



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

8/8/84

MEMORANDUM FOR: William Miller, Chief  
Licensee Fee Management Branch  
Office of Administration

FROM: Elliott A. Greher, Program Analyst  
Program Support and Analysis Staff  
Office of Inspection and Enforcement

SUBJECT: REQUESTED LICENSE FEE INFORMATION

LRA  
2483 262  
2484 325  
590

We have reviewed available records on IE staff effort -- staff or IE consultants assigned to IE headquarters or to the Technical Training Center -- devoted to license fee-billable efforts for the reactor license HARRIS I docket number 50-400 during the period 6/23/84 to 1/27/78.

- ( ) There is no record of IE staff effort.
- ( ) There is IE staff effort and it is all devoted to IE functions. A total of \_\_\_\_\_ hours of effort is recorded. See enclosed computer run for the details.
- ( ) There is IE staff effort and it is all devoted to regional functions. The appropriate computer run has been mailed to region \_\_\_\_\_.
- ( X ) There is IE staff effort and it is devoted in part to IE functions. A total of 651.0 hours of effort is recorded. See enclosed computer run for details. There is also IE staff effort devoted to regional functions. The appropriate computer run has been mailed to region II.
- ( X ) We are still searching available contractor cost records and expect to provide that information to you and to the regions, as appropriate within three weeks.
- ( ) There is no record of IE computer costs.
- ( ) There are IE contractor costs. See enclosed information.

10/23/84

\* 651.0 Hours

- 52.0 IDS Independent Design Inspection cannot be billed until June 23, 1984

599.0 As per routine insp

- 9.0 Elliott Greher Error (see p 7)

590.0 used for fee purposes

Enclosures: As stated *CHullonny*

*Elliott Greher*  
Elliott A. Greher, Program Analyst  
Program Support and Analysis Staff  
Office of Inspection and Enforcement

cc w/o enclosures: 293  
J. L. Blaha, IE  
A. J. Burda, IE  
R. Maloy, RII (w/enc.)

9102050293 900921  
PDR FOIA  
WILLIAM90-162 PDR

WK ENDING SOC-SEC NO ACT CODE REG HRS NON-REG HRS TOTAL HRS

Wk Ending	SOC-SEC NO	ACT CODE	REG HRS	NON-REG HRS	TOTAL HRS
010784	I241	LRA	18.0	4.0	22.0
TOTAL			18.0	4.0	22.0
010784	I241	ATV	6.0	.0	6.0
TOTAL			6.0	.0	6.0
010784	I121	PR1	12.0	.0	12.0
TOTAL			12.0	.0	12.0
011484	I241	LRA	35.0	6.0	41.0
TOTAL			35.0	6.0	41.0
012884	I121	PR1	6.0	.0	6.0
TOTAL			6.0	.0	6.0
021184	I121	PR1	34.0	.0	34.0
TOTAL			34.0	.0	34.0
021779	R942	PPT	20.0	.0	20.0
TOTAL			20.0	.0	20.0
021884	I121	PR1	8.0	.0	8.0
TOTAL			8.0	.0	8.0
022479	R942	PPT	12.0	.0	12.0
TOTAL			12.0	.0	12.0
030379	R942	PTG	33.0	4.0	37.0
TOTAL			33.0	4.0	37.0
030379	R942	C00	7.0	1.0	8.0
TOTAL			7.0	1.0	8.0
030384	I121	PR1	23.0	.0	23.0
TOTAL			23.0	.0	23.0

SUPPORT TR  
PERFORMERS  
PTG = PROGRAM  
TEAM. GUILD

TOTAL HRS

NON-REG HRS

REG HRS

ACT CODE

SOC-SEC NO

ORG CODE

WK ENDING

WK ENDING	ORG CODE	SOC-SEC NO	ACT CODE	REG HRS	NON-REG HRS	TOTAL HRS
031084	I241		LRA	14.0	4.0	18.0
TOTAL				14.0	4.0	18.0
031084	I121		PR1	21.0	.0	21.0
TOTAL				21.0	.0	21.0
031084	I112		LRA	4.0	.0	4.0
TOTAL				4.0	.0	4.0
031784	I241		LRA	32.0	4.0	36.0
TOTAL				32.0	4.0	36.0
031784	I121		PR1	8.0	.0	8.0
TOTAL				8.0	.0	8.0
031784	I242		LRA	4.0	.0	4.0
TOTAL				4.0	.0	4.0
032484	I241		LRA	31.0	.0	31.0
TOTAL				31.0	.0	31.0
033184	I241		LRA	31.0	.0	31.0
TOTAL				31.0	.0	31.0
033184	I121		PR1	8.0	4.0	12.0
TOTAL				8.0	4.0	12.0
040784	I242		LRA	4.0	.0	4.0
TOTAL				4.0	.0	4.0
040784	I241		LRA	15.0	.0	15.0
TOTAL				15.0	.0	15.0
041484	I241		LRA	6.0	.0	6.0

Supp-185 T

07/31/84

MPS DATA FOR HARRIS 1 (50/400)  
JAN 27, 1978 TO JUNE 23, 1984

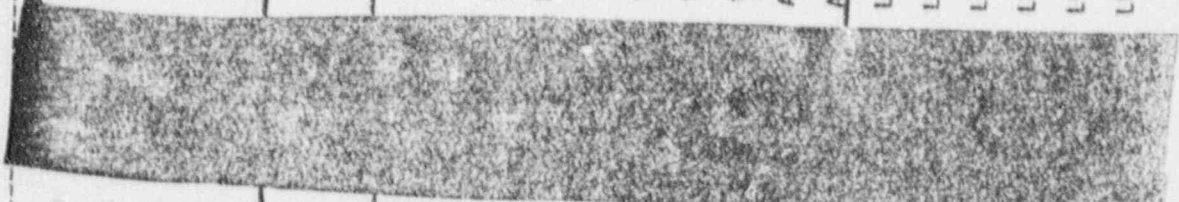
PA1

		WK ENDING	ORG CODE	SOC-SEC NO	ACT CODE	REG HRS	NON-REG HRS	TOTALHRS
WK-END	TOTAL	041484	I241		LRA	6.0	.0	6.0
		042179	R930		PTG	5.0	.0	5.0
WK-END	TOTAL	042179	R930		PTG	5.0	.0	5.0
		042184	I112		LRA	1.0	.0	1.0
WK-END	TOTAL	042184	I112		LRA	1.0	.0	1.0
		042184	I241		LRA	11.0	.0	11.0
WK-END	TOTAL	042184	I241		LRA	11.0	.0	11.0
		042383	I113		LRA	5.0	.0	5.0
WK-END	TOTAL	042383	I113		LRA	5.0	.0	5.0
		042383	I242		LRA	10.0	.0	10.0
WK-END	TOTAL	042383	I242		LRA	10.0	.0	10.0
		042879	R930		PTG	13.0	2.0	15.0
WK-END	TOTAL	042879	R930		PTG	13.0	2.0	15.0
		042884	I241		LRA	3.0	.0	3.0
WK-END	TOTAL	042884	I241		LRA	3.0	.0	3.0
		043083	I113		LRA	1.0	.0	1.0
WK-END	TOTAL	043083	I113		LRA	1.0	.0	1.0
		050579	R930		PTG	8.0	1.0	9.0
WK-END	TOTAL	050579	R930		PTG	8.0	1.0	9.0
		050584	I241		LRA	5.0	.0	5.0
WK-END	TOTAL	050584	I241		LRA	5.0	.0	5.0
		051279	R930		PTG	24.0	2.0	26.0
WK-END	TOTAL	051279	R930		PTG	24.0	2.0	26.0
		051284	I241		LRA	2.0	.0	2.0

SUPPORT TV

WK-END	TOTAL	WK ENDING	ORG CODE	SOC-SEC NO	ACT CODE	REG HRS	NON-REG HRS	TOTALHRS
WK-END	TOTAL	051284	I241		LRA	2.0	.0	2.0
WK-END	TOTAL	051483	I113		LRA	20.0	.0	20.0
WK-END	TOTAL	051483	I113		LRA	20.0	.0	20.0
WK-END	TOTAL	051979	R930		PTG	8.0	.0	8.0
WK-END	TOTAL	051979	R930		PIG	8.0	.0	8.0
WK-END	TOTAL	060780	R930		PC1	5.0	.0	5.0
WK-END	TOTAL	060780	R930		PC1	5.0	.0	5.0
WK-END	TOTAL	061684	I111		1D1	28.0	.0	28.0
WK-END	TOTAL	061684	I111		1D1	28.0	.0	28.0
WK-END	TOTAL	061883	I242		LRA	16.0	.0	16.0
WK-END	TOTAL	061883	I242		LRA	16.0	.0	16.0
WK-END	TOTAL	062384	I111		1D1	20.0	4.0	24.0
WK-END	TOTAL	062384	I111		1D1	20.0	4.0	24.0
WK-END	TOTAL	062384	I112		1D1	4.0	.0	4.0
WK-END	TOTAL	062384	I112		1D1	4.0	.0	4.0
WK-END	TOTAL	062384	I112		ATV	4.0	4.0	8.0
WK-END	TOTAL	062384	I112		ATV	4.0	4.0	8.0
WK-END	TOTAL	062583	I242		LRA	24.0	.0	24.0
WK-END	TOTAL	062583	I242		LRA	24.0	.0	24.0
WK-END	TOTAL	062583	I113		LRA	2.0	.0	2.0
WK-END	TOTAL	062583	I113		LRA	2.0	.0	2.0
WK-END	TOTAL	070283	I242		LRA	4.0	.0	4.0
WK-END	TOTAL	070283	I242		LRA	4.0	.0	4.0

SUPPOT 70.



07/31/84

MPS DATA FOR HARRIS 1 (50/400)  
JAN 27, 1978 TO JUNE 23, 1984

PAGE

	WK ENDING	ORG CODE	SOC-SEC NO	ACT CODE	REG HRS	NON-REG HRS	TOTALHRS
	070983	I242		LRA	8.0	.0	8.0
WK-END TOTAL	070983	I242		LRA	8.0	.0	8.0
	071683	I242		LRA	32.0	6.0	38.0
WK-END TOTAL	071683	I242		LRA	40.0	4.0	44.0
	073083	I242		LRA	72.0	10.0	82.0
WK-END TOTAL	073083	I242		LRA	38.0	6.0	44.0
	073083	I242		LRA	38.0	6.0	44.0
	080683	I242		LRA	4.0	.0	4.0
WK-END TOTAL	080683	I242		LRA	4.0	.0	4.0
	080683	I113		LRA	2.0	.0	2.0
WK-END TOTAL	080683	I113		LRA	2.0	.0	2.0
	091083	I113		LRA	1.0	.0	1.0
WK-END TOTAL	091083	I113		LRA	1.0	.0	1.0
	092483	I242		LRA	15.0	.0	15.0
WK-END TOTAL	092483	I242		LRA	15.0	.0	15.0
	100183	I242		LRA	40.0	6.0	46.0
WK-END TOTAL	100183	I242		LRA	40.0	6.0	46.0
	100883	I113		LRA	5.0	.0	5.0
WK-END TOTAL	100883	I113		LRA	5.0	.0	5.0
	102983	I242		LRA	18.0	.0	18.0
WK-END TOTAL	102983	I242		LRA	18.0	.0	18.0
	110583	I113		LRA	12.0	.0	12.0
WK-END TOTAL	110583	I113		LRA	12.0	.0	12.0
	110583	I242		LRA	20.0	6.0	26.0

		WK ENDING	ORG CODE	SOC-SEC NO	ACT CODE	REG HRS	NON-REG HRS	TOTALHRS
WK-END	TOTAL	110583	I242	[REDACTED]	LRA	20.0	6.0	26.0
		111283	I113	[REDACTED]	LRA	2.0	.0	2.0
WK-END	TOTAL	111283	I113	[REDACTED]	LRA	2.0 (2) ✓	.0	2.0
		111283	I242	[REDACTED]	LRA	24.0	8.0	32.0
WK-END	TOTAL	111283	I242	[REDACTED]	LRA	24.0 (24) ✓	8.0	32.0
		111878	R930	[REDACTED]	FE1	8.0	.0	8.0
WK-END	TOTAL	111878	R930	[REDACTED]	FE1	8.0	.0	8.0
		111983	I242	[REDACTED]	LRA	4.0	2.0	6.0
WK-END	TOTA	111983	I242	[REDACTED]	LRA	4.0 (4) ✓	2.0	6.0
		111983	I113	[REDACTED]	LRA	1.0	.0	1.0
WK-END	TOTAL	111983	I113	[REDACTED]	LRA	1.0 (1) ✓	.0	1.0
		112683	I242	[REDACTED]	LRA	2.0	.0	2.0
WK-END	TOTAL	112683	I242	[REDACTED]	LRA	2.0 (2) ✓	.0	2.0
		120383	I242	[REDACTED]	LRA	6.0	.0	6.0
WK-END	TOTAL	120383	I242	[REDACTED]	LRA	6.0 (6) ✓	.0	6.0
		123183	I242	[REDACTED]	LRA	18.0	4.0	22.0
WK-END	TOTAL	123183	I242	[REDACTED]	LRA	18.0 (18) ✓	4.0	22.0

SUPPORT TO  
 RES

WK ENDING	ORG CODE	SOC-SEC NO	ACT CODE	REG HRS	NON-REG HRS	TOTALHRS
GRAND	TOTAL			915.0	82.0	997.0

915.0  
 - 264.0 51.0 + 213.0  
 -----  
 651.0 642.0 per below  
 c/hollong

LRA = LICENSING FOR OL = 590.0

I1-- QA LICENSING

I2-- } EP LICENSING

I4-- }

IDI = INDEPENDENT DESIGN INSPECTION = 62.0

---

642.0



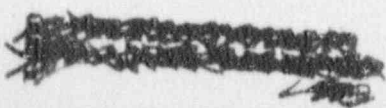
Simon Harris 1/2  
No reference to  
QA typical.

There is the QA  
Section from the  
St. Louis FSAR  
as provided by  
the Docket file  
per my request of  
10/19/84.

CHAPTER 17

17.0 QUALITY ASSURANCE

R. D. [unclear]  
10/22/84



SHNPP FSAR

CHAPTER 17  
QUALITY ASSURANCE

TABLE OF CONTENTS

SECTION	TITLE	PAGE
17.1	<u>QUALITY ASSURANCE DURING DESIGN AND CONSTRUCTION</u>	17.1-1
17.2	<u>QUALITY ASSURANCE DURING THE OPERATING PHASE</u>	17.2.0-1
17.2.1	ORGANIZATION	17.2.1-1
17.2.1.1	<u>QA Responsibilities and Authorities</u>	17.2.1-1
17.2.2	QA PROGRAM	17.2.2-1
17.2.2.1	<u>Quality Assurance Program during the Operations Phase</u>	17.2.2-1
17.2.2.2	<u>Indoctrination and Training</u>	17.2.2-6
17.2.2.3	<u>Startup QA Program</u>	17.2.2-7
17.2.2.4	<u>Computer Codes</u>	17.2.2-7
17.2.3	DESIGN CONTROL	17.2.3-1
17.2.4	PROCUREMENT DOCUMENT CONTROL	17.2.4-1
17.2.5	INSTRUCTIONS, PROCEDURES, AND DRAWINGS	17.2.5-1
17.2.6	DOCUMENT CONTROL	17.2.6-1
17.2.7	CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES	17.2.7-1
17.2.8	IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS	17.2.8-1
17.2.9	CONTROL OF SPECIAL PROCESSES	17.2.9-1
17.2.10	INSPECTION	17.2.10-1
17.2.11	TEST CONTROL	17.2.11-1
17.2.12	CONTROL OF MEASURING AND TEST EQUIPMENT	17.2.12-1
17.2.13	HANDLING, STORAGE, SHIPPING	17.2.13-1

SHNPP FSAR

CHAPTER 17  
QUALITY ASSURANCE

LIST OF TABLES

TABLE	TITLE	PAGE
17.2.1-1	INDEX-SHNPP PLANT OPERATING MANUAL INDEX	17.2.1-9

CHAPTER 17  
QUALITY ASSURANCE

LIST OF FIGURES

FIGURE	TITLE
17.2.1-1	Carolina Power & Light Co. Organization For the Operation & Maintenance QA Program
17.2.1-2	Quality Assurance Department Organizational Chart

17.1 QUALITY ASSURANCE DURING DESIGN AND CONSTRUCTION

The PSAR QA program will continue to be implemented for remaining design and construction activities.

17.2 QUALITY ASSURANCE DURING THE OPERATING PHASE

It is the policy of CP&L to engineer, construct, and operate nuclear plants without jeopardy to public health and safety. This policy is implemented in part by the Corporate Quality Assurance Program which provides measures for assuring that the nuclear plant engineering provides adequate nuclear safety for long-term power production, that engineering design requirements and objectives are achieved in construction of new facilities, and that plant functional capability and nuclear safety is maintained in operation.

## 17.2.1 ORGANIZATION

The CP&L organization responsible for the safe operation of the SHNPP is described in Section 13.1. Figures 17.2.1-1 and 17.2.1-2 depict the QA organizational relationships for the SHNPP operations phase. The size of the QA organization is based on CP&L's considerable experience in operation of nuclear plants (i.e. Brunswick Plant Units 1 and 2 and H. B. Robinson Plant Unit 2). QA/QC staffing for SHNPP will be adequate to provide coverage of ongoing activities (approximately 15-20 people). Staffing levels will be based on evaluation of schedules to fulfill the QA/QC commitments of the FSAR.

17.2.1.1 QA Responsibilities and Authorities

Carolina Power & Light Company policy regarding implementation of the QA Program is documented and made mandatory through the Corporate QA Program. The Policy Statement is signed by the CP&L Chairman/President. The policy states in part:

"It is the policy of Carolina Power & Light Company to design, construct, and operate nuclear power plants without jeopardy to the public health and safety or to its employees. Quality assurance programs shall be developed, implemented, and updated as necessary to assure that systems used to produce, use, treat, store, or transport waste produced by the generation of nuclear steam are designed, constructed, and operated in a safe manner. Deviations from these programs shall be permitted only upon written authority from the corporate management position which originally approved the program or implementing procedures.

The design and construction of nuclear power shall be accomplished in accordance with the Nuclear Regulatory Commission (NRC) regulations specified in Title 10 of the United States Code of Federal Regulations. All commitments to the NRC Regulatory Guides and to industry codes and standards shall be effectively implemented.

The operation of nuclear power plants shall be in accordance with the terms and conditions of the facility operating license issued by the NRC. Any changes in operating procedures or experiments at the facility, modifications to plant components or systems, revisions to nuclear plant safety analysis reports, or proposed changes to plant technical specifications shall be made in accordance with the terms and conditions of the facility operating license.

The Manager - Corporate Quality Assurance is responsible for effective implementation of the approved Corporate Quality Assurance Program and ASME QA Program, as each applies, at the Company's nuclear construction sites and operating plants. Quality assurance and quality control (QA/QC) activities shall be independent from scheduling and production commitments. The Managers of QA/QC activities shall have sufficient authority and organizational freedom to identify quality problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. The Manager - Corporate Quality Assurance shall monitor the effectiveness of the Company's nuclear program on a periodic basis through a system of planned and implemented inspections, surveillances, and audits.

The Manager - Corporate Quality Assurance shall review the overall effectiveness of the Company's quality assurance programs on a regular basis with the Executive Vice President - Power Supply and Engineering & Construction, who has the ultimate Company responsibility for the safe construction and operation of nuclear power plants. The Manager - Corporate Quality Assurance shall communicate directly with corporate management up to and including the Chairman/President/Chief Executive Officer and, if appropriate, with the Board of Directors to resolve any quality assurance concerns which cannot be resolved satisfactorily at a lower management level.

The managers of all functions involving engineering, construction, nuclear fuel, operations, nuclear safety, and quality assurance shall assure that their personnel are adequately trained for their jobs and have the specified experience and education required to perform their assigned responsibilities.

Personnel who habitually or willfully disregard or violate nuclear safety and quality assurance policies and procedures shall be subject to disciplinary action."

The Chairman/President is responsible for setting QA policies, goals, and objectives. The Executive Vice President - Power Supply & Engineering & Construction, who reports to the Chairman/President, is responsible for establishing the Corporate Quality Assurance Program. He provides for Management, Engineering, Construction, Procurement, QA/QC, Operations, Health Physics and Nuclear Safety.

The Executive Vice President - Power Supply and Engineering and Construction has overall responsibility for the Corporate Quality Assurance Program including approval of the program and revisions thereto. He operates through the Senior Vice President - Nuclear Generation, Senior Vice President - Operations Support, Vice President - Corporate Nuclear Safety and Research, and the Manager - Corporate Quality Assurance.

The Senior Vice President - Nuclear Generation is responsible for managing the design, construction, operation and maintenance of the Harris and H. B. Robinson plants. He has assigned the responsibility for managing the design, construction, operation and maintenance of the Harris plant to the Vice President - Harris Nuclear Project. He has assigned the responsibility for licensing and engineering support of the Company's nuclear generating facilities to the Vice President - Nuclear Engineering and Licensing Department. He has assigned the responsibility for procurement and contracting support for all nuclear generating facilities to the Vice President - Nuclear Plant Construction Department. He has assigned the responsibility for coordinating the implementation and maintenance of programs that require high technical knowledge of methods and procedures that should be relatively consistent among the plants and performing staff studies to the Manager - Nuclear Staff Support Section.

The General Manager - Harris Plant Operations Section who reports to the Vice President - Harris Nuclear Project, is responsible for all operational phases of plant management, including operation, maintenance, and technical support. He manages and controls the organization through personal contact with five unit heads and through written reports, meetings, conferences, and



in-plant inspections. He is responsible for adherence to all requirements of the operating license, technical specifications, Corporate Quality Assurance Program, and Corporate Health Physics and Nuclear Safety policies. He is responsible for the review of incoming and outgoing correspondence with the NRC Office of Nuclear Reactor Regulation and the Office of Inspection and Enforcement concerning the Harris Plant; the establishment and approval of qualification requirements for all Harris Plant Operations staff positions; the personal review of the qualifications of specific personnel for managerial and supervisory positions in the Harris Plant Operations Section; and the review of and concurrence in the plant radiation protection, industrial security, quality assurance, fire protection, training, operations, and maintenance programs.

The Senior Vice President - Operations Support is responsible for the management of the materials and fuels needs of the generating and transmission facilities in addition to the training and technical support of those personnel. He has assigned the responsibility for managing fuel to the Manager - Fuel Department. He has assigned the responsibility for Corporate purchasing to the Manager - Materials Management Department. He has assigned the responsibility for supporting nuclear training, including operator training, and providing supplemental technical expertise to the Vice President - Operations Training & Technical Services Department. He has assigned the responsibility for issuing contracts to the Manager - Contract Services Section.

The Vice President - Corporate Nuclear Safety and Research is responsible for the management of the functions of corporate health physics, corporate nuclear safety, safety analysis review at the nuclear plants, and research in support of Company activities. He provides senior management up to and including the Chairman/President and the Board of Directors a continuing assessment of current nuclear safety programs. Additionally, should any nuclear safety or quality assurance issue require immediate attention, the Vice President - Corporate Nuclear Safety and Research has the authorized organizational freedom to contact anyone with the Company, up to and including the Chairman/President and the Board of Directors, in order to resolve such concerns to his satisfaction.

The Manager - Corporate Quality Assurance is assigned overall authority and responsibility for the CP&L Corporate Quality Assurance Program. He reports directly to the Executive Vice President - Power Supply and Engineering & Construction, is independent from cost and schedule responsibilities (other than Corporate QA departmental budget and schedule) and has no other duties or responsibilities that would prevent his full attention to QA matters. Reporting to the Executive Vice President - Power Supply and Engineering & Construction at the same level as the Senior Vice Presidents of Nuclear Generation and Operations Support, the Manager - Corporate Quality Assurance has open communication channels both oral and written to these senior management positions. The Manager - Corporate Quality Assurance along with the Senior Vice Presidents of Nuclear Generation and Operations Support recommends the Corporate QA Program, including changes, for approval by the Executive Vice President - Power Supply and Engineering & Construction. The Manager - Corporate Quality Assurance periodically reviews with the Executive Vice President - Power Supply and Engineering & Construction the overall effectiveness of the Company's quality assurance program. He has access to

corporate management up to and including the Chairman/President to resolve any quality assurance related concerns if the concerns cannot be resolved satisfactorily at a lower management level. He has delegated the authority necessary for implementation of the Corporate Quality Assurance Program to the Manager - Quality Assurance/Quality Control Harris Plant and to the Manager - QA Services Section.

The Manager - Quality Assurance/Quality Control Harris Plant has direct management responsibility for the QA/QC activities related to the Engineering, Construction, Start-Up, and Operation of the SHNPP. He has delegated the authority necessary for implementation of the Corporate Quality Assurance Program to the Director QA/QC Harris Plant, the Principal QA Engineer - On-site Engineering Quality Assurance Unit, and the Principal QA/QC Specialist - NDE Unit.

The Director - QA/QC Harris Plant is responsible for conducting the onsite QA/QC activities during construction and operation of the Shearon Harris Nuclear Power Plant in accordance with the Corporate QA Program and QA/QC procedures. The Corporate QA Program provides assurance that the Director - QA/QC has appropriate organizational responsibilities and authority to exercise proper control over the onsite QA Program. The Director - QA/QC Harris Plant has delegated the authority necessary for implementation of his portion of the Corporate QA Program to the Superintendent - QA and the Superintendent - QC.

The Superintendent - QA and his staff, are responsible for:

- a) Providing QA services during start-up and operation of the plant.
- b) Stopping maintenance and modification work which does not meet requirements.
- c) Reviewing plant modification and maintenance documents and selected plant procedures and instructions to assure that quality requirements are adequately prescribed.
- d) Providing QA coverage of turnover activities.
- e) Assuring timely resolution of concerns and identified nonconformances.
- f) Ensuring holdpoints have been inserted in work control documents.
- g) Coordinating/conducting surveillance of ongoing plant activities.
- h) Providing procedures and instructions necessary for accomplishment of QA activities.
- i) Ensuring maintenance of records attesting to accomplishment of QA activities.
- j) Conducting surveillances of ongoing construction activities.

The Superintendent - QA and his staff receive, on an as-needed basis (i) support from the off-site and on-site Engineering QA units in areas such as procedure review; (ii) support from the NDE unit in the areas of NDE and review of contractor NDE procedures, and (iii) support from the Superintendent - QC in documentation review for turnovers.

12

12

The Superintendent - QC and his staff are responsible for:

- a) Conducting inspections of maintenance and modification activities.
- b) Stopping maintenance and modification work which does not meet requirements.
- c) Reviewing procurement documents and performing receipt inspections.
- d) Providing procedures and instructions necessary for accomplishment of QC activities.
- e) Ensuring maintenance of records attesting to accomplishment of QC activities.
- f) Conducting designated inspections of ongoing construction activities.

The Superintendent - QC and his staff receive on an as-needed basis: (i) support from the on-site QA Engineering Unit in areas such as procurement document review; (ii) support from the NDE Unit in the area of NDE; and (iii) support from the Superintendent - QA in the area of documentation review.

12

The Principal QA Engineer in charge of the on-site QA Engineering Unit and his staff are responsible for:

- a) Developing and maintaining the Harris QA program to meet regulatory commitments.
- b) Assisting the Harris project organizations in the development and implementation of procedures, review of specifications, and modification packages to meet commitments.
- c) Providing QA engineering support to the Harris project organizations on QA problem resolution.

The Principal QA/QC Specialist - NDE is responsible for:

- a) Providing NDE technical consultation.
- b) Performing NDE.
- c) Maintaining the department's industrial radiography license.
- d) Providing NDE training/qualification/certification.

The NDE Unit also provides QA/QC support in the above areas to CP&L's other Nuclear and Fossil plants.

The Manager - QA Services Section is responsible for providing the off-site QA services support in areas of Engineering Quality Assurance, vendor surveillance, and training. He is also responsible for conducting an independent corporate audit program for all CP&L nuclear plants. He has delegated the authority necessary to fulfill his responsibilities to the Principal QA Engineer - Off-site Engineering QA Unit, the Principal Specialist - Vendor Surveillance Unit, the Principal QA Specialist - Training and Administration Unit and the Principal QA Specialist - Performance Evaluation Unit.

The Principal QA Engineer - Off-site Engineering Quality Assurance Unit is responsible for:

- a) Reviewing contracts and A-E and NSSS purchase orders for inclusion of applicable QA/QC requirements.
- b) Maintaining liaison with the A-E and NSSS Supplier to keep up-to-date on project QA/QC activities and status and to assure timely resolution of quality-related problems.
- c) When requested, conducting and/or participating in audits of quality-related activities of the A-E and the NSSS Supplier.
- d) Reviewing A-E/NSSS Design Specifications and their revisions for QA requirements.
- e) Ensuring timely resolution of identified concerns and nonconformances.

The Off-site Engineering Quality Assurance Unit also provides QA/QC support to CP&L's other Nuclear & Fossil Plants.

The Principal Specialist - Vendor Surveillance Unit is responsible for:

- a) Qualification of Suppliers' QA programs. When necessary, facility surveys are conducted. For procurement by the A-E, the actual function of conducting such surveys is performed by the A-E. When surveys are performed by the A-E, the Vendor Surveillance Unit will monitor and may participate in the survey.
- b) Conducting inspections and item acceptance activities (shop inspections) at Supplier facilities for procurement and ensuring timely resolution of identified concerns and nonconformances.
- c) Evaluating Supplier's corrective action to prevent recurrence of nonconformances identified during shop inspections.
- d) When requested, conducting or participating in audits of quality-related activities of Suppliers.
- e) Providing Vendor Surveillance Quality Assurance Procedures (VQA).

The Vendor Surveillance Unit also provides QA/QC support in the above areas to CP&L's other Nuclear and Fossil Plants.

The Principal QA Specialist - Training and Administration Unit is responsible for:

- a) Maintaining QA/QC procedures for corporate and/or field use, including document control and coordination of preparation of revisions.
- b) Maintaining the Corporate QA Program, including document control and coordination of preparation of revisions.
- c) Assisting other CQA units in developing, implementing, and maintaining a training program to qualify and upgrade QA/QC personnel.

The Training and Procedures Unit also provides QA/QC support in the above areas to other CP&L nuclear and fossil plants.

The Principal QA Specialist - Performance Evaluation Unit is responsible for conducting an independent corporate audit program for all CP&L nuclear plants. Personnel in this unit have no responsibility for quality achievement nor for quality assurance other than auditing. They are trained to prepare for audits, conduct and report audits, and follow-up, as necessary, to assure timely correction of conditions, practices, and items that could degrade plant quality. The Principal QA Specialist - Performance Evaluation Unit reports all audit results to the Chairman/President, Executive Vice President - Power Supply and Engineering and Construction, and to the management of the function audited.

The qualification requirements of the Manager - Corporate Quality Assurance are equivalent to those described in Section 4.4.5 of ANSI/ANS-3.1-1978, as endorsed by Regulatory Guide 1.8. These are:

- a) Must have a Bachelor's degree in engineering or the equivalent in practical experience.
- b) Must have developed a high level of competence in the field of quality assurance or related technical areas associated with nuclear stations.
- c) Must be innovative and have the ability to plan an effective overall quality assurance program for the Company.
- d) Must have the ability to effectively coordinate the implementation, monitoring and modification of quality assurance programs among the several departments of the Company.
- e) Must exhibit qualities of leadership and communication ability, both oral and written.

QA/QC personnel routinely participate in plant meetings and review schedules in order to keep abreast of plant activities. Such action ensures that sufficient qualified QA/QC manpower and procedures are made available to provide the necessary QA/QC coverage for the scheduled activities.

The appropriate requirements of the docketed QA program description and the regulatory guides are listed in Section 1.8 of the FSAR and are translated into procedures and instructions. These procedures and instructions are,

The Principal QA Specialist - Training and Administration Unit is responsible for:

- a) Maintaining QA/QC procedures for corporate and/or field use, including document control and coordination of preparation of revisions.
- b) Maintaining the Corporate QA Program, including document control and coordination of preparation of revisions.
- c) Assisting other CQA units in developing, implementing, and maintaining a training program to qualify and upgrade QA/QC personnel.

The Training and Procedures Unit also provides QA/QC support in the above areas to other CP&L nuclear and fossil plants.

The Principal QA Specialist - Performance Evaluation Unit is responsible for conducting an independent corporate audit program for all CP&L nuclear plants. Personnel in this unit have no responsibility for quality achievement nor for quality assurance other than auditing. They are trained to prepare for audits, conduct and report audits, and follow-up, as necessary, to assure timely correction of conditions, practices, and items that could degrade plant quality. The Principal QA Specialist - Performance Evaluation Unit reports all audit results to the Chairman/President, Executive Vice President - Power Supply and Engineering and Construction, and to the management of the function audited.

The qualification requirements of the Manager - Corporate Quality Assurance are equivalent to those described in Section 4.4.5 of ANSI/ANS-3.1-1978, as endorsed by Regulatory Guide 1.8. These are:

- a) Must have a Bachelor's degree in engineering or the equivalent in practical experience.
- b) Must have developed a high level of competence in the field of quality assurance or related technical areas associated with nuclear stations.
- c) Must be innovative and have the ability to plan an effective overall quality assurance program for the Company.
- d) Must have the ability to effectively coordinate the implementation, monitoring and modification of quality assurance programs among the several departments of the Company.
- e) Must exhibit qualities of leadership and communication ability, both oral and written.

QA/QC personnel routinely participate in plant meetings and review schedules in order to keep abreast of plant activities. Such action ensures that sufficient qualified QA/QC manpower and procedures are made available to provide the necessary QA/QC coverage for the scheduled activities.

The appropriate requirements of the docketed QA program description and the regulatory guides are listed in Section 1.8 of the FSAR and are translated into procedures and instructions. These procedures and instructions are.

TABLE 17.2.1-1

INDEXSHNPP PLANT OPERATING MANUAL INDEX

N - No Review Required  
 O - Original Revision Only  
 R - Original and Subsequent  
 Revisions

VOL.	Procedure No.	Rev.	Title	Responsibility	QA Review	ALARA Review	**	Approval Authority
I			<u>Administrative Instructions</u>	Admin. Supv.				
	AI-1	*	Rules of Conduct	Admin. Supv.	R			Gen. Mgr.
	AI-2	*	Plant Organization	Admin. Supv.	R			Gen. Mgr.
	AI-3	*	External Interface Instructions	Admin. Supv.	R			Gen. Mgr.
	AI-4.0	I	Document Control-Conduct of Operations	Sr. Spec. Doc. Cont.	R			Gen. Mgr.
	AI-4.1	*	Filing Index and Instructions	Sr. Spec. Doc. Cont.	R			Gen. Mgr.
	AI-4.2	*	Control of Plant Forms	Sr. Spec. Doc. Cont.	O			Gen. Mgr.
	AI-4.3	*	Document Distribution & Control	Sr. Spec. Doc. Cont.	R			Gen. Mgr.
	AI-4.4	*	Micrographics Instructions	Sr. Spec. Doc. Cont.	O			Gen. Mgr.

\* Procedure to be written

\*\* To be determined later

SHNPP FSAR

4

TABLE 17.2.1-1 (Cont'd)

INDEXSHNPP PLANT OPERATING MANUAL INDEX

Procedure									
VOL.	No.	Rev.	Title	Responsibility	QA Review	A/LARA Review	**	Approval Authority	
	AI-5	*	Handling of Confidential/Proprietary/ Security Material	Admin. Supv.	R			Gen. Mgr.	
	AI-6.0	*	Cost Control-Conduct of Operations	Admin. Supv.	O			Gen. Mgr.	
	AI-7.0	*	Nuclear Safety Review Committee- Conduct of Operations	**	R			Gen. Mgr.	
	AI-8.0	*	Regulatory Compliance-Conduct of Operations	Proj. Spec. Reg. Comp.	O			Gen. Mgr.	4
	AI-9	*	Plant Safety-Policies and Procedures	Admin. Supv.	R			Gen. Mgr.	
	AI-10	*	Plant Notices	Admin. Supv.	R			Gen. Mgr.	
	AI-11.0	*	Office Services-Conduct of Operations	Office Serv. Supv.	O			Gen. Mgr.	
	AI-12.0	*	Plant Stores-Conduct of Operations	Admin. Supv.	R			Gen. Mgr.	
	AI-13	*	Housekeeping	Admin. Supv.	R			Gen. Mgr.	

\* Procedure to be written

\*\* To be determined later

SHNPP PSAR



TABLE 17.2.1-1 (Cont'd)

INDEXSHNPP PLANT OPERATING MANUAL INDEX

Procedure								
VOL.	No.	Rev.	Title	Responsibility	QA Review	ALARA Review	**	Approval Authority
	AI-14	*	Planning & Scheduling - Conduct of Operations	Director-Planning & Scheduling	0			Gen. Mgr.
2			<u>Procedures Preparation, Revision, Review and Approval Control</u>	Sr. Spec. Doc. Cont.				
	PP-1	0	Description of POM	Sr. Spec. Doc. Cont.	R			Gen. Mgr.
	PP-2	0	Procedures Format and Preparation	Sr. Spec. Doc. Cont.	R			Gen. Mgr.
	PP-3	0	Procedure Review and Approval	Sr. Spec. Doc. Cont.	R			Gen. Mgr.
	PP-4	*	Temporary Procedure Revision Review/ Approval	Sr. Spec. Doc. Cont.	R			Gen. Mgr.
	PP-5	*	Disposition of Completed Procedures	Sr. Spec. Doc. Cont.	R			Gen. Mgr.

\* Procedure to be written

\*\* To be determined later

TABLE 17.2.1-1 (Cont'd)

INDEXSHNPP PLANT OPERATING MANUAL INDEX

Procedure							Approval
VOL.	No.	Rev.	Title	Responsibility	QA Review	ALARA Review	Authority
	PP-6	*	Preparation of Hydrostatic/Pneumatic Test Procedures	SU Supt.	R		SU Supt.
	PP-7	*	Preparation of Valve and Electrical Lineups	SU Supt.	R		SU Supt.
	PP-8	*	Preparation of Flushing/Cleaning Procedures	SU Supt.	R		SU Supt.
3		*	<u>Emergency Plan</u>	Sr. Spec. Emer. Prep.	R		Gen. Mgr.
4			<u>Environmental and Radiation Control Procedures</u>				
	EVP-1	*	Environmental-Conduct of Operations	Envir. & Chem. Supv.	R		Mgr. - Pl. Ops.
	RCP-1	*	Radiation Control-Conduct of Operations	Rad. Cont. Supv.	R		Mgr. Pl. Ops.

\* Procedure to be written

\*\* To be determined later

SHNPP PS&amp;X

4

TABLE 17.2.1-1 (Cont'd)

INDEX

SHNPP PLANT OPERATING MANUAL INDEX

N - No Review Required  
 O - Original Revision Only  
 R - Original and Subsequent Revisions

VOL.	Procedure No.	Rev.	Title	Responsibility	QA Review	ALARA Review	**	Approval Authority
	CP-1	*	Chemistry-Conduct of Operations	Envir. & Chem. Supv.	R			Mgr. - Pl. Ops.
			<u>Fire Protection Manual</u>					
	FPP-1	*	Fire Brigade-Conduct of Operations	Sr. Spec. - Fire Prot.	R			Gen. Mgr.
6			<u>Security Manual</u>					
	SP-1	*	Plant Security-Conduct of Operations	Sr. Spec. - Security	R			Gen. Mgr.
7			<u>Engineering Procedures</u>	Eng. Supv.				
	ENP-1	*	Engineering-Conduct of Operations	Eng. Supv.	R			Mgr. - Tech. Sup.
	ENP-2	*	Development and Maintenance of System Descriptions	SU Supv.	O			SU Supt.
	ENP-3	*	Development and Maintenance of Q-List	Eng. Supv.	R			Mgr. - Tech. Sup.

\* Procedure to be written

\*\* To be determined later

SHNPP PSAR

17 2 1-19

Amendment No. 4

TABLE 17.2.1-1 (Cont'd)

INDEX

SHNPP PLANT OPERATING MANUAL INDEX

N - No Review Required  
 O - Original Revision Only  
 R - Original and Subsequent Revisions

VOL.	Procedure No.	Rev.	Title	Responsibility	QA Review	ALARA Review	**	Approval Authority
	ENP-4	*	Equipment Code System	SU Supv.	O			SU Supt.
	ENP-5	*	Plant Modification Control	Eng. Supv.	R			Mgr. - Tech. Sup.
	ENP-6	*	Preparation of SHNPP Specifications	Eng. Supv.	R			Mgr. - Tech. Sup.
	ENP-7	*	PSI/ISI Program	SU Supv.	R			SU Supt.
	ENP-8	*	Plant Performance Program	Eng. Supv.	O			Mgr. - Tech. Sup.
8			<u>Radwaste Operating Procedures</u>	Rad. Supv.				
	RO-1	*	Radwaste Operations-Conduct of Operations	Rad. Supv.	R			Mgr. - Pl. Ops.
9		*	<u>Immediate Response (Emergency) Procedures</u>	Oper. Supv.	O			Mgr. Pl. Ops.

\* Procedure to be written

\*\* To be determined later

SHNPP PSAR

4

Amendment No. 4

TABLE 17.2.1-1 (Cont'd)

INDEX

SHNPP PLANT OPERATING MANUAL INDEX

N - No Review Required  
 O - Original Revision Only  
 R - Original and Subsequent  
 Revisions

VOL.	Procedure No.	Rev.	Title	Responsibility	QA Review	ALARA Review	Approval authority
10		*	<u>Annunciator Procedures</u>	Oper. Supv.	O		Mgr. - Pl. Ops.
11			<u>General Operating Procedures</u>	Oper. Supv.			
	GP-1	*	Operations-Conduct of Operations	Oper. Supv.	R		Mgr. - Pl. Ops.
12			<u>General Maintenance Procedures</u>	Maint. Supv.			
	GM-1	*	Maintenance-Conduct of Operations	Maint. Supv.	R		Mgr. - Pl. Ops.

SHNPP PSAR

4

\* Procedure to be written

\*\* To be determined later

## 17.2.2 QA PROGRAM

## 17.2.2.1 Quality Assurance Program During the Operations Phase

The SHNPP QA Program during the Operations Phase is controlled by the policies and requirements of the Corporate Quality Assurance Program. (The Corporate Quality Assurance Program applies to all Nuclear Plants). These policies and requirements are implemented through the SHNPP Plant Operating Manual and other departmental/section procedures. The program is designed to ensure compliance with the NRC Regulatory Guides and ANSI Standards applicable to the operations phase of the SHNPP project. The commitment to comply or alternatives for CP&L to follow are presented in Section 1.8. The Corporate QA Program is divided into the following topics:

- 1 INTRODUCTION
  - 1.1 CP&L Quality Assurance Program
  - 1.2 Scope of Application
  - 1.3 QA Program Implementation
  - 1.4 Supporting Documents & Document Control
  - 1.5 QA Program Control
  - 1.6 CP&L Management Review of Corporate Quality Assurance Audit Activities
  - 1.7 Corporate ALARA Program
  - 1.8 Corporate Emergency Plan
- 2 ORGANIZATION AND RESPONSIBILITIES
  - 2.1 Scope
  - 2.2 CP&L Organization
  - 2.3 Management Responsibilities
  - 2.4 Quality Assurance Functions
  - 2.5 Supporting Companies
- 3 DESIGN CONTROL - NEW PLANTS AND NUCLEAR FUEL
  - 3.1 Scope
  - 3.2 New Plant Construction and Nuclear Fuel
- 4 PROCUREMENT CONTROL
  - 4.1 Scope
  - 4.2 Contracts
  - 4.3 Procurement by the Architect-Engineer
  - 4.4 CP&L Purchases
  - 4.5 Pre-Award Meeting
  - 4.6 Purchase Order
  - 4.7 Verification of Vendor Activities
  - 4.8 Nonconformances and Corrective Action
  - 4.9 Final Acceptance
  - 4.10 Plant Procurement Assistance Required
- 5 MATERIAL & EQUIPMENT CONTROL
  - 5.1 Scope
  - 5.2 Receiving Inspection
  - 5.3 Material in Storage
  - 5.4 Material Released from Storage
  - 5.5 Off the Shelf Items
  - 5.6 Installed Plant Items

SIDNPP FSAR

- 14.7 Setpoint Changes
- 14.8 Temporary Repairs/Modifications
  
- 15 NONCONFORMANCE CONTROL AND CORRECTIVE ACTION
  - 15.1 Scope
  - 15.2 Disposition and Control
  - 15.3 Nonconforming Material Status
  - 15.4 Nonconformance Documentation & Closeout
  
- 16 AUDITS
  - 16.1 Scope
  - 16.2 Internal Audits
  - 16.3 External Audits
  
- 17 QUALITY ASSURANCE RECORDS
  - 17.1 Scope
  - 17.2 Requirements for Implementation
  - 17.3 Types of QA Records
  - 17.4 QA Records Accumulation, Maintenance, and Retention
  - 17.5 QA Records
  
- 18 QUALITY ASSURANCE PROGRAM FOR FIRE PROTECTION SYSTEMS
  - 18.1 Scope
  - 18.2 General
  - 18.3 New Plant Construction
  - 18.4 Operating Plants
  - 18.5 Material Upgrading
  
- 19 QUALITY ASSURANCE PROGRAM FOR RADIOACTIVE WASTE MANAGEMENT SYSTEMS
  - 19.1 Scope
  - 19.2 General
  - 19.3 Management Responsibilities
  - 19.4 Design and Procurement Document Control
  - 19.5 Control of Purchased Material, Equipment and Services
  - 19.6 Inspection
  - 19.7 Handling and Storage
  - 19.8 Inspection, Tests, and Operating Status
  - 19.9 Corrective Action
  - 19.10 Instructions, Procedures & Drawings
  - 19.11 Control of Measuring and Test Equipment
  - 19.12 Records
  - 19.13 Document Control
  - 19.14 Material Upgrading
  
- 20 (LATER)
  
- 21 IF-300, IRRADIATED FUEL SHIPPING CASK
  - 21.1 Scope
  - 21.2 Responsibility
  - 21.3 Procurement Control
  - 21.4 Operations Control
  - 21.5 Maintenance and Repair
  - 21.6 Quality Assurance Records

Management above and outside the QA organization regularly assesses the scope, adequacy and compliance of the QA Program to 10 CFR 50, Appendix B, through (a) review of CP&L and NRC audit reports, (b) review of status of quality assurance at plant status meetings with CP&L and major contractors, (c) review of reports of quality problems, (d) participation in meetings concerning quality problems, and (e) review of semiannual preplanned and documented assessments of Corporate Quality Assurance audit activities performed by the CP&L Manager - Corporate Health Physics. The Manager of Health Physics provides a report of the assessment to responsible management and corrective action is identified and tracked. | 6

The CP&L Corporate QA Program requires that the authority and duties of persons and organizations performing QA functions be clearly established and delineated in writing and that these individuals and organizations have sufficient authority and organizational freedom to:

- a) Identify quality problems.
- b) Order unsatisfactory work to be stopped and control further processing, delivery, or installation of nonconforming material.
- c) Initiate, recommend, or provide solutions for conditions adverse to quality.
- d) Verify implementation of solutions.

The CP&L Corporate QA Program identifies the persons and organizations with the above authority and describes how these actions are carried out.

The CP&L Corporate QA Program requires that an individual or organization assigned responsibility for checking, auditing, inspecting or otherwise verifying that an activity has been correctly performed shall be independent of the individual or group directly responsible for performing the specific activity.

The Corporate QA Program outlines the methodology for resolution of disputes involving quality arising from a difference of opinion between QA/QC personnel and other groups. Section 17.2.16, "Corrective Action," further outlines this methodology.

When changes are made to the QA program that deletes requirements or positions as presented in the FSAR, the change will be reviewed and approved internally to ensure it meets applicable requirements and then submitted to the NRC for acceptance prior to implementation. If a response from the NRC to submitted changes is not received within 30 days, CP&L will consider the changes approved by the NRC and will proceed on that basis (Note: Format, editorial changes, or increase in requirements and/or positions will be provided with the normal FSAR update requirements).

The Corporate QA Program which addresses the QA program for operations will be implemented at least 90 days prior to fuel loading.



Proficiency tests are given to personnel performing independent QA/QC inspection, and acceptance criteria are developed to determine if individuals are properly trained and qualified. Certificates of qualification delineate the functions personnel are qualified to perform. | 5

#### 17.2.2.3 Startup QA Program

The description of phase out of design and construction, and takeover of operations (provided in the Shearon Harris Startup Manual) is described in Chapter 14. The Corporate QA Program applies to preoperational and start-up test activities.

Schedules will be developed to assure that implementing procedures are prepared prior to commencement of the activities which they are intended to control. Procedures which prescribe the methods by which preoperational and initial startup testing is accomplished and controlled are contained in the Startup Manual. These procedures provide for the orderly transition from design and construction to operations and, during this transitional period, prescribe the methods for control of management and technical interfaces between the Architect-Engineer, EBASCO, Inc.; the NSSS Vendor, Westinghouse; the constructor, Daniel; and CP&L. The conduct of the test program and the administrative controls to be implemented are described in Section 14.2.

Preoperational test procedures are reviewed by personnel knowledgeable in QA. The preoperational testing program will be monitored by QA/QC personnel.

#### 17.2.2.4 Computer Codes

The QA Program is applied to the development, content and use of computer codes to ensure (1) the codes are developed, documented, verified and certified for use per approved procedures; (2) the codes are properly controlled to preclude use of outdated or obsolete codes; (3) that proper instructions concerning the use of the codes is provided; and (4) adequate QA provisions are invoked for the procurement of computer codes.

## 17.2.3 DESIGN CONTROL

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for the control of design activities associated with modifications of safety-related structures, systems, and components.

Design changes, including those originating at the plant, are subject to the same controls which were applicable to the original design. Carolina Power and Light Company may designate an organization to make design changes other than the organization which prepared the original design. In these cases, CP&L will assure that the organization has access to pertinent background information, including an adequate understanding of the requirements and intent of the original design, and that the organization has demonstrated competence in applicable design areas.

The program requires that design changes made to the plant are accomplished in a planned and controlled manner in accordance with written, approved procedures. These procedures include provisions, as necessary, to ensure that:

- a) Design documents (such as specifications and drawings) and procedures and instructions reflect applicable regulatory requirements and design bases and are checked for accuracy and completeness by qualified individuals which are other than those who prepared the document and such reviews are documented. An independent review is conducted to assure that documents are prepared in accordance with procedures. 4
- b) Design documents specify quality requirements or reference quality standards as necessary.
- c) There is adequate review of the suitability of materials, parts, equipment, and processes which are essential to the safety-related functions of structures, systems, and components.
- d) Materials, parts, and equipment which are standard off-the-shelf items or which have been previously approved for a different application are evaluated for suitability prior to selection.
- e) Design documents and procedures are revised to reflect design modifications and "as-built" conditions. 4
- f) Internal and external design interfaces between organizations participating in design modifications are adequately defined and controlled, including the review, approval, release, and distribution of design documents and revisions.

The above controls are applied as necessary to such aspects of design as reactor physics; seismic, stress, thermal, hydraulic, radiation, and accident analyses; compatibility of materials; and accessibility for inservice inspection, maintenance, and repair.

## 17.2.4 PROCUREMENT DOCUMENT CONTROL

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for the control of procurement documents for safety-related components, materials, and services. The program requires that procurement documents, such as purchase specifications, contain or reference the following:

- a) The design basis technical requirements, including the applicable regulatory requirements, material and component identification requirements, drawings, specifications, codes and industrial standards, test and inspection requirements, and special process instructions.
- b) The applicable requirements of 10CFR50 Appendix B which must be compiled with and described in the supplier's QA program.
- c) Identification of the documentation to be prepared, maintained, or submitted (as applicable) to CP&L for review and approval. These documents may include, as necessary, inspection and test records, qualification records, or code required documentation.
- d) Identification of those records to be retained, controlled, and maintained by the supplier, and those delivered to the purchaser prior to use or installation of the hardware.
- e) The procuring agency's right of access to supplier's facilities and records for source inspection and audit.
- f) Requirements for supplier reporting and dispositioning of nonconformances from procurement requirements.
- g) Provisions for extending applicable requirements of the procurement documents to lower-tier suppliers.

Carolina Power & Light Company procurement documents are prepared, reviewed, approved, and controlled in accordance with QA program requirements and written procedures to assure that quality requirements are correctly stated, inspectable, and controllable, and there are adequate acceptance/rejection criteria. Procurement document review is done by personnel knowledgeable in QA, and documentary evidence of that review and approval is retained and available for verification.

Carolina Power & Light Company evaluates supplier QA programs (except for off-the shelf items) prior to award of contracts or purchase orders, as discussed in Section 17.2.7.

Carolina Power & Light Company compliance with ANSI N45.2.13 is discussed in CP&L's position on Regulatory Guide 1.123 in Section 1.8.

17.2.5 INSTRUCTIONS, PROCEDURES, AND DRAWINGS

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes the requirements for prescribing and accomplishment of activities affecting quality in accordance with instructions, procedures, and/or drawings.

The program requires methods to be developed for the preparation, review, approval, and control of instructions, procedures, and drawings. These are reviewed to ensure the appropriate criteria of 10CFR30, Appendix B, are included.

Instructions, procedures, and drawings are required to have the following applicable elements included in their content:

- a) Prerequisites.
- b) Precautions.
- c) Qualitative/quantitative acceptance criteria.
- d) Inspection points, if determined to be required.
- e) Check list.

Confirmation that these instructions and procedures meet the requirements of the program and are being properly implemented is accomplished through inspection, surveillance, or audits of activities affecting quality.

## 17.2.6 DOCUMENT CONTROL

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes the requirements for the control of documents relative to activities affecting quality. The documents which are to be controlled include:

- a) Design specifications, calculations, and design analysis. | 4
- b) Design, manufacturing, construction, and installation drawings.
- c) Procurement documents.
- d) QA Manual and implementing procedures. | 4
- e) Maintenance, modification, and operating procedures.
- f) FSAR.
- g) Manufacturing, inspection, and testing instructions.
- h) Test procedures.
- i) Design change request.
- j) Nonconformance reports.
- k) Operating License/Technical Specifications.

The Corporate QA program requires that procedures be established to identify those individuals or organizations responsible for reviewing, approving, and issuing documents and revisions thereto. Documents are reviewed for technical adequacy and inclusion of QA requirements prior to implementation. Such reviews are performed by individuals other than the person who generated the document. These individuals are knowledgeable of QA program aspects. | 4

The program requires that changes to documents be reviewed and approved by the same organization that performed the original review and approval or by other designated qualified responsible organizations. Approved changes are included in instructions, procedures, drawings, and other documents prior to implementation of the change.

Obsolete or superseded documents are controlled to prevent inadvertent use.

Documents will be available at the location where the activity will be performed prior to commencing the work, except in a radioactive contaminated area where the documents will be readily available. | 4

Master lists are established to identify the current revision number of instructions, procedures, specifications, drawings, and procurement documents. These lists shall be updated and made available to responsible personnel to preclude the use of superseded documents.

## 17.2.7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for the control of purchased safety-related material, equipment, and services, including spare or replacement parts. The program requires spare or replacement parts to be subject to QA program controls, codes and standards, and technical requirements equal to or better than those applied to the original parts. The program also requires procurement documents to address (i) vendor records to be submitted for purchaser review; (ii) reporting and disposition of nonconformances and their submittal for purchaser acceptance; (iii) submittal of documentation identifying the purchased item and the specific procurement requirements (e.g. codes and standards) met by the item; and (iv) vendor identification of any procurement requirements that have not been met.

Potential contractors and suppliers are evaluated by qualified QA personnel prior to award of a purchase order or contract when needed to assure the contractor's or supplier's capability to comply with procurement document requirements.

Receipt inspections at SHNPP are performed by qualified QA/QC inspectors in accordance with written procedures to assure that:

- a) Materials, equipment, or components are properly identified and correspond with associated documentation.
- b) Inspection records or certificates of conformance attesting to the acceptance of materials, equipment, and components are completed and are available at SHNPP prior to installation or use.
- c) Materials, equipment, and components are inspected and judged acceptable in accordance with predetermined inspection instructions prior to installation or use.
- d) Items accepted or released are identified as to their inspection status prior to forwarding them to a controlled storage area or releasing them for installation or further work. (Bulk items will not require individual accept tags; however, status of unacceptable bulk items will be so indicated).
- e) Nonconforming items are clearly identified and controlled until proper disposition is made.

For Nuclear Fuel Section purchased items, plant personnel shall perform receipt inspection activities using approved procedures. Inspection results shall be recorded and filed in the appropriate receiving inspection package. Inspection status shall be indicated as required by applicable procedures.

Carolina Power & Light Company maintains a program for supplier evaluation, results of supplier evaluation, surveillance of suppliers, supplier furnished records, certificates of conformance, effectiveness of supplier quality control, and the purchase of spare or replacement parts.

SHNPP FSAR

17.2.8 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for the identification and control of safety-related materials, parts, and components, including spare or replacement items.

The program requires that materials, parts, and components be identified and controlled to prevent the use of incorrect or defective items. The program also requires that identification of items be maintained either on the item in a manner that does not affect the function or quality of the item, or on records traceable to the item.

Suppliers of safety-related materials, parts, or components are required by procurement documents to establish a system of identification and control which is consistent with the above requirements.

Procedures implementing these requirements provide for the following:

- a) Verification that items received at the plant are properly identified and can be traced to the appropriate documentation, such as drawings, specifications, purchase orders, manufacturing and inspection documents, nonconformance reports, or mill test reports.
- b) Verification of item identification consistent with the CP&L inventory control system and traceable to documentation which identifies the proper uses or applications of the item.
- c) Verification of correct identification of material, parts and components prior to fabrication, assembly installation or use, and results documented.

Consumables utilized in safety-related structures, systems and components are subject to appropriate QA controls as described in approved plant procedures.

4

SHNPP FSAR

17.2.9 CONTROL OF SPECIAL PROCESSES

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for the control of special processes, such as welding, heat treating, and nondestructive testing.

Special processes are those that require interim inprocess controls in addition to final inspection to assure quality.

The program requires the special processes be performed by qualified personnel using proper equipment and in accordance with written qualified procedures. These personnel and procedures are to be qualified in accordance with applicable codes, standards, and specifications as described in procedures. Qualification records of special process procedures and personnel performing special processes are filed, maintained, and available for verification. Records of completion of special processes will be maintained. Surveillance is performed by QA of personnel and procedure qualification activities to assure such activities are satisfactorily performed. Special process procedures will be reviewed and concurred by QA prior to use.



## 17.2.10 INSPECTION

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for an inspection program to verify conformance of activities affecting quality with requirements specified for those activities.

Inspections are performed by personnel who are independent of the individuals performing or directly supervising the activity being inspected. The inspection personnel are qualified in accordance with applicable codes and standards, and their qualifications and certifications are maintained current. If individuals performing inspections are not part of the QA organization, the inspection procedures, personnel qualifications, proficiency tests, and independence are reviewed by the QA organization prior to initiation of the activity.

Inspections at SHNPP are performed in accordance with written procedures, instructions, and/or checklists, which provide for the following:

- a) Identification of individuals or groups responsible for performing the inspections.
- b) Identification of characteristics and activities to be inspected.
- c) Acceptance and rejection criteria.
- d) Method of inspection.
- e) Recording the results of the inspection review of the results, and identification of the inspector.
- f) Indirect control by monitoring of processing methods, equipment, and personnel when direct inspection is not possible.
- g) Use of necessary drawings/specifications.
- h) Specifying special measuring and test equipment.

Procedures will be established to assure the correct identification of mandatory inspection holdpoints where required beyond which work may not proceed until inspected.

Modifications, repairs, and replacements are inspected in accordance with the original design and inspection requirements or acceptable alternatives.

Inspections are determined based on involvement of technical and QA/QC personnel aided by criteria established in approved procedures and SAR commitments.

## 17.2.11 TEST CONTROL

The SHNPP QA Program as controlled by the Corporate QA Program, establishes the requirements for the preoperation and operation test programs. It requires that safety-related structures, systems, and components be tested in accordance with the original design and testing requirements or acceptable alternatives.

Procedures are written, reviewed, and approved for conducting the testing program.

Modifications, repairs, and replacement of safety-related structures, systems, and components are in accordance with the original design and testing requirements or acceptable alternatives.

Test procedures incorporate or reference the following:

- a) The requirements and acceptance limits contained in applicable design and procurement documents.
- b) Instructions for performing the test.
- c) Test prerequisites:
  - . provisions for assuring test prerequisites have been met
  - . calibrated instrumentation
  - . adequate and appropriate equipment
  - . trained, qualified, and licensed or certified personnel
  - . completeness of item to be tested
  - . suitable and controlled environmental conditions
  - . provisions for data collection and storage
- d) Hold points
- e) Acceptance and rejection criteria
- f) Methods of documenting or recording test data and results.

Test results are documented, evaluated, and their acceptability determined by a qualified, responsible individual or group.

Carolina Power & Light Company's position concerning Regulatory Guides 1.30, 1.58, 1.95, and 1.116 (ANSI N45.2.8) are contained in Section 1.8.

## 17.2.12 CONTROL OF MEASURING AND TEST EQUIPMENT

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes the requirements for the control of measuring and test equipment used in activities affecting quality. The program includes the requirement to establish procedures for the calibration technique and frequency, maintenance, and control of all measuring and test equipment.

Measuring and test equipment (M&TE) is identified and traceable to the calibration test data.

Status of calibration for measuring and test equipment is provided through the use of tags, stickers, labels, routing cards, computer programs, or other suitable means. The status indicators indicate the date recalibration is due or the frequency of recalibration.

Measuring and test instruments are calibrated at specified intervals based upon one or more of the following:

- a) Technical Specifications.
- b) Required accuracy.
- c) Purpose.
- d) Degree of usage.
- e) Stability characteristics.
- f) Other conditions affecting measurement.
- g) Manufacturer's recommendations.

Measures are required to be taken and documented to determine the validity of previous inspections and test results, if the measuring and test equipment is found to be out of calibration. Calibrations, inspections, and tests may be repeated if required by this determination. QA will be knowledgeable of the above activities by being on distribution for the documented actions attesting to identification and resolution of out of calibration M&TE.

Portable measuring and test equipment are calibrated by standards which are at least four times as accurate as the portable measuring and test equipment, unless limited by the state of the art. In cases where the accuracy is not achievable or limited by the state of the art, an engineering evaluation or other appropriate justification is performed and documented to justify acceptability of the M&TE in question. The evaluation is reviewed in accordance with approved procedures.

Calibration of installed plant devices shall be against M&TE having sufficient accuracy, greater than the device being calibrated, to assure that the system containing the device is within the specified system tolerance. The basis for determining the "greater than accuracy" shall be documented.

17.2.13 HANDLING, STORAGE, SHIPPING

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes the requirements for the control of the handling, storage, and shipping of safety-related components, systems, and structures. This program requires measures to be taken to ensure special handling, storage, cleaning, packaging, shipping, and preservation requirements are established and accomplished by qualified individuals.

Procedures are written to control the cleaning, handling, storage, packaging, shipping, and preservation of materials, components, and systems in accordance with design and specification requirements to preclude damage, loss, or deterioration by environmental conditions such as temperature or humidity.

Provisions are established to control the shelf life and storage of chemicals, reagents, lubricants, and other consumable materials. | 4

Carolina Power & Light Company's position on Regulatory Guide 1.38 is contained in Section 1.8.

## 17.2.14 INSPECTION, TEST, AND OPERATING STATUS

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes the requirements for the identification and control of the inspection, test, and operating status of safety-related structures, systems, and components.

Procedures are written to control the various methods of indicating status; i.e., tags, markings, labels, stamps, routing cards, calibration data sheets, computer programs, or other suitable means. These procedures include the application and removal of inspection and welding stamps, or other status indicators as appropriate.

Measures are established for indicating the operating status of structures, systems, and components. These measures include the use of checklists, computer programs, logs, stickers, tags, labels, record cards, and test records to indicate the acceptable operating status of installed equipment. Installed equipment which, if operated, could cause damage to other equipment/systems or to personnel is tagged to indicate its nonoperational status and to prevent inadvertent use.

Selected plant procedures and subsequent revisions are reviewed by the QA group to ensure required inspections, tests, and other critical operations are inserted in the documents.

Altering the sequence of required tests, inspections, and other operations important to safety can only be accomplished by methods outlined in approved procedures. Procedure revisions reflecting such changes are subject to the same controls as the original review and approval.

## 17.2.15 NONCONFORMING MATERIALS, PARTS, OR COMPONENTS

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for the control of nonconforming materials, parts or components.

The Corporate QA Program addresses QA and other organizational responsibilities for the definition and implementation of activities related to nonconformance control. This includes identifying those individuals or groups with authority for the disposition of nonconforming items. The Corporate QA Program requires QA to document concurrence of the adequacy of corrective action and initiate follow-up action to verify proper implementation of the corrective action.

The program requires that material, parts, or components found nonconforming through review, inspection, surveillance, testing, or audits be controlled by administrative procedures. These procedures provide for the following:

- a) Identification of nonconforming items by use of nonconformance tags, stickers, or other appropriate status indicators and segregation of those items, if practical, to prevent inadvertent use pending proper disposition and reinspection.
- b) Identification of those individuals or organizations responsible for disposition of nonconforming items.
- c) Preparation of nonconformance reports which identify nonconforming items and describe the nonconformance, the disposition of the nonconformance, and the reinspection or testing performed to determine the acceptability of the item after the disposition has been completed.
- d) Verification of the acceptability of rework/repair of items by reinspection or testing of the item as originally performed or by a method which is equivalent to the original inspection and testing method.
- e) Nonconformance reports which are dispositioned "use as is" or "repair" are retained as part of the quality records.
- f) Quarterly analysis of selected reports as determined by QA be performed and forwarded to management to show quality trends.

Nonconforming items that require rework/repairs by the plant maintenance organization are identified to the plant maintenance organization through the use of maintenance work request forms. Work request form packages include or reference procedures and instructions (including QA hold points) as required by which work has to be accomplished. Referenced procedures and instructions are reviewed and concurred by QA prior to start of work. Upon completion of the work, the maintenance work request form package is reviewed by QA to ensure QA hold point requirements have been satisfied and the necessary documentation, attesting to satisfactory completion of the work, has been generated. Work request form packages, where the resolution of the nonconformance is "accept as is", are also forwarded through QA. Quality Assurance in this case verifies that the documented engineering evaluation, justifying the "accept as is", is part of the package. Responsibility for

## 17.2.16 CORRECTIVE ACTION

The SHNPP QA Program, as controlled by the Corporate QA Program, requires the identification and correction of conditions adverse to quality.

The program requires that an evaluation of conditions adverse to quality, such as nonconformances, failures, malfunctions, deficiencies, deviations, and defective material and equipment is conducted to determine need for corrective action.

Conditions adverse to quality are identified through inspections, surveillances, audits, tests, checks, and review of documents.

The program requires corrective action to be initiated to preclude recurrence of significant conditions adverse to quality.

The program requires follow-up reviews, audits, inspections, etc., to be conducted to verify proper implementation of corrective action and to close out the corrective action documentation.

Significant conditions adverse to quality, the cause of the conditions, and the corrective action taken are reported to management, both on site and off site, including QA groups, for review and assessment.

Periodic review and assessment of quality trends is made by the General Manager - Harris Plant Operations Section, Director - SHNPP QA/QC, Manager - QA/QC Harris Plant, and Manager - Corporate QA.

12

In the event the plant staff and the QA/QC organization cannot agree on the corrective action or disposition, the QA/QC organization will escalate the matter through successive levels of management until a resolution is reached. The ultimate decision making authority is the Executive Vice President - Power Supply and Engineering & Construction.

## 17.2.17 QUALITY ASSURANCE RECORDS

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for the identification, collection, and storage of quality assurance records.

The program requires that sufficient records be maintained to provide documentary evidence of the quality of items and the accomplishment of activities affecting quality. The types of records to be maintained as QA records are based on the guidance given in Appendix A of ANSI N45.2.9-1974, with exceptions as noted in CP&L's position on Regulatory Guide 1.88 and Section 6 of the SHNPP Technical Specification (see Section 16.2).

Records are identifiable and retrievable through the use of indexes and filing systems, which are required by the program.

These records are controlled in accordance with the Plant Operating Manual which requires procedures for their collection, maintenance, and protection. Procedures are required to be developed to indicate responsibilities and retention periods.

The SHNPP QA Program requires inspection and test records to contain the following, where applicable:

- a) A description of the type of observation.
- b) Evidence of completing and verifying a manufacturing, inspection, or test operation.
- c) Date and results of the inspection or test.
- d) Information related to conditions adverse to quality.
- e) Inspection or data recorder identification.
- f) Evidence as to the acceptability of the results.

The records are maintained within structures designed to prevent destruction, deterioration, or theft, which are designed, constructed, and maintained as required by CP&L's position on Regulatory Guide 1.88. These facilities ensure protection against destruction by fire, flooding, theft, and deterioration by the environmental conditions of temperature and humidity.

The SHNPP QA Program requires access control to the records storage facilities.



## 17.2.18 AUDITS

The SHNPP QA Program, as controlled by the Corporate QA Program, establishes requirements for an audit program. This program requires that planned and periodic audits be performed in accordance with written procedures to verify compliance with all aspects of the quality assurance program and that audits include an objective evaluation of the QA program and the effectiveness of the implementation of the program in meeting project commitments.

Responsibility for the audit of the overall operational phase quality assurance program has been assigned to the Principal QA Specialist - Performance Evaluation Unit.

Audits conducted by personnel of the Performance Evaluation Unit include an examination of quality-related activities such as:

- a) Operation, maintenance, and modification of SHNPP.
- b) Receiving and plant inspection.
- c) Preparation, review, approval, and control of instructions, designs, procedures, drawings, specifications, and procurement documents.
- d) Indoctrination and training programs.
- e) Calibration of measuring and test equipment.
- f) Implementation of operating and test procedures.

Organizations performing activities affecting quality that are subject to audit include the following:

- a) The CP&L Operating Group including the operations, maintenance, engineering, quality assurance, support organizations, and Nuclear Fuel.
- b) Contractors, consultants, and suppliers of quality-related items or services.

The audit program includes the following provisions:

- a) An audit planning document is used which identifies the organizations to be audited and the frequency of the audits.
- b) Audits are conducted in accordance with predetermined schedules, which are reviewed and updated periodically.
- c) Audits are scheduled on the basis of the status and safety importance of the activities being performed, or the requirements of the Technical Specifications.
- d) Audits are performed in accordance with audit checklists or written instructions which identify the activities, processes, items, and documentation to be audited.

17.2.19.4 Inspection, Test, and Operating Status

The requirements stated in Section 17.2.14 will apply.

17.2.19.5 Deficiencies and Nonconformance Items

Deficiencies and nonconformances of fire protection system items will be identified, reported, dispositioned, and corrected in accordance with Section 17.2.15.

17.2.19.6 Corrective Action

The requirements of Section 17.2.16 shall apply. Procedures shall be established for evaluating conditions adverse to fire protection to determine the necessary corrective action. In the case of significant or repetitive conditions adverse to fire protection, the cause of the conditions will be determined and analyzed, and prompt corrective action taken to preclude recurrence.

17.2.19.7 Quality Control Inspections

With respect to fire protection systems or features which protect nuclear safety-related systems, structures, or equipment, a documented program of quality control inspections will be implemented by the Director - QA/QC Unit/Fire Protection Specialist when repairs or modifications to those systems or features are performed, or if the quality of the activity can impair the ability of the system, equipment, component, or installation to accomplish its intended function. | 12

17.2.19.8 Quality Control Surveillance

The General Manager - Harris Plant Operations Section is responsible for implementing a documented program of periodic surveillance which verifies compliance with governing procedures for the following fire protection activities: | 12

- a) Housekeeping
- b) Surveillance tests of the fire protection systems
- c) Control of ignition sources
- d) Use of fire watches
- e) Control of combustibles
- f) Fire protection training documentation
- g) Preventive maintenance program

This program will be conducted by the Fire Protection Specialist in accordance with approved procedures.

17.2.19 FIRE PROTECTION QA PROGRAM

The General Manager - Harris Plant Operations Section is responsible, unless otherwise designated in this section, for the overall administration of the fire protection program and provides the on-site point of control and contact for all contingencies. These responsibilities include final approval of all fire protection procedures and assignment of personnel to be members of the Fire Brigade Teams. Fire protection procedures will be reviewed and concurred by QA/QC. | 12

The General Manager - Harris Plant Operations Section will direct a documented program of quality assurance for items designated by the Fire Protection Specialist as Fire Protection items. The program will accomplish the following: | 12

- a) Quality Control inspection of the installation, corrective maintenance, modifications, and receipt of designated fire protection items.
- b) Verification of compliance with governing procedures of the Fire Protection Program.
- c) Provision for adequate quality assurance controls for designated fire protection items to ensure the maintenance of an effective fire protection program.

The Fire Protection Specialist is responsible for:

- a) Coordination of all fire protection program activities.
- b) Preparation of procedures and instructions which implement the Fire Protection Program.
- c) Ensuring the development and technical adequacy of the training materials and training sources related to the fire protection program, and assigning qualified Fire Protection instructors.
- d) Preparation of the listing of those Fire Protection items which are subject to the quality assurance procedures.
- e) Periodic monitoring of all fire protection activities.
- f) Assisting the Plant Supervisor in assuring that all corrective maintenance and modifications of the fire protection systems comply with Technical Specifications.
- g) Coordination of the arrangements for off-site fire company support and training.
- h) Scheduling and implementation of the Fire Drills Program.
- i) Establishing the minimum equipment for the Fire Brigade Teams.

10/19/84

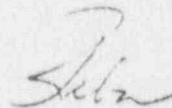
Region II

Jim:

For the Region II cases listed below, all professional hours shown as QAT or 3BH should be excluded from the OL review computation because ~~Chapter 17~~ Chapter 17 of the SER refers to the licensee's topical report. I'm getting copies of the Chapter 17 pages from the updated FSAR retained by the Records Section (Docket Files) and will let you see them when they arrive:

1. TVA - Bellefonte 1 & 2 - Topical Report Number-TVA-TR-75-1  
- Watts Bar 1 & 2 - Topical Report Number-TVA-TR-75-1
2. Duke Power - Catawba 1 & 2 - Topical Report Number-DUKE-1
3. Mississippi Power - Grand Gulf 1 & 2 - Topical Report Number-MPL-TOP-1

I don't find that there are topicals for QA on Harris 1 & 2 or Vogtle 1 & 2, but I am getting Chapter 17 pages to see what the FSAR says. Florida Power & Light and VEPCO also have topical reports, but they do not have any OL applications under review thus these two are not at issue. I plan to look at the revisions/amendments to the topical reports for which fees have been collected and will determine if the fees assessed cover the latest amendments filed or approved.



Reba





U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MANPOWER HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM ISSUE DATE THROUGH END FY '83

Run 1

REGION II - OL REVIEW  
 05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
FOR FISCAL YEAR '78			
C00 TRAVEL			
EMPNAME	TOTAL	ANNAST, MICHAEL V	1.5
EMPNAME	TOTAL	BRADLEY, ROBERT D	3.0
EMPNAME	TOTAL	BROWNLEE, VIRGIL L	9.0
EMPNAME	TOTAL	HERDT, ALAN R	1.0
EMPNAME	TOTAL	SWAN, WALLACE B	9.0
ACT-CODE	TOTAL		23.5
1TA SAFETY OFF-SITE INSPECTION EFFORT			
EMPNAME	TOTAL	SWAN, WALLACE B	.0
ACT-CODE	TOTAL		.0
1TW OUT OF OFC SFTY INSP EFFORT (ON-SITE)			
EMPNAME	TOTAL	BRADLEY, ROBERT D	13.5
EMPNAME	TOTAL	BROWNLEE, VIRGIL L	18.0
EMPNAME	TOTAL	HERDT, ALAN R	3.0
EMPNAME	TOTAL	SWAN, WALLACE B	28.0
ACT-CODE	TOTAL		62.5
1TX IN OFFICE SAFETY INSPECTION EFFORT			
EMPNAME	TOTAL	BRADLEY, ROBERT D	6.0
ACT-CODE	TOTAL		6.0
1T0 ALL OTHER SFTY INSP EFFORT (PREP-DOC-ENF)			
EMPNAME	TOTAL	BRADLEY, ROBERT D	8.0
EMPNAME	TOTAL	BROWNLEE, VIRGIL L	20.5
EMPNAME	TOTAL	GERARD, EDWARD H	2.0
EMPNAME	TOTAL	MCFARLAND, CHARLES R	9.0
EMPNAME	TOTAL	SWAN, WALLACE B	38.0
EMPNAME	TOTAL	VANDOORN, PETER K	6.0
ACT-CODE	TOTAL		83.5

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

09/21/84

REGION II - OL REVIEW  
 05000400 HARRIS 1

EMPLOYEE  
 NAME

REGULAR  
 HOURS

1UA OFF-SITE SAFETY INVESTIGATION

ANNAST, MICHAEL V

2.0

2.0

EMPNME TOT L  
 ACT-CODE TOTAL

1UW OUT OF OFC SFTY INVEST. (ON-SITE)

BRADLEY, ROBERT D

2.0

2.0

EMPNME TOTAL  
 ACT-CODE TOTAL

1UX IN OFFICE SAFETY INVESTIGATION EFFORT

ANNAST, MICHAEL V

10.0

BRADLEY, ROBERT D

.0

10.0

EMPNME TOTAL  
 EMPNME TOTAL  
 ACT-CODE TOTAL

115 SAFETY CP HEARINGS

BROWNLEE, VIRGIL L

11.0

11.0

EMPNME TOT  
 ACT-CODE TOT

2TA OFF-SITE ENVIRONMENT INSPECTION

CUNNINGHAM, ANDREW L

.0

.0

EMPNME TO L  
 ACT-CODE TOTAL

2TW OUT OF OFC ENVIR INSP EFFORT (ON-SITE)

CUNNINGHAM, ANDREW L

5.0

5.0

EMPNME TO L  
 ACT-CODE TO L

2T0 ALL OTHER ENVIR INSPECTION EFFORT

CUNNINGHAM, ANDREW L

8.0

8.0

EMPNME TO L  
 ACT-CODE TO L



U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
200 ALL OTHER ENVIR INSPECTION EFFORT			
YR	TOTAL		217.5
v FOP FISCAL YEAR '79			
AST INSPECTOR SUPPORT TO OTHER OFFICES			
EMPNAME	TOTAL	BROWNLEE, VIRGIL L	45.0
EMPNAME	TOTAL	BROWNLEE, VIRGIL L	8.0
EMPNAME	TOTAL	CANTRELL, FLOYD S	15.0
EMPNAME	TOTAL	LEWIS, RICHARD C	12.0
EMPNAME	TOTAL	WESSMAN, RICHARD H	40.0
ACT-CODE	TOTAL		120.0
B00 TRAINING			
EMPNAME	TOTAL	ANDREWS, DALE L	12.5
ACT-CODE	TOTAL		12.5
C00 TRAVEL			
EMPNAME	TOTAL	ANDREWS, DALE L	4.5
EMPNAME	TOTAL	ANG, WILLIAM P	16.0
EMPNAME	TOTAL	BRADLEY, ROBERT D	59.1
EMPNAME	TOTAL	BROWNLEE, VIRGIL L	14.0
EMPNAME	TOTAL	BRYANT, JACK C	15.0
EMPNAME	TOTAL	CANTRELL, FLOYD S	6.0
EMPNAME	TOTAL	CUNNINGHAM, ANDREW L	14.0
EMPNAME	TOTAL	DANCE, HUGH C	7.0
EMPNAME	TOTAL	GERARD, EDWARD H	6.0
EMPNAME	TOTAL	GRANT, WILLIAM B	7.0
EMPNAME	TOTAL	HARRIS, JOHN R	10.0
EMPNAME	TOTAL	LENAHAN, JOE	11.0
EMPNAME	TOTAL	SWAN, WALLACE B	4.0
EMPNAME	TOTAL	THOMAS, MCKENZIE	4.0
EMPNAME	TOTAL	VANDOORN, PETER K	2.0
ACT-CODE	TOTAL		179.6

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
 05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
DOC ROUTINE DOCUMENTATION			
EMPNME	TOTAL	ALDERSON, CARL E	16.0
EMPNME	TOTAL	ANG, WILLIAM P	28.0
EMPNME	TOTAL	BRADLEY, ROBERT D	181.0
EMPNME	TOTAL	CUNNINGHAM, ANDREW L	52.0
EMPNME	TOTAL	ECONOMOS, NICK	11.0
EMPNME	TOTAL	GERARD, EDWARD H	48.0
EMPNME	TOTAL	HARRIS, JOHN R	102.0
EMPNME	TOTAL	LENAHAN, JOE	42.0
EMPNME	TOTAL	SWAN, WALLACE B	52.0
ACT-CODE	TOTAL		532.0
JOM ADMINISTRATIVE SUPPORT			
EMPNME	TOTAL	BRADLEY, ROBERT D	125.0
EMPNME	TOTAL	CANTRELL, FLOYD S	8.0
EMPNME	TOTAL	MURPHY, CHARLES E	16.0
ACT-CODE	TOTAL		149.0
PAP ROUTINE PREPARATION			
EMPNME	TOTAL	ANG, WILLIAM P	12.0
EMPNME	TOTAL	BRADLEY, ROBERT D	237.5
EMPNME	TOTAL	CUNNINGHAM, ANDREW L	24.0
EMPNME	TOTAL	ECONOMOS, NICK	4.0
EMPNME	TOTAL	GRANT, WILLIAM B	2.0
EMPNME	TOTAL	HARRIS, JOHN R	106.0
EMPNME	TOTAL	LENAHAN, JOE	35.0
EMPNME	TOTAL	SWAN, WALLACE B	7.0
EMPNME	TOTAL	WILCOX, JOHN D JR	12.0
ACT-CODE	TOTAL		439.5
PC1			
EMPNME	TOTAL	BRYANT, JACK C	12.0
ACT-CODE	TOTAL		12.0

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
 05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
PPT			
EMPNME	TOTAL	BRYANT, JACK C	.0
EMPNME	TOTAL	CANTRELL, FLOYD S	24.0
EMPNME	TOTAL	HERDT, ALAN R	28.0
EMPNME	TOTAL	KELLOGG, PAUL J	12.0
EMPNME	TOTAL	MCFARLAND, CHARLES R	27.0
EMPNME	TOTAL	MCHENRY, THOMAS J	8.0
EMPNME	TOTAL	MURPHY, CHARLES E	60.5
EMPNME	TOTAL	RUHLMAN, WILLIAM ARTHUR	13.0
EMPNME	TOTAL	TROUP, GERALD L	5.0
EMPNME	TOTAL	WESSMAN, RICHARD H	2.0
ACT-CODE	TOTAL		179.5
PP1 ROUTINE INSPECTION			
EMPNME	TOTAL	ANG, WILLIAM P	48.0
EMPNME	TOTAL	BRADLEY, ROBERT D	352.5
EMPNME	TOTAL	BRYANT, JACK C	38.0
EMPNME	TOTAL	CANTRELL, FLOYD S	34.0
EMPNME	TOTAL	CONLON, THOMAS	8.0
EMPNME	TOTAL	CUNNINGHAM, ANDREW L	34.0
EMPNME	TOTAL	DANCE, HUGH C	57.0
EMPNME	TOTAL	ECONOMOS, NICK	35.0
EMPNME	TOTAL	GRANT, WILLIAM B	17.0
EMPNME	TOTAL	HARRIS, JOHN R	170.0
EMPNME	TOTAL	LENAHAN, JOE	36.0
EMPNME	TOTAL	LONG, FRANCIS J	66.0
EMPNME	TOTAL	MURPHY, CHARLES E	42.0
EMPNME	TOTAL	THOMAS, MCKENZIE	20.0
EMPNME	TOTAL	WESSMAN, RICHARD H	29.0
EMPNME	TOTAL	WILCOX, JOHN D JR	29.0
ACT-CODE	TOTAL		1,015.5
PR1 REACTIVE ONSITE/OFFSITE INSPECTION			
EMPNME	TOTAL	ECONOMOS, NICK	4.0
EMPNME	TOTAL	LENAHAN, JOE	4.0
ACT-CODE	TOTAL		8.0

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION 1 - OL REVIEW  
 0500040 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
P1V INVESTIGATION			
EMPNME	TOTAL	ALDERSON, CARL E	4.0
EMPNME	TOTAL	BRADLEY, ROBERT D	6.0
EMPNME	TOTAL	BROWNLEE, VIRGIL L	14.5
EMPNME	TOTAL	CANTRELL, FLOYD S	16.0
EMPNME	TOTAL	DANCE, HUGH C	20.0
EMPNME	TOTAL	HERDT, ALAN R	20.0
EMPNME	TOTAL	MCFARLAND, CHARLES R	9.0
EMPNME	TOTAL	MURPHY, CHARLES E	20.0
ACT-CODE	TOTAL		109.5
1TW OUT OF OFC SFTY INSP EFFORT (ON-SITE)			
EMPNME	TOTAL	BRADLEY, ROBERT D	.4
EMPNME	TOTAL	GERARD, EDWARD H	20.0
EMPNME	TOTAL	SWAN, WALLACE B	9.0
EMPNME	TOTAL	VANDOORN, PETER K	14.0
ACT-CODE	TOTAL		43.4
1TX IN OFFICE SAFETY INSPECTION EFFORT			
EMPNME	TOTAL	BRADLEY, ROBERT D	.9
EMPNME	TOTAL	SWAN, WALLACE B	3.0
ACT-CODE	TOTAL		3.9
1T0 ALL OTHER SFTY INSP EFFORT (PREP-DOC-ENF)			
EMPNME	TOTAL	BRADLEY, ROBERT D	9.2
EMPNME	TOTAL	GERARD, EDWARD H	22.0
EMPNME	TOTAL	SWAN, WALLACE B	17.0
EMPNME	TOTAL	VANDOORN, PETER K	13.0
ACT-CODE	TOTAL		61.2
1U0 SAFETY INVESTIGATIONS			
EMPNME	TOTAL	SWAN, WALLACE B	3.0

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '85

REGION I - 01 REVIEW  
050004 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
100 SAFETY INVESTIGATIONS			
ACT-CODE TO			3.0
115 SAFETY CP HEARINGS			
EMPNAME	TOTAL	ANG, WILLIAM P	6.0
EMPNAME	TOTAL	BRADLEY, ROBERT D	36.0
EMPNAME	TOTAL	BROWNLEE, VIRGIL L	14.5
EMPNAME	TOTAL	BRYANT, JACK C	6.0
EMPNAME	TOTAL	CANTRELL, FLOYD S	122.0
EMPNAME	TOTAL	COMPTON, ROBERT M	16.0
EMPNAME	TOTAL	DANCE, HUGH C	4.0
EMPNAME	TOTAL	GOUGE, MICHAEL J	33.0
EMPNAME	TOTAL	GRAHAM, MARY JANE	39.0
EMPNAME	TOTAL	HERDT, ALAN R	60.0
EMPNAME	TOTAL	HINCKLEY, DARRELL G	44.0
EMPNAME	TOTAL	JENKINS, GEORGE	8.0
EMPNAME	TOTAL	LENAHAN, JOE	12.0
EMPNAME	TOTAL	MCFARLAND, CHARLES R	20.0
EMPNAME	TOTAL	MCHENRY, THOMAS J	54.0
EMPNAME	TOTAL	MURPHY, CHARLES E	20.0
EMPNAME	TOTAL	TROUP, GERALD L	9.0
EMPNAME	TOTAL	VALLISH, EDWARD J	2.0
EMPNAME	TOTAL	WESSMAN, RICHARD H	70.0
EMPNAME	TOTAL	WHITENER, HERBERT L	8.0
EMPNAME	TOTAL	WILCOX, JOHN D JR	48.0
EMPNAME	TOTAL	WRIGHT, ROBERT	8.0
ACT-CODE	TOTAL		639.5
2TX IN OFFICE ENVIR INSPECTION EFFORT			
EMPNAME	TOTAL	CUNNINGHAM, ANDREW L	3.0
ACT-CODE	TOTAL		3.0
YR	TOTAL		3,511.1

09/21/84

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

PAGE

REGION I - OL REVIEW  
 050004 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
F.R. FISCAL YEAR '80			
C00 TRAVEL			
EMPNME	TOTAL	ASHENDEN, MELVIN C	7.0
EMPNME	TOTAL	BROWNLEE, VIRGIL	7.0
EMPNME	TOTAL	BRYANT, J C	13.0
EMPNME	TOTAL	ECONOMOS, NICK	10.0
EMPNME	TOTAL	LANDSMAN, ROSS B	16.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	24.0
EMPNME	TOTAL	THOMAS, MCKENZIE	7.0
EMPNME	TOTAL	ZAJAC, LEA D	8.5
ACT-CODE	TOTAL		92.5
DPP PROGRAM DEV, COORD, & ASSESSMENT			
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	16.0
EMPNME	TOTAL	PERNY, CYNTHIA D	3.0
ACT-CODE	TOTAL		19.0
DOC ROUTINE DOCUMENTATION			
EMPNME	TOTAL	ASHENDEN, MELVIN C	16.0
EMPNME	TOTAL	BLAKE, JEROME J	26.0
EMPNME	TOTAL	BRADLEY, ROBERT D	74.0
EMPNME	TOTAL	BROWNLEE, VIRGIL	7.0
EMPNME	TOTAL	CROWLEY, BILLY R	1.0
EMPNME	TOTAL	CUNNINGHAM, ANDREW L	6.0
EMPNME	TOTAL	ECONOMOS, NICK	48.0
EMPNME	TOTAL	GERARD, EDWARD H	12.0
EMPNME	TOTAL	GIBBONS, THOMAS D	24.0
EMPNME	TOTAL	HARRIS, JOHN R	4.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	46.0
EMPNME	TOTAL	LANDSMAN, ROSS B	52.0
EMPNME	TOTAL	LENAHAN, JOE	61.0
EMPNME	TOTAL	MARSH, ROBERT J	4.0
EMPNME	TOTAL	MAXWELL, GEORGE F	50.0
EMPNME	TOTAL	MCFARLAND, C R	34.0
EMPNME	TOTAL	RAUSCH, JOHN K	10.0
EMPNME	TOTAL	RUHLMAN, WILLIAM ARTHUR	4.0
EMPNME	TOTAL	THOMAS, MCKENZIE	4.0

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
050004J0 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
DOC ROUTINE DOCUMENTATION			
EMPNAME	TOTAL	WALTERS, D KEITH III	32.0
ACT-CODE	TOTAL		515.0
JMO MANAGEMENT SUPERVISION			
EMPNAME	TOTAL	CONLON, THOMAS	2.0
EMPNAME	TOTAL	RAUSCH, JOHN K	2.0
ACT-CODE	TOTAL		4.0
JOM ADMINISTRATIVE SUPPORT			
EMPNAME	TOTAL	BRADLEY, ROBERT D	95.5
ACT-CODE	TOTAL		95.5
PAA ADMINISTRATIVE SUPPORT			
EMPNAME	TOTAL	MAXWELL, GEORGE F	47.0
ACT-CODE	TOTAL		47.0
PAP ROUTINE PREPARATION			
EMPNAME	TOTAL	BLAKE, JEROME J	34.0
EMPNAME	TOTAL	BRADLEY, ROBERT D	41.0
EMPNAME	TOTAL	BROWNLEE, VIRGIL	10.5
EMPNAME	TOTAL	BURDETTE, THOMAS E	4.0
EMPNAME	TOTAL	GERARD, EDWARD H	5.0
EMPNAME	TOTAL	GIBBONS, THOMAS D	4.0
EMPNAME	TOTAL	HARRIS, JOHN R	6.0
EMPNAME	TOTAL	KLEINSORGE, WILLIAM P	22.0
EMPNAME	TOTAL	LENAHAN, JOE	11.0
EMPNAME	TOTAL	MARSH, ROBERT J	12.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	14.0
EMPNAME	TOTAL	MCFARLAND, C R	17.0
EMPNAME	TOTAL	RAUSCH, JOHN K	6.0
EMPNAME	TOTAL	WALTERS, D KEITH III	32.0

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
 05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
PAP ROUTINE PREPARATION			
EMPNME	TOTAL	ZAJAC, LEA D	.0
ACT-CODE	TOTAL		218.5
PP1 ROUTINE INSPECTION			
EMPNME	TOTAL	ASHENDEN, MELVIN C	30.0
EMPNME	TOTAL	BLAKE, JEROME J	55.0
EMPNME	TOTAL	BRADLEY, ROBERT D	77.0
EMPNME	TOTAL	BROWNLEE, VIRGIL	8.5
EMPNME	TOTAL	BRYANT, J C	33.0
EMPNME	TOTAL	BURDETTE, THOMAS E	8.0
EMPNME	TOTAL	COLEY, JAMES I JR	30.0
EMPNME	TOTAL	CUNNINGHAM, ANDREW L	7.0
EMPNME	TOTAL	ECONOMOS, NICK	30.0
EMPNME	TOTAL	GERARD, EDWARD H	15.0
EMPNME	TOTAL	GIBBONS, THOMAS D	36.0
EMPNME	TOTAL	HARRIS, JOHN R	4.0
EMPNME	TOTAL	HERDT, ALAN R	12.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	57.5
EMPNME	TOTAL	LANDSMAN, ROSS B	56.0
EMPNME	TOTAL	LENAHAN, JOE	60.0
EMPNME	TOTAL	MAXWELL, GEORGE F	213.0
EMPNME	TOTAL	MCFARLAND, C R	30.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	32.0
EMPNME	TOTAL	RAUSCH, JOHN K	4.0
EMPNME	TOTAL	RUHLMAN, WILLIAM ARTHUR	28.0
EMPNME	TOTAL	THOMAS, MCKENZIE	8.5
EMPNME	TOTAL	WALTERS, D KEITH III	34.0
EMPNME	TOTAL	ZAJAC, LEA D	31.5
ACT-CODE	TOTAL		900.0
PR1 REACTIVE ONSITE/OFFISTE INSPECTION			
EMPNME	TOTAL	BRADLEY, ROBERT D	180.0
EMPNME	TOTAL	HARRIS, JOHN R	11.0
EMPNME	TOTAL	LENAHAN, JOE	54.0
EMPNME	TOTAL	UPRIGHT, CHARLES M	15.0



U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION II  
 05000400

		EMPLOYEE NAME	REGULAR HOURS
PR1 REACTIVE ONSITE/OFFSITE INSPECTION			
ACT-CODE TOTAL			260.0
RT1 INCIDENT/ACCIDENT RESPONSE			
EMPNME TOTAL		MURPHY, CHARLES E	10.0
ACT-CODE TOTAL			10.0
4UZ RQST REV & EVAL (PART 21)			
EMPNME TOTAL		MCFARLAND, C R	5.0
ACT-CODE TOTAL			5.0
YR TOTAL			2,166.5
FISCAL YEAR '81			
BR1 REACTIVE PREPARATION			
EMPNME TOTAL		GIRARD, EDWARD H	1.0
EMPNME TOTAL		HOWELL, JERRY C	6.0
EMPNME TOTAL		VORSE, JAMES Y	3.0
ACT-CODE TOTAL			10.0
C01 DOCKET TRAVEL			
EMPNME TOTAL		BLAKE, JERGME J	9.0
EMPNME TOTAL		BROWNLEE, VIRGIL	2.0
EMPNME TOTAL		CROWLEY, BILLY R	2.0
EMPNME TOTAL		ECONOMOS, NICK	6.5
EMPNME TOTAL		GIRARD, EDWARD H	6.0
EMPNME TOTAL		HARRIS, JOHN R	5.0
EMPNME TOTAL		KLEINSORGE, WILLIAM	2.0
EMPNME TOTAL		LENAHAN, JOE	2.0
EMPNME TOTAL		MERRIWEATHER, NORMAN	8.0
EMPNME TOTAL		PEEBLES, THOMAS	6.0
EMPNME TOTAL		TILLMAN, AUBREY	7.0
EMPNME TOTAL		WRIGHT, R	2.0
ACT-CODE TOTAL			57.5

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
DR1 REACTIVE DOCUMENTATION			
EMPNME	TOTAL	ECONOMOS, NICK	8.0
EMPNME	TOTAL	GIRARD, EDWARD H	2.0
EMPNME	TOTAL	HARRIS, JOHN R	12.0
EMPNME	TOTAL	MAXWELL, GEORGE F	2.0
EMPNME	TOTAL	RAUSCH, JOHN K	5.0
EMPNME	TOTAL	TILLMAN, AUBREY	8.0
ACT-CODE	TOTAL		37.0
DOC ROUTINE DOCUMENTATION			
EMPNME	TOTAL	BLAKE, JEROME J	41.0
EMPNME	TOTAL	BROWNLEE, VIRGIL	6.0
EMPNME	TOTAL	BUTCHER, ROSS	117.0
EMPNME	TOTAL	COLEY, JAMES L JR	12.0
EMPNME	TOTAL	CROWLEY, BILLY R	26.0
EMPNME	TOTAL	CUNNINGHAM, ANDREW L	2.0
EMPNME	TOTAL	ECONOMOS, NICK	12.0
EMPNME	TOTAL	GIRARD, EDWARD H	30.0
EMPNME	TOTAL	HARRIS, JOHN R	10.0
EMPNME	TOTAL	JULIAN, CAUDLE A JR	6.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	45.0
EMPNME	TOTAL	LENAHAN, JOE	4.0
EMPNME	TOTAL	MAXWELL, GEORGE F	61.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	32.0
EMPNME	TOTAL	PEEBLES, THOMAS	2.0
EMPNME	TOTAL	RAUSCH, JOHN K	4.0
EMPNME	TOTAL	WRIGHT, R	19.0
EMPNME	TOTAL	ZAJAC, LEA D	18.0
ACT-CODE	TOTAL		447.0
PAA ADMINISTRATIVE SUPPORT			
EMPNME	TOTAL	MAXWELL, GEORGE F	2.0
ACT-CODE	TOTAL		2.0

09/21/84

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

PAGE

REGION II - OL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
PAP ROUTINE PREPARATION			
EMPNME	TOTAL	BLAKE, JEROME J	19.0
EMPNME	TOTAL	BROWNLEE, VIRGIL	6.0
EMPNME	TOTAL	CROWLEY, BILLY R	3.0
EMPNME	TOTAL	ECONOMOS, NICK	4.0
EMPNME	TOTAL	GIRARD, EDWARD H	9.0
EMPNME	TOTAL	HARRIS, JOHN R	16.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	6.0
EMPNME	TOTAL	LENAHAN, JOE	1.0
EMPNME	TOTAL	MAXWELL, GEORGE F	50.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	8.0
EMPNME	TOTAL	RAUSCH, JOHN K	2.0
EMPNME	TOTAL	WRIGHT, R	13.0
ACT-CODE	TOTAL		137.0
PP1 ROUTINE INSPECTION			
EMPNME	TOTAL	BLAKE, JEROME J	35.0
EMPNME	TOTAL	BROWNLEE, VIRGIL	19.0
EMPNME	TOTAL	BUTCHER, ROSS	4.0
EMPNME	TOTAL	CROWLEY, BILLY R	14.0
EMPNME	TOTAL	ECONOMOS, NICK	18.5
EMPNME	TOTAL	GIRARD, EDWARD H	18.0
EMPNME	TOTAL	HARRIS, JOHN R	7.0
EMPNME	TOTAL	JULIAN, CAUDLE A JR	5.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	26.5
EMPNME	TOTAL	LENAHAN, JOE	8.0
EMPNME	TOTAL	MAXWELL, GEORGE F	750.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	32.0
EMPNME	TOTAL	PEEBLES, THOMAS	32.0
EMPNME	TOTAL	WRIGHT, R	12.0
ACT-CODE	TOTAL		981.0
PR1 REACTIVE ONSITE/OFFSITE INSPECTION			
EMPNME	TOTAL	ECONOMOS, NICK	1.0
EMPNME	TOTAL	GIBBONS, THOMAS D	2.5
EMPNME	TOTAL	GIRARD, EDWARD H	3.0

U.S.H.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
PR1 REACTIVE ONSITE/OFFSITE INSPECTION			
EMPNAME	TOTAL	HARRIS, JOHN R	22.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	15.0
ACT-CODE	TOTAL		43.5
P1V INVESTIGATION			
EMPNAME	TOTAL	ALDERSON, CARL E	3.0
EMPNAME	TOTAL	HARRIS, JOHN R	7.0
EMPNAME	TOTAL	HOWELL, JERRY C	9.0
EMPNAME	TOTAL	KLEINSORGE, WILLIAM P	2.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	3.0
EMPNAME	TOTAL	TILLMAN, AUBREY	9.0
EMPNAME	TOTAL	VORSE, JAMES Y	5.0
EMPNAME	TOTAL	WILLIAMSON, EVERETT	1.0
ACT-CODE	TOTAL		39.0
SR1 SIZE PUBLIC RELATIONS			
EMPNAME	TOTAL	MAXWELL, GEORGE F	9.0
ACT-CODE	TOTAL		9.0
YR	TOTAL		1,763.0
FOR FISCAL YEAR '82			
BR1 REACTIVE PREPARATION			
EMPNAME	TOTAL	COLEY, JAMES L JR	2.0
EMPNAME	TOTAL	HARDIN, AUSTIN K	2.0
EMPNAME	TOTAL	HUNT, MILTON D	4.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	2.0
ACT-CODE	TOTAL		10.0
C01 DOCKET TRAVEL			
EMPNAME	TOTAL	COLEY, JAMES L JR	16.5
EMPNAME	TOTAL	DEBBAGE, ARTHUR G.	8.0
EMPNAME	TOTAL	GIRARD, EDWARD H	4.0

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION I - OI REVIEW  
 05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
C01 DOCKET TRAVEL			
EMPNAME	TOTAL	HARRIS, JOHN R	11.0
EMPNAME	TOTAL	HUNT, MILTON D	5.0
EMPNAME	TOTAL	JULIAN, CAUDLE A JR	3.5
EMPNAME	TOTAL	KLEINSORGE, WILLIAM P	7.0
EMPNAME	TOTAL	LENAHAN, JOE	6.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	20.0
EMPNAME	TOTAL	MERRIWEATHER, NORMAN	23.0
EMPNAME	TOTAL	MILLER, WILLIAM H JR	4.0
EMPNAME	TOTAL	RUFF, ALBERT B	8.0
EMPNAME	TOTAL	URYC, BRUNO, JR	20.0
EMPNAME	TOTAL	VORSE, JAMES Y	46.0
EMPNAME	TOTAL	WRIGHT, R	8.0
EMPNAME	TOTAL	YORK, JOHN W	3.0
ACT-CODE	TOTAL		193.0
DR1 REACTIVE DOCUMENTATION			
EMPNAME	TOTAL	HARRIS, JOHN R	8.0
EMPNAME	TOTAL	HOWELL, JERRY C	2.0
EMPNAME	TOTAL	LENAHAN, JOE	26.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	3.0
EMPNAME	TOTAL	URYC, BRUNO, JR	29.0
EMPNAME	TOTAL	VORSE, JAMES Y	69.0
ACT-CODE	TOTAL		137.0
DOC ROUTINE DOCUMENTATION			
EMPNAME	TOTAL	BELISLE, GEORGE A	3.0
EMPNAME	TOTAL	BUTCHER, ROSS	68.0
EMPNAME	TOTAL	COLEY, JAMES L JR	80.0
EMPNAME	TOTAL	CROWLEY, BILLY R	1.0
EMPNAME	TOTAL	DEBBAGE, ARTHUR G.	47.0
EMPNAME	TOTAL	GIRARD, EDWARD H	28.0
EMPNAME	TOTAL	HARDIN, AUSTIN K	29.0
EMPNAME	TOTAL	HARRIS, JOHN R	37.0
EMPNAME	TOTAL	HEHL, CHARLES W.	7.0
EMPNAME	TOTAL	HUNT, MILTON D	32.0

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
 050004.3 HARRIS 1

EMPLOYEE  
 NAME

REGULAR  
 HOURS

DOC ROUTINE DOCUMENTATION

EMPNAME	TOTAL	JULIAN, CAUDLE A JR	39.0
EMPNAME	TOTAL	KLEINSORGE, WILLIAM P	67.0
EMPNAME	TOTAL	LENAHAN, JOE	16.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	65.0
EMPNAME	TOTAL	MERRIWEATHER, NORMAN	82.0
EMPNAME	TOTAL	MILLER, WILLIAM H JR	16.0
EMPNAME	TOTAL	RUFF, ALBERT B	20.0
EMPNAME	TOTAL	SKINNER, PIERCE	22.0
EMPNAME	TOTAL	WRIGHT, R	37.0
EMPNAME	TOTAL	YORK, JOHN W	15.0
ACT-CODE	TOTAL		697.0

PAP ROUTINE PREPARATION

EMPNAME	TOTAL	COLEY, JAMES L JR	26.0
EMPNAME	TOTAL	DEBBAGE, ARTHUR G.	16.0
EMPNAME	TOTAL	GIRARD, EDWARD H	10.5
EMPNAME	TOTAL	HARRIS, JOHN R	35.0
EMPNAME	TOTAL	HEHL, CHARLES W.	1.0
EMPNAME	TOTAL	HUNT, MILTON D	7.0
EMPNAME	TOTAL	KLEINSORGE, WILLIAM P	29.0
EMPNAME	TOTAL	LENAHAN, JOE	5.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	22.0
EMPNAME	TOTAL	MERRIWEATHER, NORMAN	50.5
EMPNAME	TOTAL	MILLER, WILLIAM H JR	3.0
EMPNAME	TOTAL	RUFF, ALBERT B	33.0
EMPNAME	TOTAL	WRIGHT, R	17.0
ACT-CODE	TOTAL		255.0

PE1 ENFORCEMENT

EMPNAME	TOTAL	HARRIS, JOHN R	4.0
EMPNAME	TOTAL	VORSE, JAMES Y	5.0
ACT-CODE	TOTAL		9.0

REGION II - 01 REVIEW  
050004.1 HARRIS 1

EMPLOYEE NAME REGULAR HOURS

PP1 ROUTINE INSPECTION

EMPLOYEE NAME	REGULAR HOURS
COLEY, JAMES L JR	88.5
DEBBAGE, ARTHUR G.	32.0
GIRARD, EDWARD H	29.0
HARDIN, AUSTIN K	6.0
HARRIS, JOHN R	52.0
HEHL, CHARLES W.	2.0
HUNT, MILTON D	45.0
JULIAN, CAUDLE A JR	44.5
KLEINSORGE, WILLIAM P	88.0
LENAHAN, JOE	21.0
MAXWELL, GEORGE F	876.0
MERRIWEATHER, NORMAN	81.0
MILLER, WILLIAM H JR	22.0
RUFF, ALBERT B	20.0
WRIGHT, R	41.0
YORK, JOHN W	15.0
ACT-CODE TOTAL	1,463.0

PR1 REACTIVE ONSITE/OFFSITE INSPECTION

EMPLOYEE NAME	REGULAR HOURS
BELISLE, GEORGE A	8.0
COLEY, JAMES L JR	6.0
DEBBAGE, ARTHUR G.	24.0
GIBBONS, THOMAS D	10.0
HARDIN, AUSTIN K	2.0
HARRIS, JOHN R	21.0
LENAHAN, JOE	10.0
MAXWELL, GEORGE F	55.0
MERRIWEATHER, NORMAN	10.0
PERNY, CYNTHIA D	1.0
RUFF, ALBERT B	16.0
SKINNER, PIERCE	8.0
WRIGHT, R	11.0
YORK, JOHN W	2.0
ACT-CODE TOTAL	184.0

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION I - OL REVIEW  
 050004 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
P1V INVESTIGATION			
EMPNAME	TOTAL	COLEY, JAMES L JR	13.0
EMPNAME	TOTAL	HARRIS, JOHN R	49.0
EMPNAME	TOTAL	HOWELL, JERRY C	4.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	112.0
EMPNAME	TOTAL	RUFF, ALBERT B	15.0
EMPNAME	TOTAL	SWAN, WALLACE B	8.0
EMPNAME	TOTAL	URYC, BRUNO, JR	40.0
EMPNAME	TOTAL	VORSE, JAMES Y	147.5
ACT-CODE	TOTAL		388.5

## SR1 SITE PUBLIC RELATIONS

EMPNAME	TOTAL	MAXWELL, GEORGE F	42.0
ACT-CODE	TOTAL		42.0
YR	TOTAL		3,378.5

FOR FISCAL YEAR '83

NOT RELATED TO AN ACTIVITY CODE

EMPNAME	TOTAL	JOHNSON, ARTHUR H	12.0
EMPNAME	TOTAL	NORRIS, TIMOTHY L	72.0
ACT-CODE	TOTAL		84.0

*rel p to R on #v*

## BR1 REACTIVE PREPARATION

EMPNAME	TOTAL	ANG, WILLIAM P	8.0
EMPNAME	TOTAL	ELDROD, STEPHEN	5.0
EMPNAME	TOTAL	FREDRICKSON, PAUL E	4.0
EMPNAME	TOTAL	GIBBONS, THOMAS D	7.0
EMPNAME	TOTAL	GIRARD, EDWARD H	2.0
EMPNAME	TOTAL	JACKSON, LOUIE H	4.0
EMPNAME	TOTAL	MAXWELL, GEORGE F	24.0
EMPNAME	TOTAL	PREVETTE, RICHARD L	24.0
ACT-CODE	TOTAL		78.0



U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
-----			
C01 DOCKET TRAVEL			
EMPNME	TOTAL	ANG, WILLIAM P	22.0
EMPNME	TOTAL	CGLEY, JAMES L JR	4.0
EMPNME	TOTAL	ECONOMOS, NICK	7.0
EMPNME	TOTAL	ELDROD, STEPHEN	13.0
EMPNME	TOTAL	FREDRICKSON, PAUL E	15.0
EMPNME	TOTAL	GIBBONS, THOMAS D	4.0
EMPNME	TOTAL	GIRARD, EDWARD H	6.0
EMPNME	TOTAL	HARRIS, JOHN R	17.0
EMPNME	TOTAL	HEATHERLY, THEODORE	6.0
EMPNME	TOTAL	JACKSON, LOUIE H	15.0
EMPNME	TOTAL	JOHNSON, ARTHUR H	3.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	5.0
EMPNME	TOTAL	LENAHAN, JOE	15.0
EMPNME	TOTAL	LIU, WAN-CHENG	9.0
EMPNME	TOTAL	MAXWELL, GEORGE F	8.0
EMPNME	TOTAL	MCFARLAND, CHARLES R	8.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	10.5
EMPNME	TOTAL	MILLER, WILLIAM H JR	3.0
EMPNME	TOTAL	PREVETTE, RICHARD L	8.0
EMPNME	TOTAL	RUFF, ALBERT B	12.0
EMPNME	TOTAL	TOBIN, WILLIAM J	8.0
EMPNME	TOTAL	WRIGHT, ROBERT W	4.0
EMPNME	TOTAL	YORK, JOHN W	15.0
ACT-CODE	TOTAL		217.5
DR1 REACTIVE DOCUMENTATION			
EMPNME	TOTAL	ANG, WILLIAM P	60.0
EMPNME	TOTAL	GIBBONS, THOMAS D	22.0
EMPNME	TOTAL	GIRARD, EDWARD H	11.0
EMPNME	TOTAL	JACKSON, LOUIE H	28.0
EMPNME	TOTAL	LENAHAN, JOE	11.0
EMPNME	TOTAL	MAXWELL, GEORGE F	6.0
EMPNME	TOTAL	URYC, BRUNO	1.0
ACT-CODE	TOTAL		139.6

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - DL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
DOC ROUTINE DOCUMENTATION			
EMPNME	TOTAL	ECONOMOS, NICK	20.0
EMPNME	TOTAL	ELDROD, STEPHEN	4.0
EMPNME	TOTAL	FREDRICKSON, PAUL E	109.0
EMPNME	TOTAL	GIBBONS, THOMAS D	29.0
EMPNME	TOTAL	HARDIN, AUSTIN K	140.0
EMPNME	TOTAL	HARRIS, JOHN R	67.0
EMPNME	TOTAL	HEATHERLY, THEODORE	8.0
EMPNME	TOTAL	HEHL, CHARLES W	7.0
EMPNME	TOTAL	JACKSON, LOUIE H	22.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	54.0
EMPNME	TOTAL	LENAHAN, JOE	24.0
EMPNME	TOTAL	LIU, WAN-CHENG	47.0
EMPNME	TOTAL	MAXWELL, GEORGE F	65.0
EMPNME	TOTAL	MCFARLAND, CHARLES R	36.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	30.0
EMPNME	TOTAL	MILLER, WILLIAM H JR	8.0
EMPNME	TOTAL	PREVETTE, RICHARD L	42.0
EMPNME	TOTAL	RUFF, ALBERT B	4.0
EMPNME	TOTAL	WRIGHT, ROBERT W	27.0
EMPNME	TOTAL	YORK, JOHN W	44.0
ACT-CODE	TOTAL		787.0

LEP LICENSING - EMERGENCY PREPAREDNESS

EMPNME	TOTAL	WRIGHT, ROBERT W	24.0
ACT-CODE	TOTAL		24.0

PAP ROUTINE PREPARATION

EMPNME	TOTAL	ECONOMOS, NICK	4.0
EMPNME	TOTAL	FREDRICKSON, PAUL E	5.0
EMPNME	TOTAL	GIBBONS, THOMAS D	11.0
EMPNME	TOTAL	HARRIS, JOHN R	13.0
EMPNME	TOTAL	HEATHERLY, THEODORE	4.0
EMPNME	TOTAL	JACKSON, LOUIE H	18.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	30.0
EMPNME	TOTAL	LENAHAN, JOE	7.0

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - DL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
PAP ROUTINE PREPARATION			
EMPNME	TOTAL	LIU, WAN-CHENG	10.0
EMPNME	TOTAL	MAXWELL, GEORGE F	36.0
EMPNME	TOTAL	MCFARLAND, CHARLES R	22.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	34.0
EMPNME	TOTAL	MILLER, WILLIAM H JR	4.0
EMPNME	TOTAL	PREVETTE, RICHARD L	18.0
EMPNME	TOTAL	RUFF, ALBERT B	24.0
EMPNME	TOTAL	WRIGHT, ROBERT W	2.0
EMPNME	TOTAL	YORK, JOHN W	16.0
ACT-CODE	TOTAL		259.0
PE1 ENFORCEMENT			
EMPNME	TOTAL	MAXWELL, GEORGE F	12.0
EMPNME	TOTAL	PREVETTE, RICHARD L	6.0
ACT-CODE	TOTAL		18.0
PP1 ROUTINE INSPECTION			
EMPNME	TOTAL	BELISLE, GEORGE A	6.0
EMPNME	TOTAL	COLEY, JAMES L JR	1.0
EMPNME	TOTAL	CROWLEY, BILLY R	2.0
EMPNME	TOTAL	ECONOMOS, NICK	33.0
EMPNME	TOTAL	ELDROD, STEPHEN	5.0
EMPNME	TOTAL	FREDRICKSON, PAUL E	39.0
EMPNME	TOTAL	GIBBONS, THOMAS D	5.0
EMPNME	TOTAL	HARDIN, AUSTIN K	52.0
EMPNME	TOTAL	HARRIS, JOHN R	85.0
EMPNME	TOTAL	HEATHERLY, THEODORE	30.0
EMPNME	TOTAL	HEHL, CHARLES W	2.0
EMPNME	TOTAL	JACKSON, LOUIE H	47.0
EMPNME	TOTAL	KLEINSORGE, WILLIAM P	117.0
EMPNME	TOTAL	LENAHAN, JOE	43.0
EMPNME	TOTAL	LIU, WAN-CHENG	50.0
EMPNME	TOTAL	MAXWELL, GEORGE F	758.0
EMPNME	TOTAL	MCFARLAND, CHARLES R	30.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	23.0

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
 FROM CP ISSUE DATE THROUGH END FY '83

REGION II - OL REVIEW  
 05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
PP1 ROUTINE INSPECTION			
EMPNME	TOTAL	MILLER, WILLIAM H JR	13.0
EMPNME	TOTAL	PREVETTE, RICHARD L	557.0
EMPNME	TOTAL	RUFF, ALBERT B	48.0
EMPNME	TOTAL	TAYLOR, PETER A	19.0
EMPNME	TOTAL	TOBIN, WILLIAM J	16.0
EMPNME	TOTAL	WRIGHT, ROBERT W	20.0
EMPNME	TOTAL	YORK, JOHN W	96.0
ACT-CODE	TOTAL		2,097.0

PR1 REACTIVE ONSITE/OFFSITE INSPECTION

EMPNME	TOTAL	ANG, WILLIAM P	134.0
EMPNME	TOTAL	ELDROD, STEPHEN	17.0
EMPNME	TOTAL	FREDRICKSON, PAUL E	28.0
EMPNME	TOTAL	GIBBONS, THOMAS D	57.0
EMPNME	TOTAL	HARDIN, AUSTIN K	4.0
EMPNME	TOTAL	HARRIS, JOHN R	27.0
EMPNME	TOTAL	JACKSON, LOUIE H	35.0
EMPNME	TOTAL	LENAHAN, JOE	16.0
EMPNME	TOTAL	MAXWELL, GEORGE F	64.0
EMPNME	TOTAL	MERRIWEATHER, NORMAN	58.0
EMPNME	TOTAL	MILLER, WILLIAM H JR	6.0
EMPNME	TOTAL	PREVETTE, RICHARD L	50.0
EMPNME	TOTAL	RUFF, ALBERT B	7.0
EMPNME	TOTAL	URYC, BRUND	2.0
EMPNME	TOTAL	WRIGHT, ROBERT W	6.0
ACT-CODE	TOTAL		511.0

P1V INVESTIGATION

EMPNME	TOTAL	GIRARD, EDWARD H	17.0
EMPNME	TOTAL	HARRIS, JOHN R	4.0
EMPNME	TOTAL	MAXWELL, GEORGE F	46.0
EMPNME	TOTAL	PREVETTE, RICHARD L	68.0
EMPNME	TOTAL	RUFF, ALBERT B	17.0
EMPNME	TOTAL	TODD, GREGORY A	36.0
ACT-CODE	TOTAL		188.0

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FROM CP ISSUE DATE THROUGH END FY '83

REGION II - DL REVIEW  
05000400 HARRIS 1

EMPLOYEE NAME REGULAR HOURS

QAT QA CHANGE REVIEWS & TOPICALS

EMPNAME TOTAL ACT-CODE TOTAL EMPNAME REGULAR HOURS  
WRIGHT, ROBERT W 19.0  
19.0

SRI SITE PUBLIC RELATIONS

EMPNAME TOTAL ACT-CODE TOTAL EMPNAME REGULAR HOURS  
GIBBONS, THOMAS B 2.0  
MAYWELL, GEORGE F 7.0  
PREVETTE, RICHARD L 5.0  
14.0  
4,435.5  
15,468.1

09/21/84

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FOR BLANK ACT-CODES FROM CP ISSUE DATE THROUGH END FY '83

*Roz*

REGION II - OL REVIEW  
05000400 HARRIS 1

		EMPLOYEE NAME	REGULAR HOURS
FOR FISCAL YEAR '83			
1321		POWER FACIL. REPLACEMENT EXAM	
EMPNAME	TOTAL	NORRIS, TIMOTHY L	16.0
PA-NUM	TOTAL		16.0
134 CERTIFICATION EXAMINATIONS			
EMPNAME	TOTAL	JOHNSON, ARTHUR H	12.0
EMPNAME	TOTAL	NORRIS, TIMOTHY L	56.0
PA-NUM	TOTAL		68.0
YR	TOTAL		84.0
DOCKETNO	TOTAL		84.0

*See p 271*  
*Roz*

09/20/84

Run 3

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKETS  
FOR FISCAL YEAR '84 THRU 06/23/84

PAGE 51

REGION II - OL REVIEW  
05000400 HARRIS 1

	REVIEWER INITIALS	NAME OF REVIEWER	REGULAR HOURS
APD ROUTINE DOCUMENTATION			
REV-INIT TOTAL	AER	ABRUFF	10.0
REV-INIT TOTAL	AKH	AKHARDIN	85.0
REV-INIT TOTAL	DKW	DKWALTERS	32.0
REV-INIT TOTAL	EHG	EHGIRARD	1.0
REV-INIT TOTAL	GFM	GFMAXWELL	57.0
REV-INIT TOTAL	JHO	JRHARRIS	32.0
REV-INIT TOTAL	LHJ	LJACKSON	20.0
REV-INIT TOTAL	MNH	MDHUNT	24.0
REV-INIT TOTAL	NGM	N MERRIWEATHER	20.0
REV-INIT TOTAL	PEF	PEFREDRICKSON	4.0
REV-INIT TOTAL	PEK	WPKLEINSORGE	82.0
REV-INIT TOTAL	RHR	RWRRIGHT	44.0
REV-INIT TOTAL	RKP	RLPREVETTE	60.0
REV-INIT TOTAL	WBS	WBSWAN	10.0
ACT-CODE TOTAL			481.0
API ROUTINE ON-SITE/OFF-SITE INSPECTION			
REV-INIT TOTAL	AER	ABRUFF	10.0
REV-INIT TOTAL	AKH	AKHARDIN	41.0
REV-INIT TOTAL	CQH	CMHOSEY	8.0
REV-INIT TOTAL	DKW	DKWALTERS	32.0
REV-INIT TOTAL	GFM	GFMAXWELL	692.0
REV-INIT TOTAL	JHO	JRHARRIS	28.0
REV-INIT TOTAL	LHJ	LJACKSON	34.0
REV-INIT TOTAL	MNH	MDHUNT	23.0
REV-INIT TOTAL	NGM	N MERRIWEATHER	32.0
REV-INIT TOTAL	PEK	WPKLEINSORGE	133.0
REV-INIT TOTAL	PGT	PATAYLOR	16.0
REV-INIT TOTAL	RHR	RWRRIGHT	33.5
REV-INIT TOTAL	RKP	RLPREVETTE	690.0
REV-INIT TOTAL	TRC	TRCOLLINS	5.0
ACT-CODE TOTAL			1,777.5
APP ROUTINE INSPECTION PREPARATION			
REV-INIT TOTAL	AER	ABRUFF	18.0
REV-INIT TOTAL	AKH	AKHARDIN	2.0
REV-INIT TOTAL	GFM	GAHALLSTROM	24.0
REV-INIT TOTAL	GFM	GFMAXWELL	38.0

09/20/84

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKETS  
FOR FISCAL YEAR '84 THRU 06/23/84

PAGE 52

REGION II - OL REVIEW  
0500400 HARRIS 1

	REVIEWER INITIALS	NAME OF REVIEWER	REGULAR HOURS
APP ROUTINE INSPECTION PREPARATION			
REV-INIT TOTAL	GRW	GRWISEMAN	64.0
REV-INIT TOTAL	JHO	JRHARRIS	4.0
REV-INIT TOTAL	LHJ	LHJACKSON	16.0
REV-INIT TOTAL	MNH	MDHUNT	8.0
REV-INIT TOTAL	NGH	N MERRIWEATHER	8.0
REV-INIT TOTAL	PEK	WPKLEINSORGE	59.0
REV-INIT TOTAL	PEM	PCMCPHAIL	1.0
REV-INIT TOTAL	RHR	RWWRIGHT	12.0
REV-INIT TOTAL	RKP	RLPREVETTE	36.0
ACT-CODE TOTAL			290.0
ARD REACTIVE DOCUMENTATION			
REV-INIT TOTAL	AKH	AKHARDIN	4.0
REV-INIT TOTAL	BAU	B URYC	2.0
REV-INIT TOTAL	CIL	WCLIU	4.0
REV-INIT TOTAL	DGN	DENORMAN	40.0
REV-INIT TOTAL	DTM	DOMYERS	1.0
REV-INIT TOTAL	JWL	JBLANKFORD	20.0
REV-INIT TOTAL	PAA	WPANG	32.0
REV-INIT TOTAL	WBS	WBSWAN	24.0
ACT-CODE TOTAL			127.0
ARI REACTIVE ON-SITE/OFF-SITE INSPECTION			
REV-INIT TOTAL	AER	ABRUFF	9.0
REV-INIT TOTAL	CIL	WCLIU	4.0
REV-INIT TOTAL	DGN	DENORMAN	28.0
REV-INIT TOTAL	GFM	GFMAXWELL	112.0
REV-INIT TOTAL	JHO	JRHARRIS	25.0
REV-INIT TOTAL	LHJ	LHJACKSON	3.0
REV-INIT TOTAL	NGM	N MERRIWEATHER	8.0
REV-INIT TOTAL	PAA	WPANG	51.0
REV-INIT TOTAL	PEK	WPKLEINSORGE	31.0
REV-INIT TOTAL	RHR	RWWRIGHT	19.0
REV-INIT TOTAL	RKP	RLPREVETTE	98.0
REV-INIT TOTAL	TDG	TDGIBBONS	4.0
ACT-CODE TOTAL			392.0



09/20/84

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKETS  
FOR FISCAL YEAR '84 THRU 06/23/84

PAGE 53

REGION II - OL REVIEW  
05070400 HARRIS 1

		REVIEWER INITIALS	NAME OF REVIEWER	REGULAR HOURS
-----				
ARP REACTIVE INSPECTION PREPARATION				
REV-INIT	TOTAL	GFM	GFMAXWELL	10.0
REV-INIT	TOTAL	PAA	WPANG	8.0
REV-INIT	TOTAL	RKP	RLPREVETTE	8.0
ACT-CODE	TOTAL			26.0
AS1				
REV-INIT	TOTAL	GFM	GFMAXWELL	4.0
REV-INIT	TOTAL	RKP	RLPREVETTE	4.0
ACT-CODE	TOTAL			8.0
AT INSPECTION-RELATED TRAVEL				
REV-INIT	TOTAL	AER	ABRUFF	5.0
REV-INIT	TOTAL	BWJ	BWJONES	16.0
REV-INIT	TOTAL	DGN	DENORMAN	12.0
REV-INIT	TOTAL	DKW	DKWALTERS	8.0
REV-INIT	TOTAL	GFM	GFMAXWELL	36.0
REV-INIT	TOTAL	JHO	JRHARRIS	8.0
REV-INIT	TOTAL	LHJ	LHJACKSON	6.0
REV-INIT	TOTAL	MNH	MDHUNT	9.0
REV-INIT	TOTAL	NGM	N MERRIWEATHER	8.0
REV-INIT	TOTAL	PAA	WPANG	9.0
REV-INIT	TOTAL	PEK	WPKLEINSORGE	25.0
REV-INIT	TOTAL	PEM	PCMCPHAIL	4.0
REV-INIT	TOTAL	RHR	RWWRIGHT	6.5
REV-INIT	TOTAL	RY.P	RLPREVETTE	38.0
REV-INIT	TOTAL	WBS	WBSWAN	8.0
ACT-CODE	TOTAL			198.5
BA1 NORMAL ENFORCEMENT ACTIVITIES				
REV-INIT	TOTAL	GFM	GFMAXWELL	6.0
REV-INIT	TOTAL	NGM	N MERRIWEATHER	1.0
ACT-CODE	TOTAL			7.0
BA2 ESCALATED ENFORCEMENT ACTIVITIES				
REV-INIT	TOTAL	DGN	DENORMAN	10.0
REV-INIT	TOTAL	GFM	GFMAXWELL	12.0

09/20/84

U.S.N.R.C. MANPOWER SYSTEM  
 REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKETS  
 FOR FISCAL YEAR '84 THRU 06/23/84

PAGE 54

REC'D ON II - OL REVIEW  
 054 0400 HARRIS 1

	REVIEWER INITIALS	NAME OF REVIEWER	REGULAR HOURS
BA2 ESCALATED ENFORCEMENT ACTIVITIES			
REV-INIT TOTAL	RKP	RLPREVETTE	8.0
ACT-CODE TOTAL			30.0
BB SALP			
REV-INIT TOTAL	AKH	AKHARDIN	6.0
REV-INIT TOTAL	DHP	D PRICE	1.0
REV-INIT TOTAL	GFM	GFMAXWELL	33.0
REV-INIT TOTAL	HAM	WHMILLER	6.0
REV-INIT TOTAL	JHO	JRHARRIS	33.0
REV-INIT TOTAL	MNH	MDHUNT	43.0
REV-INIT TOTAL	PAA	WPANG	16.0
REV-INIT TOTAL	PEK	WPKLEINSORGE	21.0
REV-INIT TOTAL	RHR	RWRRIGHT	23.5
REV-INIT TOTAL	RKP	RLPREVETTE	40.0
REV-INIT TOTAL	TLM	TCMACARTHUR	6.0
ACT-CODE TOTAL			228.5
BD2 RESPONSE TO EVENTS/INCIDENTS			
REV-INIT TOTAL	EJW	E WORKMAN	14.0
REV-INIT TOTAL	PEM	PCMCPHAIL	14.0
ACT-CODE TOTAL			28.0
BE TECHNICAL SUPPORT FOR INVESTIGATIONS			
REV-INIT TOTAL	BAU	B URYC	4.0
REV-INIT TOTAL	EHG	EHGIRARD	1.5
REV-INIT TOTAL	GET	GATODD	4.0
REV-INIT TOTAL	JHO	JRHARRIS	5.0
REV-INIT TOTAL	JWL	JBLANKFORD	12.0
REV-INIT TOTAL	MNH	MDHUNT	2.0
REV-INIT TOTAL	PEK	WPKLEINSORGE	4.0
ACT-CODE TOTAL			32.5
BF LABORATORY TECHNICIAN ACTIVITIES			
REV-INIT TOTAL	EJW	E WORKMAN	64.0
ACT-CODE TOTAL			64.0

09/20/84

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKETS  
FOR FISCAL YEAR '84 THRU 06/23/84

PAGE 55

REGION II - OL REVIEW  
05000400 HARRIS 1

	REVIEWER INITIALS	NAME OF REVIEWER	REGULAR HOURS
BH QUALITY ASSURANCE REVIEWS			
REV-INT TOTAL	GKB	GABELISLE	2.0
REV-INT TOTAL	RHR	RWWRIGHT	5.0
ACT-CODE TOTAL			7.0
BJ ALLEGATION FOLLOW-UP			
REV-INT TOTAL	GFM	GFMAXWELL	2.0
REV-INT TOTAL	JHO	JRHARRIS	16.0
REV-INT TOTAL	PEK	WPKLEINSORGE	0
REV-INT TOTAL	RKP	RLPREVETTE	2.0
ACT-CODE TOTAL			20.0
NRR NRR TAC-RELATED ACTIVITY			
REV-INT TOTAL	JMU	JFMUNRO	2.0
REV-INT TOTAL	LGL	LLLAWYER	7.0
REV-INT TOTAL	LTN	TLNORRIS	12.0
REV-INT TOTAL	TBR	T ROGERS	3.0
ACT-CODE TOTAL			24.0
DOCKET NO TOTAL			3,741.0

*Accept  
Range 4*

09/20/84

U.S.N.R.C. MANPOWER SYSTEM  
REGULAR MAN HOURS EXPENDED FOR THE SELECTED DOCKET  
FOR BLANK ACTIVITY CODES FOR FISCAL YEAR '84 THRU 06/23/84

PAGE 5

*Row 4*

REGION II - OL REVIEW  
05000400 HARRIS 1

	REVIEWER INITIALS	NAME OF REVIEWER	REGULAR HOURS
	131	POWER FACILITY INITIAL EXAMS	
REV-INIT TOTAL	LTN	TLNORRIS	12.0
REV-INIT TOTAL	TBR	T ROGERS	3.0
PA-NUM TOTAL			15.0
	134	CERTIFICATION EXAMINATIONS	
REV-INIT TOTAL	JMU	JFMUNRO	2.0
REV-INIT TOTAL	LGL	LLLAWYER	7.0
PA-NUM TOTAL			9.0
DOCKETNO TOTAL			24.0

*per P 15  
per #3*

DISTRIBUTION:  
 PDR  
 LPDR  
 LFMB Actual Manpower File  
 RMDiggs, LFMB  
 CJHolloway, LFMB ←  
 Reg Docket File  
 DWeiss, LFMB  
 LFMB Reactor File  
 LSolander, NRR  
 MKaltman, NRR

Docket No. 50-354

DEC 28 1984

Public Service Electric and Gas Company  
 ATTN: Mr. R. L. Mittl, General Manager  
 Nuclear Assistance and Regulation  
 80 Park Plaza T22A  
 Newark, New Jersey 07101

Gentlemen:

As you are aware, 10 CFR 170 of the Commission's regulations for license and inspection fees was revised effective June 20, 1984. Section 170.12(b) of the revised rule provides that for applications for permits, licenses, facility reference design approvals, and special projects which have been on file with the Commission for review for six months or longer, the first bill for accumulated review costs would be sent to the applicant at the time the rule becomes effective and thereafter at six-month intervals or when the review is completed, whichever is earlier. The first bill for the operating license (OL) review will include applicable professional staff review time expended through June 23, 1984, and contractual support services expended to May 31, 1984. Subsequent bills covering six-month reviews will be issued approximately ninety days after the end of each six-month period which closes in December and June of each year.

Consistent with the requirements of 10 CFR 170.12(b), we have completed the cost analysis for the Hope Creek 1 OL application review for the period specified above. The cost through that period is \$1,268,587. The Office of Resource Management has been notified to bill your Company for this amount. When making payment, please make reference to the invoice number on your bill.

Enclosed is a copy of the revision to Part 170 as sent to all applicants and licensees on May 24, 1984.

Sincerely,

Original Signed by  
 Wm. O. Miller

William O. Miller, Chief  
 License Fee Management Branch  
 Office of Administration

8501070638 (1P.)

Enclosure:

OFFICE	Revision to Part 170 w/Notice	LFMB:ADM	LFMB:ADM	LFMB:ADM
SUNNAM	of 5/24/84	eb	oway	WOMiller
DATE		12/27/84	12/27/84	12/27/84