

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-454/82-20(DEPOS); 50-455/82-15(DEPOS)

Docket Nos. 50-454; 50-455

Licenses No. CPPR-130; CPPR-131

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

Facility Name: Byron Station, Units 1 and 2

Inspection At: Byron Construction Site, Byron, IL

Inspection Conducted: September 30 and October 1, 1982

Inspector: *M. J. Oestmann*
M. J. Oestmann

10/19/82

Approved By: *M. C. Schumacher*
M. C. Schumacher, Chief
Independent Measurements and
Environmental Protection Section

10/19/82

Inspection Summary

Inspection on September 30 and October 1, 1982 (Reports No. 50-454/82-20(DEPOS); 50-455/82-15(DEPOS))

Areas Inspected: Routine announced environmental protection inspection for both units, including preoperational radiological environmental monitoring program and placement of thermoluminescent dosimeters (TLD's) around the site; implementation of the environmental protection program for onsite construction; a tour of the site and chemical laboratory facilities; and review of corrective actions taken regarding previous items of noncompliance. The inspection involved 14 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

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DETAILS

1. Persons Contacted

- J. Golden, Administrator for Radiological Environmental Monitoring Programs, Technical Services Department, CECO
- *R. Ward, Assistant Plant Superintendent for Administration and Support Services, Byron
- *J. VanLeare, Rad/Chem Supervisor, Byron
- *K. Houghton, Health Physicist, Byron
- J. Weitzel, Engineering Assistant, Byron
- H. M. Lythgoe, Construction Site Environmental Coordinator, Byron
- J. Klink, Manager, Quality Assurance, Construction
- G. Sorenson, Site Project Superintendent

*Denotes those present at the plant exit interview.

The inspector also interviewed several other licensee personnel during the course of the inspection including chemical, health physics and security personnel.

2. Licensee Action on Previous Inspection Findings

- a. (Closed) Item of Noncompliance (50-454/80-18-01; 50-455/80-17-01): Failure to make certain daily and monthly checks as required in the licensee's "Onsite Environmental Monitoring Program," the inspector reviewed documentation of daily, weekly and monthly checks completed by the Site Environmental Coordinator and found full compliance had been achieved by September 16, 1980.
- b. (Closed) Item of Noncompliance (50-454/80-18-02; 50-455/80-17-02): Erosion was observed near northwest corner of site. During a tour of the site, the inspector observed that crushed rock and seeding had been done by the licensee to prevent erosion of this part of the site.

The inspector has no further questions regarding these items.

3. Management Controls

The inspector reviewed the licensee's management controls for implementation of the environmental protection requirements for construction and preoperational monitoring. These requirements are presented in the construction permits, the licensee's Environmental Reports (ER), and the NRC's Final Environmental Statements (FES) for construction and operation. The licensee's Site Environmental Coordinator utilizes the document "Onsite Environmental Monitoring Program" to implement these environmental protection requirements.

The licensee has completed the nonradiological terrestrial and aquatic preoperational monitoring programs through its contractors, Espey, Huston and Associates, Inc. The preoperational radiological environmental monitoring program (REMP), initiated in July 1981, is conducted by Hazleton Environmental Sciences Corporation as contractor for the licensee. A specific licensee plant representative is assigned to periodically check the environmental sampling locations and accompany the Hazleton sample collector. He also reviews the weekly sample collection data sheets as does the Rad/Chem Supervisor.

No items of noncompliance or deviations were identified.

4. Implementation of the Preoperational Environmental Programs

a. Environmental Protection Program

The inspector reviewed selective onsite environmental monitoring records for the period of September 1980 through July 1982, prepared by the Site Environmental Coordinator, and approved by the Site Construction Superintendent and Quality Assurance Department Supervisor. These included daily, weekly, and monthly reports on road dust controls, onsite sewage disposal, trash disposal, equipment laydown areas, and other considerations as described in the "Onsite Environmental Monitoring Program." A tour of the site during this inspection and discussion with the coordinator confirmed that these requirements were being met. The inspector also observed that road dust controls were being implemented. No technical problems were noted.

b. Placement of NRC Thermoluminescent Dosimeters (TLD's)

On September 30, 1982, the inspector, with assistance from Northwestern University and licensee personnel, placed 40 TLD's, to monitor dose from gamma radiation, in the 16 sectors of the compass around the plant site. These are inner and outer ring surveillance network in accordance with NRC guidelines. Northwestern University personnel have agreed to exchange TLD's on a quarterly schedule. The licensee also provided the NRC with maps and descriptions showing the locations of the licensee's TLD's in the 16 sectors surrounding the plant.

c. Radiological Environmental Monitoring Program (REMP)

The inspector reviewed the licensee's preoperational REMP, as described in the licensee's ER-OL and the NRC's FES-OL. This review included examination of the contractor's monthly environmental reports and weekly data collection sheets for the period of July 1981 through July 1982. The reports and data sheets accounted for all samples collected and included appropriate reasons for missing samples. No unusual trends or anomalies except for fallout effects from weapon testing from the Peoples' Republic of China were noted in the analytical results.

The contractor's quality control program for analytical measurements of environmental samples was described in the reports and included results of participation in the EPA interlaboratory crosscheck and TLD intercomparison programs. No technical weaknesses were noted.

During a tour of selective environmental monitoring stations, the inspector noted that the licensee personnel did not have the correct keys to unlock the metal cabinets used to house the air samplers nor a suitable ladder to reach the cabinets. This is an open item (50-454/82-20-01; 50-455/82-15-01). The inspector observed that the licensee's TLDs were properly placed outside the cabinet of the air samplers. The licensee's contractor had just completed a milk-producing animal census. No other problems were observed. The licensee plans to install several onsite air samplers in the near future which will be examined in a future inspection. (Open Item 50-454/82-20-02; 40-455/82-15-02)

No items of noncompliance or deviations were identified.

5. The Licensee's Chemical/Radiochemical Program

During this inspection, the inspector examined selective chemical and radiochemical procedures for sampling, analysis, calibration, and quality assurance/control programs in the laboratories and counting room. These included procedures for boron, chloride, hydrazine, various metals, dissolved oxygen, suspended solids, total dissolved solids, preparation of standards and calibration of analytical instruments. Most procedures reviewed were approved in CY 1981 and 1982 by licensee management. The licensee has established a formal program for checking the quality of analytical measurements being conducted in the laboratories.

During a tour of the cold and hot chemistry laboratories, the inspector observed that instruments being used for analyses had current calibration stickers and that calibration curves were up to date. The licensee is in the process of testing new analytical instruments prior to fuel load. The inspector observed several chemistry technicians performing laboratory analyses of samples of various plant water systems. The sampling panel for the plant was located in the laboratory.

Training of chemistry personnel includes on-the-job experience, supervisor observation, and the completion of a formal program to demonstrate adequacy in performing analytical measurements. New employees have formal lectures and presentations on chemistry practices and procedures.

No items of noncompliance or deviations were identified.

6. Exit Interview

The inspector met with licensee representatives (denoted in Section 1) at the conclusion of the inspection on October 1, 1982. The inspector summarized the scope and findings of the inspection. The licensee acknowledged the need to have keys for the radiological air sampling stations available at the plant.