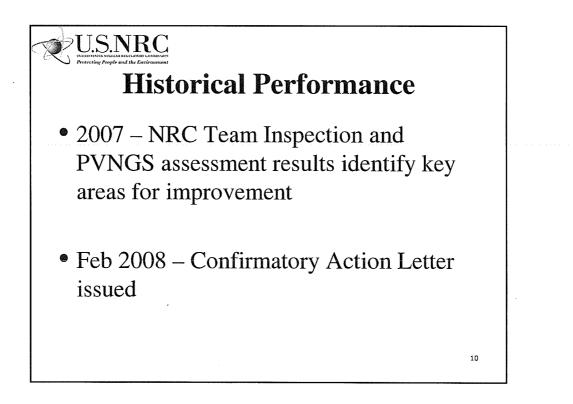


### NRC's Strategic Goal's

- <u>Safety</u>: Ensure adequate protection of public health and safety and the environment
- <u>Security</u>: Ensure adequate protection in the secure use and management of radioactive material





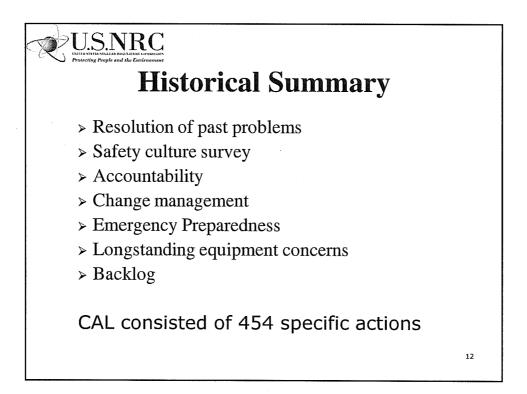


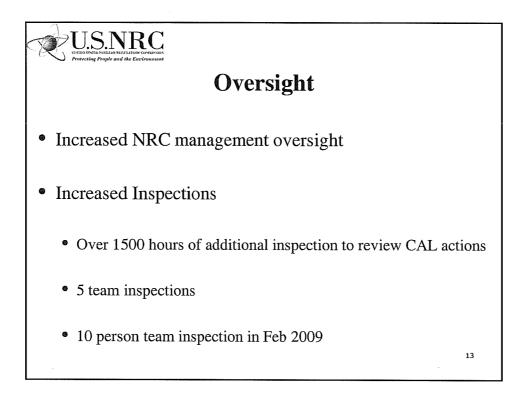
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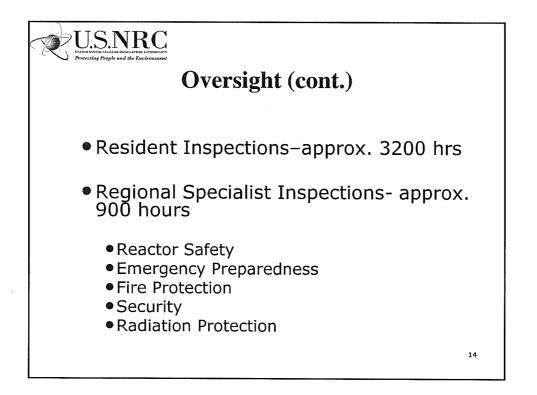
### **Confirmatory Action Letter (CAL)**

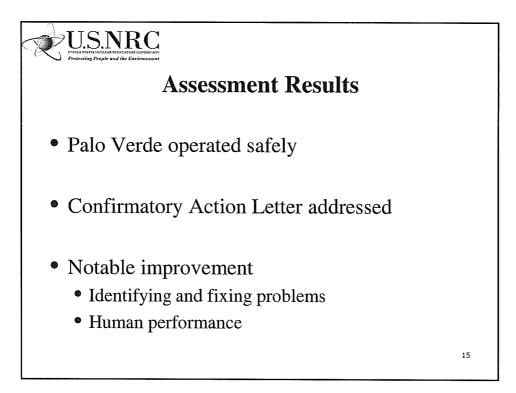
• 12 key performance areas required improvement

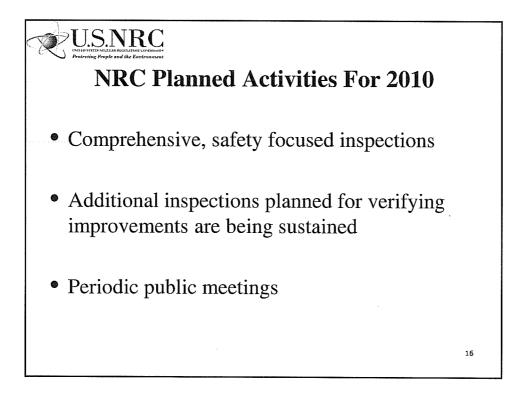
- > Yellow finding voided ECCS piping
- > White finding emergency diesel failure
- > Problem identification and resolution
- > Human performance
- > Engineering programs











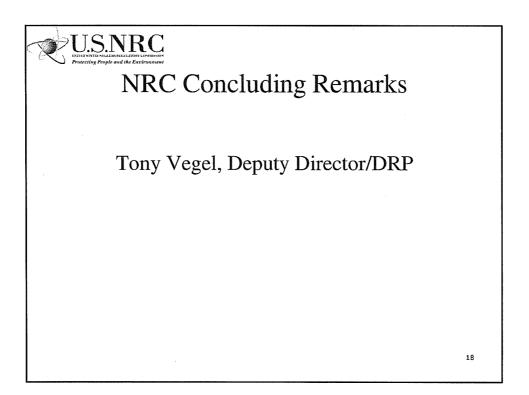


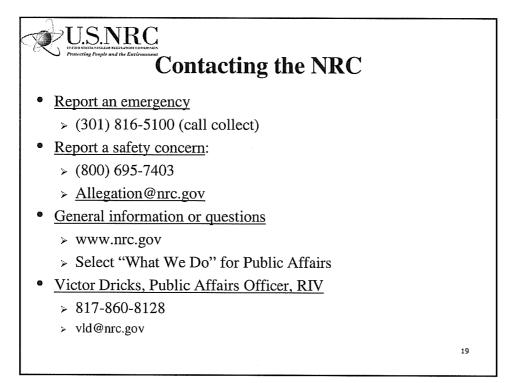
### Licensee Response and Remarks

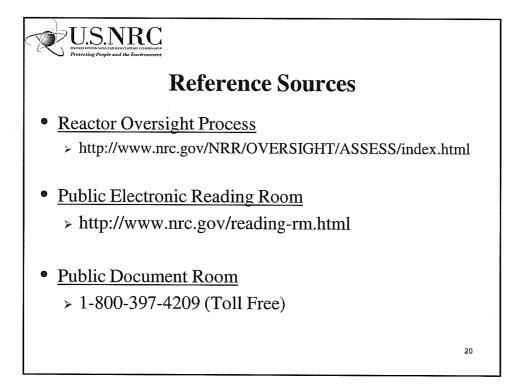
Randall Edington Senior Vice President, Nuclear

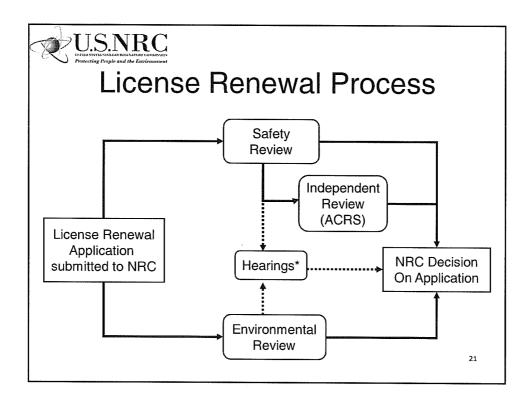
and

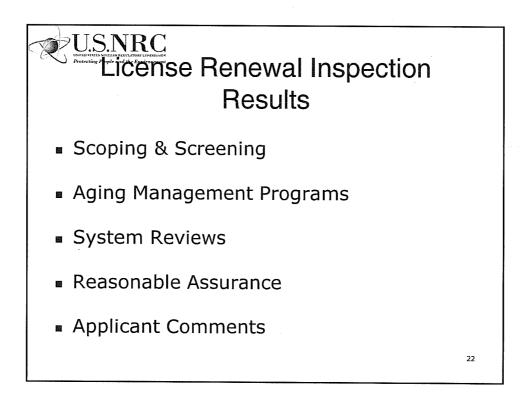
Chief Nuclear Officer Arizona Public Service Company





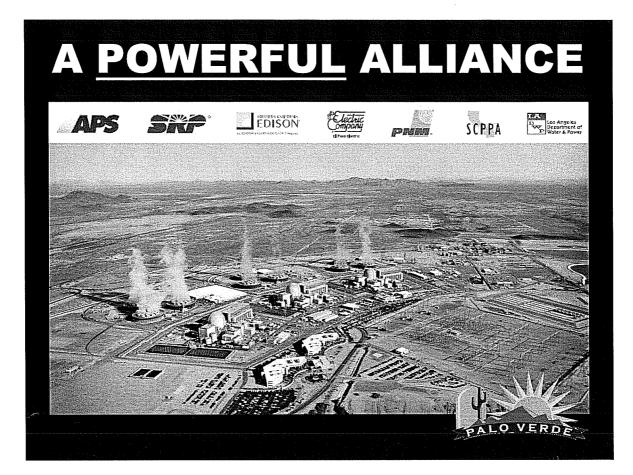








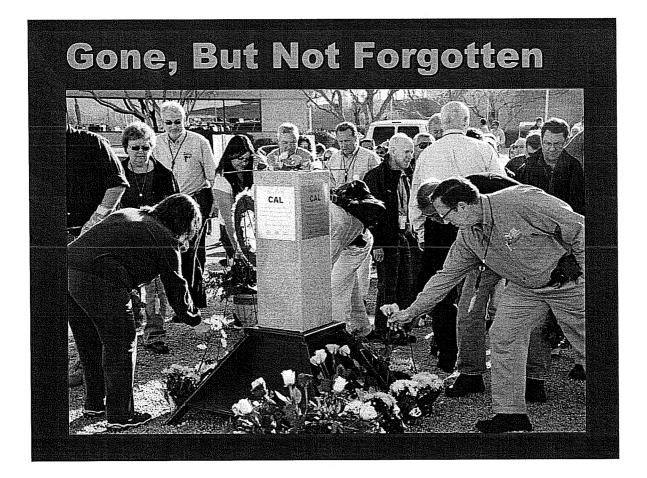
Questions and Answers

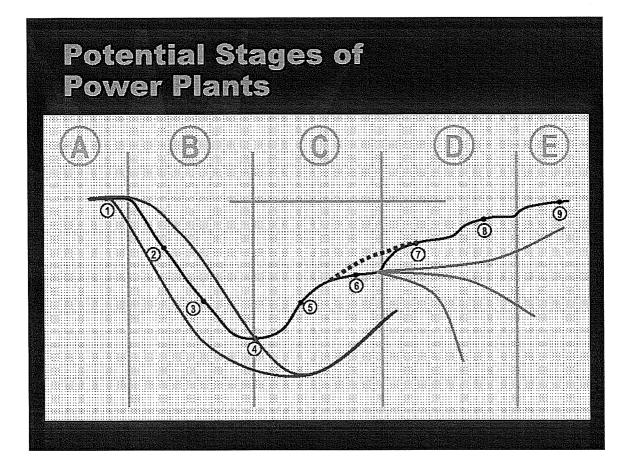


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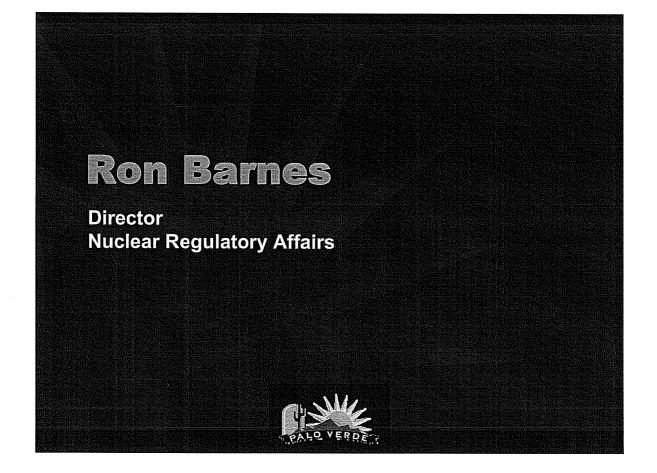




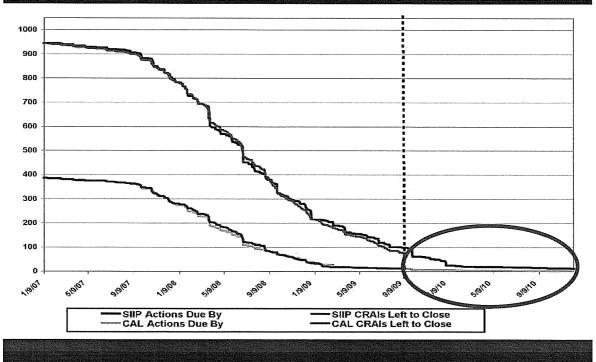


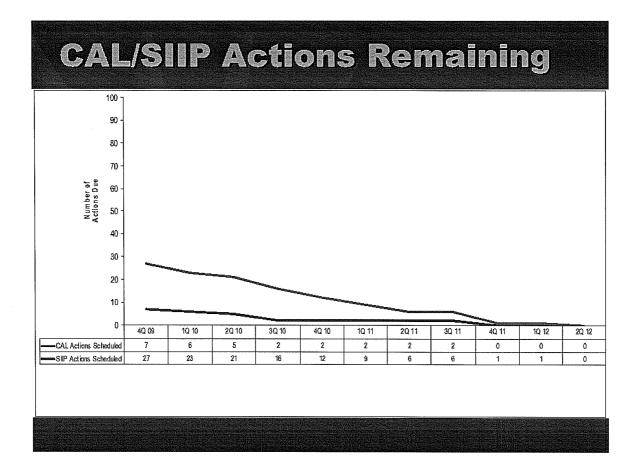














### **Safety Net Processes**

- Operability Determination Daily Challenge Boards
- Closure Review Boards
- 100% CRDR Closure Reviews
- Engineering Product Review Boards
- Effectiveness Review Challenge Boards

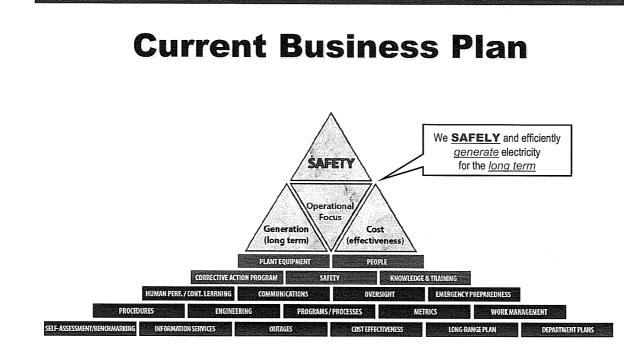
### **Transition to Beyond CAL** Sustaining Continuous Improvement

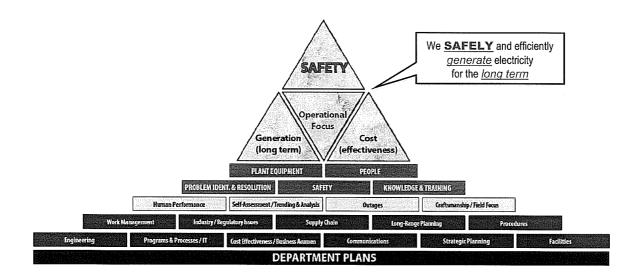
### NRC Post-CAL Follow-up Inspection

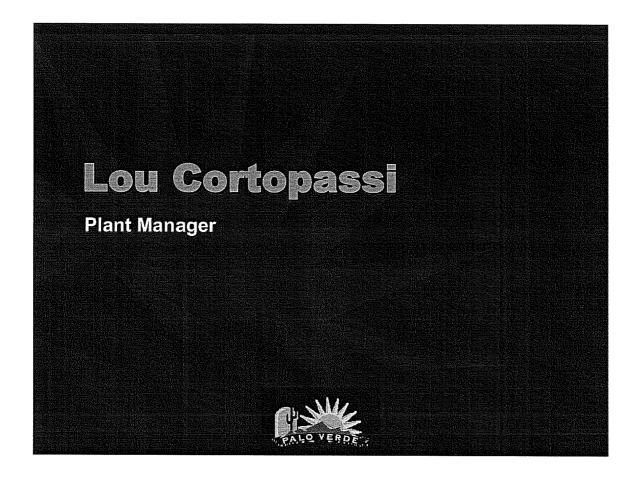
- No findings identified
- Several observations noted

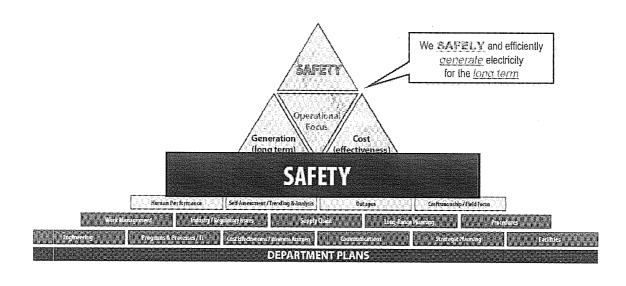
### Post-CAL Self-assessment

- Volume / Priorities
- Human Performance
- Outages









# <u>SAFETR</u>

### Nuclear

- Shutdown Risk Assessment
- Mitigating System Performance Index

### Industrial

Voluntary Protection Program



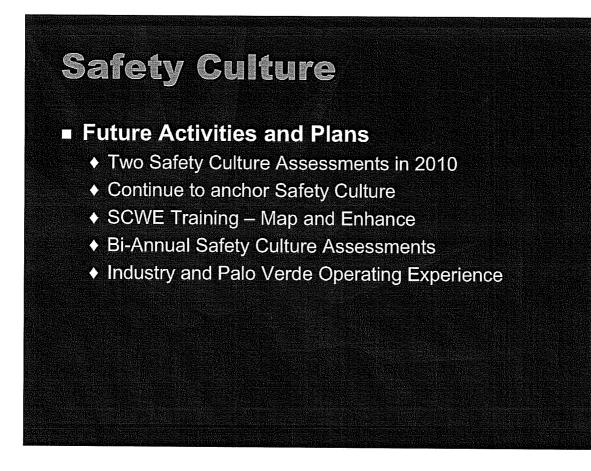
Voluntary Protection Programs An OSHA Cooperative Program

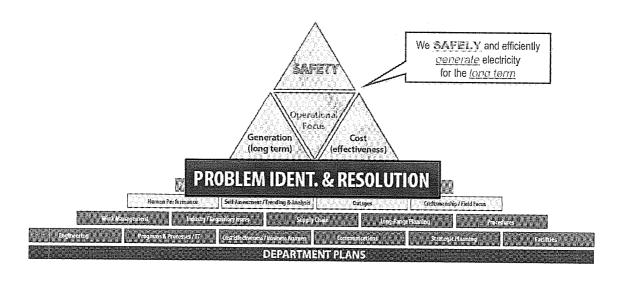
# <u>SARETN</u>

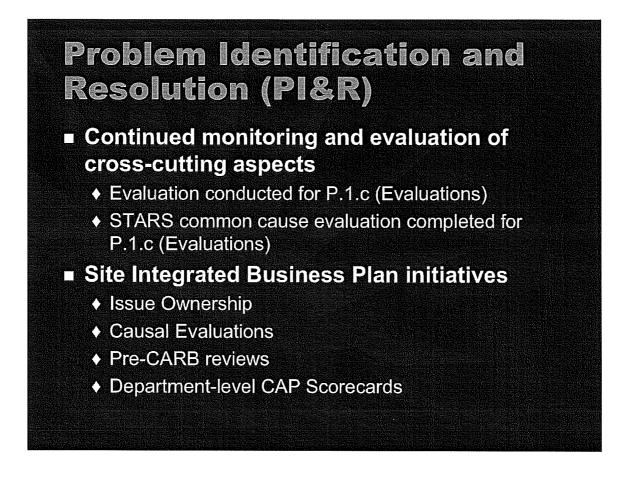
- Nuclear
  - Shutdown Risk Assessment
  - Mitigating System Performance Index
- Industrial
  - Voluntary Protection Program
- Radiological
  - Line engagement in ALARA planning
- Safety Culture

# **Safety Culture**

- Past Activities and Status
  - Significant improvement in 2008 and 2009
- Present Activities and Status
  - Safety Culture Review Group
  - SCWE training for Leaders and Vendors
  - Improvement actions into Department Plans





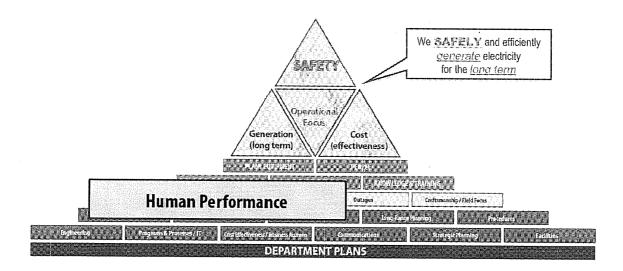




# Self-Assessment / Trending and Analysis

- Self-Assessment Manager / organization
- Two-year Self-Assessment schedule
- Integrated Performance Assessments
- Self-Assessment Review Board
- Improving Trending and Analysis

# 2010-2013 Business Plan



# Human Performance

### Fundamentals

- Leader Oral Boards
- Procedure Use and Adherence, Status Control, Clearance and Tagging, Verifications, Communications

### Observation Program

- One-over Leader Reviews for Quality
- Trending of areas for improvement at department level

### Coaching

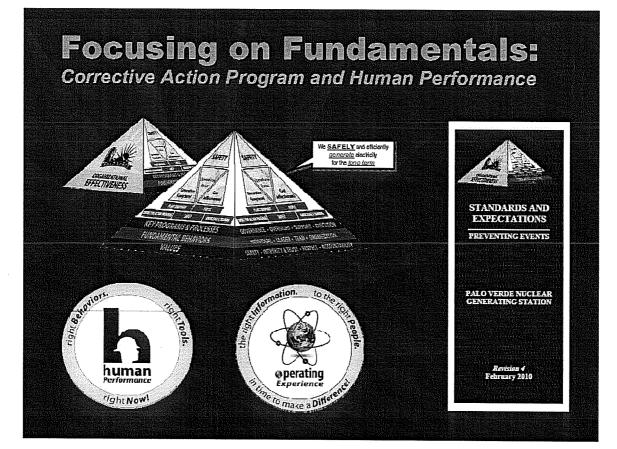
Coach-the-Coach training

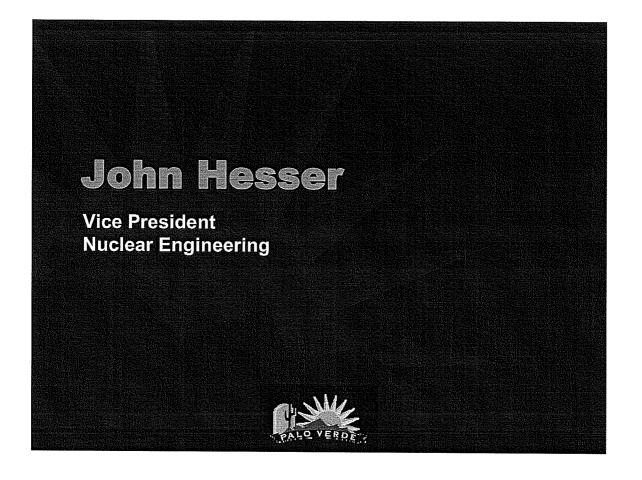
### Use of the Tools

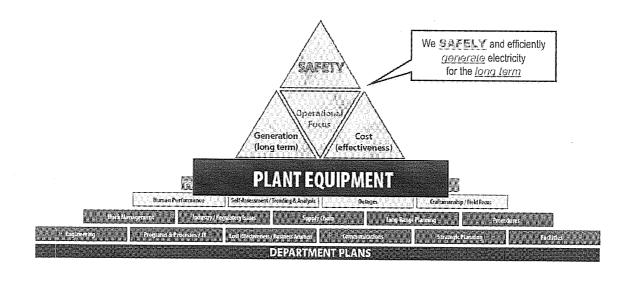
Standards and Expectations Booklet

### Systematic Trending and Analysis

Integrated Performance Assessments

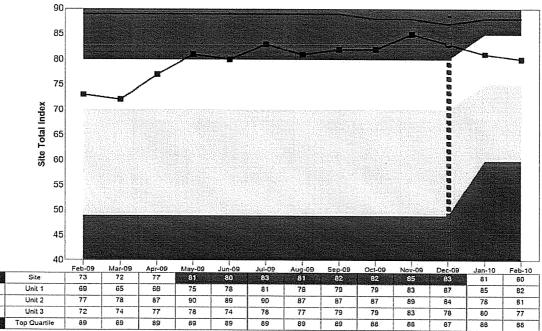


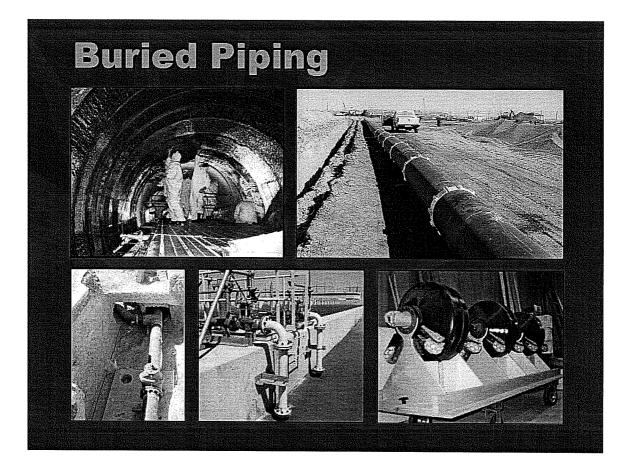




and the second s	A S		TOP 10		CHINI	CAL	Issu	ES									
Site Top 10								SPONSO									
	Site Top 10 Issues			COMMENTS													
1. Spray Pond Chemical Addition and Filtration			Chemical addition comple				na Malantian da antina da antin	Dan Frey									
MSIV/FWIV Accumulator Margin     Letdown Control System Instability     Charging Pump Reliability     Flant Computer System Reliability			Main Steam and Feed Wat		and a state of the second s			Jim Taylar Mixe Colvin Jelf Summy Doug Coxon									
			Teflon packing installed, I	oosters removed f	rom letdown valves, l	oackpressure redu	ced										
			New plungers installed or	8 of 9 pumps. New	bladders being proc	ured and installed	by Feb 2011										
			CMC/COLSS upgrade inst	alled in 2R15, sche	duled for 1R15 and 3	R15											
6. PN System Invertor Reliability			PM tasks aligned with ind	ustry, Current setti	ngs changed in 3R14	2R15. scheduled	for 1R15	Dennis Swa									
7. Fuel Building Lighting (SAFETY)			Lighting improvement modification funded and scheduled for 2011 implementation														
B. Unit 2 Essentia	i Cooling Water Tube	Loaks	New Issue - Tube replac	ement in 2R16 (PV	AR 3446925)			Dwayne Carnes									
9. Feedwaler Hyd	Inazine Pump Improve	ment	Pump replacement modification in ZR16, 1R36, and 3R16														
10. Condenser Integrity			New Issue - Condenser action plan due 4-18-2010 (PVAR 3446918)														
Site Second	i Top 10 Issue	S															
11. Safety Injection System Venting Issues     12. Spray Pond Material Condition     13. Spray Pond Flow Margin Recovery     14. 140-foot Aux Building Ventilation Control		Alter SJ insulation to allow ultrasonic testing (~33% comp) Vent valves installation in 1R15/3R15/2R17 New Issue – Correct spray pond concrete degradation (PVAR 3446930)															
									Margin recovery design modifications being evaluated, PHC approval scheduled for April 2010								
		Action plan complete. Effectiveness review in progress PHC approved funding for Phase 1 design study – target 1R17 for first implementation New Issue – Valve and controls action plan due 4-18-2010 (PVAR 3446934) Refueling Water Tank modification in 1R15, 3R16, and 2R16 Automatic CEDM Timer Module (ACTM) Upgrade scheduled for 1R16, 3R16, and 2R17 QSPDS Plasma Display Unit replacement scheduled for 1R16, 3R16, and 2R17															
								15. Polar Grane Reliability     16. Steam Generator Blowdown System Reliability     17. Bornled Water Management / Gask Pit Leve: Indication     18. CEDMCS System Improvements     19. QSPDS Reliability									
20. EDG Excitation	n System Reliability											Automatic Voltage Regula	stor (AVR) upgrade	in 3R16, 2R17, 1R17			Jell Summ
EDG Loaks	ECCS Pump Oil Leaks										Liquid Radwast System Dogradation	e Cooling Tower Improvements	Si Check Valve	HPSI Pump Oil Level	Main Feedwater Pump Seal	Control Room Chart Recordars	Unit 1 BOP/ESF Sequenc
Target Rock SOV	EDG Fuel Oll Injection Pump										EDG K-1 Relay	EDG Governor	Containment Sump Screens	RCS Weld Overlays	85-Acre WRF Re-Line	Low-Pressure Turbine Rotor Replacements	Steam General Replacem
tarch 2010			We SATELY and efficien	the summary startically for the	Court Posts	A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O	and a second										

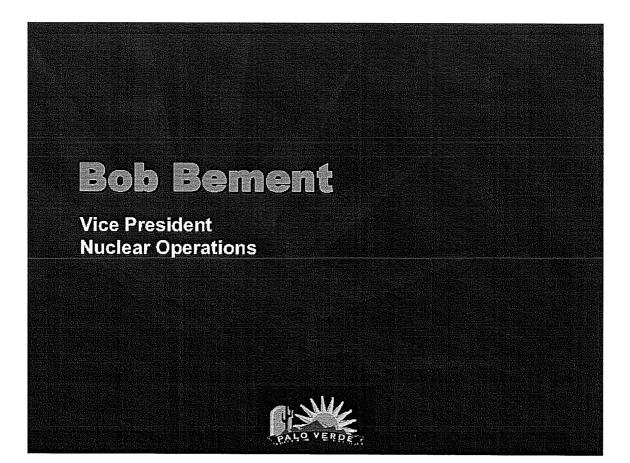
# **Equipment Reliability Index**

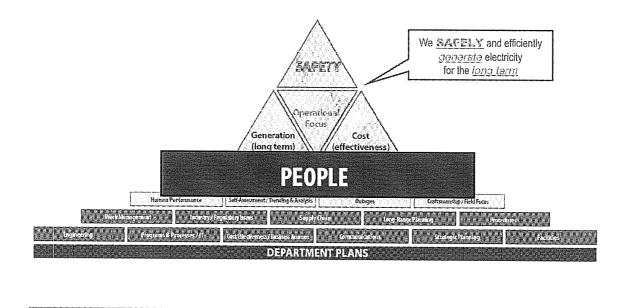










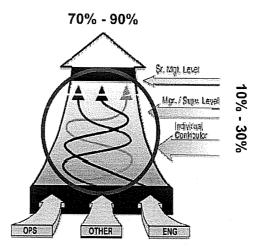


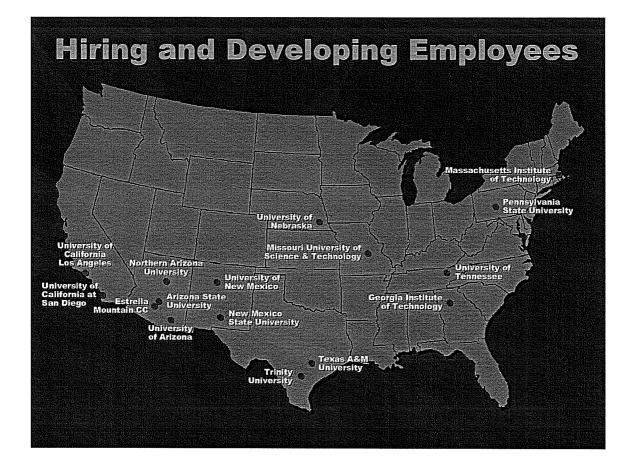
### Hiring and Development Model... Hiring for <u>OUR</u> Future

What do you want the organization to look like in 5 years, 10 years, 15 years?

### Planning for OUR future includes:

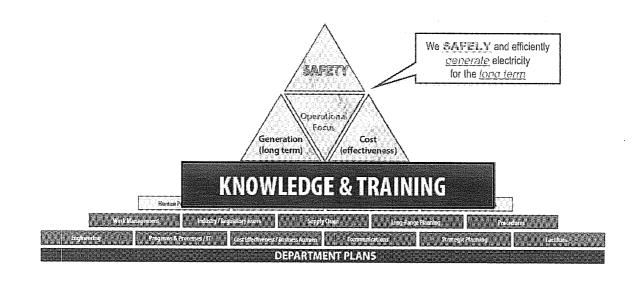
- Workforce Planning
- Initial and Targeted Hires
- Performance Management
- Development and Retention
- Compensation and Rewards
- Metrics / Effectiveness Reviews





### 

### 2010-2013 Business Plan

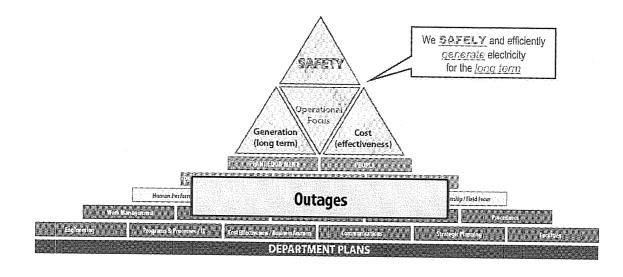


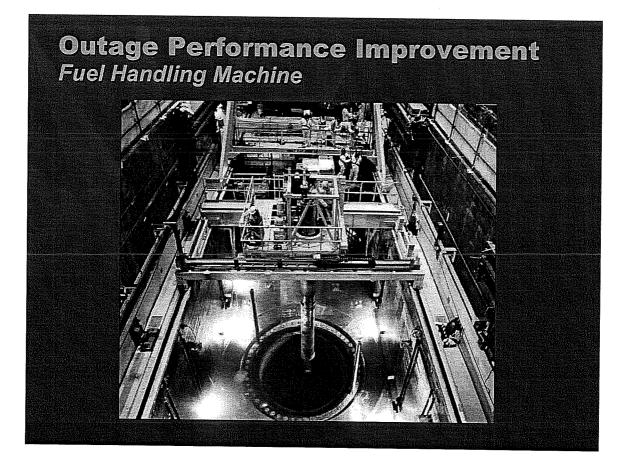
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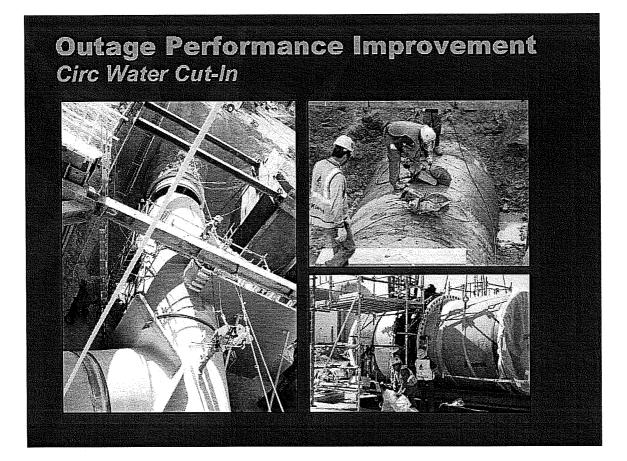
# **Knowledge and Training**

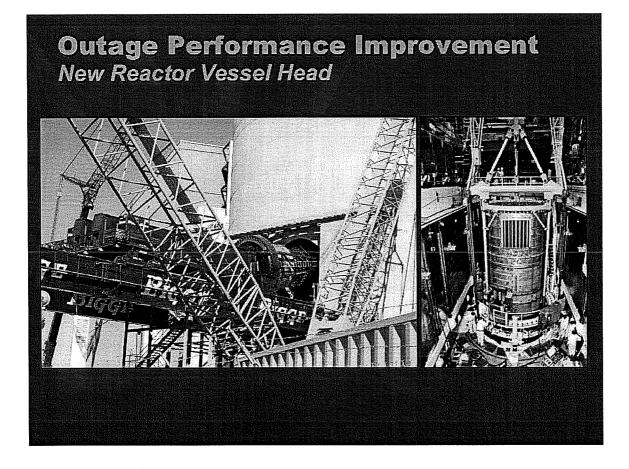
- Operator "pipeline"
- Engineering Legacy Program
- Maintenance Internship and Apprenticeship Programs
- Craftsmanship Training
- Engineering Excellence Training
- Four-week Systems Class
  - ◆ 10 classes to date with 193 students
- Summer Internships

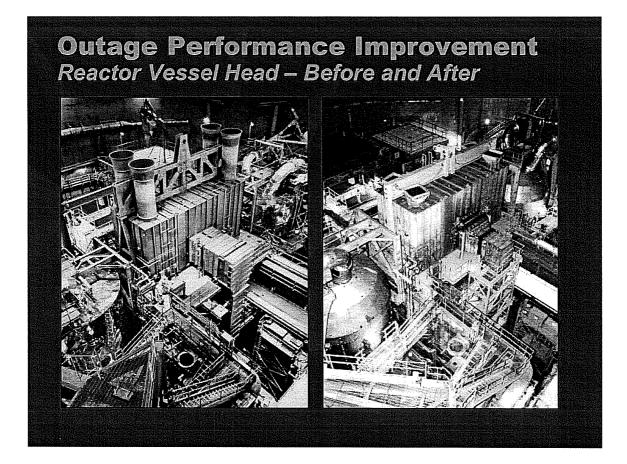












# So, where are we going from here?

- Top half in <u>all</u> areas and top quartile in most areas
- Select areas for top decile
- Areas for industry leadership:
  - ♦ <u>SAFETY</u>
  - ♦ Knowledge & Training
  - Craftsmanship (Field Focus)

