UNION ELECTRIC COMPANY
1901 GRATIOT STREET
ST. LOUIS, MISSOURI

JOHN K. BRYAN
VICE PRESIDENT

MAILING ADDRESS:
P. O. BOX 149
ST. LOUIS, MISSOURI 63166

June 17, 1981



Mr. Harold R. Denton
Director of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Denton:

ULNRC-453

DOCKET NUMBERS 50-483 AND 50-486
CALLAWAY PLANT, UNITS 1 & 2
FINAL SAFETY ANALYSIS REPORT

Reference: NRC Letter dated May 15, 1981, signed by R. L. Tedesco

The referenced letter requested addition information concerning the Callaway Plant FSAR in the area of fire protection. This letter responds with a table which address 10CFR50, Appendix R, for the site related portions. A similar table addressing the standard plant portion of Appendix R has been transmitted by Mr. N. A. Petrick, Executive Director, SNUPPS, by SLNRC 81-045 dated May 15, 1981.

FSAR Appendix 9.5A contains a point by point comparison to Brach Technical Position APCSB 9.5-1.

This information will be formally incorporated into the SNUPPS Standard Plant and Callaway Site Addendum FSAR in the next revision. This information is hereby incorporated into the Callaway Application.

Very truly yours,

John K. Bryan

DS/afg
Enclosure

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STATE OF MISSOURI )
) S S
CITY OF ST. LOUIS )

Robert J. Schukai, of lawful age, being first duly sworn upon oath says that he is General Manager-Engineering (Nuclear) for Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By _____
Robert J. Schukai
General Manager-Engineering
Nuclear

SUBSCRIBED and sworn to before me this 17th day of June, 1981

Barbara J. Pfaff
Barbara J. Pfaff
Notary Public--State of Missouri
St. Louis County
My Commission Expires April 22, 1985

cc: Glenn L. Koester
Vice President
Operations
Kansas Gas & Electric
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Wichita, Kansas 67201

John E. Arthur
Chief Engineer
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Robert L. Schulz
for John K. Bryan

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APPENDIX 9.5-E
FIRE PROTECTION EVALUATION

| 10CFR50 Appendix R | Union Electric Co. |
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| A. Water Supplies For Fire Suppression Systems | |
| 1. Two separate water supplies shall be provided to furnish necessary water volume and pressure to the fire main loop.<br><br>Each supply shall consist of a storage tank, pump, piping, and appropriate isolation and control valves. These supplies shall be separated so that a failure of one supply will not result in a failure of the other supply. | Complies.<br>Two separate 300,000 gallon maximum capacity tanks are furnished. The tanks are interconnected so that three pumps can take suction from either/or both of the tanks. Check valves are provided so that a leak in one tank or its supply piping does not cause both tanks to drain. |
| 2. Each supply of the fire water distribution system shall be capable of providing for a period of 2 hours the maximum expected water demands as determined by the fire hazards analysis for safety-related areas or other areas that present a fire exposure hazard to safety-related areas. | Complies.<br>Each fire water tank is capable of providing for a period of two hours the maximum water demand for any safe shutdown area. This is based on 1,000 gpm to the largest safe shutdown area. |
| 3. When storage tanks are used for combined service water/fire water uses the minimum volume for fire uses shall be ensured by means of dedicated tanks or by some physical means such as vertical standpipe for other water service. | Complies.<br>The fire protection system water storage is not interconnected with any sanitary or service water storage systems. |
| 4. Other water systems used as one of the two fire water supplies shall be permanently connected to the fire main system and shall be capable of | Complies.<br>The fire water supply system is not common with any other system. |

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| automatic alignment to the fire main system. | |
| B. Sectional Isolation Valves | |
| 1. Sectional isolation valves such as post indicator valves or key operated valves shall be installed in the fire main loop to permit isolation of portions of the fire main loop for maintenance or repair without interrupting the entire water supply. | Complies. Post indicator valves are provided to isolate portions of the main for maintenance or repair without shutting off the entire system. |
| C. Hydrant Isolation Valves | |
| 1. Valves shall be installed to permit isolation of outside hydrants from the fire main for maintenance or repair without interrupting the water supply to automatic or manual fire suppression systems in any area containing or presenting a fire hazard to safety-related or safe shutdown equipment. | Complies. The lateral to each hydrant from the fire main is furnished with a curb valve, for isolation of damaged hydrants without reducing the effectiveness of the supply system. |
| E. Hydrostatic Hose Tests | |
| Fire hose shall be hydrostatically tested at a pressure of 300 psi or 50 psi above maximum fire main operating pressure whichever is greater. Hose stored in outside hose houses shall be tested annually. Interior standpipe hose shall be tested every three years. | Complies. Fire hoses are tested at a pressure of 300 psi. Hoses stored outside are tested annually. Interior standpipe hoses are tested every three years. |
| H. Fire Brigade | |
| 1. A site fire brigade trained and equipped for fire fighting shall be established to ensure | Complies. The Callaway fire brigade trained and equipped for fire fighting will be established |

| 10CFR50 Appendix R | Union Electric Co. |
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| adequate manual fire fighting capability for all areas of the plant containing structures, systems, or components important to safety. The fire brigade shall be at least five members on each shift. | to ensure adequate manual fire fighting capability for all areas of the plant. The fire brigade consists of a fire brigade leader and two 3-man fire teams per shift. |
| 2. The brigade leader and at least two brigade members shall have sufficient training or knowledge of plant safety-related systems to understand the effects of fire and fire suppressants on safe shutdown capability. | Complies.<br>The brigade leader and at least two brigade members per shift shall have sufficient training in or knowledge of plant safety-related systems to understand the effect of fire and fire suppressants on safe shutdown capability. |
| 3. The qualification of fire brigade members shall include an annual physical examination to determine their ability to perform strenuous fire fighting activities. | Complies.<br>To qualify as a member of the Callaway Plant fire brigade, an individual must successfully complete an annual physical examination to ensure his ability to perform strenuous fire fighting activities. |
| 4. The Shift Supervisor shall not be a member of the fire brigade. The brigade leader shall be competent to assess the potential safety consequences of a fire and advise control room personnel. Such competence by the brigade leader may be evidenced by possession of an operator's license or equivalent knowledge of plant safety-related systems. | Complies.<br>The on duty Operating Supervisor-Field is designated fire brigade leader. |
| 5. The minimum equipment provided for the brigade shall consist of personal protective equipment such as turnout coats, boots, gloves, hard hats, emergency communications | Complies.<br>The minimum equipment provided for the Callaway Plant fire brigade consists of personal protective equipment such as turnout coats, boots, gloves, hard hats, emergency |

| 10CFR50 Appendix R | Union Electric Co. |
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| equipment, portable lights, portable ventilation equipment and portable extinguishers. | communications equipment, portable lights, portable ventilation equipment and portable estinguishers. |
| 6. Self-contained breathing apparatus using full-face positive-pressure masks approved by NIOSH shall be provided for fire brigade, damage control, and control room personnel. At least 10 masks shall be available for fire brigade personnel. Control room personnel may be furnished breathing air by a manifold system piped for a storage reservoir if practical. Service or rated operating life shall be a minimum of one-half hour for the self-contained units. | Complies. Self-contained breathing apparatus, approved by NIOSH, are provided for selected fire brigade, damage control personnel and control room personnel. Rated operating life for self-contained units shall be one-half hour. At least 10 masks will be available for fire brigade personnel. |
| 7. At least two extra air bottles shall be located on site for each self-contained breathing unit. In addition, an onsite 6 hour supply of reserve air shall be provided and arranged to permit quick and complete replenishment of exhausted supply air bottles as they are returned. | Complies. Two extra air bottles are provided for each self-contained breathing unit to be used by Fire Fighting, Damage Control, or Control Room personnel. An additional on site 6 hour supply of reserve air is provided to permit quick and complete replenishment of exhausted supply air bottles. |
| I. FIRE BRIGADE TRAINING | |
| 1. Instruction | |
| a) The initial instruction shall include | This instruction includes |
| 1. Indoctrination of the plant fire fighting plan with specific identification of each individual's responsibilities. | Complies. Review of Callaway Fire Protection Plan with coverage of each individuals responsibilities. |

| 10CFR50 Appendix R | Union Electric Co. |
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| 2. Identification of the type and location of fire hazards and associated types of fire that could occur in the plant. | Complies. Identification of flammable materials and substances along with their location within the plant and its environ. Identification of the types of fires that could occur within the plant and its environ. |
| 3. The toxic and corrosive characteristics of expected products of combustion. | Complies. The toxic, radiological and corrosive characteristics of products of combustion. |
| 4. Identification of the location of fire fighting equipment for each fire area and familiarization with the layout of the plant including access and egress routes to each area. | Complies. Identification of the location of onsite fire fighting equipment and familiarization with the layout of the plant including ingress and egress routes to each area. |
| 5. The proper use of available fire fighting equipment and the correct method of fighting each type of fire. The types of fires covered should include fires in energized electrical equipment, fires in cables and cable trays, hydrogen fires, fires involving flammable and combustible liquids or hazardous process chemicals, fires resulting from construction or modifications (welding) and record file fires. | Complies. The proper use of fire fighting equipment and the correct method of fighting each type of fire, including electrical fires, cable and cable tray fires, hydrogen fires, flammable liquids, waste/debris fires, fires involving radioactive materials and record file fires. |
| 6. The proper use of communication, lighting, ventilation, and emergency breathing equipment. | Complies. The proper use of communication, lighting, ventilation, and emergency breathing apparatus. |
| 7. The proper method of fighting fires inside buildings and confined spaces. | Complies. The proper methods of fighting fires inside buildings and confined spaces. |

| 10CFR50 Appendix R | Union Electric Co. |
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| 8. The direction and coordination of the fire fighting activities (fire brigade leaders only). | Complies. Direction and coordination of fire fighting activities (fire brigade leaders only). |
| 9. Detailed review of fire fighting strategies and procedures. | Complies. Review of fire fighting procedures and strategies. |
| 10. Review of the latest plant modifications and corresponding changes in fire fighting plans. | Complies. Review of fire protection-related plant modifications and changes in fire fighting plans. |
| b) The instruction shall be provided by qualified individuals who are knowledgeable, experienced, and suitably trained in fighting the types of fires that could occur in the plant and in using the types of equipment available in a nuclear power plant. | Complies. Classroom instruction and training is conducted by qualified individuals knowledgeable, experienced, and suitably trained in fighting the fires that could occur within the plant and its environ and in using on-site fire fighting equipment. |
| c) Instruction shall be provided to all fire brigade members and fire brigade leaders. | Complies. All fire brigade members receive classroom instruction in fire protection and fire fighting techniques, prior to qualifying as members of the fire brigade. |
| d) Regular planned meetings shall be held at least every 3 months for all brigade members to review changes in the fire protection program or other subjects as necessary. | Complies. Regular planned meetings of the Callaway Plant fire brigade are held at least quarterly for members to review changes in the Fire Protection Program or other subjects as necessary. |
| e) Periodic refresher training sessions shall be held to repeat the classroom instruction program for all brigade members over a two year period. These sessions may be concurrent with the regular planned meetings. | Complies. Classroom refresher training is scheduled on an annual basis to assure retention of initial training. |

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| 2. Practice | Complies. |
| Practice sessions shall be held for each shift fire brigade on the proper method of fighting the various types of fires that could occur in a nuclear power plant. These sessions shall provide brigade members with experience in actual fire extinguishment and the use of emergency breathing apparatus under strenuous conditions encountered in fire fighting. These practice sessions shall be provided at least once per year for each fire brigade member. | Practice sessions are held for fire brigade members on the proper method of fighting various types of fires which might occur in a nuclear power plant. These sessions are scheduled on an annual basis and provide brigade members with experience in actual fire extinguishment and the use of emergency breathing apparatus. These practice sessions shall be provided at least once per year for each fire brigade member. |
| 3. Drills | |
| a) Fire brigade drills shall be performed in the plant so that the fire brigade can practice as a team. | Complies. Fire brigade drills are to be performed in the plant. |
| b) Drills shall be performed at regular intervals not to exceed 3 months for each shift fire brigade. Each fire brigade member should participate in each drill, but must participate in at least two drills per year. | Complies. Fire brigade drills are conducted on a quarterly basis at Callaway Plant for each shift fire brigade. Each fire brigade member should participate in scheduled drills but must participate in at least two drills per year. |
| A sufficient number of these drills, but not less than one for each shift fire brigade per year, shall be unannounced to determine the fire fighting readiness of plant fire brigade, brigade leader, and fire protection systems and equipment. Persons planning and authorizing an unannounced drill shall ensure that the responding | At least one drill for each shift fire brigade per year shall be unannounced to determine the fire fighting readiness of plant fire brigade, brigade leader, and fire protection systems and equipment. Persons planning and authorizing an unannounced drill shall ensure that the responding shift fire brigade are not aware that a drill is being planned until it is begun. Unannounced drills |

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| shift fire brigade members are not aware that a drill is being planned until it is begun. Unannounced drills shall not be scheduled closer than four weeks.<br><br>At least one drill per year shall be performed on a back shift for each shift fire brigade. | shall not be scheduled closer than four weeks.<br><br>At least one drill per year shall be performed on the back shift for each shift fire brigade. |
| c) The drills shall be preplanned to establish the training objectives of the drill and shall be critiqued to determine how well the training objectives have been met. Unannounced drills shall be planned and critiqued by members of the management staff responsible for plant safety and fire protection. Performance deficiencies of a fire brigade or of individual fire brigade members shall be remedied by scheduling additional training for the brigade or members. Unsatisfactory drill performance shall be followed by a repeat drill within 30 days. | Complies.<br>Training objectives are established prior to the drill by the FPS. Afterwards, to determine how well the training objectives have been met the drill is critiqued. Unannounced drills shall be planned and critiqued by members of the fire protection staff. Performance deficiencies of a fire brigade or of individual fire brigade members shall be remedied by scheduling additional training for the brigade or members. Unsatisfactory drill performance shall be followed by a repeat drill within thirty days. |
| d) At 3 year intervals, a randomly selected unannounced drill shall be critiqued by qualified individuals independent of the licensees' staff. A copy of the written report from such individuals shall be available for NRC review. | Complies.<br>Triannually, a randomly selected unannounced drill shall be critiqued by qualified individuals independent of the Callaway Plant Staff. A copy of the written report from such individuals shall be available for NRC review. |
| e) Drills as a minimum include the following | Drill critiques as a minimum include: |

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| 1. Assessment of fire alarm effectiveness, time required to notify and assemble fire brigade and selection, placement, and use of equipment and fire fighting strategies. | Complies. Assessment of fire alarm effectiveness, time required to notify and assemble the fire brigade and the selection, placement, and use of equipment. |
| 2. Assessment of each brigade member's knowledge of his or her role in the fire fighting strategy for the area assumed to contain the fire. Assessment of the brigade member's conformance with established plant fire fighting procedures and use of fire fighting equipment including self-contained emergency breathing apparatus, communication equipment, and ventilation equipment, to the extent practicable. | Complies. Assessment of each fire brigade member's knowledge of fire fighting strategy, procedures, and use of equipment in the area assumed to contain the fire. |
| 3. The simulated use of fire fighting equipment required to cope with the situation and type of fire selected for the drill. The situation selected should simulate the size and arrangement of a fire that could reasonably occur in the area selected, allowing for fire development due to the time required to respond, to obtain equipment, and organize for the fire, assuming loss of automatic suppression capability. | Complies. The simulated use of fire fighting equipment required to cope with the situation and type of fire selected for the drill. The situation selected shall simulate the size and arrangement of a fire that could reasonably occur in the area selected, allowing for fire development due to the time required to respond, to obtain equipment, and organize for the fire assuming loss of suppression capability. |
| 4. Assessment of brigade leader's direction of the fire fighting effort as to thoroughness, accuracy, and effectiveness. | Complies. Assessment of brigade leader's effectiveness in directing the fire fighting effort. |

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| 4. Records<br><br>Individual records of training provided to each fire brigade member including drill critiques, shall be maintained for at least three years, to ensure that each member receives training in all parts of the training program. These records of training shall be available for NRC review. Retraining or broadened training for fire fighting within buildings shall be scheduled for all those brigade members whose performance records show deficiencies. | Complies.<br>Records of training for each fire brigade member including drill critiques are maintained to assure that each member receives training in all parts of the program and retains a high level of competence in this activity. These records shall be maintained for three years and shall be available for NRC review. Retraining and broadened training for fire fighting within buildings shall be scheduled for all those brigade members whose records show deficiencies. |
| K. Administrative Controls | |
| Administrative controls shall be established to minimize fire hazards in areas containing structures, systems, and components important to safety. These controls shall establish procedures to: | Complies.<br>Administrative procedure and controls are established to ensure the reliable performance of fire protection personnel, system, and equipment. These controls |
| 1. Govern the handling and limitation of the use of ordinary combustible materials, combustible and flammable gases and liquids, high efficiency particulate air and charcoal filters, dry ion exchanges, or other combustible supplies in safety-related areas. | Complies.<br>Govern the proper handling of flammable gases and liquids, HEPA and charcoal filters, dry unused ion exchange resins and other combustibles in safety-related areas. |
| 2. Prohibit the storage of combustibles in safety-related areas or establish designated storage areas with appropriate fire protection. | Complies.<br>Prohibit the storage of combustibles in safety-related areas or establish designated storage areas with appropriate fire protection. |

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| 3. Govern the handling of and limit transient fire loads such as combustible and flammable liquids, wood, and plastic products, or other combustible materials in buildings containing safety-related systems or equipment during all phases of operating and especially during maintenance, modification, or refueling operations. | Complies. Govern the handling of and limit transient fire loads such as flammable liquids, wood and plastic materials in buildings containing safety related systems or equipment. This control requires an inplant review of work activities to identify transient fire loads. |
| 4. Designate the on-site staff member responsible for the inplant fire protection review of proposed work activities to identify potential transient fire hazards and specify required additional fire protection in the work activity procedure. | Complies. The Superintendent, Maintenance is responsible for reviewing the work activities to identify transient fire loads. |
| 5. Govern the use of ignition sources by use of a flame permit system to control welding, flame cutting, brazing, or soldering operations. A separate permit shall be issued for each area where work is to be done. If work continues over more than one shift, the permit shall be valid for not more than 24 hours when the plant is operating or for the duration of a particular job during plant shutdown. | Complies. Govern the use of ignition sources by use of a flame permit system to control welding flame cutting, brazing, or soldering operations. A separate permit shall be issued for each area where work is to be done. If work continues over more than one shift the permit shall be valid for not more than 24 hours when the plant is operating or for the duration of a particular job during plant shutdown. |
| 6. Control the removal from the area of all waste, debris, scrap, oil spills, or other combustibles resulting from the work activity immediately following completion of the activity, or at the | Complies. Minimize waste, debris, scrap, and oil spills resulting from a work activity in the safety-related area while work is in progress and remove the same upon completion of |

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| end of each work shift, whichever comes first. | the activity or at the end of each work shift. |
| 7. Maintain the periodic housekeeping inspections to ensure continued compliance with these administrative controls. | Complies. Govern periodic inspections for accumulation of combustibles and to ensure continued compliance with these administrative controls. |
| 8. Control the use of specific combustibles in safety-related areas. All wood used in safety-related areas during maintenance, modification, or refueling operations (such as lay-down blocks or scaffolding) shall be treated with a flame retardant. Equipment or supplies (such as new fuel) shipped in untreated combustible packing containers may be unpacked in safety-related areas if required for valid operating reasons. However, all combustible materials shall be removed from the area immediately following the unpacking. Such transient combustible material, unless stored in approved containers, shall not be left unattended during lunch breaks, shift changes, or other similar periods. Loose combustible packing material such as wood or paper excelsior, or polyethylene sheeting shall be placed in metal containers with tight-fitting self-closing metal covers. | Complies. Control the use of specific combustibles in safety-related areas. All wood used in safety-related areas during maintenance, modification, or refueling operations (such as lay-down blocks or scaffolding) shall be treated with a flame retardant. Equipment or supplies (such as new fuel) shipped in untreated combustible packing containers may be unpacked in safety-related areas if required for valid operating reasons. However, all combustible materials shall be removed from the area immediately following the unpacking. Such transient combustible material, unless stored in approved containers, shall not be left unattended during lunch breaks, shift changes, or other similar periods. Loose combustible packing material such as wood or paper excelsior, or polyethylene sheeting shall be placed in metal containers with tight-fitting self-closing metal covers. |

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| 9. Control actions to be taken by an individual discovering a fire, for example, notification of control room, attempt to extinguish fire, and actuation of local fire suppression systems. | Complies. Control actions to be taken by the individual discovering the fire such as notification of the Control Room, attempting to extinguish the fire, and activation of local fire suppression systems. |
| 10. Control actions to be taken by the control room operator to determine the need for brigade assistance upon report of a fire or receipt of alarm on control room annunciator panel, for example, announcing location of fire over PA system, sounding fire alarms, and notifying the shift supervisor and the fire brigade leader of the type, size, and location of the fire. | Complies. Control actions to be taken by the Unit Reactor Operator, such as sounding fire alarms, and notifying the Operating Supervisor of the type, size, and location of fire. |
| 11. Control actions to be taken by the fire brigade after notification by the control room operator of a fire, for example, assembling in a designated location, receiving directions from the fire brigade leader, and discharging specific fire fighting responsibilities including selection and transportation of fire fighting equipment to fire location, selection of protective equipment, operating instructions for use of fire suppression systems, and use of preplanned strategies for fighting fires in specific areas. | Complies. Control actions to be taken by the fire brigade after notification of a fire, including location to assemble, directions given by the fire brigade leader, the responsibilities of brigade members such as selection of fire fighting and protective equipment and use of preplanned strategies for fighting fires in specific areas. |

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| 12. Define the strategies for fighting fires in all safety-related areas and areas presenting a hazard to safety-related equipment. These strategies shall designate: | Define the strategies established for fighting fires in safety-related areas and areas presenting a hazard to safety-related equipment including the designation of the |
| a. Fire hazards in each area covered by the specific prefire plans. | Complies. Fire hazards in each plant zone covered by a fire fighting procedure. |
| b. Fire extinguishants best suited for controlling the fires associated with the fire hazards in that area and the nearest location of these extinguishants. | Complies. Fire extinguishers best suited for controlling fires with the combustible loadings of the zone and the nearest location of these extinguishers. |
| c. Most favorable direction from which to attack a fire in each area in view of the ventilation direction, access hallways, stairs, and doors that are most likely to be free of fire, and the best station or elevation for fighting the fire. All access and egress routes that involve locked doors should be specifically identified in the procedure with the appropriate precautions and methods for access specified. | Complies. Most favorable direction from which to attack a fire in each area in view of the ventilation direction, access hallways, stairs, and doors that are most likely to be free of fire, and the best station or elevation for fighting the fire. All access and egress routes that involve locked doors will be specifically identified in the procedure with the appropriate precautions and methods for access specified. |
| d. Plant systems that should be managed to reduce the damage potential during a local fire and the location of local and remote controls for such management (e.g., any hydraulic or electrical systems in the zone | Complies. Plant systems that should be managed to reduce the damage potential during a local fire and the location of local and remote controls for such management (e.g., any hydraulic or electrical |

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| covered by the specific fire fighting procedure that could increase the hazards in the area because of overpressurization or electrical harzards). | systems in the zone covered by the specific fire fighting procedure that could increase the hazards in the area because of overpressurization or electrical harzards). |
| e. Vital heat-sensitive system components that need to be kept cool while fighting a local fire. Particulary hazardous combustibles that need cooling should be designated. | Complies. Vital heat-sensitive system components that need to be kept cool while fighting a local fire. Particulary hazardous combustibles that need cooling will be designated. |
| f. Organization of fire fighting brigades and the assignment of special duties according to job title so that all fire fighting functions are covered by any complete shift personnel complement. These duties include command control of the brigade, transporting fire suppression and support equipment to the fire scenes, applying the extinguishant to the fire, communication with the control room, and coordination with outside fire departments. | Complies. Organization of fire fighting brigades and the assignment of special duties according to job title so that all fire fighting functions are covered by any complete shift personnel complement. These duties include command control of the brigade, transporting fire suppression and support equipment to the fire scenes, applying the extinguishant to the fire, communication with the control room, and coordination with outside fire departments. |
| g. Potential radiological and toxic hazards in fire zones. | Complies. Potential radiological and toxic hazards in fire zones. |
| h. Ventilation system operation that ensures desired plant air distribution when the ventilation flow is modified for fire containment or smoke clearing operations. | Complies. Ventilation system operation that ensures desired plant air distribution when the ventilation flow is modified for fire |

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| | containment or smoke clearing operations. |
| i. Operations requiring control room and shift engineer coordination or authorization. | Complies. Operations requiring control room and operating supervisor coordination or authorization. |
| j. Instructions for plant operators and general plant personnel during fire. | Complies. Instructions for plant operators and general plant personnel during fire. |
| N. Fire Doors | |
| 1. Fire doors shall be self-closing or provided with closing mechanisms and shall be inspected semi-annually to verify that automatic hold open release and closing mechanisms and latch are operable. | Complies. Fire doors are provided with closing mechanisms and will be inspected semi-annually to verify that the closing mechanisms are operable. |
| One of the following measures shall be provided to ensure they will protect the opening as required in case of fire. | Fire doors are normally closed an locked except where the door is a means of egress in which case they are closed and latched. Fire doors that are locked closed will be inspected weekly to verify position. Fire doors that are closed and latched will be inspected daily to verify that they are in the closed position. |
| i. Fire door shall be kept closed and electrically supervised at a continuously manned location. | |
| 2. Fire doors shall be locked closed and inspected weekly to verify that the doors are in a closed position. | |

3. Fire doors shall be provided with automatic hold open add release mechanisms and inspected daily to verify that doors are free of obstructions or

4. Fire doors shall be kept closed and inspected daily to verify that they are in the closed position.

The Fire Brigade Leader shall have ready access to keys for any locked fire doors. Areas protected by automatic total flooding gas suppression systems shall have electrically supervised self-closing fire doors or shall satisfy option 1 above.