UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

June 22, 2007

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

SUBJECT: MEETING SUMMARY FOR THE PUBLIC MEETING OF JUNE 6, 2007

Dear Mr. Edington:

On June 6, 2007, the NRC held the first quarterly 95003 supplemental inspection status meeting with Palo Verde Nuclear Generating Station near the site in Tonapah, AZ. This meeting discussed the status of the licensee's performance assessment and improvement efforts in response to entering Column 4 of the NRC Action Matrix. This meeting included the formal entrance for the 95003 supplemental inspection. Officials from the APS Board of Directors and the Arizona Corporation Commission attended, as well as members of the public and the news media. The meeting attendance list, NRC presentation, and Palo Verde's presentation is enclosed.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be available electronically for public inspection in the NRC's 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/index.html (the Public Electronic Reading Room).

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

Sincerely,

for Neil O'Keefe, 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 Lists
2. NRC Presentation
3. Licencee Presentation

cc w/Enclosures:
Steve Olea
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

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

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

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

Scott Bauer, Acting General Manager
Regulatory Affairs and
Performance Improvement
Palo Verde Nuclear Generating Station
Mail Station 7636
P.O. Box 52034
Phoenix, AZ 85072-2034

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

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

John Taylor
Public Service Company of New Mexico
2401 Aztec NE, MS Z110
Albuquerque, NM 87107-4224

Geoffrey M. Cook
Southern California Edison Company
5000 Pacific Coast Hwy, Bldg. N50
San Clemente, CA 92672

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

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

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

Matthew Benac
Assistant Vice President
Nuclear & Generation Services
El Paso Electric Company
340 East Palm Lane, Suite 310
Phoenix, AZ 85004

Chief, Radiological Emergency Preparedness Section
National Preparedness Directorate
Technological Hazards Division
Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

Enclosure 1

MEETING ATTENDANCE	
LICENSEE/FACILITY	APS/Palo Verde
DATE/TIME	June 6, 2007; 6:30 PM (MST)
LOCATION	School District Board Room, Tonopah, AZ
NAME (PLEASE PRINT)	**ORGANIZATION/Member of public**
GEORGE ANDREWS	APS
KEVIN GRAHAM	APS
Greg Werner	NRC
Jared Nadel	NRC
Kent Chavet	APS
TERRY L. RADTKE	APS
FRED RIEDER	APS
HENRY DAY	APS
EDWARD O'NEILL	APS
Larry Johnson	APS
MICHAEL GRESSBY	APS
GAYLE SCHIAVONE	APS
Judy mellody	APS

MEETING ATTENDANCE	
LICENSEE/FACILITY	APS/Palo Verde
DATE/TIME	June 6, 2007; 6:30 PM (MST)
LOCATION	School District Board Room, Tonopah, AZ
NAME (PLEASE PRINT)	**ORGANIZATION/Member of public**
Tim Henline	APS / Local Resident
John Scott	APS
Scott Bauer	APS
Tom Hiltz	NRC
Mike Markley	NRC
Linda Ramsey	APS
Janet Burns	APS
Paul Reynolds	APS
Phil Ramka	Interested Person
MIKE RENFROE	APS
Rick Lane	APS
Jerry Young	APS
Bill Post	APS

MEETING ATTENDANCE

LICENSEE/FACILITY	APS/Palo Verde
DATE/TIME	June 6, 2007; 6:30 PM (MST)
LOCATION	School District Board Room, Tonopah, AZ
NAME (PLEASE PRINT)	**ORGANIZATION/Member of public**
MARK McGHEE	APS
Pam + Rex Miller	APS Community Adv. Panel (CAP)
Annabelle Shepland	
Marshann Dick	
Ruben Reyes	Rep. Grijalva
Ruben Guerrero	Rep Grijalva
Doug Henry	APS
BONNIE DILLER	RESIDENT
Charles Marschall	APS Consultant
Michael Sontag	APS

MEETING ATTENDANCE

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LOCATION	School District Board Room, Tonopah, AZ
NAME (PLEASE PRINT)	**ORGANIZATION/Member of public**
Rhea Beyle	APS
Eric Shouse	El Paso Electric
Mike Powell	APS
Mo Karbassian	APS
NICK ARDITO	APS
John Barns	Visitor
Jeanne Copsey	APS
RUSTY STROUD	APS
Bill Chapin	APS
MARIA LACAL	APS
Dave Fan	APS
Gary Shanker	APS
Bill Baer	APS

MEETING ATTENDANCE

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NAME (PLEASE PRINT)	**ORGANIZATION/Member of public**
Michael Green	APS
Randy Edington	APS
Michael Sueda	APS
Rob Henry	SRP
Willis Friar	Southern Calif Edison
Dwayne Carnes	APS
John Wood	APS
Tom Gray	APS
Paul Kirker	APS
Michael Perito	APS
Roger Broderick	APS
Mike Partridge	SAL
Steve Duca	ACC

Enclosure 2

Palo Verde Nuclear Generating Station Public Meeting

Discuss Palo Verde Performance Improvement Plan and Inspection Procedure 95003

Nuclear Regulatory Commission - Region IV

June 6, 2007

Purpose of Today's Meeting

- A public forum for discussion of Palo Verde's performance

- Open dialogue between Palo Verde and NRC

  - NRC and Arizona Public Service Company to discuss Palo Verde performance

Agenda

- Introduction
- NRC Discussion on Performance and Upcoming Activities
- Inspection Procedure 95003 Entrance Meeting
- Licensee Discussion on Assessment Efforts and Schedule of Associated Activities
- NRC Closing Remarks
- Question and Answer Session

NRC Representatives

- Bruce Mallett, Regional Administrator, Region IV
  - (817) 860-8100
- Tony Vegel, Deputy Director, Division Reactor Projects
  - (817) 860-8291
- Neil O'Keefe, Branch Chief
  - (817) 860-8269
- Greg Warnick, Senior Resident Inspector
  - (623) 393-3736
- Jim Melfi, Resident Inspector
  - (623) 393-3737
- Gregory Werner, Senior Project Engineer
  - (817) 860-8156
- Victor Dricks, Public Affairs Officer
  - (817) 860-8128

Inspection Procedure 95003 Entrance

- Intent of the Inspection

  - Perform an independent diagnostic review of programs and processes used by Palo Verde to operate the plant

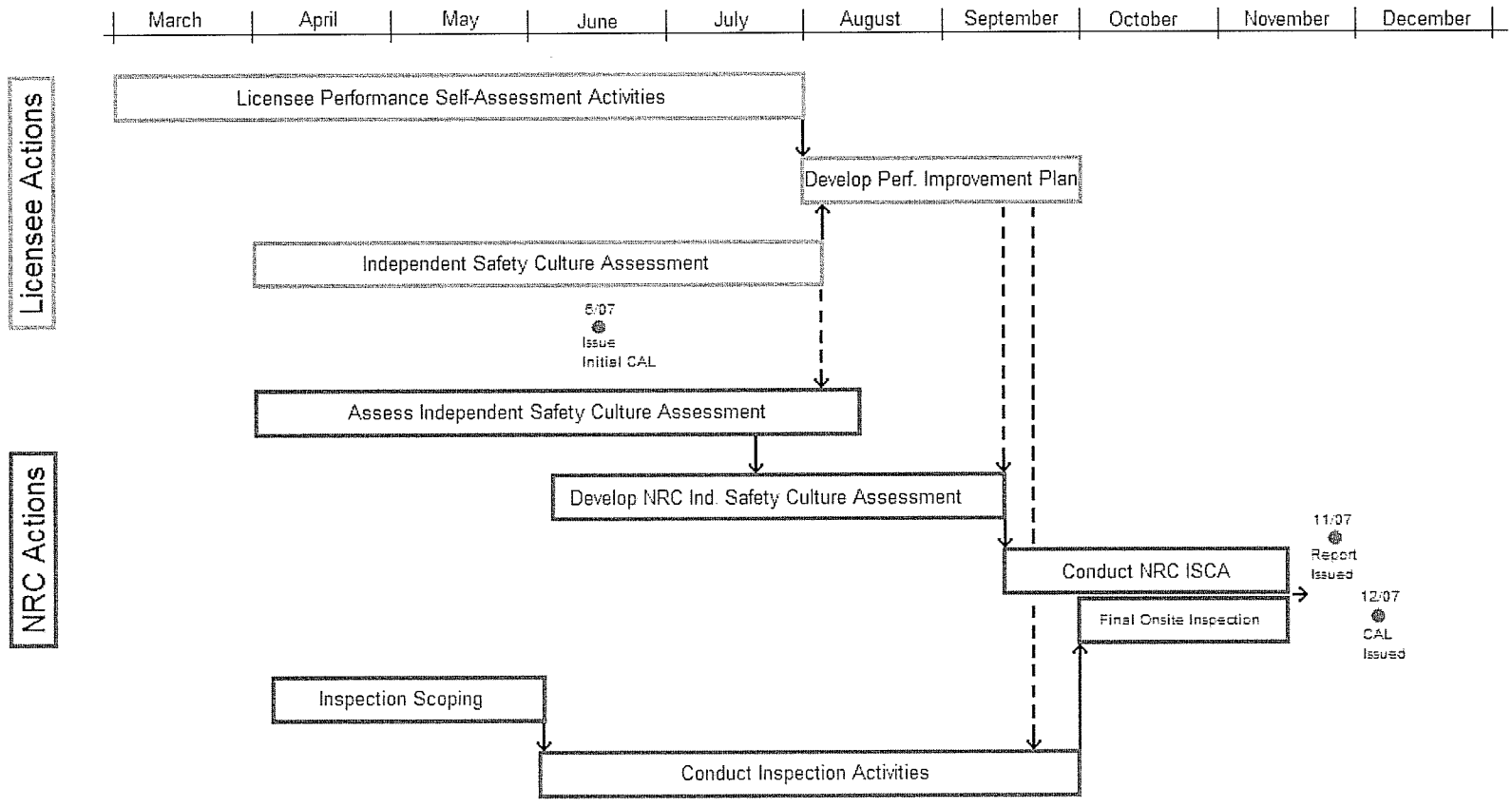
  - Determine extent of safety, organizational, and programmatic issues

Inspection Procedure 95003 Entrance (Cont)

- <u>Focus Areas of Inspection</u>
  - Review actions taken by PV to improve plant performance and determine if the NRC needs to take any additional actions
  - NRC Independent assessment of PV issues to determine:
    1. PV can identify, evaluate, and correct performance issues
    2. Adequacy of PV programs and processes to operate and maintain the units
    3. Causes and corrective actions for the two performance deficiencies – Yellow and White findings
    4. Status of site safety culture

Palo Verde
Planned 2007 Activities

Palo Verde 95003 Schedule



Path Forward

- Key NRC Activities for Monitoring PV Performance
  - Continue inspection activities associated with IP 95003
  - Issue Confirmatory Action Letter (CAL) to document licensee commitments
  - Conduct periodic meetings to discuss performance and status of improvement initiatives
  - Focus baseline inspections on daily plant operation and the two substantive crosscutting issues

Licensee Discussion

Randall Edington
Senior Vice President, Nuclear
and
Chief Nuclear Officer
Arizona Public Service Company

Enclosure 3

Performance Improvement & Sustainability

Randy Edington

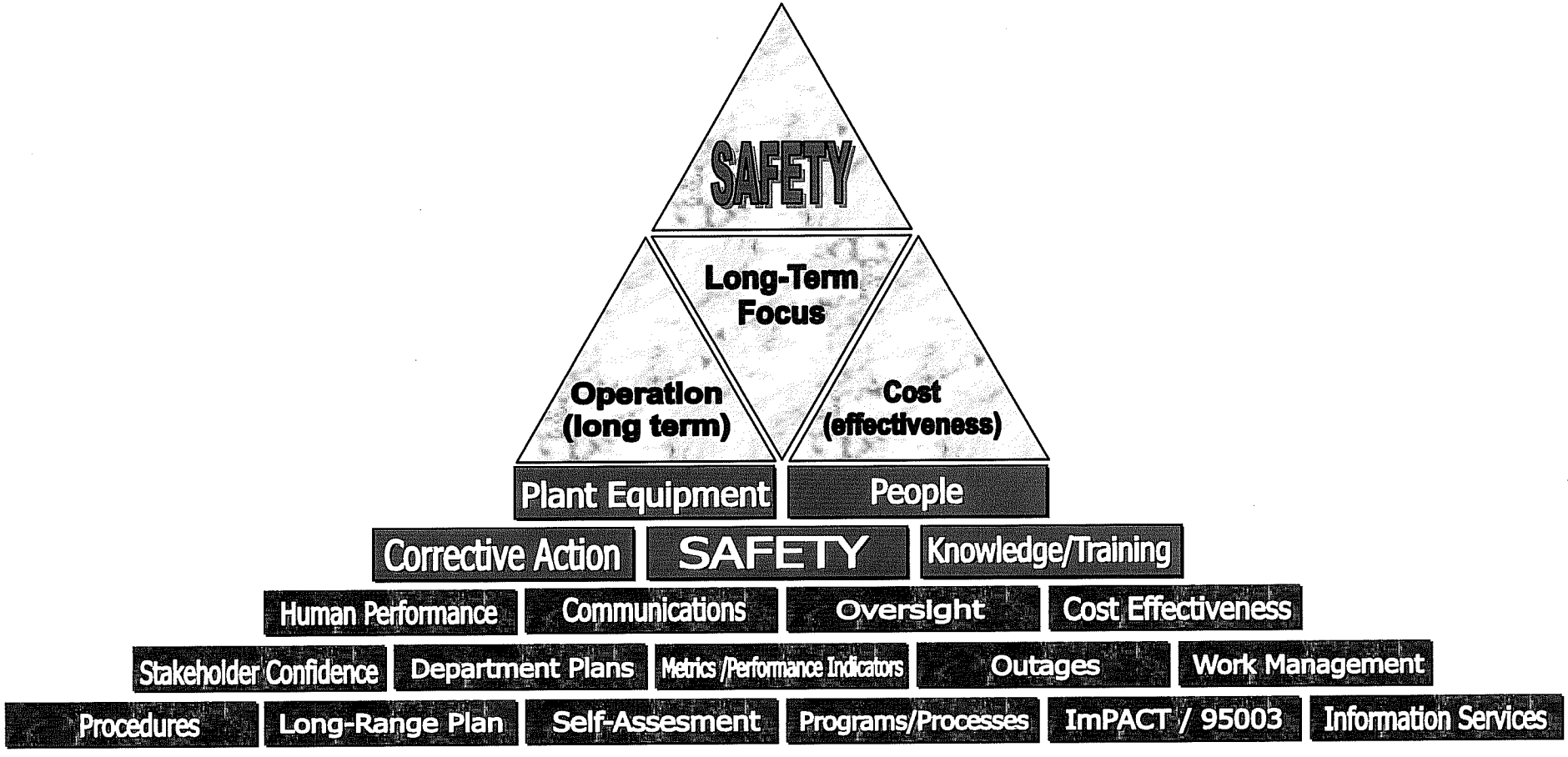
Senior Vice President - Nuclear
& Chief Nuclear Officer

June 6, 2007

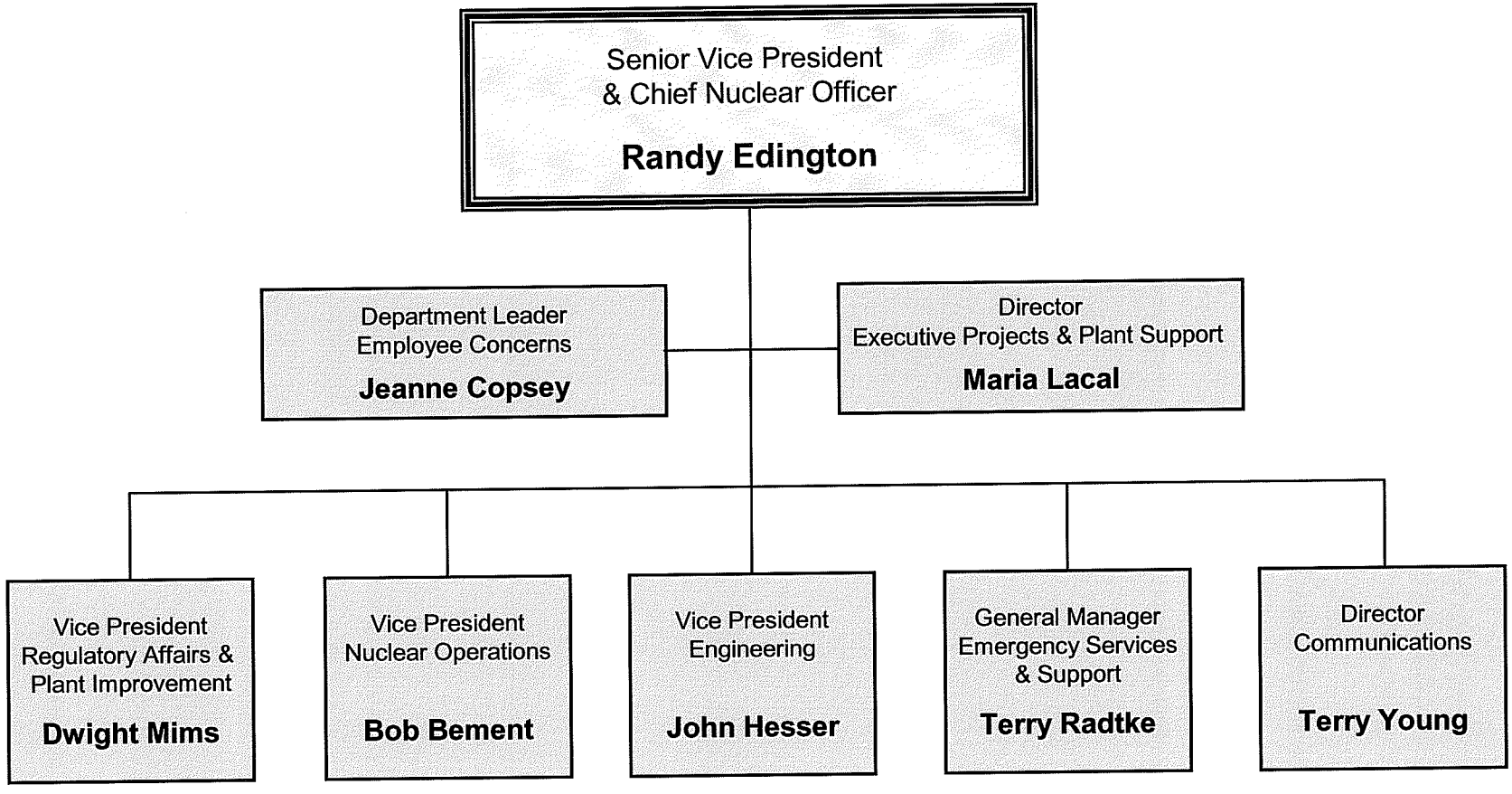
Our Focus

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

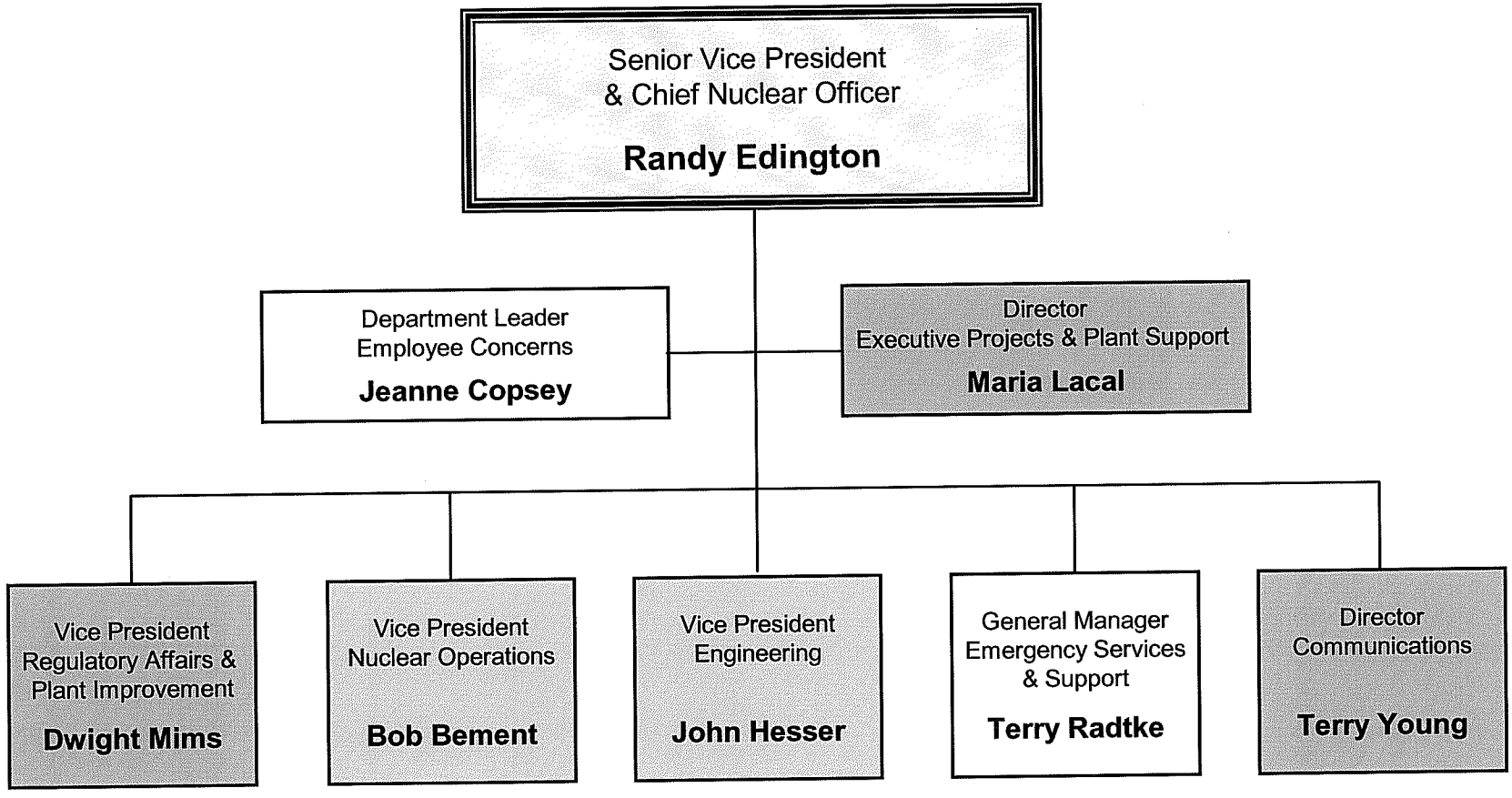
Our Foundation



Our Organization



Our Organization

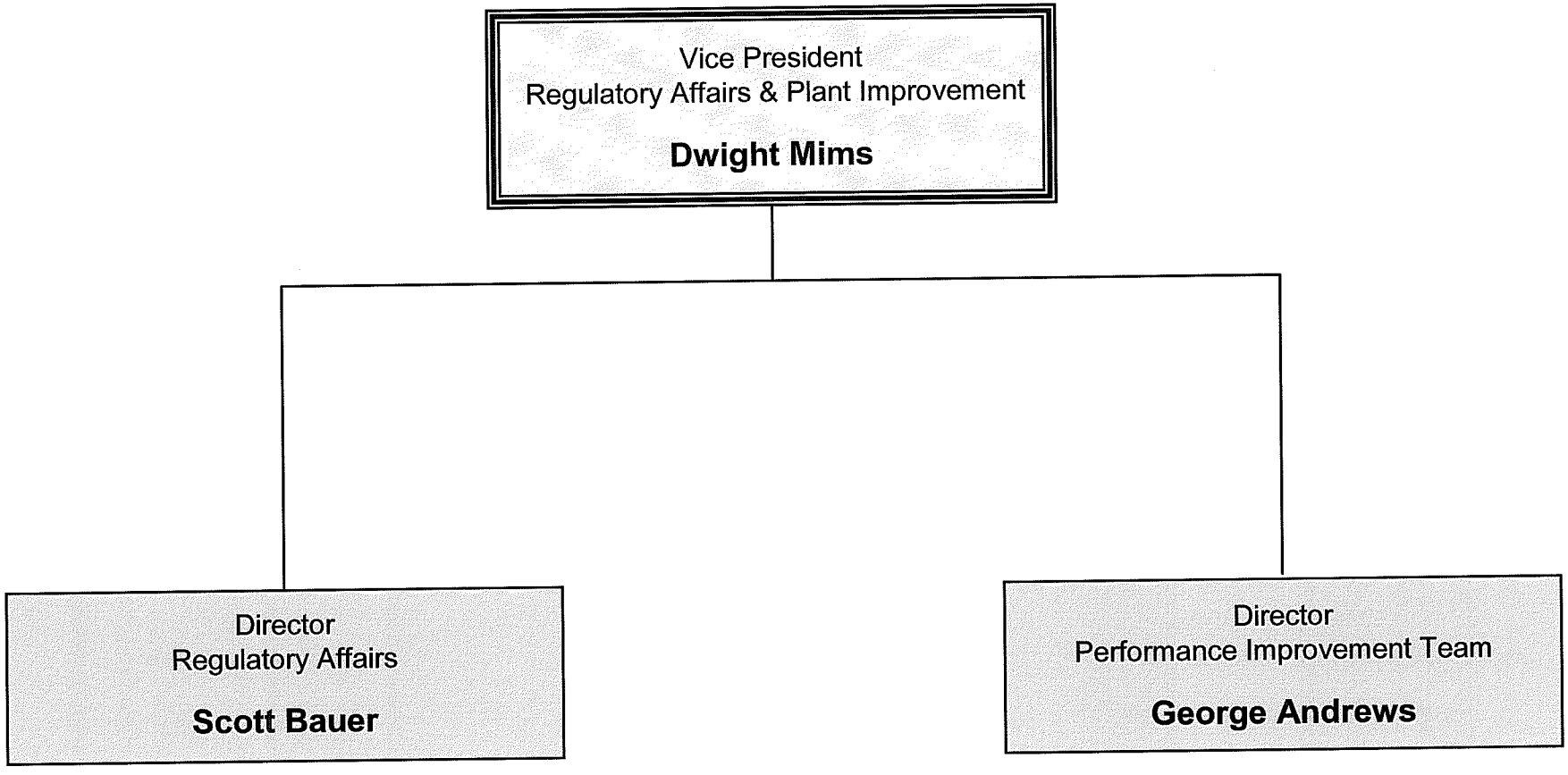


ImPACT Project

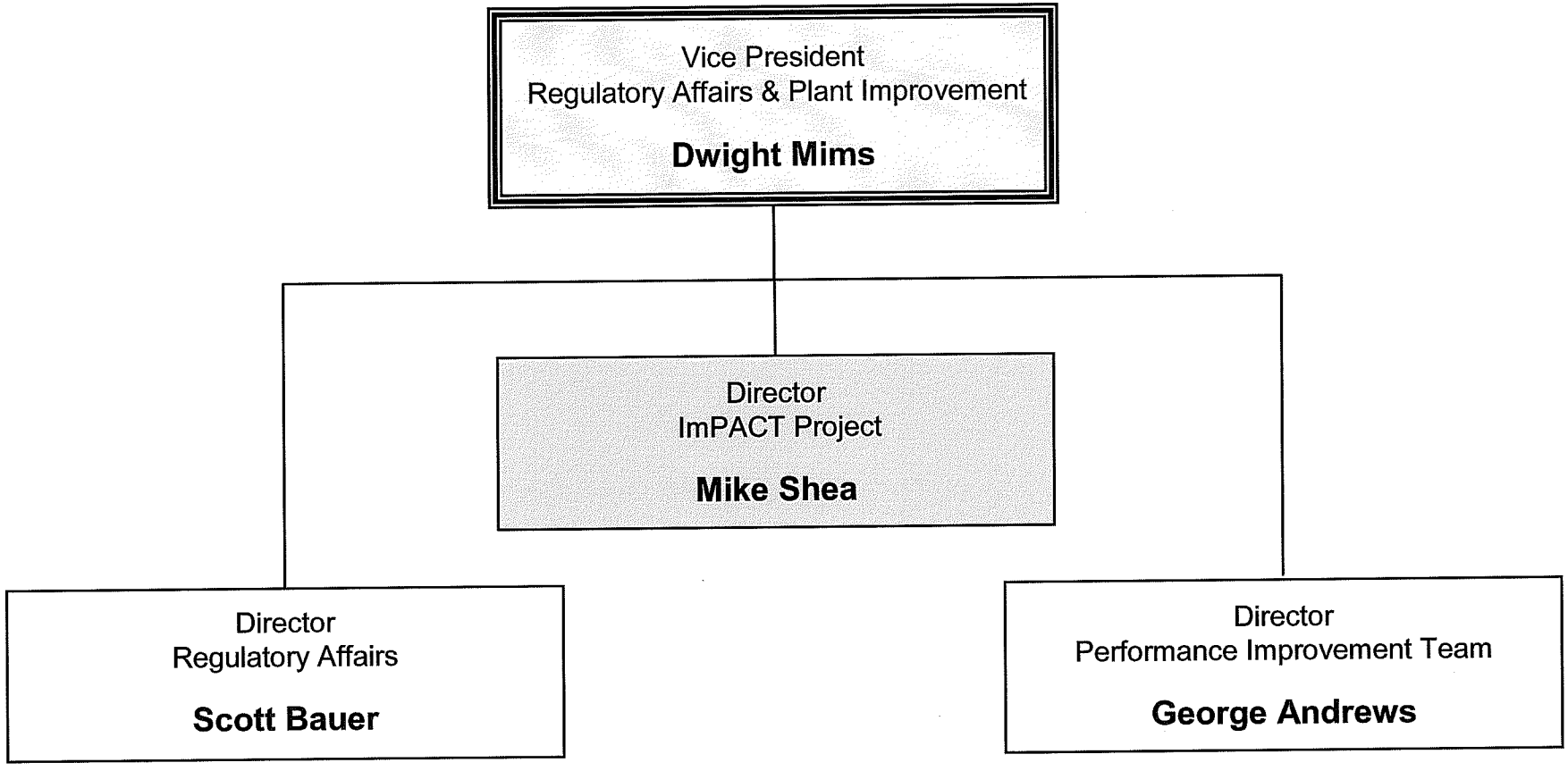
Dwight Mims

Vice President, Regulatory Affairs
& Plant Improvement

ImPACT Project



ImPACT Project



ImPACT Project

PURPOSE

- Improve site safety culture
- Identify issues and corrective actions to enable Palo Verde to improve performance
- Sustained performance for the long term

ImPACT Project

How is ImPACT different than previous performance improvement efforts?

- Focus on long-term, sustainable performance
- Organization & Process
  - Dedicated project team and facilities
  - Greater external expertise
  - Rigorous, broad, systematic approach to issue discovery and resolution
- Ownership, Alignment & Engagement
  - Broader cross-section of Palo Verde employees involved in assessments and reviews
  - Organizational involvement in evaluation and action plan development
  - Frequent communication with all levels of organization to ensure alignment and engagement
- Incorporation into Site Integrated Improvement Plan
  - Stronger review and closure process

ImPACT Project

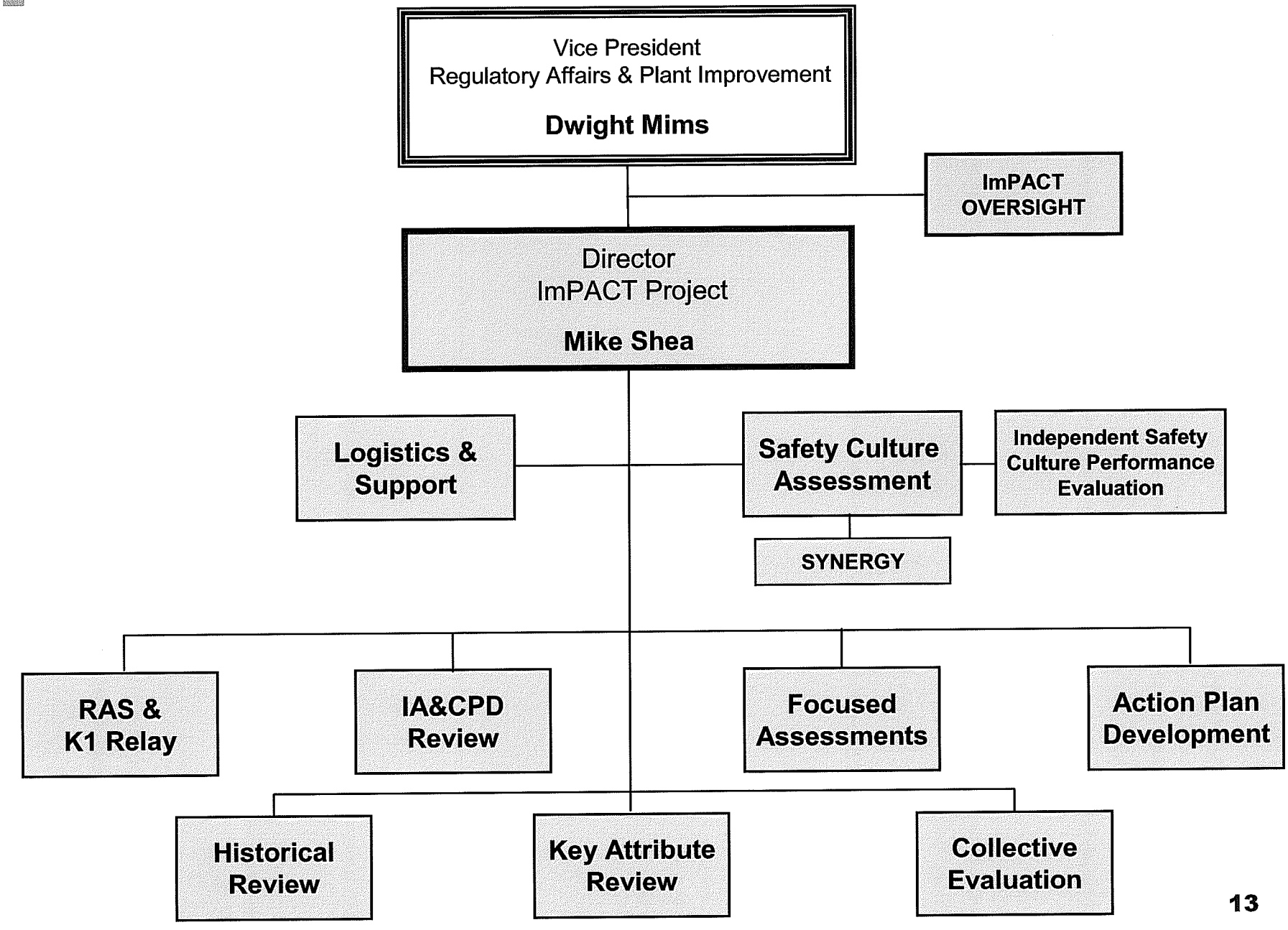
PRESENTATION FOCUS

- Project Activities
- Objectives, Scope and Methodologies for each assessment area
- How information will be used to improve performance for the long term

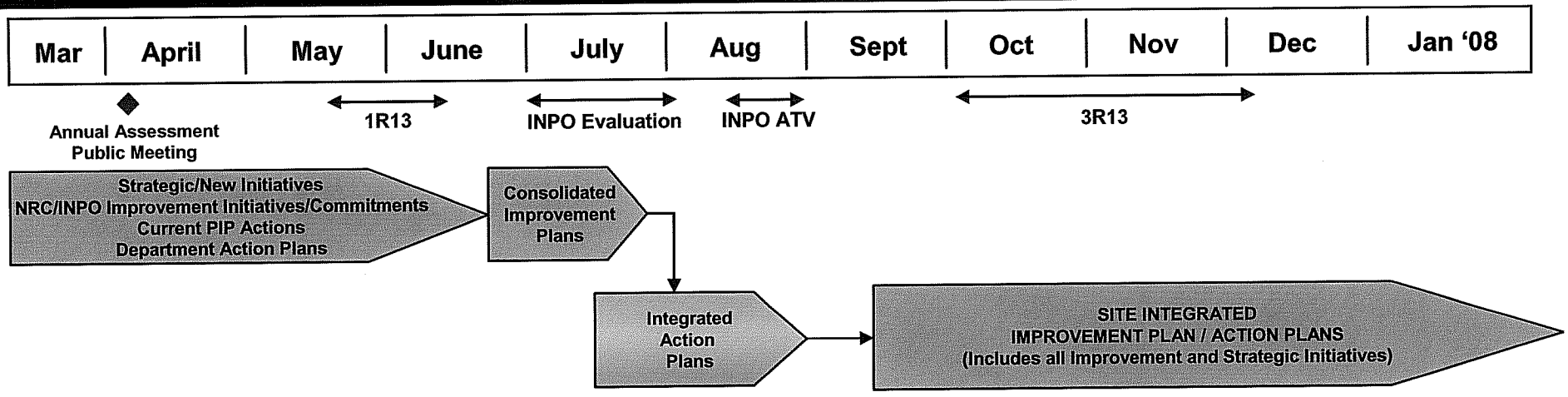
ImPACT Project

Mike Shea

Director, ImPACT Project

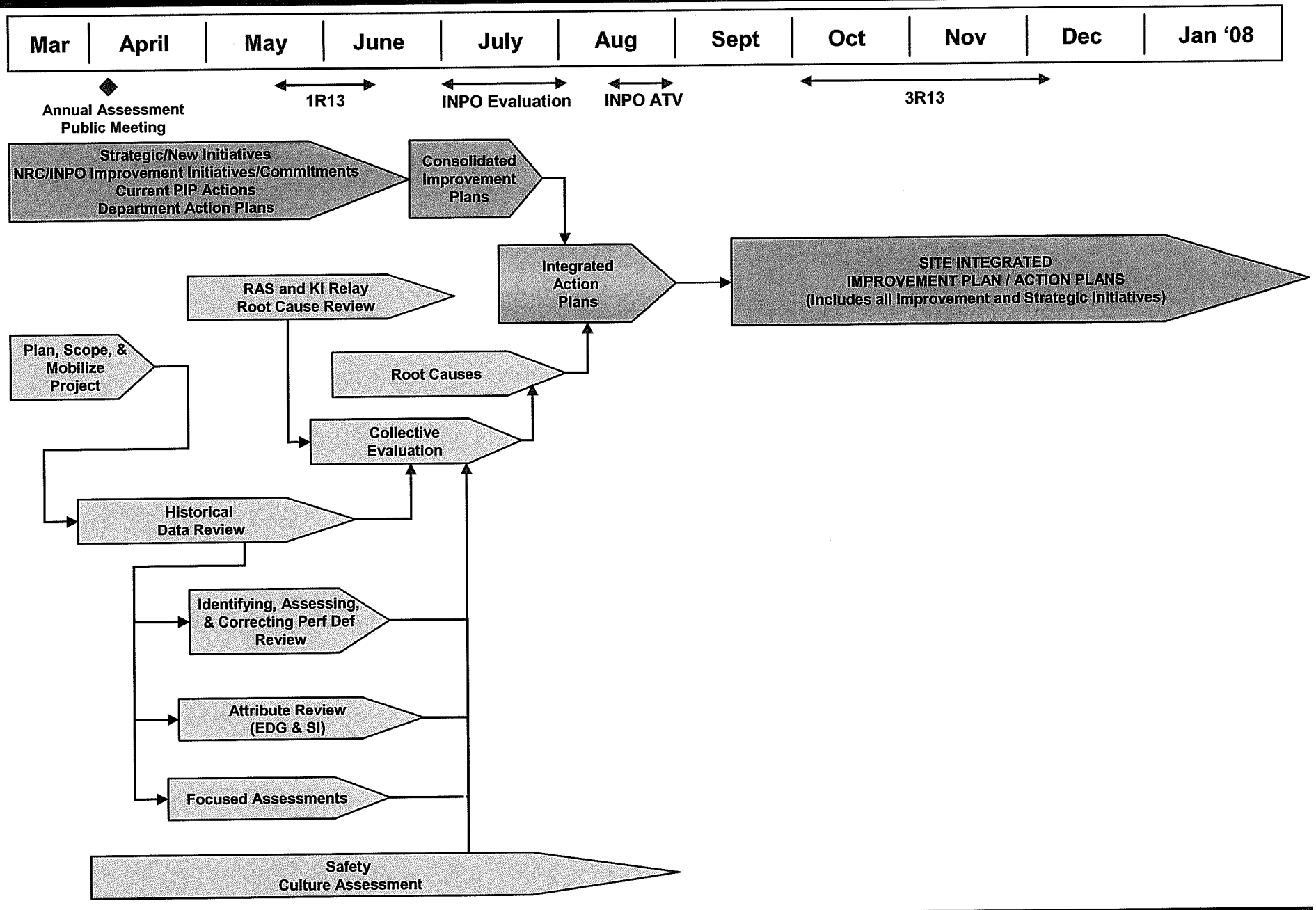

Vice President
Regulatory Affairs & Plant Improvement
Dwight Mims
ImPACT OVERSIGHT
Director
ImPACT Project
Mike Shea
Logistics & Support
Safety Culture Assessment
Independent Safety Culture Performance Evaluation
SYNERGY
RAS & K1 Relay
IA&CPD Review
Focused Assessments
Action Plan Development
Historical Review
Key Attribute Review
Collective Evaluation

Improving Palo Verde for the Long Term



NOTE: This approximates the timetable for the ImPACT Project — see project schedule for detail.

Improving Palo Verde for the Long Term



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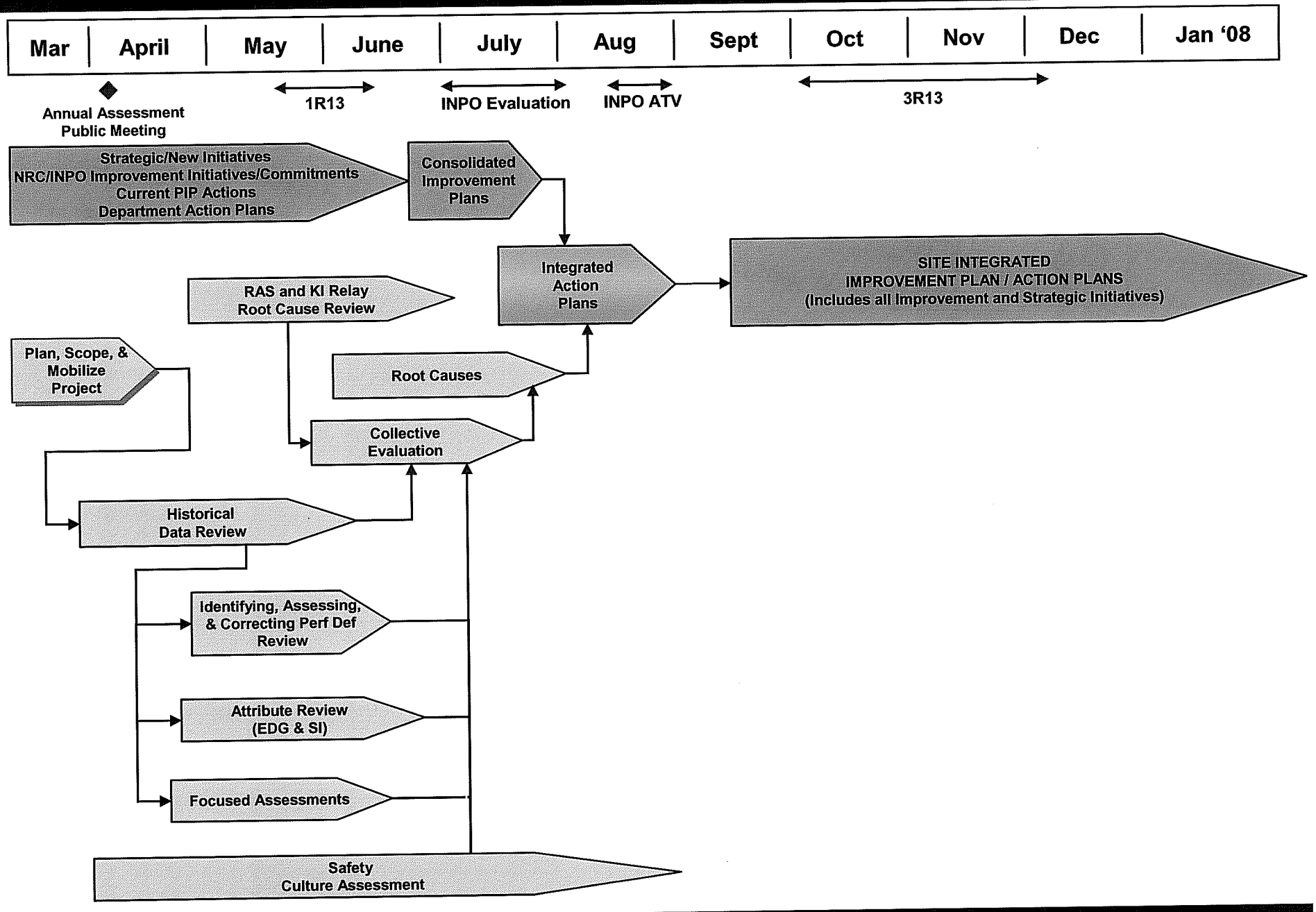

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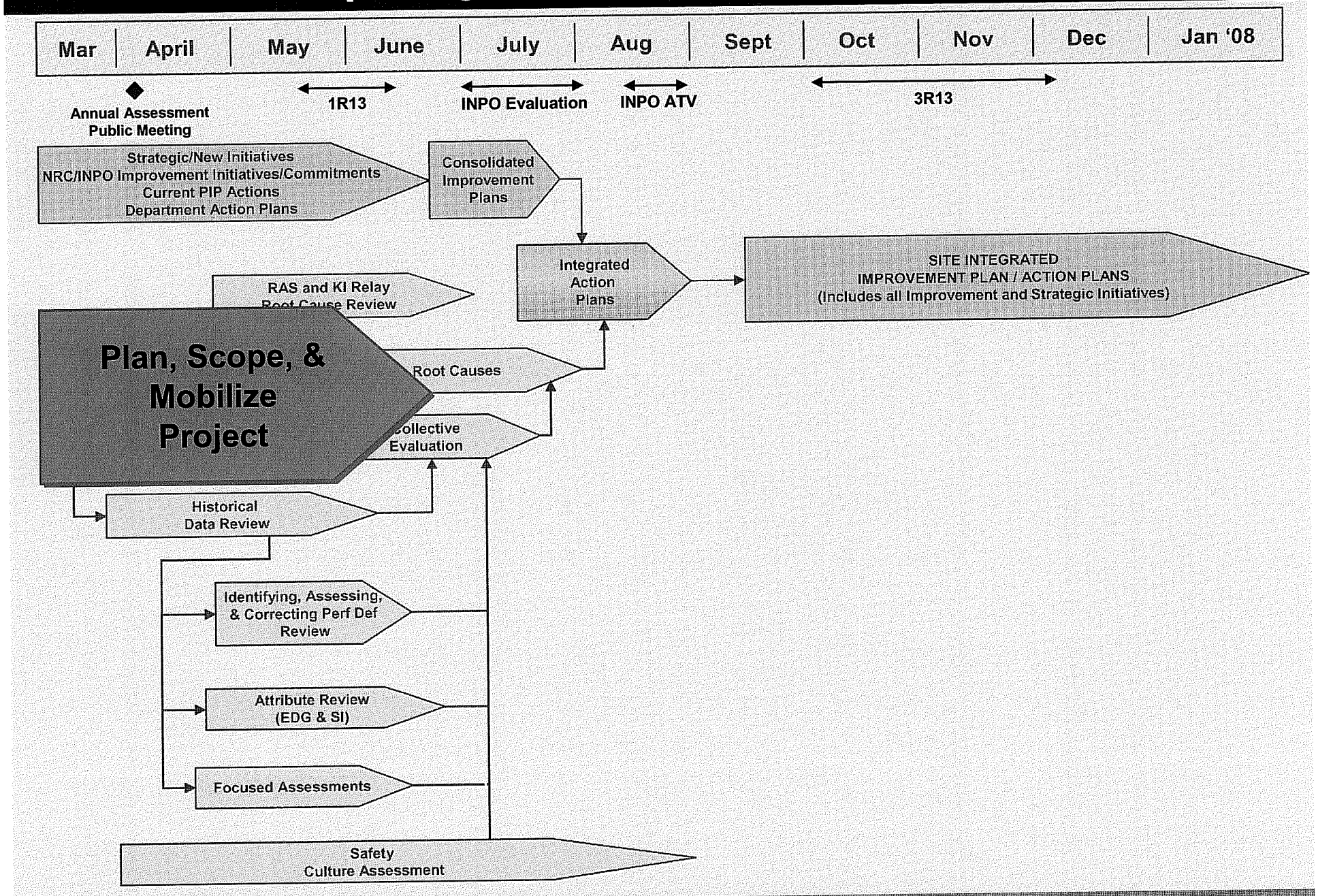

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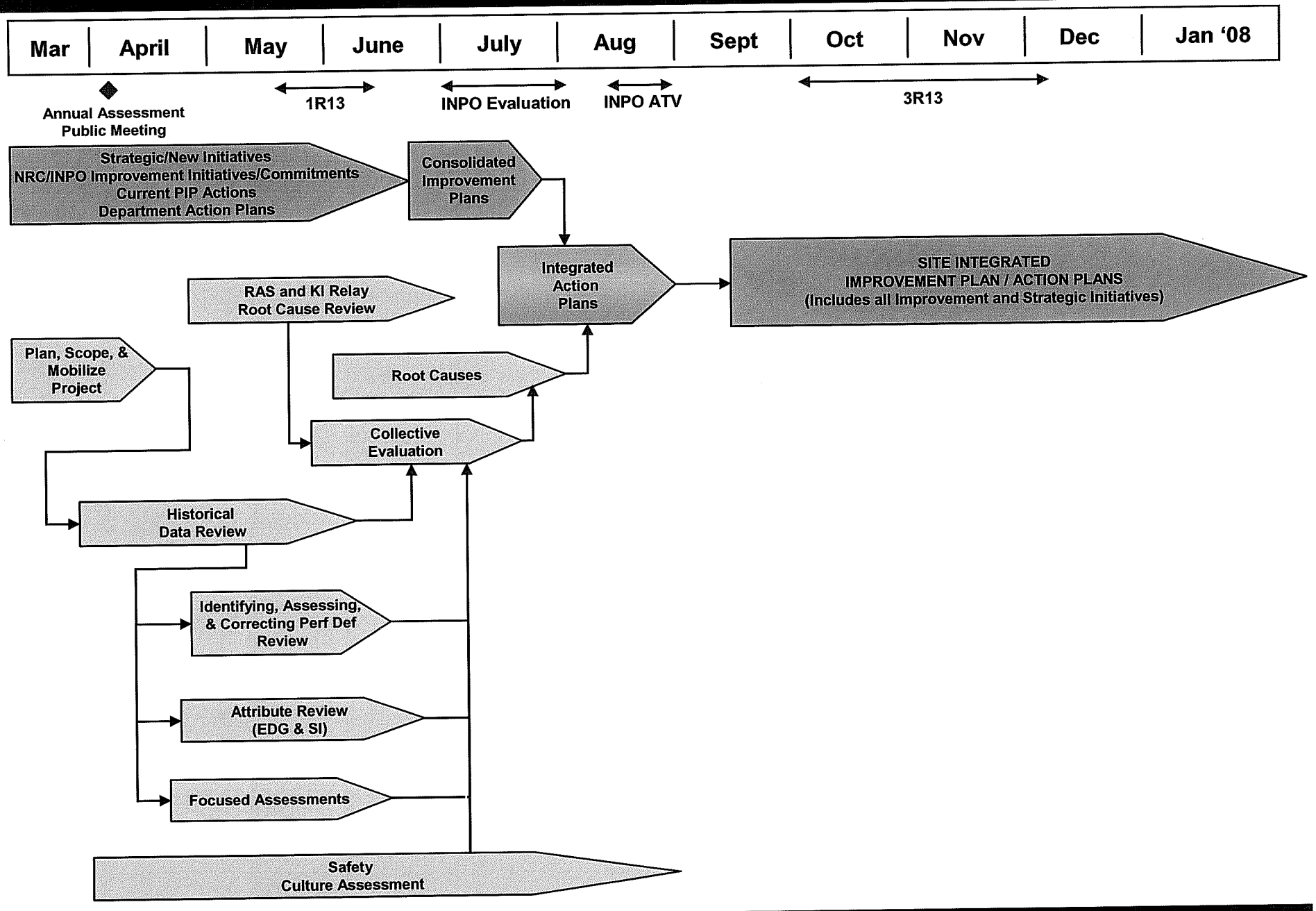

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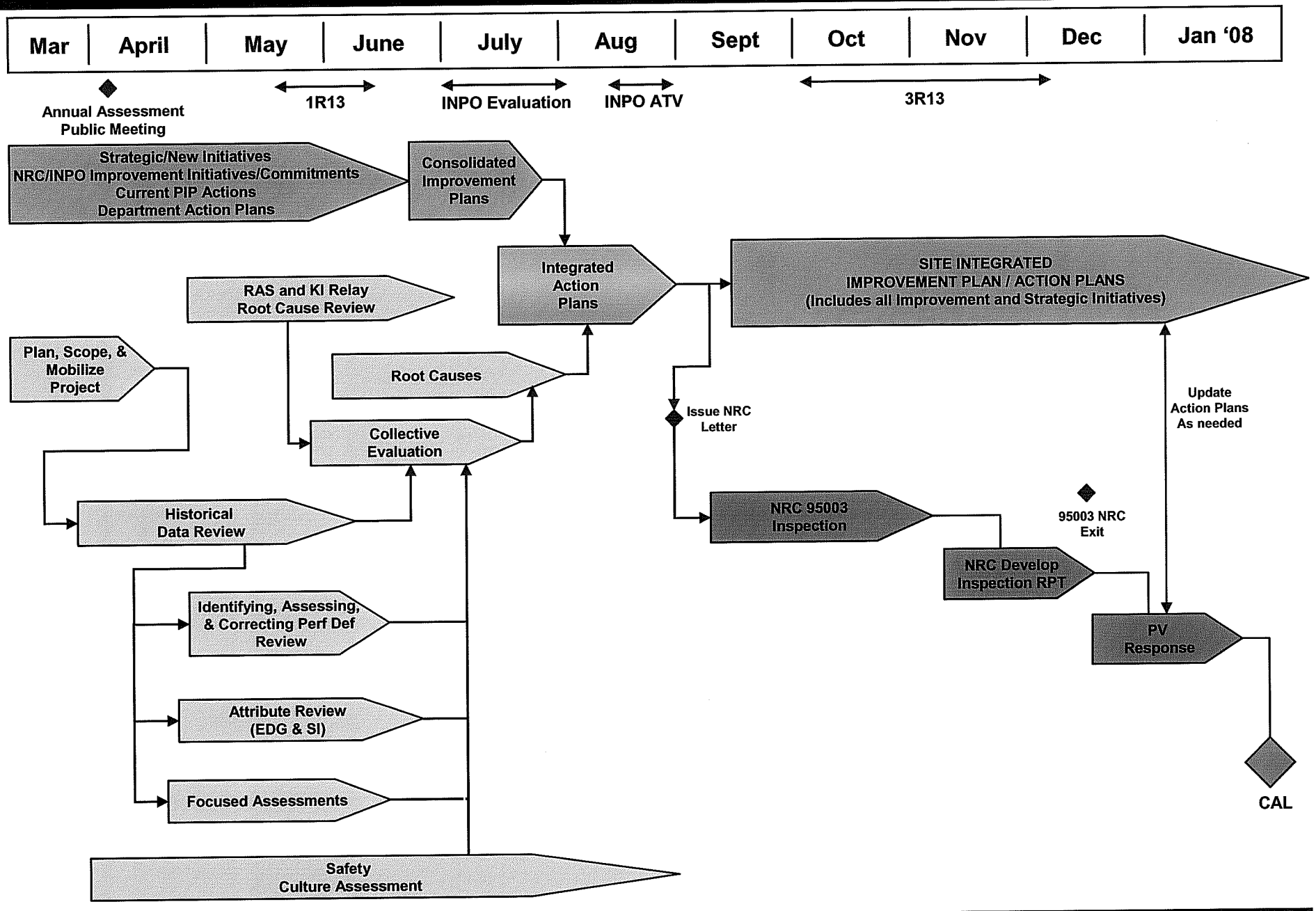

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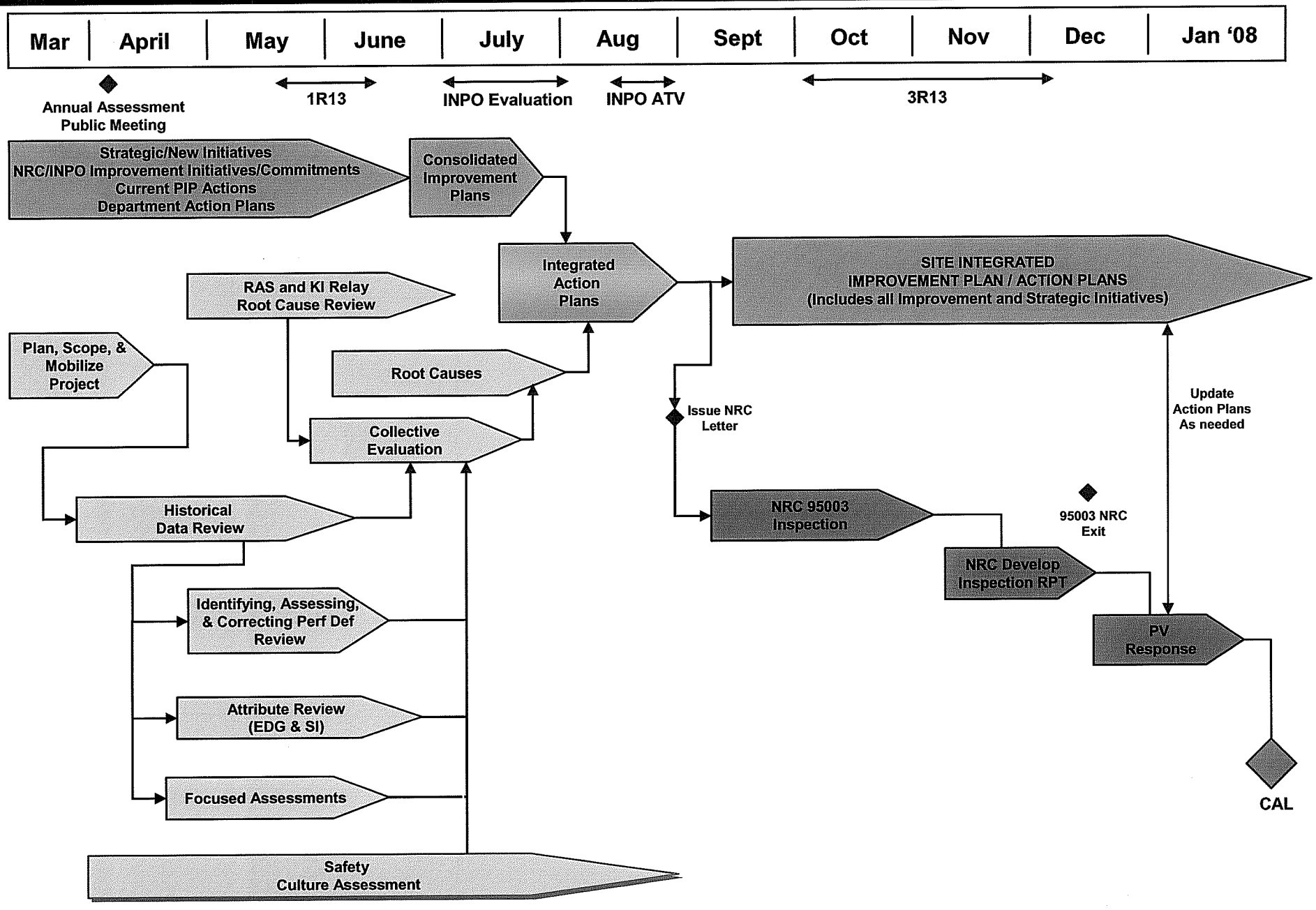

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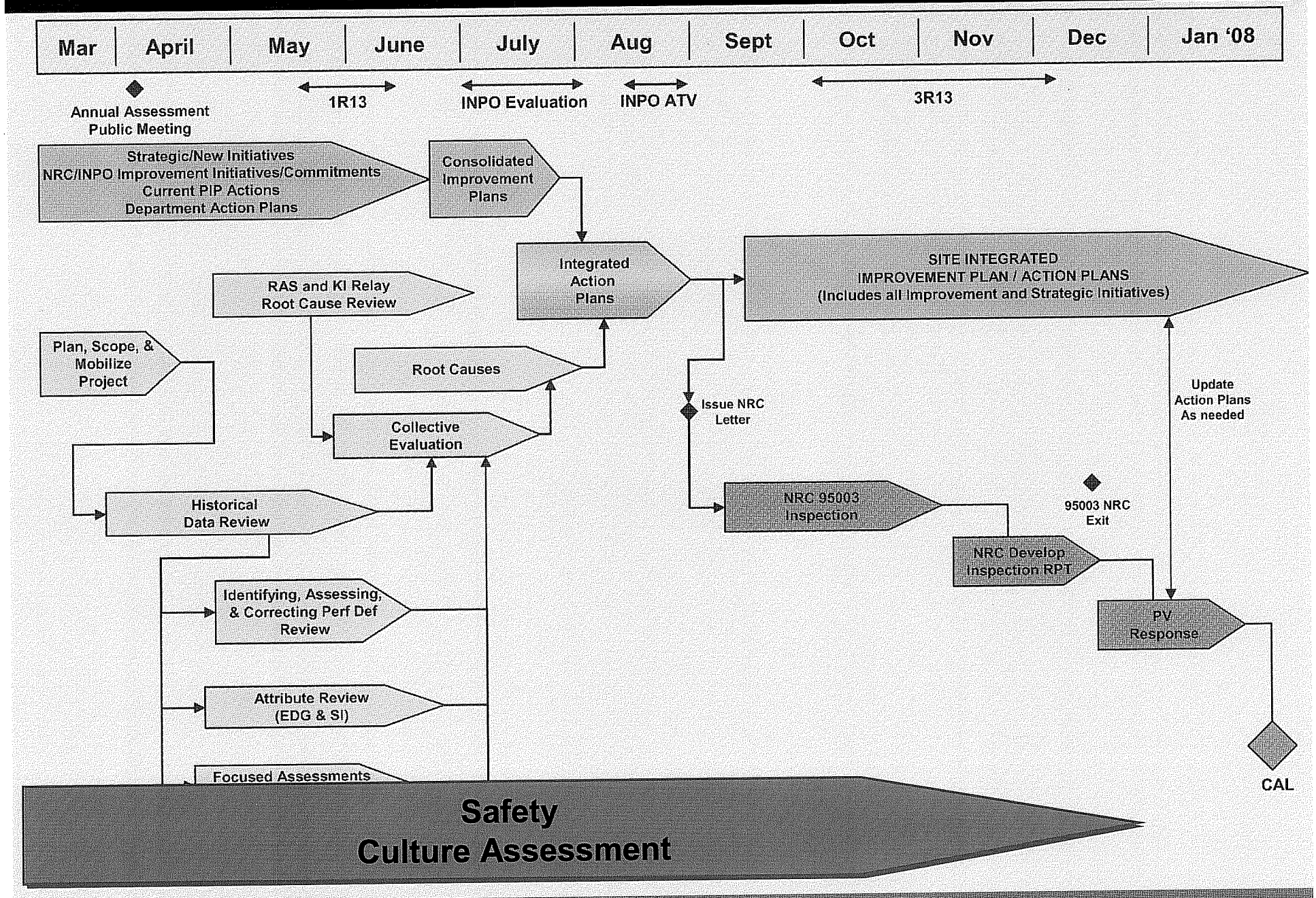

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Safety Culture Assessment

OBJECTIVE

- Independently assess the safety culture at Palo Verde:
  - To understand the breadth and depth of safety culture issues
  - To provide insight into the overall root and contributing causes of identified performance deficiencies
  - To develop plans to strengthen safety culture and improve performance for the long term

Safety Culture Assessment

SCOPE

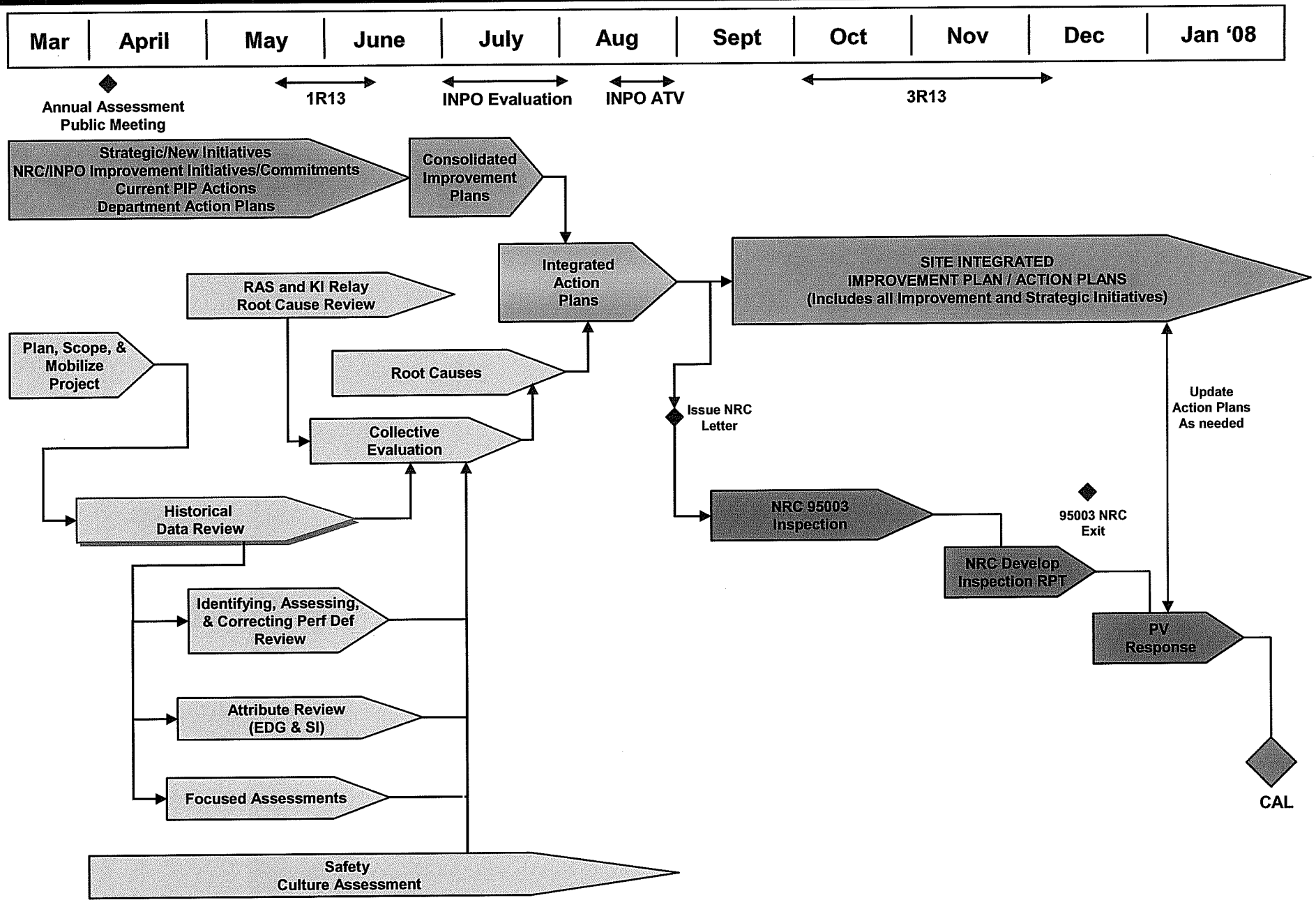
- Palo Verde employees, management and long-term contractors
- APS executive management
- Nuclear Safety Values, Behaviors and Practices
- Safety Conscious Work Environment
- General Work Environment
- INPO Safety Culture Principles

Safety Culture Assessment

METHODOLOGY

- Independent comprehensive survey which includes write-in comments
- Observe site activities and organizational meetings for cultural insight
- Conduct topical area and organizational interviews
- Review station programs, procedures and policies
- Review NRC inspections, employee concerns, allegations, corrective action documents, assessments, and human resources data

Improving Palo Verde for the Long Term



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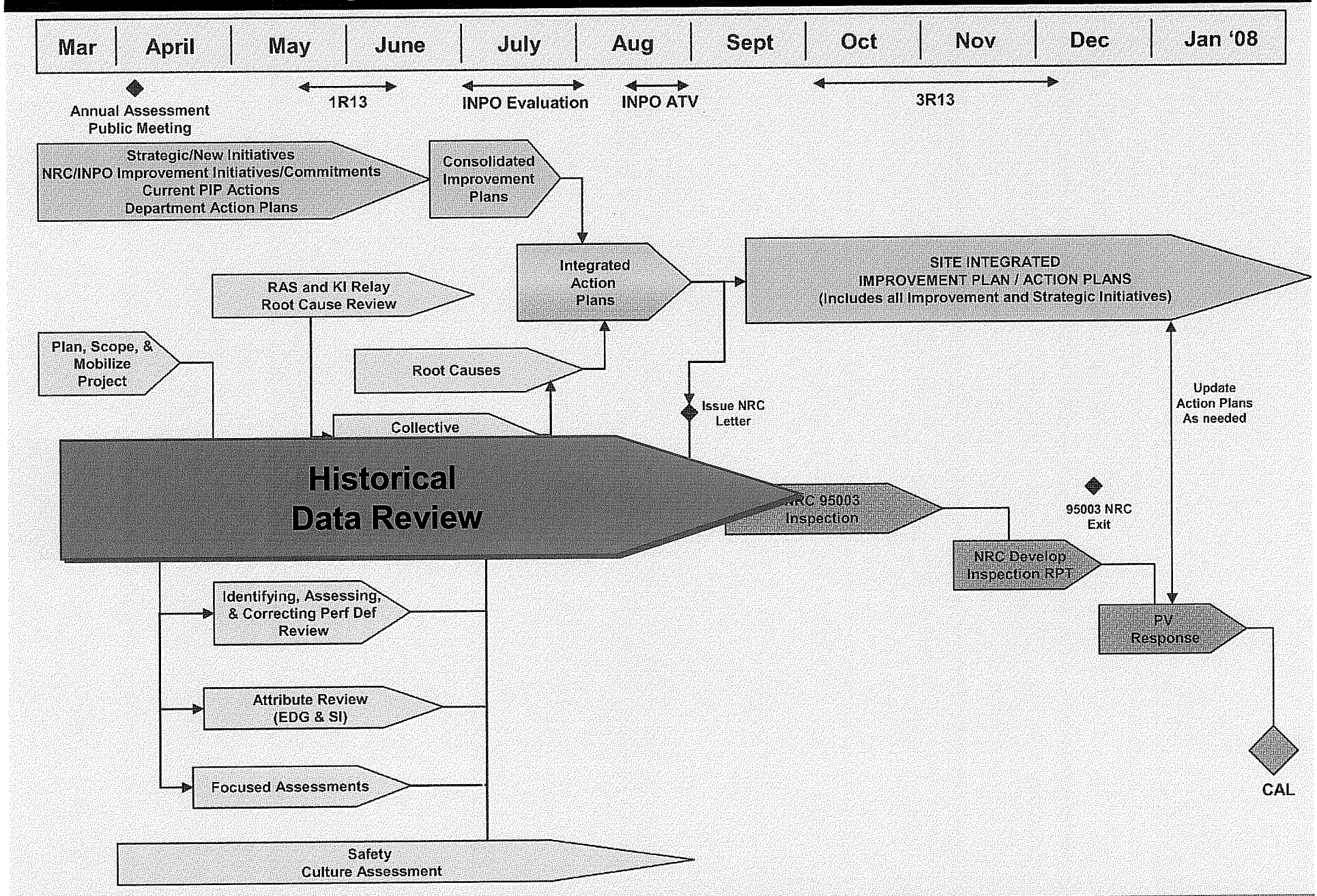
Improving Palo Verde for the Long Term



NOTE: This approximates the timetable for the ImPACT Project — see project schedule for detail

Historical Data Review

OBJECTIVES

- Review selected historical plant records and identify/characterize previous failures and deficiencies
- Establish initial judgments on the data source documents relative to failure modes/ mechanisms and other pertinent attributes of the data sources

Historical Data Review

SCOPE

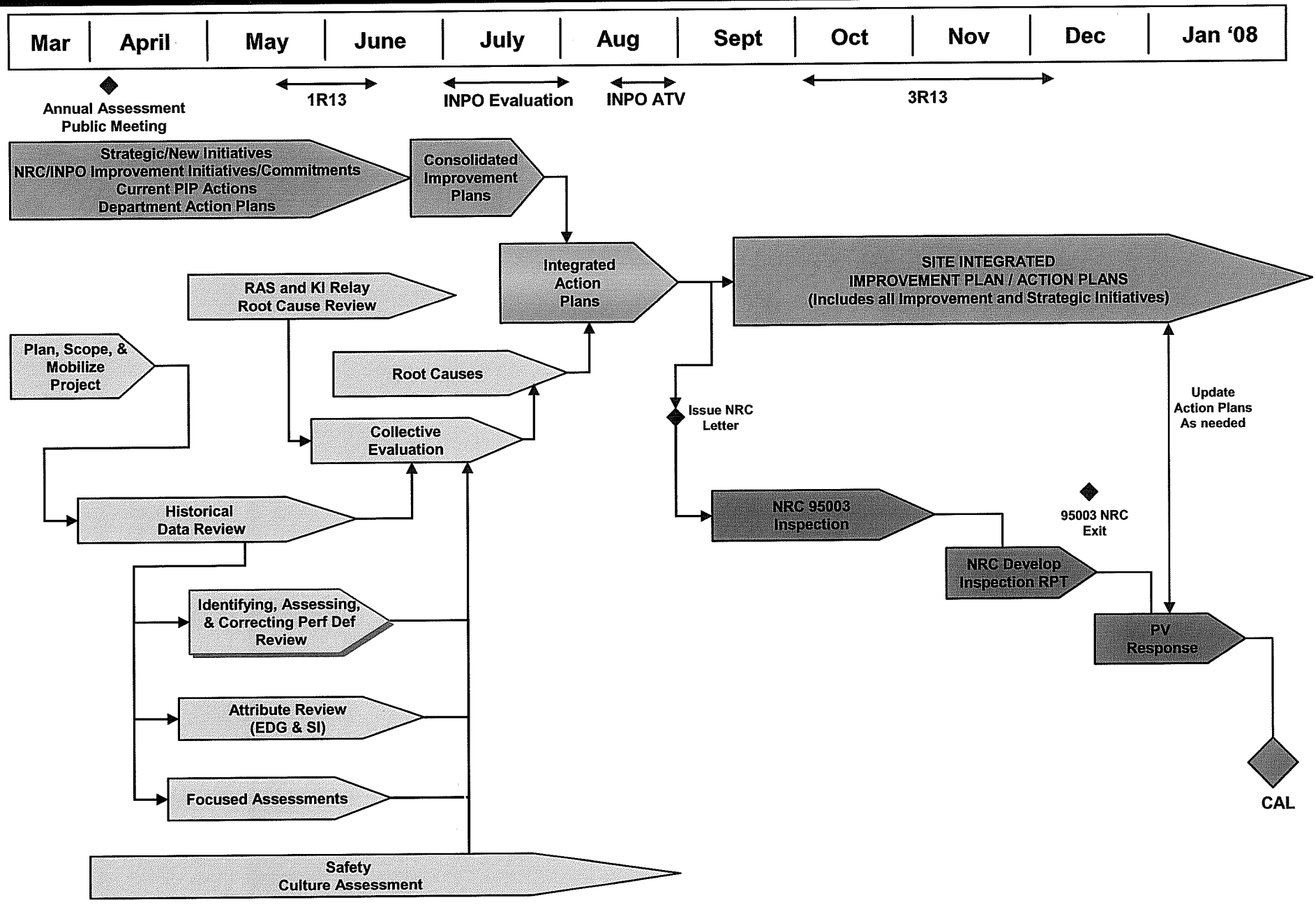
- Key documents include:
  - Corrective Action Program documents
  - Training Program Reviews
  - Nuclear Regulatory Commission Correspondence
  - Institute for Nuclear Power Operations
  - Unplanned Downpowers
  - Oversight & self-assessment reports
  - Other documents

Historical Data Review

METHODOLOGY

- Compile performance information from various source document types for approximately the past 6 years
- Selected Focused Assessments will go back further than 6 years
- Develop an electronic database with pre-defined data fields of the compiled information with full sort capability

Improving Palo Verde for the Long Term



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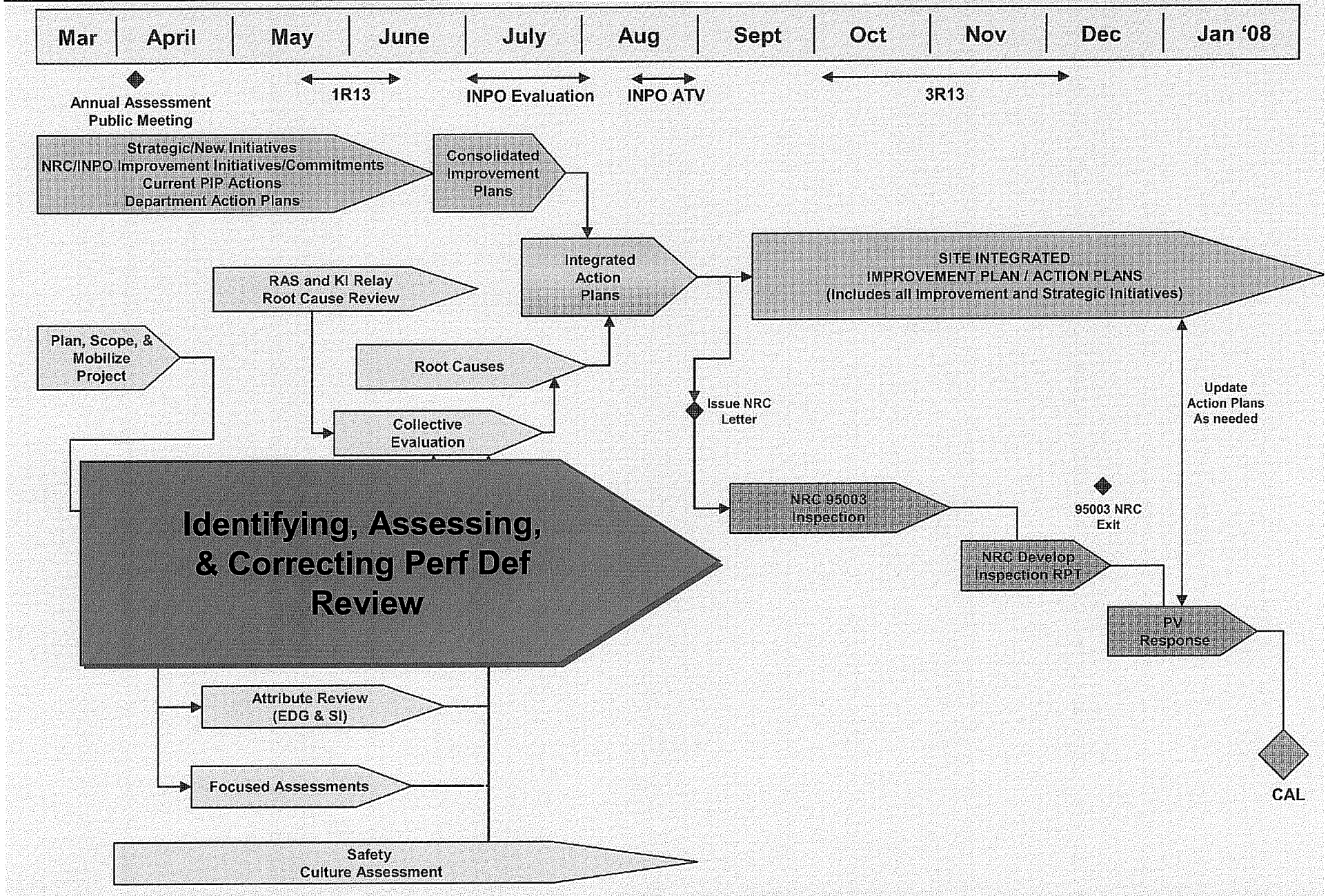
Improving Palo Verde for the Long Term



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IA&CPD Review

OBJECTIVE

- Determine whether current programs associated with Identifying, Assessing & Correcting Performance Deficiencies (IA&CPD) are sufficient to support strong performance

IA&CPD Review

SCOPE

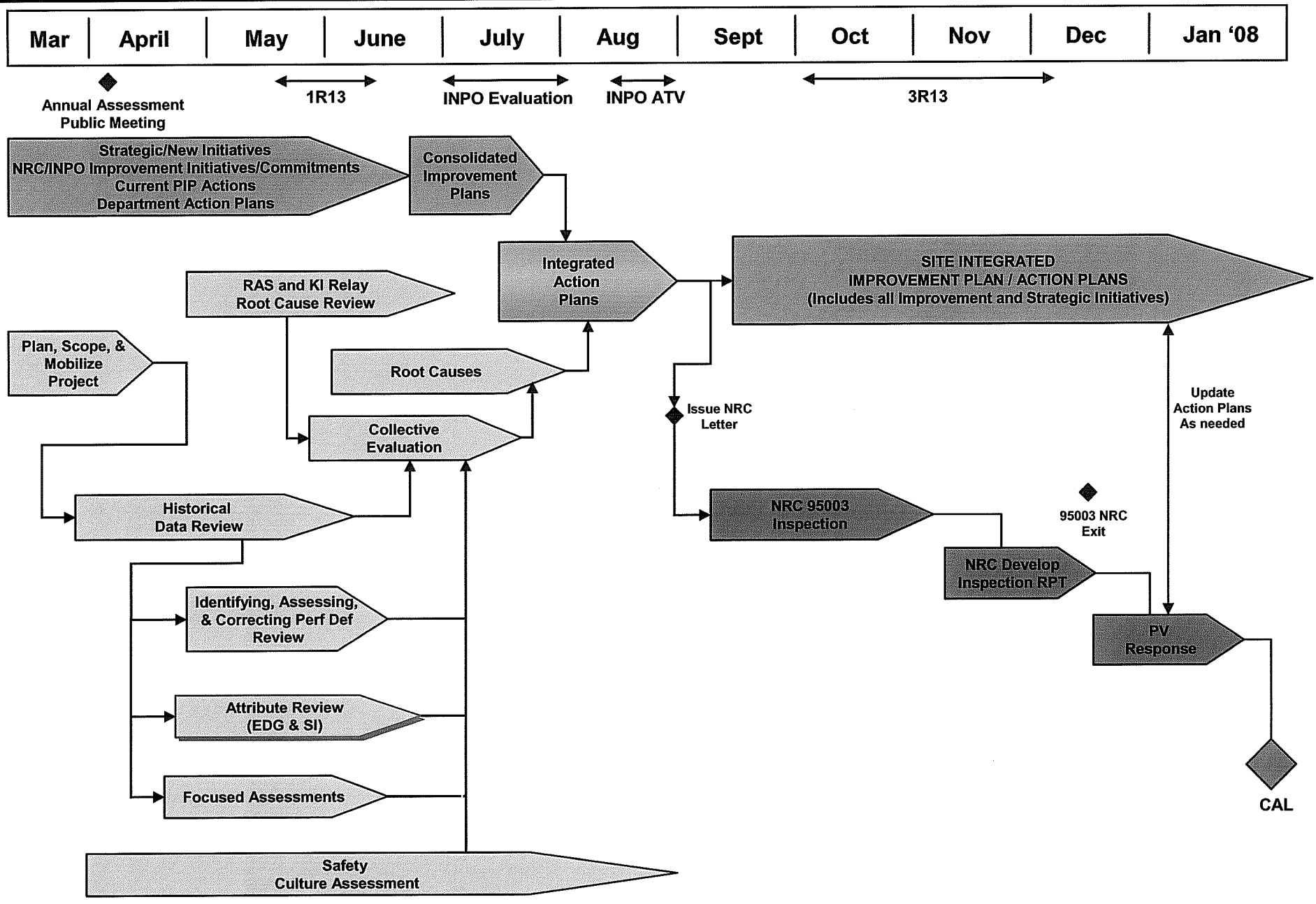
- Root Cause Program
- Audits and Assessments
- Allocating Resources
- Performance Goals
- Employee Concerns Program
- Technical Resolution Dispositions
- Use of Industry Information

IA&CPD Review

METHODOLOGY

- Scope elements are unique, assessment actions will vary by area
- Elements of review include:
  - Appropriate prioritization for safety and risk
  - Timely identification and evaluation of issues
  - Corrective action effectiveness
  - Backlogs
  - Resource utilization
  - Extent of Condition

Improving Palo Verde for the Long Term



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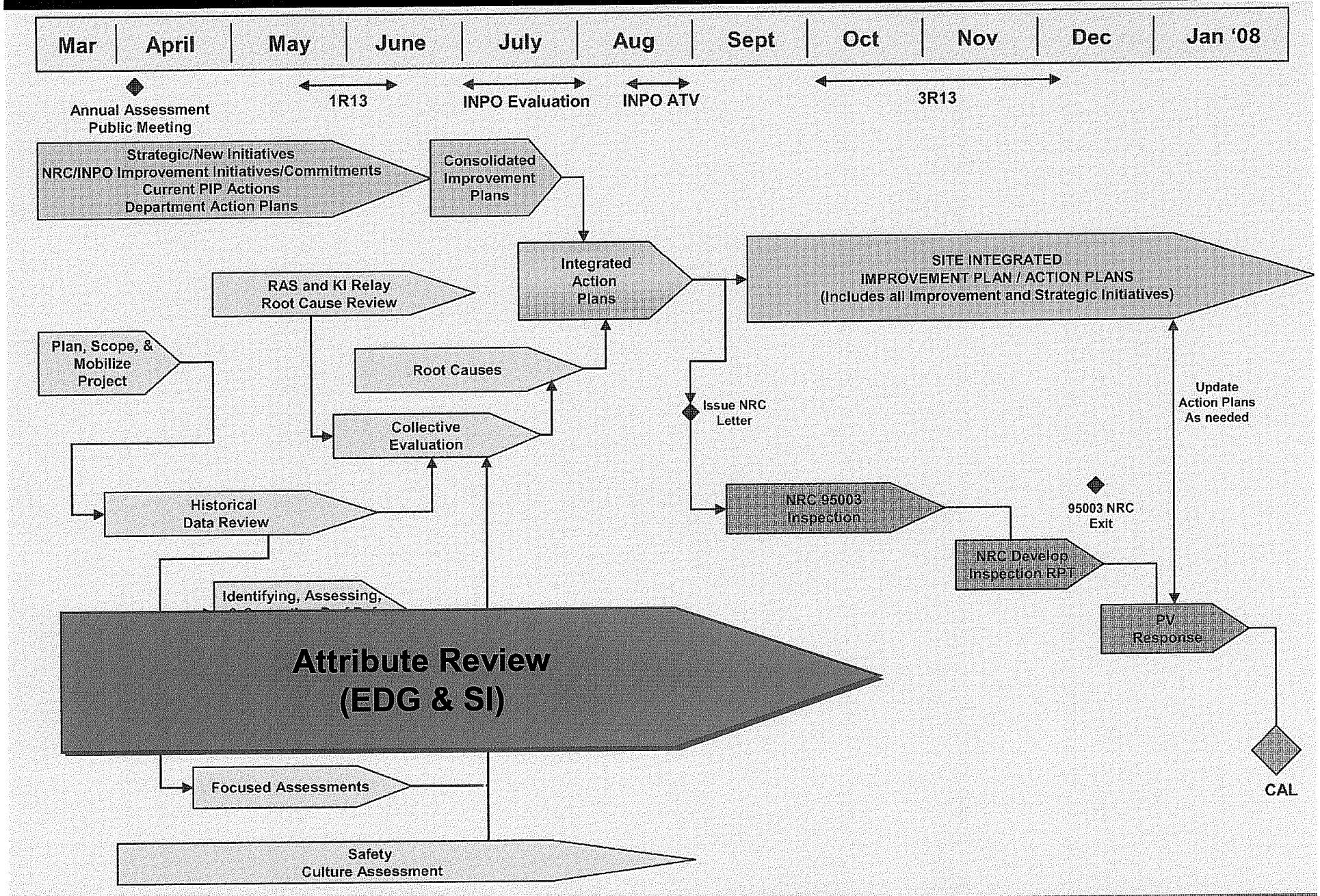
Improving Palo Verde for the Long Term



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Key Attribute Review

OBJECTIVES

- Evaluate Safety Injection and Emergency Diesel Generator capability to fulfill their intended safety functions
- Identify broad-based safety, organizational and performance issues
- Determine Component Design Basis Review (CDBR) effectiveness
- Evaluate Emergency Response Organization (ERO) readiness

Key Attribute Review

SCOPE

- Design
- Human Performance
- Procedure Quality
- Equipment Performance
- Configuration Control
- Component Design Basis Review

- Emergency Response Organization Readiness

Key Attribute Review

METHODOLOGY

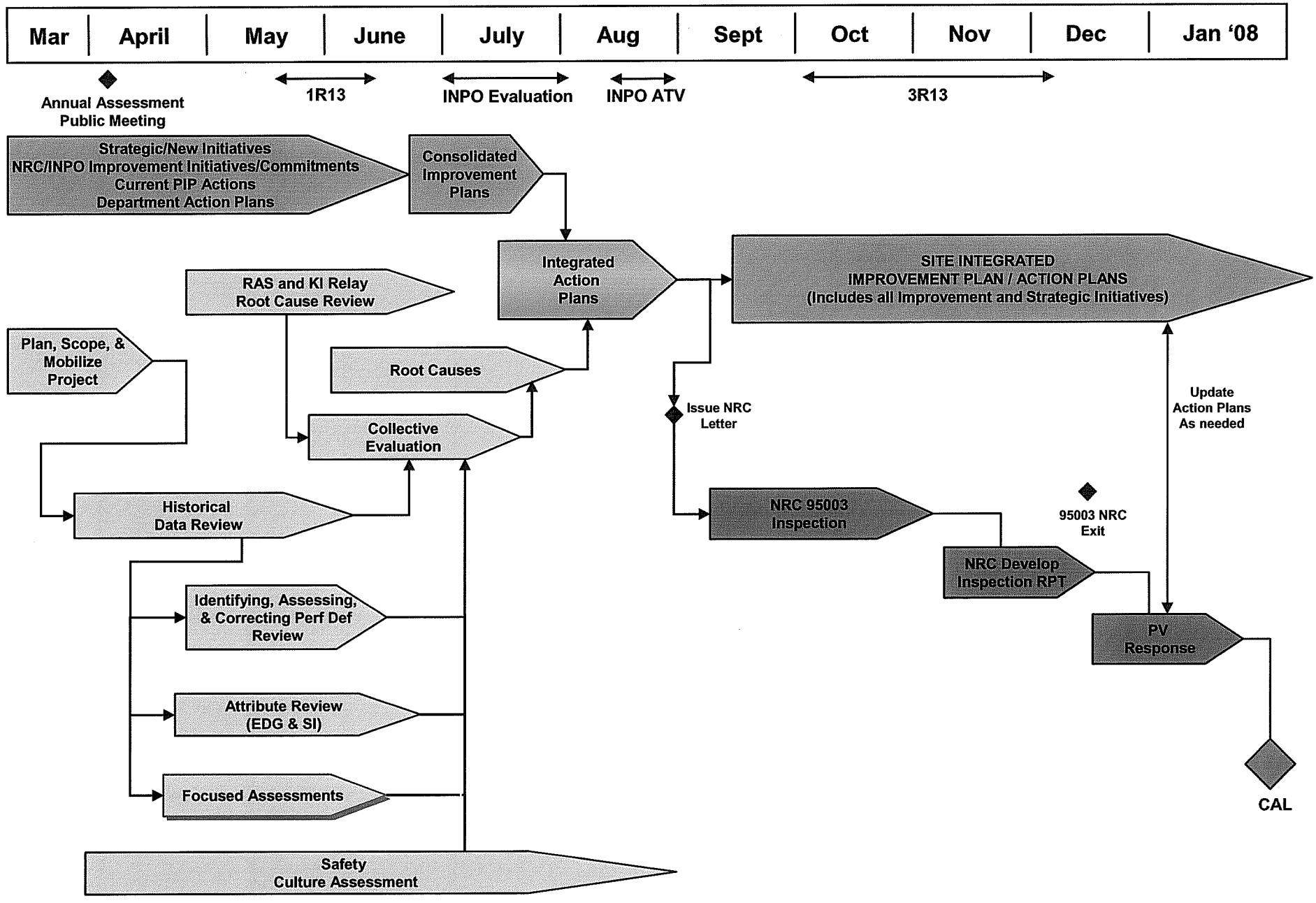
- Select sample plant documents to review for technical adequacy
- Verify that changes are properly translated to other controlled documents such as programs, drawings, procedures, work instructions and licensing documents
- Conduct plant walkdowns to verify as-built configuration is consistent with design
- Observe plant activities to verify adherence to site standards, expectations, procedures and conservative operational decision making

Key Attribute Review

METHODOLOGY (continued)

- Evaluate the Component Design Basis Review process to determine its effectiveness in identifying latent issues and incorporation of lessons learned
- Review corrective action documents to determine whether station personnel are using them to effectively resolve issues
- Observe and assess Emergency Response Organization activities and E-Plan drill to determine performance adequacy

Improving Palo Verde for the Long Term



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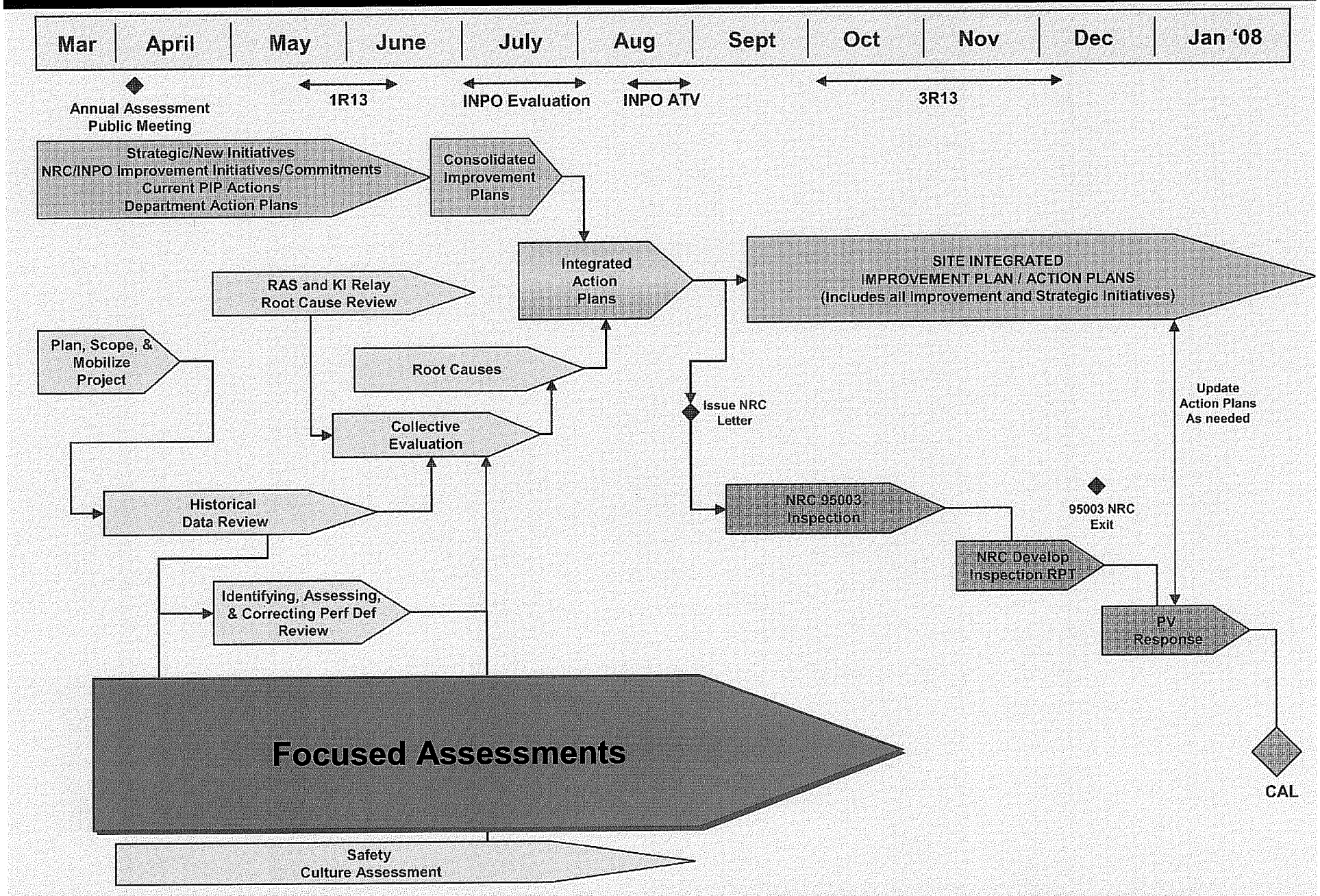
Improving Palo Verde for the Long Term



NOTE: This approximates the timetable for the ImPACT Project — see project schedule for detail

Focused Assessments

OBJECTIVE

- Perform an assessment of selected performance deficiencies and associated organizational issues

Focused Assessments

SCOPE

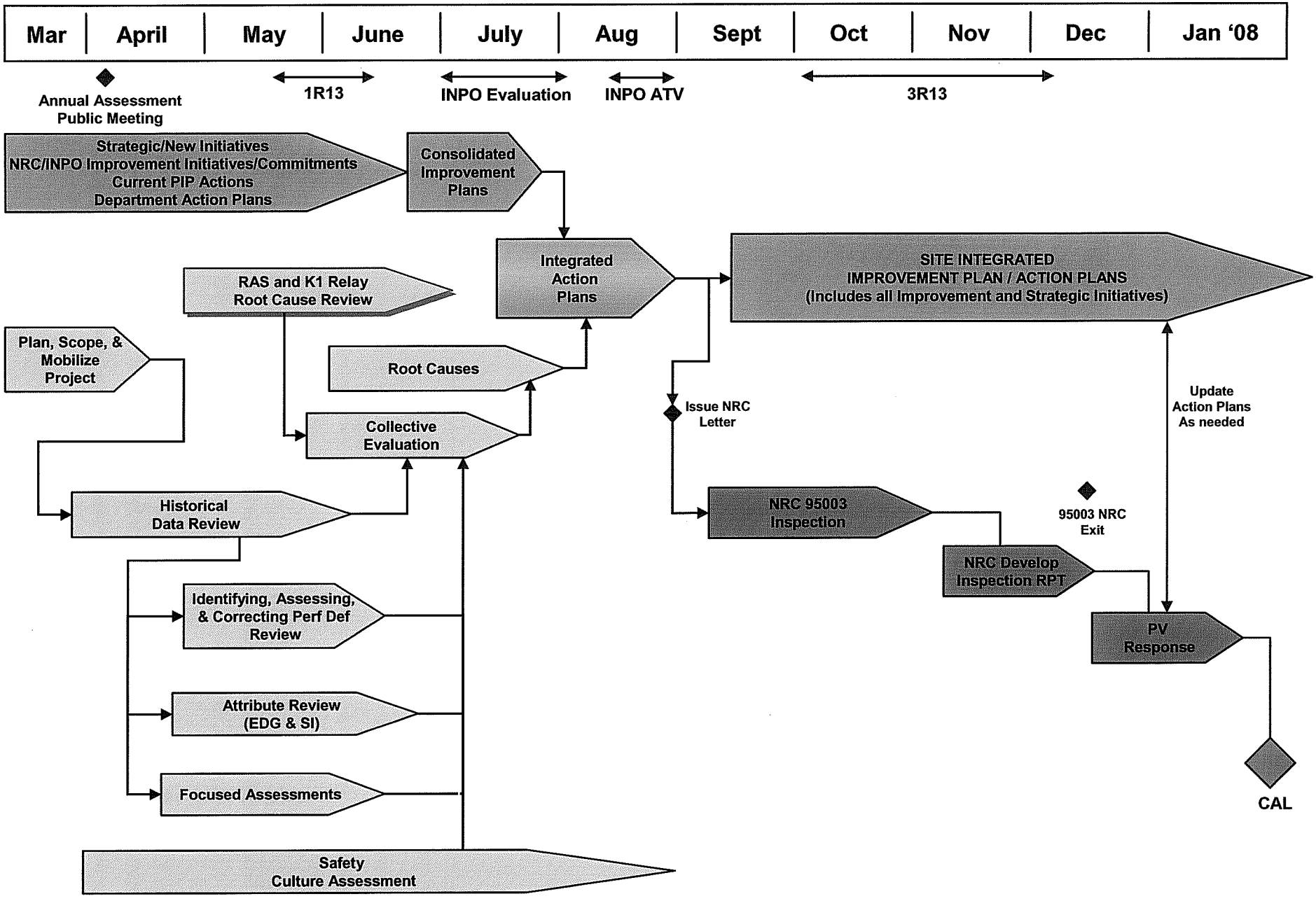
- Problem Identification & Resolution
- Human Performance
- Re-Engineering (1993-1994)
- 1989 Diagnostic Inspection
- Performance Improvement Plan
- ***Other issues as identified***

Focused Assessments

METHODOLOGY

- Scope elements are unique, assessment actions will vary by area
- Elements of review include:
  - Review effectiveness of actions taken to correct previous identified deficiencies (cross-cutting issues)
  - Review previous 1989 Diagnostic and Re-Engineering for relationship to current performance issues
  - Understand barriers to successful implementation of previous performance improvement efforts for lessons learned

Improving Palo Verde for the Long Term



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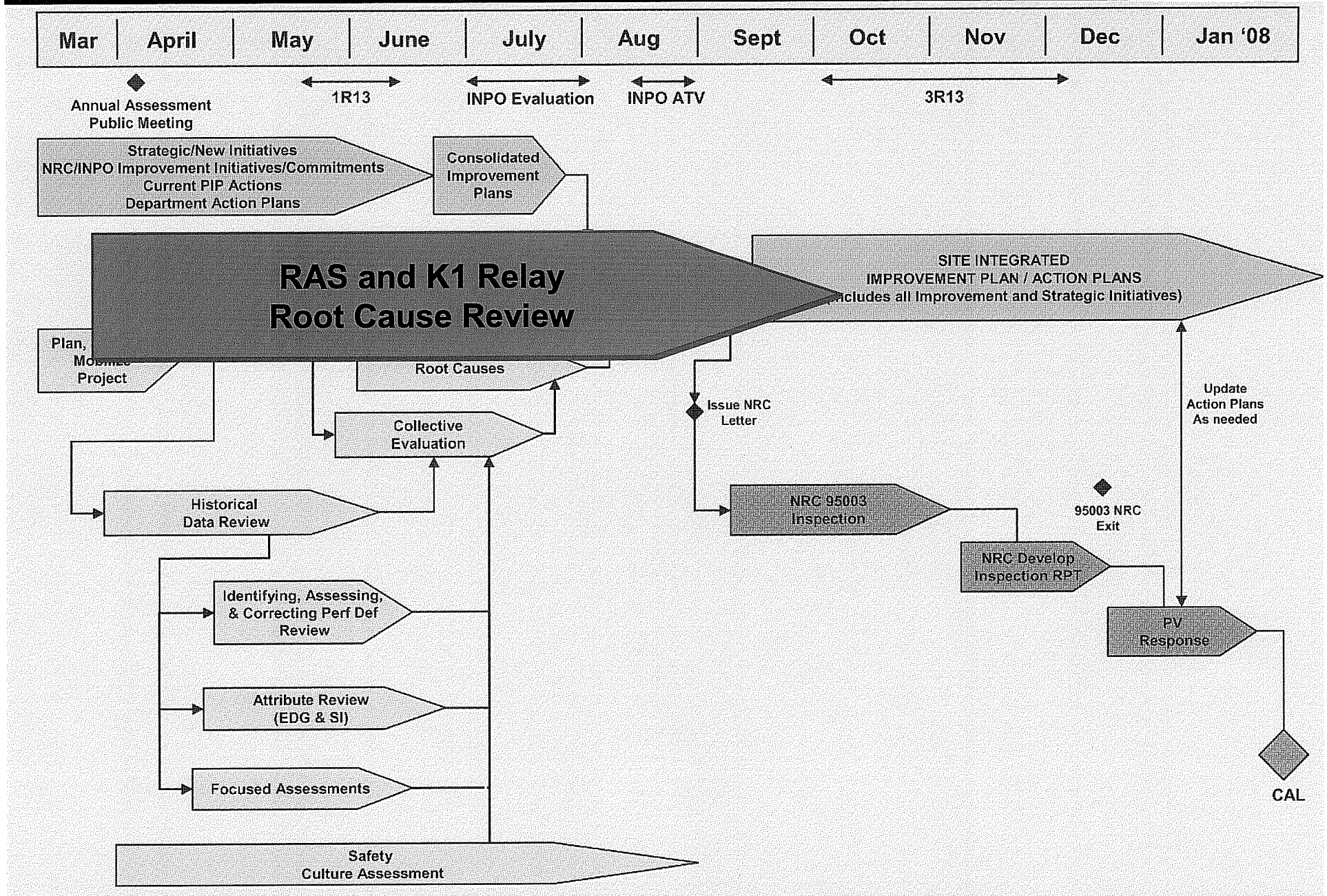

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RAS Issue Review

OBJECTIVES

- Review of 10 focus area assessments to determine if actions related to Recirculation Actuation Sump (RAS) have been effective
- Determine if metrics/performance indicators and management processes are in place to ensure sustained improved performance

RAS Issue Review

SCOPE

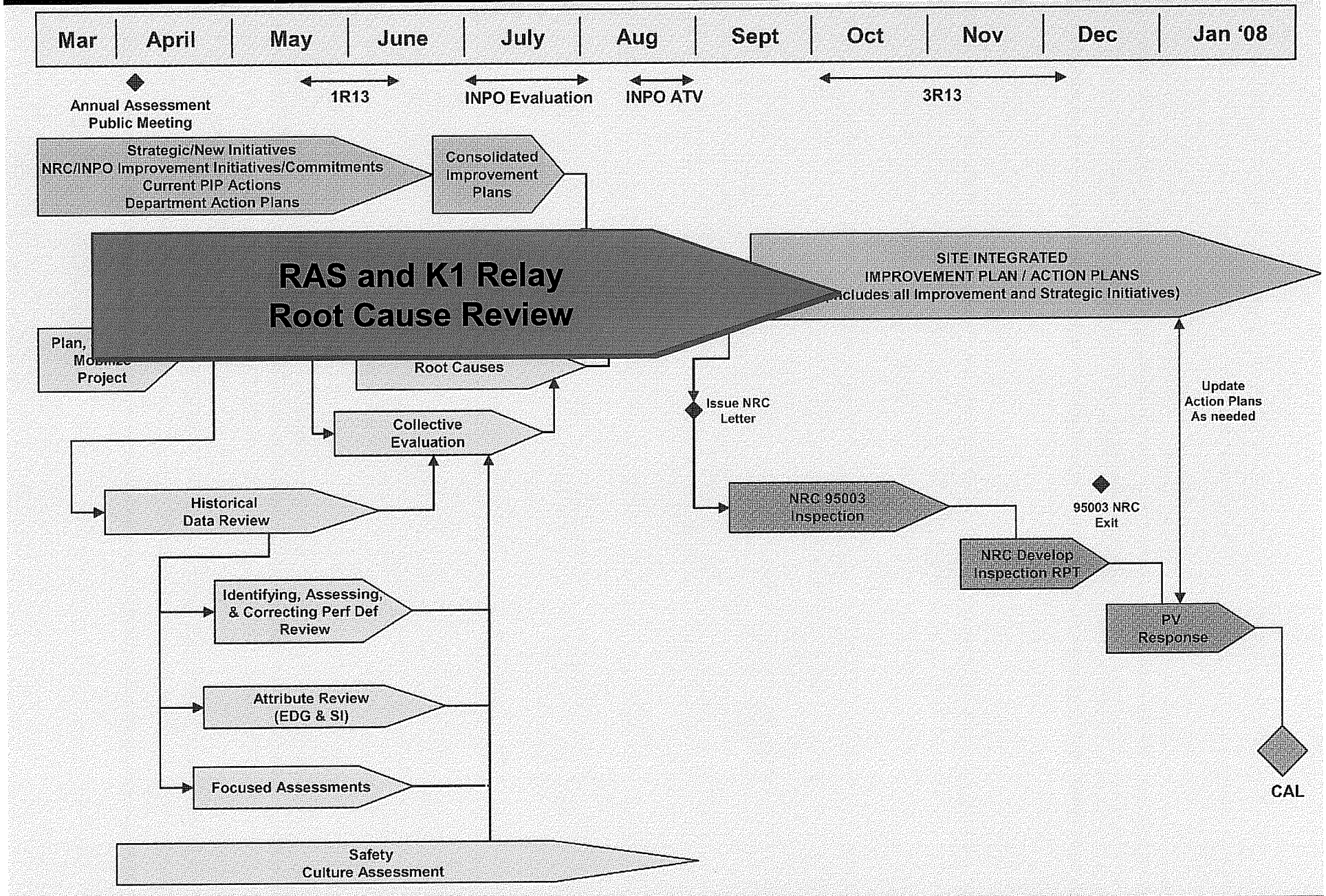
- Focus Areas:
  1. Procedures did not contain necessary requirements
  2. Lack of specific provisions in the Design and Licensing Basis, inappropriate reliance on standard CE design, and limited verification and validation (DBM)
  3. Lack of Questioning Attitude of individuals and less than adequate technical reviews
  4. Inadequate communication of design information (IDR and CE Letters)
  5. Inadequate problem identification and resolution (System Engineers & Shift Supervisors)
  6. Limited Operating Experience Program (Topical Reports & Tracking Trends) and Weak Operating Experience (Generic)
  7. Limited experience and training (Engineering)
  8. Limited Resources (Engineering)
  9. Limited NAD Oversight (Audits)
  10. Limited procedural guidance (DBM Writer's Guide)

RAS Issue Review

METHODOLOGY

- Review the 95002 Inspection Closure Action Plans for each Focus Area
- Interview the owners for each Action Plan to identify lessons-learned to date
- Assess adequacy of Action Items developed for each Focus Area to meet performance objectives
- Assess adequacy of Performance Metrics

Improving Palo Verde for the Long Term



NOTE: This approximates the timetable for the ImPACT Project — see project schedule for detail

K-1 Issue Review

OBJECTIVES

- Review the root cause evaluation for effectiveness
- Determine if corrective actions were sufficient to prevent recurrence
- Ensure there are effectiveness measures

K-1 Issue Review

SCOPE

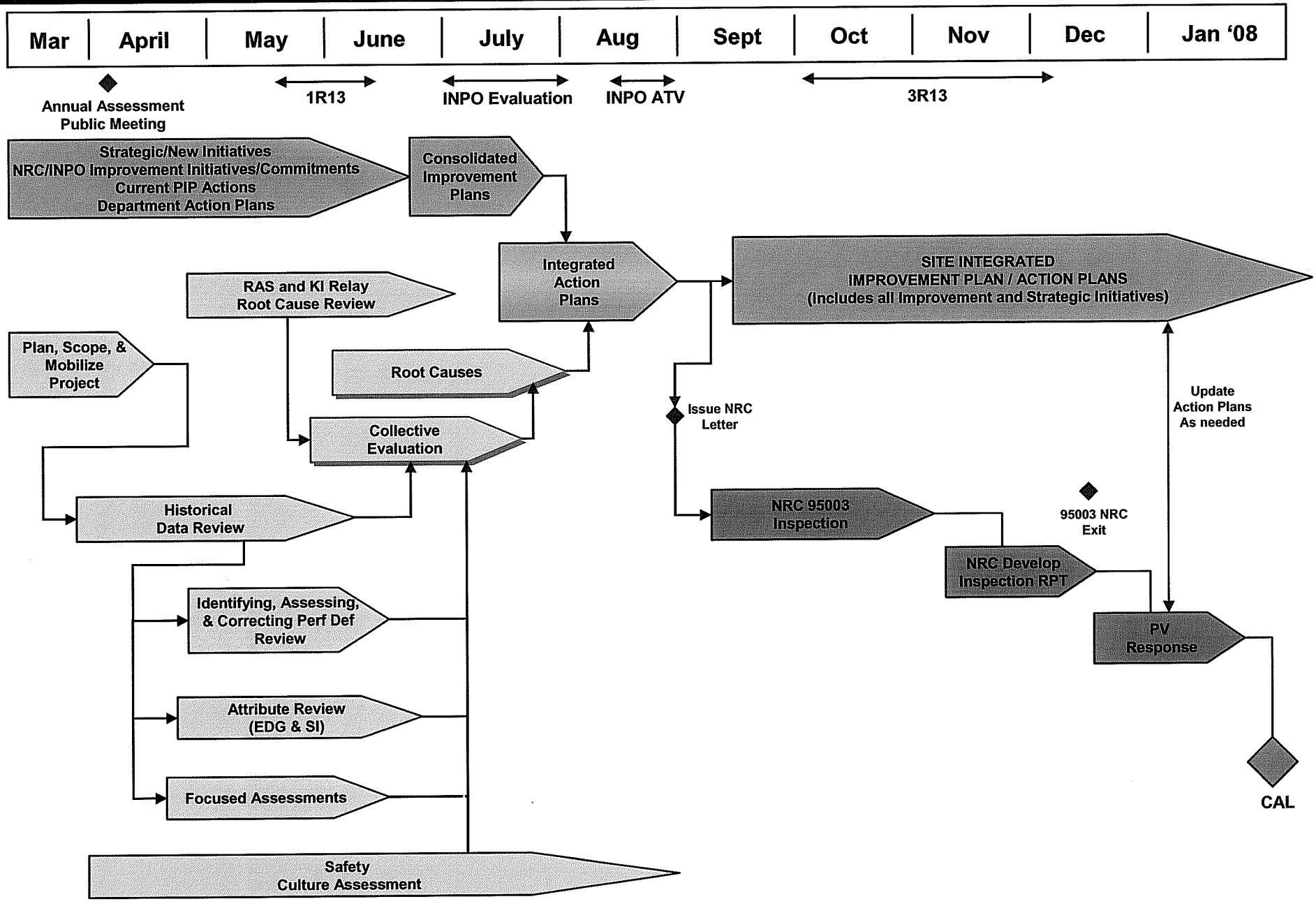
- Problem Identification
- Root Cause Evaluation
- Corrective Actions

K-1 Issue Review

METHODOLOGY

- Assess root cause and corrective actions to determine the effectiveness of:
  - Condition Report Classifications (Significant vs. Non-Significant)
  - Root Cause, Extent of Condition and Extent of Cause
  - Corrective Actions

Improving Palo Verde for the Long Term



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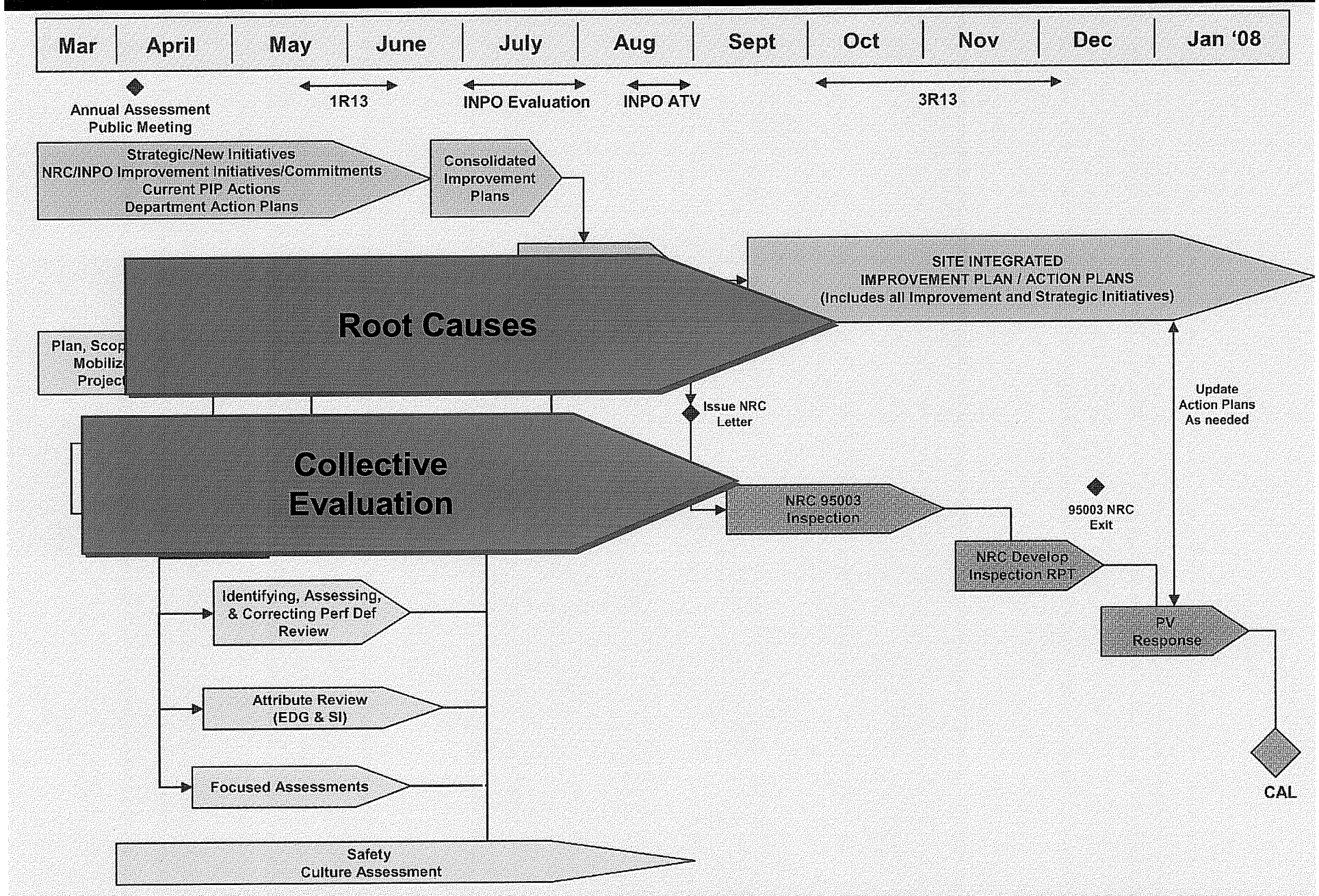
Improving Palo Verde for the Long Term



NOTE: This approximates the timetable for the ImPACT Project — see project schedule for detail

Collective Evaluation Processes

OBJECTIVES

- Identify the primary areas that are driving performance deficiencies at Palo Verde
- Establish improvement actions to achieve sustained high performance for the long term

Collective Evaluation Processes

SCOPE

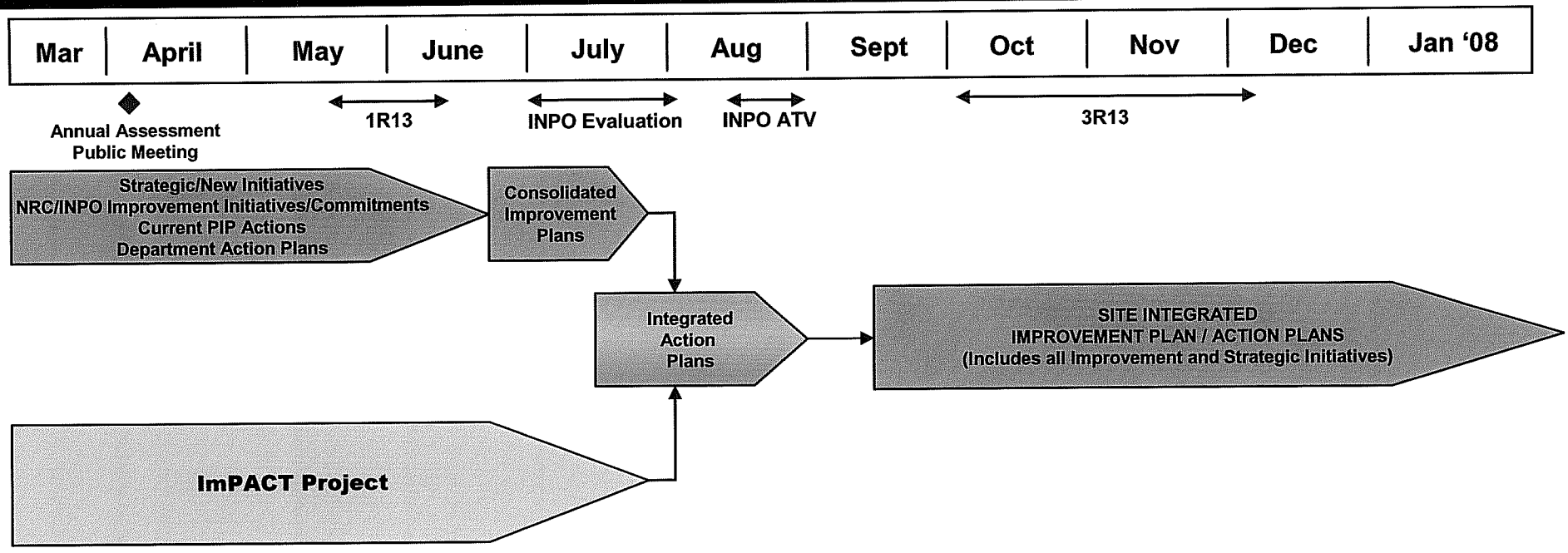
- Collective Evaluation
  - Safety Culture Assessment
  - Historical Data Review
  - IA&CPD Review
  - Key Attribute Review
  - Focused Assessments
  - RAS/K-1 Relay Root Cause Evaluations
- Root Cause(s) & Corrective Actions
- ***Other assessments as identified***

Collective Evaluation Processes

METHODOLOGY

- Identify priority issues based on frequency and significance
- Root Cause Analysis
- Action plan development
- Incorporation of action items with Site Integrated Improvement Plan

Improving Palo Verde for the Long Term



NOTE: This approximates the timetable for the ImPACT Project — see project schedule for detail.

ImPACT Project

RESULTS

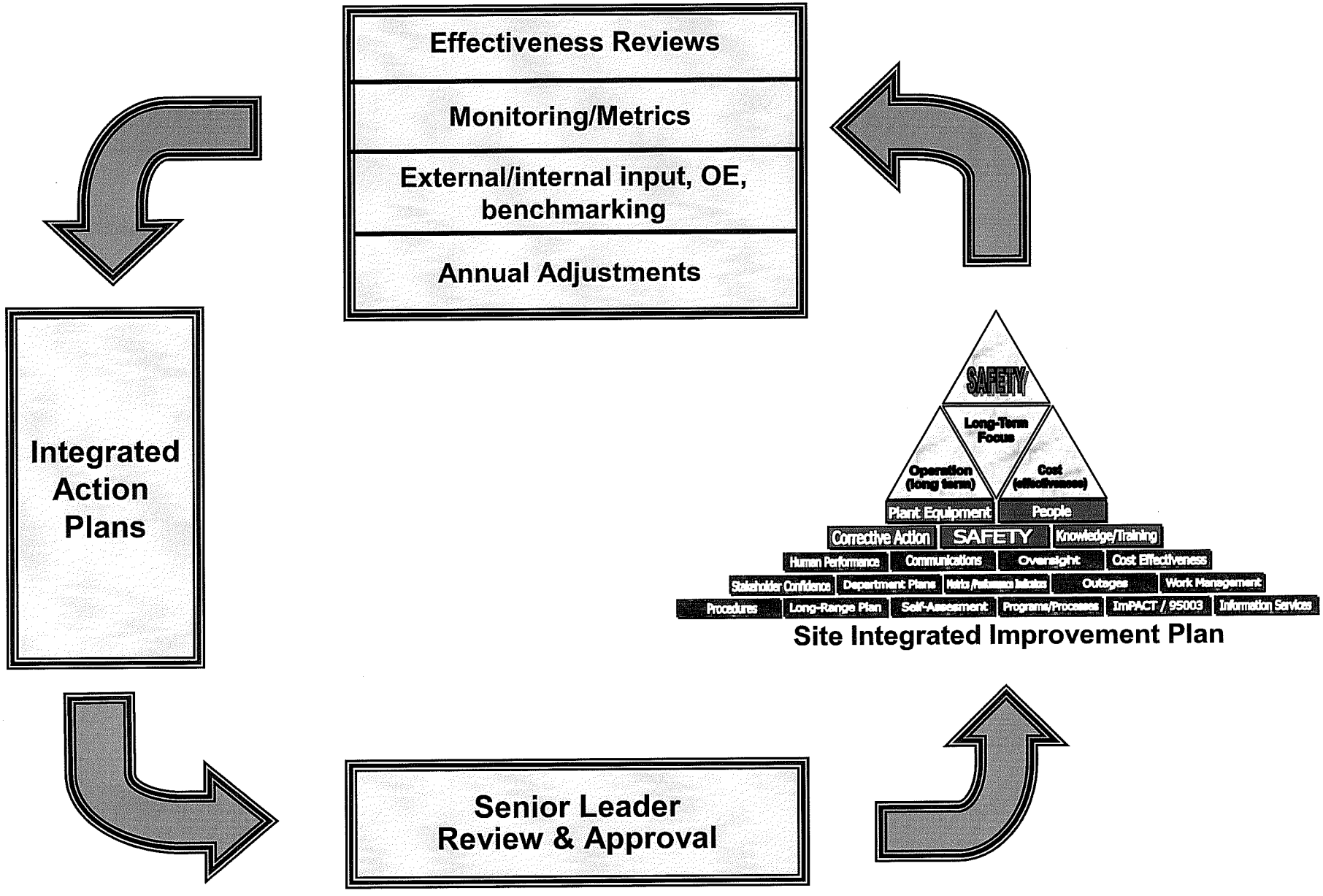
- Corrective actions to prevent recurrence of issues that caused Palo Verde's decline in performance
  - Addressing, for example, organizational, process, equipment and/or cultural issues
- Integrated Plan to support:
  - Strengthened safety culture
  - Sustained performance improvement for the long term

Conclusions

Randy Edington

Senior Vice President - Nuclear
& Chief Nuclear Officer

Integrated Plans For Continuous Improvement



Goals for Sustained Performance Improvement

- Identify the types of performance deficiencies and organizational and cultural weaknesses which have contributed to declining performance.
- Evaluate the identified deficiencies using root cause analysis methodologies to identify the underlying causes and the extent of condition.
- Identify corrective actions needed to correct the identified causes and the significant adverse conditions which have resulted from the causes.
- Develop and implement a Site Integrated Improvement Plan with appropriate performance measures that will result in sustained performance improvement.

Questions