



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-0402

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**BEST AVAILABLE COPY**

March 1, 2002

NO ACT  
P.E 12-27-2001

1-04928

Robert T. Lucas III  
Associate General Counsel  
Assistant Secretary  
Duke Energy Corporation  
PB05E  
422 South Church Street  
P.O. Box 1244  
Charlotte, NC 28201-1244

Act 1934  
Section \_\_\_\_\_  
Rule 14A-8  
Public Availability 3/1/2002

Re: Duke Energy Corporation  
Incoming letter dated December 27, 2001

Dear Mr. Lucas:

This is in response to your letters dated December 27, 2001 and February 28, 2002 concerning the shareholder proposal submitted to Duke Energy by Richard D. Sears. We also have received a letter from the proponent dated February 15, 2002. Our response is attached to the enclosed photocopy of your correspondence. By doing this, we avoid having to recite or summarize the facts set forth in the correspondence. Copies of all of the correspondence also will be provided to the proponent.

In connection with this matter, your attention is directed to the enclosure, which sets forth a brief discussion of the Division's informal procedures regarding shareholder proposals.

PROCESSED

T APR 11 2002

Sincerely,

THOMSON  
FINANCIAL

*Martin P. Dunn*

Martin P. Dunn  
Associate Director (Legal)

cc: Richard D. Sears  
2161 Royall Drive  
Winston-Salem, NC 27106



RECEIVED  
OFFICE OF CHIEF COUNSEL  
CORPORATION FINANCE

Duke Energy Corporation

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Robert T. Lucas III  
Associate General Counsel  
Assistant Secretary

02 JAN -2 PM 1: 12

**VIA FEDERAL EXPRESS**

December 27, 2001

Office of Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549



Re: Duke Energy Corporation 2002 Annual Shareholders' Meeting—  
Exclusion of Shareholder Proposal—Securities Exchange Act of  
1934, Rules 14a-8(i)(3), 14a-8(i)(6) and 14a-8(i)(10)

Ladies and Gentlemen:

On behalf of Duke Energy Corporation, a North Carolina corporation (the "Company"), I am submitting this letter pursuant to Rule 14a-8(j) under the Securities Exchange Act of 1934, as amended (the "Act"), in response to the shareholder proposal and accompanying supporting statement referenced herein (the "Proposal"), which has been submitted by Richard D. Sears (the "Proponent") for inclusion in the Company's 2002 proxy statement and form of proxy relating to the Company's Annual Meeting of Shareholders presently scheduled for April 25, 2002. The Company currently expects that it will file definitive copies of its 2002 proxy statement and form of proxy pursuant to Rule 14a-6 on or about March 18, 2002. I hereby request confirmation that the staff of the Division of Corporation Finance (the "Staff") will not recommend any enforcement action to the Securities and Exchange Commission (the "Commission") if, in reliance on one or more of the interpretations of Rule 14a-8 set forth below, the Company excludes the Proposal from its 2002 proxy materials.

Pursuant to Rule 14a-8(j), enclosed herewith are six copies of the following:

- (1) this letter, which represents the Company's statement of reasons for omission of the Proposal from its 2002 proxy statement and form of proxy; and
- (2) the Proposal, attached as Exhibit A hereto, which was submitted by the Proponent by letter dated November 19, 2001.

The Company intends to omit the Proposal pursuant to Rules 14a-8(i)(3), 14a-8(i)(6) and 14a-8(i)(10) under the Act, and requests that the Division of Corporation Finance advise the Company whether it would recommend any enforcement action against the Company in such event.

#### DISCUSSION OF REASONS FOR OMISSION

##### **I. Rule 14a-8(i)(3) — The Proposal May Be Omitted Because It Contains Statements that are False or Misleading.**

Rule 14a-8(i)(3) provides that a registrant may omit a proposal and any statement in support thereof from its proxy statement and form of proxy if the proposal or supporting statement is contrary to any of the Commission's proxy rules, including Rule 14a-9, which prohibits materially false or misleading statements in proxy soliciting materials. Specifically, Rule 14a-9 provides that no solicitation shall be made by means of any proxy statement containing "any statement which, at the time and in the light of the circumstances under which it is made, is false or misleading with respect to any material fact, or which omits to state any material fact necessary to make the statements therein not false or misleading."

The Proposal contains a number of such false and misleading statements, which are enumerated below.

(1) **The Proposal requests "an open comprehensive study, utilizing independent public resources . . . ."**: The Proposal specifies that the study requested in the Proposal utilize "independent public resources" and be open and comprehensive. That requirement, however, is vague since the Proposal does not define or in any way indicate what the term "independent public resources" means in the context of defining risk of, and responsibility for, causing public harm due to the Company's nuclear energy program. Moreover, the Proposal is misleading because it implies that a meaningful study of the sort requested in the Proposal can be done utilizing solely "independent public resources": it cannot. This is so because a substantial amount of information that is used to develop probabilistic risk assessments (or PRAs) for the Company's nuclear plants is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Moreover, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort contemplated by the Proposal, utilizing only public sources, would thus not be feasible.

(2) **"An independent public study will provide shareholders and other stakeholders with credible information about the risks to specific communities and the predicted consequences of a catastrophic event."**: The Proposal requests a report regarding risks of public harm, and mentions "terrorism," "sabotage," "risks to

specific communities" and "the predicted consequences of a catastrophic event." The Proposal also implies that a meaningful report of this sort is capable of being generated using only public sources. To the extent that the Proposal requests an analysis of risk likelihood (utilizing probabilistic risk assessment methods) with respect to terrorist attacks or acts of sabotage, however, such an analysis is not capable of being produced since information concerning prior terrorist attacks and acts of sabotage against commercial nuclear power plants or involving the transportation or storage of nuclear fuel, which would be necessary for probabilistic risk assessments, does not exist. To the extent that the Proposal requests an analysis of vulnerabilities to terrorist attack and to acts of sabotage, that analysis would necessarily require the consideration of "safeguards information," which, because of its security-sensitive nature, is not now and never has been in the public domain. Indeed, publication of this kind of information would raise homeland security concerns and be contrary to national security interests. Accordingly, the request in the Proposal that the Company provide a report on such risks using only public sources is misleading since a meaningful report of this sort would not be feasible to generate.

(3) **"Duke Energy has made application to the Nuclear Regulatory Commission to renew the operating licenses for the McGuire and Catawba nuclear plants for an additional 20 years and if approved plans to operate these plants until the years 2041-2046. License approval by the Nuclear Regulatory Commission would extend by 20 years the risks associated with plant aging and the threats associated with terrorism."** This statement implies that if the Company's license renewal application is approved, the Company would operate its reactors an additional 20

years, a statement that is false and misleading. Rather, approval of the Company's renewed operating license would merely authorize the Company to operate its reactors for an additional time period of up to 20 years. Whether the Company would choose to operate the reactors for such additional time period or any part thereof, would depend on a number of factors, including economics and safety. It should be noted that while the Company is the licensed operator of the Catawba plant mentioned above, it is only one of several owners of that plant.

(4) **"In a separate application Duke Energy proposes to introduce a new plutonium fuel in the McGuire and Catawba reactors. This fuel would alter the risks arising from the transportation, use and storage of plutonium (theft, sabotage, terrorism)."** The Company has not filed an application to introduce a different type of fuel in its McGuire and Catawba reactors, and when, or indeed whether, the Company will file such an application in the future is subject to a number of factors. As a part of the federal government's nonproliferation initiative to dispose of surplus weapons plutonium, the Company may, contingent on numerous factors, use mixed oxide fuel (or MOX) at its McGuire and Catawba plants. Mixed oxide fuel contains a small amount of plutonium oxide, blended with a large amount of uranium oxide (in an approximate ratio of 1:20) and thus is not a new plutonium fuel. Mixed oxide fuel has been transported, used and stored safely for decades in several European countries.

The assertion in the Proposal that a "new plutonium fuel" would "alter the risks arising from the transportation, use and storage of plutonium" is additionally misleading. Any license amendment applications submitted to the Nuclear Regulatory Commission ("NRC") for the use of mixed oxide fuel must contain all safety and

environmental analyses that the NRC requires in order to allow for evaluation of the safety and environmental impact of mixed oxide fuel use. Submission and approval of such applications would be necessary for the Company to utilize mixed oxide fuel in its nuclear reactors. The NRC's review and approval process would constitute an open comprehensive study that is subject to the oversight and participation that the Proposal appears to contemplate.

(5) **"An independent public study will provide shareholders and other stakeholders credible information . . . ."**: This statement is opinion and not fact. Moreover, the statement implies that an independent study would generate "credible" information, whereas an internal study, undertaken by the Company, would not, an implication which clearly impugns the integrity of the Company. Moreover, that implication itself is unsupported by fact: no evidence is provided in the Proposal to support the idea that the information provided in the Company's reports is not credible. Indeed, the Company is a recognized leader in the nuclear industry.

(6) **"Supporting Statement: Duke Energy's Environmental, Health & Safety Policy states. . . ."**: The Proposal contains excerpts from the Company's Environmental, Health & Safety Policy (the "EHS Policy") and labels those excerpts as the "Supporting Statement" of the Proposal. As a reading of those excerpts indicates, however, the EHS Policy does not commit the Company to provide an independent public study and report of the sort set forth in the Proposal. Rather, the EHS Policy reaffirms the Company's commitment to foster open dialogue and informed decision making through meaningful and regular communication with management, employees and the public; it states that it will engage in partnerships that enhance public

environmental, health and safety awareness and address common environmental, health and safety issues; and it reaffirms that it highly values the health and safety of its employees, customers and communities. To label the EHS Policy excerpts as a Supporting Statement of the Proposal is thus false and misleading.

(7) **The Proposal requests the Board of Directors "to conduct an open comprehensive study, utilizing independent public resources, oversight, and participation . . . ."**: This statement is misleading with respect to the duties the Company's Board would have to perform if the Proposal is implemented. Specifically, the Proposal asks the Company's Board to "conduct" a study that in effect would not be the Company's or the Board's and then to disseminate it to the Company's shareholders, as a report of the Company's Board, when the study, and the report, would in reality be, and relate to, an independent public study.

A director of a North Carolina corporation has a duty to discharge his or her duties as a director in good faith, with the care an ordinarily prudent person in a like position would exercise under similar circumstances and in a manner he or she reasonably believes to be in the best interests of the corporation. The Proposal would have the Company's Board cede supervisory and oversight authority to individuals whose only defining characteristic in the Proposal is that they are "independent" of the Company and who thus would not necessarily be acting in the Company's best interests. The resulting study would be for the benefit not of the Company and its shareholders only, but rather also for the benefit of the Company's other "stakeholders". The report would then be presented, as a report "prepared" by the Board, at the Company's next annual shareholders' meeting. The Proposal is misleading because in reality the Company's

Board would not conduct the proposed study and would have no supervisory or oversight authority after the study is commenced. The Proposal is also misleading because it does not inform shareholders that the Board may have difficulty implementing the Proposal because it may require the Company's directors to compromise their duties to the Company and its shareholders.

As the previously mentioned facts indicate, the Proposal contains numerous false or misleading statements. Such statements, individually and in the aggregate, are contrary to Rule 14a-9, which prohibits materially false or misleading statements in proxy soliciting materials. The Company submits that it may properly omit such statements from its 2002 proxy materials pursuant to Rule 14a-8(i)(3) on this basis.

Recently, the Staff indicated that, "when a proposal and supporting statement will require detailed and extensive editing in order to bring them into compliance with the proxy rules," the Staff may find it appropriate to grant relief without providing the proponent a chance to make revisions to the proposal and supporting statement. See Division of Corporation Finance: Staff Legal Bulletin No. 14 (July 13, 2001). We urge the Staff to provide such relief here.

**II. Rule 14a-8(i)(6)—The Proposal May Be Omitted Because the Company Would Lack the Power or Authority to Implement the Proposal.**

Rule 14a-8(i)(6) provides that a proposal may be excluded if "the company would lack the power or authority to implement the proposal."

The Proposal specifies that the study requested in the Proposal utilize "independent public resources" and be open and comprehensive. The Proposal thus

implies that a meaningful study of the sort requested in the Proposal can be done utilizing solely "independent public resources": it cannot. A substantial amount of information that is used to develop probabilistic risk assessments (or PRAs) for the Company's nuclear plants is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Moreover, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort contemplated by the Proposal, utilizing only public sources, would thus not be feasible.

The Proposal requests a report regarding risks of public harm, and mentions "terrorism," "sabotage," "risks to specific communities" and "the predicted consequences of a catastrophic event." The Proposal also implies that a meaningful report of this sort is capable of being generated using only public sources. To the extent that the Proposal requests an analysis of risk likelihood (utilizing probabilistic risk assessment methods) with respect to terrorist attacks or acts of sabotage, however, such an analysis is not capable of being produced since information concerning prior terrorist attacks and acts of sabotage against commercial nuclear power plants or involving the transportation or storage of nuclear fuel, which would be necessary for probabilistic risk assessments, does not exist. To the extent that the Proposal requests an analysis of vulnerabilities to terrorist attack and to acts of sabotage, that analysis would necessarily require the consideration of "safeguards information," which, because of its security-sensitive nature, is not now and never has been in the public domain. Indeed, publication

of this kind of information would raise homeland security concerns and be contrary to national security interests.

For the reasons specified above, the Company would lack the power to generate a meaningful report of this sort using only "independent public resources" (but "excluding proprietary and confidential information"). The Company submits that the Proposal may be properly excluded from the Company's 2002 proxy materials under Rule 14a-8(i)(6) on this basis.

**III. Rule 14a-8(i)(10) — The Proposal May Be Omitted Because It Has Been Substantially Implemented.**

Rule 14a-8(i)(10) provides that a proposal may be excluded from a company's proxy materials "if the company has already substantially implemented the proposal." The Company submits that the Proposal is excludable from its 2002 proxy materials under Rule 14a-8(i)(10) because the Company has substantially implemented the Proposal for the reasons specified below.

The Proposal requests that the Company, in effect, commission an open, comprehensive and independent public study for the purpose of "defining Duke Energy's risk of, and potential responsibility for, causing public harm" because of the Company's participation in its nuclear energy programs. The Proposal requests that the study be performed with independent public participation and oversight and that it utilize "independent public resources," excluding "proprietary and confidential information." The study would be the basis of a report that would be paid for by the Company "at reasonable expense" and be presented at the Company's 2003 annual shareholders' meeting.

The Proposal states that the last NRC study of reactor accident consequences was done by the Sandia National Laboratory in 1981. (In reality, the Sandia National Laboratory conducted an evaluation of severe accident risks for five U.S. nuclear power plants which was published in 1990.) The Proposal would apparently have the Company develop a report of a similar nature updated to reflect any changed circumstances and improved analytical techniques, with the Company's nuclear plant operations as the report's focus. As discussed below, however, the Company has in fact already done recent analyses and assessments of this kind utilizing information internal and proprietary to it.

The Company began performing probabilistic risk assessments (or PRAs) for its nuclear plants in the early 1980's. PRAs are reactor safety studies, and the Company maintains PRAs for each of its nuclear plants. The Company's PRAs analyze the risk of core damage, analyze core behavior and containment performance and analyze public health risk for severe (or beyond design basis) accidents (e.g., the type of damage sustained at Three Mile Island Unit 2 in 1979). These PRAs assess the public health risks to the populations surrounding the Company's nuclear plants. The Company has a staff of approximately 13 engineers and technical personnel who have an expertise in performing PRAs that are consistent with the most current risk assessment methodology and use the most current reliability information. Based on the PRA methodology, the Company submitted, in the 1990's, Individual Plant Examinations (IPEs) to the NRC, and those IPEs were reviewed by the NRC and found to be acceptable. The Company uses the information from its PRAs, which are updated periodically, to identify plant and

procedural changes that would enable it to continue to operate its nuclear plants in a safe manner.

The Company's PRAs for its nuclear plants are subject to independent peer review and hence to outside oversight. Specifically, the PRAs for the Company's McGuire and Oconee plants have recently undergone peer reviews, while the peer review for the PRA for the Catawba plant is scheduled for May 2002. These peer reviews are sponsored by the so-called "Owners Group" for the type of plant design in question. For example, the McGuire and Catawba plants are Westinghouse plants, so that the Westinghouse Owners Group sponsors the peer reviews for those plants, with the participants in the peer reviews being a combination of personnel from other Westinghouse plants with PRA experience and outside consultants. Since the Oconee plant is a Babcock & Wilcox plant, the Babcock & Wilcox Owners Group sponsors the peer review, with the participants being a combination of personnel from other Babcock & Wilcox plants with PRA experience and outside consultants.

The Company has also conducted Severe Accident Mitigation Alternatives (or SAMA) analyses as part of its applications for renewal of its operating licenses for its nuclear plants. A SAMA analysis analyzes core damage frequency, core behavior and containment performance, and public health risk. The SAMA analyses are subject to review and approval by the NRC. The SAMA analysis for the Company's Oconee plant has been reviewed and approved by the NRC, for example, in the context of its review of the Company's license renewal application, which was approved by the NRC on May 23, 2000. The SAMA analyses for the McGuire and Catawba plants have been submitted to the NRC and are being reviewed in the context of the NRC's review of the license

renewal application the Company filed for those plants on June 13, 2001. The purpose of each SAMA analysis is to look for cost effective changes to the applicable nuclear plants that would reduce public health risk.

The Proposal additionally mentions risks associated with plant aging, which the Proposal would presumably have its study also address. The Company has in place effective aging management programs for its nuclear plants, and, in the context of license renewal, will implement additional aging management programs as necessary to manage the effects of aging during any period of extended operation. These programs are subject to review and approval by the NRC and to public participation and challenge consistent with the license renewal process set forth in the NRC's regulations.

The Proposal requests an open study with public oversight and participation. The Company notes in this regard that the license renewal applications recently filed with the NRC for the McGuire and Catawba plants and recently approved by the NRC with respect to the Company's Oconee plant, is overseen by the NRC, an independent federal regulatory agency. The license renewal process includes opportunities for public participation, including the opportunity to comment and the opportunity to request a hearing. A SAMA analysis is included in each of the license renewal applications submitted to the NRC and is subject to the same review, comment and challenge as the balance of the license renewal application.

The Proposal also specifies that independent public resources are to be utilized in the study requested in the Proposal, excluding proprietary and confidential information. The Company wishes to reiterate that if independent public resources

means public sources, then a study and report using information from public sources may in fact not be feasible. This is so because a substantial amount of information that is used to develop PRAs is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Indeed, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort specified in the Proposal, which utilizes only independent public sources, would thus not be possible.

The Proposal also requests that the proposed study and report define the Company's "potential responsibility" for public harm arising out of the operation of its nuclear plants. The Company respectfully submits that relevant information is already available in the Company's 2000 Annual Report (pp. F43-F44). Specifically, as described in the 2000 Annual Report, the Company is insured against public liability claims resulting from nuclear incidents, as required under the Price-Anderson Act, to the full limit of liability of approximately \$9.5 billion. The Company has purchased the maximum required private primary liability insurance of \$200 million with a like amount to cover certain worker tort claims. As to excess liability insurance, the relevant policy currently provides approximately \$9.3 billion of coverage through the Price-Anderson Act's mandatory industry-wide excess secondary insurance program of risk pooling. The Company's 2000 Annual Report also provides information relating to possible assessments in the event of a nuclear incident at one of the Company's licensed facilities if public liability damages were to occur. The Company's property insurance policies

(primary and excess), which provide property, decontamination and decommissioning coverage, are also described in the 2000 Annual Report.

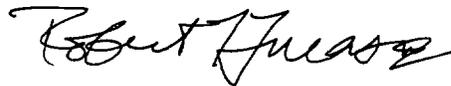
The Company submits that its analyses and assessments already address the kinds of risks that the Proposal could legitimately have an additional study address. The Company's analyses and assessments as to risk are current for the Company's nuclear plants and have been produced in a manner consistent with established industry guidance. They have been subject to review and approval by the NRC, an independent public federal regulatory agency, as NRC regulations require, and the review process, as discussed above with respect to SAMA, is subject to public participation. The dearth of necessary information available from public sources would make a meaningful study of the sort the Proposal requests not feasible. Accordingly, since analyses and assessments addressing the Proposal's concerns have already been produced and are updated regularly by the Company, and would seem to satisfy the Proposal's requirements, the Company respectfully submits that it has substantially implemented the Proposal. Accordingly, the Company submits that it may properly omit the Proposal from its 2002 proxy materials pursuant to Rule 14a-8(i)(10).

We respectfully request your confirmation that the Division of Corporation Finance will not recommend any enforcement action if the Company omits the Proposal from its proxy materials for its 2002 Annual Meeting of Shareholders for the reasons specified above. As required by Rule 14a-8(j), a copy of this letter, including the attached exhibit is being sent to the Proponent simultaneously with the sending of this letter to the Commission.

Please acknowledge receipt of this letter by stamping the enclosed copy and returning it in the enclosed self-addressed, stamped envelope. To meet the Company's projected preliminary proxy filing deadline and proxy printing schedule, we would appreciate receipt of the Staff's response on or before January 31, 2002.

Should you disagree with our conclusions, we respectfully request the opportunity to confer with you prior to the issuance of the Staff's response. Please do not hesitate to call the undersigned at (704) 382-8152 if you have any questions with respect to this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert T. Lucas III". The signature is written in a cursive, flowing style.

Robert T. Lucas III

Enclosures

cc: Richard D. Sears  
2161 Royall Drive  
Winston-Salem, NC 27106

## NUCLEAR RISK and RESPONSIBILITY

The shareholders request the Board of Directors to conduct an open comprehensive study, utilizing independent public resources, oversight, and participation (but excluding proprietary and confidential information), defining Duke Energy's risk of, and potential responsibility for, causing public harm due to the company's continued participation in nuclear energy programs, and to prepare, at reasonable expense, a report for the next annual shareholders' meeting in 2003.

### Supporting Statement:

Duke Energy's Environmental, Health & Safety Policy states:

Duke Energy highly values the health and safety of our employees, customers and communities.

Duke Energy will engage in partnerships that enhance public environmental, health & safety awareness and address common environmental, health & safety issues.

Duke Energy will foster open dialogue and informed decision making through meaningful and regular communication of environmental, health and safety information with management, employees and the public.

### Additional Supporting Statement:

The last Nuclear Regulatory Commission study of reactor accident consequences was done by the Sandia National Laboratory in 1981.

Duke Energy has made application to the Nuclear Regulatory Commission to renew the operating licenses for the McGuire and Catawba nuclear plants for an additional 20 years and if approved plans to operate these plants until the years 2041-2046. License approval by the Nuclear Regulatory Commission would extend by 20 years the risks associated with plant aging and the threats associated with terrorism.

In a separate application Duke Energy proposes to introduce a new plutonium fuel in the McGuire and Catawba reactors. This fuel would alter the risks arising from the transportation, use and storage of plutonium (theft, sabotage, terrorism).

The Nuclear Regulatory Commission acknowledges the threat of terrorism attacks on nuclear facilities. While ongoing analysis at the federal level is essential, when such questions are raised at the local level, they are often considered generic and not within the scope of the license renewal process. An independent public study will provide shareholders and other stakeholders credible information about the risks to specific communities and the predicted consequences of a catastrophic event.

###

# Richard D. Sears

(336)759-2867  
2161 Royall Drive  
Winston-Salem, NC 27106

February 15, 2002

Office of Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, NW  
Washington, DC 20549

RECEIVED  
OFFICE OF CHIEF COUNSEL  
CORPORATION FINANCE  
02 FEB 20 PM 3:50

Re: Duke Energy Shareholder Resolution for the 2002 Annual Shareholders' Meeting

Commissioners:

I wish to offer comments in response to Duke Energy's letter dated 12/27/01 seeking the Commission's approval for the company's exclusion of my shareholder resolution "Nuclear Risk and Responsibility". Page eight of their letter asks the Commission to deny me an opportunity to revise or amend either the resolution or supporting statements and sources. Given the magnitude and implications of the resolution's subject, I ask that it receive due consideration and I assure the Commission and Duke Energy of my willingness to revise the text as necessary to comply with the Commission's proxy rules.

Duke Energy's letter asserts that the proposed resolution includes, in their opinion, false and misleading statements. For instance, they cite "an open comprehensive study, utilizing independent public resources" as vague because such resources are not defined and misleading because such public resources do not exist. Numerous studies, such as "Sabotage at Nuclear Power Plants" (Purvis, James W 1999. Sandia National Laboratory. SAND-99-1850C) are available to the public. In fact, defining "independent public resources" would unnecessarily restrict the company's efforts and using confidential or classified documents would be illegal. The intent of the proposal is to alleviate legitimate shareholder concerns, not violate the law.

Duke Energy finds the statement regarding their 20 year license renewal application misleading unless we are to assume they might decide not to operate their reactors due to "a number of factors, including economics and safety". The resolution speaks directly to the issue of "economics and safety" and the company's obligation to inform its shareholders. In the case of the Catawba plant, the other "owners" are taxpayers of the cities that purchased a share (87.5%) of that facility and participate accordingly although they are not directly responsible for the plant's operation. Complicating the issue further, Duke Energy has petitioned the Federal Energy Regulatory Commission

to relieve them of liability for day to day operations of Company nuclear reactors.

The Department of Energy has entered into a contract with Duke Cogema Stone and Webster to use weapons grade plutonium processed at the Savannah River Site in South Carolina. The introduction of plutonium fuel is a definite change in operations and by entering into a contract Duke Energy has obligated the company and incurred potential liability due to risks associated with plutonium. The resolution asks that the shareholders be informed about such risks. I do not expect individual shareholders to participate in the Nuclear Regulatory Commission license amendment process when the company is already subject to an existing contract. Moreover, the European experience with reprocessed spent nuclear fuel, containing 60-70% plutonium-239, has been less than successful and did not involve weapons-grade plutonium which contains over 90% plutonium 239.

The integrity of a corporation is not questioned when independent experts prepare an analysis of company operations. Duke Energy submits financial records to an independent auditor for verification of how the Company has accounted for its income and expenses and managed the Company's assets. Shareholders expect and rely on such an audit. Recent developments involving audit relationships that lacked independence reinforce how important this is to protecting shareholder value. The resolution relies on the same assumption that independence lends credibility to any investigation.

My intent in citing excerpts from Duke Energy's Environmental, Health & Safety Policy was to point out that the resolution does not violate adopted company policy but instead complements the Company's stated policy of encouraging open discussion of environmental, health and safety issues. Quoting the complete Environmental, Health & Safety Policy would exceed the Commission's required length for shareholder resolutions.

Since Duke Energy is a corporation doing business as a public utility (Duke Power Company), I would expect that "an ordinarily prudent person" who is a director of the corporation would recognize the company's broader role and consider the relationship between the company's long-term interest and the well-being of the service area of the Company. The resolution seeks to clarify the Company's role with respect to a major issue of concern to both shareholders and neighboring communities. In no way would it require directors to "compromise their duties" as suggested by the Company.

Moving beyond discussion of information availability and the quality of safety studies, it is important to point out that the Company's liability under Price-Anderson is **limited** to \$9.5 billion according to the 2000 Annual Report. Karl Grossman, in a paper presented January 26, 2002 to The New School University, made the following statement: "The new Price-Anderson liability limit would be \$8.6 billion, a fraction of what the NRC itself has concluded would be the financial consequences of a nuclear plant accident. Those figures are contained in a 1982 report done for the NRC by the DOEs Sandia National Laboratories and titled "Calculation of Reactor Accident

Consequences for U.S. Nuclear Power Plants". It calculates-in 1980 dollars-costs as a result of a nuclear plant disaster as high as \$274 billion for Indian Point 2 and \$314 billion at the Indian Point 3 nuclear plants both a little more than 40 (miles) north of where we are today. The number of early fatalities-46,000 as a result of Indian Point 2 undergoing a meltdown with breach of containment, 50,000 for Indian Point 3." The question of inadequate insurance limits set by Congressional mandate is certainly relevant to the Company's shareholders.

Following the terrorist attack on September 11, 2001, Nuclear Regulatory Commission Chairman Richard Meserve made this point in an address to the Institute of Nuclear Power Operations in Atlanta: "In following a strategy of risk mitigation, society should undertake a careful examination of both risks and benefits. It is not the NRC's role to make judgments about this balance. But it is reasonable for the NRC to seek to assure that any decisions are made with a clear understanding of nuclear risks."

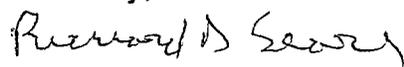
He went on to say, "Just to make myself entirely clear, I am not endorsing the continuation of "business as usual." Rather, I am saying that the problem needs to be defined before it can be solved. At this point, we are still in the definition stage in our evaluation of the terrorist threat. Any policy regarding the defense of nuclear facilities should be integrated in the overall response to the threat to infrastructure of all kinds."

The "Nuclear Risk and Responsibility" shareholder resolution seeks to inform the Company's stockholders of their shared responsibility for Duke Energy's nuclear operations. It does not ask the Company's directors to exceed their authority nor does it require the release of information not already in the public domain. Chairman Meserve's remarks reflect the significance of the problem and the challenges we face.

I urge the Commission to recognize the need for open discussion and the value of informed decisions by the shareholders by allowing the Proposal's inclusion in the 2002 proxy statement. If additional clarification is necessary, please contact me at (336)759-2867. A copy of this letter has been sent to the Company's representative.

Thank you for your consideration.

Sincerely,



Richard D. Sears

Enclosures

cc: Robert T. Lucas III  
Duke Energy Corporation  
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P. O. Box 1244  
Charlotte, NC 28201-1244



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Assistant Secretary

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**VIA FEDERAL EXPRESS**

December 27, 2001

Office of Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549

Re: Duke Energy Corporation 2002 Annual Shareholders' Meeting--  
Exclusion of Shareholder Proposal--Securities Exchange Act of  
1934, Rules 14a-8(i)(3), 14a-8(i)(6) and 14a-8(i)(10)

Ladies and Gentlemen:

On behalf of Duke Energy Corporation, a North Carolina corporation (the "Company"), I am submitting this letter pursuant to Rule 14a-8(j) under the Securities Exchange Act of 1934, as amended (the "Act"), in response to the shareholder proposal and accompanying supporting statement referenced herein (the "Proposal"), which has been submitted by Richard D. Sears (the "Proponent") for inclusion in the Company's 2002 proxy statement and form of proxy relating to the Company's Annual Meeting of Shareholders presently scheduled for April 25, 2002. The Company currently expects that it will file definitive copies of its 2002 proxy statement and form of proxy pursuant to Rule 14a-6 on or about March 18, 2002. I hereby request confirmation that the staff of the Division of Corporation Finance (the "Staff") will not recommend any enforcement action to the Securities and Exchange Commission (the "Commission") if, in reliance on one or more of the interpretations of Rule 14a-8 set forth below, the Company excludes the Proposal from its 2002 proxy materials.

Pursuant to Rule 14a-8(j), enclosed herewith are six copies of the following:

- (1) this letter, which represents the Company's statement of reasons for omission of the Proposal from its 2002 proxy statement and form of proxy; and
- (2) the Proposal, attached as Exhibit A hereto, which was submitted by the Proponent by letter dated November 19, 2001.

The Company intends to omit the Proposal pursuant to Rules 14a-8(i)(3), 14a-8(i)(6) and 14a-8(i)(10) under the Act, and requests that the Division of Corporation Finance advise the Company whether it would recommend any enforcement action against the Company in such event.

#### DISCUSSION OF REASONS FOR OMISSION

##### **I. Rule 14a-8(i)(3) — The Proposal May Be Omitted Because It Contains Statements that are False or Misleading.**

Rule 14a-8(i)(3) provides that a registrant may omit a proposal and any statement in support thereof from its proxy statement and form of proxy if the proposal or supporting statement is contrary to any of the Commission's proxy rules, including Rule 14a-9, which prohibits materially false or misleading statements in proxy soliciting materials. Specifically, Rule 14a-9 provides that no solicitation shall be made by means of any proxy statement containing "any statement which, at the time and in the light of the circumstances under which it is made, is false or misleading with respect to any material fact, or which omits to state any material fact necessary to make the statements therein not false or misleading."

The Proposal contains a number of such false and misleading statements, which are enumerated below.

(1) **The Proposal requests "an open comprehensive study, utilizing independent public resources . . . ."**: The Proposal specifies that the study requested in the Proposal utilize "independent public resources" and be open and comprehensive.

That requirement, however, is vague since the Proposal does not define or in any way indicate what the term "independent public resources" means in the context of defining risk of, and responsibility for, causing public harm due to the Company's nuclear energy program. Moreover, the Proposal is misleading because it implies that a meaningful study of the sort requested in the Proposal can be done utilizing solely "independent public resources": it cannot. This is so because a substantial amount of information that is used to develop probabilistic risk assessments (or PRAs) for the Company's nuclear plants is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Moreover, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort contemplated by the Proposal, utilizing only public sources, would thus not be feasible.

(2) **"An independent public study will provide shareholders and other stakeholders with credible information about the risks to specific communities and the predicted consequences of a catastrophic event."**: The Proposal requests a

report regarding risks of public harm, and mentions "terrorism," "sabotage," "risks to

specific communities" and "the predicted consequences of a catastrophic event." The Proposal also implies that a meaningful report of this sort is capable of being generated using only public sources. To the extent that the Proposal requests an analysis of risk likelihood (utilizing probabilistic risk assessment methods) with respect to terrorist attacks or acts of sabotage, however, such an analysis is not capable of being produced since information concerning prior terrorist attacks and acts of sabotage against commercial nuclear power plants or involving the transportation or storage of nuclear fuel, which would be necessary for probabilistic risk assessments, does not exist. To the extent that the Proposal requests an analysis of vulnerabilities to terrorist attack and to acts of sabotage, that analysis would necessarily require the consideration of "safeguards information," which, because of its security-sensitive nature, is not now and never has been in the public domain. Indeed, publication of this kind of information would raise homeland security concerns and be contrary to national security interests. Accordingly, the request in the Proposal that the Company provide a report on such risks using only public sources is misleading since a meaningful report of this sort would not be feasible to generate.

(3) **"Duke Energy has made application to the Nuclear Regulatory Commission to renew the operating licenses for the McGuire and Catawba nuclear plants for an additional 20 years and if approved plans to operate these plants until the years 2041-2046. License approval by the Nuclear Regulatory Commission would extend by 20 years the risks associated with plant aging and the threats associated with terrorism."** This statement implies that if the Company's license renewal application is approved, the Company would operate its reactors an additional 20

years, a statement that is false and misleading. Rather, approval of the Company's renewed operating license would merely authorize the Company to operate its reactors for an additional time period of up to 20 years. Whether the Company would choose to operate the reactors for such additional time period or any part thereof, would depend on a number of factors, including economics and safety. It should be noted that while the Company is the licensed operator of the Catawba plant mentioned above, it is only one of several owners of that plant.

(4) **"In a separate application Duke Energy proposes to introduce a new plutonium fuel in the McGuire and Catawba reactors. This fuel would alter the risks arising from the transportation, use and storage of plutonium (theft, sabotage, terrorism)."** The Company has not filed an application to introduce a different type of fuel in its McGuire and Catawba reactors, and when, or indeed whether, the Company will file such an application in the future is subject to a number of factors. As a part of the federal government's nonproliferation initiative to dispose of surplus weapons plutonium, the Company may, contingent on numerous factors, use mixed oxide fuel (or MOX) at its McGuire and Catawba plants. Mixed oxide fuel contains a small amount of plutonium oxide, blended with a large amount of uranium oxide (in an approximate ratio of 1:20) and thus is not a new plutonium fuel. Mixed oxide fuel has been transported, used and stored safely for decades in several European countries.

The assertion in the Proposal that a "new plutonium fuel" would "alter the risks arising from the transportation, use and storage of plutonium" is additionally misleading. Any license amendment applications submitted to the Nuclear Regulatory Commission ("NRC") for the use of mixed oxide fuel must contain all safety and

environmental analyses that the NRC requires in order to allow for evaluation of the safety and environmental impact of mixed oxide fuel use. Submission and approval of such applications would be necessary for the Company to utilize mixed oxide fuel in its nuclear reactors. The NRC's review and approval process would constitute an open comprehensive study that is subject to the oversight and participation that the Proposal appears to contemplate.

(5) **"An independent public study will provide shareholders and other stakeholders credible information . . ."**: This statement is opinion and not fact. Moreover, the statement implies that an independent study would generate "credible" information, whereas an internal study, undertaken by the Company, would not, an implication which clearly impugns the integrity of the Company. Moreover, that implication itself is unsupported by fact: no evidence is provided in the Proposal to support the idea that the information provided in the Company's reports is not credible. Indeed, the Company is a recognized leader in the nuclear industry.

(6) **"Supporting Statement: Duke Energy's Environmental, Health & Safety Policy states. . ."**: The Proposal contains excerpts from the Company's Environmental, Health & Safety Policy (the "EHS Policy") and labels those excerpts as the "Supporting Statement" of the Proposal. As a reading of those excerpts indicates, however, the EHS Policy does not commit the Company to provide an independent public study and report of the sort set forth in the Proposal. Rather, the EHS Policy reaffirms the Company's commitment to foster open dialogue and informed decision making through meaningful and regular communication with management, employees and the public; it states that it will engage in partnerships that enhance public

environmental, health and safety awareness and address common environmental, health and safety issues; and it reaffirms that it highly values the health and safety of its employees, customers and communities. To label the EHS Policy excerpts as a Supporting Statement of the Proposal is thus false and misleading.

(7) **The Proposal requests the Board of Directors "to conduct an open comprehensive study, utilizing independent public resources, oversight, and participation . . . ."**: This statement is misleading with respect to the duties the Company's Board would have to perform if the Proposal is implemented. Specifically, the Proposal asks the Company's Board to "conduct" a study that in effect would not be the Company's or the Board's and then to disseminate it to the Company's shareholders, as a report of the Company's Board, when the study, and the report, would in reality be, and relate to, an independent public study.

A director of a North Carolina corporation has a duty to discharge his or her duties as a director in good faith, with the care an ordinarily prudent person in a like position would exercise under similar circumstances and in a manner he or she reasonably believes to be in the best interests of the corporation. The Proposal would have the Company's Board cede supervisory and oversight authority to individuals whose only defining characteristic in the Proposal is that they are "independent" of the Company and who thus would not necessarily be acting in the Company's best interests. The resulting study would be for the benefit not of the Company and its shareholders only, but rather also for the benefit of the Company's other "stakeholders". The report would then be presented, as a report "prepared" by the Board, at the Company's next annual shareholders' meeting. The Proposal is misleading because in reality the Company's

Board would not conduct the proposed study and would have no supervisory or oversight authority after the study is commenced. The Proposal is also misleading because it does not inform shareholders that the Board may have difficulty implementing the Proposal because it may require the Company's directors to compromise their duties to the Company and its shareholders.

As the previously mentioned facts indicate, the Proposal contains numerous false or misleading statements. Such statements, individually and in the aggregate, are contrary to Rule 14a-9, which prohibits materially false or misleading statements in proxy soliciting materials. The Company submits that it may properly omit such statements from its 2002 proxy materials pursuant to Rule 14a-8(i)(3) on this basis.

Recently, the Staff indicated that, "when a proposal and supporting statement will require detailed and extensive editing in order to bring them into compliance with the proxy rules," the Staff may find it appropriate to grant relief without providing the proponent a chance to make revisions to the proposal and supporting statement. See Division of Corporation Finance: Staff Legal Bulletin No. 14 (July 13, 2001). We urge the Staff to provide such relief here.

**II. Rule 14a-8(i)(6)—The Proposal May Be Omitted Because the Company Would Lack the Power or Authority to Implement the Proposal.**

Rule 14a-8(i)(6) provides that a proposal may be excluded if "the company would lack the power or authority to implement the proposal."

The Proposal specifies that the study requested in the Proposal utilize "independent public resources" and be open and comprehensive. The Proposal thus

implies that a meaningful study of the sort requested in the Proposal can be done utilizing solely "independent public resources": it cannot. A substantial amount of information that is used to develop probabilistic risk assessments (or PRAs) for the Company's nuclear plants is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Moreover, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort contemplated by the Proposal, utilizing only public sources, would thus not be feasible.

The Proposal requests a report regarding risks of public harm, and mentions "terrorism," "sabotage," "risks to specific communities" and "the predicted consequences of a catastrophic event." The Proposal also implies that a meaningful report of this sort is capable of being generated using only public sources. To the extent that the Proposal requests an analysis of risk likelihood (utilizing probabilistic risk assessment methods) with respect to terrorist attacks or acts of sabotage, however, such an analysis is not capable of being produced since information concerning prior terrorist attacks and acts of sabotage against commercial nuclear power plants or involving the transportation or storage of nuclear fuel, which would be necessary for probabilistic risk assessments, does not exist. To the extent that the Proposal requests an analysis of vulnerabilities to terrorist attack and to acts of sabotage, that analysis would necessarily require the consideration of "safeguards information," which, because of its security-sensitive nature, is not now and never has been in the public domain. Indeed, publication

of this kind of information would raise homeland security concerns and be contrary to national security interests.

For the reasons specified above, the Company would lack the power to generate a meaningful report of this sort using only "independent public resources" (but "excluding proprietary and confidential information"). The Company submits that the Proposal may be properly excluded from the Company's 2002 proxy materials under Rule 14a-8(i)(6) on this basis.

**III. Rule 14a-8(i)(10) — The Proposal May Be Omitted Because It Has Been Substantially Implemented.**

Rule 14a-8(i)(10) provides that a proposal may be excluded from a company's proxy materials "if the company has already substantially implemented the proposal." The Company submits that the Proposal is excludable from its 2002 proxy materials under Rule 14a-8(i)(10) because the Company has substantially implemented the Proposal for the reasons specified below.

The Proposal requests that the Company, in effect, commission an open, comprehensive and independent public study for the purpose of "defining Duke Energy's risk of, and potential responsibility for, causing public harm" because of the Company's participation in its nuclear energy programs. The Proposal requests that the study be performed with independent public participation and oversight and that it utilize "independent public resources," excluding "proprietary and confidential information." The study would be the basis of a report that would be paid for by the Company "at reasonable expense" and be presented at the Company's 2003 annual shareholders' meeting.

? ✓ The Proposal states that the last NRC study of reactor accident consequences was done by the Sandia National Laboratory in 1981. (In reality, the Sandia National Laboratory conducted an evaluation of severe accident risks for five U.S. nuclear power plants which was published in 1990.) The Proposal would apparently have the Company develop a report of a similar nature updated to reflect any changed circumstances and improved analytical techniques, with the Company's nuclear plant operations as the report's focus. As discussed below, however, the Company has in fact ? already done recent analyses and assessments of this kind utilizing information internal and proprietary to it.

The Company began performing probabilistic risk assessments (or PRAs) for its nuclear plants in the early 1980's. PRAs are reactor safety studies, and the Company maintains PRAs for each of its nuclear plants. The Company's PRAs analyze the risk of core damage, analyze core behavior and containment performance and analyze public health risk for severe (or beyond design basis) accidents (e.g., the type of damage sustained at Three Mile Island Unit 2 in 1979). These PRAs assess the public health risks to the populations surrounding the Company's nuclear plants. The Company has a staff of approximately 13 engineers and technical personnel who have an expertise in performing PRAs that are consistent with the most current risk assessment methodology and use the most current reliability information. Based on the PRA methodology, the ? Company submitted, in the 1990's, Individual Plant Examinations (IPEs) to the NRC, and those IPEs were reviewed by the NRC and found to be acceptable. The Company uses the information from its PRAs, which are updated periodically, to identify plant and

procedural changes that would enable it to continue to operate its nuclear plants in a safe manner.

The Company's PRAs for its nuclear plants are subject to independent peer review and hence to outside oversight. Specifically, the PRAs for the Company's McGuire and Oconee plants have recently undergone peer reviews, while the peer review for the PRA for the Catawba plant is scheduled for May 2002. These peer reviews are sponsored by the so-called "Owners Group" for the type of plant design in question. For example, the McGuire and Catawba plants are Westinghouse plants, so that the Westinghouse Owners Group sponsors the peer reviews for those plants, with the participants in the peer reviews being a combination of personnel from other Westinghouse plants with PRA experience and outside consultants. Since the Oconee plant is a Babcock & Wilcox plant, the Babcock & Wilcox Owners Group sponsors the peer review, with the participants being a combination of personnel from other Babcock & Wilcox plants with PRA experience and outside consultants.

The Company has also conducted Severe Accident Mitigation Alternatives (or SAMA) analyses as part of its applications for renewal of its operating licenses for its nuclear plants. A SAMA analysis analyzes core damage frequency, core behavior and containment performance, and public health risk. The SAMA analyses are subject to review and approval by the NRC. The SAMA analysis for the Company's Oconee plant has been reviewed and approved by the NRC, for example, in the context of its review of the Company's license renewal application, which was approved by the NRC on May 23, 2000. The SAMA analyses for the McGuire and Catawba plants have been submitted to the NRC and are being reviewed in the context of the NRC's review of the license

renewal application the Company filed for those plants on June 13, 2001. The purpose of each SAMA analysis is to look for cost effective changes to the applicable nuclear plants that would reduce public health risk.

The Proposal additionally mentions risks associated with plant aging, which the Proposal would presumably have its study also address. The Company has in place effective aging management programs for its nuclear plants, and, in the context of license renewal, will implement additional aging management programs as necessary to manage the effects of aging during any period of extended operation. These programs are subject to review and approval by the NRC and to public participation and challenge consistent with the license renewal process set forth in the NRC's regulations.

The Proposal requests an open study with public oversight and participation. The Company notes in this regard that the license renewal applications recently filed with the NRC for the McGuire and Catawba plants and recently approved by the NRC with respect to the Company's Oconee plant, is overseen by the NRC, an independent federal regulatory agency. The license renewal process includes opportunities for public participation, including the opportunity to comment and the opportunity to request a hearing. A SAMA analysis is included in each of the license renewal applications submitted to the NRC and is subject to the same review, comment and challenge as the balance of the license renewal application.

The Proposal also specifies that independent public resources are to be utilized in the study requested in the Proposal, excluding proprietary and confidential information. The Company wishes to reiterate that if independent public resources

means public sources, then a study and report using information from public sources may in fact not be feasible. This is so because a substantial amount of information that is used to develop PRAs is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Indeed, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort specified in the Proposal, which utilizes only independent public sources, would thus not be possible.

The Proposal also requests that the proposed study and report define the Company's "potential responsibility" for public harm arising out of the operation of its nuclear plants. The Company respectfully submits that relevant information is already available in the Company's 2000 Annual Report (pp. F43-F44). Specifically, as described in the 2000 Annual Report, the Company is insured against public liability claims resulting from nuclear incidents, as required under the Price-Anderson Act, to the full limit of liability of approximately \$9.5 billion. The Company has purchased the maximum required private primary liability insurance of \$200 million with a like amount to cover certain worker tort claims. As to excess liability insurance, the relevant policy currently provides approximately \$9.3 billion of coverage through the Price-Anderson Act's mandatory industry-wide excess secondary insurance program of risk pooling. The Company's 2000 Annual Report also provides information relating to possible assessments in the event of a nuclear incident at one of the Company's licensed facilities if public liability damages were to occur. The Company's property insurance policies

(primary and excess), which provide property, decontamination and decommissioning coverage, are also described in the 2000 Annual Report.

The Company submits that its analyses and assessments already address the kinds of risks that the Proposal could legitimately have an additional study address. The Company's analyses and assessments as to risk are current for the Company's nuclear plants and have been produced in a manner consistent with established industry guidance. They have been subject to review and approval by the NRC, an independent public federal regulatory agency, as NRC regulations require, and the review process, as discussed above with respect to SAMA, is subject to public participation. The dearth of necessary information available from public sources would make a meaningful study of the sort the Proposal requests not feasible. Accordingly, since analyses and assessments addressing the Proposal's concerns have already been produced and are updated regularly by the Company, and would seem to satisfy the Proposal's requirements, the Company respectfully submits that it has substantially implemented the Proposal. Accordingly, the Company submits that it may properly omit the Proposal from its 2002 proxy materials pursuant to Rule 14a-8(i)(10).

We respectfully request your confirmation that the Division of Corporation Finance will not recommend any enforcement action if the Company omits the Proposal from its proxy materials for its 2002 Annual Meeting of Shareholders for the reasons specified above. As required by Rule 14a-8(j), a copy of this letter, including the attached exhibit is being sent to the Proponent simultaneously with the sending of this letter to the Commission.

Please acknowledge receipt of this letter by stamping the enclosed copy and returning it in the enclosed self-addressed, stamped envelope. To meet the Company's projected preliminary proxy filing deadline and proxy printing schedule, we would appreciate receipt of the Staff's response on or before January 31, 2002.

Should you disagree with our conclusions, we respectfully request the opportunity to confer with you prior to the issuance of the Staff's response. Please do not hesitate to call the undersigned at (704) 382-8152 if you have any questions with respect to this matter.

Very truly yours,



Robert T. Lucas III

Enclosures

cc: Richard D. Sears  
2161 Royall Drive  
Winston-Salem, NC 27106

## NUCLEAR RISK and RESPONSIBILITY

The shareholders request the Board of Directors to conduct an open comprehensive study, utilizing independent public resources, oversight, and participation (but excluding proprietary and confidential information), defining Duke Energy's risk of, and potential responsibility for, causing public harm due to the company's continued participation in nuclear energy programs, and to prepare, at reasonable expense, a report for the next annual shareholders' meeting in 2003.

### Supporting Statement:

Duke Energy's Environmental, Health & Safety Policy states:

Duke Energy highly values the health and safety of our employees, customers and communities.

Duke Energy will engage in partnerships that enhance public environmental, health & safety awareness and address common environmental, health & safety issues.

Duke Energy will foster open dialogue and informed decision making through meaningful and regular communication of environmental, health and safety information with management, employees and the public.

### Additional Supporting Statement:

The last Nuclear Regulatory Commission study of reactor accident consequences was done by the Sandia National Laboratory in 1981.

Duke Energy has made application to the Nuclear Regulatory Commission to renew the operating licenses for the McGuire and Catawba nuclear plants for an additional 20 years and if approved plans to operate these plants until the years 2041-2046. License approval by the Nuclear Regulatory Commission would extend by 20 years the risks associated with plant aging and the threats associated with terrorism.

In a separate application Duke Energy proposes to introduce a new plutonium fuel in the McGuire and Catawba reactors. This fuel would alter the risks arising from the transportation, use and storage of plutonium (theft, sabotage, terrorism).

The Nuclear Regulatory Commission acknowledges the threat of terrorism attacks on nuclear facilities. While ongoing analysis at the federal level is essential, when such questions are raised at the local level, they are often considered generic and not within the scope of the license renewal process. An independent public study will provide shareholders and other stakeholders credible information about the risks to specific communities and the predicted consequences of a catastrophic event.

###

## Our Environmental, Health & Safety Policy

Duke Energy highly values the health and safety of our employees, customers and communities. This Environmental, Health & Safety Policy establishes principles to protect and advance the corporation's essential interests worldwide and to fulfill our commitment to people and the environment. Protecting and responsibly managing natural resources are critical to the quality of life in the areas we serve, the environment and Duke Energy's long-term business success.

### Accountability

Leadership is accountable for systematically managing environmental, health & safety risks, opportunities and impacts as an integral part of our business. Employees are accountable for understanding and incorporating environmental, health & safety responsibilities into daily work activities. Suppliers, contractors and partners are accountable for meeting applicable EHS requirements.

### Stewardship

Duke Energy will use natural resources and energy efficiently to reduce waste and emissions at their source. We will strive to improve operations with a focus on preventing environmental and safety incidents and preserving public safety. Duke Energy will engage in partnerships that enhance public environmental, health & safety awareness and address common EHS issues.

### Standards

All businesses will comply with internal standards and applicable laws and regulations. Strategic relationships will be developed to promote sound public policy.

### Performance

Duke Energy will set challenging goals and assess performance to continually improve environmental, health & safety results that contribute to business success. We will work with our suppliers, contractors and partners to enhance environmental, health & safety performance.

### Communication

Duke Energy will foster open dialogue and informed decision making through meaningful and regular communication of EHS information with management, employees and the public.

[www.duke-energy.com/](http://www.duke-energy.com/)



# NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs

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Web Site: <http://www.nrc.gov/OPA>

S-01-029

## NUCLEAR SECURITY ISSUES IN THE POST-SEPTEMBER 11 ENVIRONMENT

**Dr. Richard A. Meserve**  
**Chairman**  
**United States Nuclear Regulatory Commission**  
**before the**  
**Institute of Nuclear Power Operations**  
**Atlanta, Georgia**  
**November 8, 2001**

### **I. Introduction**

I appreciate the opportunity to address this gathering again. As you know, this is my third appearance here since joining the NRC. Two years ago, when I first spoke to you, I had been in office less than a week, and this event largely provided an opportunity to get acquainted. Last year, there were numerous issues to discuss, including safety, plant security, the evolution toward risk-informed and performance-based regulation, the license renewal process, and more. All those issues continue to require the NRC's attention. But today, for reasons that are self-evident, one issue stands out -- nuclear power plant security. This is the issue on which I will concentrate in my remarks to you today.

The protection of licensed facilities against sabotage is by no means a new issue for the NRC or its licensees, as you well know. For decades, security against sabotage has been an important part of the NRC's regulatory activities and our licensee's responsibilities, applying defense in depth as the guiding principle. This begins at the design stage, with facilities that are capable of withstanding many of the challenges that either safety events or safeguards events, such as armed assaults, might bring to bear. Nuclear facilities are among the most robustly built structures in existence. Secondly, we require careful background checks to minimize the risk of insider assistance and have access controls, delay barriers, and intrusion detection systems to detect and deter potential attackers. Thirdly, we require that licensees be able to respond with force to a group of armed attackers using protective strategies involving layers of defense.

This system of multiple protections has long been in place. But that is not sufficient reason for assuming that "business as usual" is an acceptable response to the events of September 11. What occurred on that date was an attack by suicidal terrorists bent on maximizing damage in the course of their own self-destruction. September 11 has served as a wake-up call to America about the threat of terrorist attacks. I am sure that all of you in the nuclear industry are particularly aware of the heightened public sensitivity to the possible vulnerability of nuclear plants in this changed environment.

As a result, there is now intense pressure to bolster defenses and to establish new anti-terrorism strategies. But this is not a time for hasty and unreasoned overreaction, much less for panic. We need to approach the issues systematically and thoughtfully. At the same time, this is not the occasion for any of us to put our heads in the sand and to ignore the ruthlessness and destructiveness of our terrorist adversaries or their capacity to attack in strength. In short, we need to be willing in these uncommon times to follow the path of common sense, without alarmism on the one hand or complacency on the other. That means being realistic and prudent in assessing both the dimensions of the potential threat and the strength of our system of defenses. It also requires vigilance by all concerned, including the federal government, licensees, and state and local authorities. None of us can afford to declare the problem to be someone else's responsibility.

Let me say at the outset on behalf of the Commission that you have responded to the call by augmenting the defense of your plants and by maintaining an aggressive security posture. We have asked you to undertake additional measures and you have responded. Thank you. But, as they say, no good deed goes unpunished: the NRC will place continuing reliance on your efforts in the weeks and months ahead.

My aim today is both to reflect on the events of the past two months and to look forward to matters that will unfold over the coming months. I will first provide a quick overview of the activities of the NRC arising from the terrorist attacks. I will then turn to a discussion of certain of the policy issues with which we and other nuclear stakeholders must grapple.

## **II. NRC Response to the September 11 Events**

Shortly after the second crash into the World Trade Center on September 11, the NRC activated its Emergency Operations Center and the Regions activated their Incident Response Centers. We immediately issued a notice to advise our major licensees to go to the highest level of security, which we have maintained since that time. We have sought to maintain a steady information flow with our licensees through some 20 threat advisories, regular communications between the Regional Administrators and licensees, audits of licensee activities, and numerous interactions with various stakeholders. The NRC's Executive Team meets, as a minimum, once a day to discuss our interactions with other government agencies, the threat environment and actions that should be considered. And all of my fellow Commissioners are fully engaged in the process; they receive daily briefings and provide me with the benefit of their views.

We have maintained 24-hour per day operation of the Emergency Operations Center since September 11. This effort has principally involved our safeguards team. This group receives a steady flow of information from the intelligence community, law enforcement, and licensees which is evaluated to determine whether to revise the threat advisory for licensees in general or for particular plants. The flow of information is substantial and constant attention to it is necessary.

Let me provide you with an example. Some of you are aware that the NRC received information in the early evening a few weeks ago about an impending air attack on Three Mile Island that could not be discounted by the intelligence community. This resulted in an immediate advisory to TMI about the threat, the establishment of a no-fly zone by the Federal Aviation Administration, and the deployment of military assets. Although a determination was made that this threat was not credible by early the next morning, NRC, other Federal agencies, and the licensee were obliged to act because no one was able initially to discredit the threat. The continuous operation of the Emergency Operations Center has allowed the real-time evaluation of such potential threats, as well as the numerous suspicious events (flyovers, surveillance activities, threats, etc.) that have been reported to us by licensees, local law enforcement, or others.

We have also worked closely with the Federal Bureau of Investigation, the Federal Emergency Management Agency, the Department of Energy, the Federal Aviation Administration, the military, and others in order to coordinate our activities. The NRC has had a staff person assigned to the FBI's Strategic Information Operations Center (or SIOC) since September 11. SIOC has provided a means for Government-wide review of our threat advisories and for rapid communication among Federal agencies. For example, the evaluation of the constant flow of law enforcement information among a variety of agencies is coordinated through SIOC.

The President has also now created the Office of Homeland Security under the leadership of Governor Ridge. Although this office is not yet completely staffed and is operating out of temporary quarters, it is now serving as the central focus for the Government's policy response to domestic terrorism. For example, the decision on November 1 to establish no-fly zones in the vicinity of NRC and DOE facilities was coordinated through this office. Governor Ridge also placed a call to the Governors to discuss the escalation of the threat environment, which resulted in the increase in state police and National Guard at many nuclear facilities. It seems clear that the role and importance of the Office of Homeland Security will continue to grow in the months ahead.

As I mentioned, the NRC placed its licensees on the highest security level on September 11. I had expected that the situation would become better defined within a week or two, at which time I contemplated we would then find it appropriate to relax the heightened security posture. My expectations could not have been more wrong. In fact, the assessment of the threat has escalated since those early days, leading to Attorney General Ashcroft's announcement last week that there were credible reports of another major terrorist attack in the days ahead. In addition, Governor Ridge announced last Friday that the heightened security level should continue "indefinitely."

At this juncture, I cannot estimate when it will be appropriate to relax our security posture. There is no credible threat directed at a nuclear power plant at this time. However, there is a steady flow of information to indicate that terrorist attacks directed at the United States are likely, although the precise targets and the precise timing are unspecified or ill-defined. You need only read the newspapers to appreciate the fluidity of the situation that we confront. I know that this creates a difficult situation for NRC's licensees. I can only say that it also poses a challenge to the NRC, although I suspect that fact provides scant comfort to you.

Shortly after the attacks, I directed the staff to undertake a top-to-bottom review of every aspect of our security requirements. I am pleased to report that I had the unanimous support of the Commission in this undertaking. Nothing is off the table. To those who may question the need for a comprehensive reevaluation, I would simply respond that we must assure ourselves that our security

regime is appropriate to the new circumstances presented by the current terrorist threat. Fortunately, we are not starting with a blank slate; the NRC has always taken security very seriously. This review is something that all should welcome.

Although the review has only just started, there are certain overarching policy issues that I believe will be central to its completion. Let me spend a few moments to discuss three fundamental issues with which we -- and you -- must grapple. The Commission has not yet had the opportunity to address these issues, so these comments should be seen as my own.

### **III. Three Fundamental Policy Issues.**

#### **A. Risk Avoidance and Risk Mitigation**

First, I will discuss risk avoidance and risk mitigation. As you know, in the weeks since September 11, there have been numerous and visible comments in the press about the vulnerability of nuclear power plants to terrorist attack. I am sure that most of these comments have reflected a sincere effort to inform the public about important policy issues, although I have sometimes feared that some of the comments might invite attacks on nuclear facilities. Nonetheless, even if the current struggle against terrorism should come to a successful conclusion without any evidence that nuclear plants were ever a target, some may argue that the only acceptable response to the risk of nuclear terrorism is to shut down and decommission the Nation's reactors. Others will be prepared to continue with nuclear power so long as they are satisfied that prudent security steps have been taken.

One way of characterizing the difference between the two points of view is by comparing "risk mitigation" with "risk avoidance." Risk mitigation looks at an activity that has inherent hazards -- including all kinds of travel, and virtually all kinds of electrical generation -- and asks how those risks can reasonably be limited. That means preventing harm in the first place; minimizing any harm that does occur; and having adequate means of assisting those who have been harmed. The activity is allowed to proceed if, by the exercise of reasonable prudence, the risks are acceptably small in light of the benefits from the activity. Risk avoidance, by contrast, seeks the absolute protection that comes only from eliminating an activity, disregarding any benefits that it provides.

The crimes of September 11 were designed to shock and stun the American people in part by the very fact that they involved such large and imposing targets. In the effort to ensure that no such horror ever occurs again, there is a danger of drawing the wrong lesson from the terrorist attacks: of blaming the victim, so to speak. The destruction of a skyscraper does not prove that it was a mistake to build skyscrapers, any more than the dissemination of anthrax spores through the mails proves that it is an error to operate a postal service. No one can seriously think that if the World Trade Center had never been built, the terrorists would have been at a loss to come up with some other target symbolic of America's status in the world.

If we allow the threats of terrorists to determine what we build and what we operate, we would be headed back into the past, toward an era without suspension bridges, harbor tunnels, stadiums, or hydroelectric dams, let alone skyscrapers, liquid natural gas terminals, chemical factories, or nuclear power plants. Even then it would be an exercise in futility to try to eliminate all possible targets of terrorism. The problem, as the President has made clear, is not the terrorists' targets, but the terrorists themselves. It is they who need to be eliminated, not necessarily the myriad creations of a modern,

democratic, industrial society. It is thus my view that a strategy of risk avoidance -- the elimination of the threat by the elimination of potential targets -- does not reflect a sound response to terrorists.

Rather, the evaluation of the terrorist threat to infrastructure, including nuclear plants, should include a careful and realistic examination of risks and benefits. I acknowledge that the events of September 11 may have changed the perception of the risks to our society, including the risks of nuclear power. But, as Vice-President Cheney announced in the Administration's energy plan, there are benefits from nuclear power that also should be weighed in the balance: the output of nuclear plants represents not only an economic bulwark, but also an important element of national security. In following a strategy of risk mitigation, society should undertake a careful examination of both risks and benefits. It is not the NRC's role to make judgments about this balance. But it is reasonable for the NRC to seek to assure that any such decisions are made with a clear understanding of nuclear risks.

In the coming weeks and months, we can expect to see many proposals directed at bolstering public safety and security in the face of the threat of terrorism. Quite justifiably, the American people and their representatives are looking for assurance that the Nation will never again endure the suffering imposed on us on September 11. But we should be wary of acting too precipitately, for fear that we will cross the line from risk mitigation to risk avoidance. We should avoid absolute prescriptions while the struggle against terrorism is still in progress.

Just to make myself entirely clear, I am not endorsing the continuation of "business as usual." Rather, I am saying that the problem needs to be defined before it can be solved. At this point, we are still in the definition stage in our evaluation of the terrorist threat. Any policy regarding the defense of nuclear facilities should be integrated in the overall response to the threat to infrastructure of all kinds.

#### **B. Public and Private Roles.**

The second policy issue that I would like to discuss relates to public and private roles in the defense against terrorism. This is an issue that the events of September 11 have brought clearly to the fore.

As you know, the obligations of NRC licensees in the defense of nuclear power plants are defined by the "design basis threat" (or DBT). The DBT is specified in general terms in our regulations (73.1) and in greater detail in sensitive documents. The DBT was established by the Commission with the assistance of safeguards experts who, with help from the Department of Energy and the intelligence community, evaluate terrorist-related information both abroad and in the United States. As it happens, in the pre-September 11 world, the DBT served both as the definition of our licensees' defense obligation and as the NRC's assessment of the reasonably likely sabotage threat. Although it was perhaps implicit that Government bears the responsibility for defense against attacks that exceed the DBT,<sup>1</sup> serious preparations had not been undertaken for defense against a threat larger than or different from the DBT. This is understandable because the need for governmental resources was not viewed as very likely.

September 11 obviously revealed a type of attack -- a kamikaze assault using a large commercial aircraft -- that has not been part of the NRC's planning (or that of any other agency with similar

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<sup>1</sup>The limitation on licensee responsibility was explicitly recognized in 10 CFR 50.13, which provides that a licensee need not provide defense for attacks from an "enemy of the United States."

responsibilities). Moreover, there are other aspects of the September 11 attack and the subsequent assessments that require the NRC and its licensees to reevaluate the type of assault that might be mounted against a nuclear plant. As a result, on an interim basis, the defensive capacity at nuclear plants has been upgraded.

There are limits, however, to what should be expected from a private guard force. Even if it were determined, for example, that nuclear power plants should be defended against aircraft attack, I doubt that the NRC would ever expect licensees to acquire and operate anti-aircraft weaponry. Rather, this obligation would be one for the military. Similarly, there might be other types of attacks which should properly involve Governmental response because of the size of the assumed attacking force or the equipment that must be employed in defense. As a result, in its development of policy, the NRC must be prepared to differentiate the defensive obligation that is borne by licensees from the threat against which the facility must be defended. Any gap between a licensee capability and the assumed threat would reflect a recognition of obligations that must be assumed by the Government and for which the Government must prepare.

As part of the top-to-bottom review that I mentioned earlier, the NRC will reexamine the DBT and modify it, as appropriate. As in the past, the NRC will coordinate its evaluation with various other agencies of Government. But for the first time there may also have to be a discussion with the military, the States, and local law enforcement about the commitment of governmental assets. I do not expect that the definition of the appropriate boundary between the private and public sector in the defense of nuclear facilities to be easy, particularly in light of the budgetary obligations that might be associated with any new governmental responsibilities. The Office of Homeland Security will no doubt have to be a central player in this discussion, while at the same time it has a variety of other matters with which it must deal. Exactly how this debate will unfold remains uncertain. I will merely predict that this will be a difficult policy issue that will not be subject to the NRC's sole control.

### **C. The Balance Between Security and Openness.**

The third policy issue relates to the balance between security and openness. One of NRC's four performance goals is the maintenance of public confidence in NRC decision-making. We have sought to achieve this goal through a variety of means, but perhaps the most central tool has been the NRC's policy of openness. We recognize that decisions made behind closed doors are viewed with suspicion. We have therefore sought to assure open decision processes that would enable the public to be informed of the issues that are before us, and to have access to the information on which we base our decisions. In short, we have struggled to achieve transparency in our activities. We cannot aspire to a world in which all will be satisfied by our decisions, but we have hoped that all would appreciate that our decisions were reached through fair and open processes.

One of the tools that we used to achieve openness was our website. In the aftermath of the September 11 attacks, we became aware that we had substantial information on our website that might be of interest to terrorists. We now recognize that NRC's policy of openness requires reconsideration at least as it relates to information that bears on the physical security of nuclear power plants. As a result, we brought our website entirely down. We have been restoring information only after a careful review to assure that the provision of the information does not create security risks.

As a general matter, we need to rethink just how open we can and should be with respect to physical security issues. In the past, when the adequacy of security plans was an issue in licensing

proceedings, parts of hearings were closed to the general public, and non-disclosure agreements were required from the parties and their attorneys. If, as seems likely, security will play an increasing role in NRC deliberations, it may be necessary to consider more such *in camera* discussions. It would be premature to make recommendations at this time about our general approach to public access to information. I can only say that we will give due regard to two vital but competing interests. The first is the public's right to know, a right that is grounded in law and is one of the most cherished principles of our democracy. The other is the need to keep sensitive information away from those whose purpose is to destroy that democracy. We will strive to strike an appropriate balance between them.

## V. Conclusion

Let me note in conclusion that we live in very uncertain times and it is difficult at this juncture to predict how these various policy issues I have discussed will be resolved. We appreciate your cooperation so that we can jointly develop with you and our other stakeholders a sound and appropriate security regime.

President Bush described the September 11 attacks as an act of war. Plainly, those vicious attacks far exceeded anything that the NRC had contemplated as a threat to our licensees. Nor had we seriously considered the possibility that a terrorist threat might affect all U.S. nuclear facilities simultaneously. In principle, of course, it is the responsibility of the Federal Government to protect the nation against threats from abroad; but the reality of the present crisis is that all of us, organizations and individuals, public and private, have a responsibility as citizens to do our part to protect the American people. On behalf of the Commission, I want to say that we recognize, and appreciate, the efforts and the sacrifices that licensees throughout the industry have made to maintain and improve security in this critical period.

This is not a time for panic or doomsaying. Rather, it is a time for all of us, in government and the industry, to stick to the task at hand. The national interest requires vigilance at a high level; it requires close cooperation and communication between Government and licensees; and it requires coolness and clear-sightedness in analyzing and correcting problems. We all bear an enormous responsibility. At the same time, we have the opportunity -- and obligation -- to provide vital service to our country. Thank you for your efforts.

And thank you for allowing me to join you again.

## NRC NEWS

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No. 01-112 September 21, 2001

### NRC REACTS TO TERRORIST ATTACKS

In light of the recent terrorist attacks, U.S. Nuclear Regulatory Commission officials and staff have been working around the clock to ensure adequate protection of nuclear power plants and nuclear fuel facilities. This has involved close coordination with the Federal Bureau of Investigation, other intelligence and law enforcement agencies, NRC licensees, and military, state and local authorities.

Immediately after the attacks, the NRC advised nuclear power plants to go to the highest level of security, which they promptly did. The NRC has advised its licensees to maintain heightened security. The agency continues to monitor the situation, and is prepared to make any adjustments to security measures as may be deemed appropriate.

In view of the recent unprecedented events, Chairman Richard A. Meserve, with the full support of the Commission, has directed the staff to review the NRC's security regulations and procedures.

A number of questions have come in from reporters and members of the public since the tragic events of September 11. The following questions and answers are offered in response:

Q: What would happen if a large commercial airliner was intentionally crashed into a nuclear power plant?

A.: Nuclear power plants have inherent capability to protect public health and safety through such features as robust containment buildings, redundant safety systems, and highly trained operators. They are among the most hardened structures in the country and are designed to withstand extreme events, such as hurricanes, tornadoes and earthquakes.

In addition, all NRC licenses with significant radiological material have emergency response plans to enable the mitigation of impacts on the public in the event of a release. However, the NRC did not specifically contemplate attacks by aircraft such as Boeing 757s or 767s and nuclear power plants were not designed to withstand such crashes. Detailed engineering analyses of a large airliner crash have not yet been performed.

Q: What measures have the NRC and its power plant licensees taken in face of this potential threat?

A: Immediately after the attacks, the NRC advised licensees to go to the highest level of security, which all did promptly. The specific actions are understandably sensitive, but they generally included such things as increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and limited access of personnel and vehicles to the sites.

Q: What, precisely, did the NRC do in response to the attacks?

A: At 10 a.m. on September 11, the NRC activated its Emergency Operations Center in headquarters and assembled a team of top officials and specialists. The same was done in each of its four regional offices.

In addition to communicating with its licensees about the need to go to the highest level of security, the NRC established communications with the FBI, the Department of Energy, and the Federal Emergency Management Agency, among others. NRC personnel were dispatched to the FBI's Strategic Information Operations Center. The NRC has also established close communications with nuclear regulators in Canada and Mexico.

Q: What would happen if a large aircraft should crash into a spent fuel dry storage cask?

A: The capacity of spent fuel dry storage casks to withstand a crash by a large commercial aircraft has not been analyzed. Nonetheless, storage casks are robust and must be capable of withstanding severe impacts, such as might occur during tornadoes, hurricanes or earthquakes. In the event that a cask were breached, any impacts would be localized. All spent fuel storage facilities have plans to respond to such an emergency, drawn up in consultation with local officials.

Q: What if a large aircraft crashed into a spent fuel transportation cask in a heavily populated area?

A: Again, the capacity of shipping casks to withstand such a crash has not been analyzed. However, they are designed to protect the public in severe transportation accidents. The cask must be able to withstand a 30-foot drop puncture test, exposure to a 30-minute fire at 1475 degrees Fahrenheit, and submersion under water for an extended period. Moreover, the location of loaded casks is not publicly disclosed and such a cask would present a small target to an aircraft.

If an airliner crashed into a cask, there could be some localized impacts. Regulations require special accident response training of those involved in shipping, as well as coordination with state, local and tribal emergency response personnel. In addition, redundant communications must be maintained during shipment with the transporter vehicle; this would facilitate emergency response, if necessary.

Q: Could such a crash into a nuclear power plant, or a storage or shipping cask trigger a nuclear explosion?

A: No.

Q: What are the consequences if an airliner crashed into a uranium fuel cycle facility?

A: Because of the nature of the material, there would likely be only minimal off-site radiological consequences. Some such facilities use chemicals similar to those found at many industrial facilities. In the event of a release, comprehensive emergency response procedures would be immediately implemented.

Q: Have nuclear power plants been subject to attack in the past?

A: There has never been an attack on a nuclear power plant. On very rare occasions there have been intrusions. For example, there was a 1993 car crash through the gates of Three Mile Island plant by an individual with a history of treatment for mental illness. Such intrusions have not resulted in harm to public health or safety.

Q: What are the normal security measures at commercial nuclear power plants?

A: Licensees are required to implement security programs that include well-armed civilian guard forces, physical barriers, detection systems, access controls, alarm stations, and detailed response strategies. NRC routinely inspects security measures as part of its normal reactor oversight process and periodically undertakes various exercises, including force-on-force exercises, so as to assure that any vulnerabilities are exposed and corrected.

Q: Is an attack using an airplane part of the NRC's design basis threat against which its licensees have to defend?

A: No. The NRC has been in close and continuing contact with law enforcement and the military regarding such a threat.

Q: What exactly is the so-called design basis threat?

A: The details of the design basis threat are classified, but it includes the characteristics of a possible sabotage attempt that NRC licensees are required to protect against. The agency continually assesses the adequacy of the design basis threat in consultation with local law enforcement and federal intelligence agencies.

Q: Is the NRC contemplating a modification of the design basis threat?

A: The agency will continue to coordinate with law enforcement and intelligence agencies to assess the implications of this new manifestation of terrorism. If the NRC determines that the design basis threat warrants revision, such changes would occur through a public rulemaking.

# Available Study Told Of Nuclear Plant Vulnerability

BY THE ASSOCIATED PRESS

WASHINGTON — Despite evidence dating to 1994 that terrorists wanted to strike nuclear power plants, the Nuclear Regulatory Commission kept a study in its public reading room that identified in precise detail the vulnerabilities of U.S. reactors to a jetliner crash.

The 119-page report was still available for public inspection this month, long after the Sept. 11 hijackings prompted increased security. The 1982 study by the Energy Department's Argonne National Laboratory detailed the likely damage that a jetliner at certain speeds could inflict on the thick concrete containment walls protecting reac-

tors.

Though it addressed only accidental crashes, it included a chart that identified the speeds at which a jetliner would begin to transfer its force into the primary containment wall and interior structure of a nuclear reactor.

The study said U.S. nuclear reactors may have underestimated potential damage from explosions.

The report doesn't estimate at what point lethal radiation might be released in a crash. An NRC spokesman said Wednesday the agency has removed the document from its reading room and was also deleting from its public Web site similarly sensitive materials that could benefit terrorists.

"That's our first priority," spokesman Victor Dricks said. Dricks said the NRC has "had people working around the clock" to implement numerous improved security measures since Sept. 11.

Said Dricks: "It was never considered credible that suicidal terrorists would hijack a large commercial airliner and deliberately crash it into a nuclear power plant."

## Astonished At Information

The federal whistle-blowers group that discovered the document Oct. 3 in the NRC reading room while researching for a lawsuit says it was astonished such sensitive information was left public. The group is filing a suit this week

asking the NRC to order immediate security changes at nuclear plants, including deploying anti-missile weapons and posting armed guards outside spent fuel storage areas.

Ramzi Yousef, the convicted mastermind of the 1993 World Trade Center bombing, encouraged followers in 1994 to strike such a plant, officials say. An FBI agent has testified in court that one of Yousef's followers told him in 1995 of plans to blow up a nuclear plant. And in 1999, the NRC acknowledged to Congress it received a credible threat of a terrorist attack against a nuclear power facility.

U.S. nuclear officials said after Sept. 11 nuclear power plants could withstand the crash of a jetliner.

10/25/01

# Nuclear plants near Charlotte add to patrols

*Alert raises questions on adequate security, evacuation logistics*

BY SCOTT DODD  
Staff Writer

The two nuclear power plants within sight of Charlotte's bank towers ramped up security precautions another notch this week, with local police and state troopers patrolling fences and providing extra guards at checkpoints.

The measures are designed to provide a show of force, help repel a ground attack and reassure the public after an FBI warning that terrorists may be planning another strike in the United States this week.

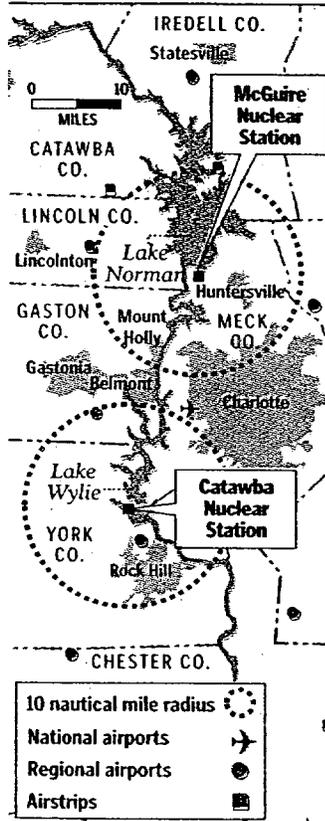
"We and local law enforcement are doing everything we can without knowing exactly what we're guarding against," said Duke Power spokeswoman Becky McSwain.

But the alert raised fresh questions about whether the nation's 103 nuclear reactors are protected adequately against a terrorist attack - and how quickly the Charlotte area could be evacuated in the unlikely event of a disaster.

Authorities say they have no knowledge any of the nation's plants are at risk. Nevertheless, federal authorities on Tuesday ordered private planes to stay away from nuclear facilities.

And the Nuclear Regulatory Commission told plants to supplement their perimeter security with police and National Guard units, if necessary.

Evidence of tighter security could be seen Wednesday at both Charlotte-area plants operated by Duke Power. A concrete barrier replaced a wall of orange cones at the Catawba nuclear power plant on Lake Wylie near



Staff graphic

Rock Hill, and police stopped each car entering the plant to check identification.

Guards at the McGuire nuclear power plant on Lake Norman north of Charlotte shined a giant spotlight on cars that passed by at night.

The governors of both Carolinas said they don't plan to call up National Guard troops bolster plant security.

"Most of the nuclear power plants have their own security and are very safe facilities," said N.C. Gov. Mike Easley.

The N.C. House tentatively  
SEE ALERT | 9

**PRIVATE PLANE TRAFFIC CLEARED 9A** | Aircraft can negotiate gap between no-fly zones near Charlotte/Douglas International Airport

# Nuclear plants near Charlotte ramp up security measures

Alert from LA

approved legislation Wednesday authorizing Easley to spend nearly \$2 million and borrow as much as \$30 million from the state "rainy day" fund for new anti-terrorism training programs and equipment.

State emergency management director Eric Tolbert said the nuclear power plants are better prepared for an attack than most facilities in North Carolina, partly because federal regulations require them to test security and response measures every two years.

Not all the news Wednesday was reassuring, however.

The Nuclear Regulatory Commission said that despite assurances from plant operators, the agency isn't sure a nuclear reactor could withstand a commercial jet crash without releasing harmful amounts of radiation.

Officials are studying the full impact of a deliberate jet crash, but "we're not talking about a Chernobyl-type disaster," NRC spokesman Victor Dricks said.

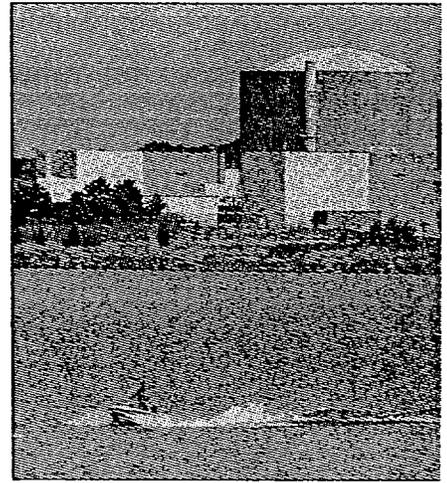
An N.C. State University expert on nuclear plant construction believes a radiation release is highly unlikely.

Dr. Ajaya Gupta, founding director of the university's Center for Nuclear Power Plant Structures, said a jet crash would cause considerable damage to the plant's containment structure but not to the reactor inside.

Gupta said the containment's thick concrete and reinforcing steel would absorb much of the impact, while any fire would be confined outside the structure.

"They were not designed for a commercial jetliner being used as a missile, but they are designed to be very strong," Duke's McSwain said of the Charlotte-area plants. "We believe it would be very difficult for that scenario to release radioactivity in amounts large enough to harm the public."

The new alert has also re-



PATRICK

An FBI warning of possible terrorist activity raised security at McGuire (above) and Catawba.

Energy the only U.S. nuclear reactor. ' in the v

Some local officials estimate that it could take as long as 24 hours to evacuate everyone from the 10-mile emergency zone around the McGuire plant.

But a study conducted by Duke-hired consultants last year disagrees, saying everyone would be evacuated in eight hours.

"I feel confident that we could get everybody out," said Jerry Wilson, Mecklenburg County's nuclear emergency planner. Evacuation plans are updated annually to take the growing population into account, he said.

Many people who live near the plants believe the risks are low.

"I don't have anything to fear," said Lake Norman resident Brad Deal. "There are enough safeguards."

For others, however, the FBI warning has renewed concerns.

"We're in the hot zone," said Richard Haynes, who has watched extra police cars headed to the Catawba station this week. If something bad happened, "I wouldn't stand a chance."

Former U.S. Ambassador Mark Erwin of Charlotte criticized the NRC recently for not doing enough to ensure plant se-

tion in its own evacuation zone. Office the typ reactor. The plant ac happen would within potenti. "It's said W County up in --- STAFF MARK JOH SHIRLEY H Scott Dow sdodd@

# Local

www.charlotte.com/observer/loc

11/2/01

N.C. ON ALERT

## Agency: Nuclear security a worry

*U.N. group concerned  
about lengths to which  
terrorists might go*

BY BRUCE HENDERSON  
Staff Writer

After U.S. agencies increased security this week around nuclear power plants - including two near Charlotte - an international watchdog agency Thursday underscored the potential for terrorists to target nuclear facilities and materials.

"The willingness of terrorists to commit suicide to achieve their evil aims makes the nuclear terrorism threat far more likely than it was before September 11," said Mohamed ElBaradei, director general of the International Atomic Energy Agency.

The U.N. agency, based in Vienna, Austria, sets worldwide standards for nuclear security.

As the nuclear industry and its critics debate the ability of the power plants to survive a deliberate jetliner crash, the IAEA described threats from radioactive materials in everyday use.

It is highly unlikely terrorists could obtain enough material to make a nuclear bomb, the agency said.

But saboteurs could try to steal radioactive materials used in in-

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# materials could be targets

Security from 1B

dustry or medicine and spread them around.

In North Carolina, the 650 universities, industries and hospitals licensed to use radioactive materials have been asked to step up security, said the N.C. Division of Radiation Protection.

Director Mel Fry said he knows of no material that has been lost, although record-keeping errors are sometimes found.

The Nuclear Regulatory Commission says security teams at Duke Power's McGuire and Catawba nuclear plants near Charlotte successfully defended their facility during terrorism exercises in 1995 and 1997.

Industry critics aren't reassured by stepped-up security at nuclear plants. The Nuclear Control Institute in Washington says anti-aircraft guns and the National Guard should be in place.

Carolinas governors say they don't plan to call up the Guard.

"If you're dealing with terrorists with some creative thinking, they're not going to be stopped" by current measures, said Jess Riley of Charlotte. The retired chemist and physicist headed a group that opposed the construction of the Catawba and McGuire nuclear plants.

Riley and other critics say the design of Catawba and McGuire makes them especially vulnerable to terrorists and nuclear accidents. Duke says they're wrong.

Those plants, unlike most, rely on ice beds to condense and contain radioactive steam that could escape a damaged reactor.

The ice lines the inside of a steel shell of 3/4-inch steel. An outer shell, of heavily reinforced concrete 3 feet thick, serves as a shield from outside impacts, such as tornadoes or projectiles.

Critics say such designs are fragile compared with those at most other sites, including Duke's Oconee plant near Seneca, S.C.

Oconee uses a single, larger containment structure of 3-foot-thick concrete lined with steel to protect the reactor. It absorbs both internal pressure and outside impact.

Catawba and McGuire are built to withstand as much impact as

Oconee, Duke says.

What isn't known is what would happen if the long, hard shaft of a jetliner engine punched into any nuclear plant.

The NRC and the IAEA say the plants are among the strongest structures in the world but weren't designed to take such a blow. Detailed analyses haven't been performed.

Physicist Edwin Lyman of the Nuclear Control Institute calculated that a Boeing 767 would have a high likelihood of penetrating the containment structures of most U.S. plants.

A 1982 study by the Department of Energy's Argonne National Laboratory said a jetliner could begin to pierce a containment structure under the right conditions. Using that study as a basis, Duke calculated that its plants would not release dangerous amounts of radioactive material after such a crash.

"You can't say there wouldn't be any damage, but you would have to do damage to so many different things to result in a radioactive release," said Duncan Brewer, who heads a Duke unit that assesses risks to nuclear plants.

Spent nuclear fuel poses a larger risk than do reactors, said a nuclear scientist with a Cambridge, Mass., think tank.

Gordon Thompson of the Institute for Resource and Security Studies said loss of water that cools highly radioactive spent fuel could result in fires that release 10 to 20 times as much radioactivity as a reactor accident.

Orange County hired Thompson when CP&L sought permission to open new pools at its Shearon Harris nuclear plant near Raleigh.

"The consequence would be greater and the spent fuel itself is more vulnerable," he said.

The NRC says that, with a loss of cooling water, spent fuel and the zirconium coating on fuel rods can get hot enough to catch fire. But that assumes the water boils away from thick-walled pools, and backup systems fail.

"That's not considered to be a very likely or credible scenario," spokesman Victor Dricks said.

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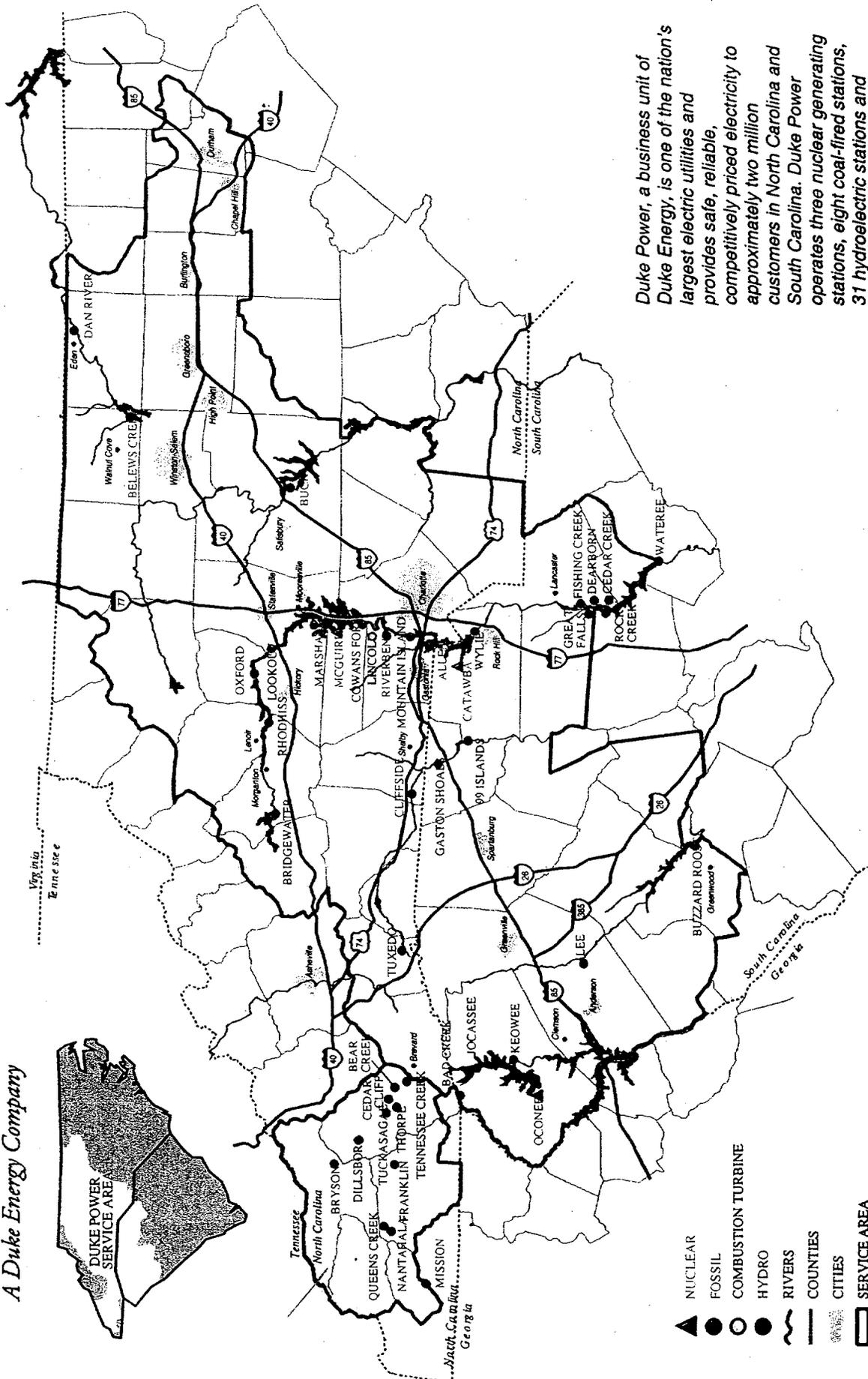
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# Science FOR Democratic Action

AN IEER PUBLICATION

## Plutonium End Game: Stop Reprocessing, Start Immobilizing

BY ARJUN MAKHIJANI

The problem of surplus military plutonium emerged quickly and with a high profile at the end of the Cold War because of widespread fears that black markets in such plutonium (and tactical nuclear warheads) might emerge from the collapse of the Soviet Union. But an equally important potential proliferation problem — that of separated commercial plutonium — has been quietly mounting in the past decade, without comparable attention.

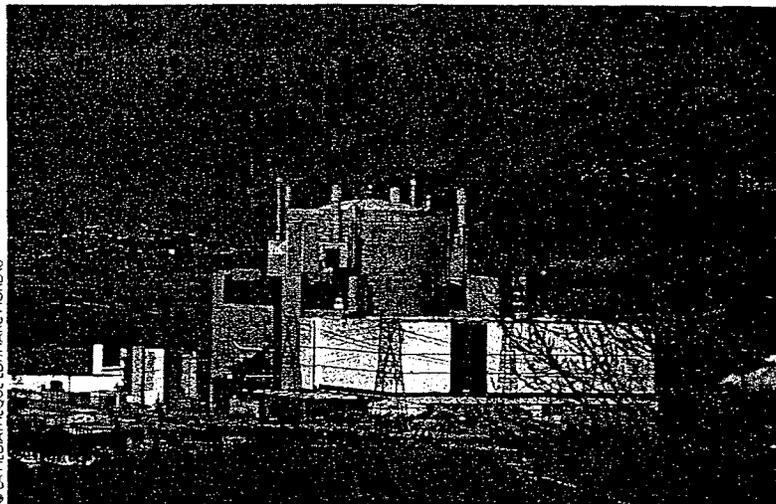
The hope of the nuclear industry had been that commercial plutonium would be a valuable fuel. But economic events in the real world have negated these hopes, just as the political events have rendered obsolete the idea that large military plutonium stocks were a security asset.

Since essentially all isotopic combinations of separated plutonium, whether of commercial or military provenance, can be used to make nuclear weapons, plutonium is one of the most important links between the commercial and military nuclear industries. Management of separated plutonium, whatever its origin, is therefore crucial to sound non-proliferation policy.

A great deal has been written about surplus military plutonium, including a considerable amount of literature produced by IEER, the US National Academy of Sciences, and others. In January 2001, IEER released a report on management of commercial plutonium, and how its disposition could and should be integrated with that of surplus military plutonium. This article summarizes that work. For references, please see the full report.<sup>1</sup>

**P**lutonium-239 is made by irradiating relatively abundant, naturally-occurring uranium-238 in a nuclear reactor. This can be done for military purposes, whereby plutonium is extracted from the fuel and targets rods that have been irradiated in a nuclear

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Superphénix, the largest breeder reactor in the world, shutdown prematurely and permanently in 1998. France's breeder reactor program failed due to technical problems and high costs.

### EDITORIAL

## A Global Truth Commission on Health and Environmental Damage from Nuclear Weapons Production

BY ARJUN MAKHIJANI

**E**xtensive research in the last two decades has shown nuclear-weapon states have, first of all, harmed their own people without informed consent, in the name of national security.<sup>1</sup> Nuclear weapons production workers have been on the front lines of this underside of the Cold War that nuclear-weapon states

have waged on their own people. But the manner in which this slow attack on health and the environment was carried out is still largely unknown and little understood. In the last two decades, a substantial idea of the damage has begun to emerge from the fog of denial and

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## PLUTONIUM

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reactor (collectively called the irradiated reactor fuel, or spent fuel). Plutonium is also created in commercial nuclear reactors, since uranium-238 is present in large amounts in commercial nuclear reactor fuel. Since there are a large number of such reactors (more than 400 worldwide), the total quantity of plutonium that has been generated in the commercial nuclear power industry has been far greater than that produced in military nuclear weapons programs. By the end of 1999, the total plutonium created in commercial power reactors amounted to over 1,400 metric tons, compared to about 270 to 300 metric tons in military programs.

Plutonium can also be used to fuel reactors. In order to be used as a nuclear fuel, plutonium must first be separated from residual uranium and fission products in the irradiated fuel rods. The chemical and electrochemical processes used to accomplish that separation go under the general rubric of "reprocessing." Of military plutonium, about 250 metric tons remains in government stocks. The rest was used up in nuclear tests, scattered about the world and in underground cavities, as the unused residue from tests, and stored or dumped as waste. Of the commercial plutonium, about 280 metric tons has been separated, while the rest remains in the spent fuel. Some of the separated commercial plutonium has been used as a mixed plutonium oxide-uranium oxide (MOX) fuel, while the rest is stored. Table 1 shows the current inventory of commercially separated plutonium in the world.

The stock of commercial plutonium is growing at roughly ten metric tons per year, since the amount of plutonium being used as MOX fuel is considerably lower than the amount separated. The military stock is growing at about one metric ton per year, mainly in Russia and the United States, both which claim that they are reprocessing for environmental, not military, reasons. At this rate, the stock of commercial separated plutonium is set to exceed the stock of military plutonium in the next few years. It is already so huge that it represents a serious proliferation problem. An Inter-agency Working Group of the US government on plutonium disposition has clearly stated that:

*"Virtually any combination of plutonium isotopes – the different forms of an element having different numbers of neutrons in their nuclei – can be used to make a nuclear weapon. Not all combinations, however, are equally convenient or efficient."*<sup>2</sup>

One metric ton of weapon-grade plutonium could be used to make about 200 nuclear bombs – more, if sophisticated bomb designs are used. It takes roughly 40 percent more commercial-grade plutonium to make a similar bomb. Stored commercial plutonium is therefore sufficient to make at least 30,000 nuclear bombs of a size similar to the one that destroyed Nagasaki.

### Background to the commercial plutonium predicament

For much of the period after World War II, plutonium was viewed not only as the currency of power in a nuclear weapons world, but also as a "magical" energy source. This was because a special type of reactor, called a breeder reactor, would convert uranium-238 into

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## SCIENCE FOR DEMOCRATIC ACTION

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**TABLE 1: ESTIMATED SEPARATED COMMERCIAL PLUTONIUM STOCKS IN COUNTRY OF STORAGE, METRIC TONS**

Country	Separated Plutonium	Date of stock	Comments
France	90	End of 1999	Includes foreign plutonium stored in France
Britain	78.5	31 March 2000	Includes foreign plutonium stored in Britain
Russia	30	2000	
Japan	5.3	End of 1999	
USA	1.5	2000	
Other	11	End of 1998	Germany, Belgium, India
<b>TOTAL</b>	<b>206</b>		Total set to exceed 210 metric tons by the end of 2000

Note: Includes plutonium in the form of unirradiated MOX fuel.

more plutonium-239 than was actually needed to run the reactor. Hence there would be more fuel (plutonium-239) at the end of the process than at the beginning, even though electricity had been generated.<sup>3</sup>

The high hopes of the 1950s that plutonium would provide such a "magical" energy source – one that might even be "too cheap to meter" – have run aground on the shoals of a host of practical problems that have steadily grown worse over the past 25 years:

1. Uranium turned out to be far more plentiful than anticipated, and the price of uranium declined rapidly (with an upward blip in the 1970s). It is currently at or near historic lows.
2. Sodium-cooled breeder reactors, the technology of choice for creating a plutonium economy, and the one in which the greatest efforts and money have been invested, have turned out to be a very difficult technology to master and make economical. Despite over \$20 billion (1999 dollars) in construction expenditures over more than four decades for just the large completed plants, the technology continues to be plagued by technical problems and high costs. Table 2 (next page) shows the approximate worldwide capital expenditures on major sodium-cooled breeder reactors (in 1996 dollars), and the current status of the various reactors.
3. Separated commercial plutonium can be used to make nuclear weapons, so that the development of a plutonium economy incurs considerably increased proliferation risks compared to those posed by uranium-fueled nuclear power reactors.
4. Reprocessing proved to be a costly technology, thereby increasing costs of plutonium relative to uranium.
5. Reprocessing results in discharges of large amounts of liquid radioactive waste and also creates other

radioactive wastes that pose environmental problems and create safety and health risks.

These structural factors have been accompanied by recent events, all but one of which are highly unfavorable to continued commercial reprocessing and MOX fuel use:

1. After the election of the Social Democratic-Green coalition government in late 1998, Germany decided to phase out nuclear power. This phase-out schedule, as it stands at the present time, will be relatively slow, corresponding approximately to the lifetime of the existing power plants. But the phase-out necessarily includes a stoppage of reprocessing German spent fuel. This will make it even more difficult to rationalize continued operation of UP2 in France (a facility dedicated to foreign spent fuel reprocessing) and the reprocessing plant in Britain, called THORP, belonging to the government-owned company, British Nuclear Fuels (BNFL), also commissioned to serve foreign customers.
2. The German government's decision to phase-out nuclear power, and hence also reprocessing, is causing reverberations in France and elsewhere, where the topic of a phase-out of nuclear power is no longer as politically difficult as before. The subsidies to plutonium in France particularly stick out as a sore thumb. (See accompanying article on page 9.)
3. The Science and Technology Committee of the British House of Lords concluded in 1999 that most British commercial plutonium should be declared a waste. This was a severe blow to the prospects for plutonium fuel subsidies in Britain.
4. The sodium-fire accident at the Monju demonstration breeder reactor in Japan in 1995 – only about a

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**TABLE 2: CAPITAL COSTS OF SODIUM-COOLED BREEDER REACTORS LARGER THAN 100 MEGAWATTS-THERMAL (MWt)**

Reactor and Country	Capacity, MWt	Operation dates	Capital cost, millions of US dollars (1996)
Fermi-1, USA	300	1966-72	403
BN350, Kazakhstan	1,000	1972	724
Phenix, France	560	1973	395
Dounreay PFR, Britain	600	1974-94	395
Joyo, Japan	100	1977	144
KNK-2, Germany	100	1977-91	107
BN600, Russia	1,470	1980	918
FFTF, USA	400	1980-1993	1,397
Superphenix, France	2,900	1985-98	6,028
Monju, Japan	714	1994-1995	5,134
SNR-300, Kalkar, Germany	762	Did not open	4,272
<b>TOTAL</b>	<b>8,906</b>		<b>19,917</b>

Notes: A. Start of operation corresponds to achievement of criticality. B. The total does not include about \$1.6 billion (current dollars) spent on the incomplete and abandoned Clinch River breeder reactor (about \$3 billion in 1996 dollars) nor the costs of other incomplete reactors.

year-and-a-half after it went critical – and the September 1999 criticality accident at the Tokaimura plant (which killed two workers from high-level radiation exposure and injured many others) have increased opposition to Japan’s MOX fuel use plans. The entire future of nuclear power in Japan is now far more open to question than seemed possible before the Tokaimura accident.

5. The revelation that some BNFL MOX fuel quality control data were fabricated, including data relating to some of the fuel shipped to Japan, has thrown the British MOX program as well as reprocessing into disarray.
6. Russia’s Minatom, the nuclear energy agency with the strongest attachment to a plutonium economy, has been and continues to be strapped for funds and cannot pursue an ambitious breeder reactor program on its own. Russia also lacks a commercial-scale MOX fuel fabrication plant.
7. The sole recent factor favoring MOX fuel use comes from the military sector. The 1 September 2000 US-Russian agreement would fill the only gap in the Russian plutonium fuel cycle infrastructure, if it is fully funded by the West and proceeds as envisioned (see below). This agreement is aimed at putting military stocks of plutonium that have been declared surplus by the two countries into non-weapons usable

form, mainly by using it as MOX fuel in light water reactors. Russia also wants the MOX fuel fabrication plant to be capable of making MOX fuel for breeder reactors. However, Russia and the United States have not been able to arrive at an agreement about who would bear the liability for the program, including in case of an accident. The agreement leaves that question open for further negotiations (see accompanying article on page 12).

The net result of the historical and current trends and events is that there is now a large policy issue of what should be done with the huge but uneconomical stock of commercial plutonium that is growing rapidly. The problem is exacerbated by the fact that the plutonium stocks and facilities are run by institutions that have a declining command of public confidence and respect, not least because of the data fabrication, safety, and environmental scandals that afflict BNFL. These factors have compounded the underlying problems arising from poor economic decision-making by governments and plutonium-related corporations.

Unsurprisingly, the plutonium industry continues to push for subsidies, upon which it should have no reasonable claim. A huge and unjustifiably large sum – on the order of \$100 billion worldwide – has already been spent over the past five decades on attempts to

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# PLUTONIUM

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create a plutonium economy. Much of this was on large breeder reactors, most of which are now shut. Most of the rest was on reprocessing and the use of the resulting uneconomical plutonium as a reactor fuel. These costs are summarized in Table 3. There is no end in sight to the subsidies and there is no reasonable way to resolve the many problems that are still outstanding in the foreseeable future.

By any rational economic and security criteria, the commercial plutonium fuel and breeder industries should have made a complete exit from the stage of energy choices at least a decade ago. Yet, commercial plutonium separation continues in several countries. Plans for breeder reactors also remain in place in some countries. Use of plutonium as a fuel (in the form of mixed uranium and plutonium oxide or MOX) in existing reactors grew considerably in the 1990s, creating a new set of subsidies for the plutonium industry.

These subsidies and unrealistic plans persist because those who fervently hope and believe in the long-term future of plutonium as an energy source have had enough muscle in the political and economic arenas to keep the plutonium flame alive. Indeed, they have been able to vastly increase the amount of plutonium being separated and used as MOX fuel in light water reactors – the most common kind of

commercial reactor – the vast majority of which were not designed for plutonium fuels. In France alone, the use of MOX fuel amounts to a subsidy of about \$1 billion per year for the commercial plutonium industry. (See accompanying article on page 9.)

## Military plutonium disposition

The prospects for plutonium fuel have also received a boost from the end of the Cold War. The United States and Russia are proposing to use most of their declared surplus weapons plutonium as a fuel in commercial nuclear power plants. This would provide an immense new subsidy to the plutonium fuel industry, in the name of non-proliferation, and provide the nuclear establishments of both countries with the arguments they need to continue reprocessing and breeder reactor programs. In particular, Minatom, Russia's ministry of atomic energy, has explicit plans to use the infrastructure created with Western non-proliferation funds for its breeder reactor program.

Minatom has explicitly stated that that US-Russian weapons plutonium disposition program "must be seen as the first step in developing a technology for a future closed nuclear fuel cycle..." This would involve "the use of mixed uranium-plutonium fuel of fast reactors" (another name for breeder reactors).<sup>4</sup> The United States has agreed to such a system in Russia in the context of

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**TABLE 3: SUMMARY OF THE APPROXIMATE NET WORLDWIDE COSTS OF ATTEMPTS TO DEVELOP PLUTONIUM AS A FUEL**

Cost category	Cost (in 1999 US dollars)	Comments
Major breeder reactors	~20 billion	Larger than 100 megawatts thermal, completed reactors only
Incomplete breeder reactors, small breeders, net operating costs	~10 billion?	Net operating costs are the costs of reactor operation in excess of revenues derived from electricity sales
Reprocessing and MOX	~40 billion	Net of value derived in substituting MOX as a fuel for uranium. Rough estimate
Rokkasho-mura reprocessing plant construction	~20 billion	Incomplete plant, now officially scheduled for completion in 2005
Other past costs (R&D, infrastructure, past decommissioning, long-term commercial plutonium storage)	Many billions	Includes closed reprocessing plants (e.g. West Valley in New York), past reprocessing and breeder decommissioning, breeder and reprocessing R&D
<b>Subtotal, costs to date</b>	<b>~100 billion</b>	
Future continued reprocessing and MOX net costs	~2 billion per year	Assuming \$1,000 per ton of heavy metal and reprocessing at current rates
Storage costs for old plutonium stock	0.4 billion per year	
Future decommissioning and commercial plutonium disposition costs	Billions or tens of billions total	

## PLUTONIUM

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weapons plutonium, even though it was rejected in the United States in the 1970s as too proliferation prone. (See accompanying article on the US-Russian agreement, page 12.)

Converting surplus military weapon-grade plutonium into a fuel and using it in commercial power reactors not only raises proliferation concerns but also concerns related to safety. The vast majority of commercial reactors were designed for uranium, not mixed oxide (MOX) fuel, in which plutonium isotopes provide the fissile material. Modifications to these reactors to accommodate more control elements may be needed. Weapon-grade plutonium has never been used as a commercial fuel in reactors, though plutonium derived from commercial spent fuel is now being used in commercial power reactors in France, Germany, Belgium, and Switzerland. The computer codes that would be used to evaluate the safety of MOX made from weapon-grade plutonium would be those developed for and tested for reactor-grade plutonium. How safety concerns arising from the different plutonium composition of weapon-grade plutonium and reactor-grade plutonium and the different patterns of loading MOX fuel will be resolved remains unclear.

The consequences of an accident in a reactor with MOX fuel would be more severe than one with uranium fuel because MOX fuel contains a larger proportion of plutonium and transuranic radionuclides. The regulatory infrastructure in Russia is relatively weak, leading to questions as to how safety concerns would be brought up or resolved. Moreover, new proliferation risks will also be created, since fresh MOX fuel would be transported on highways and stored at commercial nuclear power plants that do not now have military levels of security.

### Immobilization

Even if all plutonium separation in the commercial and military sectors were to stop immediately, there would still remain an immense problem of the management of separated commercial plutonium and surplus military stocks. It is therefore urgent both to stop commercial reprocessing and to create a plan to put separated commercial plutonium and surplus military plutonium into non-weapons-usable form as expeditiously as is consistent with safety, health, and environmental protection.

IEER has shown in previous analyses that immobilization of plutonium in one of several ways would be a safer, faster, and cheaper way to put separated plutonium into non-weapons-usable form.<sup>5</sup> The primary purpose of this immobilization should be to prevent theft of plutonium by non-nuclear weapons states or

terrorist groups. The idea of immobilizing all separated commercial plutonium and all surplus military plutonium has not made progress because of two reasons:

- ▶ It is generally believed that Russia will not accept any other alternative than to use plutonium as a fuel. Hence the MOX fuel option for surplus military plutonium is seen as essential for putting Russian weapons plutonium into non-weapons-usable form (spent fuel in this case).
- ▶ The plutonium lobby in the West and Japan has been steadfast in their support of the creation of a MOX fuel infrastructure using non-proliferation funds.

While it is true that Minatom wants western funds to create a MOX fuel infrastructure, this does not mean that a different proposal would be rejected by all parts of Russian society or government. For instance, no offer to purchase all Russian separated commercial plutonium and all surplus weapons plutonium for immobilization and storage in Russia under international safeguards has ever been officially presented to the Russian government. It would cost at most \$2 billion for the purchase of 80 metric tons of plutonium, if it is valued at its maximum possible theoretical price (that is if it were magically transformed into MOX fuel at zero cost).<sup>6</sup> It would cost a comparable sum to immobilize the plutonium. Existing cooperative nuclear security arrangements indicate a Russian willingness to consider programs that it would not otherwise have undertaken. Yet no Western offer to purchase Russian surplus plutonium for immobilization has officially been made to the Russian government. Such an approach, coupled with a complete halt to reprocessing all over the world, deserves urgent consideration for non-proliferation, safety and environmental reasons. ■

- 1 Arjun Makhijani, *Plutonium End Game: Managing Global Stocks of Separated Weapons-Usable Commercial and Surplus Nuclear Weapons Plutonium*. Takoma Park, Maryland: Institute for Energy and Environmental Research, January 2001. On the web at <http://www.ieer.org/reports/pu/index.html>.
- 2 U.S. DOE, *Nonproliferation and Arms Control Assessment of Weapons-Usable Fissile Material Storage and Excess Plutonium Disposition Alternatives*, DOE/NN-007. Washington, DC: U.S. Department of Energy, January 1997, p. 37.
- 3 The process is of course theoretically limited by the availability of uranium-238, which is abundant.
- 4 Source of quotes: *Strategy for the Development of Power Engineering in Russia for the First Half of the 21st Century: Principal Provisions*. Moscow: Ministry of Atomic Power Engineering of the Russian Federation, 2000, pp. 17-18.
- 5 IEER's technical analyses and commentary on weapons plutonium disposition are available on-line, at <http://www.ieer.org/latest/pu-disp.html>.
- 6 The actual economic value of plutonium as a fuel (whether of commercial or military origin) is negative since it is more costly than uranium fuel.

# Science FOR Democratic Action

AN IEER PUBLICATION

## Forgotten Exposures: Worker Doses at Three Nuclear Materials Processing Plants in the 1940s and 1950s

BY ARJUN MAKHIJANI, BERND FRANKE, AND HISHAM ZERRIFFI<sup>1</sup>

*Editor's Note: This article is based on a report produced by IEER under a contract to the newspaper USA Today. The report calculated estimates for radiation exposure of workers at three privately-owned and -operated factories in the United States that processed uranium, including one that also processed thorium, in the 1940s and 1950s for use in the production of nuclear weapons.*

*The report concludes that working conditions at the three plants were very poor, that doses to many of the workers far exceeded then-prevailing standards, and that some workers had a high probability of getting cancer as a result of their exposure. The government appears to have deliberately misled workers about the dangers to which they were being exposed.*

*In a series of articles published September 6 through 8, 2000, USA Today identified approximately 150 privately owned facilities that were used for various stages of nuclear weapons production in the US in the 1940s and 1950s. Subsequently, the US Department of Energy (DOE) released an "internal working list" of more than 570 facilities, both privately and government owned/operated, that were possibly involved in nuclear weapons related work. Some of these facilities carried out work*

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AMERICAN MEDICAL ASSOCIATION

Manual rolling mill, showing ventilation hood, circa 1959.

## Nuclear Plant Risk Studies: Dismal Quality

BY DAVID LOCHBAUM<sup>1</sup>

An accident at a US nuclear power plant could kill more people than were killed by the atomic bomb dropped on Nagasaki.<sup>2</sup> The financial repercussions could also be catastrophic. The 1986 accident at the Chernobyl nuclear plant cost the former Soviet Union more than three times the economical benefits accrued from the operation of every other Soviet nuclear power plant operated between 1954 and 1990.<sup>3</sup>

But consequences alone do not define risk. The probability of an accident is equally important. When consequences are very high, as they are from nuclear plant accidents, prudent risk management dictates that probabilities be kept very low. The Nuclear Regulatory Commission (NRC) attempts to limit the risk to the public from nuclear plant operation to less than one percent of the risk the public faces from other accidents.

The Union of Concerned Scientists (UCS) examined how nuclear plant risk assessments are performed and how their results are used. We concluded that the risk assessments are seriously flawed and their results are being used inappropriately to increase—not re-

duce—the threat to the American public.

Nuclear plant risk assessments are really not risk assessments because potential

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## RISK STUDIES

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accident consequences are not evaluated. They merely examine accident probabilities—only half of the risk equation. Moreover, the accident probability calculations are seriously flawed. They rely on assumptions that contradict actual operating experience.

All probability analyses make assumptions. For example, when you calculate that the probability of getting heads upon a single flip of a quarter is 50 percent, you are assuming that the coin will not land on its edge. Nuclear plant probabilistic risk assessments (PRAs) rely on numerous unrealistic assumptions that fly in the face of the actual data from operating nuclear power plants:<sup>4</sup>

**Assumption:** The plants are operating within technical specifications and other regulatory requirements.

**Fact:** There are more than 1,000 violations of technical specifications and regulatory requirements each year. As a result of this unrealistic assumption, the core damage frequencies (CDFs) calculated in the PRAs are too low. By assuming that emergency equipment meets safety requirements when in fact it does not, the PRAs calculate better response capabilities than supported by reality. In other words, the core damage frequencies are really higher than reported by the PRAs.

**Assumption:** Plant design and construction are completely adequate.

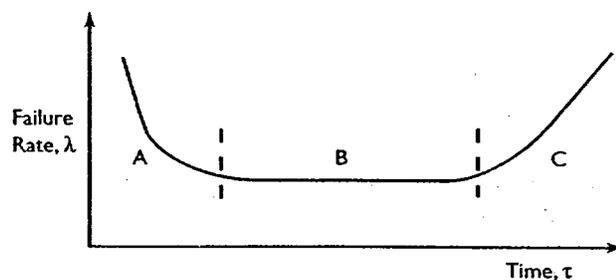
**Fact:** The risk assessments assume that there are *zero* design and construction problems when hundreds of problems are discovered every year. The NRC's Office for Analysis and Evaluation of Operational Data documented 3,540 design errors reported between 1985 and 1994.<sup>5</sup> That means a design error was discovered at a nuclear power plant in the United States almost every single day for an entire decade.

**Assumption:** Plant aging does not occur; that is, equipment fails at a constant rate.

**Fact:** The NRC has issued more than one hundred technical reports about the degradation of valves, pipes, motors, cables, concrete, switches, and tanks at nuclear plants caused by aging.<sup>6</sup> These reports demonstrate that parts in nuclear plants follow the "bathtub curve" aging process illustrated in the figure. A telling demonstration of the effects of age occurred in 1986. Four workers were killed at a nuclear power plant in Virginia because a section of pipe eroded away with time until it broke and scalded them with steam.<sup>7</sup> Yet most PRAs assume no aging effects.

**Assumption:** The reactor pressure vessels never fail.

**Fact:** Experience has shown that this assumption has as many cracks and flaws as the reactor pressure vessels themselves. In 1995, UCS issued a report on the fragile condition of reactor pressure vessels at nuclear power plants.<sup>8</sup> For example, the Yankee Rowe plant in



"Bathtub" Curve of Failure Rate

Massachusetts closed in 1992 because its reactor pressure vessel had become brittle over time. Brittle metal can shatter, much like hot glass, when placed in cold water. Despite the closure of the Yankee Rowe plant and documented embrittlement at many other nuclear plants, the risk studies continue to assume a *zero* chance of reactor pressure vessel failure.

**Assumption:** Plant workers make few serious mistakes.

**Fact:** A report issued in February 2000 by the Idaho National Engineering and Environmental Laboratory (INEEL) demonstrates that unjustified assumptions about worker behavior continue to be a problem. Researchers at INEEL examined 20 recent operating events at nuclear power plants and concluded that "Most of the significant contributing human performance factors found in this analysis of operating events are missing from the current generation of probabilistic risk assessments....[which] does not address well the kinds of latent errors, multiple failures, or the type of errors determined by analysis to be important in these operating events."<sup>9</sup>

**Assumption:** Risk is limited to reactor core damage.

**Fact:** The PRAs only determine the probabilities of events leading to reactor core damage. They do not calculate the probabilities of other events that could lead to releases of radiation, such as fuel going critical in the spent fuel pool or rupture of a large tank filled with radioactive gases. Some of these overlooked events can have serious consequences. For example, researchers at the Brookhaven National Laboratory estimated that a spent fuel pool accident could release enough radioactive material to kill tens of thousands of people.<sup>10</sup>

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## RISK STUDIES

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History shows there is a greater probability of a flipped coin landing on its edge than of these assumptions being realistic. Unrealistic assumptions in the PRAs make their results equally unrealistic. In computer programming parlance, "garbage in, garbage out."

Furthermore, the NRC requires plant owners to perform the calculations, but fails to establish minimum standards for the accident probability calculations. Thus, the reported probabilities vary widely for virtually identical plant designs. Four case studies clearly illustrated the problem:

- ▶ The Wolf Creek plant in Kansas and the Callaway plant in Missouri were built as identical twins, sharing the same standardized Westinghouse design. But some events at Callaway are reported to be 10 to 20 times more likely to lead to reactor core damage than the same events at Wolf Creek.
- ▶ The Indian Point 2 and 3 plants share the same Westinghouse design and sit side by side in New York, but are operated by different owners. On paper, Indian Point 3 is more than 25 percent more likely to experience an accident than her sister plant.
- ▶ The Sequoyah and Watts Bar nuclear plants in Tennessee share the same Westinghouse design. Both are operated by the same owner. The newer plant, Watts Bar, was originally calculated to be about 13 times more likely to have an accident than her sister plant. After some recalculations, Watts Bar is now only twice as likely to have an accident.
- ▶ Nuclear plants designed by General Electric are equipped with a backup system to shut down the reactor in case the normal system of control rods fails. On paper, that backup system is highly reliable. Actual experience, however, shows that it has not been nearly as reliable as the risk assessments claim.

To make matters worse, the NRC is allowing plant owners to further increase risks by cutting back on tests and inspections of safety equipment. The NRC approves these reductions based on the results from incomplete and inaccurate accident probability assessments.

When the NRC learns that a nuclear plant does not meet federal safety regulations, it relies on the calculated accident probabilities to assess the risk. The NRC—under constant pressure from the nuclear industry—has recently accepted a concept of "risk-informed regulation," in which many safety regulations are eliminated and the scope of other regulations is significantly reduced based on the results of risk assessments. A critical question, then, is whether risk assessments are accurate enough to rely on for these purposes.

In sum, the risk of a major accident at any nuclear power plant is unknown, because although the probability of an accident has been assessed (albeit with flawed assumptions, and inconsistent definitions and procedures), the consequences have not been assessed. The following will draw on other sources to provide the missing piece of the risk puzzle.

The incomplete and inaccurate state of nuclear plant risk assessments does not provide a solid foundation for the NRC to move towards risk-informed regulation.

A nuclear plant accident can harm the public by releasing radioactive materials. Radioactive materials emit alpha particles, beta particles, gamma rays, and/or neutrons. These emissions are called "ionizing radiation" because the particles produce ions when they interact with substances.<sup>11</sup>

Following the Three Mile Island (TMI) accident in 1979, the Sandia National Laboratory estimated the potential consequences from reactor accidents that release large amounts of radiation into the atmosphere. For each nuclear plant then in operation and nearing completion, Sandia determined the amount of radiation that could be released following a major accident, the area's weather conditions, and the population downwind of the plant. Then Sandia estimated how many people would die and be injured within the first year due to their radiation exposure. Sandia also estimated how many people would later die from radiation-induced illnesses like cancer. Early fatality estimates range from 700 for a small reactor to 100,000 for one of the larger ones. Cancer death estimates ranged from 3,000 to 40,000. Injury estimates ranged from 4,000 to 610,000. For comparison, the atomic bomb dropped on Hiroshima killed 140,000 people and the one dropped on Nagasaki killed 70,000 people.<sup>12</sup>

The incomplete and inaccurate state of nuclear plant risk assessments does not provide a solid foundation for the NRC to move towards risk-informed regulation. Before the NRC allows takes another step towards risk-informed regulation, the NRC must complete the following tasks:

1. Establish a minimum standard for plant risk assessments that includes proper methods for:
  - a. handling the fact that nuclear plants may not conform with all technical specification and regulatory requirements;

SEE RISK STUDIES ON PAGE 12

- b. handling the fact that nuclear plants may have design, fabrication, and construction errors;
  - c. handling equipment aging;
  - d. treating the probability of reactor pressure vessel failure;
  - e. handling human performance;
  - f. handling events other than reactor core damage in which plant workers and members of the public may be exposed to radioactive materials (e.g., spent fuel pool accidents and radwaste system tank ruptures);
  - g. handling nuclear plant accident consequences to plant workers and members of the public;
  - h. justifying the assumptions used in the risk assessments; and
  - i. updating the risk assessments when assumptions change.
2. Require all plant owners to develop risk—not probability—assessments that meet or exceed the minimum standard.
  3. Require all plant owners to periodically update the risk assessments to reflect changes to the plant and/or plant procedures.
  4. Require all plant owners to make the risk assessments publicly available.
  5. Conduct inspections at all nuclear plants to validate that the risk assessments meet or exceed the minimum standards.
  6. Disallow any use of risk assessment results to define a line between acceptable and unacceptable performance until all of the steps listed above are completed.

It will take considerable effort on the part of the NRC to implement these recommendations. Unfortunately, the NRC may be unable to take these safety steps because it is under attack from the US Congress to reduce its budget. Why? The NRC is a fee-based agency. Most of the NRC's budget is paid not by taxpayers but by the plants' owners. These plant owners lobbied Congress to slash the NRC's budget. Congress listened and slashed. In 1987, the NRC had 850 regional and 790 headquarters staff members. Ten years later, chronic budget cuts had reduced the NRC to 679 regional and 651 headquarters staff members.<sup>13</sup>

The NRC must be made more independent of the nuclear industry

During a decade that began with 101 licensed nuclear power plants and ended with 109 plants, the NRC lost 20 percent of its safety inspectors.<sup>14</sup>

The NRC must be made more independent of the nuclear industry in its funding so that it can properly regulate the industry before it is too late.



<sup>1</sup> David Lochbaum is Nuclear Safety Engineer at the Union of Concerned Scientists (UCS). This article is based on the UCS report he authored, *Nuclear Plant Risk Studies: Failing the Grade* (Cambridge, Mass.: Union of Concerned Scientists, August 2000), which can be ordered from UCS (Tel. 1-617-547-5552) or downloaded from its Web site, <http://www.ucsusa.org>.

<sup>2</sup> US House of Representatives, Committee on Interior and Insular Affairs Subcommittee on Oversight & Investigations, "Calculation of Reactor Accident Consequences (CRAC2) for US Nuclear Power Plants (Health Effects and Costs) Conditional on an 'SST1' Release," November 1, 1982; and Nuclear Regulatory Commission, "A Safety and Regulatory Assessment of Generic BWR and PWR Permanently Shutdown Nuclear Power Plants," NUREG/CR-6451, Washington, D.C., August 1997.

<sup>3</sup> Richard L. Hudson, "Cost of Chernobyl Nuclear Disaster Soars in New Study," *Wall Street Journal*, March 29, 1990.

<sup>4</sup> Nuclear Regulatory Commission, "Individual Plant Examination Program: Perspectives on Reactor Safety and Plant Performance," NUREG-1560, Vol. 2, Parts 2-5, p. 14-3, Washington, D.C., November 1996.

<sup>5</sup> Sadanandan V. Pullani, "Design Errors in Nuclear Power Plants," AEOD/T97-01, Washington, D.C.: NRC Office for Analysis and Evaluation of Operational Data, January 1997.

<sup>6</sup> Nuclear Regulatory Commission, "NRC Research Program on Plant Aging: Listing and Summaries of Reports Issued Through September 1993," NUREG-1377, Rev. 4, Washington, D.C., December 1993.

<sup>7</sup> Brian Jordan, "NRC Finds Surry Accident Has 'High Degree' of Safety Significance," *Inside NRC*, Washington, D.C.: McGraw-Hill, January 5, 1987.

<sup>8</sup> Robert Pollard, "US Nuclear Power Plants—Showing Their Age—Case Study: Reactor Pressure Vessel Embrittlement," Cambridge, Mass.: Union of Concerned Scientists, December 1995.

<sup>9</sup> Jack E. Rosenthal to John T. Larkins, "Meeting with the Advisory Committee on Reactor Safeguards Human Factors Subcommittee, March 15, 2000, on SECY-00-0053, NRC Program on Human Performance in Nuclear Power Plant Safety," Washington, D.C.: Nuclear Regulatory Commission, March 6, 2000. (Ed. note: This report was prepared by INEEL for the NRC.)

<sup>10</sup> Nuclear Regulatory Commission, "A Safety and Regulatory Assessment of Generic BWR and PWR Permanently Shutdown Nuclear Power Plants," NUREG/CR-6451, Washington, D.C., August 1997. (Ed. note: This report was prepared by Brookhaven National Laboratory for the NRC.)

<sup>11</sup> Code of Federal Regulations, Title 10, Energy, Section 20.1003, Definitions.

<sup>12</sup> Richard Rhodes, *The Making of the Atomic Bomb*, New York: Simon & Schuster, pp. 734 and 740, 1986.

<sup>13</sup> NRC Office of Nuclear Reactor Regulation, "Regulatory Trends," Washington, D.C., April 1997.

<sup>14</sup> Sadanandan V. Pullani, "Design Errors in Nuclear Power Plants," AEOD/T97-01, Washington, D.C.: NRC Office for Analysis and Evaluation of Operational Data, January 1997.



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VIA FACSIMILE

February 28, 2002

Office of Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549

Re: Duke Energy Corporation 2002 Annual Shareholders'  
Meeting—Exclusion of Shareholder Proposal—Securities  
Exchange Act of 1934, 14a-8(i)(3), 14a-8(i)(6) and 14a-8(i)(10)

RECEIVED  
OFFICE OF CHIEF COUNSEL  
DIVISION OF CORPORATION FINANCE  
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Ladies and Gentlemen:

On behalf of Duke Energy Corporation, a North Carolina corporation (the "Company"), I am submitting this letter in response to the letter dated February 15, 2002 of Richard D. Sears (the "Proponent") responding to the Company's letter dated December 27, 2001, which was submitted to the Division of Corporation Finance of the Securities and Exchange Commission (the "Commission") pursuant to Rule 14a-8(j) under the Securities Exchange Act of 1934, as amended, requesting that the Staff of the Division of Corporation Finance (the "Staff") not recommend any enforcement action against the Company if the Company omits from its 2002 proxy materials the shareholder proposal and accompanying supporting statement (the "Proposal") submitted by the Proponent.

Pursuant to Rule 14a-8(j), enclosed herewith are six copies of this letter, which has the Company's letter of December 27, 2001, the Proponent's letter of February 15, 2002 and the Proposal attached as Exhibits A, B and C. A copy of this letter, with exhibits, is also being sent to the Proponent.

I am submitting this letter on behalf of the Company in order to respond to additional false and misleading statements contained in the Proponent's February 15, 2002 letter. Such false and misleading statements are the following:

1. The Proponent asserts that ***"Duke Energy has petitioned the Federal Energy Regulatory Commission to relieve them of liability for day to day operations of Company nuclear reactors."*** The Company has filed no such petition and has not otherwise made such a request. Moreover, the Federal Energy Regulatory Commission does not have the authority to relieve a company from this kind of liability.

2. The Proponent states that ***"the introduction of plutonium fuel is a definite change in operations and by entering into a contract Duke Energy has***

***obligated the company and incurred potential liability due to risks associated with plutonium.*** Contrary to this assertion, the Company has not introduced plutonium fuel in any of its reactors; nor is it contractually obligated to do so. Indeed, if the Company were to use mixed oxide fuel (which is not "plutonium fuel" but rather a blend of a small amount of plutonium oxide with a large amount of uranium oxide in an approximate ratio of 1:20) in any of its reactors, it would first need to obtain the approval of the Nuclear Regulatory Commission (NRC). NRC approval would be provided only after the Company files an application to introduce a different fuel in the relevant reactors, public health and safety and environmental concerns are satisfied, and the relevant licenses are amended. The Company has not filed any such application.

3. The Proponent states that the Proposal is based on the assumption that ***"independence lends credibility to any investigation"*** and asserts that independent oversight of the Company's nuclear operations needs to be provided. The Company reiterates that the NRC, an independent Federal regulatory agency, has precisely this oversight function and provides the requisite independent investigations and evaluations with respect to the Company's nuclear operations.

4. The Proponent misrepresents the Company's liabilities under the Price-Anderson Act in its February 15, 2002 letter. Pursuant to the Price-Anderson Act, the Company is required to insure against public liability claims resulting from nuclear incidents to the full limit of liability, approximately \$9.5 billion as of 1998. The Company has satisfied this requirement. The Company thus may incur liability for public liability claims resulting from nuclear incidents up to that amount, but not beyond it. Congress has recognized that a nuclear incident could involve damages in excess of the limit of liability and has committed to protect the public from an incident of such magnitude. It has further established a process to provide full and prompt compensation for public liability claims exceeding the applicable limit of liability. It should be noted, however, that in 1998 the NRC acknowledged that there is "a very low probability of a very high consequence accident that could result in public liability claims in excess of the present and projected amounts of nuclear liability insurance." The NRC concluded that "the two layers of insurance should provide ample liability protection for most postulated nuclear power plant accidents." Accordingly, the Price-Anderson Act does not set "inadequate insurance limits," as the Proponent asserts in his February 15, 2002 letter, leaving the Company liable for amounts in excess thereof.

5. Indian Point 2 and Indian Point 3— for which the Proponent provides nuclear disaster dollar-cost data in its February 15, 2002 letter—are not Company plants and data relating to them is thus of limited relevance. Moreover, the data that the Proponent provides with respect to those plants is more than twenty years old.

The Commission has indicated that "when a proposal and supporting statement will require detailed and extensive editing in order to bring them into compliance with the proxy rules," the Staff may find it appropriate to grant relief without providing the proponent a chance to make revisions to the proposal and supporting statement. See Division of Corporation Finance: Staff Legal Bulletin No. 14 (July 13, 2001). Given the substantial number of inaccuracies in the Proposal and in the

Proponent's recent letter of February 15, 2002, the Company continues to urge that the Staff provide such relief in this case.

The Company submits that its analyses and assessments already address the kinds of risks that the Proposal could legitimately have an additional study address. It also submits that a meaningful study and report using information from independent public sources would, in fact, not be feasible, in part because a substantial amount of information that is used to develop probabilistic risk assessments is not, and never has been, available to the public, and in part because the NRC has restricted the amount of information available on its Website and through its Public Document Room, as a result of the events of September 11. The Company also notes that publication of the kind of information that the Proponent seeks to disclose regarding risks of public harm and the consequences of catastrophic events would raise homeland security concerns.

The Company submits that the Proponent's letter of February 15, 2002 does not rebut any of the Company's arguments for excluding the Proposal from the Company's proxy materials for its 2002 Annual Meeting of Shareholders, whether under Rule 14a-8(i)(3), 14a-8(i)(6) or 14a-8(i)(10).

The Company also submits that the false and misleading statements contained in the Proponent's February 15, 2002 letter provide additional support for the Company's Rule 14a-8(i)(3) claim.

The Company respectfully requests your confirmation that the Division of Corporation Finance will not recommend any enforcement action if the Company omits the Proposal from its proxy materials for its 2002 Annual Meeting of Shareholders for the reasons specified in the Company's December 27, 2001 letter and herein.

Please acknowledge receipt of this letter by stamping the enclosed copy and returning it in the enclosed self-addressed, stamped envelope.

Should you disagree with our conclusions or have any questions regarding this letter, we respectfully request the opportunity to confer with you prior to the issuance of the Staff's response. Please do not hesitate to call the undersigned at (704) 382-8152 in such event.

Very truly yours,



Robert T. Lucas III

Enclosures

cc: Richard D. Sears  
2161 Royall Drive  
Winston-Salem, NC 27106



Robert T. Lucas III  
Associate General Counsel  
Assistant Secretary

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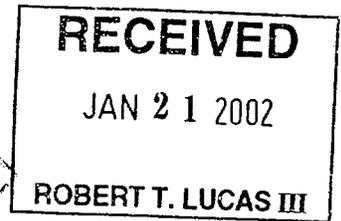
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**VIA FEDERAL EXPRESS**

December 27, 2001

Office of Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549



Re: Duke Energy Corporation 2002 Annual Shareholders' Meeting--  
Exclusion of Shareholder Proposal--Securities Exchange Act of  
1934, Rules 14a-8(i)(3), 14a-8(i)(6) and 14a-8(i)(10)

Ladies and Gentlemen:

On behalf of Duke Energy Corporation, a North Carolina corporation (the "Company"), I am submitting this letter pursuant to Rule 14a-8(j) under the Securities Exchange Act of 1934, as amended (the "Act"), in response to the shareholder proposal and accompanying supporting statement referenced herein (the "Proposal"), which has been submitted by Richard D. Sears (the "Proponent") for inclusion in the Company's 2002 proxy statement and form of proxy relating to the Company's Annual Meeting of Shareholders presently scheduled for April 25, 2002. The Company currently expects that it will file definitive copies of its 2002 proxy statement and form of proxy pursuant to Rule 14a-6 on or about March 18, 2002. I hereby request confirmation that the staff of the Division of Corporation Finance (the "Staff") will not recommend any enforcement action to the Securities and Exchange Commission (the "Commission") if, in reliance on one or more of the interpretations of Rule 14a-8 set forth below, the Company excludes the Proposal from its 2002 proxy materials.

Pursuant to Rule 14a-8(j), enclosed herewith are six copies of the following:

- (1) this letter, which represents the Company's statement of reasons for omission of the Proposal from its 2002 proxy statement and form of proxy; and
- (2) the Proposal, attached as Exhibit A hereto, which was submitted by the Proponent by letter dated November 19, 2001.

The Company intends to omit the Proposal pursuant to Rules 14a-8(i)(3), 14a-8(i)(6) and 14a-8(i)(10) under the Act, and requests that the Division of Corporation Finance advise the Company whether it would recommend any enforcement action against the Company in such event.

#### DISCUSSION OF REASONS FOR OMISSION

##### **I. Rule 14a-8(i)(3) — The Proposal May Be Omitted Because It Contains Statements that are False or Misleading.**

Rule 14a-8(i)(3) provides that a registrant may omit a proposal and any statement in support thereof from its proxy statement and form of proxy if the proposal or supporting statement is contrary to any of the Commission's proxy rules, including Rule 14a-9, which prohibits materially false or misleading statements in proxy soliciting materials. Specifically, Rule 14a-9 provides that no solicitation shall be made by means of any proxy statement containing "any statement which, at the time and in the light of the circumstances under which it is made, is false or misleading with respect to any material fact, or which omits to state any material fact necessary to make the statements therein not false or misleading."

The Proposal contains a number of such false and misleading statements, which are enumerated below.

(1) **The Proposal requests "an open comprehensive study, utilizing independent public resources . . ."**: The Proposal specifies that the study requested in the Proposal utilize "independent public resources" and be open and comprehensive. That requirement, however, is vague since the Proposal does not define or in any way indicate what the term "independent public resources" means in the context of defining risk of, and responsibility for, causing public harm due to the Company's nuclear energy program. Moreover, the Proposal is misleading because it implies that a meaningful study of the sort requested in the Proposal can be done utilizing solely "independent public resources": it cannot. This is so because a substantial amount of information that is used to develop probabilistic risk assessments (or PRAs) for the Company's nuclear plants is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Moreover, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort contemplated by the Proposal, utilizing only public sources, would thus not be feasible.

(2) **"An independent public study will provide shareholders and other stakeholders with credible information about the risks to specific communities and the predicted consequences of a catastrophic event."**: The Proposal requests a report regarding risks of public harm, and mentions "terrorism," "sabotage," "risks to

specific communities" and "the predicted consequences of a catastrophic event." The Proposal also implies that a meaningful report of this sort is capable of being generated using only public sources. To the extent that the Proposal requests an analysis of risk likelihood (utilizing probabilistic risk assessment methods) with respect to terrorist attacks or acts of sabotage, however, such an analysis is not capable of being produced since information concerning prior terrorist attacks and acts of sabotage against commercial nuclear power plants or involving the transportation or storage of nuclear fuel, which would be necessary for probabilistic risk assessments, does not exist. To the extent that the Proposal requests an analysis of vulnerabilities to terrorist attack and to acts of sabotage, that analysis would necessarily require the consideration of "safeguards information," which, because of its security-sensitive nature, is not now and never has been in the public domain. Indeed, publication of this kind of information would raise homeland security concerns and be contrary to national security interests. Accordingly, the request in the Proposal that the Company provide a report on such risks using only public sources is misleading since a meaningful report of this sort would not be feasible to generate.

(3) **"Duke Energy has made application to the Nuclear Regulatory Commission to renew the operating licenses for the McGuire and Catawba nuclear plants for an additional 20 years and if approved plans to operate these plants until the years 2041-2046. License approval by the Nuclear Regulatory Commission would extend by 20 years the risks associated with plant aging and the threats associated with terrorism."** This statement implies that if the Company's license renewal application is approved, the Company would operate its reactors an additional 20

years, a statement that is false and misleading. Rather, approval of the Company's renewed operating license would merely authorize the Company to operate its reactors for an additional time period of up to 20 years. Whether the Company would choose to operate the reactors for such additional time period or any part thereof, would depend on a number of factors, including economics and safety. It should be noted that while the Company is the licensed operator of the Catawba plant mentioned above, it is only one of several owners of that plant.

(4) **"In a separate application Duke Energy proposes to introduce a new plutonium fuel in the McGuire and Catawba reactors. This fuel would alter the risks arising from the transportation, use and storage of plutonium (theft, sabotage, terrorism)."**: The Company has not filed an application to introduce a different type of fuel in its McGuire and Catawba reactors, and when, or indeed whether, the Company will file such an application in the future is subject to a number of factors. As a part of the federal government's nonproliferation initiative to dispose of surplus weapons plutonium, the Company may, contingent on numerous factors, use mixed oxide fuel (or MOX) at its McGuire and Catawba plants. Mixed oxide fuel contains a small amount of plutonium oxide, blended with a large amount of uranium oxide (in an approximate ratio of 1:20) and thus is not a new plutonium fuel. Mixed oxide fuel has been transported, used and stored safely for decades in several European countries.

The assertion in the Proposal that a "new plutonium fuel" would "alter the risks arising from the transportation, use and storage of plutonium" is additionally misleading. Any license amendment applications submitted to the Nuclear Regulatory Commission ("NRC") for the use of mixed oxide fuel must contain all safety and

environmental analyses that the NRC requires in order to allow for evaluation of the safety and environmental impact of mixed oxide fuel use. Submission and approval of such applications would be necessary for the Company to utilize mixed oxide fuel in its nuclear reactors. The NRC's review and approval process would constitute an open comprehensive study that is subject to the oversight and participation that the Proposal appears to contemplate.

(5) **"An independent public study will provide shareholders and other stakeholders credible information . . ."**: This statement is opinion and not fact. Moreover, the statement implies that an independent study would generate "credible" information, whereas an internal study, undertaken by the Company, would not, an implication which clearly impugns the integrity of the Company. Moreover, that implication itself is unsupported by fact: no evidence is provided in the Proposal to support the idea that the information provided in the Company's reports is not credible. *Indeed, the Company is a recognized leader in the nuclear industry.*

(6) **"Supporting Statement: Duke Energy's Environmental, Health & Safety Policy states . . ."**: The Proposal contains excerpts from the Company's Environmental, Health & Safety Policy (the "EHS Policy") and labels those excerpts as the "Supporting Statement" of the Proposal. As a reading of those excerpts indicates, however, the EHS Policy does not commit the Company to provide an independent public study and report of the sort set forth in the Proposal. Rather, the EHS Policy reaffirms the Company's commitment to foster open dialogue and informed decision making through meaningful and regular communication with management, employees and the public; it states that it will engage in partnerships that enhance public

environmental, health and safety awareness and address common environmental, health and safety issues; and it reaffirms that it highly values the health and safety of its employees, customers and communities. To label the EHS Policy excerpts as a Supporting Statement of the Proposal is thus false and misleading.

(7) **The Proposal requests the Board of Directors "to conduct an open comprehensive study, utilizing independent public resources, oversight, and participation . . ."**: This statement is misleading with respect to the duties the Company's Board would have to perform if the Proposal is implemented. Specifically, the Proposal asks the Company's Board to "conduct" a study that in effect would not be the Company's or the Board's and then to disseminate it to the Company's shareholders, as a report of the Company's Board, when the study, and the report, would in reality be, and relate to, an independent public study.

A director of a North Carolina corporation has a duty to discharge his or her duties as a director in good faith, with the care an ordinarily prudent person in a like position would exercise under similar circumstances and in a manner he or she reasonably believes to be in the best interests of the corporation. The Proposal would have the Company's Board cede supervisory and oversight authority to individuals whose only defining characteristic in the Proposal is that they are "independent" of the Company and who thus would not necessarily be acting in the Company's best interests. The resulting study would be for the benefit not of the Company and its shareholders only, but rather also for the benefit of the Company's other "stakeholders". The report would then be presented, as a report "prepared" by the Board, at the Company's next annual shareholders' meeting. The Proposal is misleading because in reality the Company's

Board would not conduct the proposed study and would have no supervisory or oversight authority after the study is commenced. The Proposal is also misleading because it does not inform shareholders that the Board may have difficulty implementing the Proposal because it may require the Company's directors to compromise their duties to the Company and its shareholders.

As the previously mentioned facts indicate, the Proposal contains numerous false or misleading statements. Such statements, individually and in the aggregate, are contrary to Rule 14a-9, which prohibits materially false or misleading statements in proxy soliciting materials. The Company submits that it may properly omit such statements from its 2002 proxy materials pursuant to Rule 14a-8(i)(3) on this basis.

Recently, the Staff indicated that, "when a proposal and supporting statement will require detailed and extensive editing in order to bring them into compliance with the proxy rules," the Staff may find it appropriate to grant relief without providing the proponent a chance to make revisions to the proposal and supporting statement. See Division of Corporation Finance: Staff Legal Bulletin No. 14 (July 13, 2001). We urge the Staff to provide such relief here.

**II. Rule 14a-8(i)(6)—The Proposal May Be Omitted Because the Company Would Lack the Power or Authority to Implement the Proposal.**

Rule 14a-8(i)(6) provides that a proposal may be excluded if "the company would lack the power or authority to implement the proposal."

The Proposal specifies that the study requested in the Proposal utilize "independent public resources" and be open and comprehensive. The Proposal thus

implies that a meaningful study of the sort requested in the Proposal can be done utilizing solely "independent public resources": it cannot. A substantial amount of information that is used to develop probabilistic risk assessments (or PRAs) for the Company's nuclear plants is not, and never has been, available to the public. In addition, as a result of the events of September 11, the NRC has restricted the amount of information available on its website and through its Public Document Room, and it is unclear as to when, if ever, such information will again be available. Moreover, much of the information that is used in the Company's PRAs is internal to and proprietary to the Company. Conducting a meaningful study of the sort contemplated by the Proposal, utilizing only public sources, would thus not be feasible.

The Proposal requests a report regarding risks of public harm, and mentions "terrorism," "sabotage," "risks to specific communities" and "the predicted consequences of a catastrophic event." The Proposal also implies that a meaningful report of this sort is capable of being generated using only public sources. To the extent that the Proposal requests an analysis of risk likelihood (utilizing probabilistic risk assessment methods) with respect to terrorist attacks or acts of sabotage, however, such an analysis is not capable of being produced since information concerning prior terrorist attacks and acts of sabotage against commercial nuclear power plants or involving the transportation or storage of nuclear fuel, which would be necessary for probabilistic risk assessments, does not exist. To the extent that the Proposal requests an analysis of vulnerabilities to terrorist attack and to acts of sabotage, that analysis would necessarily require the consideration of "safeguards information," which, because of its security-sensitive nature, is not now and never has been in the public domain. Indeed, publication

of this kind of information would raise homeland security concerns and be contrary to national security interests.

For the reasons specified above, the Company would lack the power to generate a meaningful report of this sort using only "independent public resources" (but "excluding proprietary and confidential information"). The Company submits that the Proposal may be properly excluded from the Company's 2002 proxy materials under Rule 14a-8(i)(6) on this basis.

**III. Rule 14a-8(i)(10) — The Proposal May Be Omitted Because It Has Been Substantially Implemented.**

Rule 14a-8(i)(10) provides that a proposal may be excluded from a company's proxy materials "if the company has already substantially implemented the proposal." The Company submits that the Proposal is excludable from its 2002 proxy materials under Rule 14a-8(i)(10) because the Company has substantially implemented the Proposal for the reasons specified below.

The Proposal requests that the Company, in effect, commission an open, comprehensive and independent public study for the purpose of "defining Duke Energy's risk of, and potential responsibility for, causing public harm" because of the Company's participation in its nuclear energy programs. The Proposal requests that the study be performed with independent public participation and oversight and that it utilize "independent public resources," excluding "proprietary and confidential information." The study would be the basis of a report that would be paid for by the Company "at reasonable expense" and be presented at the Company's 2003 annual shareholders' meeting.

The Proposal states that the last NRC study of reactor accident consequences was done by the Sandia National Laboratory in 1981. (In reality, the Sandia National Laboratory conducted an evaluation of severe accident risks for five U.S. nuclear power plants which was published in 1990.) The Proposal would apparently have the Company develop a report of a similar nature updated to reflect any changed circumstances and improved analytical techniques, with the Company's nuclear plant operations as the report's focus. As discussed below, however, the Company has in fact already done recent analyses and assessments of this kind utilizing information internal and proprietary to it.

The Company began performing probabilistic risk assessments (or PRAs) for its nuclear plants in the early 1980's. PRAs are reactor safety studies, and the Company maintains PRAs for each of its nuclear plants. The Company's PRAs analyze the risk of core damage, analyze core behavior and containment performance and analyze public health risk for severe (or beyond design basis) accidents (e.g., the type of damage sustained at Three Mile Island Unit 2 in 1979). These PRAs assess the public health risks to the populations surrounding the Company's nuclear plants. The Company has a staff of approximately 13 engineers and technical personnel who have an expertise in performing PRAs that are consistent with the most current risk assessment methodology and use the most current reliability information. Based on the PRA methodology, the Company submitted, in the 1990's, Individual Plant Examinations (IPEs) to the NRC, and those IPEs were reviewed by the NRC and found to be acceptable. The Company uses the information from its PRAs, which are updated periodically, to identify plant and

procedural changes that would enable it to continue to operate its nuclear plants in a safe manner.

The Company's PRAs for its nuclear plants are subject to independent peer review and hence to outside oversight. Specifically, the PRAs for the Company's McGuire and Oconee plants have recently undergone peer reviews, while the peer review for the PRA for the Catawba plant is scheduled for May 2002. These peer reviews are sponsored by the so-called "Owners Group" for the type of plant design in question. For example, the McGuire and Catawba plants are Westinghouse plants, so that the Westinghouse Owners Group sponsors the peer reviews for those plants, with the participants in the peer reviews being a combination of personnel from other Westinghouse plants with PRA experience and outside consultants. Since the Oconee plant is a Babcock & Wilcox plant, the Babcock & Wilcox Owners Group sponsors the peer review, with the participants being a combination of personnel from other Babcock & Wilcox plants with PRA experience and outside consultants.

The Company has also conducted Severe Accident Mitigation Alternatives (or SAMA) analyses as part of its applications for renewal of its operating licenses for its nuclear plants. A SAMA analysis analyzes core damage frequency, core behavior and containment performance, and public health risk. The SAMA analyses are subject to review and approval by the NRC. The SAMA analysis for the Company's Oconee plant has been reviewed and approved by the NRC, for example, in the context of its review of the Company's license renewal application, which was approved by the NRC on May 23, 2000. The SAMA analyses for the McGuire and Catawba plants have been submitted to the NRC and are being reviewed in the context of the NRC's review of the license

renewal application the Company filed for those plants on June 13, 2001. The purpose of each SAMA analysis is to look for cost effective changes to the applicable nuclear plants that would reduce public health risk.

The Proposal additionally mentions risks associated with plant aging, which the Proposal would presumably have its study also address. The Company has in place effective aging management programs for its nuclear plants, and, in the context of license renewal, will implement additional aging management programs as necessary to manage the effects of aging during any period of extended operation. These programs are subject to review and approval by the NRC and to public participation and challenge consistent with the license renewal process set forth in the NRC's regulations.

The Proposal requests an open study with public oversight and participation. The Company notes in this regard that the license renewal applications recently filed with the NRC for the McGuire and Catawba plants and recently approved by the NRC with respect to the Company's Oconee plant, is overseen by the NRC, an independent federal regulatory agency. The license renewal process includes opportunities for public participation, including the opportunity to comment and the opportunity to request a hearing. A SAMA analysis is included in each of the license renewal applications submitted to the NRC and is subject to the same review, comment and challenge as the balance of the license renewal application.

The Proposal also specifies that independent public resources are to be utilized in the study requested in the Proposal, excluding proprietary and confidential information. The Company wishes to reiterate that if independent public resources

## NUCLEAR RISK and RESPONSIBILITY

The shareholders request the Board of Directors to conduct an open comprehensive study, utilizing independent public resources, oversight, and participation (but excluding proprietary and confidential information), defining Duke Energy's risk of, and potential responsibility for, causing public harm due to the company's continued participation in nuclear energy programs, and to prepare, at reasonable expense, a report for the next annual shareholders' meeting in 2003.

### Supporting Statement:

Duke Energy's Environmental, Health & Safety Policy states:

Duke Energy highly values the health and safety of our employees, customers and communities.

Duke Energy will engage in partnerships that enhance public environmental, health & safety awareness and address common environmental, health & safety issues.

Duke Energy will foster open dialogue and informed decision making through meaningful and regular communication of environmental, health and safety information with management, employees and the public.

### Additional Supporting Statement:

The last Nuclear Regulatory Commission study of reactor accident consequences was done by the Sandia National Laboratory in 1981.

Duke Energy has made application to the Nuclear Regulatory Commission to renew the operating licenses for the McGuire and Catawba nuclear plants for an additional 20 years and if approved plans to operate these plants until the years 2041-2046. License approval by the Nuclear Regulatory Commission would extend by 20 years the risks associated with plant aging and the threats associated with terrorism.

In a separate application Duke Energy proposes to introduce a new plutonium fuel in the McGuire and Catawba reactors. This fuel would alter the risks arising from the transportation, use and storage of plutonium (theft, sabotage, terrorism).

The Nuclear Regulatory Commission acknowledges the threat of terrorism attacks on nuclear facilities. While ongoing analysis at the federal level is essential, when such questions are raised at the local level, they are often considered generic and not within the scope of the license renewal process. An independent public study will provide shareholders and other stakeholders credible information about the risks to specific communities and the predicted consequences of a catastrophic event.

###

FEB 25 2002

ROBERT T. LUCAS III

COPY

Richard D. Sears

(336)759-2867  
2161 Royall Drive  
Winston-Salem, NC 27106

February 15, 2002

Office of Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, NW  
Washington, DC 20549

Re: Duke Energy Shareholder Resolution for the 2002 Annual Shareholders' Meeting

Commissioners:

I wish to offer comments in response to Duke Energy's letter dated 12/27/01 seeking the Commission's approval for the company's exclusion of my shareholder resolution "Nuclear Risk and Responsibility". Page eight of their letter asks the Commission to deny me an opportunity to revise or amend either the resolution or supporting statements and sources. Given the magnitude and implications of the resolution's subject, I ask that it receive due consideration and I assure the Commission and Duke Energy of my willingness to revise the text as necessary to comply with the Commission's proxy rules.

Duke Energy's letter asserts that the proposed resolution includes, in their opinion, false and misleading statements. For instance, they cite "an open comprehensive study, utilizing independent public resources" as vague because such resources are not defined and misleading because such public resources do not exist. Numerous studies, such as "Sabotage at Nuclear Power Plants" (Purvis, James W 1999. Sandia National Laboratory. SAND-99-1850C) are available to the public. In fact, defining "independent public resources" would unnecessarily restrict the company's efforts and using confidential or classified documents would be illegal. The intent of the proposal is to alleviate legitimate shareholder concerns, not violate the law.

Duke Energy finds the statement regarding their 20 year license renewal application misleading unless we are to assume they might decide not to operate their reactors due to "a number of factors, including economics and safety". The resolution speaks directly to the issue of "economics and safety" and the company's obligation to inform its shareholders. In the case of the Catawba plant, the other "owners" are taxpayers of the cities that purchased a share (87.5%) of that facility and participate accordingly although they are not directly responsible for the plant's operation. Complicating the issue further, Duke Energy has petitioned the Federal Energy Regulatory Commission

to relieve them of liability for day to day operations of Company nuclear reactors.

The Department of Energy has entered into a contract with Duke Cogema Stone and Webster to use weapons grade plutonium processed at the Savannah River Site in South Carolina. The introduction of plutonium fuel is a definite change in operations and by entering into a contract Duke Energy has obligated the company and incurred potential liability due to risks associated with plutonium. The resolution asks that the shareholders be informed about such risks. I do not expect individual shareholders to participate in the Nuclear Regulatory Commission license amendment process when the company is already subject to an existing contract. Moreover, the European experience with reprocessed spent nuclear fuel, containing 60-70% plutonium-239, has been less than successful and did not involve weapons-grade plutonium which contains over 90% plutonium 239.

The integrity of a corporation is not questioned when independent experts prepare an analysis of company operations. Duke Energy submits financial records to an independent auditor for verification of how the Company has accounted for its income and expenses and managed the Company's assets. Shareholders expect and rely on such an audit. Recent developments involving audit relationships that lacked independence reinforce how important this is to protecting shareholder value. The resolution relies on the same assumption that independence lends credibility to any investigation.

My intent in citing excerpts from Duke Energy's Environmental, Health & Safety Policy was to point out that the resolution does not violate adopted company policy but instead complements the Company's stated policy of encouraging open discussion of environmental, health and safety issues. Quoting the complete Environmental, Health & Safety Policy would exceed the Commission's required length for shareholder resolutions.

Since Duke Energy is a corporation doing business as a public utility (Duke Power Company), I would expect that "an ordinarily prudent person" who is a director of the corporation would recognize the company's broader role and consider the relationship between the company's long-term interest and the well-being of the service area of the Company. The resolution seeks to clarify the Company's role with respect to a major issue of concern to both shareholders and neighboring communities. In no way would it require directors to "compromise their duties" as suggested by the Company.

Moving beyond discussion of information availability and the quality of safety studies, it is important to point out that the Company's liability under Price-Anderson is **limited** to \$9.5 billion according to the 2000 Annual Report. Karl Grossman, in a paper presented January 26, 2002 to The New School University, made the following statement: "The new Price-Anderson liability limit would be \$8.6 billion, a fraction of what the NRC itself has concluded would be the financial consequences of a nuclear plant accident. Those figures are contained in a 1982 report done for the NRC by the DOE's Sandia National Laboratories and titled "Calculation of Reactor Accident

Consequences for U.S. Nuclear Power Plants". It calculates-in 1980 dollars-costs as a result of a nuclear plant disaster as high as \$274 billion for Indian Point 2 and \$314 billion at the Indian Point 3 nuclear plants both a little more than 40 (miles) north of where we are today. The number of early fatalities-46,000 as a result of Indian Point 2 undergoing a meltdown with breach of containment, 50,000 for Indian Point 3." The question of inadequate insurance limits set by Congressional mandate is certainly relevant to the Company's shareholders.

Following the terrorist attack on September 11, 2001, Nuclear Regulatory Commission Chairman Richard Meserve made this point in an address to the Institute of Nuclear Power Operations in Atlanta: "In following a strategy of risk mitigation, society should undertake a careful examination of both risks and benefits. It is not the NRC's role to make judgments about this balance. But it is reasonable for the NRC to seek to assure that any decisions are made with a clear understanding of nuclear risks."

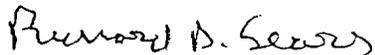
He went on to say, "Just to make myself entirely clear, I am not endorsing the continuation of "business as usual." Rather, I am saying that the problem needs to be defined before it can be solved. At this point, we are still in the definition stage in our evaluation of the terrorist threat. Any policy regarding the defense of nuclear facilities should be integrated in the overall response to the threat to infrastructure of all kinds."

The "Nuclear Risk and Responsibility" shareholder resolution seeks to inform the Company's stockholders of their shared responsibility for Duke Energy's nuclear operations. It does not ask the Company's directors to exceed their authority nor does it require the release of information not already in the public domain. Chairman Meserve's remarks reflect the significance of the problem and the challenges we face.

I urge the Commission to recognize the need for open discussion and the value of informed decisions by the shareholders by allowing the Proposal's inclusion in the 2002 proxy statement. If additional clarification is necessary, please contact me at (336)759-2867. A copy of this letter has been sent to the Company's representative.

Thank you for your consideration.

Sincerely,



Richard D. Sears

Enclosures

cc: Robert T. Lucas III  
Duke Energy Corporation  
422 South Church Street  
P. O. Box 1244  
Charlotte, NC 28201-1244

## NUCLEAR RISK and RESPONSIBILITY

The shareholders request the Board of Directors to conduct an open comprehensive study, utilizing independent public resources, oversight, and participation (but excluding proprietary and confidential information), defining Duke Energy's risk of, and potential responsibility for, causing public harm due to the company's continued participation in nuclear energy programs, and to prepare, at reasonable expense, a report for the next annual shareholders' meeting in 2003.

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###



Robert T. Lucas III  
Associate General Counsel  
Assistant Secretary

Duke Energy Corporation  
PB05E  
422 South Church Street  
P.O. Box 1244  
Charlotte, NC 28201-1244  
(704) 382-8152 OFFICE  
(704) 382-8137 FAX  
rtlucas@duke-energy.com

March 8, 2002

**Sent Via Federal Express**

Richard D. Sears  
2161 Royall Drive  
Winston-Salem, NC 27106

Dear Mr. Sears:

We have received your March 4, 2002 letter. We will make the changes you suggest in your revised proposal in our proxy statement, except that we wish to point out that you have not complied with the SEC's requirement that you recast the sentence beginning "An independent public study . . ." in the last paragraph of your supporting statement as "the proponent's opinion." To the contrary, you have recast the sentence as "the opinion of the shareholders." Your new language is misleading and without factual support. Therefore, in accordance with the SEC's response to our no-action letter request, we intend to omit this portion of your proposal from our proxy statement.

Very truly yours,

Robert T. Lucas III

cc: Securities and Exchange Commission

RECEIVED  
OFFICE OF CHIEF COUNSEL  
CORPORATION FINANCE  
02 MAR -8 PM 5:40



## LAW DEPARTMENT

**Mailing Address**

PB05E  
P.O. Box 1244  
Charlotte, NC 28201-1244

**Overnight & UPS Deliveries**

422 S. Church Street  
Charlotte, NC 28202-1904

### Facsimile Memorandum

**Date:** March 8, 2002

**TO:** Jonathan Ingram  
(F) 202-942-9525

**FROM:** Bob Lucas  
(P) 704-382-8152  
(F) 704-382-8137

**# Pages:** 2, including cover sheet

**Message:** Please see attached letter

**If you do not receive all pages, please call:**

**Name:** Phoebe Elliott    **Phone:** 704-382-8104

*The information contained in this facsimile message is attorney privileged and/or confidential or proprietary or trade secret information intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone at (704) 382-8136. Thank you.*

**DIVISION OF CORPORATION FINANCE**  
**INFORMAL PROCEDURES REGARDING SHAREHOLDER PROPOSALS**

The Division of Corporation Finance believes that its responsibility with respect to matters arising under Rule 14a-8 [17 CFR 240.14a-8], as with other matters under the proxy rules, is to aid those who must comply with the rule by offering informal advice and suggestions and to determine, initially, whether or not it may be appropriate in a particular matter to recommend enforcement action to the Commission. In connection with a shareholder proposal under Rule 14a-8, the Division's staff considers the information furnished to it by the Company in support of its intention to exclude the proposals from the Company's proxy materials, as well as any information furnished by the proponent or the proponent's representative.

Although Rule 14a-8(k) does not require any communications from shareholders to the Commission's staff, the staff will always consider information concerning alleged violations of the statutes administered by the Commission, including argument as to whether or not activities proposed to be taken would be violative of the statute or rule involved. The receipt by the staff of such information, however, should not be construed as changing the staff's informal procedures and proxy review into a formal or adversary procedure.

It is important to note that the staff's and Commission's no-action responses to Rule 14a-8(j) submissions reflect only informal views. The determinations reached in these no-action letters do not and cannot adjudicate the merits of a company's position with respect to the proposal. Only a court such as a U.S. District Court can decide whether a company is obligated to include shareholder proposals in its proxy materials. Accordingly a discretionary determination not to recommend or take Commission enforcement action, does not preclude a proponent, or any shareholder of a company, from pursuing any rights he or she may have against the company in court, should the management omit the proposal from the company's proxy material.

March 1, 2002

**Response of the Office of Chief Counsel  
Division of Corporation Finance**

Re: Duke Energy Corporation  
Incoming letter dated December 27, 2001

The proposal requests that the board of directors conduct an open comprehensive study, utilizing independent public resources, oversight and participation, but excluding proprietary and confidential information, defining Duke Energy's risk of, and potential responsibility for, causing public harm due to Duke Energy's continued participation in nuclear energy programs, and to prepare a report at reasonable expense for Duke Energy's 2003 annual meeting of shareholders.

We are unable to concur in your view that Duke Energy may exclude the entire proposal under rule 14a-8(i)(3). However, there appears to be some basis for your view that portions of the supporting statement may be materially false or misleading under rule 14a-9. In our view, the proponent must:

- recast the sentence that begins "An independent public study . . ." and ends ". . . catastrophic event" as the proponent's opinion;
- provide factual support for the phrase "and if approved plans to operate these plants until the years 2041-2046"; and
- delete the paragraph that begins "In a separate application . . ." and ends ". . . sabotage, terrorism)."

Accordingly, unless the proponent provides Duke Energy with a proposal and supporting statement revised in this manner, within seven calendar days after receiving this letter, we will

not recommend enforcement action to the Commission if Duke Energy omits only these portions of the supporting statement from its proxy materials in reliance on rule 14a-8(i)(3).

We are unable to concur in your view that Duke Energy may exclude the proposal under rule 14a-8(i)(6). Accordingly, we do not believe that Duke Energy may omit the proposal from its proxy materials in reliance on rule 14a-8(i)(6).

We are unable to concur in your view that Duke Energy may exclude the proposal under rule 14a-8(i)(10). Accordingly, we do not believe that Duke Energy may omit the proposal from its proxy materials in reliance on rule 14a-8(i)(10).

Sincerely,

  
Jonathan Ingram  
Special Counsel