NRC FORM 313
(1-84)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires: 5-31-87

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

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U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
631 PARK AVENUE
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

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U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
799 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

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MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

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U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR *(Check appropriate item)*

- [ ] A. NEW LICENSE
- [ ] B. AMENDMENT TO LICENSE NUMBER _____
- [X] C. RENEWAL OF LICENSE NUMBER 13-18945-01

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include Zip Code)*

Hoosier Energy REC, Inc.
P.O. Box 908
Bloomington, IN 47402

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

Hoosier Energy REC, Inc.
Merom Generating Station
Merom, IN 47861

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Dale D. Winter, Manager Power Production

TELEPHONE NUMBER: 812/876-2021

SUBMIT ITEMS 5 THROUGH 11 ON 8½ x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.

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7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSEE FEES *(See 10 CFR 170 and Section 170.31)*
FEE CATEGORY: Renewal
AMOUNT ENCLOSED: $ 150.00

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SIGNATURE–CERTIFYING OFFICER	TYPED/PRINTED NAME	TITLE	DATE
Dale D. Winter	Dale D. Winter	Manager Power Production	5/29/85

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS
- [ ] <$250K
- [ ] $250K–500K
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b. NUMBER OF EMPLOYEES *(Total for entire facility excluding outside contractors)*

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d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION *(dollar and/or staff hours)* ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? *(NRC regulations permit it to protect confidential commercial or financial–proprietary information furnished to the agency in confidence)*
- [ ] YES
- [ ] NO

RECEIVED
JUN 03 1985

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
Ren	Item	3P	8507120106 850614 REG3 LIC30 13-18945-01 PDR	REGION III

AMOUNT RECEIVED: $150 $30 Refunded
CHECK NUMBER: 033216
CONTROL NO.: 7910 7
DATE: 6/13/85

PRIVACY ACT STATEMENT ON THE REVERSE

PRIVACY ACT STATEMENT

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1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.

3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.

5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

Hoosier Energy REC, Inc.
Merom Generating Station
Renewal Application
May 29, 1985

NRC Material License
#13-18945-01

Item 5	Element & Mass No.	Chemical Physical Form	Max. Amt. Possessed
A.	Cesium 137	Sealed	4 @ 100 Millicuries
B.	Cesium 137	Sealed	12 @ 100 Millicuries
C.	Cesium 137	Sealed	96 @ 100 Millicuries

Item 6

A. Nuclear source and detector used to determine density of $CaSO_4$ Slurry at the F.G.D. Sludge Thickness System.

B. Nuclear source and detector used to determine coal pipe voids between bunker outlet and rotary coal feeder inlet.

C. Nuclear source and detector used to determine level of flyash buildup in electrostatic precipitator hopper.

Item 7

Radiation Protection Officer - Dennis Watson, Plant Engineer

Equipment Users and/or Supervisors -

Robert Heacox, Control and Instrument Supervisor
Les King, Control and Instrument Supervisor

Resumes Attached

Item 8

A. The manufacturer furnished us with detailed instructions on the proper precautions to be taken in utilizing these devices. Specific items of design detail, shutter operation, beam geometry, radiation levels and regulatory compliance were presented by trained personnel of Texas Nuclear at the time these devices were installed.

B&C Kay-Ray, Inc. and Merrick Scale Manufacturing Company furnished us with detailed instructions on the proper precautions to be taken in utilizing these devices. Specific items of design detail, shutter operation, beam geometry, radiation levels and regulatory compliance were presented by trained personnel of Kay-Ray, Inc. at the time these devices were installed.

As personnel changes occur, this training will be repeated as necessary.

Item 9

A. Texas Nuclear Division, Model #570-57157C

B. Kay-Ray, Inc., Model #7700D

C. Kay-Ray, Inc., Model #7700D

All detectors are used for the purposes described in Item 6 at a 980 megawatt coal-fired steam electric generating station equipped with electrostatic precipitators and a flue gas desulfurization system.

Item 10

A. Based upon working conditions and physical accessibility, we estimate that two (2) people would routinely be within three (3) feet of any of these devices one-half hour per week.

B. Based upon working conditions and physical accessibility, we estimate that six (6) people would routinely be within three (3) feet of any of these devices one-half hour per week.

C. Based upon working conditions and physical accessibility, we estimate that five (5) people would routinely be within twenty-five (25) feet of any of these devices one (1) hour per week.

No radition detection instrumentation is necessary to safely process and utilize these devices.

Our personnel have been instructed that they are not to remove the source holders under any circumstances. There is no access to beam area as long as the source holders are installed.

The manufacturers will perform the radiation survey, servicing, maintenance and repair. Additionally, our personnel received specific training at the time of installation. This training included construction features of the device, source integrity and operating details of the device.

The source holders will be tested for source integrity at least once every three years.

The manufacturers will perform the leak testing on the source holder. The leak test kit used by Kay-Ray is either the General Radioisotope Products WT-4 kit, or Kay-Ray, Inc. Model A kit which have been approved by the NRC for use in the source wiping of Kay-Ray source holders.

In the event some catastrophic emergency occurs and these devices may be involved, we will notify the manufacturers, and the Region III office of the U.S. Nuclear Regulatory Commission. Also, the area of the source holder will be barricaded until inspected by a qualified person.

Item 11 No waste disposal is involved. In the event that the gauge is damaged or its use discontinued, we shall notify the manufacturer for removal and return the gauge for repair or disposal of the source material.

RESUME

Dennis Watson
R.R. #3, Box 430
Sullivan, Indiana 47882
Home - 812/268-4992
Office - 812/356-4291

QUALIFICATIONS

Indiana Professional Engineer's License #20469

B.S., Mechanical Engineering, Rose Hulman Institute of Technology, Terre Haute, Indiana, May, 1978

Associate Member, American Society of Mechanical Engineers

EXPERIENCE

Promoted to Plant Engineer - 5/20/85

Efficiency Engineer, Hoosier Energy R.E.C., Merom Generating Station, Merom, Indiana from April, 1980 to ~~present~~ Oct. 1983. Responsibilities at this 980 Megawatt Power Plant include: plant engineering and design, performance testing, vibration analysis and balancing of all rotating equipment, preparation of operating reports, equipment inspection and documentation, operation of an ambient air monitoring network, relief supervision of Chemical and Instrument Departments.

Assistant Engineer, Central Illinois Public Service Co., Hutsonville Power Station, Hutsonville, Illinois from June 1978 to April 1980. Responsibilities at this 200 Megawatt Power Plant included: water chemistry, plant engineering and design, performance testing, relief supervision of Results Department.

BACKGROUND

Born 11/2/56 in Danville, Illinois

Married - June, 1978

Parent of a son born during November, 1982

Enjoy music, sports, video

EMPLOYMENT

1981 - PRES INSTRUMENT AND CONTROLS SUPERVISOR

Hoosier Energy, an Electrical Generation and Transmission Cooperative. At H.E.'s Merom Generating Station, responsible for the management and supervision of instrument and controls maintenance, including preparation of annual budget. Performed all instrument calibration and control tuning during the preoperational testing and startup of two 490 megawatt coal fired electrical generating units. Control systems at Merom include: Westinghouse 7300, Honeywell TDC 2000, Forney CQ3, Allen-Bradley PLC, Westinghouse W2500 computer and Westinghouse Digital Electrohydraulic Turbine controls.

1980 - 1981 PROJECT TEST ENGINEER

Dravo Corporation, a Pittsburgh Engineering and Construction Firm. At Dravo's Cleveland Research Center, supervised the rebuilding and Preoperational testing of a pilot production plant to extract oil from oil shale. Responsibilities included supervision of construction scheduling, purchasing, field engineering, instrument installation and calibration, design coordination, procedure preparation and preoperational testing of equipment and systems.

1979 - 1980 PROJECT TEST ENGINEER

Dravo Corporation. Supervised the testing and startup staff at the Citizens Gas & Coke Utilities 5 Meter Coke Oven Battery and By-Products Recovery Plant at Indianapolis, Indiana. Planned, scheduled and coordinated construction completion, preoperational testing of equipment and systems, commissioning of the process instrumentation and release of operational equipment to the customer.

1978 - 1979 PROJECT ENGINEER

International Start-Up and Testing Services, Inc., a Pittsburgh Testing Firm. Assignments included:

Field evaluation of Preventive Maintenance requirements for several municipal electrical utilities' distribution equipment and protective relaying.

Electrical Field Engineering for a modification to the Material Handling System at Allied Chemical Corporation's Ashland, Kentucky Coke Facility.

Field Start-Up Assistance at Reynolds International Inc. Venalum Aluminum Smelting Facility in Ciudad Guayana, Venezuela. Redesigned controls for the automated anode fabrication facility; and placed same into production.

1975 - 1978 SENIOR START-UP ENGINEER

Dravo Corporation. Performed Preoperational testing and start-up duties at the following facilities:

Sidbec Normines Iron Ore Pelletizing Plant at Port Cartier, P.Q., Canada. Commissioned the Ore Grinding lines consisting of conveyor belts, vibratory feeders, weigh feeders, slurry pumps, 6,000 horsepower ball mills, process instrumentation and controls and programmable control equipment.

Samarco Mineracao, Guarapari, Brazil Iron Ore Pelletizing Plant., Tested and commissioned the ore and pellet handling, stock piling, sampling and shiploading facility including high capacity variable speed belt conveyors, 8,000 metric ton per hour stacker, stacker-reclaimer, shiploader and 13.8 KV electrical distribution system for this equipment.

Dravo Lime Company Cabin Creek Limestone Mine and Calcining Facility at Maysville, Kentucky. Tested and commissioned the 69/4.16 KV/480 VAC Electrical distribution system; conveying, screening, crushing and grinding equipment; Process fans; barge loading machinery; and process instrumentation.

1974 - 1975 PLANT MAINTENANCE ENGINEER

Nuclear Services Corporation, a California Consulting Firm.

As a member of the commissioning crew at the Trojan Nuclear Plant owned by Portland General Electric Co., tested, calibrated and commissioned the plant instrumentation (electronic and pneumatic), controls and protection system, including the central data logging computer.

Participated in the development of an extensive system of preventive maintenance for the instrumentation and control equipment at Kewaunee Nuclear Station near Two Rivers, Wisconsin. System included detailed maintenance procedures and computerized scheduling and tracking capabilities.

1971 - 1974 TECHNICAL SUPERVISOR

Inflight Services Inc. - Honolulu office. Supervised shift technicians in the performance of maintenance activities on automated entertainment equipment installed in commercial jet aircraft.

1965 - 1971 NUCLEAR REACTOR OPERATOR/INSTRUMENT TECH
United States Naval Submarine Service. Served as Reactor Operator and Instrument Technician aboard two nuclear submarines; The USS Tecumseh and the USS Haddock.

EDUCATION & TRAINING

Presently enrolled in Indiana State University School of Technology majoring in Applied Computer Technology (senior).

Have attended various professional development seminars and courses in the fields of management, process instrumentation and controls, and manufacturing automation.

Designated as Engineer in Training (EIT) by the State of California by state wide exam in 1975.

Attended US Naval Schools for two years including: Electronics, physics, chemistry, heat transfer & fluid flow, electrical maintenance, instrument calibration & repair, mechanical equipment maintenance and nuclear power plant operations.

Attended and graduated from Worthington-Jefferson High School, Worthington Indiana in 1965.

PERSONAL

BORN APRIL 28, 1947 IN Vincennes, Indiana; Height: 6' 0"; Weight: 180 lbs; married; one child; family in good health.

Hobbies include: Bicycling, canoeing and photography.

Leslie A. King
R.R.2 Box 289X
Clinton, In. 47842
(317) 832-6894

PERSONAL

Birthdate: December 22, 1953

Weight: 175

Height: 5'10"

Hair: Brown

Eyes: Blue

Sex: Male

Marital Status: Married

I live with my wife Debra and daughters Stephanie and Rachel.

EDUCATION

Elementary: Fontanet and Otter Creek Jr. Hi.
1959-1968

High School: Garfield 1968-1971

Other: Indiana Vocational Technical College
Wabash Region 1971-1973

Associate Degree/General Electronics Technology

Leeds & Northrup Recorder School
Gibson Generating Station Sept. 17-22, 1978

System Controls
Public Service Indiana 1979

WORK EXPERIENCE

June-August 1970 Terre Haute Oil Co.
2500 Poplar Street
Terre Haute, In.
Attendant

April 1971-May 1973 Midwest Oil Co.
1831 N. 3rd Street
Terre Haute, In.
Attendant

May 1973-July 1973 Jack McDaniels T.V. Service
Paris, Illinois
T.V. Repair

July 1973-May 1974 Melvin Hill T.V. Service
Riley, In.
T.V. Repair

June 1974-Jan. 1981 Public Service Indiana
Wabash River Station
West Terre Haute, In.
Instrument Technician

Jan. 1981 to present Hoosier Energy REMC
Merom Generating Station
Sullivan, In.
Instrument Technician
Promoted to Instrument Supervisor
April 1983

EDUCATION

High School: Sept. 1968 to June 1971
Garfield High School
Terre Haute, In.

Studied on College Preparatory.

College: Sept. 1971 to May 1973
Indiana Vocational Technical College
Wabash Valley Region
South on U.S. 41
Terre Haute, In.
Graduated with two year Associate Degree in Electronics.
Studied basic theory of logic circuits, television applications, and trouble shooting techniques.
Developed skills in areas of maintaining transmitters, radar, and microwave.
Hold F.C.C. radio/telephone license and Indiana Radio & T.V. Service Tech License.
Leeds & Northrup School

WORK EXPERIENCE

June 1974-Jan. 1981 Public Service Indiana
Wabash River Station
Started as Station Helper in Maintenance Department. On March 9 1975 I bid to E & S Department.
worked with Instruments and Controls as a Technician.
Worked with Plat Engineer to Hectro fit turbines with New Supervisory Equipment.-GE & Westinghouse turbines.
Maintained Boiler Controls.
Five Boilers had Republic Pneumatic controls and one Bailey 721 series analog controls.

Jan. 1981 to Present Hoosier Energy REC., Inc.
Merom Generating Station
Started as an "B" Instrument Tech. worked as a "B" for 9 months then promoted to "A" Tech. In April of 1983 was promoted to Instrument Supervisor. During the time from Jan. 1981 the plant was in the process of check out of the cooling water systems and Aux. Boilers. These were the first systems to be started at the plant. I helped to complete check out and start up of the first two Combustion Control systems, made by westinghouse 7300 CCS. I have went through both start ups of 490 MW turbines. In those start ups I have experience in the following major control systems of the plant.

1. westinghouse 7300 Combustion Controls
2. westinghouse Main Turbine Controls (DE) and Supervisorys
3. westinghouse Boiler Feed Pump Control, which was a turbine.
4. Allen-Bradley Coal Handling Sys.
5. Boiler Damper Drives System- Westinghouse Wemac & Beck.
6. Water Treating Controls- Westinghouse Numa-logic control.
7. Worked in system redesign of our Ball tube mills. When original system was started up we found very unstable conditions at high loads or when moving load around.

Since being a supervisor I have started a spare parts inventory system and have maintained it. I also order most, if not all, of my own shop's spare parts & test equipment. I am now involved in developing a separate C & I Shop for our scrubber system. Since this plant is so new we also are just now setting up a PM program. Each individual Dept. is controlling it's own PM work.

CONTROL NO. 79107

NRC FORM 313
(1-84)
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KING OF PRUSSIA, PA 19406

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799 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

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SIGNATURE–CERTIFYING OFFICER	TYPED/PRINTED NAME	TITLE	DATE
D. D. Winter	Dale D. Winter	Manager Power Production	5/29/85

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PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.

3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.

5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

CONTROL NO. 7 9107

Hoosier Energy REC, Inc.
Merom Generating Station
Renewal Application
May 29, 1985

NRC Material License
#13-18945-01

Item 5	Element & Mass No.	Chemical Physical Form	Max. Amt. Possessed
A.	Cesium 137	Sealed	4 @ 100 Millicuries
B.	Cesium 137	Sealed	12 @ 100 Millicuries
C.	Cesium 137	Sealed	96 @ 100 Millicuries

Item 6

A. Nuclear source and detector used to determine density of $CaSO_4$ Slurry at the F.G.D. Sludge Thickness System.

B. Nuclear source and detector used to determine coal pipe voids between bunker outlet and rotary coal feeder inlet.

C. Nuclear source and detector used to determine level of flyash buildup in electrostatic precipitator hopper.

Item 7

Radiation Protection Officer - Dennis Watson, Plant Engineer

Equipment Users and/or Supervisors -

Robert Heacox, Control and Instrument Supervisor
Les King, Control and Instrument Supervisor

Resumes Attached

Item 8

A. The manufacturer furnished us with detailed instructions on the proper precautions to be taken in utilizing these devices. Specific items of design detail, shutter operation, beam geometry, radiation levels and regulatory compliance were presented by trained personnel of Texas Nuclear at the time these devices were installed.

B&C Kay-Ray, Inc. and Merrick Scale Manufacturing Company furnished us with detailed instructions on the proper precautions to be taken in utilizing these devices. Specific items of design detail, shutter operation, beam geometry, radiation levels and regulatory compliance were presented by trained personnel of Kay-Ray, Inc. at the time these devices were installed.

As personnel changes occur, this training will be repeated as necessary.

Item 9

A. Texas Nuclear Division, Model #570-57157C

B. Kay-Ray, Inc., Model #7700D

C. Kay-Ray, Inc., Model #7700D

All detectors are used for the purposes described in Item 6 at a 980 megawatt coal-fired steam electric generating station equipped with electrostatic precipitators and a flue gas desulfurization system.

Item 10

A. Based upon working conditions and physical accessibility, we estimate that two (2) people would routinely be within three (3) feet of any of these devices one-half hour per week.

B. Based upon working conditions and physical accessibility, we estimate that six (6) people would routinely be within three (3) feet of any of these devices one-half hour per week.

C. Based upon working conditions and physical accessibility, we estimate that five (5) people would routinely be within twenty-five (25) feet of any of these devices one (1) hour per week.

No radition detection instrumentation is necessary to safely process and utilize these devices.

Our personnel have been instructed that they are not to remove the source holders under any circumstances. There is no access to beam area as long as the source holders are installed.

The manufacturers will perform the radiation survey, servicing, maintenance and repair. Additionally, our personnel received specific training at the time of installation. This training included construction features of the device, source integrity and operating details of the device.

The source holders will be tested for source integrity at least once every three years.

The manufacturers will perform the leak testing on the source holder. The leak test kit used by Kay-Ray is either the General Radioisotope Products WT-4 kit, or Kay-Ray, Inc. Model A kit which have been approved by the NRC for use in the source wiping of Kay-Ray source holders.

In the event some catastrophic emergency occurs and these devices may be involved, we will notify the manufacturers, and the Region III office of the U.S. Nuclear Regulatory Commission. Also, the area of the source holder will be barricaded until inspected by a qualified person.

Item 11 No waste disposal is involved. In the event that the gauge is damaged or its use discontinued, we shall notify the manufacturer for removal and return the gauge for repair or disposal of the source material.

RESUME

Dennis Watson
R.R. #3, Box 430
Sullivan, Indiana 47882
Home - 812/268-4992
Office - 812/356-4291

QUALIFICATIONS

Indiana Professional Engineer's License #20469

B.S., Mechanical Engineering, Rose Hulman Institute of Technology, Terre Haute, Indiana, May, 1978

Associate Member, American Society of Mechanical Engineers

EXPERIENCE

Promoted to Plant Engineer - 5/20/85

Efficiency Engineer, Hoosier Energy R.E.C., Merom Generating Station, Merom, Indiana from April, 1980 to ~~Present~~ Oct. 1983. Responsibilities at this 980 Megawatt Power Plant include: plant engineering and design, performance testing, vibration analysis and balancing of all rotating equipment, preparation of operating reports, equipment inspection and documentation, operation of an ambient air monitoring network, relief supervision of Chemical and Instrument Departments.

Assistant Engineer, Central Illinois Public Service Co., Hutsonville Power Station, Hutsonville, Illinois from June 1978 to April 1980. Responsibilities at this 200 Megawatt Power Plant included: water chemistry, plant engineering and design, performance testing, relief supervision of Results Department.

BACKGROUND

Born 11/2/56 in Danville, Illinois

Married - June, 1978

Parent of a son born during November, 1982

Enjoy music, sports, video

EMPLOYMENT

1981 - PRES INSTRUMENT AND CONTROLS SUPERVISOR

Hoosier Energy, an Electrical Generation and Transmission Cooperative. At H.E.'s Merom Generating Station, responsible for the management and supervision of instrument and controls maintenance, including preparation of annual budget. Performed all instrument calibration and control tuning during the preoperational testing and startup of two 490 megawatt coal fired electrical generating units. Control systems at Merom include: Westinghouse 7300, Honeywell TDC 2000, Forney CQ3, Allen-Bradley PLC, Westinghouse W2500 computer and Westinghouse Digital Electrohydraulic Turbine controls.

1980 - 1981 PROJECT TEST ENGINEER

Dravo Corporation, a Pittsburgh Engineering and Construction Firm. At Dravo's Cleveland Research Center, supervised the rebuilding and Preoperational testing of a pilot production plant to extract oil from oil shale. Responsibilities included supervision of construction scheduling, purchasing, field engineering, instrument installation and calibration, design coordination, procedure preparation and preoperational testing of equipment and systems.

1979 - 1980 PROJECT TEST ENGINEER

Dravo Corporation. Supervised the testing and startup staff at the Citizens Gas & Coke Utilities 5 Meter Coke Oven Battery and By-Products Recovery Plant at Indianapolis, Indiana. Planned, scheduled and coordinated construction completion, preoperational testing of equipment and systems, commissioning of the process instrumentation and release of operational equipment to the customer.

1978 - 1979 PROJECT ENGINEER

International Start-Up and Testing Services, Inc., a Pittsburgh Testing Firm. Assignments included:

Field evaluation of Preventive Maintenance requirements for several municipal electrical utilities' distribution equipment and protective relaying.

Electrical Field Engineering for a modification to the Material Handling System at Allied Chemical Corporation's Ashland, Kentucky Coke Facility.

Field Start-Up Assistance at Reynolds International Inc. Venalum Aluminum Smelting Facility in Ciudad Guayana, Venezuela. Redesigned controls for the automated anode fabrication facility; and placed same into production.

1975 - 1978 SENIOR START-UP ENGINEER

Dravo Corporation. Performed Preoperational testing and start-up duties at the following facilities:

Sidbec Normines Iron Ore Pelletizing Plant at Port Cartier, P.Q., Canada. Commissioned the Ore Grinding lines consisting of conveyor belts, vibratory feeders, weigh feeders, slurry pumps, 6,000 horsepower ball mills, process instrumentation and controls and programmable control equipment.

Samarco Mineracao, Guarapari, Brazil Iron Ore Pelletizing Plant., Tested and commissioned the ore and pellet handling, stock piling, sampling and shiploading facility including high capacity variable speed belt conveyors, 8,000 metric ton per hour stacker, stacker-reclaimer, shiploader and 13.8 KV electrical distribution system for this equipment.

Dravo Lime Company Cabin Creek Limestone Mine and Calcining Facility at Maysville, Kentucky. Tested and commissioned the 69/4.16 KV/480 VAC Electrical distribution system; conveying, screening, crushing and grinding equipment; Process fans; barge loading machinery; and process instrumentation.

1974 - 1975 PLANT MAINTENANCE ENGINEER

Nuclear Services Corporation, a California Consulting Firm.

As a member of the commissioning crew at the Trojan Nuclear Plant owned by Portland General Electric Co., tested, calibrated and commissioned the plant instrumentation (electronic and pneumatic), controls and protection system, including the central data logging computer.

Participated in the development of an extensive system of preventive maintenance for the instrumentation and control equipment at Kewaunee Nuclear Station near Two Rivers, Wisconsin. System included detailed maintenance procedures and computerized scheduling and tracking capabilities.

1971 - 1974 TECHNICAL SUPERVISOR

Inflight Services Inc. - Honolulu office. Supervised shift technicians in the performance of maintenance activities on automated entertainment equipment installed in commercial jet aircraft.

1965 - 1971 NUCLEAR REACTOR OPERATOR/INSTRUMENT TECH
United States Naval Submarine Service. Served as Reactor Operator and Instrument Technician aboard two nuclear submarines; The USS Tecumseh and the USS Haddock.

EDUCATION & TRAINING

Presently enrolled in Indiana State University School of Technology majoring in Applied Computer Technology (senior).

Have attended various professional development seminars and courses in the fields of management, process instrumentation and controls, and manufacturing automation.

Designated as Engineer in Training (EIT) by the State of California by state wide exam in 1975.

Attended US Naval Schools for two years including: Electronics, physics, chemistry, heat transfer & fluid flow, electrical maintenance, instrument calibration & repair, mechanical equipment maintenance and nuclear power plant operations.

Attended and graduated from Worthington-Jefferson High School, Worthington Indiana in 1965.

PERSONAL

BORN APRIL 28, 1947 IN Vincennes, Indiana; Height: 6' 0"; Weight: 180 lbs; married; one child; family in good health.

Hobbies include: Bicycling, canoeing and photography.

Leslie A. King
R.R.2 Box 289X
Clinton, In. 47842
(317) 832-6894

PERSONAL

Birthdate: December 22, 1953

Weight: 175

Height: 5'10"

Hair: Brown

Eyes: Blue

Sex: Male

Marital Status: Married

I live with my wife Debra and daughters Stephanie and Rachel.

EDUCATION

Elementary: Fontanet and Otter Creek Jr. Hi.
1959-1968

High School: Garfield 1968-1971

Other: Indiana Vocational Technical College
Wabash Region 1971-1973

Associate Degree/General Electronics Technology

Leeds & Northrup Recorder School
Gibson Generating Station Sept. 17-22, 1978

System Controls
Public Service Indiana 1979

WORK EXPERIENCE

June-August 1970 Terre Haute Oil Co.
2500 Poplar Street
Terre Haute, In.
Attendant

April 1971-May 1973 Midwest Oil Co.
1831 N. 3rd Street
Terre Haute, In.
Attendant

May 1973-July 1973 Jack McDaniels T.V. Service
Paris, Illinois
T.V. Repair

July 1973-May 1974 Melvin Hill T.V. Service
Riley, In.
T.V. Repair

June 1974-Jan. 1981 Public Service Indiana
Wabash River Station
West Terre Haute, In.
Instrument Technician

Jan. 1981 to present Hoosier Energy REMC
Merom Generating Station
Sullivan, In.
Instrument Technician
Promoted to Instrument Supervisor
April 1983

EDUCATION

High School: Sept. 1968 to June 1971
Garfield High School
Terre Haute, In.

Studied on College Preparatory.

College: Sept. 1971 to May 1973
Indiana Vocational Technical College
Wabash Valley Region
South on U.S. 41
Terre Haute, In.
Graduated with two year Associate Degree in Electronics.
Studied basic theory of logic circuits, television applications, and trouble shooting techniques.
Developed skills in areas of maintaining transmitters, radar, and microwave.
Hold F.C.C. radio/telephone license and Indiana Radio & T.V. Service Tech License.
Leeds & Northrup School

WORK EXPERIENCE

June 1974-Jan. 1981 Public Service Indiana
Wabash River Station
Started as Station Helper in Maintenance Department. On March 9 1975 I bid to E & S Department.
worked with Instruments and Controls as a Technician.
Worked with Plat Engineer to Rectro fit turbines with New Supervisory Equipment.-GE & Westinghouse turbines.
Maintained Boiler Controls.
Five Boilers had Republic Pneumatic controls and one Bailey 721 series analog controls.

Jan. 1981 to Present Hoosier Energy REC., Inc.
Merom Generating Station
Started as an "B" Instrument Tech. worked as a "B" for 9 months then promoted to "A" Tech. In April of 1983 was promoted to Instrument Supervisor. During the time from Jan. 1981 the plant was in the process of check out of the cooling water systems and Aux. Boilers. These were the first systems to be started at the plant. I helped to complete check out and start up of the first two Combustion Control systems, made by westinghouse 7300 CCS. I have went through both start ups of 490 Mw turbines. In those start ups I have experience in the following major control systems of the plant.

1. westinghouse 7300 Combustion Controls
2. westinghouse Main Turbine Controls (DE) and Supervisorys
3. westinghouse Boiler Feed Pump Control, which was a turbine.
4. Allen-Bradley Coal Handling Sys.
5. Boiler Damper Drives System- westinghouse Wemac & Beck.
6. Water Treating Controls- westinghouse Numa-logic control.
7. Worked in system redesign of our Ball tube mills. When original system was started up we found very unstable conditions at high loads or when moving load around.

Since being a supervisor I have started a spare parts inventory system and have maintained it. I also order most, if not all, of my own shop's spare parts & test equipment. I am now involved in developing a separate C & I Shop for our scrubber system. Since this plant is so new we also are just now setting up a PM program. Each individual Dept. is controlling it's own PM work.

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

JUN 20 1985

Hoosier Energy
ATTN: Ms. Dale D. Winter
P.O. Box 908
Bloomington, Indiana 47402

REFUND OF APPLICATION FEE

1. BACKGROUND:

Check Received	June 17, 1985
Application Dated	May 29, 1985
Check Number	033216
Check Amount	$150

2. REFUND:

Amount	$30

This refund is now being processed by the Office of Resource Management and will be sent as soon as possible.

3. REASON FOR REFUND:

Overpayment of renewal fee for application dated May 29, 1985 for License 13-18945-01 as specified in fee Category 3P ($120) of Section 170.31, 10 CFR 170.

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Glenda Jackson
License Fee Management Branch
Office of Administration