

Table K-3. Scoping statements and EIS sections or DOE's responses

Comment number	Statement	Scoping topic	EIS section or DOE comment
<p>STATEMENT OF THE HONORABLE TRAVIS BARNES STATE REPRESENTATIVE, 90TH DISTRICT, GEORGIA</p>			
	<p>I think maybe that some of y'all have gone to a lot of trouble. You may feel like people who have organized a banquet and have all the places set and nobody comes, but I think it is important that you all are taking this extra precaution before the reactivation of this L-Reactor.</p>		
	<p>Really, I have no criticisms. In fact, I want to commend the Department of Energy. I have been receiving almost on a bi-weekly basis a lot of information about the L-Reactor and what possibly is its impact.</p>		
	<p>This is written for engineers, and my training was philosophy and theology, so I have had a little bit of a tough time with it. Yet I think the fact you all are having hearings and taking a second look at any effect the L-Reactor will have in its reactivation on this area is good.</p>		
A1	<p>As you may well all know, there are over 350,000 people in the metropolitan area of Augusta and we do have a concern about any environmental impact it might have on our area, both as far as individuals biologically, perhaps, the chance of emissions, and particularly our neighbors to the south of us who are concerned</p>	Health effects	Sections 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7, 6.1.4, Appendix B, Appendix G
A2	<p>about groundwater affecting their drinking water, perhaps, of the many thousands of people. So we are glad that the government is taking a second look and making sure that the public interest is fully protected. And really my only question I would have to you would be: Have all of these precautions been made and are we double-checking, double-checking the possible effect of any emissions or any effect on the atmospheric conditions as well as the groundwater?</p>	Groundwater use	Sections 4.1.1.3, 5.2.3
A3		Atmospheric effects	Sections 4.1.1.6, 4.1.2.1, 4.2.2.1, 4.3.1, 5.1.1.3, 5.1.2.2, Appendix B
A4		Groundwater use	Sections 4.1.1.3, 5.2.3

K-5

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
<p>STATEMENT OF JUDITH E. GORDON REPRESENTING SOUTH CAROLINA AND GEORGIA SIERRA CLUB</p>			
B1	<p>I am Judith E. Gordon representing the South Carolina and Georgia chapters of the Sierra Club with a membership of about 5,000 in the two-state area. I thank you for this opportunity to express the environmental concerns of the Sierra Club with respect to the proposed restart of the L-Reactor at the Savannah River Plant.</p>	Wetland impacts	Sections 4.1.1.4, 4.4.2, 5.1.1.2, 5.2.4, Appendix C, Appendix I
	<p>In its public notice, DOE has identified several environmental issues to be addressed. However, I did not see listed one of the most important issues; that is, the destruction of wetlands habitat.</p>		
K-6	<p>The percentage of SRP wetlands that will be affected by L-Reactor restart varies with how the calculations are made and with how wetlands are defined. Nonetheless, by DOE's own calculations, only 36 percent of Savannah River Plant wetlands have not been affected by thermal discharges.</p>	Wetland impacts	Sections 4.1.1.4, 4.4.2, 5.1.1.2, 5.2.4, Appendix C, Appendix I
	<p>Since loss of wetlands has become a priority--of priority in environmental concerns, both at federal and state levels, I request that in assessing wetland losses, DOE take into account:</p>		
B2	<p>1. The literature from the federal agencies concerned, for example, studies done by the Fish &amp; Wildlife Service of the Department of the Interior.</p>	Socioeconomics	Section 4.6
	<p>2. Studies done by South Carolina and Georgia state agencies on the importance of wetlands and their rate of loss.</p>		
	<p>There are other concerns I would like to emphasize using the categories suggested by the Department of Energy.</p>		
	<p>No. 1. Socioeconomics: Since an Environmental Impact Statement typically discusses the jobs provided by the facility, I believe the other side of the economic coin should also be discussed in the EIS; specifically, what mitigating measures will the Department of Energy implement to lessen the job crisis</p>		

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	that will ensue when the aging reactors at the Savannah River Plant are shut down, including eventually the L-Reactor itself.		
B3	2. Endangered Species: The EIS should certainly incorporate the results of ongoing research being done at the Savannah River lab on river ecology and the Shortnose Sturgeon. It should also include a Woodstork study currently under way at the Savannah River Ecology Lab.	Endangered species	Sections 3.6.1.4, 3.6.2.3, 4.1.1.4, Appendix C
B4	3. Fisheries: The EIS should estimate the cumulative effects on fish passage from all thermal plumes in the river area, not just that of L-Reactor.	Fisheries	Sections 5.2.4.2, 5.2.5.1
B5	4. Radiological Effects and Safety: The EIS should address the estimated contamination and hazards resulting from a worst possible accident at the L-Reactor; nothing less than that.	Accident analysis	Sections 4.2.1, 4.4.1, Appendix G
B6	No. 5. Groundwater Contamination: In view of the reported contamination of the Tuscaloosa Aquifer, the EIS should explain what errors were made in previous studies that assured the public that there was no reason to be concerned about pollution of aquifers. This should be contrasted with explanations of how the various wastes from the L-Reactor restart would be handled to prevent further contamination.	Groundwater contamination	Sections 4.1.2.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F. Mitigation of groundwater contamination at SRP will be the subject of a separate NEPA review.
	Finally, I would like to make two general comments that I feel DOE should consider in the preparation of this EIS.		
	Number one, as a government agency, the Department of Energy should set an example such that everyone would be aware of the concern of the federal government for environmental quality.		
B7	In particular, the federal government surely would not be in the position of exempting itself from standards that it expects private industry to meet, and I make this point in particular reference to the water standards set by the State of South Carolina and the attempts to have these put aside so that the reactors at SRP can be allowed to discharge hot water into the streams on site.	Regulatory requirements	Chapter 7 The DOE is responsible for assuring health and safety for its own facilities. In addition, the DOE will be in compliance with all applicable Federal and State regulations.
B8	Number two, if the Department of Energy expects to establish credibility for its statements and actions, then it is time that it quit monitoring itself and establish a fund through	Monitoring	Chapter 6 In addition to the SRP monitoring programs, both the States of South

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>which independent agencies would monitor both radioactive and nonradioactive discharges from the facilities contracted by DOE. It is doubtless too late to begin this process for the EIS in question, but it should certainly be possible for future endeavors.</p>	<p>Carolina and Georgia have implemented State-wide environmental monitoring programs. Also, the State of South Carolina monitors SRP activities for compliance with State regulations and administration of environmental laws.</p>	
B9	<p>There is one more thing I would like to add which is not in the statement, and I would like to say that I think it would certainly be an advantage to everyone if the comments--the comment period on the EIS could be extended to 45 days rather than 30 days. I think it is going to require that amount of time to effectively judge the EIS.</p>	Procedures	Foreword

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF DR. DAVID STONEY, JR.			
<p>My name is David Stoney, Jr., and I am employed as a researcher and teacher at a local medical college. I have a Ph.D. in physiology. I am here tonight to express my concerns as a private citizen about some of the aspects about the restart of the L-Reactor.</p>			
<p>I appreciate the opportunity to be here. I am glad we are finally going about this thing right.</p>			
<p>As a remark at the beginning of things, I would like to say that I felt that some information was left out of the background information that Mr. Sires presented regarding this L-Reactor suit and its consequences.</p>			
<p>For example, the suggestion by Mr. Robert Morgan in the spring of 1981 to a Subcommittee of the Senate, I believe, that an exemption from the National Environmental Policy Act requirements would be beneficial. Some items like that, I think, fill out the background on this dispute.</p>			
<p>I would like to address two or three issues that I think are important and that I am not certain will be covered with sufficient detail and the in-depth analysis that is deserved in the Environmental Impact Statement.</p>			
C1	<p>First of all, the radiologic effects of the routine and accidental releases of radioactivity from the Savannah River Plant. I note that you plan to give us finally the cumulative dose commitments from routine operations of the L-Reactor.</p>	<p>Cumulative radiological effects</p>	<p>Sections 5.1.2, 5.2.6</p>
<p>I think those cumulative dose commitments from the L-Reactor should be combined with cumulative dose commitments from all the other radioactivity-producing activities and facilities at the Savannah River Plant.</p>			
<p>These, I believe, should be explicitly presented and the health effects from those dose commitments should also be explicitly set forth in the Environmental Impact Statement.</p>			

K-9

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
C2	<p>The estimates of the health effects should reflect, first, those due to the operation of the L-Reactor in the context of the entire Savannah River Plant operations, as well as in the context of neighboring nuclear facilities, such as the Vogtle Plant, which will be coming on line presumably in the near future.</p> <p>So we should see not only the incremental effects from the L-Reactor but how those effects add to what is already being produced from the Savannah River Plant.</p>	Health effects	Sections 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7, Appendix B
C3	<p>In addition to estimating the health effects from the total radioactivity dose commitment from Savannah River Plant activities, I think those commitments, those health effects should be taken also in the context of the increased radioactive background, if you will, in the Northern Hemisphere by the activity of all other nuclear facilities, mostly commercial nuclear facilities.</p> <p>I have read, for example, in the 1982 edition of the Encyclopedia Britannica that they anticipate by the year 2000 a doubling of background radiation due mostly to commercial nuclear facilities.</p>	Health effects	Sections 3.7.1, 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7, Appendix B
C4	<p>Let's take a look at the total health effects, not only from the L-Reactor but also from all the other Savannah River Plant activities, look at that dose on top of the dose we are getting from the rest of the world, if you will.</p> <p>I expect to see in the Environmental Impact Statement at least three sets of data about health effects.</p> <p>One, those incremental effects associated with the restart of L-Reactor; two, those effects associated with the entire Savannah River Plant and neighboring nuclear facilities activities, including those from the L-Reactor; and finally, those associated with global Northern Hemispheric nuclear activities, including our own regional contributions thereto.</p> <p>Only then, when we look at all of that data, can the citizens of this area really know what the health effects are.</p>	Health effects	Section 3.7.1, 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7, Appendix B

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
C5	<p>I second Dr. Gordon's call, and I point out to Mr. Cumbee and to this hearing that several other people--for example, Dr. Cochran and Dr. Scheer of the Natural Resources Defense Council--have called for a release of information about the consequences of a full core meltdown accident at the L-Reactor.</p> <p>According to your published statement, apparently you intend to do that. You indicate consideration of postulated beyond design basis accidents and probabilities. Mr. Sires didn't mention that, I don't believe, in his verbal address. Am I to understand that you do intend to consider a full core meltdown accident, Mr. Sires?</p>	Accident analysis	Section 4.2.1, Appendix G
C6 C7	<p>I believe that the Environmental Impact Statement should fully analyze the health and environmental effects, indeed the social and the economic effects, of accidents up to a full core meltdown.</p>	Health effects Socioeconomic effects	Section 4.2.1.5, Appendix G Appendix G
C8	<p>This is what would be required for any commercial nuclear reactor. It is what the people of this area want to know; what is the bottom rung for producing plutonium for bombs here. We deserve to know it; we want to know it.</p>	Regulatory	See Comment B7
C9	<p>In this regard, there is one area that I have spoken to before that is not considered in your outline of scoping areas. This is the question of what happens in the case of radiologic emergency at the Savannah River Plant.</p> <p>We need to know, and I think the Environmental Impact Statement should spell out the mechanisms for dealing with us, the surrounding populations in the event of a major radiologic accident at Savannah River Plant.</p> <p>There are tens of millions of curies of radioactivity in the inventory of L-Reactor, or at least there will be after its startup. I want to know what to do with my grandchildren if there is a full core meltdown at the L-Reactor with the wind blowing 15 knots right to Augusta.</p> <p>What are at least the control, the communication procedures in the event of such an accident? We want to know.</p>	Emergency planning	Section 4.2.1.3, Appendix H

K-11

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
C10	<p>Mr. Cumbee, thank you for the opportunity to speak to these issues. I look forward to reviewing the draft EIS document. I request specifically that the period for review of the draft EIS be the full 45-day period as suggested by law.</p> <p>I think the population deserves that chance to look at what will be, for the first time, I think, a fairly direct consideration of Savannah River Plant activities.</p>	NEPA procedures	Foreword

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF GARY DUTEAU			
	<p>I am a private citizen here in Augusta. I have been in business here, and I am now farming a little bit in South Carolina. I'm still associated in business here in Augusta and a resident.</p>		
	<p>Now, I would like to preface my remarks by saying, of course, as you know, there are millions of people like myself who object to the procedures which the government has sometimes used in order to determine what is safe for the public. Now, I'm a college-educated man, and I am very familiar with the issues. I have read extensively on it. I have followed the nuclear development and I am familiar with the weapons issue.</p>		
D1	<p>I am opposed to an unending manufacture of nuclear weapons; and as I say, these issues--these attitudes that I have are reflected in many people of the population, not all of whom may be here. I do not know exactly how well you encouraged people to come. I found out about this through a friend.</p>	Need	<p>Section 1.1 Consideration of the rationale in establishing the need is beyond the scope of the EIS.</p>
	<p>I think that the chemical industry which is involved here, DuPont being a leading member of that group, and I think the American Government has very frequently, when something like this--when it comes to nuclear energy, when it comes to chemical waste, has gone off half cocked, assumed that anything they decided would be in the public interest because they have that trust.</p>		
	<p>I think we could probably list thousands of examples which originally begin with ignorance on the part of the government because they feel like they know enough to decide an issue. Now, we are talking about an Environmental Impact Statement, I realize, and that is an attempt to educate yourself as the government, as the company who is going to be doing this work, with potential dangers to the public and to the environment.</p>		
	<p>Now, Love Canal, Agent Orange, 2,000, I think it is, chemical waste dumps which are hazardous around this country where companies have walked off and left their garbage laying around; very deadly.</p>		

K-13

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
D2	<p>One thing I object to specifically, and I think this is indicative of the problem here, and the scope of it is through ignorance, originally feeling it was going to be easy to take care of, we wound up with, I think, around 27 or over 20 million gallons of radioactive waste.</p> <p>We have had many leaks into the environment. That's common knowledge now. Have many safety problems. The chemical industry in general has a tremendous number.</p> <p>Right now thousands of plants are releasing their effluents into streams illegally and legally.</p>	Radioactive waste	Sections 4.1.2.8, 4.3, 4.6, 5.1.2.8
D3	<p>To be direct, then, I think a full and comprehensive study should be undertaken, particularly evacuation in the case of a core meltdown or other significant accident.</p>	Emergency planning	Section 4.2.1.3, Appendix H
D4	<p>I think they should study the problems within the company of foreseeing and preventing problems which they have not demonstrated their ability to do, at least real well. They have projected ahead and discovered many things that could be problems, but by and large, we have had many releases, unsafe releases of gas, unscheduled, and I think that in the study, we should examine why those things happen; human error, I guess.</p>	Accident analysis	Section 4.2.1.2
D5	<p>Also, an evacuation plan and the effects of the releases; cancer, specifically.</p>	Health effects	Section 4.2.1.5, Appendix G
D6	<p>How well the aquifer can be protected, I think, should be included in the study. I personally do not think that it's necessary to do it but, of course, if the government--if the members in the government decide they will impose this, then I think that they owe it to the public to attempt to protect them from that which they have not been able to do so far due to their own mistakes, lack of knowledge especially in foreseeing what could be problems, waiting until they have problems rather than looking ahead with a study.</p> <p>Now, from what I have heard, there is some question as to whether or not there will even be an Environmental Impact Statement that is very broad in scope. Originally they felt it was unnecessary, and now we are here to find out if the public objects to such a cursory examination.</p>	Groundwater contamination	Sections 4.1.1.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F. See Comment B6.

K-14

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
----------------	-----------	---------------	----------------------------

I would like to see it as thorough as possible.

That's all I have to say.

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF MRS. FRANCES CLOSE HART			
<p>I am Frances Hart, and I'm making these comments on behalf of the Energy Research Foundation of Columbia, South Carolina. My comments are largely based on written comments which will be submitted for the record by the National Resources Defense Council on behalf of plaintiff groups in the EIS lawsuit.</p>			
<p>We assume that the Department of Energy, in accordance with the National Environmental Policy Act, will address clearly and fully the environmental impacts of the L-Reactor, particularly those which have been repeatedly identified as matters of concern in litigation, Congressional and administrative hearings, and statements, letters and other comments of federal and state officials and technical personnel, and the public. We assume that DOE will make a concerted effort to fill the existing gaps in knowledge regarding the impacts of the L-Reactor which have been previously pointed out.</p>			
E1	<p>We also anticipate that DOE will give objective consideration to all reasonable alternatives keeping in mind the following statement taken from a Council on Environmental Quality Memorandum to federal agencies concerning NEPA regulations:</p>	Alternatives	Chapter 2, Section 4.4
<p>"The phrase 'range of alternatives'...includes all reasonable alternatives, which must be rigorously explored and objectively evaluated.... In determining the scope of alternatives to be considered the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."</p>			
<p>Specific comments on the proposed scope of the EIS include the following:</p>			
E2	<p>The draft EIS should contain a justification for the proposed startup of the L-Reactor, particularly in regard to the timing,</p>	Need	Section 1.1
E2	<p>which has relevance for the operational alternatives which would eliminate or reduce the environmental harm and hazards</p>	Alternatives	Section 4.4

K-16

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
E3	<p>associated with operation as proposed in the Environmental Assessment.</p> <p>There are substantial questions as to the immediacy of the need for the plutonium to be produced by the L-Reactor, whose startup was initially called for in 1980.</p> <p>For example, the number of warheads for the MX missiles now scheduled to be deployed has been reduced from approximately 2,000 to 1,000. It is estimated that the L-Reactor will produce each year enough plutonium for some 75 to 100 nuclear warheads. Thus, the reduction in the MX program alone suggests that operation of the L-Reactor may be delayed without risk to our nation's security in order to implement mitigation measures prior to startup.</p>	Need	Section 1.1 See Comment D1
K-17	<p>DOE representatives have repeatedly testified before congressional committees that the L-Reactor is needed to meet a possible shortfall in nuclear weapon materials in the early 1990's. As a result of other production initiatives, DOE is now already ahead of its targets to boost the production of these materials. And recently the House Armed Services Committee found that "there is no basis to assume that large numbers of nuclear weapons will be produced in the years beyond 1990."</p>		
E4	<p>The draft EIS should consider as a reasonable alternative a delay in the operation of the L-Reactor for an extended period to allow the implementation of mitigation alternatives combined with production alternatives if necessary.</p>	Alternatives	Sections 2.3, 4.4
E5	<p>In order to provide a rational basis for this decision, the draft EIS must provide and disclose to the public, to the fullest extent possible, data in response to the following:</p> <ol style="list-style-type: none"> <li>1. Identify each material production alternative through 1995;</li> <li>2. Identify by year the plutonium-equivalent production capability of each alternative;</li> <li>3. Identify for each year the plutonium-equivalent inventory, stockpile, and future requirements;</li> </ol>	Need	Section 1.1

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	4. Indicate precisely which, if any, weapons systems and requirements would have to be delayed if the L-Reactor operation was postponed one, two, three, or four years; and	Alternative cooling	Section 4.4.2 Selection of thermal mitigation measures for all SRP thermal discharges will be the subject of a separate NEPA review.
	5. Indicate whether and how a delay in L-Reactor operation of one or two years would affect the production of warheads already scheduled to 1988, or plutonium contingency needs in the "out years."	Socioeconomic effects	Sections 4.1.1.1, 5.1.1.1, 5.2.1
E6	The draft EIS should fully disclose both the capital and operational costs of each cooling water alternative, with complete documentation of such costs and scheduling to permit meaningful outside review.	Alternatives	Section 4.4.1.6
E7	The draft EIS should consider the costs as well as the benefits associated with employment and related economic impacts of L-Reactor operations. Continuing or increased reliance on the Savannah River Plant could present indirect costs to the area, such as the drain on skilled technical personnel who are thus not available to the private sector. The area's dependence on this one source of employment and economic stimulation could present problems should national developments bring about a decrease in SRP's operating budget.	Socioeconomics	Section 4.2.1.5
E8	Socioeconomic benefits from implementation of various mitigation alternatives must be weighed against supposed costs of delay.	Surface water use	Sections 4.1.1.2, 5.1.1.4, 5.2.2
E9	An accidental release could have serious implications for economic development in the region, particularly those areas downstream and downwind of SRP, and socioeconomic effects in the larger Savannah River Basin of such releases, and of water contamination, should be assessed.	Surface water use	Sections 4.1.1.2, 5.1.1.4, 5.2.2
E10	The draft EIS should describe the increase in the withdrawal of Savannah River water for cooling purposes and any indications of existing and potential conflicts in the use of this resource, such as the proposed hydroelectric facility on the Augusta Canal. Concerns about adequacy of freshwater supplies in coastal areas and suggested increased use of the Savannah River for drinking water must be taken into account. And adequacy of river flow in times of drought, a concern expressed by the Corps of Engineers, must be addressed.	Surface water use	Sections 4.1.1.2, 5.1.1.4, 5.2.2

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
E11	The dose commitments from the routine operations of the L-Reactor, including radiocesium transport, and from L-Reactor accidental releases should be measured against the same standards applied to commercial nuclear reactors and using the same methodology. The draft EIS should clearly identify where those standards, namely 10 CFR Parts 50 and 100, would be exceeded by the L-Reactor and by SRP as a multi-reactor site.	Regulatory requirements	Sections 4.1.2, 4.2, 5.1.2, 5.2.6, Appendix B, Appendix G
E12	Impacts from cesium transport should be evaluated particularly with regard to the flooding of Creek Swamp Plantation and possible concentrations in fish such as the largemouth bass, which can have a concentration factor as high as 10,000. The impacts must be considered in light of consumption of fish downstream of Creek Swamp Plantation.	Radiocesium	Sections 3.7.2, 4.1.2.4, 4.2.2.5, Appendix B, Appendix D
E13	The draft EIS should fully analyze the impacts of all possible reactor accident sequences, including so-called Class 9 accidents, as is required of all commercial reactors and using the same methodology. Environmental, social, and economic effects of accidents up to a full-core meltdown should be considered. Costs and impacts from construction of containment domes for SRP's reactors should be included in the draft.	Accident analysis	Section 4.2.1.5, Appendix G
E14	The draft EIS should fully analyze the impacts of all possible reactor accident sequences, including so-called Class 9 accidents, as is required of all commercial reactors and using the same methodology. Environmental, social, and economic effects of accidents up to a full-core meltdown should be considered. Costs and impacts from construction of containment domes for SRP's reactors should be included in the draft.	Safety alternatives	Section 4.4.1.6, Appendix G
E15	The draft should include a liquid pathways assessment to analyze the effects of L-Reactor accidental releases on ground and surface waters, as well as drinking water from the Savannah River.	Accident analysis	Sections 4.2.1, 4.3.2.3, Appendix G
E16	Finally, the draft EIS should contain a clear explanation of the sources and consequences of the existing groundwater contamination at SRP in all areas which will in any way be affected by L-Reactor startup, including the M-Area. It should provide full documentation as to the possible movement of contaminants to deep aquifers. The discussion in the draft EIS should provide a basis for selection of an alternative to the present outdated reliance on seepage basins. Plans for compliance with federal and state environmental regulations, such as the Clean Water Act and the Resource Conservation and Recovery Act, should be discussed.	Groundwater contamination	Sections 4.1.2.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F
E17	The draft EIS should contain a clear explanation of the sources and consequences of the existing groundwater contamination at SRP in all areas which will in any way be affected by L-Reactor startup, including the M-Area. It should provide full documentation as to the possible movement of contaminants to deep aquifers. The discussion in the draft EIS should provide a basis for selection of an alternative to the present outdated reliance on seepage basins. Plans for compliance with federal and state environmental regulations, such as the Clean Water Act and the Resource Conservation and Recovery Act, should be discussed.	Seepage basin alternative	Section 4.4.3
E18	The draft EIS should contain a clear explanation of the sources and consequences of the existing groundwater contamination at SRP in all areas which will in any way be affected by L-Reactor startup, including the M-Area. It should provide full documentation as to the possible movement of contaminants to deep aquifers. The discussion in the draft EIS should provide a basis for selection of an alternative to the present outdated reliance on seepage basins. Plans for compliance with federal and state environmental regulations, such as the Clean Water Act and the Resource Conservation and Recovery Act, should be discussed.	Regulatory requirements	Chapter 7

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF DR. MARY KELLY			
F1	<p>I am Dr. Mary J. Kelly, First Vice-President and Natural Resources Coordinator for the League of Women Voters of South Carolina. We offered testimony at the February 9, 1983, Senate Armed Services Committee hearing in support of preparation of an EIS before restart of the L-Reactor. At that time we contended that the Environmental Assessment was inadequate, that the Savannah River Plant and its nuclear production facilities were sited back in the fifties, not on the basis of the most environmentally suited area, but on the basis of political acceptability. No comprehensive environmental impact study has ever been done. We seriously doubt, if a study as mandated by the National Environmental Policy Act of 1969 had been required, that this facility would have been sited in a seismically active area of high rainfall, on top of a major aquifer, and impacting a river used as a drinking water source for a large number of Georgia and South Carolina citizens. Those considerations still prevail. There is still need for such a comprehensive study which would take into consideration the impact of the total facility plus the impact of other nuclear operations under the control of the Nuclear Regulatory Commission adjacent to or in reasonable proximity to the Savannah River Plant. Cumulative environmental and health effects need to be considered. Unfortunately, under the terms of an expedited EIS process for one reactor, evaluation of the true broad and long-range impact will still not be adequately addressed.</p>	NEPA procedures	The Savannah River Plant was sited, constructed and started operations in the early 1950's; this was well before the National Environmental Policy Act of 1969 that required EIS be prepared on major Federal actions.
F2	<p>In many respects, the ability of the citizens of South Carolina and its regulatory agencies to deal with DOE has greatly improved since the February 9 hearing. This scoping meeting and the EIS are the result of the amendment to the Energy and Water Development Appropriations Act of 1984 and the ruling by Federal Judge Jackson in the suit brought by the Natural Resources Defense Council. Various League organizations, including those of Georgia and South Carolina, are plaintiffs in that suit. Judge Jackson ruled that the L-Reactor restart is indeed illegal in that it is a significant environmental action. A ruling on the requested injunction to halt the restart until the completion of the EIS process is still awaited.</p>	Cumulative (radiological) effects	Section 5.2.6

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>We at this time want to reiterate that the Environmental Impact Statement should not represent a legalistic charade but a sincere commitment to seek and evaluate pertinent information. Obviously, any Environmental Assessment which led to the Finding of No Significant Impact needs to be reviewed, evaluated and expanded upon, with full regard to the input of a broad range of interests, including state agencies, the academic community, public interest groups, and private citizens. We would like to offer some comments on the information supplied by DOE relative to the probable contents of the EIS.</p>		
F3	<p>In the category of production alternatives: It would seem important to re-evaluate the need for increased production and make every attempt to scale down those needs. It is inescapable that the question of the need to produce plutonium is part of the greater ongoing national security debate. If it is</p>	Need	<p>Section 1.1 See Comment D1</p>
F4	<p>indeed essential that plutonium production be stepped up, the viable alternatives should be thoroughly explored in the EIS.</p>	Alternatives	Section 2.1
F5	<p>In the category of socioeconomic: A broad consideration of the state needs to be incorporated, beyond the immediate jobs at SRP during construction and as an ongoing operation. South Carolina has tremendous potential for non-nuclear economic and recreational development, much of which could be precluded by real and feared impacts of nuclear activities.</p>	Socioeconomic effects	Section 5.2.1

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF JAMES W. STALLINGS			
G1	<p>I am James W. Stallings, research chemist, retired, from Barnwell, South Carolina. Background qualifications: I practiced chemistry for 46 years with four national companies, research and development in industrial/technical management. Memberships: Fellow of the American Institute of Chemists and the American Men of Science. Authored six U.S. patents.</p>	Groundwater contamination	Sections 4.1.1.2, 5.1.1.2, Appendix F
	<p>I want to address a matter of what we might call groundwater problems. I've had ten years' experience in the industrial use of chlorinated solvents; namely, trichloroethylene and perchloroethylene. These are subjects of the SRP groundwater contamination, plus, of course, other materials.</p>		
	<p>Earlier there appeared an article of mine in the paper. This was entitled "Contamination in Our Tuscaloosa Aquifer." I would like to bring up some points listed in that article and, thereafter, go more specifically to what is being thought of today by me.</p>		
	<p>Tuscaloosa Aquifer contaminants are trichloroethylene and perchloroethylene.</p>		
<p>The pertinence of the aquifer contamination is seen in the broad voids in the required on-the-job engineering knowledgeability of the handling of chlorinated solvents. This was a mistake in the first place. This is a problem that has to be faced today, which is enormous. This is with respect to recovery by reclaimative distillation rather than the dumping of waste in the earth.</p>			
<p>Where the average fellow needs to know something about this, I've given some limited but factual data that should clarify to the interested layman why the aforementioned contaminants proceed through and into groundwater rather than evaporate. You have water entrainment at 8.34 pounds per gallon; perchloroethylene at 13.61 pounds per gallon. Perchloroethylene, for all practical purposes, is insoluble in water. Trichloroethylene is 12.15 pounds per gallon with one-tenth of one gram solubility per hundred grams of water, 100 cc or milliliters.</p>			

K-22

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>Normally, these typical chlorinated industrial solvents are recovered by distillation in a closed system both from a stand-point of economy and to prevent air and water pollution.</p> <p>The earthen cesspool, or seepage basin, offers no more than a waste dump wherein solvent evaporation will be rather insignificant if water is present in the basin, and water would be present in the unsheltered, exposed basin. Thus, with water present in the basin from rain or otherwise, the 12-pound-per-gallon trichloroethylene, or the 13.6-pound-per-gallon perchloroethylene will immediately layer beneath the 8.3-pound-per-gallon water on the bottom of the basin.</p> <p>The complete insolubility of perchloroethylene in water assures that it begins a seepage trail from the bottom of the basin into the ground above the aquifer. Likewise, trichloroethylene will proceed completely after a saturation of any water in the basin to the extent of about 3.8 grams per gallon. Mixtures of trichlor and perchlor will behave as would perchlor in their soil penetration by seepage.</p> <p>We have, of course, a trichlor problem there. We have the greater part of the water in this area -- all of the drinking water in this area and surrounding communities, all of that comes from the Tuscaloosa Aquifer and its, let's call it, aquifer tributaries.</p> <p>You know, I can see no more important matter than to clean up the water, first of all. This is a release here, too, and this is given in the Augusta Chronicle as of July 19, 1983. They call it a water cleaner. This must be something absolutely new, and unless it's something very new, it might be something that we found in a Rube Goldberg book. But how in the world are you going to blow solvent out of water unless it's completely insoluble in it? Why do we think that we can go and blow 50 tons of stuff out of the Tuscaloosa Aquifer, and if we did, it would blow into the air where you have 200 parts per million of trichloroethylene. It's the maximum allowable limit. What do you want people in this area to do, breathe that stuff, too?</p>		

K-23

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
G2	<p>Well, we got to find out. I cannot go along with this, and it is not my job to, but I've known DuPont in Wilmington, Delaware, for more than 50 years. I can assure you they have the answers there if they are not in Aiken.</p> <p>The stability of chlorinated solvents is another matter, too. These require stabilizers and these disappear in time. So in all cases in these areas where there's solvent in the ground, you've got perhaps destabilized material. You've produced acids, et cetera.</p> <p>There are solutions to the problem I do not go along with. And as being reasonably intelligent in this area, to say that a water cleanser is the answer down there where we do this for the next hundred years at taxpayers' expense, if we need somebody to do this thing, I think we need to go to an outside source. It used to be the most reliable in the country was Arthur D. Little in Cambridge, Mass. Well, they are still there. Whether they do this or not I don't know, but I would suggest that in this EIS statement, the probable solutions will probably turn out you are going to have to mine this stuff out that is below these basins.</p> <p>You will probably have to -- it will probably have to go down the Savannah River on a monitored basis. That's the most practical solution. There might be a means of catalytic decomposition of this to produce HCL hydrochloric acid, and to neutralize that.</p> <p>Lastly, and on a personal basis, I consider that the cleanup of the Tuscaloosa Aquifer is, in itself, more demanding than the startup of the L-Reactor because if what I call the mess at hand is not corrected, there is little chance that this or other sources of contamination will receive the corrective attention required for safe drinking water in South Carolina and Georgia from the aquifer.</p> <p>That's my feelings, and I thank you for being able to express myself.</p>	Mitigation measures	Sections 4.4.3.1, 4.4.3.2 See Comment B6

K-24

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF MICHAEL F. LOWE			
My name is Michael F. Lowe. I am Director of the Palmetto Alliance, Inc.			
H1	We are a statewide organization dedicated to advocacy on nuclear waste issues, particularly on nuclear waste. I'd like to associate myself with the comments of the others here today, particularly on the need for nuclear weapons material in the EIS, addressing that subject. But it has come to our attention that DOE has disregarded our remarks before the Armed Services Committee and, again, the scoping of the EIS has omitted consideration of the impact of the additional volume of liquid, high-level wastes that will be generated as a result of L-Reactor operations.	Need	Section 1.1
H2	We are a statewide organization dedicated to advocacy on nuclear waste issues, particularly on nuclear waste. I'd like to associate myself with the comments of the others here today, particularly on the need for nuclear weapons material in the EIS, addressing that subject. But it has come to our attention that DOE has disregarded our remarks before the Armed Services Committee and, again, the scoping of the EIS has omitted consideration of the impact of the additional volume of liquid, high-level wastes that will be generated as a result of L-Reactor operations.	Radioactive waste	Section 5.1.2.8
H3	We also feel that the ability of the planned defense waste processing facility to handle this additional volume in a timely manner should be considered. The Defense Waste Processing Facility would be required to handle approximately 30 percent more than was originally planned.	Radioactive waste	Section 5.1.2.8
We believe there are many variables that would make the stabilization and ultimate disposal of this waste uncertain. Those variables include the feasibility to vitrify high-level wastes on an industrial scale, which has not yet been proven.			
The congressional approval for funding to complete this project, the Defense Wastes Processing Facility, could be in jeopardy given economic conditions in the future and the environmental concerns of both the public and scientific community could lead to further delay in addressing the problem of stabilization and ultimate disposal of high-level waste.			
In our remarks on February 9th, we said that -- and I would like to reiterate that -- it is unfair, unjust, and unwise to ask South Carolina to tolerate generation of more nuclear wastes in our state, and I would ask that the EIS consider this.			

K-25

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF WILLIAM McDANIELS			
<p>My name is William McDaniels, and I live in Aiken County, South Carolina. I'm representing no particular organization but I am concerned and I think this has been voiced by the previous speakers here about toxic wastes. I'm concerned about our table water, our atmosphere, and things in general. I am a member of the Sierra Club. I also belong to the American Associations of Retired Persons. I will be Chairman of the National Council of Senior Citizens Corporation nationwide.</p>			
<p>I don't know enough about this L-Reactor here because I've only been down here about ten months. I have moved from the state of Michigan, but I know what happened in Midland, Michigan, on this reactor there, the Dow Chemical reactor. There was ten rivers poisoned forever, and they will never, never be the same.</p>			
11	<p>I feel that the toxic waste here in South Carolina and for miles out is -- I feel that these contaminants have already got down to the table water, and we know that the table water only moves two inches every 24 hours. We have a very fragile thing here, and we're talking about table water.</p>	Groundwater contamination	Sections 4.1.2, 5.1.1, Appendix F See Comment B6
<p>The same thing applies to ozones that have been destroyed.</p>			
12 13	<p>First of all, I just wanted to voice my opinion that I'm opposed to the startup of this reactor. I don't think that it is necessary, and I feel, first of all, before you start any other reactor or bringing any other reactor into existence, that we should have more study on the method of neutralizing the waste that comes from these reactors. This is one of my main concerns.</p>	Need Radioactive waste	Section 1.1 Sections 4.1.2.8, 5.1.2.8
<p>I moved into South Carolina not knowing that we had this L-Reactor. I read nothing about it. And, of course, we bought a place here. I was born and raised in Tennessee, and I will not dwell too much on anything in particular here, but I have been working in ecology and have been a concerned citizen and a member of DAPL, Downriver Anti-Pollution League in Michigan, but I have worked in ecology in my spare time, I'd say, for since 1948 and '49.</p>			

K-26

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>I'm concerned for our younger people that's coming along. I will be 68 years old in September of next year, but I want to leave something behind for the younger generation. I don't want to leave a contaminated nation, a world -- I would like to see them survive. I have three children and I have three grandchildren, and I think -- I don't think we are getting enough information or input out to the public, like here, in regards to this L-Reactor.</p>		
	<p>This is about all I have to say. It's nice coming. When I got concerned yesterday, of course, I've had a fall and broke all my ribs, and I would not have probably come out except I read yesterday in the paper, Aiken paper, that there was only one person that spoke in Augusta, so I felt I must make myself present to voice my opinion as a concerned citizen.</p>		

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF VIRGINIA DYKES			
	<p>I'm Virginia Dykes from Greer, South Carolina. I intended to come to represent myself.</p> <p>I've done quite a bit of research on nuclear issues. In fact, I spent so much time in the Greenville County Library reading government documents that they finally invited me to work there.</p> <p>But I was asked also to present a letter that the Greenville County Democratic Women sent, so I'd like to do that, and then also represent myself.</p> <p>The letter was sent -- we're an organization of about 200 women in Greenville, South Carolina. And on our last meeting we voted unanimously to send this letter. This was before the EIS was decided upon. It went to Dr. Robert Jackson of the Department of Health and Environmental Control of our state and to the Honorable Donald Hodel, Secretary of the Department of Energy.</p> <p>The membership of Democratic Women of Greenville County, South Carolina, has voted to support the position of Senator Ernest F. Hollings and Senator Mack Mattingly in their efforts to require an Environmental Impact Statement before the startup of the L-Reactor at the Savannah River Project.</p>		
J1	It is known that operation of this reactor will flush radioactive cesium into the Savannah River and that millions of gallons of hot water will kill vegetation over a wide area.	Radiocesium remobilization	Sections 3.7.2, 4.1.2.4, Appendix B, Appendix D
J2		Wetland impacts	Sections 4.1.1.4, 4.4.2, 5.1.1.2, 5.2.4, Appendix C, Appendix I
J3	We are also concerned about the contamination of the Tuscaloosa aquifer that has already occurred, and we would appreciate being advised as to what action is being taken by your agency to remove these chemicals from the aquifer.	Groundwater contamination	Sections 4.1.2, 5.1.1, Appendix F See Comment B6
J4	Millions of gallons of high-level wastes have been accumulating in tanks at the Savannah River Project over the last 30 years. These tanks, some of which have leaked in the past, are also	Radioactive waste	Sections 4.1.2.8, 5.1.2.8

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
J5	<p>located above the aquifer. Unfortunately, money has never been made available to solidify and remove this waste to permanent storage.</p>	Health effects	Sections 4.2.1.6, 5.1.2.5, 5.2.7
	<p>While we agree that employment and national defense considerations are also of importance in this matter, we believe the significant long-term damage to our environment which has already occurred at the facility must be alleviated before the problem is further aggravated by the operation of the L-Reactor.</p>		
	<p>We appreciate your consideration of the concerns of our membership who, as residents of this state, are most closely affected by this situation, and we look forward to your response. Sincerely. This was signed by the Co-Chairs of the Legislative Committee, Dianne Smock, who is an attorney in Greenville, and Libby Yarborough, who is a builder and developer.</p>		
	<p>Thank you.</p>		
	<p>This is my own statement that I'd like to make, please.</p>		
	<p>South Carolina has the highest infant mortality in the United States. The people of our state die younger than anywhere else in this country. Our students have the lowest Scholastic Aptitude Test scores. When all three of these indicators are the dead worst in the nation, it points to something in the environment.</p>		
	<p>We do have a unique feature in our environment: one of the world's largest reprocessing plants, which has been pouring out radioactive emissions continuously for 30 years.</p>		
	<p>People do not realize that reprocessing produces large quantities of radioactive gases and liquids that are released routinely from the stack and into the river. A normally operating power plant emits about 10 curies of tritium per year, while the Savannah River Plant emits 300,000 curies, or more than all the power plants in the world put together.</p>		

K-29

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
J6	<p>Unlike power plants where the fuel is handled very gently, at a reprocessing plant, this highly radioactive product is dissolved in acid, treated with chemicals, and the plutonium is solidified. Even a government document (Air Cleaning Handbook) calls reprocessing an inherently dirty operation.</p> <p>At the Savannah River Plant about 560,000 curies of krypton 85 and 300,000 curies of tritium are released per year, according to government sources. My sources happen to be that I called up the Department of Energy and asked for the officials in charge, and just asked them how much was released. These amounts reflect the plant's normal operations, not including accidents or the addition of the L-Reactor.</p>	Radiological effects	Sections 4.2.1, 5.1.2, 5.2.6, Appendix B, Appendix G
J7	<p>Although these isotopes are difficult to filter and dispose of, improved technology does exist which is not being used currently at SRP. A method using fluorocarbons to capture krypton has been developed at Oak Ridge. Voloxidation is a process that can be used to remove tritium before it becomes diluted with water.</p>	Safety alternatives	Section 4.4
J8	<p>We are told that the hundreds of thousands of curies of tritium dumped into the air and into the Savannah River are harmless, but research papers show that the amounts approved for drinking water may, in fact, be a health hazard. Tritium has been shown to be almost three times as damaging to living systems as are gamma rays at equivalent low-level exposures. Tritium circulates as freely as water within individual body cells including sperm and egg cells where minute amounts can cause genetic damage. Human deaths have occurred from tritium exposure. Tritium has a half-life of twelve years, and all of us now carry a body burden of manmade tritium within our bodies continually.</p> <p>I would like to make part of the official record three research papers on tritium which I obtained from the Duke Medical Center Library:</p> <p>The first is Dr. R. Lowry Dobson, Lawrence Livermore Laboratories of the University of California, <u>How Toxic is Tritium? Relevance of High-Dose Results and Gamma Ray Data to Evaluating Low-Level, Chronic Exposure.</u></p>	Health effects	Sections 4.2.1.5, 4.2.1.6, 5.1.2.5, 5.2.7, 6.1.4, Appendix B, Appendix G

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>The second is Drs. S. Zamenhof and E. van Marthens, Mental Retardation Research Center, University of California at Los Angeles School of Medicine, <u>The Effects of Chronic Ingestion of Tritiated Water on Prenatal Brain Development.</u></p>		
	<p>The third is Dr. Takashi Ito and Katsumi Kobayashi, University of Tokyo, <u>Mutagenesis in Yeast Cells by Storage in Tritiated Water.</u></p>		
	<p>One of these papers shows that pregnant rats, when fed with water containing minute amounts of tritium, produce offspring with fewer than the normal number of brain cells.</p>		
	<p>I am suggesting that we can't add 60,000 more curies of tritium out the stack and into the river without doing something about the immense problem we already have, and I think that you do need to make this part of your Environmental Impact Statement. And I think studies such as these scientific papers, when you read something like <u>Tritium Control Technology</u>, a government document, they make passing references to these research papers, but they say it's not practical to remove tritium; it's a very difficult thing. Therefore, it's not being done. They will even say the reason that tritium emissions are accepted is that they are so difficult to remove.</p>		
J9	<p>Well, I'm saying we got to address this question, and this is the time to do it. When we're having an Environmental Impact Statement is our golden opportunity to see what has tritium done in the past, what is it going to do, what are the further emissions going to do to us in this state.</p>	Radiological effects	Sections 4.2.1, 5.1.2, 5.2.6, Appendix B, Appendix G
J10	<p>Other nations have not located their large reprocessing plants where emissions are released into the air and drinking water of the population. France, England, and Japan have located their reprocessing plants on the edge of the ocean. France has a long pipe along the ocean bed to carry waste a safe distance out. Dumping radioactive waste into the ocean isn't a wonderful solution, but it is better than putting it into a river that is used for drinking water.</p>	Radiological effects	Sections 5.1.2, 5.2.6
J11	<p>It is not possible to relocate or shut down the Savannah River Plant, which employs 8,000 people and which is needed for defense, but the concept of laying a waste pipe down the full</p>	Radioactive waste	Sections 4.1.2.8, 5.1.2.8

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>length of the river and out to sea should be examined. The coastal communities may not like it, but it is better for them than the present system which releases radioactive materials upstream and upwind.</p>		
	<p>Moving the waste by pipeline out to sea may be more practical than a closed circuit cooling system at SRP, given the problem of cooling water becoming more radioactive every time it recycles through the plant.</p>		
J12	<p>Studies should be made for the EIS comparing infant mortality and other health records of communities downwind and downstream from SRP with towns in the opposite direction.</p>	Health effects	Sections 4.2.1.6, 5.1.2.5, 5.2.7, 6.1.4, Appendix B
	<p>The accidental release of 479,000 curies of tritium in one day in 1974 presents an opportunity to examine infant mortality in the following year in the path of the radioactive release.</p>		
J13	<p>The additional emissions from the L-Reactor cannot be accepted without adequate controls when SRP already produces one of the greatest concentrations of radioactive pollution of any location on earth.</p>	Regulatory requirements	Chapter 7

K-32

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF JOHN DENTON			
	<p>My name is John Denton. I'm a concerned citizen from North Augusta. I have a Bachelor of Science from Western Carolina in 1936. I never worked for the government or DuPont either, and I have no DuPont stock.</p>		
	<p>I've heard the meeting with Dr. Thurmond and in -- Senator Thurmond had in North Augusta, and quite a few comments. I think there's a lot of confusion that really isn't necessary. We need to be well informed on this matter. We need whatever information that is necessary, but some of the figures and things that were asked for and seem to be required, I'm sure Russia would like to have that information.</p>		
	<p>This reminds me of when I was starting up a plant in Baton Rouge, Louisiana, a few years ago when the media and various people worked people into a fanatic state when the chlorine barge was dumped into the river by the hurricane. On the morning that the barge was raised, according to the IV, 20,000 people fled the city. I couldn't get enough men to start my unit, and the danger was equivalent to the possibility of you falling out of bed tonight and breaking your neck.</p>		
	<p>Now, that seems to me to be somewhat of the case in this L-Reactor startup. I have worked all over the world. The United States is the greatest nation in the world. War is a terrible spectre for me. I saw a few shells come over in World War II, and I don't like it. I'd hate to see a nuclear holocaust, but whose choice is it? The United States has never been a nation to go to war on its neighbor. In fact, it has a record of helping everybody all over the world.</p>		
	<p>Now, we need that L-Reactor. We need to get it going. Some people question that, and maybe honestly, but we can't get this information from Russia, what they're doing over there, and we need to -- we need to get on with it.</p>		
	<p>I know a lot of people that work for DuPont, probably 8,000 people out there, and for each one of those people that work out there, there's five or six supportive occupations in this</p>		

K-33

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
----------------	-----------	---------------	----------------------------

area. They can't be here today to voice their opinion about it.

We have a certain number of groups that come down here like flies on a warm biscuit with jelly on it and try to push their ideas down our throats. I don't agree with that. We should go ahead and start that reactor. Sure, we need the information, but three to five million dollars for an Impact Statement, it's our taxes. I've been paying taxes since 1936. I've never drawn unemployment or welfare, and I'd like to see my taxes well spent. If we have to have that, go ahead and get it, but let's get this reactor started.

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF BEATRICE JONES			
I am Beatrice Jones, I have no affiliation, but I am a concerned citizen.			
With regard to the present serious environmental circumstances at the Savannah River Plant, there should be no more errors that underestimate, or decisions that intentionally downplay, the dangers of environmental impacts of the public health and safety.			
L1	Concerns about radiation discharges to the environment, both routine and accidental, continue to be taken lightly by the DOE even though they know full well there is no evidence for any safe amount of ionizing radiation.	Radiological effects	Sections 4.2.1, 5.1.2, 5.2.6, Appendix B, Appendix D, Appendix G
L2	The restart of the L-Reactor is an anti-social, ill-considered, technological venture that does not seriously take into account the health and safety of citizens in South Carolina and Georgia, or the protection of a fragile environment.	Health effects	Sections 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7
Decisions to move forward with the L-Reactor were made by men who should understand that they will be held accountable for their decisions. As I have said before, it is immoral to put a low dollar value on human and other life forms in South Carolina and Georgia, while pushing hazardous technology where there is already too much.			
Morality, however, is not likely to visibly enter into Savannah River Plant technological considerations, at least not until mechanisms of rationalization no longer surface so abundantly to protect even the most obviously indefensible positions.			
I have serious reservations about whether an expedited EIS can adequately address the L-Reactor's impacts, particularly when almost all the problems at SRP are interrelated and were brought to a head by the L-Reactor. The EIS study should be done in relation to the past 30 years of operational impacts, that would take into account the errors of the past, so that they won't become the errors of the future as well.			

K-35

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
L3	I am not at all certain that the time element for restarting the L-Reactor is as crucial to national security as is claimed, but rather the DOE's fears of too much environmental impact disclosure.	Need	Section 1.1
L4	Nevertheless, even though the expedited EIS will be far less than what is needed, every effort should be made for a complete as possible, honestly disclosed, evaluation of the L-Reactor's environmental impacts. The DOE's own reports contain projections of severe environmental impacts without mitigation measures.  It is comforting to know that Senator Hollings has asked the General Accounting Office to review certain health and safety issues, which have for some time been my own concerns, as well as those of many other people in South Carolina and Georgia.	Mitigation measures	Section 4.4
L5	The scope of the EIS should certainly include the routine and accidental radiation hazards at SRP. It is an area of concern, perhaps the biggest area of concern, for many people. Also, perhaps the most far-reaching. The body dose to individuals from the L-Reactor's startup would increase from 1.8 to approximately 10.7 millirems per year. Twice NRC standards.	Accident analysis	Sections 4.2, 4.3.2.3, 4.4.1, 4.4.5, Appendix G
L6		Radiological effects	Sections 4.2.1, 5.1.2, 5.2.6, Appendix B
L7	The public should not look for immediate effects when the real hazard is delayed. For most of the serious environmental poisons cancer at 5 to 25 years after poisoning is precisely the kind of effect we must be concerned about. Genetic effects occurring in subsequent generations could be many times more serious.	Health effects	Sections 4.1.2.6, 5.1.2.5, 5.2.7, 6.1.4
L8	The restart of the L-Reactor would substantially increase the cumulative hazards of radiation, and because of its age, will very likely be more accident prone, releasing even greater quantities of radioactivity to the already overburdened environment. Containment domes should be required for the L-Reactor and all other operating reactors at the Savannah River Plant.	Accident analysis	Sections 4.2.1, 4.4.1, Appendix G
L9		Safety alternatives	Section 4.4.1, Appendix G
L10	Clearly, the impacts of the seepage basins to groundwater should also be another of the most important parts of the EIS	Seepage basins	Section 4.4.3 See Comment B6

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
L11	scoping. The enormity of the known contamination, and the potential for even greater contamination has reached almost nightmarish proportions. It is obvious that all seepage basins still in use should be phased out as soon as possible, and those at the L-Reactor site should not be put to use. Government should have been preventing these things from happening instead of making them happen.	Groundwater contamination	Sections 4.1.2.2, 5.1.1.2, 5.1.1.4, Appendix F See Comment B6
L12	As we all know, toxic chemicals from seepage basins in the M area have contaminated the Tuscaloosa Aquifer, a major source of fresh water in the area. The DOE's earlier assessment of the problem indicated the problem was under control, but their assessment was inaccurate. Earth has functions other than to serve as a nuclear sewer.	Seepage basins	Section 4.4.3 The contamination of the Tuscaloosa Aquifer will be the subject of a separate NEPA document.
L13	It appears to me that it would be helpful if the U.S. Geological Survey would be permitted to go on site to do a detailed hydrological and geological study. I believe it is more difficult for government officials with conflicts of interest to assess problems with the proper perspective.  It is every person's authoritative right to protect the purity of their drinking water. Government should not only respect, but help to protect this right.	Groundwater contamination	See Comment L12
L14	For the avoidance of illegal 174 degree Fahrenheit thermal discharges into Steel Creek, cooling towers should be put into place before the L-Reactor's start-up. Without the benefit of cooling towers, all wildlife in the wetlands will be destroyed,	Alternative cooling	Section 4.4.2 See Comment E6
L15	fish in the Savannah River will be killed, and the cesium in the water will pose a serious threat to the health of people who drink Savannah River water. This is another issue which concerns me greatly, and one that I would like to see addressed.  I am concerned about all 11 of the issues listed in the "DOE News," and appreciate your efforts for the scoping meetings. I do feel, however, that so many people voiced their concerns and suggestions during the February and May hearings, that there is little else to do but reiterate what has been said before. The areas of greatest concern are obvious.	Radiocesium remobilization	Sections 3.7.2, 4.1.2.4, Appendix B, Appendix D

K-37

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
L16	I hope all the issues will be given serious attention and mitigation measures taken into account, because constructive action is possible to protect lives, health and the environment.  I would like to take just another moment to make a few suggestions not related to the EIS.	Mitigation measures	Section 4.4
L17	1. Monthly measurements monitoring reports should be made public. 2. All notifications of accidents at SRP that are filed with the Energy Department on radioactivity or chemical substances should be made public. 3. There should be off-site gamma measurements by aerial surveillance as well as the on-site measurements. 4. Any health effects researched should be done by a Federal Public Health Agency. As taxpayers, we support these agencies that are supposed to protect us.	Monitoring Emergency planning Monitoring	Sections 6.1, 6.2 Appendix G, Appendix H See Comment 88
L18			
L19			
L20		Health effects	Section 6.1.4

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF BARBARA WISE			
My name is Barbara Wise, and I'm an area resident.			
I'd like to preface my comments with the fact that I am a lay person, I haven't spent much time on the technology involved in the scope of an EIS. What I will tell you today is what my personal concern is, and I'm not sure but I hope that it will be within the scope of the EIS.			
I want to give a brief summary of the concerns I would like to see addressed in the EIS.			
M1	First, how am I at risk as an area citizen and how am I to be informed of my risk? I and the other citizens who live in the environs of the Savannah River Plant are taxpayers. We help to fund the operation of Savannah River Plant. We have the right to know how we and our children and our environment are put at risk by the start-up.	Accident Analysis	Section 4.2.1, Appendix G
M1a	I would like to know how the L-Reactor releases and wastes will affect us when combined with and added to the ongoing releases and wastes already occurring at SRP.	Health effects	Sections 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7, Appendix H
M2	I would like to know about the synergistic effects of the total radioactive releases from the Savannah River Plant, including L-Reactor releases, when combined with the urban and industrial chemical pollutants to which we are already subjected.	Emergency planning	Appendix H
M3	I would like to know about the synergistic effects of the total radioactive releases from the Savannah River Plant, including L-Reactor releases, when combined with the urban and industrial chemical pollutants to which we are already subjected.	Cumulative radiological effects	Section 5.2.6
M4	In addition to this, what are the predictable increases in accidents, so-called incidents, and problems we can expect with regard to this restart? I have grave doubts that we will be informed in any meaningful way of any of these dangers because we haven't been in the past. It's true that information is published sometimes and maybe and usually is buried in other technical data in some report or article somewhere, but without any explanation of real implications that ordinary people can understand.	SRP and regional effects	Section 5.2.6 The cumulative radiological effects from SRP are small (EIS Section 5.2.6) and no synergistic effects are expected.
M5	Things are always within safe parameters, it seems, at SRP when you hear any comments from the Department of Energy or other satellite agencies.	Accident analysis	Sections 4.2.1, 4.4.1, Appendix G

K-39

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment	
K-40	<p>I'd like to cite one example. In 1977 there was an accident at which time a massive amount of radioactive tritium was released into the environment, 479,000 curies of tritium were released in one single day. The ordinary lay person cannot interpret this. What is a curie?</p>			
	<p>To give perspective on this, approximately one half this amount, 250,000 curies was released in 1979 at the tritium facility in Tucson, Arizona, at which point the State of Arizona revoked its license. To know that the American Atomic Tritium facility is shut down because it released approximately one-half the amount in a year that SRP releases in one day is one way to give perspective to otherwise meaningless technical data.</p>			
	M6	<p>I know from my reading, and there is agreement among the experts that there is no safe level of ionizing radiation. Cancer deaths and fetal deaths and genetic mutation will occur in direct ratio to dosage received. Yet, there have been no comprehensive health studies around here to address this problem.</p>	Health effects	Section 6.1.4
	M7	<p>I understand that this is probably not in the scope of an EIS, but what could be more relevant than health effects on humans in an Environmental Impact Statement. We're at least as important as the Sturgeons. That is what needs to be done most of all, and if that is beyond the scope of an EIS, then the EIS should demand that a comprehensive health study of radiation effects on humans be begun immediately in addition to the EIS.</p>	SRP and regional effects	Section 6.1.4
	<p>Until that time, we, the area residents, are functioning in the role of laboratory animals in this ongoing nuclear experiment. Given the choice, I would prefer to be an informed laboratory animal.</p>			
M8	<p>In a final remark, I would like to express my concern over the fact that DOE is doing any part of that Environmental Impact Statement. Now, I know they have been charged to do it, but it seems to me in my lack of knowledge of these things that it is inherently improper regulatory practice for an agency to regulate itself, nor is DuPont or any other benefactor, affiliate, or satellite of SRP an appropriate designee to conduct the EIS. The conflict of interest is blatantly obvious.</p>	NEPA procedures	Foreword	

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>If you are in the primary business of production, you can be assured that protection will be compromised and we have only to look at the record to know this. I guess what I'm requesting is that there will be some mechanism built into the EIS to enhance objectivity.</p>		
M9	<p>Last, I would like to request that the EIS draft be given the full 45 days as is the usual procedure.</p>	NEPA procedures	Foreword

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF MARY LOU SEYMOUR			
	<p>Okay, I'm Mary Lou Seymour. I live in Bath, South Carolina, about, oh, ten miles from here, and I'm just a concerned citizen.</p>		
N1	<p>I haven't really got anything very prepared, but I have a few points that I'd like to bring out. In the first place, from what I understand, the Savannah River Plant is allowed to put much hotter water into the creeks than the other local industries and doesn't have to abide by the South Carolina State laws, and I don't think that's right. I think that should be changed. They should have to abide by the state laws like other industries, government or not.</p>	Regulatory requirements	Chapter 7
N2	<p>Also, I agree completely with Ms. Wise's point about the health study. A full epidemiological study should be made. There never has been one made, and it's just beyond comprehension that it hasn't been. The Savannah River Plant has been there for like over 20 some-odd years, and there, you know, could be plenty of data on birth defects, cancer, leukemia, and the like, that should be collected and given to the public so we can know what we are living with out there.</p>	Health effects	Section 6.1.4
N3	<p>Also, one note on the civil defense or whatever you call it when people are supposed to be notified to evacuate. This last accident or leak incident or whatever it was they had a couple of weeks ago, I heard about it on the national news. It wasn't on any local news at all, and I was kind of upset, so I called up the Civil Defense emergency number in Aiken County, and they had never heard of it. And I talked to one lady on the phone, and then she got, I suppose, her boss in, and he told me, "Well, don't worry about it because I'm sure if it was anything they would have told us."</p>	Emergency planning	Section 4.2.1.3, Appendix G, Appendix H
	<p>And then I read in the paper later on that the leak happened like at 11:15 at night, and they didn't even tell DHEC until 12:45. That was like an hour and a half that nobody knew about it, not even DHEC, and then the citizens didn't know about it at all unless they watched the national news, and I think that's inexcusable.</p>		

K-42

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
N4	<p>Also, there's one comment that I heard on the news. I didn't make the hearings last night, but one of the people that testified mentioned the possibility of a melt-down, and someone from the Savannah River Plant or DOE or somewhere said that these reactors are different than commercial reactors, that they can't melt down because they don't get hot enough. Well, now, I'm not a scientist, but I thought a melt-down was when it went out of control. I didn't know it had anything to do with the operating temperature.</p> <p>Now, if I'm wrong there, you know, I would appreciate knowing. It's just like you are living in ignorance all the time, and you feel like, you know, I mean, I hope everything is going okay out there but they don't tell you about it when something happens.</p> <p>Like Ms. Wise says about "I'd rather be an informed laboratory animal," I mean, it just makes you feel better at least to know what's going on. I don't think there would be any panic caused if we had just been told to close our windows, that a cloud of tritium might be going by, just close your windows or something, don't go out. I mean, we had friends over at our house and they left about when it happened, at 11:00 o'clock at night, and I thought about that. Like I say, I am not a scientist but if there is this much concern about it, apparently the whole place was covered with people from DOE and NRC the next day out gathering samples in helicopters, it must have been something fairly important or they wouldn't, I don't assume, wouldn't have spent the money to do all of that.</p> <p>And just one thing I would like to see in the Environmental Impact Statement, is to take it really seriously. I mean, it just seems like it's taken, you know, a lot of people fighting a long time just to get to this point, and it seems like that should just be done automatically, and I certainly think it should get the full 45 days it's supposed to, and not be cut down to 30 days.</p> <p>And that's it.</p>	Accident analysis	Sections 4.2.1, 4.4.1, Appendix G
N5	<p>And just one thing I would like to see in the Environmental Impact Statement, is to take it really seriously. I mean, it just seems like it's taken, you know, a lot of people fighting a long time just to get to this point, and it seems like that should just be done automatically, and I certainly think it should get the full 45 days it's supposed to, and not be cut down to 30 days.</p> <p>And that's it.</p>	NEPA procedures	Foreword

K-43

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF DR. ZOE TSAGOS			
	<p>My name is Zoe Tsagos. I hold the Energy Chair in the League of Women Voters of Northern Beaufort County.</p>		
	<p>I speak in behalf of our organization which is a participant in the suit, in part pending, against the Department of Energy.</p>		
	<p>On July 15, 1983, United States District Court Judge Thomas Penfield Jackson ruled on the first part of the suit brought by the National Resources Defense Council and others for the issuance of an Environmental Impact Statement by the DOE before the restart of the L-Reactor at the Savannah River Plant.</p>		
	<p>The previous day, July 14, the President signed the Energy and Water Development Appropriations Act, FY-1984.</p>		
	<p>For greater clarification, I quote from H.R. Report Number 98-272, 99th Congress.</p>		
	<p>And, I'm doing this, or I thought I would be doing this because people would be here, especially numbers of people, who might not have been following this whole matter.</p>		
	<p>But, nevertheless, I think it's pertinent. The pertinent section of this Act reads as follows:</p>		
	<p>"None of the funds appropriated by this Act, or any other Act, or by any other provisions of law, shall be available for the purpose of restarting the L-Reactor at the Savannah River Plant, Aiken, South Carolina, until the Department of Energy completes an Environmental Impact Statement pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969, and until issued a discharge permit pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 1251, following, as amended, which permit shall incorporate the terms and conditions provided in the Memorandum of Understanding, entered into between the Department of Energy and the State of South Carolina, dated April 27, 1983, relating to studies and mitigation programs associated with such restart."</p>		

K-44

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>The purpose of today's meeting by DOE is, as we understand it, to hear suggestions on what the EIS should encompass, a scoping operation based, in part, on public recommendations from previous hearings and written submissions.</p> <p>Because of the limitation of time and because we realize that comments will be forthcoming in each of the eleven categories, from various sources, we shall confine ourselves to five recommendations which lie within one or more of the DOE listed areas.</p> <p>1. Lying within the scope of Number 10, Cumulative Thermal Effects of discharging scalding radioactive effluent into Steel Creek and the Savannah River. And, Number 11, Cumulative Radiological Effects of emissions, both in the atmosphere and in the water.</p>	Alternative cooling	Section 4.4.2 See Comment E6
K-45	<p>01 We strongly recommend that a method of cooling the reactor effluent be introduced, either by recycling, by cooling pools, or by any other acceptable method which will cool the emissions to the standard of 90 degrees Fahrenheit, acceptable to the South Carolina Department of Health and Environmental Control.</p>	Groundwater contamination	Sections 4.1.2.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F See Comment B6
	<p>2. Our second recommendation has to do with the use of seepage basins or containers, and falls within both Number 4 in the DOE identification of issues, which has to do with groundwater usage and the drawdown into the Tuscaloosa Aquifer, as well as Number 9, which concerns itself with groundwater contamination through seepage basins.</p>	Monitoring	Sections 6.1, 6.2 See Comment B8
02	<p>We feel that new means of containment of radioactive and non-radioactive chemical wastes should be devised, and that frequent and thorough inspection is necessary of whatever receptacles would be used to prevent groundwater seepage as in the case of the contaminated wells and the penetration into the Tuscaloosa Aquifer of the cleaning agent Triclene.</p>	<p>3. Our third recommendation would touch upon all eleven areas listed by DOE. We feel that the present method of yearly environmental monitoring of the Savannah River Plant by DuPont, which prepares the study for DOE, would be better carried out by a carefully chosen independent commission, an independent body not connected with DuPont or with the Department of Energy</p>	Sections 6.1, 6.2 See Comment B8
03			

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>or with any other group involved with the operation of the Savannah River Plant.</p> <p>This is not necessarily a reflection on the work done and the contents of the DuPont report, whose full title is: Environmental Monitoring in the Vicinity of the Savannah River Plant. And, the one I have is as late as 1982.</p> <p>Obviously, information from those who operate the Savannah River Plant is valuable; however, taken together, the material required by government agencies, such as DHEC, the data that can be provided by DuPont and the independent observation of a public commission, would provide a report which would be as inclusive as possible, and which, incidentally, would spread the responsibility about the accuracy of the environmental impact information.</p>	Emergency planning	Section 4.2.1.3, Appendix G, Appendix H
04	<p>4. Our fourth recommendation lies within the area of safety; Number 7 in the DOE list. Neither in the Environmental Assessment nor in the Environmental Monitoring Study is there an evacuation plan presented.</p> <p>In the EA under "Reactor Accidents," pages 4-26 through 4-31, covering nuclear, non-nuclear and accidents due to natural causes, there is a reference made to an evacuation plan. A reference only.</p> <p>On page 4-28 under "Risk Evaluation," the following statement is made:</p> <p style="padding-left: 40px;">"An emergency response plan has been implemented at the Savannah River Plant to initiate actions or evacuation of employees during an emergency."</p> <p>We feel that with the putting in operation of a fourth reactor at the SRP, thus increasing the possibility of an accident, an evacuation plan should be included in the EIS showing the steps to be taken to evacuate not only the people in the SRP, but also the people which can be affected outside the production site.</p>	Emergency planning	Section 4.2.1.3, Appendix G, Appendix H

K-46

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment	
<p>An article in the New York Times of June 5, 1983, states the following:</p>	<p>"In case of an accident in a nuclear plant, the Nuclear Regulatory Commission requires that preparations be made that those living within ten miles can be notified, sheltered or evacuated.</p> <p>"Plans must also be made to test for contamination of the food and water within 50 miles."</p>			
<p>This applies to commercial nuclear plants. But, an accident would be equally destructive whether it occurs in a commercial or federal installation.</p>				
<p>We, therefore, need to know what steps will be taken at the SRP in case of an accident. It should be spelled out.</p>				
<p>K-47</p>	<p>05</p>	<p>5. Our fifth recommendation rests squarely on the DOE issue Number 11, Cumulative Radiological Effects. We are disturbed at the present plan to restart the L-Reactor before the glassification or solidification plant will be in operation.</p> <p>We strongly recommend that serious consideration be given not to start the L-Reactor until the means of solidifying and removing the radioactive isotopes is available, thus making the effluent from the reactor far less destructive to the environment and less polluting of the Savannah River drinking water for 70,000 people.</p> <p>In summation, we are glad that an EIS, even an expedited one, will be prepared, not only because this was a pivotal point in our suit against DOE, but because both the people involved in the suit and the people who will be operating the L-Reactor will have time to take yet another look at the information which has been gathered in the testimony in North Augusta and at the several DOE hearings.</p> <p>This, we hope, will be an opportunity for a reappraisal and a sincere attempt by all of us to bring about the best possible solution to a difficult problem.</p>	<p>Radioactive waste</p>	<p>Sections 4.1.2.8, 5.1.2.8</p>

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF SISTER HELENA PRICE			
	<p>My name is Sister Helena Price. I am a member of the Religious Order of Sisters of Christian Doctrine, located in Suffern, New York. I am presently employed at St. Peter's Catholic Parish, located here in Beaufort. My main work consists in facilitating Religious Education programs, as well as serving the social needs in the local community.</p>		
P1	<p>I, along with many others, all interested citizens, object as well as fear the restart of the L-Reactor in the immediate Savannah area. We feel deep concern for the possible health hazards it could create, as well as the environmental destruction we could experience.</p>	Health effects	Sections 4.1.2.6, 5.1.2.5, 5.2.7, 6.1.4, Appendix B, Appendix G
	<p>We are in complete agreement with the federal judge's decision that an Environmental Impact Statement be made before the L-Reactor is restarted.</p>		
	<p>I, and those with whom I have spoken about this issue, hope that the Environmental Impact Statement will leave no doubts about the possible dangers for us and for succeeding generations to come.</p>		
	<p>That completes my statement.</p>		

K-48

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF SUSAN GRABER			
Q1	<p>I'm Susan Graber. I drink the water and I'm here for that reason. I'm thrilled, as all of us here in Beaufort are, that an EIS is going to be done, and I just wanted to point out one thing, that I just hope that you would consider taking into consideration the entire water problem that we have in this area. There are threats to our groundwater that concern us, saltwater intrusion, overuse and overpumpage creates problems, and I would just hope you would take into consideration our water problem in its entirety and what the elimination of our surface water source would do, you know, considering our groundwater problems as well.</p>	Groundwater contamination	<p>Sections 4.1.2.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F See Comment B6</p>
Q2	<p>I don't know if you have the Metropolitan Savannah groundwater study that the Corps of Engineers did, but if you would look at that and just consider the little bit of a tussle we are having with Savannah over our groundwater, okay, and how damage to our surface water would really greatly affect us on the coast.</p>	Surface water use	<p>Sections 4.1.1.2, 5.1.1.4, 5.2.2, Appendix D</p>

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
----------------	-----------	---------------	----------------------------

STATEMENT OF ZAIDA DILLON

I'm Zaida Dillon, and I have no affiliation, and I'm here as an individual to express my own personal delight with the fact that there will indeed be an EIS.

Addressing the issue of purity of air and purity of water for Beaufortonians who consider themselves very close downstream from the Savannah River Plant.

Although I speak as an individual, the end of 1982, one thousand signatures were gathered from citizens in Beaufort by a group of us in Beaufort who are unaffiliated with any organization or political group, and in February, the signatures regarded the importation of high level nuclear wastes into South Carolina. However, I think there was hardly an individual who signed that petition who did not in addition make a comment about the fear of the threat of the Savannah River Plant as being a possible hazard to air and water, and these thousand signatures were presented personally to Secretary Hodel, in his office in the Forrestal Building, so I think that although there are very few people as citizens here tonight, I assure you that those thousand people, silent voices, are out there in Beaufort.

Atmospheric effects

Sections 4.1.1.6, 4.1.2.1, 4.2.2.1, 4.3.1, 5.1.1.3, 5.1.2.2, Appendix B

Groundwater contamination

Sections 4.1.2.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F

R1  
R2

K-50

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF ANN HARRINGTON			
	<p>My name is Ann Harrington, and I'm just speaking as a private citizen. I have something written, so I will read it.</p>		
	<p>Since your last hearing, I have been thinking of what I would like to say to the decision makers concerning the L-Reactor as well as the nuclear issue in general. It is my feeling that you are all good people concerned with doing what is best for our nation and our children's future.</p>		
	<p>I have no choice but to trust that you are competent, conscientious professionals. The ton of paperwork you have here assembled generated by your countless hours of research and the hours upon hours spent in research leave a layperson, like myself, little room to argue on any of the technical points. However, I have read some on the subject and reflected on it and have come to my own conclusions.</p>		
S1	<p>What we are concerned with here are environmental consequences, and I have one question that I wish someone could answer. Why, after 30 years of nuclear weapons and power development, is there no program for permanent storage of nuclear waste? I feel that it is foolish to continue to provide waste until a safe, permanent solution has been developed. Until this has occurred, I call for a freeze on any further production of nuclear weapons and nuclear power plants.</p>	Radioactive waste	<p>Nuclear Waste Policy Act of 1982 established responsibilities, procedures, and schedules for providing permanent storage of high level radioactive waste.</p>
	<p>I want you to know that I am afraid. I wonder if the day is coming when an accident at SRP will force us to evacuate our homes, never again to return. A catastrophe of this magnitude could cripple our country economically and destroy countless lives. Do we really need to take such a risk? Ultimately, you are to decide that. I hope you think long and hard on it.</p>		

K-51

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
----------------	-----------	---------------	----------------------------

STATEMENT OF GERALDINE LEMAY

Mr. Cumbee, Mr. Sires, I am Geraldine LeMay, Chairman of the National Resources Committee of the League of Women Voters of Savannah-Chatham County and formerly Chairman of the Energy Committee of the League of Women Voters of Georgia.

Mrs. Lee Wash, President of the Georgia League, has asked me to represent her in speaking for the state League at this hearing.

Care for the environment is a major concern of the League, and the League of Women Voters of the U.S. in its policy toward energy development and implementation takes the position that "environmental protection is a primary consideration." This will be the major emphasis in my suggestions about the L-Reactor reactivation.

Perhaps I should comment first on my previous appearances at Savannah River Plant hearings. I am today for the third time speaking for the Georgia League at a public hearing on the proposed reactivation of the L-Reactor at the Savannah River Plant. My earlier statements, at meetings in February and May, were concerned specifically with the need for an Environmental Impact Statement. Happily, there will be no need to restate today those arguments, for an EIS is now being done. DOE is now in the progress of preparing such a statement.

I am most pleased that we have thus progressed to the position of doing a thorough study of the impacts on the physical and human environment before the final decision is made on whether to complete reactivation of the L-Reactor and place it in operation.

Some recommendations on the process of developing and desirable goals for the EIS: My concern is that the EIS be done in such a

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
T1	<p>way that it both will be recognized as an adequate scientific analysis, and one which is truly objective. The EIS should not bring forth the kinds of criticism which the DOE's Environmental Assessment has aroused, of a biased approach, one too limited in scope, and perhaps sometimes inaccurate when at variance with other studies made of the area.</p>	NEPA procedures	<p>NEPA procedures require that the responsible agency ensure the professional integrity of the discussions and analyses in EISs. DOE has identified methods used and has made explicit references to the scientific and other sources relied on for conclusions.</p>
T2	<p>The goal stated above, in my opinion, might best be reached by DOE's establishment of an independent advisory committee to oversee studies and mitigation measures. Such a committee, with details on its possible makeup and responsibilities, has already been recommended to DOE by the plaintiffs in a lawsuit about the EIS.</p>	NEPA procedures	Foreword.
	<p>The proposed committee would be widely representative of all interested groups, having members from federal, South Carolina and Georgia governments, the plaintiffs, and other civic and environmental groups.</p>		
	<p>On such a committee, there would be adequate scientific knowledge and sufficient representation of the public interest to assure that the EIS would both be and be recognized as adequate, accurate and objective a goal which I think DOE would want and should try to achieve.</p>		
	<p>And now about the scope of the EIS as proposed by DOE: DOE's notice of intent to prepare an Environmental Impact Statement lists 11 issues which will be analyzed and suggests that others may be added following the public hearings. This indicates, commendably, a desire to include all aspects of the problem in the study. However, because of the short time in which this particular EIS is to be made, it may not be possible to cover adequately this broad a field, and some issues, although all listed by DOE are important, may have to be dropped.</p>		
	<p>Issues finally chosen for study, if some do have to be dropped, should logically include those which a number of interested groups have pointed out as essential: First, human health effects; reactor safety and radioactive emissions; groundwater contamination; groundwater usage; thermal effects; transportation of radioactive materials.</p>		

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
T3	And, now, comments on proposals for mitigation of potentially harmful impacts: Certain proposals for mitigation of potentially harmful environmental impacts from the L-Reactor reactivation have been strongly urged by interested civic and environmental groups. Many of these suggestions are also among alternative mitigation measures proposed by DOE in its notice of intent.	Mitigation measures	Section 4.4, Appendix I
T4 T5	For reactor safety: An improved confinement system; a containment dome; adoption of safety standards imposed upon commercial nuclear power plants.	Safety alternatives Regulatory requirements	Section 4.4.1, Appendix G Chapter 7
T6	To prevent groundwater contamination: The elimination of the use of seepage basins.	Seepage basins	Section 4.4.3 See Comment E6
T7	To reduce groundwater usage and thermal effects: The use of a recirculation system for the cooling water.	Cooling alternatives	Section 4.4.2
T8	For safe transportation of radioactive materials: Adherence to standards imposed on commercial nuclear activities.  DOE should, I suggest, give special consideration to these methods of mitigating the potential harmful effects of the L-Reactor reactivation.	Regulatory requirements	Chapter 7
T9	What is, to me, the determining factor in the decision on reactivation of the L-Reactor: In concluding my remarks, I should like to say that the near completion of the renovation of the L-Reactor should not, in my opinion, be a determining factor in the decision on its reactivation.	Need	Section 1.1
T10	If the EIS does point to the likelihood of serious harm to people and to the physical environment, the L-Reactor should not be put back into operation. The health and safety of the people who live and work in the area should be accepted as infinitely more valuable than the millions of dollars invested in an idle nuclear reactor.  The L-Reactor should not again be placed in operation if doing so will lower the quality of life for the people who live in its immediate area, in South Carolina and Georgia, and along the Savannah River below the plant site.	Health effects	Sections 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7, 6.1.4, Appendix G

K-54

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF LAWRENCE BENEDICT			
<p>It's nice to be here again. I am Lawrence Benedict. I am the Chairman of the Environmental Quality Committee, League of Women Voters, Savannah-Chatham. We thank you for allowing us input into this very vital Environmental Impact Study the department is conducting.</p>			
<p>After hearing Geraldine LeMay, and I hope, Virginia Brown, you are well aware of the League's position regarding energy development, which is that environmental protection is a primary consideration. You are equally aware, I'm sure, that the League is not alone in this position, nationally and regionally.</p>			
<p>Here, in what is darkly called "SRP Country," we particularly support the similar position of two of our co-plaintiffs in recent victorious lawsuit, which compelled the Department of Energy to conduct an Environmental Impact Study prior to re-starting the Savannah River Plant's L-Reactor.</p>			
<p>Further than that, we speak today on behalf of The Georgia Conservancy and Coastal Citizens for a Clean Environment, representatives of whom have been called away on long-planned vacations.</p>			
<p>The primary concerns of these organizations are these:</p>			
U1	<p>Number One, the findings of the EIS should be thoroughly documented; that is, how did the conductors of the study reach particular conclusions, such as thermal effects in the Savannah River, or amounts of cesium to be released, et cetera.</p>	NEPA procedures	Foreword
U2	<p>Number Two, the cesium levels in Steel Creek Delta should be retested, not simply recalculated.</p>	Radiocesium remobilization	Sections 3.7.2, 4.1.2.4, Appendix B, Appendix D
U3	<p>Number Three, DOE should also produce documentation of the real need for the materials to come from the L-Reactor, without this information creating a national security risk.</p>	Need	Section 1.1

K-55

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
U4	<p>Both The Conservancy and the CCFCE have questions about who will prepare the EIS. Both register reservations about the NUS Corporation continuing to serve DOE in environmental matters because of that company's Finding of No Significant Impact in the neighboring environment as reported in the flawed Environmental Assessment.</p> <p>You will recall, in the above-mentioned lawsuit, U.S. District Court Judge Thomas P. Jackson denounced the FONSI as "unreasonable, arbitrary and an abuse of discretion." The League concurs.</p> <p>But forcing DOE to conduct an EIS is only part of the victory in the Court. The Court's decision becomes even more significant than a presidential signature on an appropriations bill because, according to Attorney Jacob Scherr of the Natural Resources Defense Council, Inc., "It makes clear that DOE was acting in violation of the law and sets a precedent for DOE's decisions in the future regarding the Savannah River Plant."</p>	NEPA procedures	Foreword
U5	<p>And because there was a violation of the law in attempting to restart the L-Reactor, the League will continue to press the fight to win an injunction to halt the restart until all concerned are satisfied that the need for the reactor is matched by mitigating measures to protect the health and well-being of all the creatures and plants in SRP's surrounding area.</p> <p>Given the seeming willingness of DOE to comply now with the law, the signals we citizens get from SRP are that the whole system has been approaching a state of disaster in its latter years of a very large nuclear-materials-producing life. The components for disaster have been visible since the first cascade of scalding discharge water wiped out the marshes and denizens of Steel Creek Delta back in the fifties.</p> <p>Permanent radioactive damage was assured when the cesium it carried with it became an integral part of the delta's mud.</p> <p>Another of SRP's disaster components was registered, for the first time, last spring when it was discovered that discharged toxic liquid wastes were leeching through some of DOE's collecting ponds into the area's groundwater supplies, the extent to which has not yet been determined.</p>	Mitigation measures	Section 4.4

K-56

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
	<p>And lately, just a few weeks ago, DOE announced the escape of a small quantity of tritium into the atmosphere. "A paltry supply it was," implied a DOE official. "No more radioactive material than one experiences every day flying at 30,000 feet."</p>		
	<p>Nonsense.</p>		
	<p>We are unconsolated by such analogies and turn instead to recent scientific studies which suggest that routine and accidental releases of tritium may be more hazardous than previously believed. Tritium is radioactive hydrogen which can combine to make radioactive water. This radioactive water becomes an unseen hazard in our rain, our rivers and eventually our food. These studies suggest that a dose of radiation from tritium may be three times as damaging as the same dose from x-rays. When tritium becomes a part of our food, our bodies are more likely to retain it. While tritium is inside our bodies, it bombards our body cells with radiation that can cause damage which can lead to cancer and other health problems. The unborn child is especially sensitive to damage from tritium, and young children are more sensitive than adults.</p>		
	<p>The bibliography that goes with that is from HEALTH AND ENERGY LEARNING PROJECT, 236 Massachusetts Avenue, Washington, D.C.</p>		
U6	<p>In closing, let me restate the League believes strongly in mitigation measures to correct the deficiencies in SRP's antiquated equipment. In our view, the real issues are not how little radioactivity is abroad in SRP's neighborhood, not how significant is the destruction of Steek Creek's ecology as compared to the rest of the marshlands and wildlife in Georgia and South Carolina.</p>	Mitigation measures	Section 4.4, Appendix I
U7	<p>The real issues are what caused the accidents at SRP and what is being done to prevent them. The answer to the latter issue</p>	Accident analysis	Sections 4.2.1, 4.4.1, Appendix G
U8	<p>is the installation of cooling towers and containment domes at</p>	Safety alternatives	Section 4.4.1
U9	<p>all reactor sites at SRP and mechanisms supplied for recycling discharge waters.</p>	Alternative cooling	Section 4.4.2, Appendix I See Comment E6
	<p>The EIS now in progress, truncated though it may be, should address itself to this question. And the injunction we will seek in a hearing scheduled for Washington, August 16th, will stop the process at L-Reactor and assure a more meaningful EIS.</p>		

K-57

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
U10	More importantly, it will give pause to determine by what scale of risk do we measure the values of a healthy and stable environment versus expediency and cost effectiveness.	Health effects	Sections 4.1.2.6, 4.2.1.5, 5.1.2.5, 5.2.7, Appendix G

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF KEN MATTHEWS			
<p>I'm Ken Matthews, a member of Natural Resources and Energy Management Committee of the Savannah Area Chamber of Commerce. I'm speaking on behalf of our organization. I want to thank you for this opportunity to present our point of view on the scope of the Environmental Impact Statement relative to the proposed restart of the L-Reactor.</p>			
<p>I might mention that the Savannah Chamber of Commerce is a business organization founded in 1803 that represents 1400 businesses in the community. Our primary emphasis is on economic development with additional concern for the quality of life that makes Savannah an attractive environment for our current residents as well as an incentive for attracting new business and industry to this area.</p>			
V1 V2	<p>The Chamber, as expressed previously, has grave concerns over the Department of Energy's plans for reactivation and expansion of facilities at the Savannah River Plant. Since our community is 88 miles downriver and downwind from the Savannah River Plant, we fear that our air and water quality may be adversely affected by the L-Reactor restart. Consequently, we believe that the Environmental Impact Statement should take into account the cumulative effects of the present and proposed facilities at the Savannah River Plant as well as those of contiguous operations, such as Georgia Power Company's Plant Vogtle and the Allied General Nuclear Processing Facility in Barnwell, South Carolina.</p>	<p>Atmospheric effects Surface water use SRP and regional effects</p>	<p>Sections 4.1.1.6, 4.1.2.1, 4.2.2.1, 4.3.1, 5.1.1.3, 5.1.2.2, Appendix B Sections 4.1.1.2, 5.1.1.4, 5.2.2, Appendix D Section 5.2.6</p>
V4 V5	<p>The Chamber also opposes any additional plant expansions until such time as more effective control of radioactive substances has been demonstrated for the existing facilities. We have a further concern that there is a double standard applied to those projects of the Department of Energy as opposed to those carried out by the private sector. Our concern is that the Department of Energy's standards are not comparable to those of the Nuclear Regulatory Commission, nor are they subject to the independent review of that agency.</p>	<p>Cumulative radiological effects Regulatory requirements</p>	<p>Sections 3.7.1, 5.1.2, 5.2.6 Sections 7.1, 7.2</p>

K-59

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
V6	The Chamber has consistently expressed its concern for protection of the aquifer which is recharged near the Savannah River Plant. Quality groundwater is an extremely important natural resource to Savannah and must be protected.	Groundwater contamination	Sections 4.1.2.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F See Comment B6
V7	As the Savannah area's groundwater supply becomes more scarce through increased demand, we believe that the community will be forced to rely to a much greater extent on the resources of the Savannah River for potable drinking water and for industrial use.	Surface water use	Sections 4.1.1.2, 5.1.1.4, 5.2.2, Appendix D
V8	The Environmental Impact Statement should address these health and public safety concerns that could affect our community's ability to grow and prosper.	Socioeconomic effects	Sections 4.1.1.1, 4.2.1.5, 5.1.1.1, 5.2.1
	We thank the Department of Energy for this opportunity to present our views to be considered in the scope of the Environmental Impact Statement, which we request address objectively our concerns for groundwater and river water contamination, cumulative effects of multiple radiological facilities in the area of the Savannah River, and thirdly, the L-Reactor components that are inconsistent with commercial facilities.		

K-60

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF JOEL REED			
	<p>I'm Joel Reed, and I don't have any affiliation. I just have three specific suggestions on use of information and data which will go into the EIS.</p>		
W1	<p>It's my understanding that the calculations for the maximum permissible amount of atmospheric emissions is based on an even distribution throughout the circumference area.</p>	Atmospheric effects	Sections 4.1.1.6, 4.1.2.1, 4.2.2.1, 4.3.1, 5.1.1.3, 5.1.2.2, Appendix B
	<p>I would like to remind the Department they need to consider the wind factor, which will reach an uneven build-up in certain areas downwind from the plant.</p>		
W2	<p>This also applies for the calculations for the water emissions, the waste in the water. I believe it's Cesium-137.</p>	Radiocesium remobilization	Sections 3.7.2, 4.1.2.4, Appendix B, Appendix D
	<p>You can assume that there is going to be an uneven distribution by current and wind. All this is going to affect and lead to an increased build-up in one area and no build-up in another area.</p>		
W3	<p>And the third suggestion is to consider the bioaccumulation of the waste in the food chain of the environment. The wastes that are emitted by the reactor in both atmosphere and water are going to be absorbed into the ecological food chain at each level. That means each organism, plant, fish, birds and humans, will be subjected to an increased build-up of waste, so you can't just look at one level in that chain. You have to consider the effects in each level of the chain.</p>	Radiological effects	Sections 5.1.2, 5.2.6, Appendix B

K-61

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF VIRGINIA BROWN			
X1	<p>I had thought I was going to precede two other speakers, so the timing on some of my verbs isn't quite right.</p> <p>To the United States Department of Energy: I am Virginia Brown here today representing the League of Women Voters of Savannah-Chatham. The local League has, over the past several months, worked closely with other Leagues of Women Voters which have involved themselves in the primary issues of environmental protection in connection with the start-up of the L-Reactor at the Savannah River Plant. We have joined forces also with other groups and individuals in some of their concerns about this issue and the other issues about environmental impact of the entire Savannah River Plant operation.</p>	SRP and regional effects	Section 5.2
	<p>The League of Women Voters has, from its beginning, concerned itself with taking action "in the public interest on government measures and policy." This is from a 1923 statement of purpose and policy of the League of Women Voters of the United States.</p>		
	<p>In the issue under discussion today regarding the Environmental Impact Statement on the L-Reactor, the League is gratified that our sought-after action to provide such an EIS is being implemented in accordance with requirements under the National Environmental Policy Act of 1969. The latter government policy measure was actively supported by the League of Women Voters of the United States from its inception.</p>		
	<p>Since then, the League has constantly monitored those activities which come under NEPA's regulatory requirements.</p>		
	<p>This week, our concerns about the Savannah River Plant have already been addressed by the League of Women Voters of South Carolina. We concur in the statement about needs made by the representatives of the South Carolina League.</p>		
	<p>Today, the Savannah-Chatham League of Women Voters is here to say we fully support statements about the Environmental Impact Statement regarding the L-Reactor and the impacts at the Savannah River Plant to be made by the League of Women Voters of</p>		

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
----------------	-----------	---------------	----------------------------

Georgia, represented by Ms. Geraldine LeMay and by Georgia Conservancy and Coastal Citizens for Clean Environment representative Larry Benedict.

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF MELISSA ALLEN HEATH			
	<p>My name is Melissa Allen Heath. I just represent myself. I'm a law student at the University of Georgia and will be co-chairman of the Environmental Law Association there this year.</p> <p>I echo all the concerns that have been voiced today. I have just a few things to add.</p> <p>One, I would like to formally register an observation that this hearing has not been widely publicized. It took me over an hour on the telephone yesterday to find out where it was, and the DOE telephone numbers in Atlanta are, as listed in the Atlanta information, now the Department of Labor.</p>		
Y1	I made several long-distance phone calls before I found this all out. My only other specific observation is the effect on a thousand acres of marshland through Steel Creek and possibly more each year should be measured not only in the effect on endangered species, but also the effect on all species and the effect on the ecosystem in general, not only through bioaccumulation and the effects on the river, but also just on the impact that will have on the ecosystem and on fisheries, which is a valuable resource in Georgia.	Wetland impacts	Sections 4.1.1.4, 4.4.2, 5.1.1.2, 5.2.4, Appendix C, Appendix I
Y2		Endangered species	Sections 3.6.1.4, 3.6.2.3, 4.1.1.4, Appendix C
Y3		Radiological effects	Sections 5.1.2, 5.2.6, Appendix B
Y4		Fisheries	Sections 5.2.4.2, 5.2.5.1, Appendix C
Y5		Safety alternatives	Section 4.4.1
Y6	Other than that, I think it's very important to consider the inclusion of a containment dome, cooling towers, recycling system and that the groundwater effects are an increased concern to everyone that I have talked to the last few days in Savannah.	Alternative cooling	Section 4.4.2, Appendix I, See Comment E6
Y7		Groundwater contamination	Sections 4.1.2.2, 4.4.3, 5.1.1.2, 5.1.1.4, Appendix F See Comment B6

K-64

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF ELWIN E. TILSON			
<p>My name is Elwin Tilson, and I am representing myself at this meeting. I am an assistant professor of radiation science; although I have numerous concerns that I would like the EIS to address, I feel that most of those have been addressed by other people in other areas.</p>			
<p>However, there is one area of extreme concern that I have in the preparation of the EIS, and that is in the rigor, the scientific rigor of the documents used to derive decisions used both in the Environmental Assessment, and I assume also being used in the development of the EIS.</p>			
Z1	<p>My professional opinion is that there are numerous cases in documents where there is insufficient scientific rigor, and there are assumptions that seriously affect the outcome of the study but are not adequately supported nor researched.</p>	NEPA procedures	Foreword
<p>There are three examples I would just like to bring to the attention of the hearing as general examples. This process has happened in numerous documents that I have reviewed.</p>			
Z2	<p>The first is the method used to calculate the radiation doses in both airborne and waterborne contamination from radioisotopes. It has one basic assumption in it that makes the calculation method inappropriate, and the calculation is based on the assumption of uniform distribution of radionuclides in the air for airborne releases or in the water for waterborne releases.</p>	Radiological effects	Sections 4.2.1, 5.1.2, 5.2.6, Appendix B, Appendix D
<p>Unfortunately, the way that these releases do operate, in reality, is not so that the release is uniformly distributed throughout a given volume of air or water. What happens is that the radiation is concentrated in areas and does tend to be -- it is very concentrated in some areas and uncentered in other areas.</p>			
<p>Many of the documents that have been used in the past make the assumption that there is uniform dilution of radionuclides in both airborne and waterborne types of situations, a major flaw in methodology.</p>			

K-65

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
Z3	<p>Another major flaw in methodology I have identified in the Environmental Assessment is the local lack of consideration of an effect called bioaccumulation. Bioaccumulation means just that plants and animals absorb radionuclides and will accumulate a higher level of radiation than the environment.</p> <p>They are in return eaten by higher organisms, and it accumulates further and further up the food chain.</p> <p>In many of the documents, it is totally ignored, and it is a major consequence from low level radiation release over periods of time.</p>	Radiological effects	Appendix B
Z4	<p>A third incidence of false assumptions when making conclusions is related to the containment system used at the L-Reactor. In the Environmental Assessment, the statement was made that irregardless of what the accident is, and one of the examples that they use was if they had a loss of coolant accident, that they have a filter system that is capable of removing virtually all or all of the airborne radionuclides.</p> <p>However, the one assumption they made there which is a false assumption is that the filters that are used in the containment system are equally effective when wet from steam, and in actuality, DOE documents do indicate that this particular filter system is not functional when it becomes water-saturated which, unfortunately, is exactly the situation that would happen with a loss of coolant accident.</p>	Accident analysis	Sections 4.2.1, 4.4.1, Appendix G
Z5	<p>There are many other types of examples that I could bring to the hearing, but my major concern is that in the preparation of the EIS, that the basic assumptions used behind the technical documents that are being used be reexamined and reassessed because, as I stated before, in my professional opinion, there are numerous false assumptions used to make decisions in documents.</p>	NEPA procedures	Foreword

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
STATEMENT OF JOHN MACLEAN			
<p>My name is John Maclean. I represent a very informal group of about a half dozen people. We have basically two concerns that we would like the EIS to address, some of which you have pointed out in your presentation.</p>			
AA1	<p>The first concern is that the L-Reactor and the requirements for the L-Reactor, there seems to be a double standard that may be applied to the L-Reactor versus a private group. For example, the NRC regulations for a private or utility-based power plant would be lot stricter, it seems, than the standards that are to be applied for the L-Reactor.</p>	Regulatory requirement	Chapter 7
<p>It would seem or would appear to seem that if the NRC is going to require a private utility plant to have various things, like a containment dome, a cooling tower, it would seem to make even more sense to have those same specifications, the same requirements for a plant that produces plutonium material for nuclear weapons.</p>			
<p>I think the double standard question should be addressed in the EIS.</p>			
AA2	<p>The second concern is very similar and that is that the EIS should at least spend some time in addressing the same scenario that Babcock &amp; Wilcox faced, Three Mile Island.</p>	Accident analysis	Sections 4.2.1, 4.4.1, Appendix G
<p>For example, would the L-Reactor actually survive the scenario of a locked overflow valve, the subsequent misreading of temperature by the instruments, the subsequent cutting off of the coolant pumps, the subsequent melting of the zirconium around the reactor core and the subsequent creation of a bubble underneath.</p>			
<p>At least Three Mile Island had a containment dome.</p>			
<p>Could the L-Reactor survive that same scenario? Granted it's a worst case scenario, but it did happen.</p>			

K-67

Table K-3. Scoping statements and EIS sections or DOE's responses (continued)

Comment number	Statement	Scoping topic	EIS section or DOE comment
-------------------	-----------	------------------	----------------------------

The EIS should address whether or not the L-Reactor could survive that and should also address whether or not the NRC requirements should be applied to the L-Reactor.