



**PECO ENERGY COMPANY
LIMERICK GENERATING STATION
UNITS 1 AND 2
DOCKET NOS. 50-352 AND 50-353**

**ANNUAL 10CFR50.59 AND COMMITMENT REVISION REPORT
JULY 1, 1998 THROUGH JUNE 30, 1999**

***LIMERICK
GENERATING
STATION***

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SAFETY EVALUATION SUMMARIES

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MOD ECR 93-02319 Unit 1 Unit 2 Common

This modification replaced the existing Suppression Pool Temperature Monitoring System (SPTMS) equipment with new recorders. SPTMS is safety related for indication and monitoring of suppression pool temperature and has no trip or actuation signals. The component identification changed from "TIX" to "TRS", to reflect the change from a microprocessor to a recorder. This modification also documented component identification changes and incorporated current procedure expectations and practices. The modification was required because the previous SPTMS was obsolete, not Y2K ready/compliant and had become less reliable over the years. The replacement recorder and indicating panel provides the same functionality as the existing system. The Resistance Temperature Detectors (RTDs) in the suppression pool and the Remote Shutdown Panel were not disturbed. This change affected a section of the UFSAR and is an overall enhancement to maintenance and operations.

MOD ECR 96-00924/ 99-00309 Unit 1 Unit 2 Common

This change allows the early removal (reactor power level less than 25%) of the upper layer of the reactor well shield plugs in Units 1 and 2, in support of plant outages. The change will result in a revised reactor disassembly/reassembly sequence. The current design bases and UFSAR states that the reactor well upper shield plugs should not be removed prior to the reactor achieving cold shutdown. The reactor well shield plugs are designed in part to provide radiological shielding above the drywell head to reduce the consequences of accidents involving increased dose rates in the drywell. This change evaluated load drop analysis, radiological consequences and reactor enclosure HVAC impact. It concluded that the early removal of the shield plugs can be safely performed. This change has no negative impact on safety related structures, systems or components, nor on their ability to perform their safety related functions. This change involved revision to certain sections of the UFSAR and is an overall enhancement to plant maintenance and operations.

MOD ECR 96-04372 Unit 1 Unit 2 Common

This modification replaced a portion of the carbon steel Diesel Generator exhaust piping with stainless steel. Additionally, the cast iron duct extension piece of the stack was also replaced with stainless steel. The purpose of this modification was to minimize the production of corrosion products produced in this portion of piping. The corrosion products (generated from rain water and/or condensation mixing with exhaust gas) caused fouling of the exhaust screen and resulted in crankcase pressurization events. The new stainless steel meets all of the original code design requirements and is considered functionally to be a direct replacement. The only special requirement for this portion of the stack involved the requirement for the exposed portion of the stack to be able to withstand the effects of a tornado or turbine driven missile without interfering with the operation of the Diesels. The new design used a weakly bolted connection of a stainless steel section to assure that this bolted connection would fail before any possible collapse of the 30" pipe section (i.e. the ultimate strength of the bolt circle is less than the yield strength of the pipe section). This change affected a section of the UFSAR and is an overall enhancement to operations.

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MOD ECR 97-00851, 97-00852, 97-00853, and 97-01679 Unit 1 Unit 2 Common

This modification involved performing inbody maintenance on Low Pressure Coolant Injection (LPCI) valves, HV-051-1F017A/B/C/D. This corrected a potential disc tipping condition (i.e., failure of disc to provide tight shutoff due to misalignment) when the valves are closed during LPCI injection flow. The external bypass line previously installed to eliminate pressure locking was cut to support valve maintenance. The external bypass line was not re-installed, but a disc with a small pressure relief hole was installed in the high pressure side of the disc face of the valve to eliminate pressure locking. The hole drilled in the high pressure side disc face allows venting of the bonnet back to the downstream (vessel) side piping. This change affected a section of the UFSAR and is an overall enhancement to operations.

MOD ECR 97-01323 Unit 1 Unit 2 Common

This modification replaced the Turbine Building roof, because the roof was damaged and leaking rain water in some areas. The metal deck was not adversely impacted by the moisture in the roofing and did not need to be replaced. The light weight fill within the corrugation of the metal deck was dry and did not need to be replaced. The new roofing is built-up roofing instead of the single ply system it replaced. The new roofing type meets or exceeds the previous roofing system design requirements. The Turbine Buildings are non-safety related, non-seismic category II. However, reroofing involved some small openings in the metal deck due to removal of nails and uncovering an existing joint between the two units and at the perimeter of the precast panels and the metal deck. The Turbine Buildings are part of the Radiologically Controlled Area (RCA) boundary. Therefore, the possibility of unmonitored air being released was reviewed and found to be acceptable. This change affected a section of the UFSAR and is an overall enhancement to operations.

MOD ECR 97-02694, rev.2 Unit 1 Unit 2 Common

This change covers the portion of Mod P00736 that deals with the upgrade of the existing one(1) or three(3) hour fire rated Thermo-Lag 330-1 encapsulation configurations. The existing one(1) and three(3) hour encapsulation configurations had been found to be indeterminate because they did not pass the fire resistance test criteria in certain configurations. The upgrade was made to meet the anticipated one hour fire resistance encapsulation requirement. The upgrade included the application of a skim coat of trowel grade Thermo-Lag and stress skin where required and the installation of "picture frames" at the interface between Thermo-Lag and walls, ceilings and floors. In addition, it included the overlay of Thermo-lag on existing Thermo-lag barriers for conduit in Fire Barrier System (FBS) 44-04. The impact of the change from the additional weight added by the upgrade, the effect on existing supports and changes to cable ampacity derating and combustible loading was also addressed by the modification. This change is an overall enhancement to plant maintenance and operations.

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MOD ECR 97-02805 and 97-02807 Unit 1 Unit 2 Common

This modification eliminated the capability to continuously monitor the Residual Heat Removal Service Water (RHRSW) system flow for possible radiation at the outlet of each Residual Heat Removal (RHR) heat exchanger. The monitoring skids, 1C(D)-S579 and 2C(D)-S579 (unitized skids), which provide this capability were abandoned in place. A second set of monitoring skids, 0A-S578 and 0B-S578 (common skids), which are used to monitor the combined flow from either the Loop 'A' or Loop 'B' discharge RHR heat exchangers and the Emergency Service Water (ESW) system Loop 'A' and/or Loop 'B' discharge flows, were not affected. This modification also deleted the auto closure of the RHR heat exchanger isolation valves, HV-051-1(2)F014A(B) and HV-051-1(2)-F068A(B), on the cooling water side (RHRSW) based on a Hi-Hi/INOP/DNSCL signal originating from the unitized radiation monitors. The RHRSW pump trip on a Hi-Hi/INOP/DNSCL signal originating from the common skids was not affected. The RHRSW Radiation Monitoring System (RMS) is one of the effluent radiological monitoring systems which are designed to monitor and control radioactivity levels in plant discharges to the environs. The abandonment of a portion of this system does not adversely impact the plant's ability to monitor and control radioactive releases from the RHRSW system under normal or accident conditions. This change effected a section of the UFSAR and provides enhancement to plant maintenance and operations.

MOD ECR 97-03118 Unit 1 Unit 2 Common

This modification removed Reactor Water Cleanup (RWCU) filter demineralizer relief valves, PSV-045-1-62A and B, and installed blind flanges. These relief valves, which were provided for system protection, were subject to inadvertent opening during the process of placing the filter demineralizer in service. When evaluating the removal of these relief valves, a nonconformance condition associated with the Unit 1/2 RWCU filter demineralizer inlet valves, HV-045-*-032A and B, was uncovered. The final disposition for ECR 97-02480 lowered the set pressure for the RWCU non-regen heat exchanger channel (tube) side relief valve (PSV-044-106A and B) to eliminate the nonconformance. It was also determined that this relief valve could provide overpressure protection for the Emergency Core Cooling (ECC) portion of the RWCU system. As a result, it was feasible to eliminate the filter demineralizer relief valves. This change affected a section of the UFSAR and is an overall enhancement to plant maintenance and operations.

MOD ECR 98-00845 Unit 1 Unit 2 Common

This change covers the portion of MOD P00736 that removed the existing one(1) or three(3) hour fire rated Thermo-Lag 330-1 encapsulation. An evaluation determined that the barriers were no longer required by the new FSSD analysis that is implemented under MOD P00413. The removal of the Thermo-lag 330-1 is required for reasons such as combustible load reduction, steel survivability and ampacity derating considerations. The immediate effect of Thermo-lag removal on the present plant commitment, for the time period when the Thermo-lag is removed until the revised FSSD is implemented, was addressed by this change. The removal of the Thermo-lag encapsulation in the present plant configuration did not remove cables from the current FSSD plan. This change affected a section of the UFSAR and provides an overall enhancement to plant maintenance and operations.

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MOD ECR 98-00847 Unit 1 Unit 2 Common

This change is part of MOD P00736, Thermo-Lag upgrade. It provides for some existing Thermo-Lag installations to remain in the plant in an abandoned status. The encapsulation abandoned was in anticipation of revising the Fire Safe Shutdown Compliance configuration in the future. Required compensatory measures were not affected and remain in place until the FSSD analysis is implemented under MOD P00413. The abandonment of the Thermo-lag 330-1 in place resulted in the existing ampacity rating factors remaining in effect. No change in the combustible load for the fire area and no change in the weight of the encapsulation was made, thereby, causing no impact on the raceway or raceway support loads. This change provides an overall enhancement to plant operations without negative impact on safety.

MOD ECR 98-01037 Unit 1 Unit 2 Common

This modification installed a non-combustible material over the Thermo-Lag that had been installed on conduit 1AI137, for the section that is routed through Combustible Free Zone (CFZ-5, Reactor Enclosure elevation 253'). The existing Thermo-Lag was installed to provide fire barrier protection for the Fire Safe Shutdown (FSSD) cables in the conduit. The installation was also required to remain in place for that purpose until restart from Unit 2 refuel outage 2R05, at which time both units will convert to a revised FSSD program which does not require that this conduit be protected. Thermo-Lag has been determined to be a combustible material, therefore, actions performed by this modification were required to resolve this condition. This change affected a section of the UFSAR and is an overall enhancement to operations.

MOD ECR 98-01386 Unit 1 Unit 2 Common

This modification removed Reactor Water Cleanup (RWCU) filter demineralizer relief valves, PSV-045-2-62 A and B, and installed blind flanges. These relief valves, which were provided for system protection, were subject to inadvertent opening during the process of placing the filter demineralizer in service. When evaluating the removal of these relief valves, a nonconformance condition associated with the Unit 1/2 RWCU filter demineralizer inlet valves, HV-045-*032A and B, was uncovered. The final disposition for ECR 97-02480 lowered the set pressure for the RWCU non-regen heat exchanger channel (tube side) relief valve (PSV-044-106A and B) to eliminate the nonconformance. It was also determined that this relief valve could provide overpressure protection for the Emergency Core Cooling (ECC) portion of the RWCU system. As a result, it was feasible to eliminate the filter demineralizer relief valves. This change affected a section of the UFSAR and provides an overall enhancement to plant operations without negative impact on safety.

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MOD ECR 98-01743 Unit 1 Unit 2 Common

MOD ECR 98-01743 provides documentation of the UFSAR and other design basis document changes associated with Project P00413, Thermo-Lag 330-1. Specifically, this ECR documents changes associated with the revised fire safe shutdown analysis which is documented in a series of calculations - LF-0016-XXX(A). The preponderance of the LGS UFSAR changes involved with this modification are a direct result of the specifics associated with revised fire safe shutdown analysis. UFSAR section 9A.5 is changed to identify the revised methods and to eliminate specific information when not required. Also, changes to plant operating procedures were made. This includes changes to various plant procedures and the addition of Fire Safe Shutdown Guides (1/2FSSG-3XXX). This modification determined that TRIP procedures will still be used to effect plant shutdown. It also provided for the fire shutdown guides to be used to identify equipment that may not be available, that requires contingency actions or equipment that needs to be operated from outside the control room. This change required revision to sections of the UFSAR and provides an overall enhancement to plant operations without negative impact on safety.

MOD ECR 98-01791 Unit 1 Unit 2 Common

This modification installed a thermal relief valve in primary containment on the non-safety related Reactor Enclosure Cooling Water (RECW) line HBC-291, in the test connection line upstream of valve 013-2081. This enhanced the design of the RECW piping inside containment to limit thermally induced pressurization. The set pressure was established using criteria for overpressure protection of system faulted conditions and provides adequate simmer margin for the relief valve to minimize the potential for spurious lift. The set pressure, 274 psig, protects components for rated design at faulted conditions. This change affected a section of the UFSAR and is an overall enhancement to operations.

MOD ECR 98-01965 Unit 1 Unit 2 Common

This change replaced Thermo-lag with cable tray covers on various cable trays in Combustible Free Zones (CFZ). The cable tray metal covers replaced the Thermo-Lag since the Thermo-Lag itself is a combustible material. The Areas affected were: a) Unit 1, CFZ 3 and CFZ 4, el. 217' b) Unit 1, CFZ 7, el. 313' and c) Unit 2, CFZ 9, el. 217'. The installation of cable tray covers requires a change to the UFSAR, Sections 9A.5.4.16, 9A.5.4.20 and 9A.5.5.16. All sections are associated with fire protection design features. Similar work for the installation of cable tray covers was performed in 1998 under ECR 97-03548. This provides an overall enhancement to plant operations without negative impact on safety.

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MOD ECR 98-02127 Unit 1 Unit 2 Common

This change covers the portion of MOD P00736 that deals with installation of Darmatt KM1 in place of Thermo-Lag 330-1. This change also covers the installation of Darmatt KM1 on raceways that were not previously encapsulated but are required to be encapsulated to support the new FSSD analysis. The installation of Darmatt KM1 meets the requirements for a one(1) or three(3) hour fire rated barrier as required to support the new FSSD analysis in MOD P00413. The raceways modified are located in the Unit 1 Reactor Building, Unit 2 Reactor Building and the Control Structure. The immediate effects on all of the present commitments, such as additional weight, combustible loading changes, and impact on ampacity derating of cables, were addressed by this change. This change affected a section of the UFSAR and provides an overall enhancement to plant maintenance and operations.

MOD ECR 98-02266 Unit 1 Unit 2 Common

This modification transferred meteorological data collection and display functions from the RM-21A computer to the Unit 1 Plant Monitoring System (PMS) computer. This modification installed a new computer data acquisition panel, 10-Z726, in the Technical Support Center (TSC) computer room. Analog signals from the meteorological monitoring system receiver/demultiplexer panel, 00-C499, are sent to panel 10-Z726 for collection and display by the Unit 1 PMS computer. Meteorological data was transferred to the Unit 1 PMS computer because the RM-21A computer was not Year 2000 compliant and could not be upgraded. This change affected a section of the UFSAR and is an overall enhancement to operations.

MOD ECR 98-02692 Unit 1 Unit 2 Common

This modification adds cable, terminal boxes and jacks inside Unit 2 drywell which will be used to support the use of temporary cameras and speakers. The installed cables and jacks send low voltage control signals to the cameras, send audio signals to the temporary speakers and transmit video from the cameras to the remote console. This equipment allows Health Physics to remotely monitor radiological conditions in either of the Unit 1 or Unit 2 drywells, and to visually monitor work being performed in the drywell during outages. There are no setpoint changes, surveillance changes or changes to operability requirements. The UFSAR is also updated to reflect the acceptability of the proposed materials for use in both the Unit 1 and Unit 2 drywells. This change provides an overall enhancement to plant maintenance and operational activities without negative impact on plant safety.

MOD ECR 98-03090, Rev. 0 Unit 1 Unit 2 Common

This modification replaced selected degraded Service Water System isolation valves with improved type/materials or added new isolation valves. This allows isolation of critical service water heat exchangers, so on-line maintenance may be performed. This change was required due to corrosion of existing maintenance isolation valves which have made isolation for on-line maintenance impossible for a number of critical service water heat exchangers. This activity required the Unit 2 Service Water system to be drained and refilled under a Special PORC approved procedure. Only the Service Water system, which is not a safety related system, was affected. This change required a revision to certain sections of the UFSAR and is an overall enhancement to plant maintenance and operations.

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MOD ECR 98-03090, Rev. 1 Unit 1 Unit 2 Common

MOD ECR 98-03090 replaced selected degraded Service Water System isolation valves with improved type/materials or added new isolation valves. Rev.1 of this modification defined the work scope in more general terms for flexibility of implementation, reduced the modification scope and allowed for the deferment of portions of the modification beyond the 2R05 Service Water System outage. Specifically, this revision deleted the removal of unused service water piping that previously removed the Isophase Bus Coolers from the modification scope. This change was limited to the Unit 2 Service Water system, which is not safety related, and enhanced the overall ability to operate and maintenance the plant safely.

MOD ECR 99-00337 Unit 1 Unit 2 Common

This modification rerouted a safety related instrument cable, 2BIL012B (Unit 2, Suppression Pool Water Level, Channel B), out of existing conduit 2BI295-1 and through a series of safety related cable trays. The cable is part of the level transmitter and indicator circuitry that provides an electrical signal to monitor suppression pool level. There are no actuation or alarms driven from this circuit and no electro magnetic interference (EMI) effects on suppression pool level indication. This change affected a section of the UFSAR and provides an enhancement to plant maintenance and operations.

MOD ECR 99-00615 Unit 1 Unit 2 Common

This modification administratively controls the electrical power feed to the Unit 1 outboard RHR Shutdown Cooling (SDC) Suction Valve, HV-051-1F008. The administrative, procedurally directed controls will involve manually locking open the applicable circuit breaker whenever reactor pressure exceeds 75 psig. These procedural controls call for manual closure of the circuit breaker when reactor pressure is less than 75 psig, thus, restoring the capability for remote valve operation from the control room. This change also electrically removed HV-051-1F008 from the common control room annunciator circuit for "Outboard MOV Loss of Power/Thermal Overload Trip," under an administrative clearance. This change is needed in order to clear the annunciator indicator when the subject circuit breaker is locked open which would mask power failure or trip on all other outboard MOVs. This modification also protects the RHR SDC Suction High/Low Pressure interface from a fire induced fault. This change affected a section of the UFSAR and provides an overall enhancement to plant operations without negative impact on safety.

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MOD

ECR 99-00782

Unit 1 Unit 2 Common

This modification functionally changed the method by which steam trap, ST-055-2D001, drains condensate from the HPCI steam admission line. This changed the trap from a steam trap which cycles to discharge condensate to an orifice which is constantly open and discharges condensate and steam. The passive safety-related function of ST-055-2D001 is to retain its structural integrity and maintain its system pressure boundary. This modification was required because the steam trap did not function reliably and caused the steam trap bypass valve, HV-055-2F054, to cycle frequently and to generate nuisance alarms for the high drain pot level. The bypass valve had been status tagged open to allow condensate to drain from the HPCI steam admission line until the problems with the trap could be resolved. This change allows condensate to drain freely from the HPCI steam admission drain pot and returns the bypass valve to its normally closed position, opening only on drain pot high level. The Unit 1 HPCI high drain pot high level setpoint has not been changed and the drain pot level controls and bypass valves were not modified. These components continue to function as originally designed to alarm and bypass flow in the event the steam trap orifice becomes plugged or if the flow exceeds the orifice capacity. This change involved revision to certain sections of the UFSAR and is an overall enhancement to plant maintenance and operations.

MOD

ECRs 99-00484, 99-00487, and
99-00552

Unit 1 Unit 2 Common

This modification added two (2) new water fire suppression systems into Fire Area 2 (13 kV Switchgear Area, Room 336, Elevation 217'), and Fire Area 7 (Corridor, Room 437, Elevation 239') at the Limerick Generating Station (LGS). ECRs LG 99-00484, 99-00485, 99-00486, 99-00487 and 99-00552 implemented this work under MOD P00736S-1,2, "Thermo-Lag project". ECR LG 98-00893, Rev. 3, "LGS T-Lag Project, Issue Raceway Encapsulation List", installed alternate fire rated encapsulating material to replace the existing 3 hour Thermo-Lag 330 material. Due to access limitation in certain areas, a 1-hour fire rated design using the alternate encapsulating material was utilized in lieu of a 3-hour design. The change was needed to comply with Branch Technical Position BTP CMEB 9.5-1, Section C.5.b.(2), which requires installation of an automatic fire suppression and fire detection systems in these cases. This change involved revision to certain sections of the UFSAR and TRM is an overall enhancement to plant maintenance and operations.

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MOD P00285 Unit 1 Unit 2 Common

This modification installed large capacity passive strainers in the Residual Heat Removal (RHR) and Core Spray (CS) systems. The NRC issued NRC Bulletin 96-03 (NRCB 96-03), "Potential Plugging of Emergency Core Cooling Suction Strainers by Debris in Boiling Water Reactors," requesting that Boiling Water Reactor (BWR) licensees implement appropriate procedural measures and plant modifications to minimize the potential for clogging of Emergency Core Cooling System (ECCS) pump suction strainers by debris generated during a Loss of Coolant Accident (LOCA). The NRC indicated that these actions were necessary to ensure that the ECCS can perform its intended safety function and minimize the need for operator action to mitigate a LOCA. Three potential options for addressing the long term resolution of the ECCS pump suction strainer clogging were identified by the NRC and this modification was one of those options. This option utilizes a strainer design of sufficient capacity to ensure that debris loading effects following a LOCA, as calculated in accordance with the guidance specified in Regulatory Guide 1.82, Revision 2, "Water Sources for Long-Term Recirculation Cooling Following a Loss of Coolant Accident," do not cause a loss of Net Positive Suction Head (NPSH) for the ECCS pumps. This design is completely passive and requires no operator intervention, nor does it require an interruption of ECCS flow for strainer cleaning or backflushing. Since this design relies solely on passive structures and components, no new Technical Specifications (TS) surveillance requirements for the strainers are required. This change affected a section of the UFSAR and is an overall enhancement to maintenance and operations.

MOD P00292 Unit 1 Unit 2 Common

This modification replaced various recorders in the control room because they were obsolete and spare parts were unavailable. Some recorders were changed from print head type to analog pen recorders with digital indications to provide operator trending data with no time delay. The new recorders meet the applicable requirements of NE-CG-936, "Application Guideline for Digital Upgrades". The replacement recorders meet the original design specifications for material and construction practices, radiological and seismic specifications, separation criteria and environmental qualification criteria. The replacement recorders do not impose additional loads not analyzed in the original design, do not delete or modify any support system performance required for reliable operation, do not increase the frequency of operation of equipment important to safety and do not impose increased or more severe testing requirements on equipment important to safety. This change affected a section of the UFSAR and is an overall enhancement to plant maintenance and operations.

MOD P00580 Unit 1 Unit 2 Common

This modification replaced the Unit 2 low pressure (LP) turbine rotors and high pressure (HP) turbines. The replacement turbines were designed and manufactured by Siemens Power Corporation (SPC). The replacement LP turbines are a "shrunk-on-disk" design. This change also provided a new methodology for analyzing missile generation probability, developed by SPC, that addresses the design of the replacement turbines in combination with the existing General Electric (GE) Control System. This change affected a section of the UFSAR and is an overall enhancement to maintenance and operations.

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MOD P00701 Unit 1 Unit 2 Common

This modification is one of several physical plant change modifications required to satisfy the Fire Safe Shutdown (FSSD) re-analysis under Project 8655, "Thermo-Lag Reduction". The project goal is to evaluate and correct the deficiencies of Thermo-Lag 330-1 identified in Generic Letter 92-08. The re-analysis performed by the fire protection group, SEAR, under P-8655, used a best balance choice methodology to select alternatives to resolve these issues. Some equipment required for FSSD contains cabling for non-critical automatic and alarm signals that could be damaged by the postulated fires. Fuses and switches were added to isolate these cables in the event of fire induced cable faults. The fuses were coordinated so that the fault will be cleared before the main circuit fuse(s) opens, thereby maintaining operation of the equipment. Electrical calculations to verify operability of the affected circuits and the use of 'Q' equipment, properly sized, ensured the reliability of the installed electrical components under normal plant operation and design basis accident conditions. This change was done in compliance with Reg. Guide 1.47. This change affected a section of the UFSAR and is an overall enhancement to maintenance and operations.

MOD P00738 Unit 1 Unit 2 Common

MOD P00738 relocated the Emergency Fire Dispatch Center (EFDC), installed 8 hours of emergency lighting to illuminate the access/egress paths for the EFDC and installed 8 hours of emergency lighting to support the new manual actions identified in the new FSSD analysis. The installation of the 8 hours of emergency lighting and the relocation of the EFDC will support the requirements of Branch Technical Position BTP CMEB 9.5-1 and Generic Letter 86-10. The Emergency Fire Dispatch Center (EFDC) will be relocated from the old operations support center (OSC), located in area 3 ele' 269, to the new OSC located on ele' 217 at 41 line. This change had no negative effect on plant safety and provides enhanced plant maintenance and operations.

MOD P00759 Unit 1 Unit 2 Common

MOD P00759, MSRV Improvement Project, replaced the pilots of the existing SRVs with a newly designed Target Rock 3-stage topworks and made minor modifications to the main valves. Condition monitoring capability is added with the new Target Rock design. The former SRVs at LGS were an industry unique, vertical discharge, 2-stage Target Rock design. Upward setpoint drift and unacceptable leakage performance made change to the new design necessary. Installation and testing of SRVs and modification and testing of N2 piping were also included with this change. The N2 piping was modified because the pneumatic connection on the 3-stage SRVs is in a different location, and the qualification of the SRV flex hose could not be maintained unless the nitrogen piping was moved. This change provides an overall enhancement to plant operations without negative impact on safety.

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MOD P00781-1 Unit 1 Unit 2 Common

MOD P-00781-1, "Unit 1 Alternate Decay Heat Removal Project", was implemented in three phases (pre-1R07, 1R07 and post-1R07). The change implemented a new RHR system alignment which provided another alternate method of decay heat removal in OPCON 5. The RHR alternate decay heat removal method was a new alignment of RHR for 1R07 testing and 1R08 use. Physical modification of the Fuel Pool Skimmer Surge tanks (SSTs) to make them watertight was also performed. Other changes include: temporary changes to procedure S53.0.C to cover Units 1 and 2 plant configuration during SST modifications, physical modification of RHR Shut Down Cooling piping to add a manual block valve, acceptance/incorporation of the new GE analysis for additional natural circulation configurations, piping stress analysis, and hanger and grating modifications to support valve installation. Issuance of Special Procedures and procedure revisions that ensured availability of safety related systems/components, under various Units 1 and 2 plant configurations during RHR valve installation, were also approved. This change overall provides an enhancement to maintenance and operations of the plant without safety implications.

MOD P00781-2 Unit 1 Unit 2 Common

This modification, "Unit 2 Alternate Decay Heat Removal Project", allowed use of the RHR system for decay heat removal from the reactor vessel and the spent fuel pool during the common RHR Shut Down Cooling (SDC), supply line Local Leak Rate Test (LLRT) and during maintenance. The use of the RHR system during the LLRT eliminates entry into an ORAM Orange condition and allows the LLRT to be performed earlier during Spring refueling outages. This modification consists of the installation of a 20" manual butterfly valve in the suction line for the RHR SDC mode. This valve allows RHR to cool the reactor during outages using a new method to be known as "Alternate Decay Heat Removal". This method allowed work and testing to be performed on containment isolation valves, HV-051-2F008 and HV-051-2F009, without interfering with the ability to cool the reactor. This change involved revision to certain sections of the UFSAR and overall provides enhancement to plant maintenance and operations without effecting plant safety.

MOD P00808 Unit 1 Unit 2 Common

MOD P00808, "Smoke Detector Upgrade", is one of several physical plant change modifications required to support the Fire Safe Shutdown (FSSD) re-analysis, under MOD P00413, "Thermo-Lag Reduction". The purpose of MOD P00808 is to upgrade and relocate spot smoke detectors in each beam pocket in the ceiling of Fire Area 2, as required, to comply with location and spacing requirements of National Fire Protection Association (NFPA) 72, 1996, Chapter 5. This modification also supports an engineering evaluated change from the guidelines of Branch Technical Position, BTP CMEB 9.5-1 Section C.5.b.(2).(c). The smoke detectors added to Fire Areas 1 and 7 (Units 1 and 2) in Revision 0 of this modification were removed from the scope of work being performed in Revision 1 of this modification. However, the requirement for fire suppression with enhanced smoke detection, in the areas which utilize 1-hour fire barriers, was not altered. This modification involved revisions to certain sections of the UFSAR and will enhance the early warning detection capability of the plant.

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NCR 97-00602 Unit 1 Unit 2 Common

The interim disposition for this NCR (Rev.0 and Rev. 1) abandoned the Unit 2 recirculation pump seal leak detection flow switches, FSH-043-2N002A/B. The switches measure seal leakage flow to the drywell equipment drain sumps and actuate a main control alarm when leakage flow exceeds a high flow setpoint. The subject flow switches were determined to be inoperable due to their installed configuration which did not provide adequate hydraulic head to operate the internal parts of the switches. The final disposition for this NCR, Rev. 2, replaced the abandoned flow switches with a combination thermal flow tube and electronic switch, FT/FISH-043-201A/B. This restored the functionality of the pump seal leakage high flow alarms. The thermal flow tube contains no internal components that can impede fluid flow and will function in this low hydraulic head application. This final disposition involved non-safety related equipment and systems and the affected equipment does not impact or interface with any safety related systems or components. This NCR affected a section of the UFSAR and is an overall enhancement to operations.

NCR 98-00470 Unit 1 Unit 2 Common

This "use-as-is" NCR, LG 98-00470, Rev. 0", Fire Dampers for Units 1 and 2", evaluated the existing fire damper assembly and documented the ability of the fire damper assemblies to provide protection commensurate with the postulated fire for Fire Areas 3, 4, 5 and 6. These fire areas communicate with Fire Area 2, 13kV Switchgear Area. The evaluation reviewed the ability of the HVAC penetration/fire damper/ seal plate configuration to meet its intended function without impacting the safe operation of the plant and concluded that the penetration will not impact the safe shutdown capability of the plant. The fire damper assemblies were found to no longer meet the description provided in UFSAR section 9a.3.1.1, detailed comparison to Branch Technical position CMEB 9.5-1. This change identifies the damper assemblies as uniquely evaluated assemblies which do not meet the CMEB 9.5-1 requirements, but are commensurate with the postulated fire for the identified fire zones.

NCR 98-01687 Unit 1 Unit 2 Common

This NCR justified a "use-as-is" disposition for deviations of the guidelines of National Fire Protection Association (NFPA) 10, "Standard for Portable Fire Extinguishers," 1975 edition. In response to the deviation of Class A (ordinary combustibles) extinguishers not placed throughout the facility; a) Class A extinguishers are placed in the plant only in identified areas of large concentrations of fixed Class A combustibles such as office areas. b) Isolated areas of fixed Class A combustibles are protected by the local hose station. In response to the deviation of maximum travel distances specified in Section 3 of NFPA 10-1975 being exceeded in several areas of the plant; a) these deviations are acceptable due to considerations such as radiological, nuclear safety and security concerns, the size of the anticipated fire and the consideration that the site fire brigade is the user/occupant of the extinguishers. b) portable fire extinguishers are located throughout the plant and are also sufficiently near the areas where deviations exist. This NCR affected a section of the UFSAR and is an overall enhancement to maintenance and operations.

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NCR

99-00981

Unit 1 Unit 2 Common

NCR LG 99-00981 dispositioned the acceptability of opening the condensate cleanup system deep bed demineralizer flow control valves (FCV-016*46 (A-H)) to typically 80-100% full open and de-energizing their motor operators upon placing each vessel in service. These actions eliminate the automatic control functions of these valves, but are required to eliminate an unanticipated common cause failure mode which negatively impacts the ability to maintain feedwater flow to the reactor. This failure mode was discovered on 4/16/99 when automatic closure of all of the deep bed demineralizer flow control valves, FCV-016-*46(A-H), occurred in response to a loss of power to various position indication circuits and powered I/O cards. The function of these valves is to adjust flow balance through the in-service vessels to optimize condensate purification without negative impact on reactor feedwater flow. They are capable of being operated in the manual mode (a frequently used mode) which allows the operator to adjust the flow balance as necessary based upon outlet conductivity. This manual control is maintained with this change, but requires an additional operator action to re-energize the motor operator prior to flow control valve manipulation. This NCR disposition provides an overall enhancement to plant operations without negative impact on safety.

PROCEDURE

A-C-31 Rev. 3 / A-C-31-2 Rev. 3 Unit 1 Unit 2 Common

Procedures A-C-31 and Exhibit A-C-31-2 provide administrative control and maintenance of the qualification levels for PECO Nuclear (PECON) staff supporting the operation of Limerick Generating Station (LGS), Peach Bottom Atomic Power Station (PBAPS) and the PBAPS Independent Spent Fuel Storage Installation (ISFSI). Guidance was added to permit individuals to fill positions even though they may not initially meet the specific ANSI criteria for the given position, provided that another individual(s) within the organization meets the specific qualification requirements and assumes the responsibility for the implementation of the applicable tasks. The scope of the procedure has also been expanded to cover personnel qualification requirements for operation of the PBAPS ISFSI. It also clarifies the use of training records in lieu of completing a Qualification Review Form (Exhibit A-C-31-1) for those technician level positions delineated in Exhibit A-C-31-2. The revision to Exhibit A-C-31-2 more clearly described the commitment with the comparable ANSI qualification requirements for the various positions within PECON by giving generic qualification requirements on a combination of education, experience and skills commensurate with the position. Further guidance on the minimum education and experience requirements for licensed operators, based on INPO ACAD requirements at PBAPS, was provided.

PROCEDURE

M-097-046, Rev. 2

Unit 1 Unit 2 Common

This change addressed the performance of irradiated Fuel Inspection activities at Limerick Generating Station in accordance with procedure M-097-046, Revision 2. This procedure described the use of the latest revision of GE Nuclear Energy company approved procedures and equipment by qualified vendor personnel. These GE procedures were reviewed by Reactor Services Technical Staff and were found to be accurate and appropriate to perform the activities described in the procedure. This revision to M-097-046 included additional inspection scope planned to be performed beyond the last Limerick fuel inspection campaign, including fuel bundle reconstitution.

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PROCEDURE RW-C-100, Rev. 5 Unit 1 Unit 2 Common

Solid Radwaste Process Control Program RW-C-100, Rev.5, incorporated management and group title changes based on the re-organization of the Radwaste and Chemistry departments. This procedure was also revised to provide clarification on the waste types governed by this procedure and the source document for permit requirements. The changes made with this procedure revision improved plant maintenance and operations without a negative impact on plant safety.

PROCEDURE S17.2.C Rev. 0 Unit 1 Unit 2 Common

S17.2.C allowed the temporary installation and operation of a portable clarifier when maintenance work is required on the Clarified Water System (CWS) clarifier. Temporary vendor equipment is typically used when the clarifier for the CWS is not available. This change assessed the impact on the safe operation of the plant by using this type of temporary equipment and approved methods for maintaining chemistry monitoring instrumentation inservice, effluent water quality control, and system flow and level control. This change was approved with no identified negative impact on plant safety and overall provided enhanced plant operations.

PROCEDURE SAMP-1, Rev. 0 Unit 1 Unit 2 Common

This change approved Severe Accident Management Procedure, SAMP-1, Rev. 0, "RPV and Primary Containment Flooding Control", and eliminated TRIP procedure T-118. The bases document and PSSAMG appendices are new for this procedure. This procedure replaced TRIP procedure T-118, "Primary Containment Flooding", which will be deleted. These changes are required as a result of PECO Nuclear's implementation of Revision 1, of the 'Boiling Water Reactor Owner's Group' (BWROG), Emergency Procedure and Severe Accident Guideline (EPG/SAG). PECO Nuclear committed to implement the new Emergency Procedure and Severe Accident Guideline by December 31, 1998. The former LGS TRIP procedures were based on Revision 4 of the Emergency Procedure Guidelines (EPGs), developed by the BWROG. The SAG, together with the modified EPGs, form an integrated set of symptomatic instructions that provide direction to mitigate the effects of all possible event scenarios. Adaptation of these changes was performed without negative impact to the safe operation of the plant and provides an overall enhancement to plant operations

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PROCEDURE SAMP-2, Rev. 0 Unit 1 Unit 2 Common

This change approved Severe Accident Management Procedure SAMP-2, Revision 0, "Containment and Radioactivity Release Control". The bases document and Plant Specific Severe Accident Management Guideline, PSSAMG, appendices are new for this procedure. These changes are required as a result of PECO Nuclear's implementation of Revision 1 of the Boiling Water Reactor Owners' Group (BWROG), Emergency Procedure and Severe Accident Guideline (EPG/SAG). PECO Nuclear committed to implement the new Emergency Procedure and Severe Accident Guideline, by December 31, 1998. The current LGS TRIP procedures are based on Revision 4 of the Emergency Procedure Guidelines (EPGs) developed by the BWROG. The SAG, together with the modified EPGs, form an integrated set of symptomatic instructions that provide direction to mitigate the effects of all possible event scenarios. This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations

PROCEDURE SP-191, Rev. 0 and SP-192, Rev. 0 Unit 1 Unit 2 Common

To obtain the required test pressure levels, it is necessary to temporarily operate the RHR pumps without minimum flow protection. Special Procedures (SP-191 and SP-192) were developed as a conservative action to provide administrative and manual control instructions to Operations personnel to temporarily permit running the RHR pump with the minimum flow valve shut and the breaker de-energized. SP 191: controls the Dynamic Votes Test of the RHR Full Flow Test Shut Off Valve, HV-051-*25A(B), and SP 192 controls the Dynamic Votes Test of the RHR Full Flow Test Return Valve, HV-051-*F024A(B). Dynamic valve testing is conducted to demonstrate that the subject valves could function against designed, postulated differential pressures. The valves are tested to a MOV Joint Owners Group 96-05 commitment that requires dynamically testing these valves over the next three cycles. This procedure change involved revision to certain sections of the UFSAR and provides enhanced plant maintenance and operations without a negative safety impact on the plant.

PROCEDURE T-101, Rev. 17 Unit 1 Unit 2 Common

This revision to Transient Response Implementation Plan (TRIP) Procedure T-101, "Reactor Pressure Vessel (RPV) Control", Revision 17, incorporated comments received during the Licensed Operator Requalification (LOR) training cycle 98-04 and additional enhancement comments received since the last revision. In addition, this revision is required as a result of PECO Nuclear's implementation of Revision 1 of the Boiling Water Reactor Owners' Group (BWROG) Emergency Procedure and Severe Accident Guideline (EPG/SAG). PECO Nuclear committed to implement the new Emergency Procedure and Severe Accident Guideline by December 31, 1998. The changes affect procedure T-101, its associated bases document and its Plant Specific Technical Guideline (PSTG) Appendices A and B. The bases document and PSTG appendices are complete re-writes. The current LGS TRIP procedures are based on Revision 4 of the Emergency Procedure Guidelines (EPGs) developed by the BWROG. The SAG, together with the modified EPGs, form an integrated set of symptomatic instructions that provide direction to mitigate the effects of all possible event scenarios. This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations.

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PROCEDURE T-102, Rev. 17 Unit 1 Unit 2 Common

This revision to Transient Response Implementation Plan (TRIP) Procedure T-102, "Primary Containment Control", Revision 16, implemented and incorporated comments received during the Licensed Operator Requalification (LOR) training cycles 98-04 and 98-07 and incorporated additional enhancement comments received since the last revision. In addition, this revision is required as a result of PECO Nuclear's implementation of Revision 1, of the Boiling Water Reactor Owners' Group (BWROG) Emergency Procedure and Severe Accident Guideline (EPG/SAG). PECO Nuclear committed to implement the new Emergency Procedure and Severe Accident Guideline by December 31, 1998. The changes affect procedure T-102, its associated bases document and its Plant Specific Technical Guideline (PSTG) Appendices A and B. The bases document and PSTG appendices are complete re-writes. The current LGS TRIP procedures are based on Revision 4 of the Emergency Procedure Guidelines (EPGs) developed by the BWROG. The SAG, together with the modified EPGs, form an integrated set of symptomatic instructions that provide direction to mitigate the effects of all possible event scenarios. This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations.

PROCEDURE T-103, Rev. 14 Unit 1 Unit 2 Common

This revision to Transient Response Implementation Plan (TRIP) Procedure, T-103, "Secondary Containment Control (SCC)", incorporated comments received during the Licensed Operator Requalification (LOR) training cycles 98-04 and 98-07. Additional enhancement comments received since the last revision were also incorporated. In addition, this revision is required as a result of PECO Nuclear's implementation of Revision 1 of the Boiling Water Reactor Owners Group (BWROG) Emergency Procedure and Severe Accident Guideline (EPG/SAG). PECO Nuclear committed to implement the new Emergency Procedure and Severe Accident Guideline by December 31, 1998. The changes affect procedure T-103, its associated bases document and its Plant Specific Technical Guideline (PSTG) Appendices A and B. The bases document and PSTG appendices are complete re-writes. The current LGS TRIP procedures are based on Revision 4 of the Emergency Procedure Guidelines (EPGs) developed by the BWROG. The SAG, together with the modified EPGs, form an integrated set of symptomatic instructions that provide direction to mitigate the effects of all possible event scenarios. This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations.

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PROCEDURE

T-104, Rev. 10

Unit 1 Unit 2 Common

T-104, Radioactivity Release Control, Revision 10, Secondary Containment Control (SCC) implemented and incorporated changes required as a result of PECO Nuclear's implementation of Revision 1 of the Boiling Water Reactor Owners' Group (BWROG) Emergency Procedure and Severe Accident Guideline (EPG/SAG). PECO Nuclear committed to implement the new Emergency Procedure and Severe Accident Guideline by December 31, 1998. The changes affect procedure T-104, its associated bases document and its Plant Specific Technical Guideline (PSTG) Appendices A and B. The bases document and PSTG appendices are complete re-writes. The current LGS TRIP procedures are based on Revision 4 of the Emergency Procedure Guidelines (EPGs) developed by the BWROG. The SAG, together with the modified EPGs, form an integrated set of symptomatic instructions that provide direction to mitigate the effects of all possible event scenarios. This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations

PROCEDURE

T-111, Rev. 13

Unit 1 Unit 2 Common

Revision 13, to T-111, "Reactor Pressure Vessel Level Restoration Steam Cooling", incorporated the results from the re-evaluation of the steam cooling mechanism. The minimum Reactor Pressure Vessel (RPV) pressure permissive for implementing steam cooling had been deleted. The new permissive is based on achieving stable RPV pressure as opposed to maintaining pressure above 120 psig. This change is a departure from the SER description of alternate level control that previously required an elevated RPV pressure above 120 psig. Specifically, this revision removed strategies from the EPGs that are applicable only to the SAMPs and ensured a smooth transition from the Emergency Procedure Guideline (EPG) into the SAMPs. It also incorporated recommended EPG changes identified during the severe accident mitigation development effort and incorporated outstanding EPG Rev. 4 issues. Core cooling is still provided by a combination of submergence and steam cooling. The steam produced by the decay heat to boil off the inventory in the vessel will cool the uncovered cladding. This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations.

PROCEDURE

T-112, Rev. 11

Unit 1 Unit 2 Common

This change involved revisions to Transient Response Implementation Plan (TRIP) Procedure T-112, "Emergency Blowdown", Revision 11, its associated bases document and its Plant Specific Technical Guideline (PSTG) Appendices A and B. The bases document and PSTG appendices were a complete re-write. These revisions were required as a result of PECO's commitment to adapt guidance contained in the Boiling Water Reactor Owners' Group (BWROG) Revision 1 of the Emergency Procedure and Severe Accident Guideline (EPG/SAG). This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations

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PROCEDURE T-116, Rev. 12 Unit 1 Unit 2 Common

This change involved revisions to Transient Response Implementation Plan (TRIP) Procedure T-116, Rev.12, "RPV Flooding (RF)", its associated bases document and its Plant Specific Technical Guideline (PSTG) Appendices A and B. The bases document and PSTG appendices were a complete re-write. These revisions were required as a result of PECO's commitment to adapt guidance contained in the Boiling Water Reactor Owners' Group (BWROG) Revision 1 of the Emergency Procedure and Severe Accident Guideline (EPG/SAG). This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations

PROCEDURE T-117, Rev. 14 Unit 1 Unit 2 Common

This change involved revisions to Transient Response Implementation Plan (TRIP) Procedure T-117, Rev.14, "Level Power Control", its associated bases document and its Plant Specific Technical Guideline (PSTG) Appendices A and B. The bases document and PSTG appendices were a complete re-write. These revisions were required as a result of PECO's commitment to adapt guidance contained in the Boiling Water Reactor Owners' Group (BWROG) Revision 1 of the Emergency Procedure and Severe Accident Guideline (EPG/SAG). This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations

UFSAR CHANGE ECR 98-00355 Unit 1 Unit 2 Common

This change was part of a station-wide review effort to update and clarify UFSAR information to reflect current practices. A change to UFSAR section 11.4.2.1.4, "Irradiated Reactor Internals", was made to clarify that the Power Range Monitors are changed out, as needed, based on the detector's lifetime, as opposed to the description that "approximately 30 % of the Power Range Monitor detectors will be replaced at each reactor outage". Also, clarification of the disposal and storage for spent incore detectors and dry tubes was made. Other revisions to certain UFSAR sections and Tables were made to better reflect the current practices and process, to correct typographical errors and to make format changes to equipment ID and nomenclature.

UFSAR CHANGE ECR 98-00674 Unit 1 Unit 2 Common

This UFSAR changed several sections of UFSAR Chapter 15 resulting from modification to the turbine control valve (TCV) configuration. Starting with Unit 1 in Cycle 8, the TCV configuration is being changed from partial arc to full arc admission as part of the Turbine Retrofit Project, (MOD P00580). This change to the TCV configuration and its safety significance was also addressed as part of the review of the turbine modification. However, the corresponding changes to UFSAR Chapter 15 were not available at that time because the Reload Analysis, which incorporates the new TCV configuration, had not been completed. This change describes the impact of the new TCV configuration on the Reload Analysis and the resulting changes to Chapter 15 of the UFSAR.

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UFSAR CHANGE ECR 98-01211 Unit 1 Unit 2 Common

This change made revisions to UFSAR text, figures and drawings and to other support calculations in order to fully demonstrate LGS compliance with the requirements of NRC Regulatory Guide 1.63, for all electrical containment penetration circuits. UFSAR section 8.1 was revised to include the addition of new time-current-curves. Other affected UFSAR sections were 8.1.6.1.12 and 8.3.1.1.2.11.1. As stated within the referenced Regulatory Guide, redundant protective devices are required such that electrical penetration assemblies can withstand, without loss of mechanical integrity, the maximum short circuit current versus time conditions that could occur as a result of a single random failure of circuit protective devices. Other means of protection (de-energizing the circuit, limiting fault current, low energy devices, etc.) were also reviewed and found acceptable. This change also reviewed the containment penetration electrical protection issue documented within ECR/NCRs (97-02636, 98-00724, 98-01141, 98-01144, 98-01200, 98-01201, and 98-01224) and the follow-up circuit review conducted by the SEEE (Chesterbrook: Electrical Engineering Branch). The documentation reviewed and changed within the scope of this ECR reflects the latest LGS configuration and demonstrates compliance with RG 1.63 requirements. This change is an overall enhancement to plant maintenance and operations.

UFSAR CHANGE ECR 98-01390 Unit 1 Unit 2 Common

This change revised UFSAR, Chapter 13, due to changes to the offsite organization for the Limerick Generating Station (LGS) and the Peach Bottom Atomic Power Station (PBAPS). These organizational changes include: combining the Station Support and Nuclear Planning and Development Departments under one Vice President, the addition of a new Division reporting to the Director Nuclear Planning and Development which includes the Business Unit and the Ventures organization, the removal of the description of the Business Unit and reference to Joint Owners Affairs and the addition of new organizations reporting to the Executive Management Special Projects. These organizational changes do not have any impact or adverse effect on plant operations or safety and they do not reduce the level of support provided by these organizations to LGS and PBAPS.

UFSAR CHANGE ECR 98-02814 Unit 1 Unit 2 Common

This change revised UFSAR Table 9.2-3 and DBD L-S-02, Tables T3.2-1 and T3.2-2, to correct discrepancies and to clarify contents of the Tables and notes. These changes were discovered during the annual LGS UFSAR Update project. The change corrected the required ESW flows to the TECW and RECW heat exchangers and Core Spray pump room coolers. The change also added a note to the HPCI and RCIC pump-room coolers. Safety related equipment total flow rate values were also revised. The increased required flow rates provided by this change only affect the design required flow rates. They do not reduce the actual capacity of the ESW system. No other structure, system or component is adversely impacted. This change is an overall enhancement to plant maintenance and operations.

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UFSAR CHANGE ECR 99-00451 Unit 1 Unit 2 Common

This change revised UFSAR section 15.2.1.2.3 to allow operation with a single EHC pressure regulator. The normal configuration of the EHC is for two regulators to be in service with one controlling pressure and the other in backup mode, with a setpoint slightly higher than the primary pressure regulator. Operation with only one pressure regulator is acceptable under certain conditions per GE SIL 614, Rev.1, and NEDE-24222. This change defined these conditions and demonstrated acceptability of this mode of operation. The impact on thermal limits, ASME vessel overpressure reactor vessel overpressure and containment heat-up during ATWS events were addressed and found to meet NRC approved acceptance limits.

UFSAR CHANGE ECR 99-01440 Unit 1 Unit 2 Common

This change to UFSAR, sections 13.1.1.2 and 8.3.1.1.3.13, adds clarification to allow qualified personnel from either Limerick Maintenance Division (MD) or Nuclear Maintenance Division (NMD) to perform maintenance activities on plant equipment at Limerick. The change was necessary to achieve more efficient and cost effective work without sacrificing safety or quality. This change provides the flexibility for qualified NMD personnel to perform work on a variety of plant equipment including emergency diesel generators and not be limited to reactor equipment or turbine generator and related equipment. These organization changes do not have any direct impact or adverse effect on plant operations or safety.

OTHER Cancellation of PORC Position 27 Unit 1 Unit 2 Common

This change canceled PORC Position 27 and placed the guidelines clarified in the PORC Position into related chemistry diesel fuel oil surveillance tests. PORC Position 27 clarified the conditions for meeting Technical Specification 4.8.1.1.2 and outlined inoperability/ operability determinations for the diesel generators based on fuel oil/receipt analysis. This PORC position outlined action to be taken dependent upon the outcome of certain chemistry analysis performed on new diesel fuel oil, prior to its delivery into in-ground storage tanks. The PORC position described actions to be taken if the results of longer term analysis (typically two weeks after sampling) were negative. By placing these guidelines and actions in the chemistry procedures which govern diesel fuel oil specifications/ conditions, one place is provided in which all required actions can be understood and initiated without the need for the PORC position. This change enhanced overall operation and maintenance flexibility without sacrificing plant safety.

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OTHER Continued Irradiation of GE Fuel Unit 1 Unit 2 Common
Assemblies

This change was made to allow continued irradiation of four Limerick 1 GE11 fuel assemblies in Limerick Unit 2 Cycle 6. These bundles are classified a part of a Lead Test Assembly (LTA) program. There are four High Exposure Lead Use Assembly Bundles involved; YJ1432, YJ1436, YJ1437 and YJ1470. This change allowed these bundles to exceed the current GE11 monitoring limit for Peak Rod Pellet Exposure, but did not to exceed any of the GE11 licensing criteria. The limit prior to the change was 70 GWd/MT. Analysis from this review supports operation to 86 GWd/MT. This Safety Evaluation was authored by General Electric and PECON Fuel and Services Division reviewed the document and performed an audit at GE-Wilmington. It was confirmed that GE used NRC-approved, standard methods for determining the revised operating limit. This change was performed without negative impact to the safe operation of the plant and is an overall enhancement to plant operations.

COMMITMENT T00010 Unit 1 Unit 2 Common
DELETION

This commitment was deleted after confirmation that effective corrective actions are in place to ensure the Seismic Monitoring System printer is properly repaired and will operate reliably. The identified problem was a design deficiency of the seismic monitoring system, TRSA, printer controller circuit board. A new MRAD Corporation controller circuit card was installed and the printer was tested and declared operable. This commitment required the Seismic Monitoring System Engineer to perform a weekly walkdown of the printer to ensure the printer repair was effective and that the printer was operating properly. These actions had been procedurally performed since 1989 with no recurring or new problems. This commitment is deleted because no indications of printer malfunctioning or continued need for follow-up action was warranted per procedure LR-C-1.

COMMITMENT REVISION T03645 [MSRV Monitoring Plan] Unit 1 Unit 2 Common

This change revised the MSRV leakage monitoring plan to reflect conversion to 3-stage Target Rock MSRV (MOD P00759). This revised action plan is warranted by the characteristics of the 3-stage Target Rock MSRVs and the new condition monitoring instrumentation. This new instrumentation, along with the existing SRV tailpipe temperature thermocouples, allows for timely assessment of SRV leakage origin, quantity and significance. Safe plant operation is not affected by applying this revision to commitment T03645.

COMMITMENT REVISION T03645 [Supp Pool Debris] Unit 1 Unit 2 Common

This commitment revision deleted suction strainer differential pressure trending for Unit 2 Core Spray, RHR and RCIC systems and deleted the Unit 2 Suppression Pool fiber sampling requirement. This Commitment T03645 issue was only applicable until the Unit 2 new suction strainers were installed per PECO's response to Bulletin 96-03 and PECO's response to NRC Request for Additional Information (RAI) for Bulletin 96-02. The new Unit 2 suction strainers were installed during refuel outage 2R05.

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COMMITMENT REVISION T04121, Rev. 1

Unit 1 Unit 2 Common

This revision limited actions taken by PECO to prevent recurrence of degraded Rosemount Model 510DU Trip Units to those determined to present a high risk of negative impact on plant systems. The original actions applied to all Rosemount Trip Units. This revision to the commitment limits corrective actions to affected Trip Units which contain the batch of transistors that are Trip Unit model #510, manufactured between 1973 and 1980. The corrective actions involved replacement of these transistor models with new components. The replacement program applies to Trip Units in "energize to trip" applications as well as all Trip Units contained in storeroom stock. Trip Units that provide "alarm only" functions or "alarm upon failure" are not part of the replacement program. The Trip Units targeted for rework were selected based on the identified susceptible systems described in GE SIL 520 and were prioritized according to the potential impact on plant systems. All identified Trip Units have been verified replaced or reworked.