

January 9, 2003

Mr. John W. Moyer, Vice President  
H.B. Robinson Steam Electric Plant  
Carolina Power & Light Company  
3581 West Entrance Road  
Hartsville, SC 29550

SUBJECT: ISSUANCE OF ENVIRONMENTAL SCOPING SUMMARY REPORT  
ASSOCIATED WITH THE STAFF'S REVIEW OF THE APPLICATION FOR  
RENEWAL OF THE OPERATING LICENSE FOR THE H.B. ROBINSON STEAM  
ELECTRIC PLANT, UNIT 2

Dear Mr. Moyer:

From August 22 to October 25, 2002, the Nuclear Regulatory Commission (NRC) conducted scoping to determine the extent of the NRC staff's environmental review of the application for renewal of the license for the H.B. Robinson Steam Electric Plant, Unit 2. The application for renewal was submitted by Carolina Power & Light Company on June 17, 2002. As part of the scoping process, the NRC staff held two public environmental scoping meetings in Hartsville, South Carolina, on September 25, 2002, to solicit public input regarding the scope of the review. The scoping process is the first step in the development of a plant-specific supplement to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS)," for the H.B. Robinson Steam Electric Plant, Unit 2.

The NRC staff has prepared the enclosed environmental scoping summary report identifying comments received at the September 25, 2002, license renewal environmental scoping meetings, and in writing during the scoping comment period. In accordance with 10 CFR 51.29(b), a copy of the scoping summary report is enclosed. The transcripts of the meetings can be found as an attachment to the November 18, 2002, meeting summary, which is available electronically for public inspection at the NRC's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS), under Accession No. ML022960641. ADAMS is accessible at <http://www.nrc.gov/reading-rm/adams.html>, which provides access through the NRC's Public Electronic Reading Room (PERR) link. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's PDR Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

J. W. Moyer

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The next step in the environmental review process is the issuance of a draft supplement to the GEIS scheduled for May 2003. Notice of the availability of the draft supplement to the GEIS and the procedures for providing comments will be published in an upcoming *Federal Register* notice. If you have any questions concerning this matter, you can call me at (301) 415-1590.

Sincerely,

**/RA/**

Richard L. Emch Jr., Senior Project Manager  
Environmental Section  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket No.: 50-261

Enclosure: As stated

cc w/encl: see next page

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**Environmental Impact Statement  
Scoping Process**

**Summary Report**

**H. B. Robinson Steam Electric Plant ,  
Unit No. 2  
Darlington County, South Carolina**

**December 2002**



**U.S. Nuclear Regulatory Commission  
Rockville, Maryland**

## Introduction

On June 17, 2002, the Nuclear Regulatory Commission (NRC) received an application dated June 14, 2002, from the applicant, Carolina Power and Light (CP&L) for renewal of the operating license of H. B. Robinson Steam Electric Plant, Unit 2 (referred to as the Robinson Nuclear Plant). The Robinson plant is located in northeastern South Carolina, approximately five miles west-northwest of Hartsville. As part of the application, CP&L submitted an environmental report (ER) prepared in accordance with the requirements of 10 CFR Part 51. 10 CFR Part 51 contains the NRC requirements for implementing the National Environmental Policy Act (NEPA) of 1969. Section 51.53 outlines requirements for preparation and submittal of environmental reports to the NRC.

Section 51.53(c)(3) was based upon the findings documented in NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants," (GEIS). The GEIS, in which the staff identified and evaluated the environmental impacts associated with license renewal, was issued for public comment. The staff received input from Federal and State agencies, public organizations, and private citizens. As a result of the assessments in the GEIS, a number of impacts were determined to be generic to all nuclear power plants. These were designated as Category 1 impacts. An applicant for license renewal may adopt the conclusions contained in the GEIS for Category 1 impacts in the absence of new and significant information that may cause the conclusions to fall outside those of the GEIS. Category 2 impacts are those impacts that have been determined to be plant-specific and are required to be addressed in the applicant's ER.

The Commission determined that the NRC does not have a role in energy planning decision-making for existing plants, which should be left to State regulators and utility officials. Therefore, an applicant for license renewal need not provide an analysis of the need for power, or the economic costs and economic benefits of the proposed action. Additionally, the Commission determined that the ER need not discuss any aspect of storage of spent fuel for the facility. This determination was based on the Nuclear Waste Policy Act of 1982 and the Commission's Waste Confidence Rule, 10 CFR 51.23.

On August 22, 2002, the NRC published a Notice of Intent in the *Federal Register* (67 FR 54499), to notify the public of the NRC's intent to prepare a plant-specific supplement to the GEIS to support the review of the renewal application for the Robinson operating license. The plant-specific supplement to the GEIS will be prepared in accordance with NEPA and 10 CFR Part 51. As outlined by NEPA, the NRC initiated the scoping process with the issuance of the *Federal Register* Notice. The NRC invited the applicant; Federal, State, Tribal and local government agencies; local organizations; and individuals to participate in the scoping process by providing oral comments at the scheduled public meetings and/or submitting written suggestions and comments no later than October 25, 2002. The scoping process included two public scoping meetings, held at Coker College in Davidson Hall, in Hartsville, South Carolina, on Wednesday, September 25, 2002. The NRC announced the meetings in local newspapers (The Hartsville Messenger and The Florence Daily News), issued press releases, and distributed flyers locally. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the NEPA process. Following the NRC's prepared statements, the meetings were open for public comments. Fifteen (15) commenters (one of whom spoke at both meetings) provided oral statements that were recorded and transcribed.

There were no comment letters received by the NRC. The meeting transcripts (accession numbers ML022910364 and ML022910367) are available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm.html> (the Public Electronic Reading Room).

The scoping process provides an opportunity for public participation to identify issues to be addressed in the plant-specific supplement to the GEIS and highlight public concerns and issues. The Notice of Intent identified the following objectives of the scoping process:

- Define the proposed action
- Determine the scope of the supplement to the GEIS and identify significant issues to be analyzed in depth
- Identify and eliminate peripheral issues
- Identify any environmental assessments and other environmental impact statements being prepared that are related to the supplement to the GEIS
- Identify other environmental review and consultation requirements
- Indicate the schedule for preparation of the supplement to the GEIS
- Identify any cooperating agencies
- Describe how the supplement to the GEIS will be prepared

At the conclusion of the scoping period, the NRC staff and its contractor reviewed the transcripts and identified individual comments. All comments and suggestions received orally during the scoping meetings were considered. Each set of comments from a given commenter was given a unique alpha identifier (Commenter ID letter), allowing each set of comments from a commenter to be traced back to the transcript. One commenter submitted comments through multiple sources (e.g., afternoon and evening scoping meetings).

Table 1 identifies the individuals providing comments and the Commenter ID letter associated with each person's set(s) of comments. The individuals are listed in the order in which they spoke at the public meeting.

Comments were consolidated and categorized according to the topic within the proposed supplement to the GEIS or according to the general topic if outside the scope of the GEIS. Comments with similar specific objectives were combined to capture the common essential issues that had been raised in the source comments. Once comments were grouped according to subject area, the staff and contractor determined the appropriate action for the comment. The staff made a determination on each comment that it was one of the following:

- a comment that was either related to support or opposition of license renewal in general, specifically Robinson, or that makes a general statement about the license renewal process. It may make only a general statement regarding Category 1 and/or Category 2 issues. In addition, it provides no new information and does not pertain to 10 CFR Part 54.
- a comment about a Category 1 issue that
  - provided new information that required evaluation during the review, or
  - provided no new information
- a comment about a Category 2 issue that
  - provided information that required evaluation during the review, or
  - provided no such information
- a comment that raised an environmental issue that was not addressed in the GEIS,
- a comment regarding Alternatives to the proposed action
- a comment regarding safety issues within the scope of 10 CFR Part 54, but out of the scope of 10 CFR Part 51
- a comment outside the scope of license renewal (not related to 10 CFR Parts 51 or 54), which include
  - a comment regarding emergency response and planning
  - a comment regarding operational safety issues
  - a comment regarding terrorism
- a comment that was actually a question and introduces no new information.

Each comment is summarized in the following pages. For reference, the unique identifier for each comment (Commenter ID letter listed in Table 1 plus the comment number) is provided. In those cases where no new information was provided by the commenter, no further evaluation will be performed.

The preparation of the plant-specific supplement to the GEIS (which is the SEIS) will take into account all the relevant issues raised during the scoping process. The SEIS will address both Category 1 and 2 issues, along with any new information identified as a result of scoping. The SEIS will rely on conclusions supported by information in the GEIS for Category 1 issues, and will include the analysis of Category 2 issues and any new and significant information. The draft plant-specific supplement to the GEIS will be available for public comment. The comment period will offer the next opportunity for the applicant, interested Federal, State, Tribal and local government agencies; local organizations; and members of the public to provide input to the NRC's environmental review process. The comments received on the draft SEIS will be considered in the preparation of the final SEIS. The final SEIS, along with the staff's Safety Evaluation Report (SER), will provide the basis for the NRC's decision on the Robinson license renewal.

**TABLE 1 - Individuals Providing Comments During Scoping Comment Period**

<b>Commenter ID</b>	<b>Commenter</b>	<b>Affiliation (If Stated)</b>	<b>Comment Source</b>
A	Jay Lucas	South Carolina House of Representatives	Afternoon Scoping Meeting
B	Rainey Knight	Superintendent Darlington County School Board	Afternoon Scoping Meeting
C	John Moyer	Site Vice President for CP&L and Process Energy at Robinson	Afternoon Scoping Meeting
D	Jan Lucas	Superintendent of Environmental and Chemistry at Robinson Plant	Afternoon Scoping Meeting
E	Jacqueline Kirvan	Hartsville, South Carolina	Afternoon Scoping Meeting
F	Nancy McGee	Hartsville Chamber of Commerce	Afternoon Scoping Meeting
G	Mal Hyman	Professor at Coker College	Afternoon Scoping Meeting
H	Franklin Hines	Hartsville businessman	Afternoon Scoping Meeting
I	Joseph Rubinstein	Professor at Coker College	Evening Scoping Meeting
J	Eric Hewling	Lake Robinson Resident	Evening Scoping Meeting
K	Robert Griggs	Retired School Principal	Evening Scoping Meeting
L	Bill Gaskins	Mayor of Hartsville	Evening Scoping Meeting
M	Anne Warr	Darlington County Council	Evening Scoping Meeting
N	Beth Blum	Principal N. Hartsville Elementary School	Evening Scoping Meeting
O	Thelma Dawson	Dentist in Florence and Darlington	Evening Scoping Meeting
P	Jacqueline Kirvan	Hartsville, South Carolina	Evening Scoping Meeting

## **Robinson Nuclear Plant, Unit 2 Public Scoping Meeting Comments and Responses**

The following pages summarize the comments and suggestions received as part of the scoping process, and discuss their disposition. Parenthetical numbers after each comment refer to the Commenters ID letter and the comment number. Comments can be tracked to the commenter and the source document through the ID letter and comment number listed in Table 1. Comments are grouped by category. The categories are as follows:

1. Questions about the License Renewal Process
2. General Support of License Renewal at Robinson Nuclear Plant, Unit 2
3. Comments Concerning the Environment
4. Comments Concerning Water Quality and Aquatic Ecology
5. Comments Concerning Aging and Postulated Accidents
6. Comments Concerning Nuclear Waste and Disposal
7. Comments Concerning Issues Outside the Scope of License Renewal: Terrorism

## Comments

### 1. Questions about License Renewal Process

**Comment:** Have any plants that have applied for renewal failed, or have all of the renewal applications passed? (RNP/I-1)

**Response:** *Up to this point, the plants that have applied and completed the NRC process for license renewal have been approved. The comment provides no new information; therefore, it will not be evaluated further.*

### 2. General Support of License Renewal at Robinson Nuclear Plant, Unit 2

**Comment:** I support the license renewal for the H. B. Robinson Nuclear Plant. The Robinson Nuclear Plant has been a great corporate citizen, not only in South Carolina, but to the Pee Dee Region of our state for over 30 years....CP&L is our largest taxpayer in Darlington County due primarily to having the Robinson Nuclear Plant in our county....I support this plant not only because of what it does for our school system and our local government, but CP&L is such a good steward of the environmental resources...CP&L actively promotes economic development throughout the Pee Dee Region...I've been so impressed with the commitment by CP&L and the employees of the Robinson Nuclear Plant to protect the health and safety of the public....A renewed operating license will allow the Robinson Nuclear Plant to continue to provide safe, reliable power and economic benefits to our local community for many years to come....I don't get complaints about this facility. (RNP/A-1)

**Comment:** The Robinson Nuclear Plant has been a valuable partner with us for several years....I would like to highlight for you are three areas that I think that they have been very supportive. First, financially...about 8-plus million comes into the county...A second thing [is] the way CP&L supports us is with the volunteers....And third,...the employees' commitment to their own children in our schools...I would hope that CP&L--the relicensing of the Robinson Nuclear Plant...would be a partnership that we would have long, long beyond me, just for the future generations of Darlington County. (RNP/B-1)

**Comment:** I think the best indicator of our commitment to safe and reliable nuclear plant operation is our industrial safety record. We have worked at Robinson nearly nine million person hours without a lost time injury. We apply that same operating philosophy to our plant and to the environmental stewardship that we are charged with, and we're proud of our record....I've been in this business about 40 years. In my judgement, this is the best, most professional group of men and women operating nuclear power plants that I have ever in my life had the pleasure to work with....We see what our tax dollar does for this county and for this city. And in addition to those tax dollars, in our last United Way giving campaign this little plant of fewer than 500 people was responsible for \$1.1 million of charitable contributions....We're one of the handful of utilities in the business who have run 500 consecutive days since we closed the breaker after our last refuel outage. And that is a testament, not to me, but to the employees who work at that plant and whose philosophy is safe, reliable, conservative operation of a nuclear power station. (RNP/C-1)

**Comment:** The Greater Hartsville Chamber of Commerce Board of Directors has asked me to express their support for the license renewal for the H. B. Robinson Nuclear Plant. CP&L is a good corporate citizen, a valuable partner with our community, and specifically with our local chamber of commerce....And the Robinson Plant is important to our local economy....CP&L's taxes do help support our schools. The Robinson Plant's a good neighbor, one in which our community feels very safe existing with. We ask that their license be renewed so that these mutually beneficial relationship can continue. (RNP/F-1)

**Comment:** I'm impressed with the quality and the professionalism that I find with the people I know that are working there and that operate that plant. The Robinson Plant employees seem to be committed to operating the plant safely and – and protecting this environment. The employees also have committed to making a difference in our community, as was stated by some others before me such as the chamber of commerce, the school system, and other places where they are personally involved, even if beyond the – the value of the check that you send every year....A renewed operating license would allow the Robinson Plant to continue to provide safe and reliable economic benefit to our local community for many years to come, and I'm personally pleased and I appreciate the opportunity to express my support for the license renewal of the Robinson Plant. (RNP/H-1)

**Comment:** On behalf of the City of Hartsville...we have enjoyed the partnership between the Robinson Nuclear Plant and the City of Hartsville during the plant's first 30 years of operation, and we are looking forward to the next 30 years. The Robinson Plant is a power partner with the City of Hartsville. The plant supports about 450 families with good jobs, and annually pays millions of dollars in taxes to this region. These employees are committed to keeping the plant running safely and reliably. They are also good citizens in our community, taking active roles in our schools, in our civic and community organizations. CP&L and the Robinson Plant have worked continuously with the City of Hartsville to improve the quality of life, and to protect the environment in our community. I hope the Nuclear Regulatory Commission will extend the operating license for the plant so that we will continue to have the Robinson Plant as a valuable partner in our community. (RNP/L-1)

**Comment:** I know many of the people who work at the plant, and I've been impressed with their commitment to safety, the ideals that they follow to protect our citizens, and health and safety of the public, and protecting the environment, also. Renewing the operating license will allow the Robinson Plant to continue to provide safe and reliable power and economic benefits to our community. And additional 20 years of safe operation of this plant will provide an estimated \$160 million in property tax revenue for Darlington County. This contribution to Darlington County will have a significant effect on our county's education system, as well as our safety services and the quality of life that we enjoy in Darlington County. We recognize that CP&L and the Robinson Nuclear Plant is a powerful partner in Darlington County, and we look forward for continuing this partnership for many years to come. (RNP/M-1)

**Comment:** I appreciate having this opportunity to express my support for license renewal for the H. B. Robinson Nuclear Plant. There is a special partnership between CP&L and the local communities where the Robinson employees work and live. In addition to generating safe and reliable power, the employees at the Robinson Nuclear Plant also believe it is important to be good citizens in the community. The Ambassador Program is CP&L's business education partnership with North Hartsville Elementary School. Through this program, about 40 Robinson Plant employees serve as mentors and tutors for school children in Grades 1 through 6....I also

know that they are committed to operating the plant safely and protecting the environment....I hope that the NRC will approve this license extension so that the Robinson Plant and its employees will continue to deliver energy and be our partner in the community. (RNP/N-1)

**Comment:** I've had the opportunity to tour the plant and see some of the safety issues that are involved. One of the things that I like is I think we get more in the school district in terms of safety [because of CP&L's involvement as] corporate partners with the school district....As a health care provider and a school board member and a citizen, certainly we appreciate the tax revenue from them. But obviously, as an educator, we need the money. The Robinson Plant also has been helpful in the Pee Dee, and I think that we will continue to enjoy it if you relicense it, and I support the relicense of the plant. (RNP/O-1)

**Response:** *The comments are supportive of license renewal at Robinson and are general in nature. The comments provide no new information; therefore, they will not be evaluated further.*

### **3. Comments Concerning the Environment**

**Comment:** The Robinson Plant...is very focused on being a good steward of all of our environmental resources: land, water, air....We continue to work with our state and local officials to improve the quality of life and to protect the environment for the future. We're involved in some typical environmental activities like recycling, which many of you experience: paper, aluminum cans, batteries, printer toner cartridges. But I think we're also involved in some environmental activities that you may not be as familiar with. We've registered the land at the Robinson Nuclear Plant to protect the red-cockaded woodpeckers through the South Carolina Safe Harbors Program; we maintain wood boxes on the lake; we have many employees that volunteer on Saturday workdays to help improve our South Carolina state parks. And we encourage the public use of our lake for boating and fishing and water fowl observation. CP&L has spent the last two-and-a-half years doing an extensive study of the environmental impact for license renewal. And while we're here to renew the license to operate the Robinson Nuclear Plant, I'm also here to renew our commitment to the protection of the environment, and to continue to be the good steward of all the resources that you've entrusted us with. (RNP/D-1)

**Response:** *The comment is supportive of the Robinson Plant's environmental program and is general in nature. The comment provides no new information; therefore it will not be evaluated further.*

### **4. Comments Concerning Water Quality and Aquatic Ecology**

**Comment:** The Robinson reactor was built without a cooling tower. Instead, Lake Robinson is used for this purpose. The resulting heat, the thermal pollution has made that lake a virtual desert in terms of aquatic life. And water flows from it into Black Creek....We enjoyed that lake before the nuclear plant was built, and we have witnessed the changes. The condition of the lake is becoming worse. (RNP/E-2)

**Comment:** My concern strictly is environmental with regard to the water temperature....we can have water temperatures that range anywhere from 95 degrees to 112 degrees for extended periods of time. Not just during the past two years of drought, but almost every summer....They

have a detrimental effect on both the fishery and the aquatic life in the lake. I [have] been told that they've [CP&L] done cost analysis and studies on what it would take to reduce the temperature of the discharge to make the lake more recreationally friendly. My hope is that they would do so. And I would like to see that made as part of the requirement for the 20-year relicensing. (RNP/J-2)

**Response:** *Lake Robinson was created specifically as a cooling pond for the Robinson energy production facilities. CP&L holds a thermal variance for Robinson as indicated in the NPDES permit, and has routinely provided required reports and studies to SCDHEC since the 1970s. In 1996, CP&L analyzed and summarized this long-term demonstration of continued protection and propagation of a balanced, indigenous shellfish, fish, and wildlife population. The comment provides no new information; therefore, it will not be evaluated further. Descriptive information regarding plant-specific water quality and aquatic ecology will be addressed in Chapters 2 and 4 of the Robinson Supplemental Environmental Impact Statement (SEIS).*

**Comment:** What effect is the drought causing for the use of Lake Robinson for cooling purposes, and are there plans to use groundwater resources for this purpose? (RNP/E-3)

**Response:** *Lake Robinson was originally constructed in the late 1950s as a cooling pond for Robinson, Unit 1, a coal fired power plant. It was planned and sized to provide cooling water for future plant additions. Drought does impact lakes, and has also impacted Lake Robinson to some extent, but there are no plans to use groundwater resources for cooling purposes. Lake Robinson is not operated as a storage reservoir and, except for water loss to evaporation, water is passed through the lake (e.g., if inflows are lower than normal, outflows are lower than normal). Because groundwater provides a significant portion of the inflow to Lake Robinson, and the groundwater aquifer supply is extensive, water levels in the lake do not change appreciably with inflow variations in Black Creek that are caused by drought conditions. The historic lake level has been maintained during the drought. The comment provides no new information; therefore, it will not be evaluated further. The appropriate descriptive information regarding the plant-specific water quality will be addressed in Chapters 2 and 4 of the Robinson Supplemental Environmental Impact Statement (SEIS).*

**Comment:** During the environmental process, because CP&L operates two other [facilities] – the coal and gas fired turbines, do they take that into effect as far as the water temperature or discharge temperature in relicensing the #2 Unit? (RNP/J-1)

**Response:** *The gas fired turbine plant does not discharge cooling water (or other effluent) to Lake Robinson and has only a potential, slight, indirect impact on the lake from groundwater use. Cooling water from Unit 1, the coal-fired plant, is mixed with cooling water from Unit 2, the nuclear plant, at the head of the discharge canal. Water temperature restrictions and monitoring requirements include the effects of the operation of both Unit 1 and Unit 2 on Lake Robinson and do not differentiate between the two units. The comment provides no new information; therefore, it will not be evaluated further. Descriptive information regarding the plant-specific water quality will be addressed in Chapters 2 and 4 of the Robinson Supplemental Environmental Impact Statement (SEIS).*

**Comment:** In considering reports like DHEC, [regarding] bacteria in the lake because of the heated water, will that be a factor in your decision? (RNP/K-1)

**Response:** Reports from sources including the South Carolina Department of Health and Environmental Control are used in the evaluation of environmental effects from license renewal. Health impacts, such as bacteria in the lake, are monitored and controlled by continued application of accepted industrial hygiene practices. Maximum temperatures recorded in Lake Robinson in the vicinity of and downstream of the discharge canal have consistently been below the optimal temperature range (122° F to 140° F) for maximum growth and reproduction of thermophilic microorganisms. Such organisms have not been a problem in the past. Given the thermal characteristics of Lake Robinson and the disinfection of sewage treatment plant effluent, future bacterial growth due to heated water is not expected to be a concern. The comment provides no new information; therefore, it will not be evaluated further. Descriptive information regarding the plant-specific microbiological organisms as it relates to public health will be addressed in Chapter 4 of the Robinson Supplemental Environmental Impact Statement (SEIS).

## **5. Comments Concerning Aging and Postulated Accidents**

**Comment:** Do your studies include what might happen in the event of an accident, or do they just include the impact under normal operating conditions? (RNP/I-2)

**Comment:** The Robinson reactor is an old nuclear reactor. And with aging come[s] problems of embrittlement and cracking of the metal parts which have been subjected to intense heat and radiation bombardment, and cause premature aging of the components. In 1982, after approximately ten years of operation, the NRC cited our Robinson reactor as one of the nation's worst cases of reactor vessel embrittlement. Twenty (20) years of continued operation since that time have made embrittlement an even greater concern. If any accident or situation calls for putting emergency cooling water into the reactor, a flaw in the wall could cause a dangerous crack. So my question is: How do you address the environmental consequences of an accident involving pressurized thermal shock at Robinson? (RNP/E-1)

**Comment:** With aging reactors come embrittlement problems due to the metal which has been subjected to intense heat and radiation bombardment, and that can cause premature aging of the components. And if any accident or situation calls for putting emergency cooling water into the reactor, a flaw in the wall could cause a dangerous crack. This is known as pressurized thermal shock, and could have some environmental consequences which certainly are not trivial....The potential for cracking at Robinson and the resulting environmental effects make license extension a critical decision...the prudent course may be not to extend their license, but to begin the monumental task of decommissioning and attempting to insure the security of the high level nuclear waste in the form of spent fuel that is stored at the Robinson Plant. (RNP/P-2)

**Comment:** In reading through statements by Dr. Hanauer of the NRC, about a decade ago he was talking about these problems [of thermal shock] and reports, and said, "All things considered, the NRC report reached a reasonably comforting conclusion. It listed 40 pressurized water reactors in which pressurized thermal shock was an issue. No one does anything. We've got one reactor that's in big trouble, four others that are a little behind it." The reactor he was referring to was H. B. Robinson 2. And I'm wondering how we've dealt with this. (RNP/G-2)

**Response:** NRC's ongoing safety program focuses on prevention of safety problems so that potential issues like aging and thermal shock do not lead to accidents. The NRC's environmental review for license renewal includes the issue of postulated accidents in its review of severe accident mitigation alternatives (SAMAs) to determine whether additional measures are cost-effective in preventing accidents. The staff concluded that the probability-weighted environmental consequences from severe accidents (i.e., beyond design basis accidents) are small for all plants but that alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives. See 10 CFR 51.53(c)(3)(ii)(L). To the extent that the comments pertaining to safety of equipment and aging are within the scope of license renewal, these issues will be addressed during the parallel safety analysis review performed under 10 CFR Part 54. Operational safety issues are outside the scope of 10 CFR Part 51 and will not be evaluated further in this SEIS. Descriptive information regarding the plant-specific SAMA analysis will be addressed in Chapter 5 of the Robinson Supplemental Environmental Impact Statement (SEIS). The comments provide no new information and, therefore, will not be evaluated further in the context of the environmental review. However, the comments will be forwarded to the project manager for the license renewal safety review for consideration.

## **6. Comments Concerning Nuclear Waste and Disposal**

**Comment:** The Robinson Plant was designed to generate electricity, not to be a repository for high level nuclear waste. However, since reprocessing has not panned out, spent fuel has been stored at our reactor site and at reactor sites all over the country....If the Robinson Plant license is extended, what will be done with this additional spent fuel? Will this high-level waste remain here with us? (RNP/P-1)

**Response:** The siting and construction of a national waste repository are the responsibility of the U.S. Department of Energy (DOE). The Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century (10 CFR Part 51.23). In the interim, onsite spent fuel storage in pools and in dry cask storage facilities continues in accordance with NRC regulations. The Commission has determined that spent fuel can be stored onsite safely for 30 years after the current operating license or a renewed license expires. The evaluation of the impacts of spent fuel storage is outside the scope of this analysis and will not be not addressed in this SEIS. No new information was provided by the comment. Therefore, it will not be evaluated further. Descriptive information regarding environmental impacts of solid waste management will be addressed in Chapter 6 of the Robinson Supplemental Environmental Impact Statement (SEIS).

## **7. Comments Concerning Issues Outside the Scope of License Renewal: Terrorism**

**Comment:** Regarding security, the control room [and] the spent fuel storage aren't protected by the dome at the plant. What are the environmental consequences of an attack ...? (RNP/G-1)

**Response:** In light of the recent terrorist attacks, U.S. Nuclear Regulatory Commission officials and staff have been working 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. 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. Emergency and safeguards planning are part of the current operating license and are outside the scope of the environmental analysis for license renewal. The comment provides no new information and does not pertain to the scope of license renewal as set forth in 10 CFR Part 51 and Part 54. Therefore, it will not be evaluated further under this review.*

### **Summary**

The preparation of the plant-specific supplement to the GEIS will take into account all the relevant issues raised during the scoping process that are described above. Concerns related to the environmental license renewal review of Robinson will be considered during the development of the draft SEIS for Robinson Nuclear Plant, Unit 2. The draft SEIS will be available for public comment. Interested Federal, State, and local government agencies, local organizations, and members of the public will be given the opportunity to provide comments to be considered during the development of the final SEIS. Concerns identified that are outside the scope of the staff's environmental review have been or will be forwarded to the appropriate NRC program manager for consideration.

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