



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

Docket Nos. 50-329  
50-330

Honorable Elford Cederberg  
U.S. House of Representatives

Dear Mr. Cederberg:

Your letter of March 19, 1976, to Chairman Anders, which enclosed the March 8, 1976, letter from Ms. Mary Sinclair of Midland, Michigan, regarding the Midland Plant Units 1 and 2, has been referred to me for reply. Ms. Sinclair expressed her concern regarding the design of the Midland Plant in light of the fire which occurred a year ago at the Browns Ferry Nuclear Plant, and the allegations made recently by three engineers who resigned their positions with the General Electric Company. Specifically, Ms. Sinclair requested blueprints of the electrical circuitry for the Midland Plant.

Preliminary layout drawings and schematics for the electrical circuitry for the Midland Plant are included in Chapter 7 of the Preliminary Safety Analysis Report for the Midland Plant. This report is available for examination in the Local Public Document Room established at the Grace Dow Memorial Library, 1710 W. St. Andrews Road, in the City of Midland, Michigan. We do not have final design drawings for the Midland Plant electrical and instrumentation circuitry at this time. Such drawings will be submitted by the applicant in conjunction with our review of the Final Safety Analysis Report for the plant, now tentatively scheduled for submittal during the summer of 1977. These drawings will be available for Ms. Sinclair and her engineers to review at that time.

As Ms. Sinclair pointed out in her letter, the Browns Ferry fire did reveal some deficiencies in the design of the Browns Ferry units. The Nuclear Regulatory Commission established a Special Study Group within a few days after the Browns Ferry fire to examine the circumstances surrounding the fire and to make recommendations to the Commission for possible improvements. The results of the Special Study Group's effort were published in February 1976 as a document entitled, "Recommendations Related to Browns Ferry Fire," document number NUREG-0050. A copy of this document has been forwarded to all Local Public Document Rooms and Ms. Sinclair may examine the report at the Grace Dow Memorial Library if she desires. Should Ms. Sinclair wish to obtain her own personal copy of the report, it is available from the National Technical Information Service, Springfield, Virginia 22161. The cost for a printed copy is \$5.00, but a microfiche copy may be obtained for \$2.25.

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Basically, the report of the Special Study Group concludes that the probability of disruptive fires of the magnitude of the Browns Ferry fire is quite small. The report does recognize that improvements can be made in fire protection for nuclear plants, however, and recommendations are made for additional efforts in the areas of fire prevention and fire control, and for design measures to limit the potential consequences of fires. In this connection, the Nuclear Regulatory Commission has been reviewing its criteria for fire protection for nuclear plants and, in the near future, we expect that revised criteria will be issued. The proposed design of the Midland Plant will be reviewed in light of these revised criteria and such alterations or improvements in the design as may be indicated to obtain improved fire prevention, fire control, and consequence limiting layout will be made. Actions taken in this regard will be made a part of the public record and will be available for Ms. Sinclair's inspection in the Local Public Document Room in Midland, Michigan.

The allegations regarding nuclear plant safety made by the three engineers who resigned from the General Electric Company, as well as those made by the engineer who resigned from the Nuclear Regulatory Commission, have been the subject of public hearings held by the Joint Committee on Atomic Energy. Each allegation has been examined in depth by the Nuclear Regulatory Commission staff and each has been responded to on the public record. A complete copy of all the allegations and the results of the staff investigation of each has been forwarded to the Local Public Document Room in Midland. These documents are available for study by Ms. Sinclair. In essence, while the "revelations" alleged by these four individuals made great press copy, no substantive issue was raised of which the staff and the industry had not been aware.

We recognize that nuclear plant designs are not perfect in the sense that they guarantee absolute safety. Absolute safety probably is unattainable just as other affairs of life cannot be guaranteed with absolute assurance. Nonetheless, the present designs of nuclear plants are "safe" in the ordinarily accepted meaning of the word. The concerns raised by those individuals who resigned are largely in the realm of matters whose resolution might make an incremental improvement to plant safety. If it is determined that changes are necessary to assure that the public is not exposed to any undue risk, such changes will be applied to the Midland Plant, just as to other nuclear plant designs.

Honorable Elford Cederberg

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I cannot address specifically Ms. Sinclair's allegation that Mr. John Harris has "deliberately lied" about the siting of the Midland Plant since she has not identified any specifics. However, I can assure you and Ms. Sinclair that, while she may not agree with decisions that have been made, such matters have been handled in accordance with the regulations under which we operate and in what we considered was the public interest. Should Ms. Sinclair have specific matters she wishes us to investigate in this regard, I would be pleased to initiate such an investigation, but I must first have some details with which to work.

I trust that this information will enable you to provide a responsive reply to Ms. Sinclair.

Sincerely,

Lee V. Gossick  
Executive Director for Operations

Enclosure:  
Letter from Ms. Sinclair  
to Honorable Elford  
Cederberg, U.S. House  
of Representatives

FROM: <b>Sen. Philip A. Hart</b>		ACTION CONTROL		DATES		CONTROL NO. <b>00085</b>	
		COMPL DEADLINE		<b>4/8/76</b>		DATE OF DOCUMENT <b>3/16/76</b>	
		ACKNOWLEDGMENT		<b>3/22/76</b>			
		INTERIM REPLY					
TO: <b>Carlton Kammeyer</b>		FINAL REPLY				PREPARE FOR SIGNATURE OF:	
		FILE LOCATION				<input type="checkbox"/> CHAIRMAN <input type="checkbox"/> EXECUTIVE DIRECTOR OTHER: <b>Carlton</b>	
DESCRIPTION <input checked="" type="checkbox"/> LETTER <input type="checkbox"/> MEMO <input type="checkbox"/> REPORT <input type="checkbox"/> OTHER		SPECIAL INSTRUCTIONS OR REMARKS <b>ENCL-00085</b>					
<b>Encl itr for Mary Sinclair re the electrical system design of the Milland plant &amp; req copy of the blueprints of the approved electrical circuitry</b>		<b>Return enclosure w/reply</b>					
CLASSIFIED DATA							
DOCUMENT/COPY NO.		CLASSIFICATION					
NUMBER OF PAGES		CATEGORY					
POSTAL REGISTRY NO.		<input type="checkbox"/> NSI <input type="checkbox"/> PD <input type="checkbox"/> FRD					
ASSIGNED TO:	DATE	INFORMATION ROUTING	LEGAL REVIEW		<input type="checkbox"/> FINAL <input type="checkbox"/> COPY		
<b>Kasche</b>	<b>3/22/76</b>	<b>Case</b>	ASSIGNED TO:	DATE	NO LEGAL OBJECTIONS NOTIFY:		
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					COMMENTS, NOTIFY:		
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			ICAE NOTIFICATION RECOMMENDED:		<input type="checkbox"/> YES <input type="checkbox"/> NO		

NRC FORM 232  
(11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS  
**PRINCIPAL CORRESPONDENCE CONTROL**

DO NOT REMOVE THIS COPY

# United States Senate

## MEMORANDUM

March 16, 1976

A communication attached from:

Ms. Mary Sinclair  
5711 Summerset Drive  
Midland, Michigan 48640

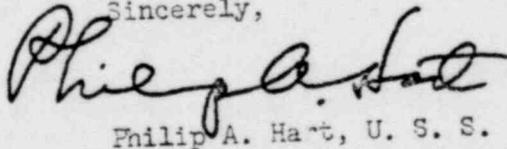
Respectfully referred to:

Mr. Carlton Kammerer, Director  
Office of Congressional Affairs  
Nuclear Regulatory Commission  
Washington, D.C. 20555

For such consideration as the communication transmitted herewith may warrant and for a report thereon, in duplicate to accompany return of the enclosure.

Your assistance in this matter will be appreciated.

Sincerely,



Philip A. Hart, U. S. S.

re: Response to concerns raised and info on getting blueprints, or specifications

PLEASE RETURN CONSTITUENT CORRESPONDENCE

KS/cdg

DATE 3/21/76  
TIME 9:15

REC'D MAR 11 1976

5711 Summerset Drive  
Midland, Michigan 48640  
March 6, 1976

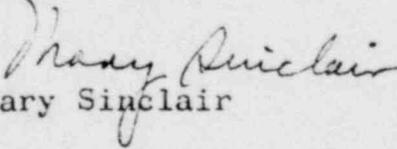
Senator Philip A. Hart  
United States Senate  
Washington, D. C. 20000

Dear Senator Hart:

I hope you will assist Congressman Cederberg in getting the information from the Nuclear Regulatory Commission that I have requested in my letter to him which is attached.

Enclosed are the credentials and letters of resignation of the three management-level engineers who resigned from G.E. because of their concerns about nuclear safety and its other problems which threaten life on the planet. I hope you will read them and think about them.

Sincerely,

  
Mary Sinclair

Enclosures

5711 Summerset Drive  
Midland, Michigan 48640  
March 8, 1976

The Honorable Elford Cederberg  
The United States House of Representatives  
Washington, D. C. 20000

Dear Congressman Cederberg:

Last March there was a serious fire in the Brown's Ferry nuclear reactors in Alabama that caused great concern nationally. The fire was started when a workman used a candle to check air flow and the foam insulation in the reactor caught fire.

In the investigation which followed the accident, it was noted that all the electrical circuitry that controlled the safety systems for both reactors was routed through one area in the reactor complex. Since this was one area damaged by the fire, the redundancy in safety that the nuclear industry has assured the public was part of all reactor designs, was knocked out for both reactors.

This unexpected incident was one of the reasons that the G.E. engineers resigned recently to urge that the nuclear program be halted until these flaws in design are corrected.

The engineers also stated the following:

Mistakes are inevitably made in implementing a new technology, but in the nuclear industry we lack a coherent program for correcting the mistakes. The government and industry, when they discover design defects, rewrite safety regulations for future designs. But they have repeatedly exempted previously approved nuclear plants from the safety requirements applicable to new nuclear plants. As a result we have accumulated a large number of plants with serious flaws.

Since the design for the Midland n-plants has been approved and is now under construction, I believe it is essential for us who must live so close to these plants to find out if the design of the Midland reactors has the serious flaw in its electrical system, similar to that of the Brown's Ferry reactor.

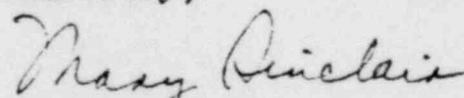
I would like to have the people in the Nuclear Regulatory Commission in charge of approving the design and licensing of the Midland reactors answer this question for us and send us blueprints of the electrical circuitry approved, so that our engineers can review them.

March 8, 1976

As you know, Mr. John Harris, Director of Public Information of the Nuclear Regulatory Commission, has in the past deliberately lied to both you and me about the questions the Regulatory staff had raised over the appropriateness of the siting of the Midland and Fermi # 2 n-plants. Therefore, it would do no good to have him answer this inquiry because he has no credibility for us.

Please follow up this request with the Nuclear Regulatory Commission. It is of vital importance to the people and industry of the Tri-County area.

Sincerely,



Mary Sinclair  
Saginaw Valley Nuclear Study Group

P.S. The letters of resignation of the G.E. engineers are enclosed, as well as their credentials. They are very explicit about all the dangers of the nuclear technology and its threat to our national security and to the life of the planet. I hope you take time to read them.

:sh  
Enclosures

Cc: William Anders, Chairman, NRC  
Senator Philip Hart  
Senator Robert Griffin

News Release

Washington, D.C. (February 6, 1976)... Three engineers who resigned this week from the nuclear industry are asking the U.S. Nuclear Regulatory Commission (NRC) to undertake an immediate review to determine whether it is safe to continue to operate the country's 56 licensed nuclear power plants under existing safety regulations.

The three engineers, until Monday managers in General Electric's nuclear energy efforts, said that "nuclear power plants now operating in the U.S. are plagued by design defects and operating problems to an extent that poses a major safety dilemma for the nation that must be promptly addressed and resolved."

Dale Bridenbaugh, Richard Hubbard and Gregory Minor will outline some of their major concerns to the NRC today at a 2:00 P.M. meeting with NRC Chairman William Anders.

"The safety of existing nuclear power plants has been badly compromised by the nuclear industry's rush to build more and more new plants," the engineers told a Washington press conference.

"Mistakes are inevitably made in implementing a new technology," they said, "but in the nuclear industry we lack a coherent program for correcting the mistakes. The government and industry, when they discover design defects, rewrite safety regulations for future designs. But they have repeatedly exempted previously approved nuclear plants from the safety requirements applicable to new nuclear plants. As a result we have accumulated a large number of plants with serious flaws."

The engineers cited a fire last year in a nuclear plant in Alabama, the Browns Ferry plant. The fire showed that the installation of control cables too close together was extremely dangerous since the fire knocked out redundant safety systems. Yet almost all of the nuclear plants currently in operation, they said, "contain the same, or even less satisfactory, cable routing systems." The same fire demonstrated the need for improvement in remote shutdown capabilities, a feature nonexistent in most older plants.

Another example cited by the engineers was the belated discovery that some of the containment systems intended to prevent the release of large amounts of radioactivity in certain types of accidents may be unable to function because the containment could itself be breached during the accident. Because of the containment damage, portions of the emergency core cooling systems could also be rendered inoperable.

February 2, 1976

Mr. N. L. Felrus  
Manager, BWR Services  
General Electric Company  
175 Curtner Avenue  
San Jose, California

Dear Neil:

This letter is to advise you that I am resigning from the General Electric Company effective immediately.

My reason for leaving is that I have become deeply concerned about the impact -- environmentally, politically, socially and genetically -- that nuclear power has made and potentially can make to life on earth. As we have discussed in the past, there is an inherent close intertie between commercial power and weapons technologies and capabilities. I am strongly opposed to the deployment of such capabilities and I fear the implications of a plutonium economy. The risk involved in such a system is far too great for the short term benefit. I see no way for us to develop the ability to maintain the perfect human and technical control needed for the long periods of time necessarily involved with the highly toxic materials we are producing. This problem is not something I wish to pass on to my children and to succeeding generations to control. Contributing to the advancement of such proliferation now seems immoral and is no longer an acceptable occupation for me.

Furthermore, in my recent assignment as the Project Manager of the Mark I Containment assessment, I have become increasingly alarmed at the shallowness of understanding that has formed the basis for many of the current designs. It is probable that many more problems will emerge with severe consequences, impacting either the safety or the economic viability of the nuclear power program.

It is hard for the mind to comprehend the immensity of the power contained in the relatively small reactor core and the risk associated with its control. In the past we have been able to learn from our technological mistakes. With nuclear power we cannot afford that luxury!

Much has been entrusted to the corporate and regulatory decision makers and the tremendous cost, schedule, and political pressures these humans experience have made unbiased decisions, with true evaluation of the consequences, very difficult to achieve. This is not meant as an indictment of any specific individuals; it is just a statement of the human imperfection which leads, ultimately, to the imperfection of the complex technological system. Nuclear power has become a "technological monster" and it is not clear who, if anyone, is in control.

In summary, I am no longer convinced of the technical safety of nuclear power and I fear the high risk of political and human factors that will ultimately lead to the misuse of its byproducts. This makes it impossible for me to work in an objective manner in my current position and I, therefore, have decided that my only choice is to get out of the nuclear business. This seems the only course of action for me to take if I am to be fair to my associates, the Company, to you, and to myself.

I also must tell you that I have become so convinced that nuclear power is not right for this country or for this world, that I have decided to volunteer my time for the next several months to work in support of the California Nuclear Safeguards Initiative. Following this, I will be looking for a job either in a non-nuclear area or, if possible, where I can use my experience to help safeguard the substantial nuclear legacy that has already been created.

I am sorry that I have been unable until now to fully confide in you the concerns I have had. This has not been an easy decision for me to make, but I finally came to the conclusion that it is something I must do. Perhaps my action will cause other people to consider the vast implications of the nuclear power program before it is too late.

I have come to believe very deeply that we cannot afford nuclear power and I intend to do whatever I can to get the message to the public where the decision on its continuation must ultimately be made.

Sincerely,

Dale G. Bridenbaugh  
Manager, Performance Evaluation  
and Improvement  
Manager, Mark I Containment  
Program

cc: A. P. Bray  
R. H. Beaton

DALE G. BRIDENBAUGH  
Manager, Performance Evaluation & Improvement  
Manager, Mark I Containment  
Nuclear Energy Division  
General Electric Company

Responsible for establishment and management of systems to provide for the monitoring and measurement of Boiling Water Reactor (BWR) equipment and system performance and for the development of performance improvement modifications.

For the past 10 months on special assignment as Manager of Mark I Containment, a special project formed to evaluate the safety and adequacy of the primary containment of 25 nuclear power plants in the United States.

Mr. Bridenbaugh has been involved with nuclear power plants since 1958 when he was assigned as Field Engineer on the installation and startup of the first large-scale commercial nuclear power plant -- Commonwealth Edison's Dresden I near Chicago, Illinois.

Employed by General Electric Company: 1953-1976

Degree: BSME, South Dakota School of Mines & Technology

February 2, 1976

Mr. Abdon Rubio, General Manager  
Nuclear Energy Control & Instrumentation Department  
General Electric Co., Nuclear Energy Systems Division  
175 Curtner Avenue  
San Jose, California

Dear Don:

During the past year and a half I've experienced a series of events which have forced me to question the continued operation and proliferation of nuclear power plants. I see that we have become an industry of narrow specialists with little comprehension of the total impact of our individual actions. I feel it is imperative that the people of California know the truth about nuclear power and know that there are people within the industry who have serious doubts and reservations about continuing our present course.

Consequently, I have decided effective today, February 2nd, to terminate my employment with General Electric and to devote myself full time to the task of educating my fellow Californians on the moral and technical issues encompassed by the Nuclear Safeguards Initiative.

When I joined the nuclear division in 1964 I was very excited about the promise of the new technology -- the promise of a virtually limitless source of safe, clean and economic energy for this and future generations. Like many of my colleagues, I consciously chose to bypass the technical and financial glamour of the defense/aerospace industries, and instead to pioneer in the infant nuclear industry. There was a common sense of excitement in the industry that approached a missionary zeal in those early years. Now, twelve years later, the vision has faded and the promises are still unfulfilled.

I have seen too many instances where engineers did not consider all the relevant parameters, where craftsmen did not follow the prescribed manufacturing and construction methods, where the plant operator acted in error when called upon for a split-second decision, and where plant maintenance decisions were based on continued power production - not plant safety. I know that very few people are aware that one of the plant wastes, plutonium, must be safeguarded from the biosphere for nearly 500,000 years; that there are presently no long-term radioactive waste storage facilities; that the genetic affects of the wastes challenge our continuing existence; and that the disposal safeguard record of the existing government weapons and

submarine fuel facilities is replete with failures.

In addition to the ecological significance of the radioactive legacy, the global political impacts of a plutonium energy economy must be faced. India's construction of an atom bomb from nuclear fuel clearly demonstrates that nuclear power plants and nuclear weapons are inseparable. If the forecasted nuclear power plants are constructed in the U.S. and if the rush to export the nuclear technology to the emerging nations continues unabated, then plutonium will be readily available for weapons diversion, hijacking, sabotage, and ransom. The power of the atom will be available to any tyrant or dissident group. We Californians cannot ignore our global interdependence.

I have struggled hard in arriving at today's decision. I considered continuing in my position, hoping that technology could somehow overcome all the obstacles. After my experience, I am now convinced that businesses and individuals can no longer take the risk of contaminating our environment, upsetting the ecological balance, or take any other steps which could irreversibly affect future generations. The limited comprehension of the present technology, coupled with the technological requirement for 100% human perfection, is a situation I can no longer rationalize as responsible or acceptable.

I came to San Jose with the vision and hope that I could benefit mankind through my contributions in harnessing the atom. Now I sense an even greater purpose -- the sharing of the knowledge gained in this pursuit to help awaken the people to the dangers and to the imperative to act now in order to preserve our planet. The issue we face is not the survival of an industry, rather it is the survival of mankind.

Sincerely,

Richard B. Hubbard,  
Manager, Quality Assurance

cc: Dr. S. Levy  
Dr. R. H. Beaton

RICHARD B. HUBBARD  
Manager, Quality Assurance  
Nuclear Energy Control & Instrumentation Department  
General Electric Company

As Manager of the Quality Assurance Section, Nuclear Energy Control and Instrumentation Department, Mr. Hubbard is responsible for developing and implementing quality plans, programs, methods, and equipment which assure that products produced by the Department meet all quality requirements as defined in NRC 10CFR50. He is involved in the manufacture of radiation sensors, reactor vessel internals, fuel handling and servicing tools, nuclear plant control and protection instrumentation systems, and control room panels.

With GE, he has held a variety of technical and supervisory positions in the application, manufacture and marketing of instrumentation and control systems for nuclear power plants.

Mr. Hubbard is an active member of the IEEE standards subcommittee on quality assurance and has published several papers on incore neutron detector systems and quality assurance programs.

Employed by General Electric Company: 1960-1976

Degrees: BSEE, University of Arizona  
MBA, University of Santa Clara

February 2, 1976

Mr. Harry H. Hendon  
Manager, C & I Engineering  
General Electric Company  
175 Curtner Avenue  
San Jose, California

Dear Harry:

This is to inform you that I am resigning from the General Electric Company effective today.

My reason for leaving is a deep conviction that nuclear reactors and nuclear weapons now present a serious danger to the future of all life on this planet.

I am convinced that the reactors, the nuclear fuel cycle, and waste storage systems are not safe. We cannot prevent major accidents or acts of sabotage. I fear that continued nuclear proliferation will quickly consume the limited uranium supply and force us into a plutonium-based fuel economy with even greater dangers of genetic damage and terrorist or weapons activity.

From my earliest days at Hanford, I have been deeply concerned about the dangers of radioactivity. I can still remember my wife's shock at having a container for urine sampling placed on our front doorstep for the use of our family. I wonder now if that police-state atmosphere at Hanford wasn't an omen for all people for the future.

I cannot be a part of an industry that promotes a policy that would lead our generation to consume 30 years of nuclear power for our own selfish purposes and leave behind radioactive wastes that will be a health hazard for thousands of generations to come.

In recent months I have become increasingly dismayed at the industry's opposition to the Nuclear Safeguards Initiative. I have seen the attempts to confuse and whitewash the issues by claiming that there are no unsolvable problems and appealing to individual's fears for their jobs. The public must be told that there are many problems. I am confident that an informed public -- given the truth -- will decide against continued nuclear proliferation.

I am also sure that there are others in the industry who share my concerns and I hope my decision will cause them to stop and consider the enormous implications and dangers of the nuclear legacy we are creating.

Sincerely,

Gregory C. Minor  
Manager, Advanced Control &  
Instrumentation

cc: A. Rubio  
S. Levy  
R. H. Beaton

GREGORY C. MINOR  
Manager, Advanced Control & Instrumentation  
Nuclear Energy Division  
General Electric Division

Mr. Minor has 16 years experience in the energy systems business, designing, building and managing control and instrumentation systems.

Mr. Minor began his career with General Electric in 1960 when he was assigned to a position at Hanford, Washington. In 1963 he served as an Electronic Design & Development Engineer in the Nuclear Power Generation Control Department in San Jose. There he was responsible for design of major instrumentation channels and control systems.

He has served as Manager of Reactor Control Systems Engineering where he was responsible for the design of protection, containment, and related control systems.

Since 1971 he has been Manager of Advanced Control & Instrumentation, responsible for the design of safety systems, control systems, and control room configuration.

Employed by General Electric Company: 1960-1976

Degrees: BSME, University of California  
MSSE, Stanford University

# Indian Point Safety Head, Charging Atom Peril, Quits

THE NEW YORK TIMES, TUESDAY, FEBRUARY 10

The Federal safety engineer for the nuclear reactors at Indian Point, resigned yesterday, charging that they were unsafe in design and construction and could cause a catastrophe killing thousands of people by radiation.

"If I had the authority, I would close down Indian Point Plant No. 2 at once—it's almost an accident waiting to happen." The engineer, Robert D. Pollard, said in announcing his resignation as project manager for the United States Nuclear Regulatory Commission, formerly known as the Atomic Energy Commission.

The commission, the Consolidated Edison Company and the State Power Authority quickly issued statements denying that the three nuclear plants were unsafe.

A spokesman for the Federal commission at Bethesda, Md., said: "We've talked at length with Mr. Pollard, and all of the safety issues he has raised have been thoroughly examined and previously resolved."

"We believe we have taken every reasonable step to insure the safety of the Indian Point plants," said a spokesman for Consolidated Edison, which owns two of the three nuclear generators at Buchanan, near the Hudson River shore about 30 miles north of New York City.

And the State Power Authority, which owns the third reactor, said through a spokesman: "We're convinced that Indian Point No. 3 is a safe and efficient plant."

Of the three reactors, No. 1 is owned by Con Edison but has been shut down since October 1974 because it lacks a kind of cooling system required by the Federal Government. No. 2, owned and operated by Con Edison, is an 873,000-kilowatt generator, and No. 3, owned by the Power Authority but operated by Con Edison, is a 965,000 kilowatt plant undergoing preoperational testing.

Mr. Pollard's resignation, effective next Friday, was announced at a news conference at the Roosevelt Hotel here.

The 35-year-old engineer had been the Federal Government's \$27,750-a-year chief safety engineer not only for the Indian Point plants but also for nuclear reactors in North and South Carolina and Texas.

Mr. Pollard said he had long worked for change within the



Associated Press  
Robert D. Pollard, project manager for Nuclear Regulatory Commission, telling of problems at Indian Point yesterday.

regulatory system but had finally concluded it would be better to work for such changes "from the outside."

He said that next week he would become the Washington representative of the Union of Concerned Scientists, a Massachusetts-based research group that conducts independent studies of nuclear power and national energy policy. His salary will be about two-thirds of his present pay.

Declaring that he could not, "in conscience, remain silent about the perils associated with the United States nuclear-power program," Mr. Pollard said the two plants at Indian Point illustrated his concerns over safety.

"I believe that the Indian Point nuclear power station constitutes an unconscionable threat to the health and safety of the millions of people who live in the metropolitan New York area," he said, adding:

## Cites Valve System

"The Indian Point plants have been badly designed and constructed and are susceptible to accidents that could cause large-scale loss of life and other radiation injuries, such as cancers and birth defects.

"The magnitude of the hazards associated with these plants has been suppressed by the Government because the release of such information might cause great public opposition to their operation."

He charged specifically that the No. 2 reactor had a "serious design defect—submerged valves—that could render required safety systems inoperative during an accident." He said also that valves on the No. 3 plant "which are supposed to prevent escape of radioactivity during accidents" were defective.

Furthermore, he said, electrical systems on the No. 2 plant "suffer from the same fundamental weaknesses as those which allowed a fire last year at the Brown's Ferry plant in Alabama to paralyze much of that plant's vital safety apparatus."