NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–373 and 50–374]

Commonwealth Edison Company; Notice of Withdrawal of Application for Amendments to Facility Operating Licenses

The U.S. Nuclear Regulatory Commission (the Commission) has granted the request of Commonwealth Edison Company (ComEd, the licensee) to withdraw its June 21, 1996, application for proposed amendment to Facility Operating License Nos. NPF–11 and NPF–18 for the LaSalle County Station, Units 1 and 2, located in LaSalle County, Illinois.

The proposed amendment would have revised the technical specifications (TS) by extending the surveillance interval for testing of the Control Room and Auxiliary Electric Equipment Room Emergency Filtration System from 18 months to 24 months and would have allowed a one-time extension of the allowed outage time for this system from 7 days to 30 days.

The Commission had previously issued a Notice of Consideration of Issuance of Amendment published in the Federal Register on August 14, 1996 (61 FR 42278). However, by letter dated October 8, 1996, the licensee withdrew the proposed change.

For further details with respect to this action, see the application for amendment dated June 21, 1996, and the licensee's letter dated October 8, 1996, which withdrew the application for license amendment. The above documents are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Jacobs Memorial Library, Illinois Valley Community College, Oglesby, Illinois 61348.

Dated at Rockville, Maryland, this 1st day of November 1996.

For the Nuclear Regulatory Commission.

Donna M. Skay,

Project Manager, Project Directorate III–2, Division of Reactor Projects—III/IV, Office of Nuclear Reactor Regulation.

[FR Doc. 96–28739 Filed 11–7–96; 8:45 am]

BILLING CODE 7590–01–P

[Docket No. 50–368]

Entergy Operations, Inc.; Notice of Denial of Amendment to Facility Operating License and Opportunity for Hearing

The U.S. Nuclear Regulatory Commission (the Commission) has denied a request by Entergy Operations, Inc., (licensee) for an amendment to Facility Operating License No. NPR–6 issued to the licensee for operation of the Arkansas Nuclear One, Unit No. 2, located in Pope County, Arkansas. A Notice of Consideration of Issuance of this amendment was not published in the Federal Register.

The purpose of the licensee's amendment request was to revise the Technical Specifications (TSs) to relocate the reactor coolant system (RCS) flow rate limit to the core operating limits report (COLR).

The NRC staff has concluded that the licensee's request cannot be granted. The licensee was notified of the Commission's denial of the proposed change by a letter dated November 1, 1996.

By December 9, 1996, the licensee may demand a hearing with respect to the denial described above. Any person whose interest may be affected by this proceeding may file a written petition for leave to intervene.

A request for hearing or petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date.

A copy of any petitions should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to Nicholas S. Reynolds, Esquire, Winston and Strawn, 1400 L Street, N.W., Washington, DC 20005–3502, attorney for the licensee.

For further details with respect to this action, see (1) the application for amendment dated August 23, 1996, and (2) the Commission's letter to the licensee dated November 1, 1996.

These documents are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Tomlinson Library, Arkansas Tech University, Russellville, AR 72801.

Dated at Rockville, Maryland, this 1st day of November 1996.

For the Nuclear Regulatory Commission.

William D. Beckner,

Project Director, Project Directorate IV–1, Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation.

[FR Doc. 96–28740 Filed 11–7–96; 8:45 am]

BILLING CODE 7590–01–P

[Docket No. 030–00692]

Indiana University, Environmental Assessment: Finding of No Significant Impact and Notice of Opportunity for Hearing Related to Amendment of Material License Number 13–00108–05

ACTION: The U.S. Nuclear Regulatory Commission (NRC) is considering an amendment to NRC License No. 13–00108–05, for use of carbon-14 (^{14}C) to conduct a field study on mayapple plants in Monroe County, Indiana. A similar project was approved by NRC in 1988 (Amendment 45 to the license).

FOR FURTHER INFORMATION, CONTACT: Sami Sherbini, U.S. Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards, MS T8F5, Washington DC 20555, telephone (301) 415–7902.

Environmental Assessment

Description of Proposed Action

The proposed action is to amend NRC Byproduct Material License No. 13–00108–05 to authorize Indiana University to conduct field studies using small quantities of ^{14}C to label mayapple plants. The total amount of ^{14}C involved is not to exceed 444 megabequerels (MBq) [12millicuries (mCi)], to be administered over a period of 2 years starting in the spring of 1997.

Experimental Procedure

Indiana University was previously authorized by NRC, in 1988, to conduct field studies similar to those presently being considered. The 1988 studies involved administration of 1260 MBq (34 mCi) of ^{14}C, and the proposed study will use 444 MBq (12 mCi).

The purpose of the project is to assess the use of carbon by the mayapple plant, *Podophyllum Peltatum*. This is achieved by exposing each plant, in the field, to gaseous $^{14}CO_2$ for a period of 30 minutes, during which time some of the gas will be absorbed by the plant. Labeled plants are left in the field for a period of 1 year, after which the plants are harvested. A total of 475 plants are expected to be involved during the study, which is to be conducted over a 2-year period. The first phase is expected to start in the spring of 1997 and end with the harvesting of the labeled plants in 1998, at which time

the second phase will start. The second phase ends in 1999, with the harvesting of the remaining labeled plants. No labeled plant will remain in the field for a period of over 1 year.

The total ^{14}C activity to be authorized for use during the 2-year project is 444 MBq (12 mCi). The ^{14}C is taken to the field in the form of sodium bicarbonate ($NaH^{14}CO_3$). The compound, in liquid form, is pipetted, in the laboratory at Indiana University, into plastic centrifuge tubes, up to 25 microcuries (μCi) (0.93 MBq) per tube, and sealed with screw caps. The amount of liquid in each of the tubes will be very small, usually about a drop. The sealed tubes are to be packed into an insulated box (e.g., a picnic cooler) that has been lined with sufficient absorbent material to absorb any liquids in case of a spill. A maximum of 35 plants will be labeled at any one time, thereby limiting the amount of ^{14}C to be taken to the fieled at any one time to 32.4 MBq (875 μCi).

In the field, a centrifuge tube is attached to the stem of each plant to be labeled, the tube is uncapped, and the plant and tube are sealed in an exposure vessel consisting of a large, clear, plastic bag. Acid is then injected into the centrifuge tube using a hypodermic needle inserted through a sealable port in the plastic bag. The ensuing reaction causes the production of $^{14}CO_2$. The labeling bag is left in this configuration for 30 minutes, and then removed from the plant. The centrifuge tube is recapped and the bag sealed and taken back to the university laboratory. It is expected that about 90 percent of the $^{14}CO_2$ generated in the bag will be absorbed by the plant. Of the activity absorbed, it is estimated that about 90 percent will be released to the atmosphere by the plant within 3 to 4 days in the form of $^{14}CO_2$, with the remaining 10 percent being incorporated into the plant tissues. At the end of a period not to exceed 1 year from the date of labeling, the mayapple plant will be removed from the field, including the roots, and returned to the university laboratory.

Personnel performing the experiments will be trained personnel who have successfully completed the university's radiation safety training program as well as special training for this project. They will wear protective clothing and latex gloves during procedures involving the handling of radioactive materials. Each labeled plant will be posted with a radioactive material sign, and the perimeter of the experimental site will be posted with warning signs.

Site Description

The site of the proposed experiments is on private property, consisting mostly of upland undeveloped forest and lowland meadowland located in a rural area of Monroe County, Indiana. The site is not developed, but part of the lowland meadow is being used as a composting area for lawn waste. The proposed location for the experiment is an 11 acre plot in the upland undeveloped forest section of the property. The owners of the property live on the property, and their house is about 50 meters (160 feet) from the proposed experimental plot. They have given the university written permission to conduct the experiments.

There is no access road to the proposed location of the experiments, and access to the property is through a 1.25 mile-long driveway on the property off a dead-end public road. Although many houses in the general area have wells, the closest of which is about 300 meters (1,000 feet) from the site, the wells are no longer in use because of the recent introduction of a municipal water supply. The closest body of water to the site is Richland Creek, located about 460 meters (1,500 feet) from the closest point of approach to the property. The creek is not used for fishing or drinking because it has been classified by the State of Indiana as a Class 2 polluted waterway, meaning that it should not be used for fishing. The depth of the water table in the area is about 200 meters (640 feet), and is about 230 meters (740 feet) at the study location.

Based on available data and experience gained from conducting similar experiments in the past, it appears that only two types of insect feed on the mayapple plant: stemborers and lepidopteran larvae, but no other animals or birds. The stemborers are known to remain within the plant, and will therefore be collected and returned to the laboratory when the plants are harvested. Only one lepidopteran larva was observed on a mayapple plant during past experiments, and it appears that these larvae are not commonly found in that area. The licensee plans to remove any such larvae that may be found during the proposed experiments and dispose of them as radioactive material. The two insect species identified above are not included in the list of endangered species for the State of Indiana published by the U.S. Fish and Wildlife Service.

Dose Assessments

Use of ^{14}C to label mayapple plants, in the manner proposed by the licensee, presents two possible pathways for exposure to the radioactive material:

1. Inhalation of the $^{14}CO2$, either during application by the workers, or as a result of emission by the labeled plants 3 to 4 days after uptake by the plant.

2. Diffusion of the ^{14}C into soil and subsequent contamination of a drinking water supply. Activity may reach the ground through the plant roots, or through a spill of the radioactive material during labeling.

1. Airborne Pathways

The ^{14}C is taken to the field in the form of sodium bicarbonate liquid contained in sealed plastic tubes. Each tube will contain up to 25 μCi (0.93 MBq) of C–14. Based on past experience, the licensee estimated that 90 percent of the ^{14}C activity to which the plant is exposed is taken up by the plant. Assuming each plant is exposed to the full 0.93 MBq (25 μCi) content of the plastic tube attached to it during labeling, the plant will absorb 25 μCi x 0.9, or about 0.83 MBq (22.5 μCi). Of this activity, 90 percent is estimated to be released to the atmosphere within 3 to 4 days of uptake by the plant. Therefore, the activity released to the atmosphere by each plant will be 22.5 μCi x 0.9, or 0.75 MBq (20.3 μCi). An estimated 475 plants will be labeled during the 2-year period of the experiment. Therefore, the total amount of ^{14}C released to the atmosphere during the proposed study will be 20.3 μCi x 475, or about 370 MBq (10 mCi).

The closest residents to the site of the experiments are the owners of the property, whose house is located about 50 meters (160 feet) from the proposed experimental site. The concentration of ^{14}C at the house is estimated by using standard airborne dispersion methods normally used to estimate the concentrations of materials downwind of a release point. The method chosen for the present purpose is that recommended for use by the U.S. Environmental Protection Agency (EPA) for showing compliance with its air emissions standards (EPA 520/1- 89–001, ''Procedures Approved for Demonstrating Compliance with 40 CFR Part 61, Subpart I,'' Background Information Document, October 1989). According to this model, the average downwind concentration of ^{14}C is given by,

$$C = \frac{fPQ}{u}$$

where:

C=concentration, μCi/m3

f=fraction of time wind is blowing toward receptor = 0.25
Q=release rate, μCi/s=1.6×10^{-4} μCi/s
u=wind speed, m/s=2 m/s

The release rate, Q, was obtained by dividing the total activity released in a 2-year period, namely 370 MBq (10 mCi), by the number of seconds in that period. The values of 0.25 and 2 m/s for ''f' and ''u'', respectively, are conservative values for these parameters. Typical values for ''f' are of the order of 0.15, and typical values for ''u'' are of the order of 4 to 5 m/s. The value of the diffusion function, P, is given by,

$$P = \frac{2.032}{\sigma_z x}\exp\left[-\frac{1}{2}\left(\frac{H}{\sigma_z}\right)^2\right]$$

Where:
P=diffusion function
×=distance from point of release, m=50 m
H=height of release point, m=2 m
Q_z=vertical diffusion parameter, m

$$\sigma_z = 0.06\frac{x}{\sqrt{1+0.0015x}}$$

The release rate is obtained by assuming uniform and continuous emission from the plants over a period of 2 years. A release height of 2 meters (6.6 feet) above ground level is assumed, and the distance to the owner's house is, as noted above, 50 meters (160 feet). The actual pattern of release of ^{14}C will not be uniform, but will in fact occur over a period of 2 months each year, for a total of 4 months during the 2-year period of the experiment. However, assuming uniform emissions over the 2-year period will only affect the rate at which the ^{14}C is inhaled, but not the total quantity inhaled, and therefore will not affect the total committed effective dose. The uniform emission assumption only simplifies the calculations, but does not affect the final outcome.

Using the above formulas, the concentration of ^{14}C at the owner's house is estimated to be about 8.14 mBq/m^3 (2.2×10^{-7} μCi/m^3). This is a conservative estimate because the calculations do not take into account any additional dispersion caused by trees and other obstacles between the plants and the house.

Assuming that the residents will inhale this activity continuously for a period of 2 years, at an inhalation rate of 1.2 m^3/hr (from Publication 30 of the International Commission on Radiological Protection), the total inhaled ^{14}C activity will be about 170 Bq (4.6×10^{-3} μCi). The effective committed dose equivalent per unit intake for ^{14}C, in the form of $^{14}CO_2$, is 6.35 μSv/MBq (0.0235 mrem/μCi) (from Federal Guidance Report No. 11, ''Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion,'' EPA–520/1–88–020). The total committed effective dose equivalent resulting from inhalation of 179 Bq (4.6×10^{-3} μCi) of $^{14}CO_2$ is therefore less than 0.01 μSv (1 μrem).

In addition to the release to the atmosphere by the plants, some ^{14}C activity will remain in the labeling plastic bag at the end of the labeling period. Each bag will initially contain 0.93 MBq (25 μCi) of $^{14}CO_2$, of which 90 percent, or 0.83 MBq (22.5 μCi) will be taken up by the plant, leaving 0.093 MBq (2.5 μCi) in the bag. If it is conservatively assumed that the person performing the labeling inhales about 25 percent of that remaining activity, and if it is also assumed that the same person performs labeling on all 475 plants, the total ^{14}C activity inhaled will be 2.5 μCi×0.25×475 plants, or about 11.1 MBq (300 μCi). Inhalation of this activity, in the form of $^{14}CO_2$, over a 2-year period, using a dose per unit intake of 6.35 μSv/MBq (0.0235 mrem/μCi) , as above, will result in an occupational committed effective dose equivalent of about 70 μSv (7 mrem).

2. Soil Pathway

The soil pathway is the exposure pathway that starts with introduction of the radioactive material into the soil, followed by diffusion to the water table and contamination of water supplies. Exposure routes would be by drinking contaminated water, eating fish or other marine life living in the contaminated water, eating plants grown in contaminated soil and irrigated using contaminated water, and eating diary products and meat produced from cattle raised on contaminated feed and water.

None of the above pathways is significant in this case. The property on which the experiment is to be conducted is not a working farm, and no food is grown or produced on it. The closest well is 300 meters (1,000 feet) from the experimental site, but the wells in the area are no longer used as a water supply because of the introduction of a municipal water system. There is no fishing in the surrounding area, and the closest body of water, Richland Creek, located 460 meters (1,500 feet) from the site, is polluted and is not used for fishing.

A spill of radioactive material is not expected to have a significant impact on the environment because each plastic centrifuge tube contains only a drop or so of the liquid tracer, with a total activity of 0.93 MBq (25 μCi). However, a potentially larger source of ^{14}C by this pathway are the labeled plants. The plants are estimated to absorb 90 percent of the activity to which they are exposed, which is 25 μCi×0.9×475 plants, or about 407 MBq (11 mCi). About 90 percent of this activity is expected to be released to the atmosphere soon after labeling, leaving 10 percent, or about 37 MBq (1 mCi), in the plant tissue. The licensee stated that all plants, including all roots, will be harvested, and no plant will be left in the ground for more than 1 year. However, if we assume that all the activity in the plant tissue is released to the ground, this will provide an upper bound for any possible effect from the groundwater pathway.

The experimental plot is about 11 acres in area, or about 45,000 m^2. It will be assumed that at the end of the experimental period of two years, the (1 mCi) 37 MBq activity in the plants is uniformly spread out over this area and to a depth of about 1 m, which is the approximate depth within which most of the roots will be located. It is also assumed that a drinking water well is located at the edge of the experimental plot. Using these assumptions, the concentration of ^{14}C in the top soil layer will be 0.022 μCi/m^3 (814 Bq/m^3) . At a soil density of about 1.5 g/cm^3, the concentration will be about 0.015 pCi/g (0.56 mBq/m^3) of soil. Using the computer code RESRAD to perform a pathway analysis, and using the water table depth at the site of about 200 meters (640 feet), the dose from the drinking water pathway is found to be substantially below 0.01 μSv (1 μrem). This is an upper limit for this pathway, because there is no well at the edge of the experimental plot, the nearest well being about 300 meters (1,000 feet) from the site.

Finding of No Significant Impact

Pursuant to the National Environmental Policy Act of 1969 (NEPA) and the Commission's regulations in 10 CFR Part 51, the Commission has determined that there will not be a significant effect on the quality of the human environment resulting from the use of ^{14}C in mayapple plant studies conducted by Indiana University in Monroe County, Indiana. Further, an environmental impact statement is not required for the proposed amendment to Byproduct Material License No.13–00108–05, which will authorize use of ^{14}C-labeled sodium bicarbonate at the experimental

site. This determination is based on the foregoing Environmental Assessment (EA) performed in accordance with the procedures and criteria in 10 CFR Part 51, ''Environmental Protection Regulations for Domestic Licensing and Related regulatory Functions.'' The EA described herein confirms the Finding of No Significant Impact for the proposed studies.

Notice of Opportunity for a Hearing

Any person whose interest may be affected by the issuance of this amendment may file a request for a hearing. Any request for hearing must be filed with the Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington DC 20555, within 30 days of publication of this notice in the Federal Register and must be served on the NRC staff by mail addressed to the Executive Director for Operations, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852; and must be served on the applicant by mail or delivery to Indiana University, Department of Environmental Health and Safety, 840 State Road 46 Bypass, Room 160, Bloomington, Indiana 47405. The request for a hearing must comply with the requirements set forth in the Commission's regulations, 10 CFR Part 2, Subpart L, ''Informal Hearing Procedures for Adjudications in Material Licensing Proceedings.'' Subpart L of 10 CFR Part 2 may be examined or copied for a fee in the Commission's Region III Public Document Room at 801 Warrenville Road, Lisle, Illinois 60532–4351, or in the NRC Public Document Room, 2120 L Street, N.W., Lower Level, Washington DC 20555.

As required by 10 CFR Part 2, Subpart L (10 CFR 2.1205), the request for hearing must describe in detail: (1) The interest of the requester in the proceeding; (2) how that interest may be affected by the results of the proceedings, including the reasons why the requester should be permitted a hearing, with particular reference to the factors set out in paragraph (g) of 10 CFR 2.1205; (3) the requester's areas of concern about the licensing activity that is the subject matter of the proceeding; and (4) the circumstances establishing that the request for a hearing is timely in accordance with paragraph (c) of 10 CFR 2.1205.

The factors in 10 CFR 2.1205(g) that must be addressed in the request for hearing include: (1) the nature of the requester's right, under the Atomic Energy Act of 1954, to be made a party to the proceeding; (2) the nature and extent of the requester's property, financial, or other interest in the proceeding; and (3) the possible effect of any order that may be entered in the proceeding, upon the requester's interest.

Dated at Rockville, Maryland this 30th day of October, 1996.

For the U.S. Nuclear Regulatory Commission.

Josephine Piccone,

Chief, Operations Branch, Division of Industrial and Medical Nuclear Safety, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 96–28737 Filed 11–7–96; 8:45 am]

BILLING CODE 7590–01–P

[Docket No. 50–245, License No. DPR–21]

Northeast Utilities Millstone Nuclear Power Station, Unit 1; Issuance of Director's Decision Under 10 CFR 2.206

Notice is hereby given that the Acting Director, Office of Nuclear Reactor Regulation, has taken action with regard to a Petition dated January 2, 1995, by Mr. Anthony J. Ross (Petition for action under 10 CFR 2.206). The Petition pertains to Millstone Nuclear Power Station, Unit 1.

In the Petition, the Petitioner asserted that (1) the Petitioner was ''unjustly chastised'' by his first-line supervisor and department manager about absenteeism, and his department manager threatened him in a memorandum; (2) his first-line supervisor willfully falsified nuclear documents in that he signed off on a surveillance of the gas turbine battery as having met acceptance criteria when the requirements had not been met; and (3) the Millstone Unit 1 organization failed to enter into a 4-day Limiting Condition for Operation as required by the Technical Specifications when the Operations Department was notified of the failed surveillance, in violation of 10 CFR 50.5. In addition, the Petitioner asserted that a number of violations have occurred in 1992 and 1993 related to the gas turbine battery, which have not been handled appropriately by the NRC and Northeast Utilities, and that the utility and NRC are engaged in an apparent ''cover-up'' of the problems.

The Petitioner requested that the Nuclear Regulatory Commission (1) assess a Severity Level II violation and a Severity Level III violation against his department manager and his first-line supervisor for their apparent violations of 10 CFR 50.7; (2) institute sanctions against his first-line supervisor, Northeast Utilities, and the Millstone Unit 1 organization for engaging in deliberate misconduct in violation of 10 CFR 50.5; and (3) remove his first-line supervisor from his position until a ''satisfactory solution to the falsifying of nuclear documents'' by this individual can be achieved.

The Acting Director of the Office of Nuclear Reactor Regulation has determined to deny the Petition. The reasons for this denial are explained in the ''Director's Decision Under 10 CFR 2.206'' (DD–96–16), the complete text of which follows this notice and is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Learning Resources Center, Three Rivers Community-Technical College, 574 New London Turnpike, Norwich, Connecticut, and at the temporary local public document room located at the Waterford Library, ATTN: Vince Juliano, 49 Rope Ferry Road, Waterford, Connecticut.

A copy of the Decision will be filed with the Secretary of the Commission for the Commission's review in accordance with 10 CFR 2.206(c) of the Commission's regulations. As provided by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of issuance unless the Commission, on its own motion, institutes a review of the Decision in that time.

Dated at Rockville, Maryland, this 31st day of October 1996.

For the Nuclear Regulatory Commission.

Ashok C. Thadani,

Acting Director. Office of Nuclear Reactor Regulation.

[DD–96–16]

I. Introduction

On January 2, 1995, Mr. Anthony J. Ross (Petitioner) filed a Petition with the Executive Director for Operations of the Nuclear Regulatory Commission (NRC) pursuant to Section 2.206 of Title 10 of the Code of Federal Regulations (10 CFR 2.206). In the Petition, the Petitioner raised concerns regarding (1) employee harassment and intimidation by Northeast Utilities (NU); (2) the falsification of nuclear documents concerning the gas turbine battery; (3) failure to enter a Technical Specification Limiting Condition for Operation (LCO) after a failed surveillance; and (4) his belief that numerous violations have occurred in 1992 and 1993 regarding the gas turbine battery. Because of these problems, the Petitioner alleges that the gas turbine is still inoperable. In addition, the Petitioner asserts that these problems have not been handled appropriately by the NRC and NU, and that NU and the