APPENDIX B

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-482/85-42 License: NPF-42

Docket: 50-482

Licensee: Kansas Gas and Electric Company (KG&E)
P. O. Box 208
Wichita, Kansas 67201

Facility Name: Wolf Creek Generating Station (WCGS)

Inspection At: WCGS Site, Burlington, Coffey County, Kansas

Inspection Conducted: December 9-13, 1985

Inspector: Blaine Murray 3/19/86
H. Chaney, Radiation Specialist, Facilities Radiological Protection Section for Date

Approved: Blaine Murray 3/19/86
B. Murray, Chief, Facilities Radiological Protection Section Date

Inspection Summary

Inspection Conducted December 9-13, 1985 (Report 50-482/85-42)

Areas Inspected: Routine, unannounced inspection of the licensee's Radiation Protection Program (internal/external dosimetry, respiratory protection, contamination and radioactive material control, and radiological control facilities), Emergency Plan implementing procedures, and results of the power ascension radiation surveys. The inspection involved 40 inspector-hours onsite and 11 inspector-hours offsite by one NRC inspector.

Results: Within the areas inspected, one deviation (see paragraph 7) was identified. No violations were identified.

DETAILS

1. Persons Contacted

KG&E

*W. J. Rudolph II, Manager WCGS Quality Assurance (QA)
*G. D. Boyer, Superintendent Technical Support
*M. G. Williams, Regulatory, Quality and Administration Superintendent
*J. Ives, Site Health Physicist (SHP)
*L. F. Breshears, Health Physics (HP) Supervisor
*W. M. Lindsay, Supervisor Quality Systems
*G. Pendergrass, Licensing Engineer
*K. Peterson, Lead Licensing Engineer
*S. Devena, Senior Engineer Emergency Planning
*R. L. Hoyt, Emergency Planning Administrator
*C. J. Hoch, QA Technician
J. Shaw, Reactor Operator
R. Ryan, HP Technician
M. Isom, Radioactive Waste Coordinator
H. Nichols, HP Technician
R. Stambough, QA Audit Supervisor
G. Downing, HP Technician

Others

*J. Cummins, NRC Senior Resident Inspector
*B. Bartlett, NRC Resident Inspector
*R. Flannigan, WCGS Site Representative, Kansas City Power & Light
*B. Allen, HP Consultant
*C. Rice, HP Supervisor, Consultant
R. Taylor, HP Supervisor/ALARA Coordinator, Consultant
J. Brock, Dosimetry Technician, Consultant

*Denotes those present at the exit interview on December 13, 1985.

The NRC inspector also interviewed several other licensee employees including QA/QC, training, administrative, and HP personnel.

2. Licensee Action on Previously Identified Open Item

(Closed) Open Item (482/8434-04): Postaccident Sampling of Radioactive Liquid Waste System - The licensee had conducted training, installed sampling equipment, and issued procedures to cover the sampling evolutions. This item is considered closed.

3. Inspector Observations

The following are observations the NRC inspector discussed with the licensee. These observations are neither violations nor unresolved items. These items were recommended for licensee consideration for program improvement, but they have no specific regulatory requirement. The licensee indicated that these items would be reviewed.

a. Staffing - The licensee was using an inordinate reliance on contracted employees in supervisory positions. (See paragraph 4)

b. ALARA - The onsite ALARA program appears inactive and under staffed. (See paragraph 4)

c. NRC Inspection and Enforcement Information Notices - The licensee had not developed adequate procedures to address the concerns identified in several IE Information Notices. (See paragraph 5)

d. Release of Radioactive Material - The licensee's survey program for potentailly radioactive materials does not satisfy the recommendations of I&E Information Notice 85-92. (See paragraph 7)

e. Response Check of Radiation Protection (RP) Instruments - The area radiation and airborne iodine monitors in the Technical Support Center (TSC) and the Emergency Operating Facility (EOF) are not routinely checked for proper operation between calibrations. (See paragraph 8)

4. Management Controls

The NRC inspector reviewed the licensee's staffing changes within the health physics department made since the last inspection of this area. The former SHP was promoted to the onsite position of Superintendent of Plant Support and the former HP Supervisor of operations was promoted to the position of SHP. The new SHP meets the training and qualification requirements of Technical Specification (TS) 6.3.1, and Standardized Nuclear Unit Power Plant System (SNUPPS) Final Safety Analysis Report (FSAR) Addendum for WCGS (SNUPPS-WC) commitments in Section 12.5.1. The NRC inspector noted that the former KG&E employee assigned as HP Supervisor/ALARA Coordinator had terminated and that this position and that of the former HP Supervisor of operations were being filled by contractor personnel. Both contract personnel filling the operations and ALARA supervisory positions possessed the proper experience and qualifications for their assigned positions. Discussions with the ALARA Coordinator disclosed that the turnover of duties involving this position was less than adequate and that the current ALARA coordinator was somewhat unsure of the position's duties regarding long range preplanning and corporate interfaces. The NRC inspector discussed with licensee representatives the NRC's concern regarding the long term use of contracted employees in supervisory positions, and the current effectiveness of the ALARA coordinator. The Superintendent of Technical Support which oversees the HP group indicated that both of the aforementioned inspector concerns had also been note by WCGS management.

The NRC inspector reviewed the licensee's onsite and corporate procedures involving radiation exposure control, QA audits, directives and policies, equipment calibration, implementing of the WCGS Emergency Plan, and administration of HP/RP programs.

No violations or deviations were identified.

5. External Radiation Exposure Control

The licensee's RP program was reviewed for compliance with the commitments contained in the SNUPPS-WC FSAR, Section 12.5.2.1, the requirements of TS 6.8.1, 6.11, 6.12.1, and 6.12.2, and the requirements contained in 10 CFR Parts 19.12, 13, and 20.101, 102, 104, 105, 202, 203, 205, 206, 405, 407, 408, and 409, and the recommendations of IE Information Notices 81-26, 82-42, 83-59, 84-59, and 85-42, and also the recommendations contained in NRC Regulatory Guides (RGs) 8.2, 8.4, 8.7, 8.8, 8.13, 8.14, and 8.28, and those of industry standards ANSI N13.11-1983, N13.5-1972, and N13.27-1981.

The NRC inspector reviewed selected WCGS personnel (contract and KG&E) radiation exposure history records (current and terminated/inactive), dosimetry processing procedures, QA/Quality Control (QC) over dosimetry selection and independent laboratory cross comparisons, dosimetry calibration records, extremity and multiple whole body dosimetry use, neutron exposure monitoring and control, administrative exposure control limits, skin exposure calculational methods, certification of the licensee's personnel dosimetry program by the National Voluntary Laboratory Accreditation Program, and physical controls for controlling entry into high and very high radiation areas. The design, useful range, and inventory of personnel thermoluminescent dosimeters (TLDS) for routine and emergency use was reviewed. The licensee's TLDs and computerized readout equipment provide for the effective monitoring of whole body penetrating radiations encountered at WCGS during routine and emergency conditions. The NRC inspector noted that the licensee had onsite self-alarming personnel dosimeters, but had not placed them into use. The NRC inspector noted that the self-alarming dosimeters had not been evaluated against the performance criteria of RG 8.28. The NRC inspector determined that the licensee had performed an annual QA audit of the RP program and several surveillances of selected RP program activities including dosimetry use and personnel exposure records during 1985. The licensee's QA department was noted by the NRC inspector to be using ANSI 45.2.6 certified auditors and contracted HP professionals for RP program audits.

The NRC inspector determined that the licensee's internal response to NRC IE Information Notices involving selected HP aspects regarding licensee oversight of contractor use of licensee radiation exposure monitoring devices (84-59), use of dosimetry devices in non-uniform radiation fields (83-59), and placement of dosimetry devices for whole body and extremity monitoring (81-26) were not provided a satisfactory review by KG&E personnel and that the licensee's actions did not provide assurance that the problem areas referenced in the IE Information Notices would not be

repeated at WCGS. Licensee representatives stated that some of the earlier IE notices were reviewed at the Corporate level prior to the full HP/RP program at WCGS being implemented, and may need to be re-reviewed by the plant HP staff.

No violations or deviations were identified.

6. Internal Radiation Exposure Control

The NRC inspector reviewed the licensee's internal radiation exposure control program including airborne radioactivity monitoring/sampling, and respiratory protection program for compliance with the commitments in the SNUPPS FSAR, Section 12.3.4.2 and SNUPPS-WC FSAR, Section 12.5, and the requirements of TS 6.3.1, 6.8.4.b, and 6.11, and those of 10 CFR Parts 19.12, 13, and 20.103, 201, 203, 405, 407, 408, and 409, and the recommendations of ANSI 13.1-1969, N343-1978, NUREG-0041, and RG 8.2, 8.7, 8.8, 8.9, 8.15, 8 20, and 8.26.

The NRC inspector reviewed selected WCGS personnel (contractor and KG&E) exposure history records documenting licensee evaluations of internal radioactivity analysis by direct whole body counting (WBC). The licensee's annual calibration and periodic response checks of the whole body counter as well as the results of offsite laboratory confirmatory measurements were reviewed. The licensee's WBC system including the internal dosimetry software use methodologies that are in agreement with ANSI N343-1979 and RG 8.26. Qualifications and training of WBC operators were reviewed. The NRC inspector noted that all dosimetry records and analysis were being reviewed by the HP supervisor in charge of dosimetry activities.

The NRC inspector reviewed respiratory protection program aspects concerning medical review of users; training; maskfit testing; response to IE Information Notices 81-26 and 85-60; installation and use of a permanent plant breathing airline system and a portable breathing airline system (cascade type); respirator receipt QC inspection, maintenance, cleaning and decontaminations; and respiratory equipment selection, issuance, preuse testing and return. The NRC inspector reviewed respiratory protection equipment inventories for both routine and emergency use. The licensee provides adequate respiratory protection equipment at the primary security building, Emergency Operations Facility (EOF), control room, Technical Support Center (TSC), Operations Support Center (OSC) for use during emergency situations. Breathing air quality is currently being certified by vendors supplying bottled air to WCGS. The NRC inspector also reviewed airborne exposure tracking procedures and methodologies used to evaluate exposures to noble gases. The licensee's progress on installation of an air line breathing system for the RAB and containment were reviewed.

No violations or deviations were identified.

7. Control of Radioactive Materials (RAM) and Contamination, Surveys, and Monitoring

The licensee's programs for the control of RAM and contamination, radiological surveys and monitoring were reviewed for compliance with the commitments contained in the SNUPPS FSAR, Section 12.3.4.2, and SNUPPS-WC FSAR, Section 12.5, and the requirements contained in TS 6.11, and those contained in 10 CFR Part 19.12, and 20.4. 5, 201, 203, 205, 207, 301, 401, and 402, and NUREG-0737, Item III, D.3.3, and the recommendations of IE Information Notice 85-92.

The NRC inspector reviewed WCGS procedures for the control of RAM and radioactive contamination, scheduling of radiological surveys, conducting radiological surveys (radiation, contamination, airborne) for both routine and emergency situations, decontamination and release of potentially RAM, personnel decontamination and documentation, emergency response facility habitability surveys during implementation of the WCGS emergency plan, instructions to workers on actions to be taken upon the alarming of fixed radiation protection instruments and instructions on reporting incidents and overexposures to the NRC. The NRC inspector also observed the performance of radiation and contamination surveys and the documentation of the results by licensee personnel. Also, the licensee's inventory of and the periodic survey of selected sources per TS 4.7.9.1 was reviewed. The NRC inspector noted to licensee representatives the filing system for source records could use some clerical attention.

The NRC inspector reviewed the contents of IE Information Notice 85-92 with licensee representatives (HP personnel at the WCGS site were not aware of the contents of the subject notice) and cautioned the licensee that their plant procedures include methodologies and criteria that could allow the release of licensed material to unrestricted areas. The NRC inspector noted that the licensee routinely restricts release of potentially radioactive material by involving a no-detectable-activity restriction to routine surveying of materials removed from within potentially contaminated areas. Currently, licensee procedures allow the release of material based on a combination of surveys to detect beta/gamma and alpha contamination, with laboratory counting of paper swipes or the frisking of material with a thin-window "pancake" Geiger-Mueller (GM) probe, which responds to primarily beta radiation, and/or the direct monitoring of an item's radiation level (millirem per hour-mr/hr). The licensee's current limits on material to be released this way is 1000 disintegration per minute (DPM) per 100 square-centimeters for loose surface radioactivity or per area frisked (for small objects) for fixed activity. Alpha contamination has considerably lower limits for release. A limit of iess than 0.1 mr/hr was noted to be used for release of RAM with fixed beta/gamma radioactivity. The NRC inspector noted to the licensee that the contamination limits for loose surface activity involving both beta/gamma and alpha contamination should be equivalent to the lower limit of detection of the laboratory counters being used, and as for the fixed radioactivity limit of 0.1 mr/hr, this limit does not appear to be in agreement with the intent of the notice 85-92. The licensee

agreed to provide a comprehensive review of their solid waste and potentially RAM release program.

The NRC inspector determined that Sections 12.3.4.2.2.2.9 and 12.5.2.1 of the SNUPPS and the SNUPPS-WC FSARs respectively establish a commitment to monitor airborne radioactivity in work areas using portable continuous airborne monitors (CAMs) as a primary method, with grab sampling as a backup to the CAMs. Contrary to this commitment the NRC inspector determined on December 10, 1985, that the licensee did not have any CAMs in operation and was relying on a grab sampling program, (particulates, iodines and noble gases). Licensee representatives stated that they had discontinued use of approximately 10 portable CAMs (that were purchased to supplement the one SNUPPS provided CAM) due to a recurring breakdown of computerized components. The lack of a CAM program is considered a deviation from commitments made to the NRC in the FSAR (482/8542-01).

No violations were identified.

8. Radiological Control Facilities and Equipment/Instruments

The licensee's facilities for radiological protection activities during routine and emergency situations were reviewed for compliance with commitments contained in the SNUPPS FSAR, Section 12, and the SNUPPS-WC FSAR, Section 12.5.2, Wolf Creek Radiological Emergency Response Plan Table 4.3-1 and the recommendations of RG 1.97, 8.8, 8.25, NUREG-0041, and NUREG-0654/FEMA-REP-1.

The NRC inspector reviewed the licensee's facilities for controlling access into radiologically controlled areas of the plant, temporary radiological work areas, RP instrument storage and calibration facilities, respiratory protection equipment storage and maintenance areas, RP counting equipment and staff offices, inplant personnel decontamination facilities, worker change rooms (male and female) and toilet facilities, and protective clothing issue locations throughout the plant. Area radiation monitors (ARMs) and certain ventilation system radioactivity monitors with readouts provided in the control room were reviewed for proper operation, calibration, and alarm set points. The setpoints for the TSC and EOF ARMs and ventilation system iodine CAMs were reviewed along with their calibration procedures. The NRC inspector noted to the licensee that neither the ARMs nor the CAMs in the TSC and EOF were required to be response checked periodically between routine calibrations (18 month intervals). Licensee representatives indicated that a response check program for the instruments would be incorporated into the quarterly emergency equipment inventory program. The NRC inspector also inspected the contents of selected emergency equipment kits and verified the inventory of selected items (e.g., dosimetry, medical/first aid, check sources, high range pocket dosimeters, high range radiation measuring instruments, iodine sampling and analysis equipment, decontamination supplies) at the control room, primary security access, TSC, EOF, and the OSC. Records of RP instrument calibrations and response checks were also reviewed for fixed instruments (portal monitors, ARMs, air samplers (low

and high volume, lapel breathing zone samplers, and CAMS), portable instruments (beta/gamma ion chambers, high range extendable probe gamma instruments, and neutron dose rate meters) and laboratory counters.

No violations or deviations were identified.

9. Reactor Power Ascension/Startup Radiation Surveys

The licensee's reactor shielding surveys conducted during power ascension testing were reviewed for compliance with the commitments in Section 14.2.12.3.40 of the SNUPPS FSAR, and Section 14.2.5 of the SNUPPS-WC FSAR.

This area was previously discussed in NRC Inspection Report 50-482/85-31. The NRC inspector reviewed the final radiation surveys of the reactor biological shield obtained during performance of reactor 100 percent power testing. The Joint Test Group review of the survey results were also reviewed by the NRC inspector for significant test exceptions.

No violations or deviations were identified.

10. Exit Interview

The NRC inspector met with the licensee's representatives and the NRC resident inspectors identified in paragraph 1 of this report at the conclusion of the inspection on December 13, 1985. The NRC inspector summarized the scope and the results of the inspection.

ATTACHMENT
TO NRC INSPECTION REPORT
50-482/85-42

DOCUMENTS REVIEWED

TITLE	REVISION	DATE
Nuclear Department Policy Manual:		
Section II, "Organizational Policies":		
17.0, As Low As Reasonably Achievable (ALARA) Policy	0	07/02/85
17A.0, ALARA Committee Charter	0	05/24/85
Section III, "Nuclear Department Directives":		
26.0, Corrective Action Program	2	06/12/84
Quality Program Manual	40	10/23/85
Quality Assurance Procedures (QAP) Manual (Home Office)	42	11/26/85
QAP C2.2, Qualification and Certification of Quality Branch Personnel	0	06/22/84
QAP C2.3, Qualification of Quality Engineers	1	11/27/85
QAP C16.5, Quality Branch Followup of NRC Findings	0	06/22/84
QAP C16.7, QA Evaluation of NRC and Industry Concerns	0	10/03/84
Quality Assurance Procedure Manual (WCGS)		
QAP W18.2, WCGS Audit Procedure	2	03/20/85
QAP W18.6, Audit System	1	08/07/85
Essential Elements Manual	0	08/02/85
Audits/Surveillances:		
TE 50140-k052, Radiation Protection Program		05/28/85
S-1407, NUS Waste Solidification Surveillance		12/09/85
S-1395, Chemistry Sampling of Primary Coolant		10/14/85
S-1263, Health Physics Personnel Qualifications		02/28/85
S-1242, Health Physics Equipment Calibrations		01/24/85
WCGS Radiological Emergency Response Plan	16	09/30/85
WCGS Emergency Plan Implementing Procedures (EPP):		
EPP 01-3.3, Offsite Support Notification	2	10/08/85
EPP 01-4.1, Technical Support Center Activation	3	10/11/85
EPP 01-4.2, Operations Support Center Activation/ Operation	3	10/11/85

TITLE	REVISION	DATE
EPP 01-4.3, Emergency Operations Facility Activation	3	10/11/85
EPP 01-7.1, Radiological Release Information System (RRIS)	2	04/02/85
EPP 01-7.2, Manual Determination of Release Rate	4	10/11/85
EPP 01-7.3, Manual Dose Projection Determination	4	10/11/85
EPP 01-8.1, Onsite Radiological Monitoring	3	10/11/85
EPP 01-8.2, Offsite Radiological Monitoring	2	10/11/85
EPP 01-9.1, Exposure Control and Personnel Protection	2	10/11/85
EPP 01-9.2, Personnel Decontamination	2	10/11/85
EPP 01-9.3, Radioprotective Drugs	2	10/11/85
EPP 01-9.4, Emergency Team Formation	3	10/11/85
EPP 01-9.5, Aid to Contaminated/Injured Personnel	2	10/11/85
EPP 01-12.1, Reentry and Recovery Operations	2	10/08/85
EPP 02-1.5, Maintenance of Emergency Facilities and Equipment	4	10/01/85
Radiation Protection Manual	2	04/17/85
WCGS Administrative Procedures (ADM)		
ADM 01-001, Introduction to WCGS Administrative Procedures	11	01/12/85
ADM 01-002, Plant Safety Review Committee	14	05/01/85
ADM 01-006, Superintendent of Technical Support Duties and Responsibilities	2	06/10/85
ADM 01-009, Site Health Physicist Duties and Responsibilities	4	08/27/85
ADM 03-001, Numbering of Health Physics Procedures	2	01/26/84
ADM 03-002, Radiation Worker Guidelines	0	03/27/85
ADM 03-003, Radiography Guidelines	0	08/20/85
ADM 03-006, Notice of Radwork Practice Violation	2	06/25/85
ADM 03-007, Duties & Responsibilities of Health Physics Supervisors and Technicians	4	12/07/84
ADM 03-050, WCGS ALARA Program	2	04/09/85
ADM 03-052, Fuel Building Evacuation Plan	1	03/01/84
ADM 03-100, Health Physics Dosimetry Program	2	03/06/85
ADM 03-101, Radiation Work Permit Program	4	03/06/85
ADM 03-201, Use & Control of Contaminated Tools and Equipment	2	03/01/84
ADM 03-202, Decontamination & Clearance of Tools, Equipment and Areas	3	03/23/84
ADM 03-203, Administrative Procedure for Radioactive Material	3	12/18/84
ADM 03-400, Operation and Calibration of Health Physics Equipment	3	06/06/85
ADM 03-600, Respiratory Protection Program	2	06/06/85
ADM 03-960, Use of Temporary Lead Shielding	0	09/03/85
ADM 07-101, WCGS Procedure Content and Format	18	10/01/85

TITLE	REVISION	DATE
Radiochemistry Procedures (CHM)		
CHM 01-100, Radwaste Building Sample Station SJ-144	3	11/25/84
CHM 01-101, Radwaste Building Sampling Instructions	1	11/25/85
Health Physics Procedures (HPH)		
HPH 01-001, Issue, Numbering and Processing of TLDs	1	03/22/85
HPH 01-002, External Overexposure Evaluation	0	02/08/85
HPH 01-003, Angular Response of Panasonic Type 802 TLDs	1	04/22/85
HPH 01-004, Acceptance Criteria for Panasonic TLDs Monitoring Devices	1	03/22/85
HPH 01-005, Developing Element Correction Factor (EFC) for Panasonic TLDs	3	06/26/85
HPH 01-006, TLD Processing	2	05/23/85
HPH 01-008, MPC-Hour Tracking	1	06/27/85
HPH 01-009, Selection of Reference TLDs	3	03/18/85
HPH 01-010, Fade Correction for the LIBO Phosphor	1	03/22/85
HPH 01-011, Calculation of Non-Penetrating & Penetrating Dose from TLD Data	3	04/18/85
HPH 01-012, Internal Dose Calculations	2	02/19/85
HPH 01-016, Evaluation of Exposure for Lost, Suspect, Damaged or Offscale Dosi.	1	04/01/85
HPH 01-017, Evaluation of Personnel TLD Monitoring Devices	2	04/10/85
HPH 01-019, Exposure History Files	2	11/21/85
HPH 01-020, Neutron Dose Calculations	1	03/14/85
HPH 01-024, Linearity/Crossover Check for TLD Reader UD-710A	0	03/11/85
HPH 01-025, Internal Exposure Evaluation	1	03/22/85
HPH 01-028, Drift Check For the Panasonic TLD Reader	0	03/10/85
HPH 01-029, Timing Gate Measurement and Glow Curve Analysis	1	06/06/85
HPH 02-001, Receipt Accountability, Inventory & Leak Check of Radioactive Materials	4	03/27/85
HPH 02-006, Receipt of New Fuel	3	05/29/85
HPH 02-007, Loss of a Radioactive Source	1	01/13/85
HPH 03-001, In-Plant Radioiodine Monitoring Program	0	12/14/84
HPH 03-002, Radiation Survey Methods	4	03/27/85
HPH 03-003, Airborne Radioactivity Survey Methods	4	09/10/85
HPH 03-005, Laundry Facility Operation	0	11/20/84
HPH 03-006, Collection of Bioassay Samples	1	03/22/85
HPH 03-011, Contamination Survey Methods	4	09/16/85
HPH 03-012, Schedule of Routine Radiological Surveys	2	03/01/85
HPH 03-013, Health Physics Shift Turnover	2	02/08/85
HPH 03-014, Personnel Decontamination	0	02/11/85
HPH 03-015, Posting for Radiological Controls	1	08/23/85

TITLE		REVISION	DATE
HPH 04-001,	Counting Blind Sample for WBC Quality Control	0	11/11/84
HPH 04-002,	Operation of the Whole Body Counting System	1	03/10/85
HPH 04-003,	Operation of the Intrinsic Germanium Counting System	1	11/30/84
HPH 04-005,	Operation of the Panasonic UD-710A TLD Reader	0	09/29/83
HPH 04-007,	Operation and Calibration of the Eberline RO-2 & RO-2A	4	08/22/85
HPH 04-008,	Operation & Calibration of the Eberline RM-14	1	07/18/85
HPH 04-010,	Operation & Calibration of the NMC Automatic Counting System (Model ASC-82)	2	07/29/85
HPH 04-011,	Operation & Calibration of the TEC Model 2004 Effluent Radiation Monitor	1	05/14/85
HPH 04-012,	Operation of Sentox 2 Model DOC Gas Monitor	0	01/18/83
HPH 04-013,	Operation & Calibration of RADECO Model H809-V1 or H809-V2 Air Samplers	3	09/10/85
HPH 04-017,	Operation of the Model PRM-110 Portal Monitors	0	11/05/84
HPH 04-019,	Operation of the Keithley 36100 RAD Survey Meter	0	09/01/83
HPH 04-020,	Operation Procedure for the Eberline Model E-530 Portable Geiger Counter	0	02/29/84
HPH 04-022,	Preparation and Operation of the Tennelec LB 5100 Alpha/Beta Counter	0	02/16/84
HPH 04-023,	Respirator Fit Booth & Dynatech Model 260 Operating Procedure	3	05/21/85
HPH 04-026,	Operation of the "RASCAL" PRS-1 with a Neutron Rate Detector	1	12/15/83
HPH 04-030,	Operation of the Panasonic UD-702E Manual (TLD) Reader	0	01/04/84
HPH 04-031,	Operation of the Victoreen Model 570 Condenser R-Meter	0	06/08/83
HPH 04-035,	Operation of the J.L. Shepherd Multi-Source Calibration System	1	11/05/84
HPH 04-036,	Operation of the Whole Body Counting System in the Stand Alone Mode	0	02/06/84
HPH 04-037,	Operation and Calibration of the Teletector 6112B Survey Meter	2	06/27/85
HPH 04-039,	Operation of the Eberline PRM-6 Pulse Rate Meter	1	04/09/84
HPH 04-040,	Operation & Calibration of the Eberline RO-7	1	09/17/85
HPH 04-042,	Operation of the J.L. Shepherd Irradiator Model 142-10	2	06/26/85
HPH 04-043,	Operation of the NOVA Barometer	0	05/03/84
HPH 04-044,	Startup & Shutdown of the WBC System	1	08/09/84
HPH 04-045,	Selection & Use of Protective Clothing	2	11/30/84
HPH 04-051,	Operation of the Eberline PRS-2/NRD	1	08/03/84
HPH 04-053,	Routine Cleaning of the Panasonic 710A TLD Reader	4	07/25/85

	TITLE	REVISION	DATE
HPH 04-054,	Operation & Calibration of the "Snoopy" NP-2 Neutron Survey Meter	1	12/10/84
HPH 04-055,	Quality Control Program for WBC	1	03/27/85
HPH 04-061,	Operation & Calibration of the Eberline RM-21 Radiation Monitor	1	06/28/85
HPH 04-062,	Operation of the MSA Lapel Air Sampler	1	08/12/85
HPH 04-063,	Operation of the Ludlum Model 177 Alarm Ratemeter	2	09/10/85
HPH 04-065,	Operation & Calibration of the Eberline RM-20 Rad Monitor	0	11/20/84
HPH 04-067,	Operation & Calibration of the Eberline Model PRM-7 Micro-R Meter	1	08/21/85
HPH 04-068,	Operation & Calibration of the RADECO Model HD-29A Air Sampler	1	07/22/85
HPH 04-069,	Calibration of the Ludlum Model 2218 Analyzer	0	07/11/84
HPH 04-070,	Operation of the Ludlum Model 2218 Analyzer	1	12/20/84
HPH 04-074,	Operation & Calibration of the NMC Gamma-10 Portal Monitor	2	06/28/85
HPH 05-001,	Calibration of the WBC System	2	08/17/84
HPH 05-011,	Calibration and Leak Test of Pocket Dosimeters	4	09/09/85
HPH 05-012,	Calibration & Sensitivity Adjustment of Model PRM-110 Portal Monitors	0	11/05/84
HPH 05-018,	Calibration of the Keithley 36100 RAD Survey Meter	0	**09/01/83**
HPH 05-020,	Calibration Procedure for the Tennelec LB5100 Counting System	1	06/26/84
HPH 05-025,	Calibration of the "RASCAL" PRS-1 with a Neutron Rate Detector	1	12/15/83
HPH 05-026,	Calibration of the "RASCAL" PRS-2 with a Neutron Rate Detector	0	**12/20/82**
HPH 05-029,	Calibration of the Eberline PRM-6	1	05/03/84
HPH 05-030,	Calibration of the Panasonic UD-702E Manual TLD Reader	1	10/22/85
HPH 05-032,	Calibration of the J.L. Shepherd Multi-source Calibration System	0	**10/19/83**
HPH 05-039,	Calibration of the J.L. Shepherd Irradiator Model 142-10	3	07/29/85
HPH 05-043,	Preparation of Calibrated Gamma Reference Sources for WBC	0	03/27/84
HPH 05-053,	Energy Calibration of the Whole Body Counting System	0	06/05/84
HPH 06-003,	Decontamination, Maintenance, Inspection and Storage of Respiratory Protection Equipment	1	03/23/84
HPH 06-004,	Selection of Respiratory Protection Equipment	0	**10/31/83**
HPH 06-005,	Use of Full Face Respirator with Canister/Filter	0	**08/18/83**
HPH 06-006,	Use of Full Face Respirator as a Supplied Air Device	0	**08/18/83**
HPH 06-007,	Operation & Use of Powered Air Purifying Respirators	1	09/17/85

TITLE	REVISION	DATE
HPH 06-008, Operation & Use of Self Contained Breathing Apparatus (SCBA)	1	07/31/84
HPH 06-009, Inventory of Respiratory Protection Equipment	0	08/18/83
HPH 06-010, Receipt of New Respiratory Protection Equipment	1	06/26/84
HPH 06-011, Quality Control of Respiratory Protection Equipment	0	08/18/83
HPH 06-014, Calibration of the Quantitative Respirator Fit Test System	0	09/20/83
HPH 06-015, Donning & Use of MSA Air Supplied Hood	0	05/25/84
HPH 06-016, Overhaul & Repair of Surviair Self-Contained Breathing Apparatus Regulators	0	05/25/84
HPH 06-017, Air Supplied Hood Decontamination, Cleaning, Inspection & Storage	0	06/11/84
HPH 08-003, Contract Health Physics Qualifications	0	07/17/84
Instrument and Controls (IC) Calibration Procedures		
STN IC-539, Channel Calibration TSC Area Radiation Monitor 43	1	07/09/85
STN IC-540, Channel Calibration EOF Area Radiation Monitor 44	1	08/15/85
STN IC-541, Channel Calibration TSC Iodine Monitor SP-RE-01	0	02/18/85
STN IC-542, Channel Calibration Mobile P.I.G Monitor	1	07/09/85
Other Documents		
A Guide of Spurious Readings on Panasonic 800 Series TLD Badges		09/20/85
Student Handout, "General Employee Training - Requalification"		
SU7-0016, KG&E WCGS Biological Shield Testing	5	08/31/85
Offsite Dose Calculation Manual		12/20/84