

3.0 FACILITY DESCRIPTION

3.1 FACILITY DESCRIPTION

3.1.1 INTRODUCTION

The SONGS 1 facility and planned Decommissioning activities are described in Sections 3.1 through 3.9. The Facility Description includes five sections dedicated to specific buildings and three sections for plant-wide topics: Electrical Systems, Monitoring and Communications, and Fire Protection.

Unit 1 is constantly changing during Decommissioning as the site is returned to conditions suitable for unrestricted use. The operating, radiological, and demolition status of the plant are carefully monitored and controlled by three SONGS organizations: the Operations, Health Physics and Decommissioning Divisions, respectively. Examples from the information systems maintained by these organizations are included in the DSAR. At any time, current plant information is available from the responsible organizations.

3.1.2 OPERATING STATUS

The Operations Division is responsible for maintaining the operating configuration of Unit 1. The active portions of the plant systems are defined by the Decommissioning P&IDs, which are distinguished from the original P&IDs by a "DE" suffix. The Decommissioning P&IDs are updated as required by the Plant Superintendent. Structures, systems and components that are Required to be Operational (RO) are identified on the Unit 1 Q-List (Dwg. M-37560).

3.1.3 RADIOLOGICAL STATUS

The Health Physics (HP) Division monitors and controls the radiological status of Unit 1 areas and Decommissioning activities.

3.1.4 EQUIPMENT REMOVAL STATUS

All systems, structures and components and their foundations have been removed or abandoned as described in sections 3.2 through 3.9. The remaining decommissioning activity is soil remediation, compaction and grading.

3.1.5 PLANT CONFIGURATION AT THE START OF DECOMMISSIONING

The physical layout of Unit 1 that existed prior to any dismantlement is shown in the following general arrangement drawings:

<u>Drawing</u>	<u>Title</u>
568700	General Arrangement - Plan of Elevation 35 ft - 6 in.
568701	General Arrangement - Plan of Elevation 14 ft - 0 in.
568702	General Arrangement Sections - Sheet 1.

568703 General Arrangement - Reactor Auxiliary Building and Intake Structure

568704 General Arrangement Sections - Sheet 2.

All of these historical drawings are provided for reference only.

3.1.6 QUALITY CLASSIFICATION OF STRUCTURES, SYSTEMS AND COMPONENTS

3.1.6.1 Quality Class Basis

During reactor operation, quality classifications and Technical Specification requirements were based on protecting public health and safety primarily from anticipated operational occurrences and accidents affecting the reactor. The regulatory limits for radiological consequences were related to 10 CFR 100, and the structures, systems and components (SSC) required to ensure these limits are not exceeded were classified as Safety Related (SR). Other SSC were assigned lesser quality classifications depending on their relative importance to safety of the reactor. These included Non Safety Related--Fire Protection (NSRFP), Non Safety Related--Anticipated Transients Without Scram (NSR-ATWS), and Non Safety Related (NSR).

Since operational occurrences were no longer possible after defueling, quality classifications were based on protecting public health and safety primarily from accidents affecting the spent fuel. The regulatory limits for radiological consequences are related to 10 CFR 20, and the SSC required to ensure these limits were not exceeded were designated as required to be Operational (RO). Quality classifications for the RO structures, systems and components were assigned consistent with their relative importance to safety of the spent fuel. These include SR, NSRFP, and a new classification of Non Safety Related--Augmented Quality (NSRAQ). RO structures, systems and components are subject to Quality Assurance program requirements.

Accidents affecting the spent fuel are no longer possible with the fuel assemblies removed and transferred to the ISFSI. Quality classifications are now only required to be based on protecting public health and safety.

3.1.6.2 Required to be Operational SSC

There are three quality classifications associated with the RO designation.

Safety Related (SR): Safety Related SSCs include components that prevent the consequences of postulated accidents that could cause undue risk to the health and safety of the public. There are no Unit 1 facility components that are classified as SR.

Non Safety Related Fire Protection (NSRFP): Fire protection components which protect RO equipment are designated NSRFP and are covered by the QA program for Fire Protection. There are no Unit 1 facility components that are classified as NSRFP.

Non Safety Related Augmented Quality (NSRAQ): RO items requiring augmented quality, are covered by the QA program. There are no Unit 1 facility components that are classified as NSRAQ.

3.1.6.3 Not Required to be Operational SSC

Structures, systems, and components which are not important to protect the health and safety of the public are designated as Not Required to be Operational (NRO). NRO structures, systems and components are exempt from Quality Assurance program requirements. All NRO structures, systems and components have been assigned a quality classification of NSR.

3.1.7 SEISMIC CLASSIFICATION OF SSC

The seismic design of SONGS 1 was originally intended to ensure the most adverse conditions of stress and deflection resulting from the combined influence of normal and earthquake loads would not impair safe operation or orderly shutdown of the plant. The original seismic analysis and procedures are very conservative for the permanently defueled condition. The seismic classification system has not been changed for Decommissioning; the same categories are applied to the plant design:

Category A: SSC that are important to the nuclear safety of the plant;

Category B: SSC that are important to the continuity of power generation or whose contained activity is such that release would not constitute a hazard;

Category C: All remaining SSC not required for safety and not directly associated with power generation.

In addition, a separate category includes those portions of SSC whose continued function is not required, but whose failure could reduce the functioning of any SSC important to safety to an unacceptable level and those portions of SSCs which form interfaces between Seismic Category A and Nonseismic Category A features. This category is in accordance with Regulatory Guide 1.29, Positions C.2 and C.3.

The Q-list retains the original seismic category designations which were applicable during power operation for historical interest to identify the construction design specifications for the structures.

3.1.8 QUALITY ASSURANCE CLASSIFICATION PROGRAM

The requirements of the quality assurance program apply to the design, fabrication, construction, modification, testing, operation, and maintenance of structures, systems, and components (SSC) that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public as given in 10 CFR 50, Appendix B.

For Decommissioning the designations RO and NRO are used to determine Quality Assurance program applicability. SSC are classified using both the RO (or NRO) designations and the quality class, as SR/RO, NSRFP/RO, NSRAQ/RO, or NSR/NRO. Normal plant quality assurance documentation is maintained for SSC designated as RO. For SSC designated as NRO, only the Q-List is maintained; other documentation does not require updating.

3.1.8.1 Q-List

The Q-List defines the quality classifications of each SSC in Unit 1. The Q-List (SCE Document Number M-37560) is maintained as a controlled document under the SCE Quality Assurance Program.

3.1.8.2 Quality Groups

Components containing water, steam, or radioactive material are assigned a quality group (A, B, C or D) in accordance with NRC Regulatory Guide 1.26, Rev. 2. These quality groups are part of a Quality Assurance program dedicated to assuring:

- 1) the integrity of the reactor coolant pressure boundary,
- 2) the capability to shut down the reactor and maintain it in a safe shutdown condition, or
- 3) the capability to prevent or mitigate the consequences of accidents which could cause undue risk to the health and safety of the public.

The current Q-list includes the R.G. 1.26 Quality Group classification for each component. Since the first two objectives do not apply to a defueled plant, Quality Groups A and B are no longer relevant at SONGS 1 plant components but are used for the Spent Fuel Dry Cask Storage components. The quality groups are:

Quality Group A

Group A quality standards are given in 10 CFR 50.55a and are applied to the design, fabrication, erection, and testing of reactor coolant pressure boundary components.

Quality Group B

Group B quality standards are given in Regulatory Guide 1.26 and are applied to the water-and-steam-containing components identified in regulatory position C.1 of Regulatory Guide 1.26.

Quality Group C

Group C quality standards are given in Regulatory Guide 1.26 and are applied to the water-, steam-, and radioactive-waste-containing components identified in regulatory position C.2 of Regulatory Guide 1.26.

Quality Group D

Group D quality standards are given in Regulatory Guide 1.26 and are applied to water- and steam-containing components not part of the reactor coolant pressure boundary nor included in Groups B and C but that are part of systems or portions of systems that contain or may contain radioactive material.

3.1.9 DESIGN CRITERIA FOR EVALUATIONS AND MODIFICATIONS OF EXISTING SSC

SONGS 1 was designed and constructed before the General Design Criteria (GDC) current criteria were established for the analysis, design, and construction of nuclear power plants. The NRC's Systematic Evaluation Program (SEP) compared the existing configurations of the SONGS 1 structures, systems, and components with criteria that had evolved since the original design was developed.

3.1.9.1 Design Codes and Standards

The original design codes and standards used to construct the operating plant are of historical interest and are presented in Reference 1. Limitations and exceptions to these codes and standards are identified in work package design criteria. Work performed on RO components is within the requirements of the Quality Assurance Program. Work that is not directly related to RO components, is performed in accordance with sound engineering practice and may use commercial standards and materials.

3.1.9.2 Electrical Engineering Design Criteria

During Decommissioning, electrical work is generally performed under commercial grade standards.

3.1.9.3 Design Controls and Work Process

The engineering design process and work activities at SONGS 1 are controlled under site-wide administrative controls. Design activities are planned, performed and documented in accordance with written procedures and instructions to assure control through all phases of design development, review and approval. Determination of 10CFR50 Appendix B requirements for design activities at SONGS 1 is based on the guidance of the TQAM and is implemented through controlled engineering procedures (SONGS Procedures Section XXIV).

The requirements of 10CFR50.59 are implemented in accordance with the recommendations and guidelines contained in NEI 96-07, Revision 1, Guidelines for 10 CFR 50.59 Implementation. A screening process is used to determine when a specific evaluation is required. Evaluations are performed by personnel with pertinent technical expertise in the DSAR and Technical Specifications. The 50.59 process applied to SONGS 1 has been augmented to include a determination that proposed work is within the limits of 50.82(a)(6).

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3.1.10 REFERENCES

1. "San Onofre Generating Station Unit 1, Updated Final Safety Analysis Report," Docket 50-206

3.2 FUEL STORAGE FACILITY

3.2.1 INTRODUCTION

The Fuel Storage Building was an independent and separate Seismic Category A structure which housed the spent fuel pool, an underwater cask transfer area, an underwater fuel transfer area, a cask decontamination area, a storage room, and an abandoned 480V switchgear room. The Fuel Storage Building was located southwest of the containment sphere.

3.2.2 FUEL STORAGE FACILITY STATUS

Plant status is continually changing during Decommissioning. Current information on operating systems, radiological conditions, and demolition progress is maintained by the Operations, Health Physics, and Decommissioning Divisions, respectively. Refer to Section 3.1.2, 3.1.3, and 3.1.4.

All structures, systems and components associated with the Fuel Storage Facility have been removed or demolished. Spent fuel assemblies in the Unit 1 spent fuel pool, as well as Unit 1 spent fuel assemblies in the Unit 2 and Unit 3 spent fuel pools, were loaded into a specially designed cask and transferred to the Independent Spent Fuel Storage Installation (ISFSI). Segmented GTCC waste from the reactor vessel internals was placed in GTCC waste container, and was similarly transferred to the ISFSI.

3.2.3 PLANNED DECOMMISSIONING ACTIVITIES

The Fuel Storage Facility has been demolished. The remaining decommissioning activity is soil remediation, compaction and grading of the area.

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3.2.7 REFERENCES

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3.3 SPHERE AND ENCLOSURE BUILDING

3.3.1 INTRODUCTION

A spherical steel containment enclosed the reactor and its related equipment. The 140-foot diameter sphere was one-inch thick and extended 40 feet below grade. The sphere was continuously supported by a concrete cradle between the steel sheet and the undisturbed soil. A concrete foundation provided support and shielding for equipment inside the sphere. The concrete Sphere Enclosure Building surrounded the steel containment sphere. The building had three-foot thick cylindrical walls and a conical roof. It was designed to reduce the offsite dose during a design basis accident.

3.3.2 SPHERE AND ENCLOSURE BUILDING STATUS

Plant status is continually changing during Decommissioning. Current information on operating systems, radiological conditions and demolition progress is maintained by the Operations, Health Physics and Decommissioning Divisions, respectively. Refer to being dismantled. Sections 3.1.2, 3.1.3 and 3.1.4.

All structures, systems and components internal to the Containment Sphere have been completely removed. The reactor vessel internal (RVI) components were cut up. Highly activated pieces that were greater than Class C (GTCC) were segmented, placed in a GTCC waste container and transferred to the Independent Spent Fuel storage installation (ISFSI). The remaining pieces were returned to the reactor vessel and stabilized by grouting. The reactor vessel has been packaged for shipment and is stored in the Unit 1 Industrial Area.

The Sphere Enclosure Building and its foundation have been completely demolished. The steel sphere has been removed. The lower portion of the concrete cradle foundation located below grade still remains. The bowl was filled with Elastozell and one foot of concrete up to elevation 8 ½ feet.

3.3.3 PLANNED DECOMMISSIONING ACTIVITIES

The Sphere and Enclosure Building has been demolished. The remaining decommissioning activity is soil remediation, compaction and grading of the area.

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3.3.4 DESIGN EVALUATION

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3.3.5 BUILDING DESCRIPTIONS

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3.3.7 REFERENCES

1. "Permanently Defueled Technical Specifications," Amendment No. 155 to License No. DPR-13, Issued December 28, 1993
2. "Permanently Defueled Technical Specifications," Amendment No. 163 to License No. DPR-13, Issued September 22, 2004

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3.4 REACTOR AUXILIARY BUILDING

3.4.1 INTRODUCTION

The Reactor Auxiliary Building contained the liquid and gaseous radwaste processing equipment and associated holdup tanks. A pipe tunnel connected the Reactor Auxiliary Building to the sphere piping penetration room (dog house). The Reactor Auxiliary building was a single story, partially embedded, reinforced concrete structure rising to about 6 feet above ground level. The northeast corner included a second story that was constructed of masonry walls, conventionally reinforced concrete walls and slabs, and structural steel floor framing.

The overall dimensions of the Reactor Auxiliary Building was approximately 134 feet by 60 feet. The northeast corner which comprised an additional story was approximately 32 feet by 41 feet.

The Reactor Auxiliary Building foundation was a reinforced mat, 2 feet 4 inches thick, 134 feet 4 inches long and 60 feet 2 inches wide, bearing directly on the San Mateo formation. The lowest elevation of the basemat was at (-) 4 feet 4 inches.

The area surrounding the Reactor Auxiliary Building was known as the "backyard". The backyard area included equipment which supported the reactor primary systems. The area was paved and fenced forming the controlled boundary of the Radiological Control Area (RCA). The backyard provided access to the PASS lab, high rad storage vault, pipe tunnel, sphere penetration room, cryogenic building, ventilation building, and ion exchanger vault shield plugs.

3.4.2 REACTOR AUXILIARY BUILDING PLANT STATUS

Plant status is continually changing during Decommissioning. Current information on operating systems, radiological conditions and demolition progress is maintained by the Operations, Health Physics, and Decommissioning Divisions, respectively. Refer to Sections 3.1.2, 3.1.3, and 3.1.4.

All structures, systems and components associated with the Reactor Auxiliary Building have been completely removed.

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3.4.3 PLANNED DECOMMISSIONING ACTIVITIES

The Reactor Auxiliary Building has been demolished. The remaining decommissioning activity is soil remediation, compaction and grading of the area.

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3.5 INTAKE STRUCTURE

3.5.1 INTRODUCTION

The Pacific Ocean provided cooling water for SONGS 1 cooling systems and dilution water for liquid releases. Water was drawn from an offshore intake structure which rests on a foundation located 33 feet beneath the ocean bottom and rises vertically to a point about 10 feet above the ocean floor. The inside horizontal dimensions of the offshore intake structure are 16 by 21 feet. Two 12-foot inside diameter reinforced concrete pipes, extending about 3,200 feet and 2600 feet into the ocean, provided for the intake and discharge of seawater. These pipes are buried beneath the ocean bottom, with a minimum of 4 feet of sand cover over the top and 4 feet of rock cover surrounding the intake structure.

The intake pipe conveyed water to and from a concrete intake structure located on-shore. The intake structure was a as Seismic Category A buried reinforced concrete structure that housed: (1) the components of the circulating water system, (2) the salt water cooling pumps which support the component cooling water system and, (3) the tsunami pit. The intake structure foundation was a reinforced concrete slab, 3 feet 4 inches thick, 136 feet 3-1/2 inches long with a varying width, bearing directly on the San Mateo formation. The intake structure provided the structural transition from the pipes used to collect and discharge seawater for salt water cooling and to the ocean.

The intake tunnel consists of a 14-foot, 2-inch outside diameter intake pipe leading to a 12-foot square box culvert to two pump chambers, with a maximum open cross section of 12 feet high by 23 feet wide. The pump well, where the salt water pumps are installed, had a 23-foot high peripheral retaining wall, and the pump chamber top slab formed the base of the pump well.

The discharge tunnel was 10 feet, 8 inches by 12 feet cross-section and it leads to the 14-foot, 2-inch diameter outfall tunnel.

is protected with a 2-1/2 inch gunite coating which extends down to elevation 4 feet on the seaward face and down to 1 foot below finished grade on the landward face. The top and bottom elevations of the wall are 28.0 feet and (-) 8.0 feet respectively. The finished grade adjacent to the wall varies from elevation 14.5 feet to elevation 17.0 feet. The stone revetment on the seaward face extends from approximately elevation 5.0 feet to elevation 13.0 feet and is placed at an approximate 1.5:1 slope. The seawall is laterally supported by San Mateo sand.

The Domestic Water System consists of a header supplied with potable water which provides drinking water and other domestic water system needs. To eliminate any potential for contaminating the domestic water system, backflow preventer are installed upstream of all use points.

3.5.2 INTAKE STRUCTURE

Plant status is continually changing during Decommissioning. Current information on operating systems, radiological conditions and demolition progress is maintained by the Operations, Health Physics, and Decommissioning Divisions, respectively. Refer to Sections 3.1.2, 3.1.3, and 3.1.4.

All structures, systems and components associated with the Intake Structure including the Circulating Water System and Salt Water System have been removed from the site. The yard sump and overflow berm have been removed.

Except for the East wall of the intake structure circulation water pit, the entire structure was removed down to El 8 foot 6 inches. The East wall of the circulation water pit was removed down to grade which is approximately 13 foot 4 inches. The offshore circulating water conduits were sealed off in the Intake/Discharge Gate Structures by placing stop gates in the gate slots and slurry filling the structure up to 8 foot 6 inches. The remaining portions of the intake structure were filled up to El. 8 foot 6 inches with 70 pcf minimum Elastizell. The Turbine Plant Cooling Water line was breached between the Concrete Junction Box and Anchor Block 2 and the Discharge Structure Gate structure with slurry. The off-shore intake structure and tunnels were abandoned in place.

The seawall remains as the western security boundary of the site which is now the North Industrial Area but it has no other design function.

The Domestic Water System remains in service throughout the site, however, it no longer interfaces with any SSC associated with Unit 1.

3.5.3 PLANNED DECOMMISSIONING ACTIVITIES

The Intake Structure and all associated equipment have been demolished or abandoned and decommissioning is complete.

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3.5.8 REFERENCES

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3.6 TURBINE BUILDING

3.6.1 INTRODUCTION

The Turbine Building consisted of four individual structural systems which surrounded the turbine pedestal. These four structural systems were the turbine building north and south extensions and east and west heater platforms. The Turbine Building area contained the main steam system, the turbine-generator unit, the electrical distribution system, compressed air system, and several other support systems related to power production.

The turbine building north extension was a one-story structural steel frame building with a mezzanine. It had approximate plan dimensions of 40 feet by 50 feet with an 8-1/2 inch thick prestressed concrete slab at elevation 42 feet, 0 inches, and a steel grating platform at elevation 30 feet, 0 inches. The west side of the turbine building north extension was adjacent to the fuel storage building. Doors in the east wall of the fuel storage building provided personnel access to the spent fuel pool area from the turbine building north extension, elevation 42 feet, 0 inches. Expansion joints were provided at the junctures between the turbine building north extension and other buildings, including the fuel storage building.

The turbine building foundation consisted of column spread and combined footings, bearing directly on the San Mateo formation. Footing width varies from 3 feet to 5 feet, while footing thickness varied from 2 feet, 6 inches, to 5 feet. Elevation of top of the footing varied from elevation 6 feet to elevation 17 feet, 7 inches.

3.6.2 TURBINE BUILDING STATUS

Plant status is continually changing during Decommissioning. Current information on operating systems, radiological conditions and demolition progress is maintained by the Operations, Health Physics, and Decommissioning Divisions, respectively. Refer to Sections 3.1.2, 3.1.3, and 3.1.4.

The Turbine Pedestal Bottom mat, Anchor Blocks 1 and 2, intake culverts and discharge culverts have been abandoned. The anchor blocks, and the intake and discharge culverts have been filled with a 100 psi minimum slurry. The turbine pedestal foundation floor drains and the reheater pit sump and its drain line were filled with 100 psi slurry.

All other structures, systems and components associated with the Turbine Building have been removed from the site.

3.6.3 PLANNED DECOMMISSIONING ACTIVITIES

The Turbine Building has been demolished. The remaining decommissioning activity is soil remediation, compaction and grading of the area.

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3.7 ELECTRICAL SYSTEMS

3.7.1 INTRODUCTION

The electric system that served SONGS 1 was electrically independent of SONGS 2 and 3. Electrical isolation of most of the original electrical equipment was accomplished by Cold and Dark. Under cold and Dark, the station electrical system provided power to the facility from the SDG&E 12 kV system located at the Mesa. Substation "Gary" fed the North Construction load Center B34 and "Fran" fed Switchboard CD-5. Three motor control centers (CD1, CD2, CD3), fed from CD-5 were installed by Cold and Dark. Two 120-208 VAC distribution panels CD1-DP1 and CD3-DP2 were powered from MCC-CD1 and MCC-CD3.

3.7.2 ELECTRICAL SYSTEM STATUS

Plant status is continually changing during Decommissioning. Current information on operating systems, radiological conditions and demolition progress is maintained by the Operations, Health Physics, and Decommissioning Divisions, respectively. Refer to Sections 3.1.2, 3.1.3, and 3.1.4.

The electrical system that served SONGS 1 has been dismantled, demolished or abandoned. The SDG&E 12 kV system, 480V system, and the 120 VAC systems have all been removed.

A new electrical distribution system has been installed to support the North Industrial Area. The system consists of 480VAC load center 2/3B57 fed from SDG&E 12kV line "Gary" which provides electrical power for the North Security Processing Facility and North Industrial area yard Drain Sump Switchboard 2/3B58. A separate 480V substation is fed from SDG&E 12kV line "Fran". This substation consists of Transformer X69A, Switchboard CD-5A, MCC-CD3A and 120-208VAC Distribution Panel CD3A-DP1. This substation supplies decommissioning loads and power to the Motor Operated gate MOG-1.

3.7.3 PLANNED DECOMMISSIONING ACTIVITIES

There are no AC power systems remaining in service for SONGS 1. The AC power supply system installed and now serving the North Industrial Area does not interface with any SSC associated with Unit 1.

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3.8 MONITORING AND COMMUNICATIONS

3.8.1 INTRODUCTION

A new Control Room was located in the HP/Operations Building (A52). Plant conditions were monitored from the Control Room via a personal computer (PC). There were no control functions. Equipment was controlled locally by plant operators or, in a few cases, was automatically controlled.

3.8.2 MONITORING AND COMMUNICATIONS STATUS

Plant status is continually changing during Decommissioning. Current information on operating systems, radiological conditions and demolition progress is maintained by the Operations, Health Physics, and Decommissioning Divisions, respectively. Refer to Sections 3.1.2, 3.1.3, and 3.1.4.

After all Unit 1 spent fuel was transferred to the ISFSI, the control room was no longer required. The personal computer was moved to the Unit 2 Control Room for monitoring of the remaining operational systems. Equipment control responsibility was taken over by Unit 2/3 Operations.

3.8.3 PLANNED DECOMMISSIONING ACTIVITIES

Decommissioning activities related to plant monitoring and communications have been completed.

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3.8.5.1.1.2 (Deleted)

3.8.5.1.1.3 (Deleted)

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3.8.5.1.1.5 (Deleted)

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3.8.5.1.2.1 (Deleted)

3.8.5.1.2.2 (Deleted)

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3.8.5.2 Deleted

Table 3.8-1
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3.9 FIRE PROTECTION

3.9.1 INTRODUCTION

The fire protection program protected safety related equipment that was required to be operable. The Unit 1 fire protection capability included permanent detection and suppression equipment, mobile fire apparatus and portable fire extinguishers. Additional fire protection features were in place to satisfy Nuclear Electric Insurance Limited (NEIL) Property and Loss prevention requirements and to provide defense-in-depth fire protection features for the surrounding structures. Administrative measures control the transient combustible materials and ignition sources.

3.9.2 FIRE PROTECTION STATUS

Current information on operating systems and demolition progress is maintained by the Operations and Decommissioning Divisions, respectively. Refer to Sections 3.1.2 and 3.1.4.

All safety related equipment and buildings have been removed. Fire protection features were systematically abandoned and removed as fire hazards were eliminated and buildings were demolished. The fire protection system has been reduced to manual suppression capabilities throughout the Unit 1 Industrial Area.

Fire protection requirements are established by SO123-FP-1, Fire Protection Program, which covers Units 1, 2 & 3. The reduced fire protection program requirements for the Unit 1 Industrial Area include control of combustibles, control of ignition sources, and manual suppression capabilities, including firewater supply and fire brigade staffing. The fire protection system includes sprinkler systems in occupied structures, fire extinguishers, hydrants and hose valves. The water supply and pumping equipment are from Unit 2/3.

The fire protection system is further discussed in the Updated Fire Hazards Analysis (UFHA) Section 6. The fire zones and fire protection features are shown on drawing 83321. This drawing is provided for reference only.

3.9.3 PLANNED DECOMMISSIONING ACTIVITIES

The modification and/or removal of fire protection features will continue as conditions change during Decommissioning. Significant Decommissioning activities are reviewed by Fire Protection Engineering staff, who may require temporary or permanent fire protection features be established based on conditions at the time.

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3.9.4.1 Deleted

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3.9.7.1 Deleted

3.9.7.2 Deleted

3.9.7.3 Deleted

3.9.8 REFERENCES

1. Deleted
2. Letter Huffman (NRC) to Ray (SCE), Subject, "San Onofre Nuclear Generating Station -Unit 1- Issuance of Amendment Upon Transfer of All Spent Fuel Storage From The Spent Fuel Pool Into Dry Cast Storage (TAC No L52616)", dated September 22, 2004. Amendment No. 163 to Facility Operating License No DPR-13 for SONGS Unit 1.

SONGS Unit 1 DSAR

Figure 3.1-1

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SONGS Unit 1 DSAR

Figure 3.1-2
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SONGS Unit 1 DSAR

Figure 3.1-3
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SONGS Unit 1 DSAR

Figure 3.1-4
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Figure 3.1-5
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SONGS Unit 1 DSAR

Figure 3.1-6

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SONGS Unit 1 DSAR

Figure 3.2-1

(DELETED)

SONGS Unit 1 DSAR

Figure 3.2-2
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SONGS Unit 1 DSAR

Figure 3.2-3
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SONGS Unit 1 DSAR

Figure 3.2-4

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SONGS Unit 1 DSAR

Figure 3.2-5

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SONGS Unit 1 DSAR

Figure 3.2-6

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SONGS Unit 1 DSAR
Figure 3.2-7
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SONGS Unit 1 DSAR

Figure 3.2-8

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Figure 3.2-9

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Figure 3.2-10
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Figure 3.2-11
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Figure 3.2-12
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SONGS Unit 1 DSAR

Figure 3.2-13

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Figure 3.2-14

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Figure 3.2-15

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Figure 3.2-16

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Figure 3.2-18

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Figure 3.2-19

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Figure 3.2-20

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Figure 3.3-1

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SONGS Unit 1 DSAR

Figure 3.3-2

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SONGS Unit 1 DSAR

Figure 3.3-3

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SONGS Unit 1 DSAR

Figure 3.3-4

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SONGS Unit 1 DSAR

Figure 3.6-1

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Unit 1 Fire Area Boundaries and Fire Protection Features

See UFHA Section 6