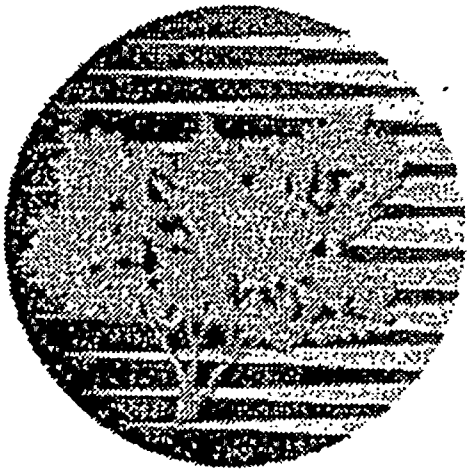
PVNGS

1991 BUSINESS PLAN



JULY 1990

INTRODUCTION

This initial version of the PVNGS 1991 Business Plan presents the one-year objectives for the operation of Palo Verde Nuclear Generating Station (PVNGS). It also integrates PVNGS priorities into a one-year plan to help employees understand the PVNGS mission and goals. Our mission is to generate electricity in a safe, reliable, economic, and environmentally sound manner that benefits our customers, owners, and employees. PVNGS is a business enterprise that must operate in a manner that best serves the interest of our shareholders and customers.

The 1991 Business Plan consists of:

- A restatement of the goals, strategies, and objectives from the Five-Year Business Plan;
- A 1991 objective for each five-year objective and corresponding strategy;
- The organizations responsible for contributing to achieving each goal and;
- Numeric objectives for each department, as applicable.

The 1991 Business Plan supports the Five-Year Business Plan which presents the PVNGS mission and the long-range goals, strategies, objectives, and resources that support the mission. The 1991 plan is supported by task plans which identify activities and responsibilities for achieving yearly objectives. The five-year plan, the 1991 plan, and the task plans are updated annually to incorporate changes and statused quarterly to monitor progress and reflect achievements. All levels of PVNGS management participated in developing appropriate elements of this plan.

NOTE: The absence of a date indicates an ongoing activity or that the due date of an objective is the last day of 1995 for five-year objectives and 1991 for one-year objectives. Due dates shown are the last day of the period indicated.

MISSION
GOALS
STRATEGIES

PVNGS 1991
BUSINESS PLAN

MISSION: The mission of the Palo Verde Nuclear Generating Station is to generate electricity in a safe, reliable, economic, and environmentally sound manner for the benefit of our customers, owners, and employees.

Goal 1: ***Safety - Protect the environment and the health and safety of the public and employees.*** (JNB)

Strategies:
- A. Provide a safe work environment for all employees.
- B. Minimize personnel radiation exposure and the generation of radioactive materials and waste.
- C. Meet or exceed regulatory requirements.
- D. Maintain safety equipment in a state of readiness to support plant operations and minimize challenges.
- E. Minimize use of hazardous materials and production of hazardous waste.

Goal 2: ***Professionalism - Maximize individual performance.*** (BEB)

Strategies:
- A. Attract, train, develop, and retain a professional, competent staff.
- B. Improve individual performance and accountability.
- C. Improve communication and teamwork.

Goal 3: ***Production - Maximize electric generation and improve organizational effectiveness.*** (JML)

Strategies:
- A. Maximize production efficiency.
- B. Improve effectiveness of all organizations.
- C. Improve maintenance support for operations.
- D. Improve engineering support for operations and maintenance.
- E. Improve chemistry support for operations.
- F. Improve outage planning, scheduling, and management.
- G. Improve work control processes.
- H. Improve plant configuration management.

Goal 4: ***Cost - Reduce overall cost.*** (ECS)

Strategies:
- A. Manage resources in a cost-effective manner.
- B. Improve management cost control practices.

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Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy A: *Provide a safe work environment for all employees.*

FIVE-YEAR OBJECTIVE 1: Maintain an All Injury Incident Rate of 0.50 or less.

1991 OBJECTIVE: Maintain an All Injury Incident Rate of 0.50 or less.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE
Plant Operations		Unit Ops Mgr	0.5
Maintenance		Unit Mntc Mgr	0.5
Plant Support		DEB	0.5
Site Services		JNT	0.5
Technical Support		GRO	0.1
Radiation Protection		JYO	0.5
Chemistry		JAS	0.0
Nuclear Training		EGF	0.25
Simulator Support		DCB	0.1
Quality Assurance		CNR	0.0
Nuclear Fuel Management		PFC	0.0
Nuclear Engineering & Support Services		JEA	0.0
Site Engineering & Construction		EWD	0.0
Nuclear Safety & Licensing		WFQ	0.0
Management Services		RWP	0.0
Budgets & Cost Control		MJG	0.0
Human Resources	JRB		0.0
Communications		DBA	0.0

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy A: *Provide a safe work environment for all employees.*

FIVE-YEAR OBJECTIVE 2: Maintain a Lost Work Incident Rate of 0.15 or less.

1991 OBJECTIVE: Maintain a Lost Work Incident Rate of 0.19 or less.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE
Plant Operations		Unit Ops Mgr	0.19
Maintenance		Unit Mntc Mgr	0.19
Plant Support		DEB	0.19
Site Services		JNT	0.19
Technical Support		GRO	0.0
Radiation Protection		JYO	0.19
Chemistry		JAS	0.0
Nuclear Training		EGF	0.10
Simulator Support		DCB	0.0
Quality Assurance		CNR	0.0
Nuclear Fuel Management		PFC	0.0
Nuclear Engineering & Support Services		JEA	0.0
Site Engineering & Construction		EWD	0.0
Nuclear Safety & Licensing		WFQ	0.0
Management Services		RWP	0.0
Budgets & Cost Control		MJG	0.0
Human Resources	JRB		0.0
Communications		DBA	0.0

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy A: *Provide a safe work environment for all employees.*

FIVE-YEAR OBJECTIVE 3: Maintain a Severity Incident Rate of 1.50 or less.

1991 OBJECTIVE: Maintain a Severity Incident Rate of 2.00 or less.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE
Plant Operations		Unit Ops Mgr	2.0
Maintenance		Unit Mntc Mgr	2.0
Plant Support		DEB	2.0
Site Services		JNT	2.0
Technical Support		GRO	0.4
Radiation Protection		JYO	2.0
Chemistry		JAS	0.0
Nuclear Training		EGF	1.0
Simulator Support		DCB	0.0
Quality Assurance		CNR	0.0
Nuclear Fuel Management		PFC	0.0
Nuclear Engineering & Support Services		JEA	0.0
Site Engineering & Construction		EWD	0.0
Nuclear Safety & Licensing		WFQ	0.0
Management Services		RWP	0.0
Budgets & Cost Control		MJG	0.0
Human Resources	JRB		0.0
Communications		DBA	0.0

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy B: *Minimize personnel radiation exposure and the generation of radioactive materials and waste.*

FIVE-YEAR OBJECTIVE 1: Do not exceed personnel radiation exposure of: outage = 180 manrem/year and non-outage = 25 manrem/year.

1991 OBJECTIVE: Do not exceed personnel radiation exposure of: Unit 1 = 144 manrem, Unit 2 = 200 manrem, Unit 3 = 200 manrem.

TASK PLAN RESPONSIBILITY					
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE UNIT 1	UNIT 2	UNIT 3
Plant Operations		Unit Ops Mgr	5.40	7.50	7.50
Maintenance		Unit Mntc Mgr	83.20	110.00	110.00
Plant Support		DEB	0.30	0.40	0.40
Site Services		TED	0.50	7.50	7.50
Technical Support		GRO	5.40	7.50	7.50
Radiation Protection	JMS		40.10	53.80	53.80
Chemistry		JAS	0.75	1.00	1.00
Nuclear Training		EGF	0.35	0.50	0.50
Simulator Support		DCB	0.01	0.01	0.01
Quality Assurance		CNR	2.50	3.50	3.50
Nuclear Fuel Management		PFC	0.01	0.01	0.01
Nuclear Engineering & Support Services		JEA	0.05	0.05	0.05
Site Engineering & Construction		EWD	5.40	7.50	7.50
Nuclear Safety & Licensing		TRB	0.01	0.01	0.01
Management Services		RWP	0.00	0.00	0.00
Budgets & Cost Control		LOI	0.00	0.00	0.00
Human Resources		JRB	0.00	0.00	0.00
Communications		DBA	0.00	0.00	0.00

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy B: *Minimize personnel radiation exposure and the generation of radioactive materials and waste.*

FIVE-YEAR OBJECTIVE 2: Do not exceed contaminated surface area of: outage = 7.5% and non-outage = 1.5%.

1991 OBJECTIVE: Do not exceed contaminated surface area of: outage = 7.5% and non-outage = 2.5%.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Ops Mgr	
Maintenance	Unit Mntc Mgr		
Plant Support			X
Site Services			X
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry		JAS	
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management			X
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy B: *Minimize personnel radiation exposure and the generation of radioactive materials and waste.*

FIVE-YEAR OBJECTIVE 3: Do not exceed personnel contamination events of: outage = 110/year and non-outage = 50/year.

1991 OBJECTIVE: Do not exceed personnel contamination events of: Unit 1 = 110, Unit 2 = 180, Unit 3 = 180.

TASK PLAN RESPONSIBILITY					
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE UNIT 1	UNIT 2	UNIT 3
Plant Operations		Unit Ops Mgr	12	18	18
Maintenance		Unit Mntc Mgr	65	108	108
Plant Support		FCB	0	0	0
Site Services		TED	3	6	6
Technical Support		GRO	3	4	4
Radiation Protection	JMS		20	32	32
Chemistry		JAS	3	5	5
Nuclear Training		EGF	0	0	0
Simulator Support		DCB	0	0	0
Quality Assurance		CNR	1	2	2
Nuclear Fuel Management		PFC	0	0	0
Nuclear Engineering & Support Services		JEA	0	0	0
Site Engineering & Construction		EWD	3	5	5
Nuclear Safety & Licensing		TRB	0	0	0
Management Services		RWP	0	0	0
Budgets & Cost Control		LOI	0	0	0
Human Resources		JRB	0	0	0
Communications		DBA	0	0	0

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy B: *Minimize personnel radiation exposure and the generation of radioactive materials and waste.*

FIVE-YEAR OBJECTIVE 4: Do not exceed a three-year average low level waste volume of 160 cubic meters/unit/year.

1991 OBJECTIVE: Do not exceed a low level waste volume of: Unit 1 = 225m^3, Unit 2 = 200m^3, Unit 3 = 250m^3

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Ops Mgr	
Maintenance		Unit Mntc Mgr	
Plant Support		FCB	
Site Services			X
Technical Support		GRO	
Radiation Protection	TPH		
Chemistry		JAS	
Nuclear Training			X
Simulator Support			X
Quality Assurance		CNR	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: *Meet or exceed regulatory requirements.*

FIVE-YEAR OBJECTIVE 1: Make responsible, coordinated regulatory commitments and meet due dates.

1991 OBJECTIVE: Assure commitment scope is understood, coordinated with appropriate organizational units and resources are available before making regulatory commitments. Track progress and meet due dates.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Ops Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services		GTS
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	WFQ	
Management Services		PDK
Budgets & Cost Control		JAF
Human Resources		JM
Communications		DBA

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: *Meet or exceed regulatory requirements.*

FIVE-YEAR OBJECTIVE 2: Make responsible, coordinated industry (e.g., ANI, NUMARC) commitments and meet due dates.

1991 OBJECTIVE: Assure commitment scope is understood, coordinated with appropriate organizational units and resources are available before making industry commitments. Track progress and meet due dates.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Ops Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services		GTS
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	ACR	
Management Services		PDK
Budgets & Cost Control		JAF
Human Resources		JM
Communications		DBA

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: *Meet or exceed regulatory requirements.*

FIVE-YEAR OBJECTIVE 3: Prioritize, track, and respond in a timely manner to approved recommendations from internal and external assessments.

1991 OBJECTIVE: Prioritize, track, and respond in a timely manner to approved recommendations from internal and external assessments.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		GTS
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	DNS	
Management Services		PDK
Budgets & Cost Control		JAK
Human Resources		JM
Communications		DBA

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy D: *Maintain safety equipment in a state of readiness to support operations and minimize challenges.*

FIVE-YEAR OBJECTIVE 1: Achieve safety system performance availability of at least: 99.0% - high pressure safety injection, 98.5% - aux. feedwater, 98.5% - E A/C power.

1991 OBJECTIVE: Achieve safety system performance availability of at least: 99.0% - high pressure safety injection, 96.8% - aux. feedwater, 97.5% - E A/C power.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations	Unit Ops Mgr		
Maintenance		Unit Mntc Mgr	
Plant Support		JWD	
Site Services		PJC	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training		EGF	
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy D: *Maintain safety equipment in a state of readiness to support operations and minimize challenges.*

FIVE-YEAR OBJECTIVE 2: Do not exceed one unplanned automatic reactor scram while critical per unit each year.

1991 OBJECTIVE: Do not exceed one unplanned automatic reactor scram while critical per unit.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations	Plant Mgrs		
Maintenance		Plant Mgrs	
Plant Support		JWD	
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy D: *Maintain safety equipment in a state of readiness to support operations and minimize challenges.*

FIVE-YEAR OBJECTIVE 3: Do not exceed one unplanned safety system actuation per unit each year.

1991 OBJECTIVE: Do not exceed one unplanned safety system actuation per unit.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations	Plant Mgrs		
Maintenance		Plant Mgrs	
Plant Support		JWD	
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy E: *Minimize use of hazardous materials and production of hazardous waste.*

FIVE-YEAR OBJECTIVE 1: Limit the production of hazardous waste.

1991 OBJECTIVE: Evaluate production of hazardous waste and determine five-year and one-year targets.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance		RAJ	
Plant Support		FCB	
Site Services		DWC	
Technical Support		GRO	
Radiation Protection		JPH	
Chemistry		JAS	
Nuclear Training		PVR	
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing	MC		
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy E: *Minimize use of hazardous materials and production of hazardous waste.*

FIVE-YEAR OBJECTIVE 2: Evaluate use of non-hazardous materials versus hazardous materials annually and substitute as practical.

1991 OBJECTIVE: Complete evaluations of use of non-hazardous materials versus hazardous materials by February and substitute as practical by June.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgrs	
Maintenance		RAJ	
Plant Support		FCB	
Site Services		DWC	
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry		JAS	
Nuclear Training		PVR	
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing	MC		
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 2: Professionalism - Maximize individual performance.

Strategy A: *Attract, train, develop, and retain a professional, competent staff.*

FIVE-YEAR OBJECTIVE 1: Select qualified individuals to perform job functions.

1991 OBJECTIVE: Define and document required personnel skills and select job candidates accordingly. Use the manager and supervisor development systems, backup candidate, and dual career path programs as appropriate. Provide equal employment opportunities in accordance with APS' Affirmative Action Plan.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		HFB
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		SCG
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		DNS
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources	KDD	
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy A: *Attract, train, develop, and retain a professional, competent staff.*

FIVE-YEAR OBJECTIVE 2: Develop technical and interpersonal skills through formal and informal training.

1991 OBJECTIVE: Identify training needs and requirements of each non-supervisory PVNGS employee. Prepare a training plan as part of the annual performance plan by April or within 60 days of selection for a job. Schedule training and assignments in accordance with plan. Attend scheduled training and carry out scheduled assignments.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		HFB
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training	EGF	
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		DNS
Management Services		SMT
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy A: *Attract, train, develop, and retain a professional, competent staff.*

FIVE-YEAR OBJECTIVE 3: Improve managerial and supervisory skills.

1991 OBJECTIVE: Identify training needs and requirements of each managerial and supervisory PVNGS employee. Prepare a training plan as part of the annual performance plan by April or within 60 days of selection for a job. Schedule training and assignments in accordance with plan. Attend scheduled training and carry out scheduled assignments.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		HFB
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		CDW
Simulator Support		DCB
Quality Assurance		SCG
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		DNS
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources	KDD	
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy B: *Improve individual performance and accountability.*

FIVE-YEAR OBJECTIVE 1: Integrate PVNGS Business Plan into daily work activities to assure continuity and consistency of managerial direction.

1991 OBJECTIVE: Assure decisions are consistent with Business Plan goals, strategies, objectives and task plans.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		JRL
Management Services	RWP	
Budgets & Cost Control		MJG
Human Resources		JM
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy B: *Improve individual performance and accountability.*

FIVE-YEAR OBJECTIVE 2: Communicate standards and expectations clearly and consistently.

1991 OBJECTIVE: Develop and communicate management and department standards and expectations.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		JRL
Management Services	RWP	
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy B: *Improve individual performance and accountability.*

FIVE-YEAR OBJECTIVE 3: Develop and implement results-oriented performance plans and appraisals consistently by 1991.

1991 OBJECTIVE: Develop and implement results-oriented performance plans and appraisals by April. Adjust compensation in accordance with appraisal by March 1992.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		REG
Maintenance		JFM
Plant Support		JWD
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		SCG
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		WFQ
Management Services		SMT
Budgets & Cost Control		MJG
Human Resources	KDD	
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy B: *Improve individual performance and accountability.*

FIVE-YEAR OBJECTIVE 5: Require adherence to procedures in accordance with PVNGS policies.

1991 OBJECTIVE: Adhere to PVNGS policy on procedure adherence (see procedure 01PR-0AP01, paragraph 3.3, "Administrative Controls Program")and PVNGS standards and expectations. Factor adherence to procedures into performance plans and appraisals.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations	FCB	
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		JRL
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy B: *Improve individual performance and accountability.*

FIVE-YEAR OBJECTIVE 4: Emphasize quality, attention to detail, and timely actions.

1991 OBJECTIVE: Emphasize quality, attention to detail, and timely actions. Managers and supervisors incorporate these as performance plan elements and reinforce in daily activities, staff meetings and one-on-one sessions.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		JRL
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources	KDD	
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy B: *Improve individual performance and accountability.*

FIVE-YEAR OBJECTIVE 6: Provide regular performance feedback throughout the organization.

1991 OBJECTIVE: Provide feedback on individual, department, and company performance during one-on-one sessions and staff meetings.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		SCG
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		JRL
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources	KDD	
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy C: *Improve communication and teamwork.*

FIVE-YEAR OBJECTIVE 1: Use daily activities to improve teamwork and morale throughout the organization.

1991 OBJECTIVE: Develop a plan to assess teamwork and morale by June. Implement plan by October.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		FJL
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		TCS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		JRL
Management Services	RWP	
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy C: *Improve communication and teamwork.*

FIVE-YEAR OBJECTIVE 2: Ensure managers and supervisors seek feedback from personnel.

1991 OBJECTIVE: Require managers and supervisors to maintain daily presence in the work area to ensure adequate knowledge of organizational and personnel performance.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		WCM
Maintenance		WCM
Plant Support		WCM
Site Services		FJL
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		TCS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		DNS
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources	KDD	
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy C: *Improve communication and teamwork.*

FIVE-YEAR OBJECTIVE 3: Promote effective, ongoing communication with co-workers and peers.

1991 OBJECTIVE: Conduct effective ongoing communication with co-workers and peer personnel at other plants and other PVNGS units.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Ops Mgr
Maintenance		Unit Mntc Mgr
Plant Support		JWD
Site Services		FJL
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		TCS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		DNS
Management Services	RWP	
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 2: Professionalism - Maximize individual performance.

Strategy C: *Improve communication and teamwork.*

FIVE-YEAR OBJECTIVE 4: Improve effectiveness of external communications, particularly with PVNGS regulators.

1991 OBJECTIVE: Evaluate effectiveness of current external communications, particularly with PVNGS regulators, and develop an improvement plan.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		FCB
Maintenance		RAJ
Plant Support		FCB
Site Services		GTS
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	WFQ	
Management Services		SMT
Budgets & Cost Control		JAF
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy A: *Maximize production efficiency.*

FIVE-YEAR OBJECTIVE 1: Achieve a three-year average site equivalent availability (capability) factor of 75%.

1991 OBJECTIVE: Achieve a site equivalent availability (capability) factor of 69%.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations	Unit Mgrs		
Maintenance		Unit Mntc Mgr	
Plant Support		DEB	
Site Services		CBS	
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance		GTS	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy A: *Maximize production efficiency.*

FIVE-YEAR OBJECTIVE 2: Do not exceed a forced outage rate (unplanned capability loss factor) of 5% per unit.

1991 OBJECTIVE: Do not exceed a forced outage rate (unplanned capability loss factor) of 9% per unit.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations	Unit Mgrs		
Maintenance		Unit Mntc Mgr	
Plant Support		JWD	
Site Services		LBS	
Technical Support		GRO	
Radiation Protection		PWH	
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance		GTS	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy A: *Maximize production efficiency.*

FIVE-YEAR OBJECTIVE 3: Maintain thermal performance of at least 99.5% per unit.

1991 OBJECTIVE: Maintain thermal performance of at least 99.5% per unit.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations	Unit Mgrs		
Maintenance		Unit Mgrs	
Plant Support		JWD	
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry		JAS	
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		MSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 1: Improve ability to conduct critical self-assessments.

1991 OBJECTIVE: Analyze department activities and identify appropriate performance indicators. Trend indicators at least quarterly to identify potential problems. Resolve problems in a timely manner.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgrs
Maintenance		Unit Mgrs
Plant Support		JWD
Site Services		DNW
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance	GTS	
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		DNS
Management Services		LAG
Budgets & Cost Control		MJG
Human Resources		JM
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 2: Improve proactive problem identification and resolution.

1991 OBJECTIVE: Promote personal ownership by initiating problem-solving at the lowest practical level. Encourage and support problem identification and, as required, escalation to the appropriate management level for resolution.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgrs
Maintenance		Unit Mgrs
Plant Support		JWD
Site Services		DNW
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	WFQ	
Management Services		LAG
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 3: Evaluate and implement lessons learned from PVNGS and industry experience.

1991 OBJECTIVE: Evaluate and implement lessons learned from PVNGS and industry operational experience. Conduct and attend quarterly industry events training, as applicable.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Ops Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services		DNW
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RNP
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	BSE	
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources		JM
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 4: Improve root cause and human performance evaluations.

1991 OBJECTIVE: Critically assess the effectiveness of the root cause and human performance evaluation programs by June and implement approved recommendations no later than December.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgrs
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support	GRO	
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		JPF
Simulator Support		DCB
Quality Assurance		RNP
Nuclear Fuel Management		SJT
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		BSE
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 5: Minimize repeat internal, NRC, or INPO findings.

1991 OBJECTIVE: Minimize repeat internal, NRC, or INPO findings.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services		GTS
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	WFQ	
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 6: Improve management of station backlogs.

1991 OBJECTIVE: Develop or confirm that meaningful measures of station backlogs have been developed by March, and reduced by the percent assigned in the Task Plans.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgrs	
Maintenance		RAJ	
Plant Support		FCB	
Site Services	RG		
Technical Support		GRO	
Radiation Protection		PWH	
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance		RCF	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		ACR	
Management Services		PDK	
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 7: Achieve SALP ratings of 2 or better in each category by 1992.

1991 OBJECTIVE: Contribute to achieving SALP ratings of 2 or better. Cause no severity level I, II, III violations and fewer level IV and V violations than in 1990. Minimize events which would result in Licensee Event Reports.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	TRB	
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 8: Achieve INPO rating of 2 or better by 1992.

1991 OBJECTIVE: Contribute to achieving INPO rating of 2 or better by 1992.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Ops Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing	WFQ	
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy B: *Improve effectiveness of all organizations.*

FIVE-YEAR OBJECTIVE 9: Integrate management information systems by 1994.

1991 OBJECTIVE: Continue integration planning and initiate implementation of enhancements to existing systems. (e.g., TRMS, MMIS, SIMS).

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Ops Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services	TFQ	
Technical Support		GRO
Radiation Protection		JMS
Chemistry		JAS
Nuclear Training		KJC
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		ACR
Management Services		PDK
Budgets & Cost Control		JAF
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: *Improve maintenance support for operations.*

FIVE-YEAR OBJECTIVE 1: Promote personal ownership by initiating problem-solving at the lowest practical level.

1991 OBJECTIVE: Promote personal ownership by initiating problem-solving at the lowest practical level. Factor problem solving and personal accountability into performance plans and appraisals.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgrs
Maintenance	RAJ	
Plant Support		FCB
Site Services		PJC
Technical Support		GRO
Radiation Protection		PWH
Chemistry		JAS
Nuclear Training		FGF
Simulator Support		DCB
Quality Assurance		RCF
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		WFQ
Management Services		RWP
Budgets & Cost Control		MJG
Human Resources		KDD
Communications		DBA

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: *Improve maintenance support for operations.*

FIVE-YEAR OBJECTIVE 2: Complete and implement preventive maintenance program improvements by 1991.

1991 OBJECTIVE: Complete and implement preventive maintenance program improvements and monitoring mechanisms.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance	RAJ		
Plant Support			X
Site Services		JA	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		RNP	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: *Improve maintenance support for operations.*

FIVE-YEAR OBJECTIVE 3: Develop and implement standard equipment specifications for corrective maintenance.

1991 OBJECTIVE: Develop and implement nine (9) standard equipment specifications for corrective maintenance.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance		RAJ	
Plant Support			X
Site Services		MJB	
Technical Support	GRO		
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		RNP	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: *Improve maintenance support for operations.*

FIVE-YEAR OBJECTIVE 4: Improve predictive maintenance program.

1991 OBJECTIVE: Establish the predictive maintenance program through implementation of departmental and maintenance procedures.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance		RAJ	
Plant Support			X
Site Services		SP	
Technical Support	GRO		
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		RNP	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: *Improve maintenance support for operations.*

FIVE-YEAR OBJECTIVE 5: Improve capability for calibration and control of measuring and test equipment.

1991 OBJECTIVE: Establish a calibration shop for contaminated tools and implement an electronic tracking and control program.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance	RAJ		
Plant Support			X
Site Services		SP	
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: *Improve maintenance support for operations.*

FIVE-YEAR OBJECTIVE 6: Improve control of special and previously used tools.

1991 OBJECTIVE: Implement electronic control and tracking of tools.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance	RAJ		
Plant Support			X
Site Services		SP	
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction			X
Nuclear Safety & Licensing		BSE	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: *Improve maintenance support for operations.*

FIVE-YEAR OBJECTIVE 7: Improve electronic work order program.

1991 OBJECTIVE: Implement SIMS program changes to support new work flow and on-line approval.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance	RAJ		
Plant Support			X
Site Services		MJB	
Technical Support			X
Radiation Protection		JMS	
Chemistry			X
Nuclear Training		LRM	
Simulator Support			X
Quality Assurance		CNR	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 1: Develop a proactive engineering posture in daily activities to foster ownership of plant systems.

1991 OBJECTIVE: Evaluate the Region V Engineering Managers Forum guidelines on proactive engineering and integrate applicable portions of the guidelines into the functions of the engineering organization at PVNGS.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services			X
Technical Support	GRO		
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 2: Disposition engineering requests for support based on operational priorities and within established time frames by 1992.

1991 OBJECTIVE 2: Identify and evaluate the various types of engineering requests received and establish realistic resolution time frames to be achieved by 1992.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance		RAJ	
Plant Support			X
Site Services			X
Technical Support	GRO		
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 3: Meet established schedules and turnaround items for engineering products and commitments.

1991 OBJECTIVE: Determine present schedule performance for engineering commitments and output documents. Establish an action plan which includes performance improvement goals.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance		RAJ	
Plant Support			X
Site Services		DJM	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services	JEA		
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 4: Continue to streamline the design change process.

1991 OBJECTIVE: Work with design process users to identify areas or methods that would streamline the process. Develop a plan and schedule to implement the recommended enhancements.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services		DJM	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services	JEA		
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 5: Continue to improve the quality of engineering products.

1991 OBJECTIVE: Continue developing and implementing a process to measure the quality of selected engineering products. Evaluate present quality of engineering products and establish an action plan which includes performance improvement goals.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		RNP	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services	FCP		
Site Engineering & Construction		MER	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 6: Develop a common engineering work management system by 1992.

1991 OBJECTIVE: Identify and evaluate the various work management systems in use within the engineering organization. Establish the successful attributes of an engineering work management system and develop an action plan to achieve implementation by 1992.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services		JED	
Technical Support	GRO		
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 7: Perform 50% of PVNGS engineering work in-house by 1992.

1991 OBJECTIVE: Define categories of engineering work performed by APS and outside engineering firms. Determine existing percentage levels of work by these groups and develop a plan to achieve 1992 objective.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		PFC	
Nuclear Fuel Management	JEA		
Nuclear Engineering & Support Services		EWD	
Site Engineering & Construction			X
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy D: *Improve engineering support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 8: Establish a plant, system, and component performance monitoring program by March 1992.

1991 OBJECTIVE: Define the requirements and scope of the performance monitoring program and develop a plan to achieve the 1992 date.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance		RAJ	
Plant Support			X
Site Services		SP	
Technical Support	GRO		
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy E: *Improve chemistry support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 1: Achieve a chemistry performance index below 0.15.

1991 OBJECTIVE: Achieve a chemistry performance index below 0.18.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgr	
Maintenance		RAJ	
Plant Support			X
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry	JAS		
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		DNS	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy E: *Improve chemistry support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 2: Improve chemistry controls for incoming demineralized water.

1991 OBJECTIVE: Evaluate monitoring of demineralized water at the water reclamation facility for chlorides, sodium sulfate, and total organic carbon. Use INPO document 88-021 in the evaluation and complete in 1990. Address any recommendations in 1991.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support	DEB		
Site Services			X
Technical Support			X
Radiation Protection			X
Chemistry		JAS	
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction			X
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy E: *Improve chemistry support for operations and maintenance.*

FIVE-YEAR OBJECTIVE 3: Improve chemistry controls for closed cooling systems.

1991 OBJECTIVE: Develop and implement a corrosion monitoring program by February.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry	JAS		
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction			X
Nuclear Safety & Licensing		DNS	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy F: *Improve outage planning, scheduling, and management.*

FIVE-YEAR OBJECTIVE 1: Plan and control outages to meet schedules.

1991 OBJECTIVE: Plan and control outages to meet schedules.
Unit 1 = 45 days, Unit 2 = 70 days, Unit 3 = 70 days

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgrs	
Maintenance		RAJ	
Plant Support		FCB	
Site Services	CDM		
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support			X
Quality Assurance		CNR	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		ACR	
Management Services		LAG	
Budgets & Cost Control		LOI	
Human Resources		KDD	
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy F: *Improve outage planning, scheduling, and management.*

FIVE-YEAR OBJECTIVE 2: Conduct annual analysis of past outages and industry outage experience to identify and correct major contributors to lost time.

1991 OBJECTIVE: Analyze 1990 PVNGS and industry outages by June to identify and correct major contributors to lost time.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgr	
Maintenance		RAJ	
Plant Support		FCB	
Site Services	CDM		
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry		JAS	
Nuclear Training		PVR	
Simulator Support			X
Quality Assurance		RNP	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		ACR	
Management Services		LAG	
Budgets & Cost Control		LOI	
Human Resources		KDD	
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy F: *Improve outage planning, scheduling, and management.*

FIVE-YEAR OBJECTIVE 3: Reduce in-processing time for outage contractors.

1991 OBJECTIVE: Reduce in-processing time for outage contractors by 10%.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance		RAJ	
Plant Support			X
Site Services	WPR		
Technical Support			X
Radiation Protection		JMS	
Chemistry			X
Nuclear Training		PVR	
Simulator Support			X
Quality Assurance		CNR	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources		KDD	
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy F: *Improve outage planning, scheduling, and management.*

FIVE-YEAR OBJECTIVE 4: Implement plan to ensure adequate summer capacity.

1991 OBJECTIVE: Develop a standard operating cycle and ensure adequate capacity during the summer.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgrs	
Maintenance		RAJ	
Plant Support			X
Site Services	RAB		
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services			X
Site Engineering & Construction			X
Nuclear Safety & Licensing		ACR	
Management Services		SMT	
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy G: *Improve work control processes.*

FIVE-YEAR OBJECTIVE 1: Reduce work order rejection rate by 10% each year.

1991 OBJECTIVE: Determine work order rejection rate by March and reduce by 25% of the identified value.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance	RAJ		
Plant Support			X
Site Services		MJB	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		CNR	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction		DBF	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy G: *Improve work control processes.*

FIVE-YEAR OBJECTIVE 2: Complete development of model work orders by 1992.

1991 OBJECTIVE: Complete 300 model work orders.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance	RAJ		
Plant Support			X
Site Services		MJB	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		CNR	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction			X
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy G: *Improve work control processes.*

FIVE-YEAR OBJECTIVE 3: Complete training and qualification of work planners and schedulers by 1992.

1991 OBJECTIVE: Develop and implement an annual technical training program.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance	RAJ		—
Plant Support			X
Site Services		RAH	
Technical Support			X
Radiation Protection			X
Chemistry			X
Nuclear Training		JPF	
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy G: *Improve work control processes.*

FIVE-YEAR OBJECTIVE 4: Complete simplification of work control processes by 1992.

1991 OBJECTIVE: Evaluate and implement approved recommendations of the Work Control Task Force.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgrs	
Maintenance	RAJ		
Plant Support			X
Site Services		MJB	
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry			X
Nuclear Training		JPF	
Simulator Support			X
Quality Assurance		CNR	
Nuclear Fuel Management			X
Nuclear Engineering & Support Services			X
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy H: *Improve plant configuration management.*

FIVE-YEAR OBJECTIVE 1: Improve the plant configuration management program by 1992.

1991 OBJECTIVE: Evaluate the existing configuration management programs and processes to identify areas needing improvement. Implement required changes identified in the evaluation consistent with developed program schedules.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services		JED	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training		WJR	
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services	JEA		
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy H: *Improve plant configuration management.*

FIVE-YEAR OBJECTIVE 2: Complete critical, safety-related plant design basis documentation.

1991 OBJECTIVE: Meet design basis reconstitution program commitments.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgrs	
Maintenance			X
Plant Support			X
Site Services		JED	
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance		RNP	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services	FCP		
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy H: *Improve plant configuration management.*

FIVE-YEAR OBJECTIVE 3: Complete development of operational basis information.

1991 OBJECTIVE: Develop, with the design organization, a plan to create operational basis information documents.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance			X
Plant Support			X
Site Services		MJB	
Technical Support	GRO		
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy H: *Improve plant configuration management.*

FIVE-YEAR OBJECTIVE 4: Limit design changes.

1991 OBJECTIVE: Limit design modification work, both new and in progress, to that which resolves safety or regulatory issues, supports unit restart, continued operation, or is specifically identified in the Long Range Plan.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		Unit Mgrs	
Maintenance		RAJ	
Plant Support		FCB	
Site Services	RG		
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry		JAS	
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy H: *Improve plant configuration management.*

FIVE-YEAR OBJECTIVE 5: Achieve simulator certification by May 1991.

1991 OBJECTIVE: Submit certification documents by March and maintain certification.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance			X
Plant Support		FCB	
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training		WJR	
Simulator Support	DCB		
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction			X
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy H: *Improve plant configuration management.*

FIVE-YEAR OBJECTIVE 6: Achieve necessary and desirable unit consistency.

1991 OBJECTIVE: When differences are identified, prioritize changes required to achieve necessary and desirable unit consistency.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations	FCB		
Maintenance		RAJ	
Plant Support		FCB	
Site Services		RAB	
Technical Support		GRO	
Radiation Protection		JMS	
Chemistry		JAS	
Nuclear Training		WJR	
Simulator Support		DCB	
Quality Assurance			X
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		MER	
Nuclear Safety & Licensing		ACR	
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 4: Cost - Reduce overall cost.

Strategy A: *Manage resources in a cost-effective manner.*

FIVE-YEAR OBJECTIVE 1: Achieve an average operations and maintenance cost per kilowatt hour, including fuel expense, within the top 20 domestic nuclear plants.

1991 OBJECTIVE: Achieve an average operations and maintenance cost per kilowatt hour, including fuel expense, of 25 mils.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgrs
Maintenance		RAJ
Plant Support		FCB
Site Services		BGC
Technical Support		GRO
Radiation Protection		VSH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		JRL
Management Services		RWP
Budgets & Cost Control	JAF	
Human Resources		KDD
Communications		DBA

Goal 4: Cost - Reduce overall cost.

Strategy A: *Manage resources in a cost-effective manner.*

FIVE-YEAR OBJECTIVE 2: Maintain five-year annual operations and maintenance budgets at the 1991 level.

1991 OBJECTIVE: Meet or underrun budget. Establish 1992 budget at or below the 1991 level.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE
Plant Operations		Unit Mgrs	Later
Maintenance		RAJ	
Plant Support		FCB	
Site Services		BGC	
Technical Support		GRO	
Radiation Protection		VSH	
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance		GTS	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		JRL	
Management Services		RWP	
Budgets & Cost Control	KJ		
Human Resources		KDD	
Communications		DBA	

Goal 4: Cost - Reduce overall cost.

Strategy A: *Manage resources in a cost effective manner.*

FIVE-YEAR OBJECTIVE 3: Reduce APS fuel expense to $7.00 per megawatt hour by 1993.

1991 OBJECTIVE: Reduce APS fuel expense to $7.50 per megawatt hour.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations		FCB	
Maintenance			X
Plant Support			X
Site Services			X
Technical Support		GRO	
Radiation Protection			X
Chemistry			X
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management	PFC		
Nuclear Engineering & Support Services			X
Site Engineering & Construction			X
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 4: Cost - Reduce overall cost.

Strategy A: *Manage resources in a cost effective manner.*

FIVE-YEAR OBJECTIVE 4: Maintain average capital improvement costs below $100 million per year.

1991 OBJECTIVE: Meet or underrun capital budget.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE
Plant Operations		Unit Mgr	Later
Maintenance		RAJ	
Plant Support		FCB	
Site Services		BGC	
Technical Support		GRO	
Radiation Protection		VSH	
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance		GTS	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		JRL	
Management Services		RWP	
Budgets & Cost Control	JAF		
Human Resources		KDD	
Communications		DBA	

Goal 4: Cost - Reduce overall cost.

Strategy A: *Manage resources in a cost effective manner.*

FIVE-YEAR OBJECTIVE 5: Maintain average warehouse inventory value below $140 million.

1991 OBJECTIVE: Maintain warehouse inventory value below $140 million.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	NONE REQUIRED
Plant Operations			X
Maintenance		RAJ	
Plant Support		DEB	
Site Services	LBS		
Technical Support		GRO	
Radiation Protection		VSH	
Chemistry		JAS	
Nuclear Training			X
Simulator Support			X
Quality Assurance			X
Nuclear Fuel Management			X
Nuclear Engineering & Support Services		ECS	
Site Engineering & Construction		SJG	
Nuclear Safety & Licensing			X
Management Services			X
Budgets & Cost Control			X
Human Resources			X
Communications			X

Goal 4: Cost - Reduce overall cost.

Strategy B: *Improve management cost control practices.*

FIVE-YEAR OBJECTIVE 1: Justify and control expenditure of funds.

1991 OBJECTIVE: Adhere to budget and cost control procedures when expending funds, developing budgets, or making budgetary changes. Evaluate the budget and cost control procedures and make any necessary changes.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgr
Maintenance		RAJ
Plant Support		FCB
Site Services		MSW
Technical Support		GRO
Radiation Protection		VSH
Chemistry		JAS
Nuclear Training		EGF
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		WFQ
Management Services		RWP
Budgets & Cost Control	MJG	
Human Resources		KDD
Communications		DBA

Goal 4: Cost - Reduce overall cost.

Strategy B: *Improve management cost control practices.*

FIVE-YEAR OBJECTIVE 2: Minimize overtime within budget.

1991 OBJECTIVE: Meet or underrun overtime budget.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE
Plant Operations		Unit Mgrs	Later
Maintenance		Unit Mgrs/RAJ	
Plant Support		FCB	
Site Services		MSW	
Technical Support		GRO	
Radiation Protection		VSH	
Chemistry		JAS	
Nuclear Training		EGF	
Simulator Support		DCB	
Quality Assurance		GTS	
Nuclear Fuel Management		PFC	
Nuclear Engineering & Support Services		JEA	
Site Engineering & Construction		EWD	
Nuclear Safety & Licensing		WFQ	
Management Services		RWP	
Budgets & Cost Control	MJG		
Human Resources		KDD	
Communications		DBA	

Goal 4: Cost - Reduce overall cost.

Strategy B: *Improve management cost control practices.*

FIVE-YEAR OBJECTIVE 3: Maintain staff, including long term contractors, no greater than 3211.

1991 OBJECTIVE: Meet or underrun authorized manpower budget.

TASK PLAN RESPONSIBILITY			
ORGANIZATION	LEAD	RESPONSIBLE	OBJECTIVE
Plant Operations		Unit Mgrs	691
Maintenance		Unit Mgr/RAJ	304
Plant Support		FCB	182
Site Services	PJC		580
Technical Support		GRO	268
Radiation Protection		PWH	200
Chemistry		JAS	100
Nuclear Training		EGF	145
Simulator Support		DCB	INC. IN TRNG & SITE SVCS
Quality Assurance		GTS	135
Nuclear Fuel Management		PFC	37
Nuclear Engineering & Support Services		JEA	285
Site Engineering & Construction		EWD	124
Nuclear Safety & Licensing		WFQ	68
Management Services		RWP	16
Budgets & Cost Control		MJG	37
Human Resources		KDD	31
Communications		DBA	8

Goal 4: Cost - Reduce overall cost.

Strategy B: *Improve management cost control practices.*

FIVE-YEAR OBJECTIVE 4: Improve cost and budget reporting.

1991 OBJECTIVE: Establish budget and cost reports, assumptions, and definitions for inclusion in the budget preparation package.

TASK PLAN RESPONSIBILITY		
ORGANIZATION	LEAD	RESPONSIBLE
Plant Operations		Unit Mgrs
Maintenance		Unit Mgr/RAJ
Plant Support		FCB
Site Services		BGC
Technical Support		GRO
Radiation Protection		VSH
Chemistry		JAS
Nuclear Training		KJC
Simulator Support		DCB
Quality Assurance		GTS
Nuclear Fuel Management		PFC
Nuclear Engineering & Support Services		JEA
Site Engineering & Construction		EWD
Nuclear Safety & Licensing		WFQ
Management Services		SMT
Budgets & Cost Control	BAR	
Human Resources		KDD
Communications		DBA

1991 TASK PLANS (Drafts)

- Motor Operated Valve (MOV) Program
- Maintenance Improvement Program

MOTOR OPERATED VALVE (MOV)

1991 TASK PLANS (draft)

Task 1 thru 11	Nuclear Engineering
Task 12 thru 16	Site Maintenance
Task 17 thru 21	Technical Support
Task 22 thru 24	Nuclear Training
Task 25, 26	Outage Planning and Management
Task 27, 28	Material Control
Task 29	Plant Support
Task 30	Plant Operations
Task 31	Technical Data

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Nuclear Engineering and Support Services

Nuclear Engineering

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	01	Collect data and assess size and configuration, relative to limit switches, of safety related MOVs.	Later	Later	12/31/91	Complete	INPO 020007	Later
1.C.1	02	Collect data and assess design data for non-safety related MOVs.	Later		12/31/93			
1.C.1	03	Develop Differential Pressure Test Guidelines (For safety valves).	I & C - S. Lane		12/91	85%		
1.C.1	04	Develop torque and sizing thrust values for safety related MOVs.	I & C - S. Lane		12/31/90	75%		
1.C.1	05	Evaluate installation of compensating spring packs for Limitorque motor operators.	I & C - S. Lane		12/31/91		OER 050341 SOER 83-09	
1.C.1	06	Evaluate circuit design of MOVs.	I & C - S. Lane		12/31/91		OER 052152 SER 81-085 SER 81-085	
1.C.1	07	Evaluate electrical overload protection policy.	EE - M. Hypse		12/31/91			
1.C.1	08	Develop and issue MOV Design Basis Manual	Later		6/30/92			
1.C.1	09	Perform periodic reviews of MOV deficiencies in comparison with the industry utilizing NPRDS.	Later		ONGOING			
1.C.1	10	Consolidate Limitorque vendor manual information.	Proc. Eng. - S. Grier					
1.C.1	11	Provide support to units for testing, trouble-shooting, and problem resolution.	Later		ONGOING			

7/27/90
Task1A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenance - Site Maintenance

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	12	Issue detailed MOV maintenance procedures to include assembly/disassembly, installation and removal.	Maint Stds -	Later	12/30/90		OER 050055 SOER 83-09	Later
1.C.1	13	Issue troubleshooting/root-cause work orders, and procedures for each model MOV.	Maint Stds -		12/30/90		OER 050056 SOER 83-09	
1.C.1	14	Issue procedures to standardize MOV packing adjustments and replacement.	Maint Stds -		02/28/91		INPO 020007	
1.C.1	15	Perform MOV static testing on all program safety related valves..	Central Maint		1RF03 2RF03 3RF02			
1.C.1	16	Implement MOV position indication DCPs.	Central Maint		1RF03 2RF03 3RF02	98% complete		

7/27/90
Task 7A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Nuclear Production - Technical Support

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: Mov Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	17	Develop program plan in response to G.L. 89-10 and other related commitments.	CSE - W. Webster	Later	06/28/90	Complete	RCTS 039559	Later
1.C.1	18	Develop and issue D/P test procedures for Generic Letter 89-10.	CSE - S. Coppock		06/28/94			
1.C.1	19	Develop list of valves and tests for upcoming unit outages.	CSE - S. Coppock		06/28/90	Complete		
1.C.1	20	Develop MOV performance trending program.	CSE - S. Coppock					
1.C.1	21	Assist in performance of D/P testing.	SE -		1RF05 06/28/94 3RF04			

7/27/90
Task2A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Nuclear Production - Nuclear Training

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	22	Update lesson plans to include MOV operation, case studies, and MOV limitations.	Later	Later	06/30/91			Later
1.C.1	23	Conduct training of personnel on MOV issues using SOER-83-09 and PVNGS procedures.			12/31/91		OER 050054 SOER 83-09	
1.C.1	24	Conduct training on test equipment as necessary.						

7/27/90
Task 3A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Site Services - Outage Planning and Management

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	25	Perform outage scheduling related to the MOV program.	Unit Out. Mgt.	Later	Later	ONGOING	Later	Later
1.C.1	26	Develop schedule for completion of rewire DCPs, DP testing, and outage required static testing.	Unit Out. Mgt.			ONGOING		

7/27/90
Task6A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Site Services - Material Control

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	27	Identify and ensure availability of parts and spare parts required to support the following: (1) Rotor rewiring (2) MOV static baseline testing (3) Other DCP work (4) Additional corrective maintenance work orders. (5) Valve packing replacement	Later	Later	Later	Later		Later
1.C.1	28	Issue receipt inspection procedure or guidelines for MOVs.					SEN 35	

7/27/90
Task17A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenace - Plant Support

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	29	Develop a procedure for backseating of valves.	Op. Stds - J. Dennis	Later	05/04/91	Later	OER 051098 OMR 0340 SER P2-049	Later

7/27/90
Task18A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenance - Plant Operations

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	30	Schedule on-line MOV testing as specified.	Unit W/C	CSE	Later	Later	Later	Later

7/27/90
Task5A

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Nuclear Safety and Licensing
Technical Data

Goal 1: Safety - Protect the environment and the health and safety of the public and employees.

Strategy C: Meet or exceed regulatory commitments.

5-Year PVNGS Objective 1: Make responsible, coordinated regulatory commitments and meet due dates.

1-Year Objective: Assure commitment scope is understood and coordinated and resources are available before scheduling work to support regulatory commitments. Track progress and meet due dates.

Major Task 1: MOV Program: Responsibility - W. Webster, Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
1.C.1	31	Review past and current plant operating experience documents, including SOER, SER, GL, IB, OMR, that are relative to MOVs.	Tech. Data - R. Kershaw	N/A	ONGOING	ONGOING	Later	Later

7/27/90
Task19A

MAINTENANCE IMPROVEMENT PROGRAMS

1991 TASK PLANS (drafts)

Major Tasks -

- Work Control Task Force
- Model Work Orders
- Maintenance Refueling Team
- Central Maintenance Improvement
- Standard Equipment Specifications
- Preventive Maintenance Task Force

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenance - Site Maintenance

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy G; Improve work control processes.

5-Year PVNGS Objective 4: Complete simplification of work control processes by 1992.

1-Year Objective: Evaluate and implement approved recommendations of the Work Control Task Force.

Major Task 2: Work Control Task Force: Responsibility (Later)

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
3.G.4	01	Issue Work Control Task Force recommendations.		N/A	07/90	Complete	Later	Later
3.G.4	02	Issue revised work control procedures.	Later		12/90			
3.G.4	03	Monitor and assess work planning efficiency.			04/91			
3.G.4	04	Monitor plant scheduling and coordination effectiveness.			04/91			
3.G.4	05	Obtain site acceptance of PSD.			01/91			
3.G.4	06	Modify and implement SIMS to improve work control process.	M. Beyer		09/91			

7/27/90
Task10a

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenance - Site Maintenance

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy G: Improve work control processes.

5-Year PVNGS Objective 2: Complete development of model work orders by 1992.

1-Year Objective: Complete 300 model work orders.

Major Task 3: Model Work Orders: Responsibility - S. Moyers (Maintenance Standards)

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
3.G.2	01	Collect archived work orders for conversion to models.	S. Moyers	N/A		Ongoing	Later	Later
3.G.2	02	Revise existing models using Maintenance Procedure Guide.	S. Moyers	N/A	6/30/91			
3.G.2	03	Develop new models using Maintenance Procedure Guide (30DP-OAP01).	S. Moyers	NISD	12/31/91			

dpA

7/27/90
Task11a

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenance - Site Maintenance

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy F: Improve outage planning, scheduling, and management.

5-Year PVNGS Objective 1: Plan and control outages to meet schedules.

1-Year Objective: Plan and control outages to meet schedule, Unit 1 = 45 days, Unit 2 = 70 days, Unit 3 = 70 days.

Major Task 4: Maintenance Refueling Team: Responsibility (Later).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
3.F.1	01	Define job performance objectives of Maintenance Refueling Team.	Later	HR	10/90	Later	Later	Later
3.F.1	02	Schedule Training development process.		NT	11/90			
3.F.1	03	Identify existing experience within organization and APS.		HR	12/90			
3.F.1	04	Identify critical or high lead time equipment or tools.		MC	01/91			
3.F.1	05	Develop training course for key refueling tasks.		NT	04/91			

7/27/90
Task12a

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenance - Site Maintenance

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: Improve maintenance support for operations.

5-Year PVNGS Objective 6: Improve control of special and previously used tools.

1-Year Objective: Implement electronic control and tracking of tooling.

Major Task 6: Central Maintenance Improvement; Pat Brandjes (Central Maintenance)

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
3.C.6	01	Develop and implement procedure for tool control.	Maint. Stds -		09/90	Later	Later	Later
3.C.6	02	Implement computer tracking of tools.	Cent. Maint -	NISD	03/91			
3.C.6	03	Complete tool inventory and establish release control program.	Cent. Maint -	MC	03/91			
3.C.6	04	Define tool storage requirements.	Cent. Maint -	MC	04/91			
3.C.6	05	Issue tool control procedures.	Maint. Stds -		04/91			

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Plant Operations and Maintenance - Site Maintenance

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: Improve maintenance support for operations.

5-Year PVNGS Objective 2: Complete and implement Preventive Maintenance (PM) program improvements by 1991.

1-Year Objective: Complete and implement Preventive Maintenance (PM) program improvements and monitoring mechanisms.

Major Task 8: PM Task Force: Responsibility - Ron Younger (Plant Standards)

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
3.C.2	01	Establish PM Task Force.	Plt Stds - R. Younger			Complete	Later	Later
3.C.2	02	Define required PM program for all components using evaluation logic.	Plt Stds - R. Younger		06/90	Complete		
3.C.2	03	Establish evaluation process for model plant system.	Plt Stds - R. Younger	Tech Stds	06/90	Complete		
3.C.2	04	Evaluate essential cooling water system (EW) & make recommendations for PM modifications.	Plt Stds - R. Younger	Tech Stds	07/90	Complete		
3.C.2	05	Continue to evaluate plant systems (104 remaining).	Plt Stds - R. Younger	Tech Stds	12/30/91	Ongoing		
3.C.2	06	Revise plant procedures as applicable.	Plt Stds - R. Younger	Tech Stds	12/30/91	Ongoing		

7/27/90
Task15b

Palo Verde Nuclear Generating Station

1991 Task Plan

Organization

Nuclear Production - Technical Support

Goal 3: Production - Maximize electric generation and improve organizational effectiveness.

Strategy C: Improve maintenance support for operations.

5-Year PVNGS Objective 3: Develop and implement standard equipment specifications for corrective maintenance.

1-Year Objective: Develop and implement nine (9) standard equipment specifications for corrective maintenance.

Major Task 9: Standard Equipment Specifications: Responsibility - W. Webster - Component and Specialty Engineering (CSE).

Objective	Task	Description	Responsibility	Interface Org.	Due Date	Status	Reference	Budget
3.C.3	01	Develop maintenance specs for fastener torquing.	CSE - G. Waldrep	Maint.	03/32/91	Later	SEEP, Section 4.3	Later
3.C.3	02	Develop maintenance specs for sealant application.	CSE - G. Waldrep	Maint.	04/31/92			
3.C.3	03	Develop maintenance specs for MOVs and testing.	CSE - G. Waldrep	Maint.	08/31/91			
3.C.3	04	Develop maintenance specs for Cable Splicing	CSE - D. Smyers	Maint.	07/31/91			
3.C.3	05	Develop maintenance specs for scaffolding.	CSE - R. Fongemie	Maint.	04/30/91			
3.C.3	06	Develop maintenance specs for rigging.	CSE - R. Fongmie	Maint.	07/31/91			
3.C.3	07	Develop maintenance specs for fire doors.	CSE - R. Fongemie	Maint.	01/31/91			
3.C.3	08	Develop maintenance specs for valve packing.	CSE - G. Waldrep	Maint.	11/30/91			
3.C.3	09	Develop specs for control of transient combustibles.	CSE - R. Fongemie	Maint.	05/31/91			

DER/PVNGS BUSINESS PLAN (INITIAL VERSION) CROSS-REFERENCE MATRIX

30 JULY 90

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
1. Improvement initiatives to resolve management issues not in place long enough to achieve desired results. (Cover Letter, 2)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objective 1.	Five-Year Objective, Integrate PVNGS Business Plan into daily work activities to assure continuity and consistency of managerial direction. 1991 Objective, Assure decisions are consistent with Business Plan goals, strategies, objectives and task plans. See Cover Letter transmitting Business Plan for description of how Business Plan has been designed to assist PVNGS managers, supervisors and employees in carrying out PVNGS' mission.
2. Rate at which major issues being resolved limited by: -insufficient top level improvement program integration; -lack of systematic/ complete programs, plans and implementing strategies for all issues;	Business Plan overall.	Strategies, objectives and tasks related to protection of the public health and safety and the environment are integrated under Goal 1, Safety; those related to improving individual effectiveness and accountabilities are integrated under Goal 2, Professionalism;

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
2. Continued: -insufficient management oversight of improvement efforts; -organizational instability, uncertainty, insecurity (Cover Letter, 2)		those related to maximizing electric generation and improving organizational effectiveness and accountability under Goal 3, Production; and those related to reducing the cost of generation and improving financial accountability under Goal 4, Cost. See Cover Letter transmitting Business Plan and Introduction to Business Plan for discussion of each of the three tiers of the Business Plan and their relationship. Note: APS has established a file at PVNGS for documenting progress on DER-related actions not management related.

DER/PVNGS BUSINESS PLAN (INITIAL VERSION) CROSS-REFERENCE MATRIX

30 JULY 90

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
3. Additional management attention needed to resolve Engineering and Maintenance programmatic issues which continue to adversely affect root cause analysis and timely corrective actions for problems (Cover Letter, 2).	Five-Year and 1991 Plans, Goal 3, Strategy B; Strategy D, Objective 8.	Strategy B is directed at improving critical-self assessments, root cause analysis and the timeliness of corrective actions. Strategy D, Five-Year Objective, Establish a plant, system, and component performance monitoring program by March 1992. 1991 Objective, Define the requirements and scope of the performance monitoring progress and develop a plan to achieve the 1992 date.
4. Attention is needed for the PVNGS MOV and check valve programs to ensure long-term reliability of the components (Cover Letter, 2).	Five-Year and 1991 Plans, Goal 1, Strategy C, Objectives 1, 2, 3.	Objectives 1-3 relate to making and meeting the regulatory and industry commitments, such as those related to the MOV and check valve programs. See third-tier Task Plan regarding MOV program; check valve program to be treated similarly.
5. Increased attention to the Plant Review Board will be required to raise the overall effectiveness of the PRB (Cover Letter, 2).	Awaiting approval of Tech. Spec. change.	See Cover Letter transmitting PVNGS Business Plan regarding NRC review of documentation on DER-related actions.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
6. APS must define its own priorities and balance its resources in an integrated manner that will provide the most rapid and sustained improvement in Palo Verde's safety performance (Cover Letter, 2).	Business Plan overall.	The Business Plan has been designed to facilitate setting priorities and balancing resources in an integrated manner. See Entry No. 2
7. Deficiencies in leadership, management involvement, teamwork, resource utilization, communications, accountability, creativity, technical expertise, ownership, motivation, work planning, work control, work prioritization, problem identification, problem resolution, and corrective action. (Executive Summary, i)	Five-Year & 1991 Plans, especially Goal 2, Strategies B & C; Goal 3, Strategies B & G.	Goal 2, Strategy B, Improve individual performance and accountability; Strategy C, Improve communications and teamwork; Goal 3, Strategy B, Improve effectiveness of all organizations; Strategy G, Improve work control processes.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
8. A number of functional areas, in particular maintenance and engineering, needed increased attention to foster greater emphasis on management, ownership, and urgency. (Executive Summary, i)	Five-Year and 1991 Plans, Goal 2, Strategy B, Objectives 2, 3, 4, 5; Goal 3, Strategies C & D, Objective 1.	Goal 2, Strategy B, Improve individual performance and accountability, Objectives 2-5 concern standards and expectations, including timely actions, and developing adherence to procedures. Goal 3, Strategies C & D, Objective 1 both foster ownership. See also Entry No. 3.
9. Engineering support often untimely and inadequate because of: -management instability and deficiencies; -strained resources; -poor communications. (Executive Summary, ii)	Five-Year & 1991 Plans, Goal 2, Strategies A, B, C; Goal 3, Strategy D.	Goal 2, Strategy A, Attract, train, develop and retain a professional, competent staff; Strategy B, Improve individual performance and accountability; Strategy C, Improve communications and teamwork; Goal 3, Strategy D, Improve engineering support for operations and maintenance.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
10. EER system ineffective and overwhelming systems engineers with paperwork. (Executive Summary, ii)	Five-Year & 1991 Plans, Goal 3, Strategy D.	Strategy D concerns improvement in all areas of engineering performance, including identification and workoff of items.
11. Much of the time spent by engineering personnel to resolve various [EER] issues was a misuse of resources. The licensee was ineffective in screening out frivolous or irrelevant EERs or rerouting them to other organizations if they were not engineering related. (Executive Summary, ii)	See Entry No. 10.	
12. The new integrated department-wide work prioritization system was not yet effective. (Executive Summary, ii)	See Entry No. 10	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
13. Most of EED's efforts involved reacting to whichever plant submitted the initial assistance request or whoever applied the most pressure to obtain engineering support. (Executive Summary, ii)	Five-Year & 1991 Plans, Goal 3, Strategy D, Objective 2.	Five-Year & 1991 Objective: Disposition engineering requests for support based on operational priorities and within established time frames by 1992.
14. Maintenance tasks not always being performed in a timely, quality and coordinated manner due to: -ineffective management; -strained resources; -inadequate procedures & programs. (Executive Summary, ii)	Five-Year & 1991 Plan, Goal 2; Goal 3, Strategies C & G.	See Entry No. 9 regarding Goal 2; Goal 3, Strategy C, Improve Maintenance Support for Operations; Strategy G, Improve Work Control processes.
15. Lack of coordination of maintenance activities resulted in delays in the performance of work and interfered with proper root cause analysis. (Executive Summary, ii)	See Entry Nos. 3, 14.	
16. Inadequate planning for and management of refueling outages. (Executive Summary, ii)	Five-Year & 1991 Plans, Goal 3, Strategy F.	Strategy F, Improve outage planning, scheduling and management.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
17. No central person or organization responsible for managing the outages. (Executive Summary, ii)	Resolved.	Outage Planning and Management organization formed. General Manager position has been created and filled.
18. Little pre-staging of parts for outages, tangible plans to deal with emergent work, cutoff date for submission of maintenance modification activities to the outage schedule. (Executive Summary, ii)	Five-Year & 1991 Plans, Goal 3, Strategy F, Objective 1.	Objective 1, Plan and control outages to meet schedules.
19. Maintenance work orders inconsistent in level of detail and often contained errors. (Executive Summary, ii)	Five-Year & 1991 Plans, Goal 3, Strategy G.	Strategy G, Improve work control processes; Five-Year Objective 1, Reduce work order rejection rate by 10% per year. Objective 2, Complete development of model work orders by 1992. Objective 3, Complete the training and qualification of work planners and schedulers by 1992. Objective 4, Complete simplification of work control processes by 1992.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
20. Work packages and reference materials: inaccurate, cumbersome, difficult to use, resulting in increased probability of maintenance errors. (Executive Summary, ii)	See Entry No. 19.	
21. Maintenance management not sufficiently aware of personnel deficiency reporting systems and equipment failure data trending programs to effectively trend maintenance activities and initiate corrective actions as appropriate. (Executive Summary, ii)	See Entry No. 19.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
22. MOV program weaknesses: -control of MOV setpoints; -use of MOV data base drawing; -lack of baseline data for many MOVs; -lack of detailed procedures for MOV disassembly and reassembly; -lack of proper documentation for MOV setpoints; -internal responses to industry experience reports incomplete and untimely. (Executive Summary, iii)	Five-Year & 1991 Plan, Goal 1, Strategy C, Objectives 1, 2, 3.	See Entry No. 4. Also see draft 1991 Task Plan for Motor Operated Valves (MOVs).

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
23. QA program weaknesses: -deficiencies not being identified; -ineffective corrective actions; -slow implementation of corrective actions because of: --programmatic weaknesses; --insufficient line organization support; --slow determination of root cause; --incomplete determination of root causes. (Executive Summary, iii)	Five-Year & 1991 Plan, Goal 3, Strategy B, Objectives 1, 2, 3, 4, 5, 6.	Strategy B, Improve effectiveness of all organizations; Objective 1 relates to improving capability to conduct critical self-assessments; Objective 2, to improving proactive problem identification and resolution; Objective 3, to using lessons learned effectively; Objective 4, to improving root cause and human performance evaluations; Objective 5, to minimizing repeat internal, NRC or INPO findings; Objective 6, to improving management of station backlogs.
24. PRB not functioning effectively: -lack of direction; -slow progress in developing improvement program. (Executive Summary, iii)	See Entry No. 5.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
25. System misalignment events were being caused by: -programmatic weaknesses; -inattention to detail; -independent verification not working; -system status prints and valve logs not being maintained; -operator inattention. (Executive Summary, iii)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objectives 2, 3, 4, 5, 6.	Goal 2, Strategy B, Improve individual performance and accountability. Five-Year Objective 2, concerns communication of standards and expectations; Objective 3, implementation of results-oriented performance plans and appraisals; Objective 4, emphasis on quality, attention to detail and timely actions; Objective 5, adherence to procedures; Objective 6, performance feedback.
26. Communications between operations management and staff not effective: -inconsistent guidance; -poor implementation among the 3 units of 2 policy letters used to reemphasize normal practices. (Executive Summary, iii)	Five-Year & 1991 Plans, Goal 2, Strategy C, Objective 3; Goal 3, Strategy H, Objective 6.	Strategy C, Improve communication and teamwork; Five-Year Objective 3, Promote effective, ongoing communication with co-workers and peers. 1991 Objective, Conduct effective ongoing communications with co-workers and peer personnel at other plants and other PVNGS units. Strategy H, Improve the plant configuration management, Five-Year Objective 6, Achieve necessary and desirable unit consistency. 1991 Objective 6, When differences are identified,

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
		prioritize changes required to achieve necessary and desirable unit consistency.
27. NRC concerned about Palo Verde ability to continue to apply resources necessary to develop, maintain and improve training programs because of the large use of contractors and their upcoming release. (Executive Summary, iii)	Five-Year & 1991 Plans, Goal 2, Strategy A, Objective 1; Goal 4, Strategy B, Objective 3.	Goal 2, Strategy A, Attract, train, develop, and retain a professional, competent staff, Objective 1, Select qualified individuals to perform job functions. Goal 4, Strategy B, Improve management cost control practices, Five-Year and 1991 Objective 3, identifies staffing levels which reflect approved staffing recommendations.
28. Some instances in surveillance testing of lack of attention to detail during planning, performance and review activities. (Executive Summary, iii)	See Entry No. 25.	
29. Inadequate progress in response to industry guidance on check valve testing. (Executive Summary, iii)	See Entry No. 4.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
30. Inadequate progress on 50 major initiatives due to: -insufficient top level improvement program integration; -lack of systematic/ complete programs, plans and implementing strategies for all issues; -insufficient management oversight of improvement efforts; -organizational instability, uncertainty and insecurity. (Executive Summary, iii-iv)	See Entry No. 2.	See Cover Letter regarding relationship of Business Plan and PVNGS programs and initiatives.
31. Additional management attention needed to resolve engineering and maintenance programmatic issues affecting adequacy of root cause analysis and timely corrective action. (Executive Summary, iv)	See Entry No. 3.	
32. Attention needed for MOV and check valve programs. (Executive Summary, iv)	See Entry No. 4.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
33. Increased attention needed to increase overall effectiveness of PRB. (Executive Summary, iv)	See Entry No. 5.	
34. Insufficient top-level improvement program integration. (2.1)	See Entry No. 4.	
35. Lack of systematic/ complete program plans and implementing strategies for all issues. (2.1)	See Entry No. 2.	
36. Insufficient management oversight of improvement. (2.1)	See Entry No. 2.	
37. Organizational instability, uncertainty, and in security. (2.1)	See Entry No. 2.	
38. Lack of communication of Palo Verde management attitudes, beliefs, values to Palo Verde employees. (2.1.1(1), 3.1.3)	See Entry No. 25	
39. Lack of strategies/ schedules for correcting management issues. (2.1.(1), 3.1.3)	See Entry Nos. 1, 2, 6.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
40. Little assurance that Excellence Program plans will be implemented on established schedules. (2.1.1(2), 3.1.8)	See Entry Nos. 1, 2, 6.	
41. Executive V.P.'s 5-point plan lack emphasis. (2.1.1(3), 3.1.3)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objectives 1, 2, 3, 4, 5, 6; Strategy C, Objectives 1,2,3; Goal 3, Strategy B, Objective 1 .	Executive Vice President's 5-point plan reflected in Business Plan objectives identified in Column 2.
42. MIS not integrated into a network or centralized from organizational standpoint. (2.1.1(4), 3.1.4)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objective 9.	Five-Year Objective 9, Integrate management information systems by 1994.
43. Managers not serving as role models. (2.1.1(5), 3.1.2)	See Entry No. 25, Goal 2, Strategy A, Objective 3	See Entry No. 25 for discussion of Goal 2, Strategy B, Maximize individual performance. Strategy A, Attract, train, develop and retain a professional, competent staff. Objective 3, Improve managerial and supervisory skills.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
44. New management team not unified, not always communicating philosophy and values consistent with those of Executive V.P. (2.1.1(7), 3.1.3 & 3.1.5)	See Entry No. 25	
45. Filtering of messages; lack of 2-way communication. (2.1.1(7), 3.1.3 & 3.1.5)	Five-Year and 1991 Plan, Goal 2, Strategy B, Objective 6; Strategy C, Objectives 1, 2, 3.	See Entry No. 25 for description of Strategy B, Objective 6. Strategy C, Five-Year Objective 1, Use daily activities to improve teamwork and morale throughout the organization; Objective 2, Ensure managers and supervisors seek feedback from personnel; Objective 3, Promote effective, ongoing communication with co-workers and peers.
46. Financial difficulties of Pinnacle West. (2.1.1(8), 3.1.1)	Not addressed	Not considered a significant concern.
47. Management participation and involvement still need greater emphasis. (2.1.1(10), 3.1.3)	Five-Year & 1991 Plans, Goal 2, Strategy B & Strategy C, Objectives 1, 2, 3.	See Entry No. 25 for description of Strategy B objectives; Entry No. 45 for Strategy C objectives.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
48. Problem identification ineffective at Palo Verde. (2.1.1(12), 3.1.5)	See Entry No. 23	
49. Systems were ineffective for determining problems, analyzing root causes, making timely decisions concerning corrective actions, prioritizing corrective actions, and controlling the work to achieve the desired results on schedule. (2.1.1(13), 3.1.5)	Five-Year & 1991 Plans, Goal 3, Strategy B; Objectives 1, 2, 3, 4, 5, 6; Goal 2, Strategy B, Objective 4.	See Entry No. 23 regarding Goal 3, Strategy B; Entry No. 25, regarding Goal 2, Strategy B.
50. Little effort devoted to advance planning. (2.1.1(14), 3.1.6)	See Entry No. 6	
51. Licensee not setting agenda, but external forces. (2.1.1(14), 3.1.6)	See Entry Nos. 2, 6.	
52. Resources for initiatives not fully considered in budget documents. (2.1.1(15), 3.1.8)	See Entry Nos. 2, 6.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
53. Lack of understanding of standards, expectations, relationship to individual accountability. (2.1.1(16), 3.1.3, 3.1.5)	See Entry No. 25	
54. Deficient job descriptions with respect to performance measures. (2.1.1(17), 3.1.4)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objective 3.	Strategy B, Five-Year Objective 3, Develop and implement results-oriented performance plans and appraisals consistently by 1991. 1991 Objective 3, Develop and implement results-oriented performance plans and appraisals by April. Adjust compensation in accordance with appraisal by March 1992.
55. Poor performance not recognized. (2.1.1(18), 3.1.4)	See Entry No. 54.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
56. More timely decision making needed (2.1.1(19), 3.1.5)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objective 4	Five-Year Objective 4, Emphasize quality, attention to detail and timely actions. 1991 Objective 4, Emphasize quality, attention to detail, and timely actions. Managers and supervisors incorporate these as performance elements and reinforce in daily activities, staff meetings and one-on-one sessions.
57. Management Review Committee (MRC) charter and representation not broad enough -- should cover all 3 units. (15) (2.1.1(20), 3.1.9)	Five-Year & 1991 Plans, Goal 2, Strategy C, Objective 3.	Five-Year Objective 3, Promote effective, ongoing communication with co-workers and peers; 1991 Objective 4, Conduct effective ongoing communication with coworkers and peer personnel at other plants and other PVNGS units.
58. Lack of praise and financial rewards for good performance. (2.1.1(21), 3.1.1 and 3.1.9)	See Entry No. 54.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
59. Potentially critical staffing problem -- present shortage of operators. (2.1.2(1), 3.2.2)	Five-Year & 1991 Plans, Goal 2, Strategy A.	Strategy A, Attract, train, develop and retain a professional, competent staff.
60. Present shortage of operators results in more overtime, less job satisfaction. (2.1.2(1), (3.2.2)	Five-Year & 1991 Plans, Goal 2, Strategy A; Goal 4, Strategy B, Objective 2.	See Entry No. 59 regarding Goal 2, Strategy A; Goal 4, Strategy B, Five-Year Objective 2, Minimize overtime within budget.
61. Less frequent meetings between management and operators because of operator shortage. (2.1.2(1), 3.2.4)	Five-Year & 1991 Plans, Goal 2, Strategy C, Objectives 1 & 2.	See Entry No. 45 regarding Five-Year Objectives 1 & 2; 1991 Objective 1, Develop a plan and conduct an assessment of teamwork and morale; 1991 Objective 2, Require managers and supervisors to maintain daily presence in the work area to ensure adequate knowledge of organizational and personnel performance.
62. Occasional lapses of oversight by senior reactor operations. (2.1.2(2), 3.2.3)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objective 4; Strategy C, Objective 2.	See Entry No. 25 regarding Strategy B; Entry Nos. 45 & 61 regarding Strategy C.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
63. Lack of procedure to control required reading for operating crews; Informal reading program did not specify time limits, criteria for adding new material; not audited. (2.1.2(7), 3.2.3)	Five-Year & 1991 Plans, Goal 2, Strategy A, Objective 2.	Five-Year Objective 2, Develop technical and inter-personnel skills through formal and informal training.
64. Failure to close valve because of inattention to detail. (2.1.2(8), 3.2.3)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objective 4.	Five-Year Objective 4, Emphasize quality, attention to detail, and timely actions.
65. Failure to close valve because of weakness in programmatic controls associated with independent verification. (2.1.2(8), 3.2.3)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objectives 2, 3, 4, 5.	See Entry No. 25 regarding Strategy B.
66. System status configuration control ineffective; history of licensee identified problems with system status prints. (2.1.2(10), 3.2.3)	Resolved	Procedures revised.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
67. Operating procedures weak from a human-factors standpoint by requiring reference to other documents (procedures not self-contained). (2.1.2(11), 3.2.3)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objectives 3 & 4.	See Entry No. 23, Objective Nos. 3 and 4.
68. Independent verification weaknesses: -not consistently required; -not always performed in independent manner; -not always performed in sequence specified in surveillance procedures. (2.1.2(12), 3.2.3)	See Entry No. 65.	
69. Communications between operations and other groups not always effective. (2.1.2(13), 3.2.4)	Five-Year & 1991 Plans, Goal 2, Strategy C, Objectives 1 & 3.	Five-Year Objective 1, Use daily activities to improve teamwork and morale throughout the organization. Five-Year Objective 3, Promote effective, ongoing communications with co-workers and peers. 1991 Objective 3, Conduct effective ongoing communications with co-workers and peers at other plants and other PVNGS units.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
70. Need for greater awareness and ownership of plant equipment during extended outages. (2.1.2(13), 3.2.4)	Five-Year & 1991 Plans, Goal 2, Strategy B; Goal 3, Strategy C, Objective 1; Strategy D, Objective 1	See Entry No. 25 regarding Goal 2, Strategy B. Goal 3, Strategy C, Five-Year Objective 1, Promote personal ownership by initiating problem-solving at the lowest practical level. Goal 3, Strategy D, Objective 1, Develop a proactive engineering posture in daily activities to foster ownership of plant systems.
71. Heavy reliance on contractors and their impending release raises concern about licensee's ability to continue applying resources necessary to develop, maintain, improve current training program. (2.1.2(19), 3.2.6)	See Entry No. 27.	
72. Human error significant contributor to component failures in conduct of maintenance activities, including inattention to detail in conduct of maintenance activities. (2.1.3(1), 3.3.1, 3.3.5, 3.3.10)	Goal 2, Strategy B, Objectives 4 & 5.	See Entry No. 25 regarding Strategy B.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
73. Inadequate work orders; work packages and reference materials difficult to use. (2.1.3(2), 3.3.2 and 3.3.6)	See Entry No. 19.	
74. Inadequate outage planning and management. (2.1.3(3), 3.3.4)	See Entry Nos. 16, 17, 18.	
75. Maintenance management not sufficiently aware of quality deficiency reporting system and equipment failure data trending program. (2.1.3(4), 3.3.5)	See Entry Nos. 19, 20, 21.	
76. Maintenance and work control center not understood nor implement quality deficiency reporting system. (2.1.3(4), 3.3.5)	See Entry Nos. 19, 20, 21.	
77. Lack of coordination of activities during maintenance have adverse effects -- delays and interference with proper root cause analysis. (2.1.3(4), 3.3.4)	See Entry Nos. 14, 15.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
78. Some lack of attention to equipment condition. (2.1.3(7), 3.3.7)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objective 4; Goal 3, Strategy C, Objective 1.	See Entry No. 25 regarding Goal 2, Strategy B; See Entry Nos. 61 & 69 regarding Goal 3, Strategy C.
79. MOV program weaknesses: -improper use of MOV data base training; -inadequate control of MOV setpoints; -lack of MOVATs baseline data for many MOVs; -lack of detailed disassembly and reassembly procedures; -lack of proper documentation for MOV setpoints; -incomplete/untimely response to industry experience reports concerning MOVs; -problems identified from failure data trending program. (2.1.3(8), 3.3.8)	See Entry Nos. 4, 22.	See 1991 Task Plans for Motor Operated Valves (MOVs).
80. Equipment failure trending reports show high number of personnel	See Entry No. 72.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
errors, including maintenance errors. (2.1.3(9), 3.3.9)		
81. Inadequate parts availability. (2.1.3(10), 3.3.9)	Goal 3, Strategy C, Objective 1; Strategy G, Objectives 2 & 3.	Strategy C, Improve maintenance support for operations; Five-Year Objective 1, Promote personal ownership by initiating problem solving at the lowest practical level; Strategy G, Improve work control processes. Objective 2, Complete development of model work orders by 1992; Objective 3, Complete training and qualification of work planners and schedulers by 1992.
82. Inadequate communications and planning between materials management group and units. (2.1.3(10), 3.3.9)	Goal 2, Strategy C, Objective 3. See Entry No. 101.	See Entry 26 for Goal 2, Strategy C discussion.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
83. Inadequate basis for available inventory. (2.1.3(10), 3.3.9)	Goal 4, Strategy A, Objective 5.	Objective 5, Maintain warehouse inventory value below $140 million.
	See also Goal 3, Strategy C, Objectives 2 & 3.	Objective 2, Complete and implement preventive maintenance program improvements by 1991; Objective 3, Develop and implement standard equipment specifications for corrective maintenance.
84. Some weaknesses in implementation of surveillance testing: -lack of attention to detail during planning; performance and review activities. (2.1.4(1), 3.4.3)	See Entry No. 25.	
85. Inadequate response to industry guidance on check valve testing. (2.1.4(3), 3.4.3)	See Entry Nos. 4, 29.	
86. Comprehensive program and implementing procedures for augmented inspection of designated check valves not completed. (2.1.4(3), 3.4.3)	See Entry Nos. 4, 29.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
87. Plant Review Board performance unimproved performance ineffective: -known weaknesses continued; -improvement plan not yet effectively implemented. (2.1.5(1), 3.5.10)	See Entry No. 5.	
88. QA audit program weak: -audits based primarily on T. S. & compliance oriented -inflexible with respect to discretionary investigation by auditors on bases of experience and expertise; -relatively few safety-significant items were identified during 1989. (2.1.5(4), 3.5.4)	See Entry No. 23.	
89. Many items identified from QA audits not properly managed and some corrective actions were not timely or appropriate. (2.1.5(4), 3.5.4)	See Entry No. 23.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
90. Further improvements can be made to the surveillance program. e.g., in use of corrected-on-the-spot methodology to resolve deficiencies. (2.1.5(5), 3.5.5)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objectives 1 & 2.	Strategy B, Improve effectiveness of all organizations; Five-Year Objective 1, Improve ability to conduct critical self-assessments; Objective 2, Improve proactive problem identification and resolution.
91. One weakness in vendor QA program -- availability and use of vendor rejection data from site receipt inspection process. (2.1.5(6), 3.5.6)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objective 3.	Five-Year/1991, Objective 3, Evaluate and implement lessons learned from PVNGS and industry experience.
92. Weaknesses still remain in QA trending program resulting in inaccurate picture to management regarding extent of some problem areas. (2.1.5(7), 3.5.7)	Resolved.	Material Nonconformance Report (MNCRs) program added. See Cover Letter transmitting PVNGS Business Plan regarding NRC review of documentation on DER-related actions.
93. No "after completion of work" review of work requests by QC organization or any of QA organizations. (2.1.5(8), 3.5.8)	See Entry No. 23.	

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
94. Weak problem identification. (2.1.5(9), 3.5.9)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objective 2.	Five-Year Objective 2, Improve proactive problem identification and resolution.
95. Significant backlog of deficiencies. (2.1.5(9), 3.5.9)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objective 6.	Five-Year Objective 6, Improve management of station backlogs.
96. Problem resolution and implementation of corrective actions slow. (2.1.5(9), 3.5.9)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objective 2; Goal 2, Strategy B, Objective 4.	See Entry Nos. 94 and 25 for description of objectives.
97. Urgency of problem resolution at lower working level not yet routine part of performance. (2.1.5(9), 3.5.9)	Five-Year & 1991 Plans, Goal 2, Strategy B, Objectives 2, 3, 4, 5; see also Five-Year/1991 Goal 3, Strategy B, Objective 2 and Five-Year/1991 Goal 3, Strategy C, Objective 1.	See Entry No. 25 regarding Goal 2, Strategy B; Goal 3, Strategy B, Objective 2, Improve proactive problem identification and resolution. Goal 3, Strategy C, Objective 1, Promote personal ownership by initiating problem-solving at the lowest practical level.
98. Root cause analysis weak. (2.1.5(9), 3.5.9)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objective 4.	Objective 4, Improve root cause and human performance evaluations.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
99. To prevent or reduce in severity plant events or degraded equipment, further improvements in operating experience review program are needed to benefit from lessons learned and to perform adequate and timely evaluation and corrective action. (2.1.5(11), 3.5.11)	Five-Year & 1991 Plans, Goal 3, Strategy B, Objective 3. Goal 2, Objective 4.	Objective 3, Evaluate and implement lessons learned from PVNGS and industry experience. Objective 4, Emphasize quality, attention to detail, and timely actions.
100. NED personnel lack actual nuclear design experience. 2.1.6(1), 3.6.1 & 3.6.2)	Five-Year & 1991 Plans, Goal 2, Strategy A, Objective 2.	Objective 2, Develop technical and inter-personal skills through formal and informal training.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
101. Existing weaknesses diminish quality, quantity, timeliness of engineering support provided by engineering: -large EER backlog of largely insignificant issues; -inadequate control/ screening of EERs forwarded to EED -unrealistic definition of system engineers' responsibilities and authorities; -inadequate management control of systems engineers' work assignments; -overlap of responsi-bilities among RNE, EED and NED; -unclear definition of function and authority of NED system engineer; -lack of urgency and team work in addressing engineering problems, providing plant support;	Five-Year & 1991 Plans, Goal 3, Strategy D. See also Entry Nos. 10, 11, 12, 13.	Goal 3, Strategy D, Improve engineering support for operations and maintenance.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
-inadequate staff to handle assume workload; -conflicting work priority systems between engineering (onsite and corporate) and site organizations; -lack of stable management: --work force; --policy and practices; --direction. (2.1.6(2), 3.6.1, 3.6.2, 3.6.3)		
102. Continual management changes impair both morale and productivity. (2.1.6(3), 3.6.1)	Five-Year & 1991 Plans, Goal 2, Strategies A, B, C.	See Entry No. 2 regarding review of progress on DER-related actions at PVNGS site. Goal 2, Strategy A, Attract, train, develop and retain a professional, competent staff; Strategy B, Improve individual performance and accountability (see Entry No. 25); Strategy C, Improve communication and teamwork (see Entry Nos. 61, 69).

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
103. Overall inability to take timely, effective corrective action to resolve component or system deficiencies or failures, a major programmatic weakness. (2.1.6(5), 3.6.4)	See Entry Nos. 9, 10, 11, 12, 13.	
104. Many elements of Engineering Excellence Programs far from complete. (2.1.6(6), 3.6.5)	See Entry No. 1, See also Entry Nos. 2, 6, 40.	
105. Some weaknesses observed with design bases reconstitution program: -design discrepancies identified in NED open items summary list not evaluated promptly for operability/report-ability; -operating, surveillance, maintenance procedures, FSAR and non-design-basis output documents not reviewed for adequacy and completeness. (2.1.6(7), 3.6.6)	Five-Year and 1991 Plans, Goal 3, Strategy H, Objective 1, 2.	Objective 2, Complete critical, safety-related plant design basis documentation. Objective 1, Improve the configuration management program by 1992.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
106. Several EDG design issues identified. (2.1.6(8), 3.6.7)	Five-Year & 1991 Plans, Goal 3, Strategy H, Objective 2.	See Entry No. 105.
107. Numerous design change packages cancelled for no apparent reason or not uniformally installed in all units: -poor initial modification screening by engineering;	Five-Year & 1991 Plans, Goal 3, Strategy H, Objectives 4 & 6.	Objective 4, Limit design changes; Objective 6, Achieve necessary and desirable unit consistency.
-modification process needs improvement; -Plant Modification Committee was established. (2.1.6(11), 3.6.13)	Five-Year & 1991 Plans, Goal 3, Strategy D, Objective 4.	Objective 4, Continue to streamline the design change process.

DER OBSERVATION (DER LOCATION)	BUSINESS PLAN CROSS REFERENCE	COMMENTS
108. Some instances in which licensee took a non-conservative approach to design calculations: -several MOV parameters not well controlled or documented; -commitment by NED to reconstitute all MOV design basis set points and develop formal thrust calculations as part of response to GL 89-10. (2.1.6(13), 3.6.15)	See Entry Nos. 4, 22, 76.	
109. Ineffective implementation of failure data trending (FDT) program: -neither maintenance nor NED on distribution list for FDT reports;	Resolved.	See Entry No. 2 regarding review of progress on DER-related actions at PVNGS site.
-programmatic and EED implementation weaknesses limit effectiveness in improving equipment reliability. (2.1.6(14), 3.6.16)	Five-Year & 1991 Plans, Goal 3, Strategy D, Objective 8.	Objective 8, Establish a plant, system and performance monitoring program by March 1992.