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NUCLEAR REGULATORY COMMISSION ISSUANCES

May 1997

U.S. NUCLEAR REGULATORY COMMISSION

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NUCLEAR REGULATORY COMMISSION ISSUANCES

May 1997

This report includes the issuances received during the specified period from the Commission (CLI), the Atomic Safety and Licensing Boards (LBP), the Administrative Law Judges (ALJ), the Directors' Decisions (DD), and the Decisions on Petitions for Rulemaking (DPRM)

The summaries and headnotes preceding the opinions reported herein are not to be deemed a part of those opinions or have any independent legal significance.

U.S. NUCLEAR REGULATORY COMMISSION

Prepared by the
Office of Information Resources Management
U.S. Nuclear Regulatory Commission
Washington, DC 20555–0001
(301–415–6844)

COMMISSIONERS

Shirley A. Jackson, Chairman
Kenneth C. Rogers
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.

B. Paul Cotter, Jr., Chief Administrative Judge, Atomic Safety & Licensing Board Panel

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Kenneth C. Rogers
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.

In the Matter of **Docket No. 55-20726-SP**

RALPH L. TETRICK
(Denial of Application for Reactor Operator License) **May 20, 1997**

The Commission remands to the Presiding Officer the issue whether Mr. Tetrick correctly answered Question 63 of his written Senior Operator examination, and directs the Presiding Officer to reconsider expeditiously his prior negative ruling in light of new information submitted to the Commission. The Commission also grants a temporary stay of both the Presiding Officer's Initial Decision and his order denying reconsideration of the Initial Decision (LBP-97-2, 45 NRC 51 (1997), and LBP-97-6, 45 NRC 130 (1997)).

MEMORANDUM AND ORDER

On February 28, 1997, the Presiding Officer issued an Initial Decision in this proceeding, concluding that Ralph L. Tetrick, who is currently a reactor operator at the Turkey Point Nuclear Generating Plant (Units 3 and 4), had answered correctly seventy-eight out of ninety-eight valid questions on his Senior Reactor Operator (SRO) written examination. This ruling resulted in Mr. Tetrick's score being changed to 79.59%. The Presiding Officer then rounded Mr. Tetrick's revised score of 79.59 to the nearest integer, 80, thereby giving him a passing grade on the written examination. LBP-97-2, 45 NRC 51 (1997).

The NRC Staff filed a Motion for Reconsideration challenging the Presiding Officer's decision to "round up" the score. The Presiding Officer denied the NRC Staff's motion. LBP-97-6, 45 NRC 130 (1997). The Staff then filed with the Commission both a request for stay and a petition for review of LBP-97-2 and LBP-97-6, again challenging the Presiding Officer's decision to "round up" Mr. Tetrick's test score. In response, Mr. Tetrick asserted that, if the Commission reviews the Presiding Officer's decisions on the "rounding" issue, it should also examine whether the Presiding Officer was correct in ruling that Mr. Tetrick had answered Question 63 of the SRO examination incorrectly.[1]

In a recent letter submitted by the NRC Staff to the Commission, dated May 1, 1997, the utility's Vice-President at Turkey Point has stated that he believes Mr. Tetrick's answer to Question 63 is a correct one. The Staff maintains otherwise. The matter appears to turn ultimately on the interpretation of language in a number of technical documents, some of which may not be in the record. This issue is, at bottom, a technical one on which we are unwilling to reverse or affirm the Presiding Officer without further factual and technical inquiry.

We therefore remand in its entirety the issue of Question 63 to the Presiding Officer and direct him to reconsider expeditiously his prior ruling in light of the utility's May 1st letter. "In Commission practice the [Presiding Officer], rather than the Commission itself, traditionally develops the factual record in the first instance." *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-10, 42 NRC 1, 2 (1995). *Accord Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 255 (1996).

We will defer a ruling on the "rounding up" issue, which remains pending before us, until after disposition of the remand. In light of our remand and the still-pending "rounding up" issue, we grant a temporary stay of LBP-97-2 and LBP-97-6. The Staff may withhold issuance of the Senior Reactor Operator license to Mr. Tetrick pending further order of the Commission.

---

[1] That question reads as follows:

Plant conditions:

- Preparations are being made for refueling operations.
- The refueling cavity is filled with the transfer tube gate valve open.
- Alarm annunciators H-1/1, SFP LO LEVEL and G-9/5, CNTMT SUMP HI LEVEL are in alarm.

Which ONE of the following is the required IMMEDIATE ACTION in response to these conditions?

a. Verify alarms by checking containment sump level recorder and spent fuel level indication.
b. Sound the containment evacuation alarm.
c. Initiate containment ventilation isolation.
d. Initiate control room ventilation isolation.

The only issue before us on appeal regarding Question 63 is whether Mr. Tetrick's answer of "a" is also correct. (Everyone agrees that answer "b" is correct.)

IT IS SO ORDERED.

For the Commission[2]

JOHN C. HOYLE
Secretary of the Commission

Dated at Rockville, Maryland,
this 20th day of May 1997.

[2] Commissioner Diaz was not available for the affirmation of this Order. Had he been present, he would have approved the Order.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Kenneth C. Rogers
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.

In the Matter of

REGENTS OF THE UNIVERSITY OF CALIFORNIA
(Indemnity Claim) **May 29, 1997**

The Commission denies the Regents' claim for the NRC's payment of attorney's fees and expenses incurred in the Regents' defense of two private tort suits against it (subsequently settled) for alleged harm caused by radioactive releases from the NRC-licensed Argonaut nuclear test reactor at the University of California at Los Angeles (UCLA).

The Commission finds that section 170 of the Atomic Energy Act (known as the Price-Anderson Act) bars the NRC's payment of licensee legal expenses incurred in connection with settlements. Furthermore, the Commission finds that even if it were permitted to pay such expenses under the Act, it would not approve the claim because by statute and under the Indemnity Agreement the Regents should have timely notified the NRC at the point where governmental indemnity arose and should have sought NRC approval of the settlement of the tort cases.

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

The Price-Anderson Act is best understood as barring Commission payment of licensee legal expenses incurred in connection with settlements. 42 U.S.C. § 2210(h).

NRC: CONSIDERATION OF INDEMNITY CLAIMS

The Commission cannot authorize expenditures of government money without express statutory authority or in the face of a statutory prohibition against such payments. 31 U.S.C. §§ 1341, 1350.

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

Section 170h of the AEA appeared in the original 1957 Price-Anderson Act. It provides the authority for the Commission, when it anticipates making indemnity payments for public liability claims, to collaborate with an indemnified person, approve payments of claims, take charge of such action, and settle or defend any such action.

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

The 1975 Hathaway Amendment altered section 170h of the AEA by providing that a Commission-approved settlement "shall not include expenses in connection with the claim incurred by the person indemnified."

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

The 1988 Price-Anderson Act amendments loosened restrictions on government payment of legal costs and modified several of the Hathaway Amendment provisions, but did not alter section 170h in any respect; therefore, the bar against indemnifying a licensee's expenses in settlements remains in place.

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

The Commission believes that a lawsuit that is dismissed voluntarily after a negotiated arrangement in which a licensee, among other things, forfeits any right to seek costs from plaintiff qualifies as a "settlement" and not a "dismissal."

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

The fact that a specific provision of the Price-Anderson Act other than section 170h was modified by the 1988 Amendments to contemplate government

payment of licensee legal costs in some situations does not mean that Congress repealed section 170h by implication.

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

The Price-Anderson Act contemplates that at the point where governmental indemnity arises in a public liability claim, the licensee will offer the government the opportunity to take over defense of the claims and manage the lawsuit. 42 U.S.C. § 2210(h).

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

By statute, a licensee is required both to notify the NRC that it has reached the point where government indemnification payments will be required under a public liability claim and to seek NRC's approval of the settlement of such a claim.

ATOMIC ENERGY ACT (AEA): INTERPRETATION OF SECTION 170h (PRICE-ANDERSON ACT)

The Price-Anderson Act provides for indemnification of expenses incurred defending claims against licensees, not reimbursement for expenses incurred in presenting claims to the government.

DECISION

I. INTRODUCTION

In a series of letters beginning on January 17, 1996, the Regents of the University of California have demanded that the Commission pay $91,375.22 in indemnification for attorneys' fees and expenses incurred in defending two private tort suits against the Regents.[1] The Regents seek indemnification under

[1] The Regents' initial letter, dated January 17, 1996, demanded NRC payment of $76,102.26. More recently, in a letter dated January 31, 1997, the Regents amended their claim to include an additional $15,272.96 in legal costs, an amount that apparently reflects attorneys' fees and costs the Regents have incurred in pursuing their indemnity claim with the NRC. The Regents' submissions do not make clear who bears the risk of loss in the event that the NRC rejects the indemnity claim. That presumably is a matter of contract among the Regents, their private insurer, and the law firm that has handled this matter.

section 170 of the Atomic Energy Act, 42 U.S.C. § 2210 (known as the Price-Anderson Act), and under their indemnity agreement with the Commission executed pursuant to that Act.

The two underlying tort suits, known as the *Miller* and *Redisch* cases, sought damages for harm to plaintiffs' persons allegedly caused by releases of radioactivity during normal operations of the NRC-licensed Argonaut nuclear test reactor at the University of California at Los Angeles (UCLA) between 1979 and 1984. By late October 1996, the Regents had settled both cases, which therefore were never tried or decided on the merits. The settlements resulted in the payment of no damages to plaintiffs. Under their terms, plaintiffs voluntarily dismissed their lawsuits, and the Regents relinquished all rights to seek legal costs from plaintiffs.

Under the Price-Anderson Act and under the Commission's indemnity agreement with the Regents, the Commission agreed to indemnify the Regents for "public liability" exceeding $250,000 when such liability arises from a "nuclear incident." *See* section 170k, 42 U.S.C. § 2210(k). The Regents' January 17, 1996 claim for indemnity asserted that expenses incurred in defending the *Miller* and *Redisch* cases exceeded the $250,000 threshold by roughly $76,000. The Regents' private insurer apparently paid the first $250,000 in legal costs.

In a letter dated August 6, 1996, the Commission's Office of the General Counsel advised lawyers for the Regents that it was disinclined to recommend payment of the indemnity claim. More than 6 months later, on January 31, 1997, the Regents replied and asked that their claim be presented directly to the Commission.

After reviewing the factual background of the Regents' indemnity claim, the relevant provisions of the Price-Anderson Act, and the Regents' letters and submissions to the NRC detailing their claim, we have decided to deny it — for two independent reasons. First, the Price-Anderson Act is best understood as barring Commission payment of licensee legal expenses incurred in connection with settlements. *See* section 170h, 42 U.S.C. § 2210(h). Second, even if we were able to construe the Act to permit Commission payment of such expenses as a general matter, we would not approve an indemnity payment in this case because the Regents failed to give the Commission reasonable notice of the extent of their expenses in time for the Commission to take protective measures. *See id.* Some of the expenses also appear unreasonably excessive or insufficiently related to defense of the underlying tort suits.

We detail the reasons for our decision below. We issue our decision as a formal opinion because the Regents specifically requested Commission consideration of their indemnity claim, and because our views may shed some light on seldom invoked provisions of the Price-Anderson Act.

II. DISCUSSION

The Commission plainly cannot authorize expenditures of government money without express statutory authority or in the face of a statutory prohibition against such payments. Both the Constitution (the Appropriations Clause, art. 1, § 9, cl. 7) and federal statute (31 U.S.C. §§ 1341, 1350) impose this restriction on Commission expenditures. *See Office of Personnel Management v. Richmond,* 496 U.S. 414, 424-30 (1990). Under the related "sovereign immunity" doctrine (*id.* at 432), a claimant may not pursue monetary relief against the government absent authority "unequivocally expressed in statutory text." *Lane v. Pena,* 116 S. Ct. 2092, 2096 (1996).

This background law requires the Commission to scrutinize the Regents' claim against the public treasury in this case with great care. We cannot discern the clear authority necessary to pay the claim. Nor would we find the claim otherwise payable even if we were able to answer the authority question differently.

1. Authority to Pay

Contrary to the Regents' view, we believe that section 170h of the Atomic Energy Act provides the governing law. That section appeared in the original 1957 Price-Anderson Act and to this day provides the authority for the Commission to collaborate with an indemnified person, approve payments of claims, appear through the Attorney General on behalf of the person indemnified, take charge of such action, and settle or defend any such action. Section 170h further provided, in its original form, that a settlement "may include reasonable expenses in connection with the claim incurred by the person indemnified."[2]

Section 170h has had only one substantive alteration. That came in 1975 as part of a series of changes presented as an amendment by Senator Hathaway. Senator Hathaway's aim was (at least in part) to ensure that government indemnity money ended up in the hands of victims of nuclear incidents, and was not diverted to attorney's fees and other costs. *See generally* Damage Claims Under the Atomic Energy Act, 1 U.S. Op. OLC 157 (1977).

The Hathaway Amendment altered a number of the Act's provisions, including section 170h, which as revised provided that a Commission-approved settlement "shall *not* include expenses in connection with the claim incurred by the person indemnified" (emphasis added). "Therefore," concluded the Comptroller General in a 1980 opinion, "the Act must be interpreted as follows: the gov-

[2] *See* H.R. Rep. No. 296, 85th Cong., 1st Sess. 23 (1957) (noting that the expenses "could include reasonable attorney's fees incurred by the person indemnified in examining any claims").

ernment will not indemnify a person for his legal expenses." *See* "Interpretation of Price-Anderson Act," File B-197742, 1980 WL 16980, at *4 (C.G.).

In 1988 amendments to the Price-Anderson Act, after revisiting the legal costs issue in cognizant committees, Congress loosened the across-the-board restrictions on government payment of legal costs and modified several of the Hathaway Amendment provisions, *but did not alter section 170h in any respect.* This leaves in place the section 170h bar against indemnifying a licensee's expenses in settlements and prevents the Commission from paying the legal expenses incurred by the Regents in settling the *Miller* and *Redisch* cases. Congress may have assumed that licensees' own insurance would be adequate to cover legal costs in such cases. *See* Damage Claims Under the Atomic Energy Act, 1 U.S. Op. OLC at 158 & n.3 (discussing legislative history of Hathaway Amendment).

The Regents argue that section 170h does not apply here because the *Miller* and *Redisch* lawsuits in actuality were dismissed, not settled. We find this argument wholly unpersuasive. The documents the Regents themselves have provided us show plainly that the two cases were dismissed voluntarily and only after the parties reached a negotiated arrangement in which the Regents, among other things, forfeited any right to seek costs from plaintiffs. By any standard, this qualifies as a "settlement."

The Regents' only other argument is that the section 170h bar must give way because it is less "specific" than another provision, section 170k, which applies to educational institutions and appears to contemplate government payment of licensee legal costs in some situations.[3] As noted above, the "legal costs" language currently found in section 170k (and in other Price-Anderson Act provisions) dates from the 1988 Amendments that modified some aspects of the 1975 Hathaway Amendment but made no changes in section 170h. Standard principles of statutory construction prevent us from assuming that Congress repealed section 170h by implication. *Watt v. Alaska,* 451 U.S. 259, 266-67 (1981). On the contrary, we are obliged to give effect to all statutory provisions.

[3] Section 170k's applicability here is far from crystal clear by its own terms. That provision establishes that the Commission shall indemnify educational licensees "from public liability in excess of $250,000 for nuclear incidents," and says that the "aggregate indemnity" in connection with each nuclear incident may not exceed $500,000,000, "including such legal costs as are approved by the Commission." But in this case the aggregate indemnity limit was never approached. And no public liability payment was made, much less one in excess of $250,000. By definition, "public liability" does not include legal costs; by contrast, licensees' own "financial protection" is defined as including damages and legal costs. *See* sections 11k, 11w, 42 U.S.C. §§ 2014(k), (w). For educational institutions the financial protection requirement was waived and instead the requirement for exceeding $250,000 in public liability was established as the trigger for governmental indemnity. *See* section 170k, 42 U.S.C. § 2210(k).

Id. See Bennett v. Spear, 117 S. Ct. 1154, 1166 (1997).[4] We cannot, therefore, accept the Regents' invitation simply to ignore the section 170h prohibition.

We see no basis, in sum, for disregarding section 170h's apparent prohibition against paying licensee legal expenses incurred in settling cases. The Regents themselves have offered us none. We therefore decline to approve their indemnity claim.

2. *Prior Notice and Reasonableness of Indemnity Claim*

Even if section 170h did not bar Commission reimbursement of licensee legal costs in settled cases, as we think it does, we would not approve payment of the Regents' indemnity claim in this case. The Price-Anderson Act, and the NRC's indemnity agreement with the Regents, indisputably contemplate Commission "approval" of claims for legal costs. Such a right of approval implies Commission review for reasonableness. Here, we cannot find the Regents' claim reasonable.

a. As a matter of procedure, the Price-Anderson Act contemplates that at the point where governmental indemnity arises, here at the $250,000 threshold, the licensee will offer the government the opportunity to take over defense of the claims and manage the lawsuit. *See* section 170h, 42 U.S.C. § 2210(h). One purpose of this provision, presumably, is to allow the government to take over representation or active management of the case with a view toward minimizing public expenses.

Here, a series of letters from counsel for the Regents did alert the NRC Staff to the existence of the *Miller* and *Redisch* cases, and to the possibility of exceeding the $250,000 limit. But the Regents' letters also indicated that plaintiffs' merits claims were insubstantial and that the case would be "tendered" to the NRC if expenses reached the $250,000 limit. *See, e.g.,* Letter dated August 10, 1995. No "tender" ever occurred until the two cases ended, after the Regents had exceeded the $250,000 limit by nearly $80,000. The lack of timely tender prejudiced the NRC.

Eight days before the parties agreed on the settlement in *Redisch*, with the *Miller* suit having already been dismissed, the Regents' insurer sent the NRC a letter reporting $28,534.08 in remaining "available financial protection" from the private insurer and indicating that tender to NRC was expected "in the very near future since [the *Redisch* case] is still unresolved." *See* Letter from Boehner, dated October 18, 1995. But it now appears that in actuality the Regents' law

[4] Our reading of section 170h does not nullify the "legal costs" authorization found in section 170k or in other provisions of the Price-Anderson Act. Those provisions remain applicable in the absence of a settlement. Moreover, even in connection with a settlement, the Commission could approve payment of *plaintiffs'* legal costs. *See* section 11jj, 42 U.S.C. § 2014(jj). Section 170h simply prevents Commission payment of licensees' legal costs in settling a case.

firm at that time already had incurred additional billable hours amounting to more than $30,000 and already had paid out additional expenses in excess of $20,000 (many apparently incurred much earlier). In other words, the Regents already had entirely consumed and substantially exceeded the $28,534 that supposedly remained as "available financial protection."

Thus, if the Regents were correct that their legal expenses were payable by the NRC after $250,000 (*but see* note 3, *supra*), they had reached an appropriate tender time and passed it before they negotiated the *Redisch* settlement. By statute, they not only ought to have notified the NRC but they also should have sought NRC approval of the settlement. *See* section 170h, 42 U.S.C. § 2210(h). As part of the settlement, however, and without NRC approval, they relinquished any right to claim legal costs against plaintiffs or monetary sanctions under Rule 11 of the Federal Rules of Civil Procedure. Had the NRC been given presettlement notice that the $250,000 limit had been reached, it might have insisted on some recompense from plaintiffs or their lawyers for the substantial expenses their insubstantial lawsuit had caused. The government almost surely would have limited any further expenditures by the private lawyers.

Even the Regents' letter reporting termination of the case indicated that there still remained $3,654.94 of the insurance money. That letter suggested only that "some expense in excess" of $250,000 might be expected. *See* Letter dated December 6, 1995. By then, of course, there was no case for the government to take over and no opportunity to minimize government costs. In addition, when read in conjunction with the prior letter's reference to $28,000 in remaining financial protection, the close-out letter's language raised no expectation of more than a *de minimis* exceeding of the $250,000 limit. The NRC therefore was quite surprised a few weeks later, when counsel for the Regents demanded $76,000 from the Commission. The substantial excess, one-third again over the insurance amount, apparently occurred in some measure because of late-arriving bills for earlier-performed services.

In these circumstances, the government was not given a timely opportunity to take over these cases and minimize public costs. The Regents have since suggested that the NRC Staff ought to have been aware that experts' fees would be high and that pretrial preparation would be expensive; however, the people in the best position to make that assessment were the defendants' counsel themselves. The Regents' correspondence did not call attention to the apparently lengthy lag time between incurring obligations for expenses and notification of them as expenditures. And, as we stressed above, the Regents did not make its tender in time for the NRC to monitor and approve the ultimate settlement or otherwise to take action in an attempt to minimize the potential costs to the U.S. government.

In short, given the Regents' failure to timely tender the case to the NRC, we do not find it reasonable for the government to pick up the bill for the Regents' expenses.

b. In addition, some of the expenses incurred by the Regents in reaching and exceeding the $250,000 limit appear questionable substantively. To begin with, we see no basis in the Price-Anderson Act to approve the Regents' claim for approximately $15,000 in attorney's fees and costs incurred *after* termination of the underlying tort suits, apparently as part of the Regents' effort to persuade the NRC to make indemnity payments. *See* note 1, *supra.* The Act provides for indemnification of expenses incurred defending claims against licensees, not reimbursement for expenses incurred in presenting claims to the government.

The Regents' fee claim raises a number of additional questions. For example, the billing records' descriptions of law firm hours are often vague and insufficiently segregated as to tasks as well as being chronologically out of order — with significant expenses for billed hours appearing considerably later than previous invoices represented as being "for services rendered through" a specified date. Moreover, the billing records indicate that counsel incurred substantial expenses on matters not directly related to defense of the tort cases, such as correspondence with the insurer-client and organizing what were apparently disorganized UCLA files. Finally, the records show that high-priced law firm partners, rather than associates or paralegals, conducted such fairly mundane tasks as document and privilege reviews and also that they traveled extensively to meet with experts rather than conduct conferences by telephone, at significantly less expense.

The Regents might be able to provide adequate answers to some or all of our substantive questions. But we need not resolve these questions definitively in view of our decision on other grounds not to pay Price-Anderson Act indemnity in this case.

III. CONCLUSION

For the foregoing reasons, the Commission declines to approve the Regents' indemnity claim.

For the Commission

JOHN C. HOYLE
Secretary of the Commission

Dated at Rockville, Maryland,
this 29th day of June 1997.

Atomic Safety and Licensing Boards Issuances

ATOMIC SAFETY AND LICENSING BOARD PANEL

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Thomas S. Moore, Chairman
Richard F. Cole
Frederick J. Shon

In the Matter of **Docket No. 70-3070-ML**
(ASLBP No. 91-641-02-ML)
(Special Nuclear Material License)

LOUISIANA ENERGY SERVICES, L.P.
(Claiborne Enrichment Center) **May 1, 1997**

In this Final Initial Decision in the combined construction permit–operating license proceeding for the Claiborne Enrichment Center, the Licensing Board (1) determines that a thorough NRC Staff investigation of the facility site selection process is essential to determine whether racial discrimination played a role in that process, thereby ensuring compliance with the nondiscrimination directive contained in Executive Order 12898; (2) resolves in favor of the Intervenor portions of the contention concerning the adequacy of the Staff's treatment in the final environmental impact statement of the impacts of relocating the parish road connecting the African American communities of Forest Grove and Center Springs and the economic impacts of the facility on properties in those communities; and (3) denies the Applicant's requested authorization for a license.

NEPA: ENVIRONMENTAL JUSTICE

On February 11, 1994, the President issued Executive Order 12898, 3 C.F.R. 859 (1995), titled "Federal Actions to Address Environmental Justice in Minority

Populations and Low-Income Populations," and an accompanying Memorandum for the Heads of All Departments and Agencies, 30 Weekly Comp. Pres. Doc. 279 (Feb. 14, 1994). The President's memorandum states that the Executive Order is designed "to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice" and "to promote nondiscrimination in Federal programs substantially affecting human health and the environment."

NEPA: ENVIRONMENTAL JUSTICE

As an independent regulatory agency the NRC is not mandatorily subject to Executive Order 12898. Nevertheless, on March 31, 1994, the then Chairman of the Commission wrote the President stating that the NRC would carry out the measures in the Executive Order. By voluntarily agreeing to implement the President's environmental justice directive, the Commission has made it fully applicable to the agency and, until that commitment is revoked, the President's order, as a practical matter, applies to the NRC to the same extent as if it were an executive agency. The NRC is obligated, therefore, to carry out the Executive Order in good faith in implementing its programs, policies, and activities that substantially affect human health or the environment.

NEPA: ENVIRONMENTAL JUSTICE

Although Executive Order 12898 does not create any new rights that the Intervenor may seek to enforce before the agency or upon judicial review of the agency's actions, the President's directive is, in effect, a procedural directive to the head of each executive department and agency that, "to the greatest extent practicable and permitted by law," it should seek to achieve environmental justice in carrying out its mission by using such tools as the National Environmental Policy Act.

NEPA: ENVIRONMENTAL JUSTICE

Pursuant to the President's order, there are two aspects to environmental justice: first, each agency is required to identify and address disproportionately high and adverse health or environmental effects on minority and low-income populations in its programs, policies, and activities; and second, each agency must ensure that its programs, policies, and activities that substantially affect human health or the environment do not have the effect of subjecting persons and populations to discrimination because of their race, color, or national origin.

NEPA: ENVIRONMENTAL JUSTICE

It is clear that Executive Order 12898 directs all agencies in analyzing the environmental effects of a federal action in an EIS required by NEPA to include in the analysis, "to the greatest extent practicable," the human health, economic, and social effects on minority and low-income communities.

NEPA: ENVIRONMENTAL JUSTICE

In using the term human health and environmental "effects" in Executive Order 12898 and the accompanying memorandum the President's order tracks the regulations of the Council on Environmental Quality ("CEQ") that define "effects" to include both direct and indirect effects and states that "[e]ffects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." 40 C.F.R. § 1508.8(b).

NEPA: ENVIRONMENTAL JUSTICE

Executive Order 12898 does impose duties on the NRC because the Commission has undertaken to carry out the President's directive, but no party to an agency proceeding has a remedy with regard to the manner in which the agency carries out its commitment to the President to implement Executive Order 12898.

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FINAL INITIAL DECISION
(Addressing Contention J.9)

This Final Initial Decision addresses the remaining contention — environmental justice contention J.9 — filed by the Intervenor, Citizens Against Nuclear Trash ("CANT"), in this combined construction permit–operating license proceeding. The Applicant, Louisiana Energy Services, L.P. ("LES"), seeks a 30-year materials license to possess and use byproduct, source, and special nuclear material in order to enrich uranium using a gas centrifuge process at the Claiborne Enrichment Center ("CEC"). The Applicant plans to build the CEC on a 442-acre site in Claiborne Parish, Louisiana, that is immediately adjacent to and between the unincorporated African-American communities of Center Springs and Forest Grove, some 5 miles from the town of Homer, Louisiana.

There is no serious dispute between the parties regarding the essential facts concerning the site location and area demographics. Claiborne Parish is in northern Louisiana and lies along the southern border of Arkansas. The proposed CEC site is located in the approximate center of the parish some 50 miles northeast of Shreveport, Louisiana. The site, called the LeSage property, is a rough approximation of a square and the CEC will occupy the center 70 acres of the site. The LeSage property is currently bisected by Parish Road 39 (also known as Forest Grove Road) running north and south through the property.

Immediately to the north of the site, Parish Road 39 crosses State Road 9 that runs in a northeasterly direction from the town of Homer 5 miles away. The community of Center Springs, roughly centered on the Center Springs Church, lies along State Road 9 and Parish Road 39 and is located approximately 0.5 kilometer (about 0.33 mile) to the north of the LeSage property. The community of Forest Grove, again very roughly centered on the Forest Grove Church, lies approximately 3.2 kilometers (about 2 miles) south of the site along Parish Road 39 (and other intersecting unnamed local roads). The Forest Grove Community runs south along Parish Road 39 to where Parish Road 2 crosses State Road 2 that runs in an easterly direction from the town of Homer. The two community churches, which share a single minister, are approximately 1.1 miles apart, with the LeSage property lying between them.

The community of Forest Grove was founded by freed slaves at the close of the Civil War and has a population of about 150. Center Springs was founded around the turn of the century and has a population of about 100. The populations of Forest Grove and Center Springs are about 97% African American. Many of the residents are descendants of the original settlers and a large portion of the landholdings remain with the same families that founded the communities. Aside from Parish Road 39 and State Road 9, the roads in Center Springs or Forest Grove are either unpaved or poorly maintained. There are no stores, schools, medical clinics, or businesses in Center Springs or Forest Grove. The Intervenor's evidence was undisputed that from kindergarten through high school the children of Center Springs and Forest Grove attend schools that are largely racially segregated. Many of the residents of the communities are not connected to the public water supply. Some of these residents rely on groundwater wells while others must actually carry their water because they have no potable water supply.

Although none of the parties put in any specific statistical evidence on the income and educational level of the residents of Forest Grove and Center Springs, the 1990 United States Bureau of the Census statistics in the record show they are part of a population that is among the poorest and most disadvantaged in the United States. Claiborne Parish is one of the poorest regions of the United States with a total population in 1990 of 17,405 and a racial makeup of 53.43% white and 46.09% African American. Over 30% of the parish population live below the poverty level with over 58% of the black population and 11% of the white population living below the poverty line. Per capita income of the black population of Claiborne Parish is only 36% of that of the white population, compared to a national average of 55%. Over 69% of the black population of Claiborne Parish earn less than $15,000 annually, 50% earn less than $10,000, and 30% earn less than $5,000. In contrast, among whites in the parish, 33% earn less than $15,000 annually, 21.5% earn less than $10,000, and 6.5% earn less than $5,000. In Claiborne Parish, over 31% of blacks live in households in which there are no motor vehicles and over 10% live in households that lack complete plumbing. Over 50% of the African-American households in the parish have only one parent, 58% of the black population have less than a high school education, including almost 33% of the parish black population over 24 years old that has not attained a ninth grade education.

The Intervenor's environmental justice contention is grounded in the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 *et seq.* ("NEPA"). As originally filed, the contention essentially asserts that the negative economic and sociological impacts of closing Parish Road 39 connecting the minority communities to make way for the plant and placing the facility in the midst of a rural black community of over 150 families have not been appropriately considered in the Applicant's Environmental Report ("ER").

Further, the contention claims that the siting of the CEC follows a national pattern of siting hazardous facilities in minority communities and that no steps to avoid or mitigate the disparate impact of the CEC on this minority community have been taken.

With this Final Initial Decision addressing contention J.9, all of the issues in the licensing proceeding will have been addressed. The history of this proceeding may be found in three previous decisions. *See* LBP-96-7, 43 NRC 142 (1996); LBP-96-25, 44 NRC 331 (1996); LBP-97-3, 45 NRC 99 (1997). Suffice it to say that the three earlier Partial Initial Decisions decided all of the Intervenor's other health, safety, safeguards, environmental, financial qualification, and decommissioning funding contentions in the proceeding. Like a number of the other contentions in this proceeding, the Intervenor's environmental justice contention J.9 presents questions of first impression in NRC licensing proceedings.

I. ENVIRONMENTAL JUSTICE CONTENTION

A. Contention J.9

In its entirety, the Intervenor's contention J.9 asserts that the Applicant's Environmental Report does not adequately describe or weigh the various environmental, social, and economic impacts and costs of operating the CEC. In support of the contention, it then states:

> BASIS: NEPA requires the NRC to fully assess the impacts of the proposed licensing action, and to weigh its costs and benefits. LES' Environmental Report contains a brief "benefit-cost analysis" that is improperly slanted in favor of the benefits of the project, and contains little discussion of the potentially significant impacts and their environmental and social costs. The discussion is inadequate with respect to the following issues:
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> . . . .
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> 9. The proposed plant will also have negative economic and sociological impacts on the minority communities of Forest Grove and Ce[nter] Springs. Forest Grove Road, which joins the two communities, must be closed in order to make way for the proposed plant, which would lie between them. If the road is closed off, it will cause hardships to families who use the road, residents who car-pool to work, school transportation, sports-related activities that involve children living in both communities, and church services that are divided between the two communities.
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> Moreover, the ER does not reflect consideration of the fact that the plant is to be placed "in the dead center o[f] a rural black community consisting of over 150 families." The proposed siting of the CEC in a minority community follows a pattern noted in a 1987 study by the United Church of Christ, "Toxic Wastes and Race In the United States, A National Report on the Racial and Socio-Economic Characteristics of Communities With Hazardous Waste Sites." The study found that "[r]ace proved to be the most significant among variables tested in association with the location of commercial hazardous waste facilities. This represented

> a consistent national pattern." It also found that "In communities with one commercial hazardous waste facility, the average minority percentage of the population was twice the average minority percentage of the population in communities without such facilities (24 percent vs. 12 percent)." The ER does not demonstrate any attempts to avoid or mitigate the disparate impact of the proposed plant on this minority community. [Citations and footnotes omitted.]

In opposing the admission of the contention before the Licensing Board, the Applicant argued that CANT's "allegations are premised on speculation" and that the Intervenor had provided "no support for the proposition that closing off Forest Grove Road and building the plant will have negative impacts on the two communities." LBP-91-41, 34 NRC 332, 353 (1991). The NRC Staff did not oppose the admission of the contention. The Licensing Board, as then constituted, admitted contention J.9 ruling that "CANT has identified an issue with sufficient basis and specificity to meet the requirements of [10 C.F.R. § 2.714(b)(2)]." *Id.* As in the case of several of the Intervenor's other contentions that were heard in this proceeding, CANT contention J.9, which was required by the Commission's Rules of Practice to be filed before the issuance of the environmental impact statement ("EIS"), is phrased only in terms of a challenge to the Applicant's ER. *See* LBP-96-25, 44 NRC at 337-38. Nevertheless, the Intervenor's contention necessarily encompasses the Staff's later-filed final environmental impact statement and all parties in their evidentiary presentations on contention J.9 included evidence on all aspects of the issues. *See id.*; 10 C.F.R. § 2.714(b)(2)(iii).

Further, as indicated in the earlier decisions in this proceeding, the Commission's Rules of Practice, 10 C.F.R. § 2.732, provide that the Applicant has the burden of proof in the proceeding. Therefore, in order for the Applicant to prevail on each contested factual issue, the Applicant's position must be supported by a preponderance of the evidence. *See* LBP-96-7, 43 NRC at 144-45. As LBP-96-25 indicates, however, where environmental and NEPA issues are involved, care must be taken in applying the Commission's general burden of proof rule because the NRC, not the Applicant, has the burden of complying with NEPA. Accordingly, because the Commission's regulations require the Applicant to file an environmental report and prescribe its contents, the Applicant has the burden on contentions, or portions of contentions like J.9, asserting deficiencies in the ER. Similarly, because the Staff is ultimately responsible for preparing the EIS required by NEPA, the Staff generally has the burden on contentions, or portions of contentions like J.9 that are taken to assert deficiencies in the FEIS. Additionally, because the Staff relies extensively upon the Applicant's ER in preparing the EIS, when the Applicant becomes a proponent of a particular challenged position set forth in the EIS, the Applicant, as such a proponent, also has the burden on that matter. *See* LBP-96-25, 44 NRC at 338-39.

Finally, we reiterate the additional NEPA obligations the Commission placed upon the Licensing Board in the hearing notice. The Commission directed the Board to determine whether the Staff's environmental review conducted pursuant to 10 C.F.R. Part 51 was adequate and whether the agency had complied with the requirements of section 102(2)(A), (C), and (E) of NEPA. In addition, the Commission instructed the Board independently to consider the cost-benefit balance among the conflicting factors contained in the record of the proceeding. *See* 56 Fed. Reg. 23,310 (1991). As we noted previously in LBP-96-25, 44 NRC at 339, "[a]lthough obviously related, these obligations placed upon us by the Commission to ensure the agency's compliance with NEPA are independent of the parties' burdens with respect to the Intervenor's environmental contentions."

B. Executive Order 12898

Subsequent to the admission of the Intervenor's contention J.9 and the Staff's issuance of the draft EIS, on February 11, 1994, the President issued Executive Order 12898, 3 C.F.R. 859 (1995), and an accompanying Memorandum for the Heads of All Departments and Agencies, 30 Weekly Comp. Pres. Doc. 279 (Feb. 14, 1994). The President's order, titled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," contains a number of provisions but two are most pertinent here. In subsection 1-101 under the heading "Agency Responsibilities," the President directs that

> [t]o the greatest extent practicable and permitted by law . . . each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.

3 C.F.R. at 859. Further, in section 2.2, the President orders that

> [e]ach Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.

Id. at 861. The President's directive also contains a number of general provisions. In subsection 6-604, the President requests that independent agencies comply with the provisions of the order. *See id.* at 863. Finally, subsection 6-609 states that the order is intended to improve the internal management of the

executive branch and that it does not create any substantive or procedural rights in any person or create any right of judicial review. *See id.*

The President's memorandum accompanying the order states that the Executive Order is designed "to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice" and "to promote nondiscrimination in Federal programs substantially affecting human health and the environment." 30 Weekly Comp. Pres. Doc. at 279. To accomplish these goals, the Presidential memorandum specifically states that, in conducting analyses required by NEPA, "[e]ach Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities." *Id.* at 280.

It is the NRC's position that, as an independent regulatory agency, the NRC is not mandatorily subject to Executive Order 12898. Nevertheless, on March 31, 1994, the then Chairman of the Commission wrote the President stating that the NRC would carry out the measures in the Executive Order. In furtherance of this agency commitment, the NRC has participated in the Interagency Working Group on Environmental Justice created by the Executive Order and the NRC has drafted an environmental justice strategy as called for by the President's order.

Although Executive Order 12898 does not create any new rights that the Intervenor may seek to enforce before the agency or upon judicial review of the agency's actions, the President's directive is, in effect, a procedural directive to the head of each executive department and agency that, "to the greatest extent practicable and permitted by law," it should seek to achieve environmental justice in carrying out its mission by using such tools as the National Environmental Policy Act. Pursuant to the President's order, there are two aspects to environmental justice: first, each agency is required to identify and address disproportionately high and adverse health or environmental effects on minority and low-income populations in its programs, policies, and activities; and second, each agency must ensure that its programs, policies, and activities that substantially affect human health or the environment do not have the effect of subjecting persons and populations to discrimination because of their race, color, or national origin. Thus, whether the Executive Order is viewed as calling for a more expansive interpretation of NEPA as the Applicant suggests[1] or as merely clarifying NEPA's longstanding requirement for consideration of the impacts of major federal actions on the "human" environment as the Intervenor

[1] Applicant's Proposed Findings of Fact and Conclusions of Law (May 26, 1995) at 223-24 [hereinafter App. P.F.].

argues,[2] it is clear the President's order directs all agencies in analyzing the environmental effects of a federal action in an EIS required by NEPA to include in the analysis, "to the greatest extent practicable," the human health, economic, and social effects on minority and low-income communities.[3]

By voluntarily agreeing to implement the President's environmental justice directive, the Commission has made it fully applicable to the agency and, until that commitment is revoked, the President's order, as a practical matter, applies to the NRC to the same extent as if it were an executive agency. The NRC is obligated, therefore, to carry out the Executive Order in good faith in implementing its programs, policies, and activities that substantially affect human health or the environment. Further, because NRC licensing actions are activities that substantially affect human health and the environment, the Executive Order is applicable to the licensing of the CEC.

Thus, in carrying out the additional obligation the Commission has placed upon us in the hearing order (i.e., to ensure that the Staff's environmental review is adequate and in compliance with section 102(2)(A), (C), and (E) of NEPA), we necessarily also must ensure agency compliance with the President's environmental justice directive. Hence, contrary to the Applicant's assertion,[4] Executive Order 12898 does impose duties on the NRC because the Commission has undertaken to carry out the President's directive, but no party to this proceeding has a remedy with regard to the manner in which the agency carries out its commitment to the President to implement Executive Order 12898.

C. Witnesses and Exhibits

Before turning to the substance of the environmental justice issues before us, we first briefly detail the witnesses and exhibits that were presented by the parties. Consistent with the Commission's burden-of-proof rule and in accordance with the stipulation of the parties, the Applicant presented its case first, followed by the Intervenor, and then the Staff. In support of its position on contention J.9, the Applicant presented the prefiled direct testimony of Peter G. LeRoy, the Licensing Manager of the CEC, and the prefiled testimony of a panel of witnesses consisting of B. William Dorsey, William H. Schaperkotter, Larry Engwall, Jesse B. Swords, and Peter G. LeRoy. Although the Applicant's

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[2] Citizens Against Nuclear Trash's Proposed Reply Findings of Fact and Conclusions of Law Regarding Contention J.9 (June 26, 1995) at 2-3 [hereinafter CANT R.F.].

[3] In using the term human health and environmental "effects" in Executive Order 12898 and the accompanying memorandum, the President's order tracks the regulations of the Council on Environmental Quality ("CEQ") that define "effects" to include both direct and indirect effects and states that "[e]ffects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." 40 C.F.R. § 1508.8(b). *See also* 40 C.F.R. § 1508.14.

[4] App. P.F. at 227.

witnesses appeared as a single panel, the two sets of testimony are separately numbered and appear bound in the record one after the other. (LeRoy fol. Tr. 840; Dorsey et al. fol. Tr. 840.)

Mr. LeRoy was responsible for compiling the information in the Applicant's ER and several ER amendments on the potential environmental, economic, and sociological impacts associated with the CEC. (LeRoy at 1-2 fol. Tr. 840.) He also had primary responsibility for the preparation of section 7 of the ER that describes the CEC site selection process, although Mr. LeRoy had no direct involvement in the siting process, having first become involved with the CEC in July 1989. (*Id.* at 1; Dorsey et al. at 5-6 fol. Tr. 840.)

Mr. Dorsey is employed by Fluor Daniel, Inc.,[5] as Director of Siting and Consulting Services, a position he has held since 1974. In that capacity, he is responsible on a worldwide basis for coordinating, directing, and performing consulting services for industrial clients in all areas of project development, including feasibility studies, site location analyses, and management consulting. From approximately March 1987 through November 1989, he provided services under contract to one or more of the original participants of the venture that subsequently became LES as a site selection consultant and he directed and had overall responsibility for the site selection process for the CEC. Mr. Dorsey has earned a BA degree in economics and an MBA degree and he has more than 25 years of experience in site selection for industrial facilities and has been involved in hundreds of siting projects while at Fluor Daniel. (Dorsey et al. at 1-2, 5 & Attach. 1 fol. Tr. 840.)

Mr. Schaperkotter, who also is employed by Fluor Daniel, Inc., reported to Mr. Dorsey at the beginning of the CEC site selection process. He holds a BS degree in business administration and an MBA degree and he served as Manager of Facility Siting and Consulting Services from 1984 through 1988. During this time, he supervised dozens of site selection projects for industrial facilities and, from the spring of 1987 until the end of 1988 when he was promoted and transitioned out of his position, he had principal operational responsibility for the siting of the CEC. He also was involved in the preparation of section 7 of the ER in 1990. (Dorsey et al. at 2-3, 6 & Attach. 2 fol. Tr. 840.)

At the time of the hearing, Mr. Engwall was employed by Fluor Daniel, Inc., as an Operations Coordinator. He has earned a BS degree in engineering and an MBA degree. From approximately March 1989 to January 1990, he worked in the Facility Siting and Consulting Services Group. In April 1989 he was assigned principal operational responsibility for the siting of the CEC

[5] Fluor Daniel, Inc., is involved in the LES project as the parent corporation of Claiborne Fuels, Inc., the sole general partner of the Delaware limited partnership, Claiborne Fuel, L.P., which is a LES general partner. Fluor Daniel, Inc., is, in turn, a wholly owned subsidiary of Fluor Corporation. (Dorsey et al. at 11 fol. Tr. 840.) *See* LBP-96-25, 44 NRC at 379.

and concluded his involvement with the CEC in November 1989. Before Mr. Engwall began work on the CEC project, he received several weeks of training in site selection. After completing the CEC site selection, he worked on several other site selection projects and then moved into other areas at Fluor Daniel. (Dorsey et al. at 3, 6 & Attach. 3 fol. Tr. 840; Intervenor's Exhibit I-RB-56, at 9-10.)

Mr. Swords is employed by Duke Engineering and Services, Inc., as an Engineering Manager.[6] He holds a BS degree in engineering and has approximately 16 years of experience in the nuclear industry, including 4 to 5 years of experience in site selection for nuclear facilities. In the last stages of the CEC siting process, from June 1989 until November 1989, he provided technical site selection services with regard to the physical evaluation of specific sites under contract to LES. He also was involved in drafting section 7 of the ER in 1990. (Dorsey et al. at 4, 6 & Attach. 4 fol. Tr. 840.)

The prefiled direct testimony of the Applicant's witnesses was admitted pursuant to a pretrial stipulation of the parties and without further objection at the hearing. (Tr. 840.) Because the Applicant did not offer these witnesses as experts and, in light of the parties' admissibility stipulation, the Board did not rule at the hearing on the qualifications of these witnesses as experts. Obviously, however, as the LES official responsible for compiling the information in the ER on the site selection process and on the various impacts associated with the CEC, Mr. LeRoy was qualified to testify concerning that information. Additionally, we find that, as participants in the CEC site selection process, Mr. Dorsey, Mr. Schaperkotter, and Mr. Swords are qualified to testify concerning that process and also are qualified by knowledge and experience to testify as experts on site selection for industrial facilities. Further, we find that, as a participant in the process, Mr. Engwall is qualified to testify concerning that process but we do not find him qualified as an expert on industrial facility site selection.[7]

In support of its contention J.9, the Intervenor presented the testimony of Dr. Robert D. Bullard, Ware Professor of Sociology at Clark Atlanta University. (Bullard at 1 fol. Tr. 853.) He holds an MA degree in sociology from Clark

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[6] Duke Engineering and Services, Inc., is a subsidiary of Duke Power Company (Swords Tr. 953) which, in turn, is a LES general and limited partner. *See* LBP-96-25, 44 NRC at 380.

[7] Pursuant to a stipulation of the parties the following Applicant exhibits were admitted into evidence relating to contention J.9: Applicant's Exhibit 16, LES letter to NRC dated March 30, 1992 (with attachment A containing response to NRC request for additional information) (App. Exh. 16); Applicant's Exhibit 18, Letter dated December 8, 1994, from Robert L. Draper, Winston & Strawn, Washington, D.C., to Diane Curran, Harmon, Curran, Gallagher & Spielberg, Takoma Park, Maryland (with enclosure of 1990 U.S. Census data for Homer, Louisiana) (App. Exh. 18); Applicant's Exhibit 19, Copies of Claiborne Enrichment Center "Community Newsletter" (App. Exh. 19); Applicant's Exhibit 20, State of Louisiana Air and Water Permits for LES (App. Exh. 20); Applicant's Exhibit 23, Market Search Corporation, Louisiana Quality of Life Survey (July 1989) (App. Exh. 23); Applicant's Exhibit 24, Market Search Corporation, Louisiana Quality of Life Survey (Sept. 1990) (App. Exh. 24); Applicant's Exhibit 25, LES letter to NRC dated September 29, 1994 (with enclosures containing ER Revision 17, SAR Revision 20, and License Application Revision 10) (App. Exh. 25). (Tr. 981-82.) Previously, the Applicant's ER, Applicant's Exhibit 1(h), which is relevant to contention J.9, was admitted into evidence. (Tr. 31.)

Atlanta University and a PhD in sociology from Iowa State University. Dr. Bullard has worked, conducted research, lectured, and written prolificly in the areas of urban land use, housing, community development, industrial facility siting, and environmental quality for more than 15 years and his scholarship and activities have made him one of the leading experts on environmental justice. He currently serves on the United States Environmental Protection Agency National Justice Advisory Council. Of the many works he has written, Dr. Bullard's book *Dumping in Dixie: Race, Class and Environmental Quality* (Westview Press 1990) has become a standard text in the environmental justice field. He also authored *Confronting Environmental Racism: Voices from the Grassroots* (South End Press 1993) and *Unequal Protection: Environmental Justice and Communities of Color* (Sierra Club Books 1994). Most recently he co-edited *Residential Apartheid: The American Legacy* (UCLA Center for Afro-American Studies Publications 1994). (*Id.* at 1-2; Intervenor's Exhibit I-RB-48.)

The Intervenor offered Dr. Bullard's prefiled direct testimony as his expert opinion on contention J.9 and that of an expert in socioeconomic impact analysis. (Tr. 843-44.) His direct testimony was admitted pursuant to a stipulation of the parties and without further objection at the hearing. (Tr. 853.) We find that Dr. Bullard is qualified by education, knowledge, and experience to testify as an expert on the issues involved in contention J.9.[8]

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[8] Pursuant to a stipulation of the parties the following Intervenor exhibits were admitted into evidence relating to contention J.9: Intervenor's Exhibit I-RB-48, Vita of Robert D. Bullard (I-RB-48); Intervenor's Exhibit I-RB-49, Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Feb. 11, 1994) and accompanying Memorandum for the Heads of All Departments and Agencies (Feb. 11, 1994) (I-RB-49); Intervenor's Exhibit I-RB-50, EPA Draft Environmental Justice Strategy for Executive Order 12898 (Jan. 1995) (I-RB-50); Intervenor's Exhibit I-RB-51, NRC Draft Strategic Plan — Environmental Justice (undated) (I-RB-51); Intervenor's Exhibit I-RB-52, Comment of Eula Mae Malone, Center Springs community, on scoping of EIS (I-RB-52); Intervenor's Exhibit I-RB-53, Handwritten map of Center Springs and Forest Grove communities prepared by Norton Tompkins (1992) (I-RB-53); Intervenor's Exhibit I-RB-54, Letter dated June 25, 1991, from Charles J. Haughney, Chief, Fuel Cycle Safety Branch, NRC, to LES, Attention W. Howard Arnold (I-RB-54); Intervenor's Exhibit I-RB-55, Portions of deposition of William S. Schaperkotter (Dec. 21, 1994) (I-RB-55); Intervenor's Exhibit I-RB-56, Portions of deposition of Larry Engwall (Jan. 26, 1995) (I-RB-56); Intervenor's Exhibit I-RB-57, Portions of deposition of B. William Dorsey (Dec. 21, 1994) (I-RB-57); Intervenor's Exhibit I-RB-58, Map and Analysis, "Poor Households as Percent of Total County Households — 1989, Thirteen Southern States," Southern Regional Council, Voting Rights Programs (Aug. 1993) (I-RB-58); Intervenor's Exhibit I-RB-59, Map and Analysis, "Black Population as Percent of Total County Population — 1990 and Congressional Districts, Eleven Southern States," Southern Regional Council, Voting Rights Programs (Sept. 1993) (I-RB-59); Intervenor's Exhibit I-RB-60, Letter dated November 2, 1994, from Robert L. Draper, Winston & Strawn, Washington, D.C., to Diane Curran, Harmon, Curran, Gallagher & Spielberg, Takoma Park, Maryland (I-RB-60); Intervenor's Exhibit I-RB-61, "CEPP, Centrifuge Enrichment Plant Project, Site Selection," Larry Engwall, Project Manager (May 17, 1989) (I-RB-61); Intervenor's Exhibit I-RB-62, Letter dated July 30, 1990, from A.M. Segrest, Manager, Projects and Administration, Duke Engineering & Services, Inc., to R.D. Belprez, Fluor Daniel, Inc. (with attachment) (I-RB-62); Intervenor's Exhibit I-RB-63, Fluor Daniels, "Site Recommendation Report for the Centrifuge Enrichment Plant Project" (Aug. 1989) (I-RB-63); Intervenor's Exhibit I-RB-64, Memo to File from Peter G. LeRoy (June 13, 1990) (I-RB-64). (Tr. 853.)

Additionally, the following Intervenor exhibits that were not subject to the parties' admissibility stipulation were admitted into evidence without objection or, in the case of I-RB-68, after the Applicant withdrew its objection:

(Continued)

In support of its position on contention J.9, the Staff presented the testimony of Merri L. Horn, Dr. Ibrahim H. Zeitoun, and Harry Chernoff. (Horn et al. fol. Tr. 904.) Ms. Horn is an environmental engineer in the Enrichment Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards. She holds a BS degree in physics and an MS degree in environmental engineering and she is the Environmental Project Manager for the CEC license application. (*Id.* at 1 & Attach. 1.) Dr. Zeitoun is employed by Science Applications International Corporation ("SAIC") as a Senior Environmental Analyst and he has earned both an MS degree and a PhD in fisheries biology. He is the SAIC project manager for the NRC contract to prepare the EIS for the CEC and has over 20 years of experience in directing and supporting multidisciplinary programs and projects in the areas of waste management, energy, and the environment. (*Id.* at 1 & Attach. 2.) Mr. Chernoff is also employed by SAIC as a Senior Economist and he has over 15 years of experience in energy economics, research and development program analysis, energy cost modeling, policy and regulatory analysis, and socioeconomics. He has earned a BS degree in economics and an MBA degree and he participated in preparing the EIS for the CEC. (*Id.* at 1 & Attach. 3.)

Pursuant to the pretrial stipulation of the parties and without further objection at the hearing, the prefiled direct testimony of the Staff witnesses was admitted. (Tr. 904.) We find that Ms. Horn, as the Staff's primary regulator with regard to the environmental impact analysis in the FEIS, and Dr. Zeitoun and Mr. Chernoff, as participants in the preparation of the FEIS for the CEC, are qualified to testify on the matters raised in their prefiled testimony.[9]

II. DISCRIMINATION ELEMENT OF ENVIRONMENTAL JUSTICE

Although the Intervenor's contention was filed before the President issued Executive Order 12898, CANT's contention J.9 is aimed at two concerns that are components of the Executive Order as well. Contention J.9 essentially asserts

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Intervenor's Exhibit I-RB-65, LES Site Selection Files, "Numerical Listing (1-58) of Potential Sites" (I-RB-65); Intervenor's Exhibit I-RB-66, LES Site Selection Files, 4′ × 8′ Louisiana topographical map listing potential sites (32091-A1-TM-100) (1982) (I-RB-66); Intervenor's Exhibit I-RB-67, 1990 U.S. Bureau of the Census Data for Claiborne Parish, Louisiana (I-RB-67); Intervenor's Exhibit I-RB-68, Population by Race Living Within One Mile of LES Candidate Sites derived from U.S. Bureau of the Census PL 94-171 data on CD-ROM and TIGER/Line files (I-RB-68); Intervenor's Exhibit I-RB-69, Map, Claiborne Parish, 1990 Enterprise Zones (Oct. 1994) (I-RB-69). (Tr. 845, 853, 883, 987.)

[9] Without objection, Staff Exhibit 3, Letter dated March 10, 1995, from Maria E. Lopez-Otin, NRC Environmental Justice Coordinator, to Kathy Aterno, Chair, Environmental Justice Subcommittee for Policy and Coordination, U.S. Environmental Protection Agency (with enclosure of final NRC Environmental Justice Strategy) (Staff Exh. 3), was offered into evidence by the Staff and admitted. (Tr. 1006.) Previously, the Staff's FEIS, Staff Exh. 2, which is relevant to contention J.9, was admitted into evidence. (Tr. 501.)

that the Applicant's ER and the Staff's FEIS have not adequately weighed the negative economic and sociological impacts on the minority communities of Forest Grove and Center Springs caused by closing Forest Grove Road that now joins them and placing the facility in the midst of these communities — a siting practice that follows a national pattern of locating hazardous facilities in minority communities. Further, the contention asserts that there has been no attempt to avoid or mitigate the disparate impact of the facility on this minority community. Thus, the Intervenor's contention has the same general focus as the President's environmental justice directive: disproportionate impacts on a minority population and racial discrimination.

Indeed, all parties apparently agree that the CEC will affect residents of a low-income minority populated community and that consideration of the environmental justice implications of the project is warranted. Similarly, all parties presented evidence on these factors with respect to contention J.9. In this Part II, therefore, we consider the discrimination aspect of environmental justice with respect to the Applicant's site selection process, a process that both contention J.9 and the Intervenor's expert witness charge was racially biased.

A. The CEC Siting Process

The site selection process that ultimately led to the selection of the LeSage property as the site for the CEC began in the first half of 1987 and, after several stops and starts, concluded in the fall of 1989. (Dorsey et al. at 5-6, 12, 22, 25 fol. Tr. 840.) The process took place before the Applicant, Louisiana Energy Services, L.P., was formed in 1990 and was conducted by employees of Fluor Daniel, Inc., under contract to one or more of the original venturers in the project that subsequently became partners in LES. (*Id.* at 10-11.) Representatives of the original participants in the venture comprised the Steering Committee that, *inter alia,* oversaw the selection process, participated in formulating the various site selection criteria, and acted upon the recommendations of Fluor Daniel. (*Id.* at 13, 16, 21.)[10]

The CEC siting process consisted of a number of phases and the Applicant's description of the siting process is set forth in the Applicant's ER. (App. Exh. 1(h), at 7.1-1 to -11.) The Staff's recitation of the siting process in the FEIS reproduces that set forth in the ER. (Staff Exh. 2, at 2-3 to -20.) A second description of the siting process is contained in Intervenor's Exhibit I-RB-63, Fluor Daniel's "Site Recommendation Report for the Centrifuge Enrichment Project" (Aug. 1989). That August 24, 1989 report, prepared by Mr. Engwall

[10] Even though LES had not yet been formed at the time the CEC site was selected, all parties nevertheless refer to the site selection process as though LES conducted it. For ease of reference, we generally follow that convention, recognizing that it is technically inaccurate.

and submitted to the Steering Committee by Fluor Daniel, is the report that the Steering Committee had before it in making the final site selection. Clearly, as the Applicant's witnesses testified, the Fluor Daniel report was the principal document in the site selection process and a key document factored into the description of the site selection process in section 7 of the Applicant's ER. (Dorsey et al. at 44, 48 fol. Tr. 840.) For current purposes, it suffices to note that, although similar, the description of the site selection process contained in the Applicant's ER and the Fluor Daniel Report do not reflect identical phases for the selection process or the same site selection criteria or even the same number of criteria for the various phases of the selection process. We recognize that some of these differences are significant; however, to minimize confusion, we refer to the phases of the process used in the ER, which also appear in the FEIS and were used in the testimony of the Applicant's and the Intervenor's witnesses.

The CEC site selection process began with a coarse screening of the forty-eight contiguous states to identify a region of the United States for the facility. This Coarse Screening Phase applied various selection criteria involving the service area of sponsoring electric utilities, transportation distances, and seismic and severe storm factors. In October 1987, the siting consultants recommended northern Louisiana to the Steering Committee as the regional location for the facility and the Steering Committee adopted this recommendation. (Dorsey et al. at 10, 21 fol. Tr. 840; App. Exh. 1(h), at 7.1-2 to -5.)

Because of a hold on the project, it was not until the spring of 1988 that the site selection consultants conducted what the ER labels a two-phase intermediate screening process to select the most suitable host community. (Dorsey et al. at 15, 22; App. Exh. 1(h), at 7.1-5.) In Intermediate Phase I, communities across northern Louisiana within 45 miles of Interstate 40 were solicited with the assistance of the Louisiana Department of Economic Development. The candidate communities were asked to nominate potential sites based on a set of criteria that, *inter alia,* indicated the proposed facility was a chemical plant. In answer to the solicitation, 21 communities in 19 parishes with over 100 sites responded and expressed an interest in hosting the project. (Dorsey et al. at 11, 15, 24, 28; App. Exh. 1(h), at 7.1-5 to -6.)

According to the ER, during Intermediate Phase I, the site selection personnel then visited each of the communities and, applying a second set of criteria, reduced to nine the number of candidate communities. (App. Exh. 1(h), at 7.1-6.) Actually, however, during the spring and summer of 1988, only Mr. Schaperkotter visited nineteen of the twenty-one communities and met with or spoke with representatives of the other two communities. Specifically, he spoke by telephone with the mayor of Farmerville and eliminated that community. He also met in Shreveport with members of a regional economic development group representing Claiborne Parish and the town of Homer and learned that they were

busy pursuing another project at that time. Using reconnaissance-level data, Mr. Schaperkotter eliminated twelve communities for failing to meet one or more of the Intermediate Phase I criteria, leaving nine candidate host communities of the original twenty-one communities. (Dorsey et al. at 25, 28-30 fol. Tr. 840.) Although Mr. Schaperkotter did not visit Homer or any site in Claiborne Parish, the ER indicates Homer was one of the remaining nine candidate communities. (App. Exh. 1(h), at 7.1-6 & Fig. 7.1-6b.)

The purpose of the second phase of intermediate screening was to select a host community from the nine communities still under consideration. (Dorsey et al. at 25 fol. Tr. 840; App. Exh. 1(h), at 7.1-6.) When Mr. Schaperkotter left the siting group at Fluor Daniel in late 1988, he had completed most of the work for Intermediate Phase I. The project was again dormant until the spring of 1989 when Mr. Engwall was assigned principal operating responsibility for what the ER describes as Intermediate Phase II. (Dorsey et al. at 32-33 fol. Tr. 840.)

During this phase, Mr. Engwall scored the remaining nine candidate communities against another set of criteria that had been refined and expanded from those used in the first intermediate phase. (*Id.* at 22-23, 34-35.) In ranking the candidate communities he employed the Kepner-Tregoe ("K-T") method of decisional analysis. The K-T decisional analysis method is a widely used means for comparing alternatives on the basis of multiple criteria using a ten-point weighted scoring system in which criteria are divided into those that must be met ("musts") and those that are desirable ("wants"), with the wants weighted according to relative importance.[11] (*Id.* at 34; App. Exh. 1(h), at 7.1-6.) Further, in applying each "want" criterion to an alternative, the top rated alternative for that criterion always gets a ten and each of the other alternatives is compared relative to the best one. (Engwall Tr. 947.)

When assigned to the project in April 1989, Mr. Engwall visited a number of the communities previously visited by his predecessor to learn more about Mr. Schaperkotter's evaluative process. His visits included several communities that had been eliminated in Intermediate Phase I because they had expressed a renewed interest or proposed additional sites. Mr. Engwall also visited each of the nine remaining candidate communities, including Homer, which he visited for the first time on May 22, 1989. (Dorsey et al. at 26 fol. Tr. 840; Engwall Tr. 936.) In every community, Mr. Engwall viewed nominated sites and, according to his report to the Steering Committee, half of the fifteen criteria he applied were related to community characteristics and the other half were site specific. (I-RB-63, at 20.) In any event, as long as there was at least one site in each community meeting the established criteria the community remained in contention. (Dorsey

[11] In referring to K-T decisional analyses in the ER, the Applicant references Charles H. Kepner & Benjamin B. Tregoe, *The New Rational Manager*, Princeton Research Press (1981). (App. Exh. 1(h), at 7.1-12.)

et al. at 35 fol. Tr. 840.) Mr. Engwall assigned values for the nine communities, in consultation with Mr. Schaperkotter and Mr. Dorsey. (*Id.* at 36.) Based on Mr. Engwall's scoring, Homer was the highest rated community, with Winnsboro the runner up. (App. Exh. 1(h), at 7.1-8.) The Steering Committee then selected Homer as the host community. On June 9, 1989, the then Senator of Louisiana, Bennett Johnson, came to Homer and announced that it had been selected as the CEC host community. (Bullard at 57 fol. Tr. 853.)

After selecting Homer as the host community, the ER states that a fine screening process, in two phases, was employed to obtain the three most preferred sites from the six sites nominated by Homer community leaders. (App. Exh. 1(h), at 7.1-9.) In what the ER describes as Fine Screening Phase I, Mr. Engwall scored each of the six sites using the K-T decisional analysis against another set of criteria developed in conjunction with the Steering Committee. (Dorsey et al. at 39 fol. Tr. 840; App. Exh. 1(h), at 7.1-9.) Although eleven sites in Claiborne Parish were initially nominated by community leaders, five sites were immediately dropped by Mr. Engwall for failing to meet the selection criteria and only six sites were seriously considered and scored. (Engwall Tr. 944.) On the basis of the K-T analysis, the LeSage site was top rated and recommended for selection, pending confirmatory onsite studies. The second and fourth rated sites, the Emerson and Prison sites, respectively, also were carried to the next phase as alternatives to the LeSage property. The third most preferred site, the Baptist Children's Home site, was dropped for failing to meet the mandatory low flood risk criterion. (App. Exh. 1(h), at 7.1-10.)

During Fine Screening Phase II the three remaining sites were examined in more detail to select a final site. At this juncture, Mr. Swords, an engineer, joined the siting process. (Dorsey et al. at 39, 41 fol. Tr. 840.) A number of technical criteria relating to, *inter alia,* the cost of site work and grading, preliminary geotechnical evaluation, and the cost of providing electric power to the site were added to the criteria used in the first phase of fine screening. Again using K-T decisional analysis, Mr. Engwall apparently scored the three sites, with the LeSage property receiving the highest rating, followed by the Emerson site, and then the Prison site. (*Id.* at 39; App. Exh. 1(h), at 7.1-10 & Fig. 7.1-9.) The Applicant's ER notes that "[a]ll three properties are adequate sites for locating the CEC and relatively indistinguishable in their environmental characteristics." (App. Exh. 1(h), at 7.1-11.) Because it was the highest rated site, however, the site selection consultants, in August 1989, recommended the LeSage property to the Steering Committee. (Dorsey et al. at 39; I-RB-63, at ES-1.) On November 3, 1989, the selection of the LeSage property was publicly announced. (App. Exh. 1(h), at 9.5-9.)

B. The Parties' Positions

All parties presented evidence on the question whether race was a consideration in the selection of the site for the CEC. In sum, the Applicant and the Intervenor took diametrically opposed positions, while the Staff took the position it found nothing in the Applicant's ER to indicate that racial considerations were a factor in the site selection.

1. The Applicant

All of the Applicant's witnesses on contention J.9 testified in their prefiled direct testimony that the CEC site selection process was not racially biased or based on racial considerations. Although not directly involved in the siting process but with primary responsibility in the year after the LeSage site had been selected for preparing section 7 of the Applicant's ER, the LES Licensing Manager, Mr. LeRoy, stated that he was unaware of any instance in which, or evidence that, the race or color of any individual or group of individuals was a factor in any decision regarding the siting of the CEC. Similarly, he stated he had no knowledge that the siting of the CEC involved any intent to discriminate against the communities of Forest Grove and Center Springs on the basis of race or socioeconomic status. (LeRoy at 33-34 fol. Tr. 840.) Further, he testified that, in his judgment, the site selection process was not biased in any regard. (Tr. 951.)

In like vein, the Fluor Daniel consultants that oversaw and conducted the site selection process, Messrs. Dorsey, Schaperkotter, and Engwall, and Mr. Swords, the Duke Engineering and Services, Inc., engineer who was involved in the technical analysis for Fine Screening Phase II, together stated that the racial mix or racial makeup of the local population was not considered as a site selection criterion. (Dorsey et al. at 24 fol. Tr. 840.) Together these witnesses also stated that they were unaware of any instance in which, or evidence that, the race or color of any individual or any group was a factor in any decision concerning the siting of the facility. Further these witnesses together stated that the siting of the CEC did not involve any intent to discriminate against the communities of Forest Grove or Center Springs on the basis of race or socioeconomic status. (*Id.* at 48-49.) Finally, each of these witnesses testified that, in his judgment, the site selection process was not biased in any regard. (Tr. 951.)

2. The Intervenor

Intervenor witness Dr. Bullard in his prefiled direct testimony stated that, in his opinion, the process for selecting the CEC site was, among other things, biased and that racial considerations were a factor in the site selection process.

(Bullard at 39, 43 fol. Tr. 853.) Dr. Bullard based his conclusion that the CEC siting process was racially discriminatory on four major points. According to Dr. Bullard, the first factor and the most significant indication that institutionalized racism played a part in the site selection, was the fact that, at each progressively narrower stage of the site selection process, the level of poverty and African Americans in the local population rose dramatically, until it culminated in the selection of a site with a local population that is extremely poor and 97% African American. (*Id.* at 43.) Specifically, Dr. Bullard stated:

> This progressive trend, involving the narrowing of the site selection process to areas of increasingly high poverty and African American representation, is also evident from an evaluation of the actual sites that were considered in the Intermediate and Fine Screening stages of the site selection process. At my request, the American Civil Liberties Union of Virginia performed an analysis, using census track data, of the percentage of black population within a one mile radius of 78 of the 79 sites that LES claims it seriously considered as candidate sites.[121] The ACLU's analysis shows that the aggregate average percentage of black population for a one mile radius around all of the 78 sites examined (in 16 parishes)[122] is 28.35%. When LES completed its initial site cuts, and reduced the list to 37 sites within nine communities (parishes), including Homer, the aggregate percentage of black population rose to 36.78%. When LES then further limited its focus to six sites in Claiborne Parish, the aggregate average percent black population rose again, to 64.74%. The final site selected, the "LeSage" site, has a 97.1% black population within a one-mile radius.

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[121]Because LES' site selection documentation is so contradictory, it is difficult to determine how many sites were actually considered at any particular point in time by LES. However, counsel for LES stated in discovery that an undated document entitled "Numerical listing (1-58) of potential sites" [I-RB-65], and a "Huge topo map — 1982 Bastrop/Louisiana — Mississippi (32091-[A]I-TM-100)" [I-RB-66] provide the most comprehensive listing of sites that were considered. *See* letter from Robert L. Draper to Diane Curran (November 2, 1994) identifying [these exhibits] as providing the most comprehensive listing of sites that received serious consideration in the site selection process. [I-RB-60]. Based on these documents, the ACLU was able to identify, by description and/or map location, 79 candidate sites. Because one of these sites, the Armistead Cagean site, was identified on the list of 58, but was not clearly identified on the map, it was not considered in the analysis.

[121]The twenty sites that were not identified on the list of 58 sites were placed in the appropriate parish by map location for computation purposes, rather than attempting to associate each unidentified site with a particular community. An exception to this was made for Homer, where six sites that were not included in the list of 58 sites were all identified in the draft and final EIS as being considered connected with the town of Homer.

(*Id.* at 46-47.) The tabulation of the ACLU analysis was received in evidence as Intervenor's Exhibit I-RB-68.

The second point showing discrimination according to Dr. Bullard, is LES' application in Fine Screening Phase I of the "low adjacent population within a 2-mile radius" criterion in a biased and discriminatory manner in connection with the LeSage and Emerson sites to protect the white, middle class lifestyle on Lake Claiborne next to the Emerson site. (Bullard at 44, 51-52 fol. Tr. 853.) Relying on Mr. Engwall's deposition testimony (I-RB-56, at 105-06), Dr. Bullard testified that, as the principal person responsible for site selection process

at this stage involving winnowing the six Homer sites to three, Mr. Engwall initially evaluated and scored the low population criterion for the LeSage site based upon an "eyeball assessment." As Mr. Engwall described this process, he drove along the road through Forest Grove and every now and then he drove up a dirt road where he saw "a small cluster of houses" and "boarded up houses." From this survey, Mr. Engwall concluded that in this area there were "maybe ten people living there at most." (I-RB-56, at 105-06; Bullard at 52 fol. Tr. 853.) Dr. Bullard further testified that it did not appear Mr. Engwall drove through Center Springs at all. As a result of this survey, Mr. Engwall gave the LeSage site a "low population" score of 9 out of a maximum of 10 and, when multiplied by the "want" weight of 8, it yielded a weighted score of 72. (Bullard at 52 fol. Tr. 853.)

Dr. Bullard declared that, in fact, there are 150 people living in Forest Grove and 100 in Center Springs. According to Dr. Bullard, had Mr. Engwall taken the most basic measures to assess population levels, such as consulting aerial photographs or county land records or talking to inhabitants of Forest Grove, he would not have rendered this African American population essentially invisible or taken the condition of the housing as empirical evidence of the number of people living there. (*Id.* at 52.)

Next, Dr. Bullard asserted, Mr. Engwall compounded the problem by using invalid and biased considerations in comparing the population level of the LeSage site to that of the Emerson site. The Emerson site, which was the overall second highest rated site in Fine Screening Phase I, was given a "low population" score of 7, yielding a significantly lower weighted score of 56. Again relying on Mr. Engwall's deposition testimony (I-RB-56, at 102, 105, 108-10), Dr. Bullard asserted that the Emerson site score also was based on Mr. Engwall's observations from driving around the site, which led him to conclude that between 50 and 100 people actually lived there. Yet when asked what he saw that caused him to score the site a seven, Mr. Engwall answered "[p]robably the proximity to the lake." Mr. Engwall went on to explain that "[w]e just felt opinion-wise people would probably not want this plant to be close to their pride and joy of their lake where they go fishing." (I-RB-56, at 109; Bullard at 53 fol. Tr. 853.) The significance of the lake, Dr. Bullard asserted, also was emphasized a few pages earlier in his deposition when Mr. Engwall testified that the Emerson site was rated neutral to slightly negative because

> [i]t was right on the edge of this lake. This lake is a very nice lake. This lake is the pride and joy of this part of Louisiana, nice boating, nice homes along the lake. It was felt that an industrial facility real close to that lake would not be in keeping with the existing usage, which was nice homes, vacation and fishing, hunting. (I-RB-56, at 102.)

Based on Mr. Engwall's deposition testimony, Dr. Bullard concluded it was clear that quality of life considerations improperly affected Mr. Engwall's scoring of the low population criterion for the Emerson site given that, at this stage of the evaluation process, there were no site specific criterion related to quality of life. He further maintained that Mr. Engwall's biased judgment on the quality of life concern regarding the desirability of avoiding the lakeside site where white, middle class people lived was directly related to the relative scoring of the low population criterion. Dr. Bullard asserted that the total effect of Mr. Engwall's actions was to discriminate against the Forest Grove and Center Springs communities because their residents' lifestyle and socioeconomic status were on a much lower plane. (Bullard at 54-55 fol. Tr. 853.)

The third factor Dr. Bullard testified about was racial discrimination inherent in the Fine Screening Phase I criterion of not siting the facility within at least 5 miles of institutions such as schools, hospitals, and nursing homes. (*Id.* at 13, 43-44.) He asserted that by its own terms, this criterion is inherently biased toward the selection of sites in minority and poor areas because these areas generally lack institutions such as schools, hospitals, and nursing homes that are the focus of this criterion. Dr. Bullard stated that even though Forest Grove and Center Springs are 5 miles from the nearest town, there are no schools, hospitals, or medical facilities of any kind or, for that matter, any other service institution in either community. He stated that, while it is not necessarily inappropriate to attempt to site a hazardous facility in an area that is far from these institutions, this criterion cannot be applied equitably unless the process is enlightened by consideration of the demographics of the affected population. Otherwise, he stated, disadvantaged populations will invariably be favored as hosts for more hazardous facilities as is evidenced by the fact that minority communities already host a disproportionate share of prisons, half-way houses, and mental institutions. (*Id.* at 13.)

The fourth and final point, according to Dr. Bullard, was the use of various community support criteria in the selection process that had the effect of discriminating against the people of Forest Grove and Center Springs. He testified that during the siting process LES relied upon the opinions of Homer, a community 5 miles from the actual host community. This was inappropriate, he concluded because Homer stood to minimize the risks and maximize the benefit to itself by placing the facility a good distance from its own residents. In contrast, the actual host communities of Forest Grove and Center Springs were never informed of the siting decision until it was too late for the residents to affect the selection process. (*Id.* at 13-14.)

This was particularly significant, Dr. Bullard testified, because the principal criteria for site selection were support from the community and opinion leaders in the community. Indeed, LES considered it of primary importance that the facility

should be located in a locale where it would be considered a community asset.[12] Dr. Bullard testified, however, that, despite the importance of such community support, LES did not even recognize the existence of Forest Grove and Center Springs as communities, let alone consult their leaders. Instead, LES defined the "community" as Homer, a town 5 miles away whose government contains no representation from Forest Grove or Center Springs. Further, he declared that the concept of community leadership, which was key to the assessment of community support in the selection process was biased toward consultation with individuals who, rather than having an interest or stake in the welfare of Forest Grove or Center Springs, instead stood to benefit from imposing the risks of the facility on these neighboring communities while the community of Homer reaped the benefits. According to Dr. Bullard, the groups of community leaders with whom LES met and with whom it consulted to form its opinion of "community support," "active and cohesive community leadership" and "community leader preferences," were dominated by the Claiborne Parish Industrial Development Foundation — on which Forest Grove and Center Springs have no representatives — and elected officials from the towns of Homer and Haynesville, rather than Forest Grove and Center Springs. Thus, Dr. Bullard concluded that a facially neutral site selection process was perverted to give certain communities the discretion to decide who should accept the adverse impacts of the proposed facility. (*Id.* at 47-51.)

3. The NRC Staff

In chapter 2, section 2.3.1, of the FEIS at the end of its description of the LES site selection process, the Staff concludes that "the LES approach for selecting the site was reasonable." (Staff Exh. 2, at 2-19.) Thereafter, in chapter 4, section 4.2.1.7.4, titled "Environmental Justice," the Staff states, *inter alia,* that it considered environmental justice from the perspective of whether there is evidence LES selected the CEC site based on racial considerations. It states that, although many comments on the draft environmental impact statement alleged that LES deliberately chose the site because it is in an African American community, none cited any specific evidence to support the charge. In the FEIS, the Staff asserts that based on its review of the public comments and the LES description of the site selection process, it concluded that "[t]he LES process

[12] As evidence of the importance of this factor, Dr. Bullard noted that in Intermediate Phase II when the field had been narrowed to nine communities, "local support" was a criterion that had the highest possible scoring weight of 10. Similarly, he observed that, in both Intermediate Phases I and II, "active, cohesive community leadership" was evaluated and in Phase II (where K-T analysis was used for the first time) that criterion was given a "want" weight of 10. Finally, he indicated that, although at the Fine Screening stage when LES was choosing among the six Homer sites community support was no longer considered because it was deemed already to have been established in the selection of Homer, in choosing among the six sites, LES nonetheless gave a "want" weight of 10 to "community leader preferences." (Bullard at 47-48 fol. Tr. 853.)

appears to be based solely on business and technical considerations" and it found "no specific evidence that racial considerations were a factor" in the process. (*Id.* at 4-34.)

In their prefiled direct testimony, the Staff's witnesses, Ms. Horn and Dr. Zeitoun, reiterated the findings in the FEIS and stated that the LES site selection criteria "appeared to be objectively applied in each phase of the selection process; and none of the criteria appear to be based on racial considerations." (Horn et al. at 12 fol. Tr. 904.) The Staff witnesses further testified, however, that "[t]he Staff did not conduct a detailed evaluation of the site selection process. The Staff did not evaluate each individual criterion and make a determination if that particular criterion was appropriate. The Staff only considered the information provided in the Environmental Report." (*Id.*) Finally, Ms. Horn and Dr. Zeitoun reiterated that "[b]ased on the information in the Environmental Report, the Staff did not see any evidence that racial considerations were a factor in the site selection process." (*Id.*)[13]

C. Licensing Board Determination

The nondiscrimination component of Executive Order 12898 requires that the NRC conduct its licensing activities in a manner that "ensures" those activities do not have the effect of subjecting any persons or populations to discrimination because of their race or color. 3 C.F.R. at 861. In the FEIS and in its prefiled direct testimony, the Staff stated that it sought to determine whether race played a role in the CEC site selection process by reviewing the information in the Applicant's ER. In taking this action, the Staff necessarily recognized the agency's obligation under the nondiscrimination component of the President's environmental justice directive to make sure the site selection process conducted by the original venturers in what subsequently became the LES project was free from racial discrimination.

In the circumstances presented in this licensing action, however, by limiting its consideration to a facial review of the information in the Applicant's ER, the Staff has failed to comply with the President's directive. As we discuss more fully below, a thorough and in-depth investigation of the Applicant's siting process by the Staff is essential to ensure compliance with the President's nondiscrimination directive if that directive is to have any real meaning. Moreover, such a thorough Staff investigation is needed not only to comply with Executive

[13] In its proposed findings dealing with the site selection process, the Staff suggests that we approach the issue by "looking at the question of whether the selection process was overtly racist." NRC Staff's Proposed Findings of Fact and Conclusions of Law in the form of a Partial Initial Decision Regarding Contentions B, J, K, and Q (May 26, 1995) at 57.

Order 12898, but to avoid the constitutional ramifications of the agency becoming a participant in any discriminatory conduct through its grant of a license.

Racial discrimination in the facility site selection process cannot be uncovered with only a cursory review of the description of that process appearing in an applicant's environmental report. If it were so easily detected, racial discrimination would not be such a persistent and enduring problem in American society. Racial discrimination is rarely, if ever, admitted. Instead, it is often rationalized under some other seemingly racially neutral guise, making it difficult to ferret out. Moreover, direct evidence of racial discrimination is seldom found. Therefore, under the circumstances presented by this licensing action, if the President's nondiscrimination directive is to have any meaning a much more thorough investigation must be conducted by the Staff to determine whether racial discrimination played a role in the CEC site selection process.

Before turning to a discussion of the evidence in this proceeding, we wish to emphasize that our determination that the Staff's limited review of the description of the siting process set out in the ER was inadequate and that the Staff now must undertake a thorough investigation, is not intended as a criticism of the Staff. The obligations imposed upon the Staff by the Commission's commitment to the President to implement the provisions of the Executive Order are new to the agency. Because this agency's primary responsibilities historically have dealt with technical concerns, investigating whether racial discrimination played a part in a facility siting decision is far afield from the Staff's past activities. Indeed, because racial discrimination questions have not previously been involved in agency licensing activities, this is an area in which the Staff has little experience or expertise. Nevertheless, if the President's directive is to have any meaning in this particular licensing action, the Staff must conduct an objective, thorough, and professional investigation that looks beneath the surface of the description of the site selection process in the ER. In other words, the Staff must lift some rocks and look under them.

Substantial evidence presented by the Intervenor in this proceeding demonstrates why it is imperative that the Staff conduct such a thorough investigation. As we have noted, direct evidence of racial discrimination is rare. Nonetheless, the Intervenor's evidence, the most significant portions of which are largely unrebutted or ineffectively rebutted, is more than sufficient to raise a reasonable inference that racial considerations played some part in the site selection process such that additional inquiry is warranted. In so stating, we do not make specific findings on the current record that racial discrimination did or did not influence the site selection process. When stripped of its abundant irrelevant chaff, the record is simply inadequate, objectively viewed, to reach any conclusion with the requisite degree of confidence. A finding that the selection process was tainted by racial bias is far too serious a determination, with potentially longlasting consequences, to render without the benefit of a thorough and

professional Staff investigation aided by whatever outside experts as may be necessary. Additionally, the Applicant, because of the allocation of the burden of proof in the adjudicatory process and the nature of this particular subject matter, is, to some extent, in the position of proving a negative. Thus, in this instance any finding that racial considerations either did or did not play a part in the site selection process should be made only after the Staff has undertaken a complete and systematic examination of the entire process.

Looking to the record of this proceeding, the Intervenor's statistical evidence presented by Dr. Bullard and set out in Intervenor's Exhibit I-RB-68, shows that as the site selection process progressed and the focus of the search narrowed, the level of minority representation in the population rose dramatically. *See supra* p. 386. The Intervenor's analysis did not include one of the seventy-nine seriously considered proposed CEC sites because it was not clearly identified on the large map on which the siting consultants had marked the proposed sites. (Bullard at 46 n.121 fol. Tr. 853; *see* I-RB-66.) Of the remaining seventy-eight proposed sites, however, the Intervenor's analysis reveals that the aggregate average percentage of black population within a 1-mile radius of each of the sites across sixteen parishes is 28.35%. After the initial site cuts reduced the list to thirty-seven sites in nine parishes, including the sites in Claiborne Parish, the aggregate percentage of black population rose to 36.78%. Then, when the search narrowed to the six sites in Claiborne Parish, the aggregate average percent of black population increased to 64.74%. Ultimately, the process culminated in a chosen site with a black population of 97.1% within a 1-mile radius of the LeSage site, which is the site with the highest percent black population of all seventy-eight examined sites. (Bullard at 46-47 fol. Tr. 853; I-RB-68, at 2-4.) This statistical evidence very strongly suggests that racial considerations played a part in the site selection process. It does not, of course, rule out all possibility that race played no part in the selection process. Nonetheless, the Intervenor's statistical evidence clearly indicates that the probability of this being the case is unlikely. Certainly, the possibility that racial considerations played a part in the site selection cannot be passed off as mere coincidence.

For its part the Applicant did not attempt to rebut the Intervenor's statistical analysis with any statistical evidence of its own or present any witness challenging the statistical validity of the Intervenor's evidence.[14] Rather, Mr. LeRoy,

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[14] Although at the hearing the Applicant did not challenge the Intervenor's statistical evidence with any statistical evidence or witnesses of its own, the Applicant, in its proposed findings (App. P.F. at 319 n.199), argues that it has no way of knowing whether the Intervenor's statistical data are correct and whether the site locations on which they are based were properly identified.

After having its initial objection sustained, Applicant withdrew its objection to Intervenor's Exhibit I-RB-68 (Tr. 883) so that exhibit was admitted into evidence. Thus, it is too late now for procedural arguments challenging that evidence. Further, as the Intervenor's exhibits show, the map used by the Intervenor to locate each of the proposed sites (I-RB-66) was turned over by the Applicant to the Intervenor during discovery from the Applicant's

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the LES Licensing Manager, although not directly involved in the actual siting process, stated that the siting process was not biased in any way and that he was not aware of any instance in which, or evidence that, the race or color of any individual or group was a factor in any siting decision. (LeRoy at 33 fol. Tr. 840; Tr. 951.) He also testified that it was only coincidence that the selection process ended with a site that has a black population of 97.1% within a mile radius of it. (Tr. 965.) The three Fluor Daniel siting consultants, Messrs. Dorsey, Schaperkotter, and Engwall gave similar testimony, as did Mr. Swords, the Duke Engineering and Services, Inc., engineer involved in the last phase of the selection process. (Dorsey et al. at 48-49 fol. Tr. 840; Tr. 951.)

As we have already observed, we would not expect instances of racial discrimination to be admitted. Instances of racial bias are often rationalized in ways that avoid the question, so that a person can state, with conviction, that he or she did not discriminate even when objective evidence suggests otherwise. In so stating, it is not our intent to impugn the integrity of the Applicant's witnesses. Rather, our point is simply that this and similar testimony of the Applicant's witnesses does not adequately rebut the Intervenor's statistical evidence.[15]

In response to an inquiry from the Licensing Board on the statistical probability of coincidentally selecting a site that is 97.1% black within a one-mile radius from among the seventy-eight proposed CEC sites, Mr. Dorsey did testify that because of the selection criteria of a large site size and a low population area "the odds are very high that that is going to happen no matter where you go. It may not be 97–." (Tr. 966.) Mr. Dorsey then added that, if you are in Louisiana or Mississippi or some other states in this part of the country, "[i]t is simply the make-up of the rural areas within that region." (Tr. 967.) In this regard, Mr. LeRoy added that "[t]he rural population of Claiborne Parish, I believe, is about 60 percent African American." (Tr. 968.)[16] Yet, at least with respect to Claiborne Parish (on which the record contains considerable data),

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own site selection files. (I-RB-60.) The 79 proposed CEC sites marked on the map were placed there by the Fluor Daniel siting consultants during the selection process, not by the Intervenor, so the Applicant's complaint that it does not know how Dr. Bullard located the sites is well wide of the mark. Moreover, Dr. Bullard's prefiled direct testimony containing the methodology and results of the statistical analysis was served on the Applicant by overnight mail on February 24, 1995, so it had that information for well over 2 weeks before Dr. Bullard testified on March 16, 1995. Accordingly, the Applicant's post-hearing objections are without merit.

[15] The Applicant also argues that to accept as evidence of racial discrimination the Intervenor's testimony that at each progressive stage of the selection process the level of minority population rose dramatically, "would be to suggest that any attempt to build a facility in the vicinity of Forest Grove and Center Springs or similar communities is inherently racially discriminatory" (App. P.F. at 322) and "as a matter of law would deprive communities such as Forest Grove and Center Springs of the opportunity even to be considered as the site for a project." (App. P.F. at 323.) We do not agree. Any conclusion that the site selection process was racially biased necessarily would be an ultimate determination of fact based on the specific site selection process applied in this proceeding. If such a finding were made, it would not be a determination "as a matter of law" and it most certainly would not deprive depressed minority communities of the opportunity for future improvement.

[16] Interestingly, in the portion of his deposition admitted into evidence, Mr. Engwall testified that 90% to 95% of the entire population of Claiborne Parish lived in Homer and Haynesville, the two urban centers in the parish. (I-RB-56, at 104, 107.)

the record before us does not support the Applicant's assertion that the odds are very high that, because of the high percentage of blacks in the rural population, the black population around any rural site inevitably would be markedly higher than the racial makeup of the parish at large or the racial makeup of the rural population.[17]

In addition to this statistical evidence, the Intervenor presented additional evidence indicating that racial considerations played a role in the CEC site selection process. Based on Mr. Engwall's deposition testimony, Dr. Bullard also testified that, with respect to the LeSage and Emerson sites, Mr. Engwall applied the low population criterion during the Fine Screening Phase of the site selection process in a biased and discriminatory manner to protect the white, middle class lifestyles on Lake Claiborne next to the Emerson site. *See supra* pp. 386-88. (Bullard at 51-55 fol. Tr. 840.) A thorough and careful reading of all the parts of Mr. Engwall's deposition admitted in evidence clearly supports Dr. Bullard's assertion that racial and economic-based quality of life considerations influenced Mr. Engwall's scoring of the Emerson site. (I-RB-56 at 108-09, 102.) Overall, Dr. Bullard's testimony fairly recites and reasonably characterizes Mr. Engwall's deposition testimony on this point. At a minimum, that deposition testimony raises a strong inference that race and economic status played a role in the scoring of the two sites.

Moreover, Dr. Bullard's testimony on this matter was not persuasively and effectively rebutted. Mr. Schaperkotter testified that LES did not apply the low population criterion in a biased matter. (Tr. 929.) But Mr. Schaperkotter had left the project prior to that time. Instead, at the Fine Screening Phase of the site selection process, it was Mr. Engwall who had primary operational responsibility for the project and it was Mr. Engwall who visited and scored the LeSage and Emerson sites.

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[17] The record shows that the population of Louisiana is 30.8% African American. (Bullard at 45 fol. Tr. 840; I-RB-59.) Drawing on census data, the FEIS states that the population of Claiborne Parish is 17,405 and that 53.43% of the population is white and 46.09% black. (Staff Exh. 2, at 3-102 to -103.) Thus, there are slightly more than 8000 African Americans in Claiborne Parish. Although no party introduced census figures on the urban-rural breakdown of the population of Claiborne Parish or the racial makeup of that breakdown, that information can be reasonably derived from other record evidence. There are only two urban areas in Claiborne Parish, Homer and Haynesville, although there are numerous rural enclaves. The census data in Applicant's Exhibit 18 on Homer, the largest town in the parish, shows a black population of 2346 or 56.5% of the total population of 4152. (App. Exh. 18, at 16.) The radial sector map and corresponding population table in the Applicant's ER (App. Exh. 1(h), at Fig. 2.2-6 & Table 2.2-9) indicates that the population of Haynesville is approximately 3000. Hence, the total urban population of Claiborne Parish is approximately 7000 and the rural population is approximately 10,400. Therefore, approximately 60% of the total population of Claiborne Parish lives in rural areas. Even assuming the entire black population of the parish outside of Homer resides in rural areas and that no blacks live in Haynesville, the second urban center in the parish, the maximum percentage of blacks in the rural population would be less than 55%. Making the reasonable assumption that one-third of the population of Haynesville is black, then the rural black population of the parish is approximately 45% and thus essentially the same as the racial makeup of the parish population. In light of these population figures derived from the evidentiary record for Claiborne Parish, it is not at all apparent that the rural black population of the parish creates a situation where the "odds are very high" that any rural site in the parish would have a surrounding black population that is much higher than the racial makeup of the parish at large or the racial makeup of the rural black population.

Even more troubling, however, is Mr. Engwall's attempted revision at the hearing of his deposition testimony regarding how he assessed the population of the LeSage and Emerson sites that was neither credible nor convincing. At his deposition, Mr. Engwall no less than seven times testified under oath that he performed his evaluation of the population of the LeSage and Emerson sites by driving through the area and performing a visual or "eyeball" assessment. (I-RB-56 at 106; *id.* at 102-08.) Indeed, he even asked his questioner, Intervenor's counsel, "How else are you going to do it?" and indicated that, in his site selection training prior to his work on the CEC project, he learned to evaluate population by driving around and looking. (I-RB-56 at 106.) In his rebuttal testimony at the hearing, however, Mr. Engwall testified that although he had said that at his deposition, he later was looking through the siting files and saw a map that he recalled using to gather information on the proximity of houses near the Emerson and LeSage sites. He also declared that he remembered taking an airplane flight around three or four sites to get an idea of the population levels. He then stated it was this later information that he used in scoring the sites for the Kepner-Tregoe analyses (Tr. 931-32.)

The marked difference in Mr. Engwall's testimony on this matter from the time of his deposition to the time of trial causes us seriously to doubt the credibility of this revised explanation. Further, his demeanor at the hearing in responding to his counsel's question and the substance of his response, in particular the generality of that response, convince us that Mr. Engwall's earlier deposition testimony is a more accurate accounting of the process he used to gauge and score the population of the LeSage and Emerson sites.[18] In the same vein, Mr. Engwall's attempt in his rebuttal testimony (Tr. 933) to distance himself from his earlier deposition testimony regarding the low population scoring for the Emerson site and his view that the proposed CEC facility was not compatible with the land uses around Lake Claiborne was neither credible nor persuasive.[19] Accordingly, we find that this specific example of the application of a site selection criterion raises a reasonable inference, which was

[18] For example, Mr. Engwall did not otherwise identify the "map" from the siting files that he "used to gather information on the proximity of houses near each one of the sites" (Tr. 932) nor was it introduced into evidence.

[19] In its proposed findings, the Applicant suggests that Dr. Bullard provided no basis for his conclusion that the lakeside community around Lake Claiborne is white, middle class. (App. P.F. at 310 n.189.) Dr. Bullard's areas of expertise, however, include land use and minority housing (I-RB-48) and he testified that "it is very simple to tell who lives where. Given the demographics of the parish, given the nature of Forest Grove and residential segregation in this parish, it is fairly simple to look at the numbers and the charts and tell who lives where." (Tr. 874.) The Applicant presented no evidence of any kind that the residential community around Lake Claiborne was not a white, middle class area and that Dr. Bullard was incorrect in his description. Indeed, in light of the Bureau of the Census statistics in Intervenor's Exhibit I-RB-67 on the household incomes of white and black households in Claiborne Parish (I-RB-67 at 10), it is reasonably inferred that the "very nice lake" with "nice homes along the lake" that the Applicant's witness, Mr. Engwall, described (I-RB-56 at 102) are not the homes of Claiborne Parish African Americans.

not effectively rebutted by the Applicant, that racial bias played a part in the selection process.[20]

To summarize, the Intervenor's statistical evidence and its evidence concerning the application of the low population criterion stand as significant probative evidence in the current record that racial considerations played a part in the site selection process. This evidence demonstrates that a thorough Staff investigation of the site selection process is needed in order to comply with the President's nondiscrimination directive in Executive Order 12898. The Intervenor did provide other evidence concerning the inherent racial bias in the fine screening criterion of siting the facility 5 miles from institutions such as schools, hospitals, and nursing homes and evidence on the manner in which various community opinion and support criteria in the selection process discriminated against the minority communities of Forest Grove and Center Springs. This evidence is, at most, only indirectly indicative that racial considerations played a part in the site selection process. Nevertheless, when coupled with the Intervenor's statistical evidence and its evidence concerning the application of the low population

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[20] In his rebuttal testimony, Mr. LeRoy testified that prior to the hearing he had a house count performed that confirmed Mr. Engwall's scoring for the Emerson and LeSage sites. He stated that this drive-by survey showed approximately 140 houses within a 2-mile radius of the Emerson site and approximately 70 houses for the LeSage site. (Tr. 932.)

There are several reasons why Mr. LeRoy's testimony does not rebut effectively the inference of racial discrimination in the application of the population scoring criterion. That count has no real relevance to the quality of life considerations about the incompatibility of the proposed CEC facility with the white, middle class homes on the lake that we have found improperly influenced Mr. Engwall's scoring of the Emerson site relative to the LeSage site. In any event, using a house count instead of an actual population enumeration for determining the population around the LeSage site and that portion of Forest Grove within 2 miles of the Emerson site does not provide accurate information because the use of the standard multiplier of 2.8 persons per household undercounts minority households and yields totally unrealistic results. (Bullard Tr. 988-89.) Additionally, the Applicant's ER states that 50% of the houses located on Lake Claiborne within 5 miles of the LeSage site are not permanent residences. (App. Exh. 1(h), at 2.2-2.) Therefore, it appears that some significant portion, if not all, of those houses are included in Mr. LeRoy's house count. Hence, that house count does not reliably establish the population around the LeSage and Emerson sites.

Finally, in an effort to bolster its low population scoring defense, the Applicant argues that Intervenor's Exhibit I-RB-68 showing the population within 1 mile of the LeSage site as 138 and the population within 1 mile of the Emerson site as 393 effectively confirms the low population scoring of the two sites. Because the fine screening stage low population criterion is a 2-mile radius, the presence of a good portion of Lake Claiborne within 2 miles of the Emerson site precludes any accurate conclusion from the 1-mile radius figures. In sum, none of the evidence in the current record provides an accurate or reliable figure of the population within 2 miles of the Emerson and the LeSage sites. The record does clearly establish, however, that Mr. Engwall's count of 10 people for the LeSage site and 50 to 100 people for the Emerson site is not correct and that, contrary to his deposition testimony, 90% to 95% of the people in Claiborne Parish do not live in Homer and Haynesville. (I-RB-56, at 104, 105, 107.) Further, we note that the figures "characterized" from census data in the direct testimony of the Staff witnesses on the population and racial makeup of the area around the LeSage site, including the 1-mile site radius (Horn et al. at 11-12 fol. Tr. 904), is markedly different from the 1-mile radius around the site derived from the census data by the Intervenor in I-RB-68. But the Staff witnesses conceded that the numbers actually were much higher. (*Id.*)

criterion, this further Intervenor evidence raises concerns that deserve attention and should be further carefully analyzed as part of the Staff investigation.[21]

III. ENVIRONMENTAL IMPACTS

Although the Staff now must undertake a thorough investigation of whether racial considerations played a part in the CEC site selection process, we nevertheless turn to address the second concern of the Intervenor's environmental justice contention. In the event it is ultimately determined that racial considerations played a role in the site selection process, these findings would become

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[21] In his testimony, Dr. Bullard also claimed that the CEC site selection process was not the orderly, systematic process depicted in the Applicant's ER but rather a process that contained significant irregularities, gaps, and inconsistencies. He asserted that these numerous deficiencies raised an inference of bias in the site selection process. (Bullard at 55-66 fol. Tr. 853.) In light of our conclusion that the Staff must conduct a thorough investigation of the site selection process, we have not attempted to resolve all of the additional evidentiary disputes between the Intervenor and the Applicant over the various aspects of the selection process.

It should be noted, however, that a comparison of the Fluor Daniel Site Recommendation Report (I-RB-63) — the report before the Steering Committee when the Committee selected the LeSage site — with section 7 of the Applicant's ER (App. Exh. 1(h), at 7.1-1 to -11) does not support the Applicant's assertion that the description of the site selection process in the ER is consistent with the Fluor Daniel report. (Dorsey et al. at 46-48.) Even accepting the Applicant's characterization of the correlation between the site selection phases of the Fluor Daniel report and the phases stated in the ER (*id.* at 46), the criteria that the Fluor Daniel report states were applied at several phases of the selection process simply do not match the criteria that the ER states were applied at those corresponding stages. For example, the Applicant states that Phase III of the Fluor Daniel report corresponds to what is called Intermediate Phase I in the ER. (*Id.*) Yet of the 10 criteria applied at Phase III of the Fluor Daniel report (I-RB-63 at 18-19) 5 of those criteria (i.e., square site configuration, topography, no split ownership of land and mineral rights, site access, and wetlands) have no counterpart in the 10 criteria the ER states were applicable at Intermediate Phase I. (App. Exh. 1(h), at 7.1-6.) The Applicant also states that the First Stage of Phase IV of the Fluor Daniel report corresponds to Intermediate Phase II in the ER. (Dorsey et al. at 46 fol. Tr. 840.) Yet of the 15 criteria applied at the First Stage of Phase IV of the Fluor Daniel report (I-RB-63 at 20-23) at least 8 of those criteria (i.e., access control (must), low flood risk (must), low adjacent population, institutions within 5 miles, no airport within 5 miles, single owner, site size, and baseline environmental data) have no counterpart in the 14 criteria the ER states were applicable to Intermediate Phase II. (App. Exh. 1(h), at 7.1-7 to -8.)

Moreover, given the siting criteria that the Fluor Daniel report states were applied, it is not apparent how the LeSage site could survive the early screening criteria much less become the favored site. For example, the Fluor Daniel report states that in Phase II, which the Applicant states corresponds to Intermediate Phase I in the ER, the solicitation to communities seeking the nomination of potential sites indicated that sites should not have operating oil and gas wells or separate mineral rights. (I-RB-63 at 16.) The ER recites the same solicitation criterion and states that Intermediate Phase I sites were screened using a criterion to "[a]void property with operating gas/oil wells." (App. Exh. 1(h), at 7.1-6.) The Executive Summary of the Fluor Daniel report, however, states: "The LeSage site has a number of characteristics which appear to best satisfy the need for a site for CEEP. These can be summarized as follows[:] Environmental. Current land use includes oil and gas wells, timber farming and a county road." (I-RB-63 at ES-4.) Thus, it appears that the Fluor Daniel siting consultants believed throughout the siting process that there was an operating oil and gas well on the LeSage site. This fact seemingly should have disqualified the LeSage site even though it would not have disqualified the Homer community if other nominated sites in Claiborne Parish still met the other criteria. Indeed, nominated sites in other communities such as the Vivian Texaco site (I-RB-65 at 2) were disqualified for having an oil well on the nominated site. Yet the early screening criteria never disqualified the LeSage site. Although the Applicant's SAR indicates that LeSage well #4 is in fact outside the final southern site boundary (App. Exh. 1(a), at 2.1-13 to -14), that fact does not alter the apparent belief of the siting consultant during the siting process that the LeSage site contained oil and gas wells.

Similarly, the Fluor Daniel report indicates that during the First Stage of Phase IV, which the Applicant states corresponds to Intermediate Phase II in the ER, a "must" access control criterion was applied. That criterion stated that the site must be situated and arranged so that access by unauthorized persons could be prevented and

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moot. Should the opposite prove to be the case, however, these issues will have been decided so that any appropriate Staff licensing action can proceed.

The Intervenor's contention J.9, much like the similar component of Executive Order 12898, is concerned with the disparate impacts of the proposed CEC facility on the minority communities of Forest Grove and Center Springs. More particularly, the Intervenor's contention asserts that the Applicant's ER and the Staff's FEIS do not adequately describe and weigh the various environmental, social, and economic impacts of placing the CEC in the midst of Forest Grove and Center Springs. Similarly, as applicable here, the President's Executive Order instructs the agency, to the greatest extent practicable and permitted by law, to make environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health and environmental effects on minority and low income populations as part of its licensing activities.

In the FEIS, the Staff addressed the various impacts of the CEC in chapters 3 and 4. Additionally, in chapter 4, section 4.2.1.7.4, on environmental justice, it states that, in addition to considering environmental justice from the perspective of whether race played a part in the site selection process, the Staff also considered whether minority and economically disadvantaged populations will be disproportionately affected by the CEC. (Staff Exh. 2, at 4-34.) In this regard, the Staff concludes they will not. (*Id.* at 4-35.)

In making this determination, the Staff declares that, to the extent the CEC affects the environment, those living closest to the facility will be most affected, but that all aspects of facility operation will be required to comply with State and Federal environmental regulations. Specifically, the Staff asserts that all effluent releases from the CEC will be below established regulatory limits and doses are expected to be well within regulatory limits. Further, the Staff states that it has not identified any significant offsite adverse impacts that would occur as a result of facility construction and operation. The Staff thus concludes that because the impacts of the CEC will be relatively small and there will not be a disproportionate adverse impact on minority or low-income populations, operating the LES facility will not promote environmental injustice. (*Id.*)

In their prefiled direct testimony, the Staff witnesses, Ms. Horn and Dr. Zeitoun, stated that in evaluating whether there were disproportionately high

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indicated a site crossed by a public hiking trail, for example, would be unacceptable. (I-RB-63 at 21.) By applying the reconnaissance level information that was used at this early screening stage, the existence of Parish Road 39 bisecting the LeSage site seemingly should have disqualified the site even though it would not have disqualified the Homer community if there were other nominated sites in the parish that met the criteria. Indeed, nominated sites in other communities such as the Delhi site III, Oak Grove Sheldon site, and Winnsboro Magee site (I-RB-65 at 1) were disqualified for having a road across the site. Yet this early screening criterion never disqualified the LeSage site. A similar situation involving the LeSage site is presented by the proximity to airport criterion applicable to the First Stage of Phase IV in the Fluor Daniel report. (I-RB-63 at 22; I-RB-65 at 1.) Neither of these criteria are included in any of the listings of criteria listed in the ER. Accordingly, these anomalies in the process should be analyzed as part of the Staff investigation.

and adverse impacts to minority and low-income populations from the CEC facility, the Staff considered the term "high and adverse" to mean a significant impact such as one above regulatory limits. The Staff also used the term disproportionate to mean greater. (Horn et al. at 22 fol. Tr. 904.) They further testified that the Staff recognized that to whatever degree the CEC affects the environment, those living closest will be the most impacted. Accordingly, concentrations of uranium in the air or water will be higher close to the facility than in Homer; construction noise will be louder close to the site; and traffic impacts will be greater near the site than in Homer or other parts of the parish. (*Id.* at 21.) The Staff witnesses concluded, however, that, "[a]though Forest Grove and Center Springs residents will receive greater impacts due to CEC operation[,] . . . these impacts are not considered by the Staff to be significant or above regulatory limits, and are therefore not considered to be high and adverse." (*Id.* at 22.)

In its evidentiary presentation on contention J.9, the Intervenor challenged the adequacy of the Staff's FEIS treatment of a number of CEC-related effects on the communities of Forest Grove and Center Springs. We must judge the adequacy of the Staff's treatment of the various impacts in the FEIS by the rule of reason. *See, e.g., Maine Yankee Atomic Power Co.* (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1011-12 (1973). That standard is not one of perfection; rather, it is a question of reasonableness. As the Appeal Board long ago recognized, "absolute perfection in a FES [Final Environmental Statement] being unattainable, it is enough that there is 'a good faith effort . . . to describe the reasonably foreseeable environmental impact' of a proposed action." *Id.* at 1012 (citations omitted).

A. Worst Case Accident Analysis

First, the Intervenor asserts that the FEIS does not adequately consider the worst case accident risk to the neighboring communities of Forest Grove and Center Springs.[22] In his prefiled direct testimony, Dr. Bullard asserted that the FEIS identifies the greatest hazard associated with the operation of the CEC as a UF_6 storage area fire. He also conceded that the FEIS sets out the predicted intake of uranium at various distances from the release point in the event of that accident and indicates these accident-related intakes are in excess of the NRC guidance criteria of 10 milligrams (mg). Dr. Bullard further claimed that, other than recognizing it would be released in an accident, the FEIS contains

[22] Even though the Intervenor's contention is aimed at the Applicant's ER and is understood also to challenge the Staff's later filed FEIS (*see supra* p. 373), the Intervenor's evidence is directed exclusively to the adequacy of the FEIS. Accordingly, the focus of our findings is on the Staff's FEIS, although such findings necessarily encompass the adequacy of the Applicant's ER because of the Staff's heavy reliance on the ER in writing the FEIS.

no information about the release of hydrogen fluoride, which combines with atmospheric moisture to form potentially dangerous hydrofluoric acid ("HF"), nor does it discuss the effects of uranium or HF releases on nearby populations, other than to state the bare conclusion that the potential consequences of such an accident are unacceptable. (Bullard at 23-24 fol. Tr. 853.)

Dr. Bullard declared that the asserted Staff failure to address adequately the consequences of a severe accident is based upon the Staff's conclusion that various mitigative measures will keep such an accident from occurring. According to Dr. Bullard, by relying on such mitigative measures the Staff has improperly analyzed the nature of the CEC facility. Instead, the Staff should have recognized that the CEC is a hazardous facility with a certain level of risk that cannot be eliminated by regulation and that licensees, for whatever reason, do not always comply with safety regulations intended to protect the public. He thus claims that there is a foreseeable risk of such an accident and that the minority communities close to the CEC bear that risk to a significantly higher degree than people living further away. Dr. Bullard states that this disproportionate accident risk for Forest Grove and Center Springs should have been analyzed and discussed in the FEIS. (*Id.* at 25-26.)

We agree that the catastrophic failure of a hot cylinder containing liquified UF_6 presents the greatest offsite hazard associated with the CEC. From the record before us, it appears there are two worst case accident scenarios that can result in such a failure: an autoclave heater malfunction and a UF_6 storage yard fire. In the FEIS, the Staff states that an autoclave heater malfunction is prevented by redundant Class I control systems and, therefore, such an event is neither considered credible nor analyzed. (Staff Exh. 2, at 4-53, 4-62.) The Intervenor did not challenge the Staff's treatment of an autoclave malfunction accident.

The Staff also evaluated a UF_6 storage area fire as part of its accident analysis for the CEC. Specifically, it considered an accident involving a cylinder transporter vehicle collision in which the vehicle fuel tank ruptures and the spilled fuel is ignited engulfing the UF_6 cylinder in flames. Relying on an earlier study of the consequences of this accident scenario that it performed in connection with emergency response requirements for fuel cycle facilities, the Staff set out in the FEIS the quantities of uranyl fluoride and hydrogen fluoride escaping from a ruptured UF_6 cylinder. In a table in the FEIS, the Staff also reproduced from its earlier study the predicted uranium intakes at various distances from the release point under two release scenarios. (*Id.* at 4-62 to -63.) The FEIS then states:

> Intakes in excess of the NUREG-1391 guidance criteria (NRC, 1991b) are predicted for considerable distances from the release point. Intakes of uranium below the 10 mg limit and exposure to HF below the 25 mg/m^3 limit are not expected to cause adverse health

> effects. Substantially higher intakes can cause serious injuries and fatalities. The potential consequences of this type of accident are unacceptable.

(*Id.* at 4-63.)

Because it concludes that the consequences of a storage yard fire are unacceptable, the Staff then states in the FEIS that measures to prevent this accident are being imposed by license condition to limit transporter fuel inventories to less than the quantity of fuel that could sustain a fire causing cylinder rupture. Further, although the FEIS does not expressly state that offsite HF concentrations from a storage yard fire would exceed NRC limits, the Staff witnesses testified that "[i]f a cylinder were to overheat and rupture, uranium and HF concentrations would exceed the criteria at offsite locations and result in some health impacts." (Horn et al. at 20 fol. Tr. 904.) The Staff witnesses also testified that, because LES will have in place mitigative measures to prevent an accident as well as an NRC-approved emergency plan, "the Staff does not believe that the accident risk to local residents is significant." (*Id.*)

Contrary to the Intervenor's assertion, we conclude that the Staff's treatment in the FEIS of the worst case storage yard fire accident is minimally adequate to inform the reader of the consequences and likelihood of such an accident — the two components of the overall risk. Recognizing that the standard for judging the sufficiency of the discussion of environmental impacts in the FEIS is one of reasonableness, we cannot find that the Staff's discussion of environmental impacts is so deficient that it requires remediation. As Dr. Bullard conceded, the FEIS sets out, albeit in a table format, the representative predicted uranium intakes from a storage yard fire accident at various distances from the point of release of UF_6 6. In addition, it is also obvious from the FEIS table that uranium intakes in excess of the NRC limit of 10 mg are predicted in both hypothesized release scenarios at various distances from the point of release. Further, the FEIS states that intakes substantially above the NRC limit can cause serious injuries and death. Thus, contrary to Dr. Bullard's assertion, the FEIS does more, although not a great deal more, than merely state the conclusion that the consequences of an accident are unacceptable.

There is no question that the information in the FEIS could be stated more clearly and meaningfully. Indeed, one of the purposes of the EIS is to serve as an environmental full disclosure statement to, among others, interested members of the public. *See, e.g., Minnesota PIRG v. Butz,* 541 F.2d 1292, 1299 (8th Cir. 1976), *cert. denied,* 430 U.S. 922 (1977). Nonetheless, the essential information regarding uranium intakes and health consequences of a worst case accident is provided. No doubt, the FEIS would be more informative if it outlined the various levels of uranium intakes that cause serious injury and those that cause death and if it correlated the distances set forth in the table of representative

predicted uranium intakes with the local populations around the CEC. The FEIS is not, however, inadequate for failing to include this information.

Further, as Dr. Bullard asserts, the FEIS does not expressly address the exposure of the surrounding population to HF releases from a storage yard fire. But the FEIS does imply that HF exposures, like uranium intakes, will exceed the agency guidance criterion of 25 mg/m^3 and that such exposures can cause serious injuries and fatalities — a fact confirmed by the Staff witnesses at the hearing. Thus, in the circumstances, the FEIS is minimally adequate in this regard as well.

Finally, we do not find meritorious Dr. Bullard's claim that the Staff may not rely on accident prevention measures that lessen the probability of an accident as a basis for concluding the risk to surrounding populations from a worst case storage yard fire is not significant. Here, the Staff relies upon a license condition limiting the fuel quantities carried by cylinder transporters to ensure that a storage yard fire would be deprived of a sufficient fuel source for heating a UF_6 cylinder to the rupture point. (Staff Exh. 2, at 4-63 to -64.) Similarly, the Applicant's ER indicates that a combination of engineered safety features and administrative controls must fail to have a worst case storage yard fire. (App. Exh. 1(h), at 5.1-9.) The Intervenor's disagreement with the Staff's conclusion that the risk to surrounding populations from such an accident is not significant, is supported by nothing more than Dr. Bullard's bare assertion that licensees do not always follow safety regulations. This is hardly sufficient to establish that the Staff's deterministic analysis of the accident risk is flawed.[23] For these reasons, we find that the Staff's treatment of the worst case storage yard fire accident in the FEIS is adequate.

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[23] The Intervenor's position that the FEIS is inadequate also is not advanced by Dr. Bullard's reliance on the Commission's finding in the final fuel cycle emergency preparedness rule that releases of uranium hexafluoride in a severe accident occur rapidly with little warning, thereby leaving close neighbors no time to evacuate or even to seek shelter. *See* 54 Fed. Reg. 14,051, 14,052 (1989). The speed with which UF_6 releases may occur in a worst case storage yard fire does not address the likelihood of the accident occurring when there are a number of preventative measures in place.

Additionally, we note that the rationale for the rule requiring certain fuel cycle facilities like the CEC to have emergency plans rested, in part, on the fact that "[a]ny system of engineered safeguards is considered to have some possibility of failure. No system could ever be perfect." 54 Fed. Reg. at 14,056. On its face, it might appear incongruous for the agency to decide, on the one hand, that the generic risk of failure of engineered safeguards is sufficiently significant to require the emergency preparedness rule but, on the other, that engineered safeguards, along with the LES emergency plan, make the risk of a CEC worst case storage yard fire accident insignificant. Nevertheless, it is important to recognize that the Staff's FEIS conclusion is based upon its deterministic analysis of several specific mitigative measures that reduce the likelihood and hence the risk of a worst case accident to a point where the risk is not considered significant. To be sure, the Staff's assessment of the accident risk is not based upon a quantitative probablistic risk assessment. The Intervenor, however, has not shown any error in the Staff's assessment.

B. Impacts of Road Closing/Relocation

The Intervenor also asserts that the FEIS is deficient because if fails to address the impacts of closing Parish Road 39, which currently bisects the LeSage site and joins the communities of Forest Grove and Center Springs. (Bullard at 33 fol. Tr. 853.) *See generally supra* p. 370. Dr. Bullard testified that in the FEIS the Staff assumed that Forest Grove Road would be relocated after it is closed. He claimed, however, that it is by no means clear that the road will be relocated because any decision about the road rests not with LES, but with the Claiborne Parish Police Jury that must pay for any road relocation. Dr. Bullard testified that if the road is not relocated it would impose upon the residents of Center Springs and Forest Grove an additional 8- or 9-mile trip by way of Homer to go from one community to the other. (Bullard at 33 fol. Tr. 853.)

Additionally, Dr. Bullard asserted that even if Parish Road 39 is relocated around the site, the Staff incorrectly concluded in the FEIS that the impacts would be very small and not pose unacceptable risks to the local community. According to Dr. Bullard, it is apparent that the Staff did not even consult with any of the residents of Forest Grove and Center Springs before reaching its conclusion for if it had, the Staff would have found that Forest Grove Road is a vital and frequently used link between the two communities, with regular pedestrian traffic. (*Id.* at 33-34.)

For its part, the Staff does indeed state in the FEIS that Parish Road 39 will be relocated to pass to the west of the plant area and that the existing road will not be closed until the relocated road is fully constructed and open. (Staff Exh. 2, at 2-21; *see id.* Fig. 2.8 at 2-22.) Further, the FEIS indicates that the road relocation will add approximately 120 meters (0.075 mile) to the traveling distance between State Roads 2 and 9 and will add an additional 600 meters (0.38 mile) to the 1800 meter (1.1 mile) distance between the Forest Grove Church and the Center Springs Church, which are the approximate centers of the respective minority communities. The Staff also concludes in the FEIS that the impacts associated with the road relocation "are very small and would not impose unacceptable risks to the local community." (*Id.* at 4-12 to -13.) Finally, in the chapter 4 section on environmental justice, the Staff states that "[t]he minority communities of Forest Grove and Center Springs would be inconvenienced by the Parish Road 39 relocation, increasing the driving time between the communities." (*Id.* at 4-35.) The Staff then generally concludes that there will not be a disproportionate adverse impact on minority or low-income populations. (*Id.*)

In their prefiled direct testimony, the Staff witnesses added that the relocation of Parish Road 39 is expected to result in the largest disruption to the residents of Forest Grove and Center Springs and that it will certainly affect those living near the road to a greater extent than those living in other locations around the parish. (Horn et al. at 14, 21-22 fol. Tr. 904.) They also testified that LES

had stated in a letter to the agency that the road would not be closed until a new road was built. (*Id.* at 14.) Further, Ms. Horn, the Environmental Project Manager for the LES application, testified the Staff concluded that Parish Road 39 would be relocated because the Applicant's ER so stated and Claiborne Parish had passed a resolution (which she had not seen) indicating the road would be relocated. (Tr. 909-10.) Similarly, Dr. Zeitoun testified that a member of his staff confirmed by telephone with a parish police juror that a resolution had been passed, but admitted no inquiry was made whether funds had been allocated to relocate the road. (Tr. 910-11.) Ms. Horn did acknowledge that the Staff had not considered the impacts on the Forest Grove and Center Springs communities if Forest Grove Road was closed and not relocated. (Tr. 912.)

In their prefiled direct testimony, the Staff witnesses also stated the comments on the draft EIS suggest that much of social interaction between Forest Grove and Center Springs center on the community churches. They asserted that the relocation of Parish Road 39 should not affect those activities and residents who attend church services at either church will still be able to do so, although driving distances will be slightly increased. The Staff witness further indicated that the road relocation may require residents of the communities to adjust carpools. For these reasons, the Staff concluded the road relocation would cause an inconvenience, but it is not expected to have a significant impact. (Horn et al. at 14-15 fol. Tr. 904.)

The Applicant's Licensing Manager, Mr. LeRoy, also stated in his prefiled direct testimony that Parish Road 39 will not be closed. Rather, he stated the segment crossing the LeSage site will be relocated to the western edge of the property and the relocation should not cause hardship to anyone. (LeRoy at 12-13 fol. Tr. 840; App. Exh. 1(h), at 4.1-2). He testified it was not foreseeable that the police jury would not relocate the road because "[t]hey voted unanimously to relocate the road." (Tr. 925.)

Although neither the Applicant nor the Staff offered the parish police jury resolution in evidence, and the Staff witnesses apparently have not even seen it, that resolution is in the record as an attachment to the Intervenor's original contentions.[24] As adopted on November 9, 1989, by the Claiborne Parish Police Jury, that resolution hardly can be characterized as the "open and shut case" portrayed by the Applicant and Staff witnesses. It is only a resolution — not an ordinance or other binding legislative enactment with the force of law — and thus merely expresses the prevailing sentiment and opinion of the then police jury. Moreover, the significant "resolved clause" of the resolution uses the disjunctive "or" when it declares the jury agrees to "close or relocate" the road. Therefore, contrary to the apparent belief of the Applicant and Staff witnesses,

[24] *See* Citizens Against Nuclear Trash's Contentions on the Construction Permit/Operating License Application for the Claiborne Enrichment Center (Oct. 3, 1991) following Attach. 13.

the police jury has only expressed a sentiment either to close or to relocate the segment of Parish Road 39 that crosses the LeSage property, but not necessarily to do both. The record before us thus does not support Mr. LeRoy's optimism that the parish will relocate the road. Rather, when all of the record evidence is considered, including that which shows that the minority communities of Forest Grove and Center Springs now are underserved when it comes to receiving even basic parish services (Bullard at 18, 36 fol. Tr. 853; Tr. 870), we have no basis to accept Mr. LeRoy's assurance that the road will be relocated by the parish instead of just closed.

Moreover, the record is clear that the Staff did not analyze the impacts on the communities of Forest Grove and Center Springs of closing Parish Road 39. This substantial shortcoming in the FEIS was remedied at the hearing, however, when LES indicated, for the first time, that it would relocate the road, if necessary. Specifically, Mr. LeRoy, in response to a direct inquiry, testified that LES will relocate the road in the event the police jury fails to do it. (Tr. 925.) We take this as a concession by the Applicant that the impacts of closing the road are sufficiently detrimental to the communities of Forest Grove and Center Springs that those impacts must be addressed by road relocation. Mr. LeRoy's answer thus is a direct commitment that, if the parish does not relocate the road, LES will take all necessary steps, including paying for the road relocation itself, to ensure the segment of Parish Road 39 bisecting the LeSage site is relocated before the current road is closed. Accordingly, we direct that a license condition to that effect must accompany any construction permit and operating license authorization.

The Intervenor also challenged the adequacy of the Staff's treatment in the FEIS of the impact from relocating (as opposed to closing) Parish Road 39 on the communities of Forest Grove and Center Springs and the Staff's conclusion that those impacts were very small. In particular, Dr. Bullard asserted that the Staff did not consider at all that Forest Grove Road was a vital and regularly used pedestrian link between Forest Grove and Center Springs.

The Staff's FEIS treatment of the impacts of relocating Parish Road 39 does not discuss Forest Grove Road's status as a pedestrian link between Forest Grove and Center Springs and the impacts of relocation on those who must walk the distance between the communities on this road. In the FEIS, the Staff calculates how much additional gasoline it will take to drive between the communities when the road is relocated and the added travel time the road relocation will cause for various trips. (Staff Exh. 2, at 4-12.) Similarly, it its hearing testimony, Staff witnesses acknowledged the interaction between the Forest Grove and Center Springs communities but only noted that "[t]he driving distance will be slightly increased." (Horn et al. at 14-15 fol. Tr. 904.)

Dr. Bullard testified, however, that Forest Grove Road is a vital and frequently used link between the communities with regular pedestrian traffic. Neither

the Staff nor the Applicant presented any evidence disputing Dr. Bullard's testimony in this regard. Further, the Bureau of Census statistics introduced by the Intervenor show that the African American population of Claiborne Parish is one of the poorest in the country and that over 31% of black households in the parish have no motor vehicles. (I-RB-67, at 12.) *See supra* p. 371. Again this evidence is undisputed. It thus is obvious that a significant number of the residents of these communities have no motor vehicles and often must walk. Adding 0.38 mile to the distance between the Forest Grove and Center Springs communities may be a mere "inconvenience" to those who drive, as the Staff suggests. Yet, permanently adding that distance to the 1- or 2-mile walk between these communities for those who must regularly make the trip on foot may be more than a "very small" impact, especially if they are old, ill, or otherwise infirm. The Staff in the FEIS has not considered the impacts the relocation of Forest Grove Road will have upon those residents who must walk. Accordingly, we find that the Staff's treatment in the FEIS of the impacts on the communities of Forest Grove and Center Springs from the relocation of Parish Road 39 is inadequate and must be revised.

In doing so, the Staff should identify any impacts of the relocation on local pedestrian traffic and factor those impacts into its weighing of the costs and benefits for the facility and in its environmental justice determination. Further, consideration must be given to whether actions can be taken to mitigate the impacts. In this regard, as we emphasized in LBP-96-25, 44 NRC at 370, it must be remembered that "NEPA is a procedural environmental full disclosure law and it does not dictate any particular substantive outcome as a result of the cost-benefit analysis."

C. Property Value Impacts

In line with that portion of contention J.9 claiming that the CEC will have negative economic impacts on the minority communities of Forest Grove and Center Springs, the Intervenor asserts that property values in the neighboring communities will be adversely affected by the facility and that this economic effect will be borne disproportionately by the minority communities that can least afford it. (Bullard at 22 fol. Tr. 853.) In his prefiled direct testimony, Dr. Bullard acknowledged that the Staff in the FEIS found that some property values may be negatively impacted by the proposed plant, but criticized the Staff for failing to identify the location, extent, or significance of this effect. Instead, Dr. Bullard claims the Staff merely concluded that there will be some unspecified positive and negative changes in property values from the CEC. (*Id.* at 35.)

In support of his assertion that the Staff analysis is inadequate, Dr. Bullard stated that his research shows that negative impacts on property values will occur in the immediate area of the plant and that, because of the housing barriers faced

by African Americans, the residents of Forest Grove and Center Springs will not have the same opportunities to relocate as do whites living in the parish. He asserted that the general beneficial effects on local housing values from the plant cited in the FEIS will have little, if any, effect on the minority communities of Forest Grove and Center Springs. In this regard, Dr. Bullard testified that the general "benefit streams" to counties with large industrial taxpayers do not have significant positive effects on low-income minority communities, which are already receiving a disproportionately low share of the services offered by the county. Further, he stated that the increased demand for property and housing attributable to the facility from migrants coming into the area is unlikely to affect the minority communities of Forest Grove and Center Springs very much, if at all. Dr. Bullard explained that, at the period of peak employment when the proposed facility is expected to have its greatest effect on the local population, which is during the fourth year of construction when some operation already has started, the FEIS states migrants will amount to only 12% of the work force, or 65 workers. He further observed that the FEIS indicates these workers will all be at the very upper end of the skill and pay scale and are expected to be predominantly white. Therefore, according to Dr. Bullard, these workers are extremely unlikely to seek housing in the poor, isolated African American communities of Forest Grove and Center Springs that already receive a relatively low level of services from the parish. (*Id.* at 35-37.)

The Intervenor's expert thus concludes that, although the FEIS acknowledges the proposed facility will depress some property values and increase others, the Staff has failed to address the central fact that in all likelihood the negative impacts of depressed property values will disproportionately affect the minority communities next to the plant. Similarly, he asserts the FEIS fails to address the fact that the minority residents of Forest Grove and Center Springs are among the poorest residents of the parish and are less likely to be able to absorb the diminution in property values than other wealthier, more mobile residents of Claiborne Parish. Dr. Bullard states that the FEIS should have analyzed and discussed these adverse, inequitable impacts. (*Id.* at 37.)

In FEIS section 4.2.1.7 entitled "Socioeconomic and Community Support Services," the Staff "describe[d] the social, economic, and community impacts of CEC operations." (Staff Exh. 2, at 4-31.) It stated that "[t]he towns of Homer and Haynesville have been emphasized due to their proximity to the proposed facility location and their status as providers of community services." (*Id.*) In subsection 4.2.1.7.1, the Staff stated with respect to housing that

> For the last 2 years there has been an oversupply of lower quality and older homes on the market. However, there are very few homes, apartments, or mobile homes available for rent. Construction and operation of CEC would be expected to bid up rental prices and, to a lesser extent, home purchase prices; and will probably stimulate new construction. Any

> shift of this nature is expected to be minimal since there is an oversupply of homes for sale and people can choose residences over a wide area.

(*Id.* at 4-32.) In subsection 4.5.2 on property values in its cost-benefit analysis, the Staff then stated:

> LES is likely to have a significant effect on local housing values and, ultimately, amenities. There is considerable evidence to suggest that property values and amenities are enhanced in counties with large industrial taxpayers (e.g., fossil power plants) (Gamble and Downing, 1982). These benefits are not only via the direct payment to the taxing jurisdiction, but through the increased value of real property as the benefit stream to the property owners is capitalized into property values . . . .
>
> The facility is likely to increase both housing and land prices because of increased demand (e.g., from migrants) and because of the benefit-capture effect just described. This is a benefit to all existing property owners, including those acquiring property prior to the actual receipt of the tax revenues. The magnitude of the benefit is difficult to quantify but is not negligible. Real estate prices in the area are likely to be bid up in anticipation of the property tax stream.

(*Id.* at 4-83.) Thereafter, in the summary of the cost-benefit analysis, the Staff notes that there will be "changes in property values (some positive, some negative)." (*Id.* at 4-86.)

In its prefiled direct testimony, the Staff witnesses stated that impacts such as property values "would be distributed throughout the region and are not expected to disproportionately or adversely impact Forest Grove or Center Springs." (Horn et al. at 20 fol. Tr. 904.) Further, they asserted that "[i]mpacts on individuals cannot be predicted" and that "[a]ll of these types of impacts and benefits will occur throughout the region; however, there is no way to determine if a specific individual or area will benefit or be adversely impacted." (*Id.*) Ms. Horn and Dr. Zeitoun also stated that the Staff did not consider the racial makeup of the homes surrounding the site when it assessed the impacts of the CEC. (*Id.* at 21.)

For its part, the Applicant stated in its ER that LES anticipates that real estate values of some adjacent properties may be enhanced due to the facility. It indicated that neither the specific adjacent properties nor the precise increase in value can be predicted but that the "[p]roperty value enhancement would be gained primarily through the location of business ventures supporting LES operations (e.g., food service, equipment vendors)." (App. Exh. 1(h), at 8.1-4 to -5.) Further, the Applicant's Licensing Manager, Mr. LeRoy, testified that, in his experience with Duke Power Company nuclear power plants, property values around the plants dramatically increased after the facilities were constructed. (Tr. 919, 954.) He indicated that he was referring to the Oconee Nuclear Station on Lake Keowee and the Catawba Nuclear Station on Lake Wylie in South Carolina,

and the McGuire Nuclear Station on Lake Norman in North Carolina. (Tr. 956.) Mr. LeRoy then provided one example of residential or vacation property on each of the lakes before and after the nuclear facilities were built showing substantial increases in values from the 1970s and early 1980s through the 1990s. (Tr. 957-59.) He conceded, however, that he did not know whether any of the communities around the three lakes were African American communities. (Tr. 961.)

Additionally, Mr. Dorsey testified that in his 25 to 30 years of experience on a number of significant projects in a wide range of industries, property values have increased in the immediate vicinity of the final site. (Tr. 919.) Likewise, Mr. Schaperkotter added that in his experience the presence of new development quite often creates an increase in property values. (*Id.*)

The Staff's treatment of the economic impacts of the CEC on property values in the FEIS does indeed recognize that the CEC will depress some property values while increasing others, but the Staff fails to identify the location, extent, or significance of impacts. Further, although, the FEIS generally indicates the CEC is likely to increase both housing and land prices because of increased demand and the benefits capture effect, the Staff makes no attempt to allocate the costs or benefits. Dr. Bullard directly challenges the Staff's failure to assess the impacts of the CEC on property values in the communities of Forest Grove and Center Springs asserting that when facilities like the CEC are placed in the midst of poor, minority communities, the facility has negative impacts on property values in the immediate area of the plant. For the reasons specified below, we find his testimony on the negative economic impact of the CEC on property values in these minority communities reasonable and persuasive.

The focus of Intervenor contention J.9 and Dr. Bullard's supporting testimony is that the negative economic impact of the CEC must be assessed as it operates on the minority "communities" of Forest Grove and Center Springs, not just on a particular parcel of property. Dr. Bullard explained that unlike white residents of the parish, the black residents of Forest Grove and Center Springs face substantial "housing barriers" that preclude them from leaving when a large industrial facility is sited in the midst of their residential area. As a consequence, these already economically depressed communities must fully absorb the further adverse impact of having a heavy industrial facility nearby making them even more undesirable. He testified that the beneficial effects on housing values from increased demand by new migrating employees and the benefit capture effect relied upon by the Staff in the FEIS will have no effect on these minority communities that currently receive almost no parish services, are virtually 100% African American, and are inhabited by some of the most economically disadvantaged people in the United States. As Dr. Bullard stated, it is "extremely unlikely" new workers to the area will seek to live in Forest Grove and Center Springs. Dr. Bullard concludes that these factors lead to an

overall negative impact on property values in the minority communities that must host the CEC; yet these communities are made up of people who can least afford the diminution in property values.

The Staff witnesses made no attempt to explain how or why Dr. Bullard might be mistaken. Rather, they testified that the impacts on property values from the CEC would be distributed throughout the region and, therefore, the impacts "are not expected to disproportionately or adversely impact Forest Grove or Center Springs." (Horn et al. at 20 fol. Tr. 904.) Further, they claimed "there is no way to determine if a specific individual or area will benefit or be adversely impacted." (*Id.*) We find that the testimony of these Staff witnesses in this regard is neither persuasive nor reasonable in this instance. Indeed, given the Staff's recognition in the FEIS that there will be some negative impacts on property values from the CEC, it is difficult to envision an economic rationale that would demonstrate those adverse impacts from the CEC are likely to occur to properties well removed from the facility, such as in Homer or Haynesville, as opposed to the Forest Grove and Center Springs areas next to the facility.

We also find the Intervenor's position persuasive because we find this witness both credible and convincing. Dr. Bullard is a recognized expert on the subject of environmental justice who for years has conducted research, lectured, and written extensively in the areas of housing and community development. He has presented a reasoned, persuasive, and unchallenged explanation why the CEC will negatively impact property values in these minority communities. Additionally, even a cursory look at the references cited by Dr. Bullard in his prefiled direct testimony show there has been substantial research indicating the negative impacts on minority communities in analogous circumstances.

In reaching this conclusion, we recognize that the Staff witnesses stated it was not "expected" the impacts from the CEC on property values would disproportionately or adversely impact Forest Grove or Center Springs. Yet the same witnesses also specifically testified that the Staff did not consider the racial makeup of the homes surrounding the site when they considered the impacts from the CEC. Thus, the Staff apparently has not considered the economic impact on property values of siting the CEC in the midst of these neighboring minority communities, qua minority communities. Indeed, the exploration of this matter would likely be another circumstance that merits scrutiny under Executive Order 12898.

Nor is the Applicant's evidence about property value increases persuasive here. Applicant's ER undoubtedly is correct in predicting that a number of adjacent properties will increase in value as sites for food service and equipment vendors supporting the plant. But the number of immediately adjacent properties involved will be relatively few, most likely on State Road 9. The thrust of contention J.9 and Dr. Bullard's testimony is the impact on the minority communities of Forest Grove and Center Springs as a whole, rather than on two

or three individual parcels of property. The Applicant's ER simply does not address that impact.

By the same token, the opinions of Mr. Dorsey and Mr. Schaperkotter to the effect that industrial facilities often increase property values in the vicinity of a facility are far too general to draw any reasonable conclusions about the impacts on property values in the circumstances presented here. Likewise, Mr. LeRoy's testimony about the positive impact on lakefront vacation home values from the construction of nuclear power plants is neither useful nor reasonable in making a comparison with the economically disadvantaged minority communities of Forest Grove and Center Springs. Certainly, the reality of Forest Grove and Center Springs hardly seems comparable to the description of Lake Wylie in Applicant's Exhibit 19, which states that "[t]he Catawba plant was built on a beautiful lake, dotted with hundreds of expensive homes and homesites." (App. Exh. 19 at 7.) Nor do these communities resemble the description of Lake Keowee in Exhibit 19 as "[o]ne of the most prestigious resort/retirement communities in the United States [which] is less than a mile from Oconee Nuclear Station. At Keowee Key more than 1500 people golf, boat, fish, relax and retire next door to a nuclear plant." (*Id.* at 8.)

On this basis, we find that the Staff's treatment in the FEIS of the impacts from the CEC on property values in the communities of Forest Grove and Center Springs is inadequate. Therefore, the Staff must consider these impacts and factor them into its weighing of the costs and benefits of the facility and in its environmental justice determination.

D. Other Impacts

Finally, the Intervenor also challenges the adequacy of the Staff's treatment in the FEIS of the impacts from the CEC on the communities of Forest Grove and Center Springs concerning a number of other matters, including (1) contamination of surface and groundwater; (2) impacts on groundwater supply; (3) impacts of noise; (4) impacts of traffic, development, and crime; and (5) impacts from the disproportionate distribution of benefits. We have carefully examined all of the evidence regarding each of these claims and find that the FEIS adequately considers the impacts. Further, we find that none of these impacts will cause a disproportionately high and adverse impact on the residents of Forest Grove and Center Springs. In addition to the foregoing findings on contention J.9, we have considered all of the other arguments, claims, and proposed findings of the parties on this contention and find that they either are without merit, immaterial, or unnecessary to this Final Initial Decision.

IV. CONCLUSION

For the reasons detailed in Part II.C, we conclude that a thorough Staff investigation of the CEC site selection process is essential to determine whether racial discrimination played a role in that process, thereby ensuring compliance with the nondiscrimination directive contained in Executive Order 12898. Additionally, for the reasons set forth in Part III.B, we conclude that the Staff's treatment in the FEIS of the impacts of relocating Parish Road 39 on the communities of Forest Grove and Center Springs is inadequate and the Staff must take steps to revise the FEIS consistent with this Decision. Also in connection with the relocation of Parish Road 39, consistent with this Decision a license condition must be included in any ultimate construction permit–operating license authorization that makes the Applicant responsible for ensuring that the current road is relocated before the segment that currently bisects the facility site is closed. Further, we conclude in Part III.C that the Staff's treatment in the FEIS of the economic impact of the CEC on the properties in the communities of Forest Grove and Center Springs is inadequate and that the Staff must take steps to revise the FEIS consistent with this Decision.

In light of the Board's conclusions in the earlier Partial Initial Decisions in LBP-96-25, 44 NRC 331 (1996), and LBP-97-3, 45 NRC 99 (1997), the Staff also must take appropriate steps to address the other identified insufficiencies in the FEIS. Further, the Applicant's requested authorization for a combined construction permit and operating license is hereby *denied,* albeit without prejudice to the Applicant amending its license application in accordance with the Partial Initial Decisions in this proceeding.

Pursuant to 10 C.F.R. § 2.760 of the Commission's Rules of Practice, this Final Initial Decision will constitute the final Decision of the Commission on this contention forty (40) days from the date of its issuance unless a petition for review is filed in accordance with 10 C.F.R. § 2.786, or the Commission directs otherwise. Within fifteen (15) days after service of this Final Initial Decision, any party may file a petition for review with the Commission on the grounds specified in 10 C.F.R. § 2.786(b)(4). The filing of a petition for review is mandatory in order for a party to have exhausted its administrative remedies before seeking judicial review at the appropriate time. Within ten (10) days after service of a petition for review, any party to the proceeding may file an

answer supporting or opposing Commission review. The petition for review and any answers shall conform to the requirements of 10 C.F.R. § 2.786(b)(2)-(3).

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Thomas S. Moore, Chairman
ADMINISTRATIVE JUDGE

Richard F. Cole
ADMINISTRATIVE JUDGE

Frederick J. Shon
ADMINISTRATIVE JUDGE

May 1, 1997
Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

G. Paul Bollwerk, III, Presiding Officer
Dr. Charles N. Kelber, Special Assistant

In the Matter of **Docket No. 40-3453-MLA**
(ASLBP No. 97-723-02-MLA)

ATLAS CORPORATION
(Moab, Utah Facility) **May 16, 1997**

In this 10 C.F.R. Part 2, Subpart L informal proceeding concerning pro se petitioner John Francis Darke's challenge to a request by Atlas Corporation to amend the license for its Moab, Utah uranium milling facility to extend the completion date for placing a final radon barrier on the facility tailings pile, the Presiding Officer rules (1) Petitioner Darke's hearing request is timely and specifies areas of concern that are germane to the subject matter of the proceeding; (2) Petitioner Darke has failed to establish any grounds for using 10 C.F.R. Part 2, Subpart G formal adjudicatory procedures; and (3) despite multiple opportunities to address the issue, Petitioner Darke has failed to meet his burden to establish his standing to intervene in this proceeding.

RULES OF PRACTICE: INFORMAL HEARINGS (PARTY ADMISSION REQUIREMENTS)

To be admitted as a party to an informal adjudication under Subpart L of 10 C.F.R. Part 2 regarding a licensee-initiated materials license amendment, the individual or organization filing a hearing/intervention request must establish three things: (1) the petitioner is a "person whose interest may be affected by the proceeding" within the meaning of section 189a(1)(A) of the Atomic Energy Act of 1954 (AEA), 42 U.S.C. § 2239(a)(1)(A), in that the petitioner has standing

to participate in the proceeding consistent with the standards governing standing in judicial proceedings generally; (2) the petitioner has "areas of concern" regarding the requested licensing action that are germane to the subject matter of the amendment proceeding; and (3) the hearing/intervention petition was timely filed. *See* 10 C.F.R. § 2.1205(e), (h).

RULES OF PRACTICE: INFORMAL HEARINGS (USING OTHER PROCEDURES)

In an informal adjudication under 10 C.F.R. Part 2, Subpart L, the petitioner may request that the proceeding be conducted employing procedures other than those set forth in Subpart L, which could include use of the procedures for formal, trial-type adjudications set forth in Subpart G of Part 2. *See id.* § 2.1209(k).

RULES OF PRACTICE: INFORMAL HEARINGS (SPECIFYING AREAS OF CONCERN)

The "areas of concern" specified in support of a hearing request under Subpart L "need not be extensive, but [they] must be sufficient to establish that the issues the requester wants to raise fall generally within the range of matters that properly are subject to challenge in such a proceeding." 54 Fed. Reg. 8269, 8272 (1989). Like the requirement that a 10 C.F.R. Part 2, Subpart G formal hearing petition must define the "specific aspect or aspects of the subject matter of the proceeding as to which petitioner wishes to intervene," 10 C.F.R. § 2.714(a)(2), the Subpart L direction to define "areas of concern" is only intended to ensure that the matters the petitioner wishes to discuss in his or her written presentation are generally within the scope of the proceeding.

RULES OF PRACTICE: INFORMAL HEARINGS (USING OTHER PROCEDURES)

A request to use other procedures in a 10 C.F.R. Part 2, Subpart L proceeding should involve consideration of whether, given the particular circumstances involved in the proceeding, permitting the use of additional, trial-type procedures such as oral cross-examination would add appreciably to the factfinding process. *See Sequoyah Fuels Corp.* (Sequoyah UF_6 to UF_4 Facility), CLI-86-17, 24 NRC 489, 497 (1986).

RULES OF PRACTICE: HEARING REQUIREMENT (MATERIALS LICENSE)

As a request for a revision to a 10 C.F.R. Part 40 source materials license, a licensee's amendment application falls squarely within the designation of a "licensee-initiated amendment" under 10 C.F.R. § 2.1201(a)(1) — as opposed to being a 10 C.F.R. Part 2, Subpart B Staff-imposed amendment that would be subject to the formal hearing procedures in Subpart G — and thus properly is the subject of Subpart L informal procedures.

ATOMIC ENERGY ACT: STANDING TO INTERVENE

RULES OF PRACTICE: STANDING TO INTERVENE

To establish standing to participate as of right in an adjudicatory proceeding regarding an agency licensing action, an individual petitioner must demonstrate that (1) he or she has suffered or will suffer a distinct and palpable "injury in fact" within the "zone of interests" arguably protected by the statutes governing the proceeding (e.g., the AEA, the National Environmental Policy Act of 1969); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996).

RULES OF PRACTICE: STANDING TO INTERVENE (CONSTRUCTION OF PETITION)

Although the petitioner bears the burden of establishing his or her standing, it also is clear under Commission caselaw that in making a standing determination a presiding officer is to "construe the petition in favor of the petitioner." *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

ATOMIC ENERGY ACT: STANDING TO INTERVENE (INJURY IN FACT)

RULES OF PRACTICE: STANDING TO INTERVENE (INJURY IN FACT)

A licensee's claim that "regulatory limits" are not being exceeded by offsite radiological releases from a facility is not, standing alone, sufficient to show that a petitioner lacks standing. As was noted in the face of a similar assertion, "[r]elative to a threshold standing determination, . . . even minor radiological exposures resulting from a proposed licensee activity can be enough to create

the requisite injury in fact." *General Public Utilities Nuclear Corp.* (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 158 (1996).

ATOMIC ENERGY ACT: STANDING TO INTERVENE (INJURY IN FACT)

RULES OF PRACTICE: STANDING TO INTERVENE (INJURY IN FACT)

A showing that there may be some offsite radiological impacts to someone is not enough to establish standing for a particular petitioner. As the Commission has made clear on a number of occasions, in the context of a proceedings other than those for the grant of a reactor construction permit or operating license, a petitioner who wants to establish "injury in fact" for standing purposes must make some specific showing outlining how the particular radiological (or other cognizable) impacts from the nuclear facility or materials involved in the licensing action at issue can reasonably be assumed to accrue to the petitioner. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 246-48 (1996).

ATOMIC ENERGY ACT: STANDING TO INTERVENE (INJURY IN FACT)

RULES OF PRACTICE: STANDING TO INTERVENE (INJURY IN FACT)

In proceedings other than those for the grant of a reactor construction permit or operating license, petitioners generally establish their "injury in fact" by quantifying the distance from the nuclear facility or materials at which they reside or engage in other activities they believe are likely to result in radiological impacts. *See, e.g., Oyster Creek,* LBP-96-23, 44 NRC at 157-59.

ATOMIC ENERGY ACT: STANDING TO INTERVENE (INJURY IN FACT)

RULES OF PRACTICE: STANDING TO INTERVENE (INJURY IN FACT)

A petitioner has not shown any reasonable nexus between himself or herself and any purported radiological impacts when, despite assertions about potential facility-related airborne and waterborne radiological contacts, he or she has not delineated these with enough concreteness to establish some impact on him that is sufficient to provide him or her with standing. By not providing any

information that indicates whether water-related activities are being conducted upstream or downstream from a facility and by describing other activities only using vague terms such as "near," "close proximity," or "in the vicinity" of the facility at issue, the petitioner fails to carry his or her burden of establishing the requisite "injury in fact."

RULES OF PRACTICE: STANDING TO INTERVENE (FACTUAL REPRESENTATIONS)

It generally is the practice for participants making factual claims regarding the circumstances that establish standing to do so in affidavit form that is notarized or includes a declaration that the statements are true and are made under penalty of perjury.

MEMORANDUM AND ORDER
(Denying Hearing Request)

Pro se petitioner John Francis Darke has filed a hearing request challenging Atlas Corporation's (Atlas) December 20, 1996 application to amend its 10 C.F.R. Part 40 license for its uranium milling facility in Moab, Utah. The amendment in question would modify License Condition (LC) 55 A.(3) of the Atlas license (No. SUA-917) to extend by 4 years — until December 31, 2000 — the completion date for placing a final radon barrier on the existing mill tailings pile at the Moab facility. Licensee Atlas opposes Petitioner Darke's hearing request asserting, among other things, that he lacks standing and has failed to specify any litigable issues.

For the reasons stated below, I find Petitioner Darke has not established his standing to intervene in this proceeding. Accordingly, I deny his hearing request.

I. BACKGROUND

A. Atlas Reclamation Plans for the Moab Facility

Atlas' Moab uranium milling facility, which is located on the west bank of the Colorado River approximately 3 miles northwest of Moab, Utah, ceased commercial operation in 1984. At present, on site at the facility is a 10.5-million-ton mill tailings pile that needs to be reclaimed (i.e., stabilized) for long-term disposal. This pile, which currently occupies approximately 130 acres of land and rises to a height of some 90 feet, is located within 750 feet of the Colorado River. *See* Office of Nuclear Materials Safety and Safeguards (NMSS), U.S.

Nuclear Regulatory Commission (NRC), NUREG-1531, Draft Environmental Impact Statement [(EIS)] Related to Reclamation of the Uranium Mill Tailings at the Atlas Site, Moab, Utah (Jan. 1996) at 1-4, 2-1.

To comply with agency requirements regarding site stabilization, Atlas initially submitted an onsite reclamation plan in 1981, which the NRC Staff approved the following year. Then, in 1988 Atlas submitted a license amendment application that included a revised onsite reclamation plan. Staff review of that plan resulted in requests for additional information and redesign. Thereafter, in June 1992 Atlas submitted another revised onsite reclamation plan. In July 1993, the Staff issued a notice of its intent to approve this Atlas reclamation plan and made available for public comment an environmental assessment regarding the proposed Atlas plan. *See* NMSS, NRC, NUREG-1532, Draft Technical Evaluation Report [(TER)] for the Revised Reclamation Plan for the Atlas Corporation Moab Mill (Jan. 1996) at 1-4.

Based on public comment, in October 1993 the Staff withdrew the July 1993 notice of intent, and in March 1994 issued another notice declaring its intent to prepare a full-blown EIS. The Staff also began a reevaluation of the entire revised Atlas reclamation plan. *See id.* As part of this reevaluation process, in March 1994 the Staff also issued a notice that included an opportunity for a hearing on the revised Atlas reclamation plan. *See* 67 Fed. Reg. 16,665, 16,665 (1994). No hearing requests apparently were filed in response to this notice, however.

The Staff finally issued a draft EIS and a draft TER on Atlas' proposed onsite reclamation plan in January 1996. A final TER regarding the plan was issued in March 1997, while a final EIS apparently is not expected until the fall of 1997. *See* Licensee's Response (Apr. 7, 1997) at 2 & n.2 [hereinafter Atlas Response].

B. Atlas Request to Extend Radon Barrier Completion Date

Related to the approval of a reclamation plan for the Atlas facility is the item of central interest in this proceeding: the December 31, 1996 target date initially set for the placement of a final earthen cover on the Moab facility tailings to limit radon emissions to a flux of no more than 20 picocuries per meter squared per second ($pCi/m^2/s$). This date came into play by reason of an October 1991 memorandum of understanding between the Environmental Protection Agency and the NRC that set out target dates for final radon barrier emplacement for a number of tailings impoundments, including the Atlas Moab facility. *See* 56 Fed. Reg. 55,434, 55,435 (1991). Subsequently, the December 31, 1996 date for final radon barrier emplacement at the Moab facility was incorporated into the Atlas license as LC 55 A.(3) by Amendment No. 17 issued on November 4, 1992.

Under LC 55 C., which also was adopted under Amendment No. 17, any request to revise the final radon barrier completion date specified in the license "must demonstrate that compliance was not technologically feasible (including inclement weather, litigation which compels delay to reclamation, or other factors beyond the control of the licensee)." *See* Letter from Sherwin E. Turk, NRC Staff Counsel, to Presiding Officer and Special Assistant (Feb. 14, 1997), encl. 1, at 11 (License No. SUA-917, Amendment No. 27) [hereinafter Turk Letter]. Relying on this provision, *see* Atlas Response at 8-9, on December 20, 1996, Atlas asked to amend the Moab facility license to extend by 4 years the December 31, 1996 date specified in LC 55 A.(3) for final radon barrier completion. As the basis for this request, Atlas declared that (1) the December 1996 deadline was footed on the assumption the Moab facility reclamation plan would be approved in 1993, thereby allowing 3 years to perform construction work and still provide an adequate period for consolidation of affected materials placed in the impoundment before placement of the final radon barrier; and (2) because the agency EIS and TER were not completed, Atlas did not have the plan approval needed to begin construction. *See* Turk Letter, encl. 2, at 1-2 (Letter from Richard E. Blubaugh, Atlas Corp., to Joseph J. Holonich, NMSS, NRC (Dec. 20, 1996)).

C. Adjudicatory Proceeding Procedural Posture

On January 14, 1997, the Staff issued a notice stating it had received the December 20 Atlas license amendment application and was offering an opportunity for a 10 C.F.R. Part 2, Subpart L informal hearing on the Licensee's request. *See* 62 Fed. Reg. 3313, 3313 (1997). In a one-page letter dated January 30, 1997, Petitioner Darke asked for a hearing regarding the Atlas amendment request. *See* Letter from John Francis Darke to Secretary, NRC (Jan. 30, 1997) [hereinafter Darke Hearing Request]. Besides asserting the requested licensing action "is without factual or legal basis," Petitioner Darke sought to have the matter heard under the rules for formal adjudicatory proceedings set forth in Subpart G of 10 C.F.R. Part 2. *Id.* Further, addressing his standing to become a party to such a proceeding, he stated only that the proposed amendment was "predominately adverse to the health and safety of the requestor and his family, who reside in the vicinity of the subject site." *Id.*

After being designated as presiding officer for this proceeding, *see* 62 Fed. Reg. 7279 (1997), on February 12, 1997, I issued an initial order. That order established a deadline for the Staff to specify whether it wished to be a party to this proceeding. It also provided Petitioner Darke with an opportunity to supplement his hearing petition to address more fully the issue of his standing and to explain in more detail his areas of concern regarding the Atlas amendment request and his reasons for claiming that a formal adjudication under Subpart G

was appropriate. *See* Presiding Officer Memorandum and Order (Initial Order) (Feb. 12, 1997) at 2-3 [hereinafter Initial Order].

In a February 21, 1997 response to this order, the Staff declared that, in accordance with 10 C.F.R. § 2.1213, it would not participate as a party in this proceeding. *See* Letter from Sherwin E. Turk, NRC Staff Counsel, to Presiding Officer and Special Assistant (Feb. 21, 1997). Petitioner Darke responded to the initial order with two substantive filings.[1] In the first, submitted on February 24, 1997, he addressed the question of why this proceeding should be conducted under Subpart G formal procedures. *See* [First Response to Presiding Officer's Memorandum and Order Dated February 13, 1997] (Feb. 24, 1997) [hereinafter Darke February 24 Response]. In his second filing, dated March 3, 1997, Petitioner Darke discussed his areas of concern regarding the proposed amendment and the basis for his standing to intervene in this proceeding. *See* [Second Response to Presiding Officer's Memorandum and Order Dated February 13, 1997] (Mar. 3, 1997) [hereinafter Darke March 3 Response].

On March 5, 1997, the Staff submitted a letter declaring that, in accordance with 10 C.F.R. § 2.1205(m), the previous day it had issued the license amendment sought by Atlas, thereby revising LC 55 A.(3) to change the date for final radon barrier placement at the Moab facility to December 31, 2000. *See* Letter from Sherwin E. Turk, NRC Staff Counsel, to Presiding Officer and Special Assistant (Mar. 5, 1997). Although a petitioner may contest a Staff determination to issue a license amendment during the pendency of a hearing, *see* 10 C.F.R. § 2.1263, Petitioner Darke did not initiate such a challenge.

Thereafter, in a March 11, 1997 memorandum and order, I afforded Petitioner Darke an opportunity to make an additional submission addressing the issue of standing. *See* Presiding Officer Memorandum and Order (Permitting Additional Filing) (Mar. 11, 1997) at 2-3 [hereinafter Additional Filing Order]. He filed that pleading on March 24, 1997. *See* [Response to Presiding Officer's March 11, 1997 Memorandum and Order] (Mar. 24, 1997) [hereinafter Darke March 24 Response]. Atlas then submitted its response to all of Petitioner Darke's prior filings, asserting he lacked standing and had failed to specify areas of concern germane to the proceeding or to establish an adequate basis for his request that formal adjudicatory procedures be used. *See* Atlas Response at 4-11. In lieu of a prehearing conference/oral argument on these issues, I permitted Petitioner Darke to file a reply to this Atlas response. *See* Presiding Officer Order (Permitting Reply Filing) (Apr. 11, 1997) at 2 [hereinafter Reply Filing Order]. Petitioner Darke did so on April 21, 1997. *See* [Response to Presiding

[1] In addition, Petitioner Darke filed a third pleading in which he provided corrections to the first two pleadings. *See* [Third Response to Presiding Officer's Memorandum and Order Dated February 13, 1997] (Mar. 13, 1997).

Officer's April 11, 1997 Memorandum and Order] (Apr. 21, 1997) [hereinafter Darke Reply].

II. ANALYSIS

Section 2.1205 of title 10 of the *Code of Federal Regulations* makes it clear that to be admitted as a party in an informal adjudication under Subpart L of Part 2 regarding a licensee-initiated materials license amendment, the individual or organization filing a hearing/intervention request must establish three things: (1) the petitioner is a "person whose interest may be affected by the proceeding" within the meaning of section 189a(1)(A) of the Atomic Energy Act of 1954 (AEA), 42 U.S.C. § 2239(a)(1)(A), in that the petitioner has standing to participate in the proceeding consistent with the standards governing standing in judicial proceedings generally; (2) the petitioner has "areas of concern" regarding the requested licensing action that are germane to the subject matter of the amendment proceeding; and (3) the hearing/intervention petition was timely filed. *See* 10 C.F.R. § 2.1205(e), (h). In addition, as Petitioner Darke's hearing request illustrates, the petitioner may request that any proceeding be conducted employing procedures other than those set forth in 10 C.F.R. Part 2, Subpart L, governing informal adjudications, which could include use of the procedures for formal, trial-type adjudications set forth in Subpart G of Part 2. *See id.* § 2.1209(k).

A. Timeliness, Areas of Concern, and Additional Adjudicatory Procedures

As he seeks to address these threshold matters, Petitioner Darke's various filings present a decidedly mixed bag. For instance, as he points out in his March 3 response, because he filed (i.e., mailed) his hearing request within 8 days of *Federal Register* publication of the Staff's notice of opportunity for hearing, Petitioner Darke's hearing request clearly is timely. *See* Darke March 3 Response at 5.

So too, his hearing request, as supplemented by his filings of March 3 and March 24, sets forth "areas of concern" that are sufficient to support the grant of his hearing request. As the Commission has indicated, the "areas of concern" specified in support of a hearing request under Subpart L "need not be extensive, but [they] must be sufficient to establish that the issues the requester wants to raise fall generally within the range of matters that properly are subject to challenge in such a proceeding." 54 Fed. Reg. 8269, 8272 (1989). Like the requirement that a Subpart G formal hearing petition must define the "specific aspect or aspects of the subject matter of the proceeding as to which petitioner

wishes to intervene," 10 C.F.R. § 2.714(a)(2), the Subpart L direction to define "areas of concern" is only intended to ensure that the matters the petitioner wishes to discuss in his or her written presentation are generally within the scope of the proceeding. In this instance, Petitioner Darke has made it apparent that, among other things, he wishes to address the validity of the reasons cited by Licensee Atlas for requesting the amendment (i.e., whether completion under the prior schedule "was not technologically feasible" in accordance with LC 55 C. and 10 C.F.R. Part 40, App. A, Criterion 6A(1)) and the efficacy of the extended completion date, both of which are appropriate subjects for consideration relative to the license amendment in question. *See* Darke March 3 Response at 5-8.

On the other hand, Petitioner Darke's request that Subpart G formal adjudicatory procedures be used for this proceeding is well off the mark. The Commission has indicated that such a request should involve consideration of whether, given the particular circumstances involved in the proceeding, permitting the use of additional, trial-type procedures such as oral cross-examination would add appreciably to the factfinding process. *See Sequoyah Fuels Corp.* (Sequoyah UF_6 to UF_4 Facility), CLI-86-17, 24 NRC 489, 497 (1986). Petitioner Darke has taken a different tack, asserting this proceeding should be held using Subpart G formal procedures because it does not involve the type of "licensee-initiated amendment" of a nuclear materials license to which Subpart L is applicable under 10 C.F.R. § 2.1201(a)(1). *See* Darke February 24 Response at unnumbered 2-3. There is not the slightest doubt, however, that as a request for a revision to its 10 C.F.R. Part 40 source materials license, the Atlas amendment application falls squarely within that designation — as opposed to being a 10 C.F.R. Part 2, Subpart B Staff-imposed amendment that would be subject to the formal hearing procedures in Subpart G — and thus properly is the subject of Subpart L informal procedures. Because Petitioner Darke has made no other showing in support of his request for the use of Subpart G formal procedures, I have no basis for recommending to the Commission that such procedures be used.

B. Standing to Intervene

My decision on Petitioner Darke's request to convene a hearing thus comes down to the question whether he has made a showing sufficient to establish he has standing to intervene in this proceeding. To establish standing to participate as of right in an adjudicatory proceeding regarding an agency licensing action, an individual petitioner must demonstrate that (1) he or she has suffered or will suffer a distinct and palpable "injury in fact" within the "zone of interests" arguably protected by the statutes governing the proceeding (e.g., the AEA, the National Environmental Policy Act of 1969); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station),

CLI-96-1, 43 NRC 1, 6 (1996). Further, while the petitioner bears the burden of establishing his or her standing, it also is clear under Commission caselaw that in making a standing determination a presiding officer is to "construe the petition in favor of the petitioner." *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

As was noted previously, in his initial hearing request Petitioner Darke's only statement regarding his standing to intervene was that the Atlas amendment request was "predominately adverse" to his health and safety and that of his family, "who reside in the vicinity of the subject site." Darke Hearing Request at 1. In an effort to learn more about his standing claim, in my February 12 initial order I gave Petitioner Darke an opportunity to supplement his hearing petition to address "in detail" the basis for his standing. Initial Order at 2-3. Petitioner Darke did discuss his standing further in his March 3 response, declaring in toto:

> That interest (the health and safety of the requestor and his family, who reside in the vicinity of the Moab facility) would be challenged by the granting of the amendment proposed by the Application as offered by the Applicant/Licensee submittal of December 20, 1996.
>
> The undersigned and his family would suffer direct harm, radiological and other wise by such granting.

Darke March 3 Response at 8-9.

After reviewing that pleading, I issued an additional order that described the parameters of the agency caselaw on standing, including the need for an individual petitioner to make a specific showing of the "distance (in miles)" from the facility at which the petitioner either resides or engages in recreational or other activities, and permitted Petitioner Darke to make a further filing on the subject. Additional Filing Order at 2-3. He made that submission on March 24, 1997, the substance of which is discussed below. Thereafter, although Licensee Atlas in its April 7 response challenged Petitioner Darke's asserted bases for standing, *see* Atlas Response at 5-8, and Petitioner Darke had an opportunity to respond to any of the arguments in that response, *see* Reply Filing Order at 2, he made no further assertions concerning the grounds for his standing to intervene in this proceeding. *See* Darke Reply at 4.

Consequently, on the question of Petitioner Darke's standing to intervene in this proceeding, the pertinent pleading is his March 24, 1997 response in which he provided essentially all the information now before me regarding the basis for his standing. In that filing, Petitioner Darke declared that while he does not live within or on the boundary of the Moab facility, he and his family do undertake certain activities that establish his interests are affected by the facility such that he has standing to intervene in this proceeding. These include (1) obtaining potable water for drinking and cooking from "a source that is within

a short walk" of the Moab facility; (2) using fire fuel driftwood taken from the Colorado River, which flows by the Moab facility; (3) bathing with or in the waters of the Colorado River; (4) using a public telephone that is a "short walk" from the Moab facility; (5) undertaking various other activities, including recreational and educational activities, on public and private lands in "close proximity" to the Moab facility; and (6) using local transportation corridors in "close proximity" to the Moab facility. Darke March 24 Response at 2-3. Petitioner Darke also declared that certain structures, systems, or components found within or "nearby" the facility impede his use of the Colorado River in violation of 33 U.S.C. §§ 401-413 and that the facility precludes him from using certain "necessary" amenities provided by the Colorado River that are "proximate (a short walk)" from the facility. *Id.* at 4. Petitioner Darke then concluded that as a result of these various activities, he and his family "most probably intercept numerous overloaded exposure pathways (some radiological) which originate" within the Moab facility, thereby resulting in "direct harm" to him and to them. *Id.*

In its April 7, 1997 response to Petitioner Darke's filings, Licensee Atlas argued that he had failed to make any allegation of "injury in fact" sufficient to support a finding that he has standing to be admitted as a party to this proceeding. According to Atlas, the tailings pile at the Moab facility has an interim cover that virtually eliminates windblown particulate emissions so that Atlas complies with the applicable agency dose limits in 10 C.F.R. §§ 20.1301-.1302. Licensee Atlas further declared that Petitioner Darke's assertions regarding use of water from the Colorado River for drinking, cooking, and bathing are not sufficient because he has not indicated whether the source of this water is surface water or ground water and whether it is upstream or downstream from the Moab facility. Licensee Atlas also maintained Petitioner Darke's concern about exposure pathways is "nonsense" that bears no relationship to the license amendment at issue. Atlas Response at 5-7.

To be sure, Licensee Atlas' claim that "regulatory limits" are not being exceeded by offsite releases from the Moab facility is not, standing alone, sufficient to show that Petitioner Darke lacks standing. As was noted recently in the face of a similar assertion, "[r]elative to a threshold standing determination, ... even minor radiological exposures resulting from a proposed licensee activity can be enough to create the requisite injury in fact." *General Public Utilities Nuclear Corp.* (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 158 (1996). As Licensee Atlas' own annual dose calculations indicate, currently the facility does provide at least some radiological exposures to offsite individuals, albeit small. *See* Atlas Response, exh. C. Further, on this record there is nothing to suggest there is a reasonable expectation that such exposures will not occur during the additional period that is the subject of the

license amendment. As such, the potential for offsite radiological impacts from the facility, and thus for injury in fact to offsite individuals, exists.

By the same token, a showing that there may be some offsite radiological impacts to someone is not enough to establish standing for Petitioner Darke. As the Commission has made clear on a number of occasions, in the context of a proceedings other than those for the grant of a reactor construction permit or operating license, a petitioner who wants to establish "injury in fact" for standing purposes must make some specific showing outlining how the particular radiological (or other cognizable) impacts from the nuclear facility or materials involved in the licensing action at issue can reasonably be assumed to accrue to the petitioner. *See, e.g., Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 247-48 (1996); 55 Fed. Reg. 36,801, 36,804 (1990); 54 *id.* at 8272. As I noted in my March 11, 1997 memorandum and order, *see* Additional Filing Order at 2, petitioners generally do this by quantifying the distance from the nuclear facility or materials at which they reside or engage in other activities they believe are likely to result in radiological impacts. *See, e.g., Oyster Creek,* LBP-96-23, 44 NRC at 157-59.

Petitioner Darke's problem in this instance is that he has failed to carry his burden to provide the specific information needed to establish his injury in fact.[2] Simply put, he has not shown any reasonable nexus between himself and any purported radiological impacts. Petitioner Darke certainly has made assertions about potential facility-related airborne and waterborne radiological contacts. He has not, however, delineated these with enough concreteness to establish some impact on him that is sufficient to provide him with standing.[3]

For instance, Petitioner Darke claims he may suffer radiological impacts as a result of drinking, bathing, and cooking with water from the Colorado River that flows next to the Moab facility. Yet, he has not provided any information that indicates whether these water-related activities are being conducted upstream or downstream from the facility, a fact critical to establishing whether these activities will provide the requisite injury in fact. So too, his description of his other activities near the facility are all quantified with vague terms such as "near," "close proximity," or "in the vicinity." Notwithstanding the Commission's

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[2] Petitioner Darke also refers to impacts on his family in seeking to establish his standing to be a party to this proceeding. His ability to gain standing for himself based on injury in fact to the interests of his spouse or children (especially if those children are not minors) is problematic. *See Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-470, 7 NRC 473, 474 n.1 (1978) (mother cannot represent interests of nonminor son attending medical school in vicinity of proposed nuclear facility). Nonetheless, because Petitioner Darke has not sought to establish his interests are based on circumstances different from those of the members of his family, I need not reach this issue.

[3] Petitioner Darke does refer to "numerous overloaded exposure pathways (some radiological)" emanating from the Moab facility that will harm him and his family, *see* Darke March 24 Response at 4, apparently suggesting there also is a nonradiological component to his injury in fact. He has not, however, provided any detail about the nature of any purported nonradiological impacts so as to give me a basis for considering them in making a standing determination.

general guidance to afford a liberal construction to petitioner hearing requests, I am unable to find these cryptic references adequate to establish the required nexus with any facility radiological impacts, particularly in light of the repeated guidance given Petitioner Darke about the need to make a specific showing in this regard.[4]

I thus conclude Petitioner Darke has not met his burden of showing that Atlas' requested license amendment will result in injury in fact to him or his family.[5] Because he has failed to establish this element that is vital to demonstrating his standing to intervene in this proceeding, his hearing request must be dismissed.

III. CONCLUSION

In accordance with 10 C.F.R. § 2.1205(e), (h), Petitioner Darke has established that his hearing request challenging applicant Atlas' December 20, 1996 license amendment application is timely and specifies areas of concern that are germane to the subject matter of the proceeding. Nonetheless, despite multiple opportunities to address the issue, for the reasons outlined above Petitioner Darke has failed to meet his burden to establish his standing to intervene in this proceeding. Accordingly, I deny Petitioner Darke's hearing request and terminate this proceeding.[6]

For the foregoing reasons, it is, this sixteenth day of May 1997, ORDERED that:

1. The January 30, 1997 hearing request of John Francis Darke is *denied* and this proceeding is *dismissed.*

2. In accordance with the provisions of 10 C.F.R. § 2.1205(o), as it rules upon a hearing request, this Memorandum and Order may be appealed to

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[4] In my initial order, I also advised Petitioner Darke that it generally is the practice for participants making factual claims regarding the circumstances that establish standing to do so in affidavit form that is notarized or includes a declaration that the statements are true and are made under penalty of perjury. *See* Initial Order at 3. As Licensee Atlas notes, Petitioner Darke apparently has made no effort to comply with this guidance. *See* Atlas Response at 5. Providing this assurance of the accuracy of factual representations about standing is important; nonetheless, because Petitioner Darke appears pro se and generally is making representations about himself (rather than about other individuals), I am not dismissing this case because of his failure to comply with this instruction.

[5] As was noted above, *see supra* p. 425, Petitioner Darke also has made assertions about facility-related impacts impairing his use of navigable waters in violation of 33 U.S.C. §§ 401-413. Besides suffering from the vagueness problem already identified, it is not apparent how this claim meets the standing requirement that any purported injury in fact come within the "zone of interests" that is being protected by the statutes governing this proceeding.

[6] In his pleadings, Petitioner Darke repeatedly champions the need to establish a local public document room in the vicinity of the Moab facility. *See, e.g.,* Darke Hearing Request at 1. Because I am denying his hearing request and terminating this proceeding, there is no cause for me to consider that entreaty further. Petitioner Darke does, of course, have toll-free access to information regarding the Moab facility through reference assistance and a public users' on-line data base provided in conjunction with the agency's Washington, D.C. public document room or he can seek facility-related documents through requests under the Freedom of Information Act, 5 U.S.C. § 552.

the Commission by filing an appeal statement that succinctly sets out, with supporting arguments, the errors alleged. To be timely, an appeal statement must be filed within 10 days after this Memorandum and Order is served (i.e., on or before *Monday, June 2, 1997*).

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Rockville, Maryland
May 16, 1997

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Charles N. Kelber, Special Assistant

In the Matter of

Docket No. 40-8681-MLA
(ASLBP No. 97-726-03-MLA)
(License Amendment)
(Re: Alternate Feed Material)

ENERGY FUELS NUCLEAR, INC.
(White Mesa Uranium Mill)

May 27, 1997

The Presiding Officer in this proceeding under 10 C.F.R. Part 2, Subpart L, explained what was required for a party to show standing, including affidavits of residence, a statement of authorization to represent particular members of the organizations, and a plausible allegation of injury in fact resulting from the amendment that is the subject of the licensing proceeding. Petitioner were permitted to file supplemental filings to fulfill these requirements. In addition, various procedural requirements for Subpart L filings were explained.

RULES OF PRACTICE: STANDING

To attain standing, petitioners should show a plausible way in which activities licensed by the challenged amendment would injure them. The injury must be due to the amendment and not to the license itself, which was granted previously. The injury must occur to individuals whose residence is demonstrated in the filing and whom the organizations are authorized to represent.

MEMORANDUM AND ORDER
(Additional Filings Required)

This proceeding involves a challenge to a license amendment that was issued by the Staff of the Nuclear Regulatory Commission (Staff) on April 2, 1997.[1] The amendment permits the receipt and processing of alternate feed material (i.e., material other than natural ore) at Licensee's White Mesa Uranium Mill located near Blanding, Utah. *See* 10 C.F.R. Part 40, Appendix A, which sets forth several design criteria and requires that licensing decisions "take into account the risk to the public health and safety and the environment with due consideration to the economic costs involved . . . ."; 40 C.F.R. Part 192, Subparts D & E. See also the following nonbinding Staff guidance: "Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores," 60 Fed. Reg. 49,296 (Sept. 22, 1995).

The following requests for a hearing have been filed:

1. Native American People's Historic Foundation, April 16, 1997, Winston M. Mason, Head of Council.
2. Mr. Norman Begay, April 30, 1997. Mr. Begay writes on behalf of himself and his community.
3. Westwater Navajo Community, May 5, 1997, Lula J. Katso, Community Spokesperson.
4. U.S. Department of Energy, May 5, 1997, G. Leah Dever, Assistant Manager for Environmental Management.

The Staff filed its response to these filings on May 21, 1997 (Staff Response). Although the Staff Response is admittedly untimely, based on "some confusion,"[2] I have decided to permit its filing out-of-time. The Staff Response is very helpful because it reviews in detail the Commission's requirements for standing. In particular, the Staff draws attention to the need to specify "the particular manner in which those persons or entities may be affected by the instant license amendment."

My review of the filings persuades me that there is a need for greater particularity concerning standing. Among petitioners, Mr. Begay comes closest to alleging a ground for standing. He states:

> Our Community and our water wells lie adjacent to, as well as downstream and downwind from the EFN Mill. The radionucleids which make up the Cotter Concentrate originally came from Belgium Congo Ore containing approximately 60% Uranium, and now still contain 10%

[1] Letter from Joseph J. Holonich, Chief, Uranium Recovery Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, April 2, 1997, Attachment 4 to the Letter of the Native American Peoples Historical Foundation, April 25, 1997.

[2] Staff Response at 2 n.1.

> Uranium. Not only does this hazardous waste contain extremely high radioactivity and radon gas properties, but each time it is processed it adds further harmful constituents, which are perhaps more immediately dangerous to human health than the radionuclides. According to reports, your agency, and the Department of Energy have stated that DOE is unable to stabilize the Cotter Concentrate. Therefore, on the basis of concerns for the health and safety of myself, my family, and my community, I ask for standing to argue against bringing these contaminants to the White Mesa Mill.[3]

Because the license to operate the White Mesa Uranium Mill is not at issue in this proceeding, a petitoner's standing must not be based on harm resulting from the license to operate. The only issues that may be raised must relate to the specific actions proposed to be taken under the license amendment. To show standing, an individual or an organization must show how it may be harmed ("injury in fact") by the amendment.[4] It is typical in our proceedings that an individual would submit an affidavit concerning where they live and how far that is from the proposed activity. An organization typically would file an affidavit showing that its interests as an organization will be injured or that a particular person or group of people, whom it is authorized to represent, live in particular addresses, stating how far they live from the proposed activity.

In addition to proximity, petitioner should show a plausible way in which activities licensed by the challenged amendment would injure them. For example, Mr. Begay is concerned about the contamination of water wells, and he states that the Cotter Concentrate is "unstable." This, in itself, does not show a plausible mechanism for injury. The license permits these materials to be stored according to prescribed procedures and methods of monitoring. If a petitioner alleges a way in which it fears that this particular material would fail to be properly confined and would escape into the groundwater, then a requirement for standing would appear to be met.[5] Alternatively, if intervenor can show that there is a law preventing this particular material from being stored pursuant to the amendment, then there may also be a presumption of injury sufficient to establish standing. One way or another, a petitioner must show the specific injury that is feared and how that injury might occur.

At this stage of the proceeding, I will interpret the petition favorably to the petitioner and will not require the same kind of proof of injury that would be required to render a decision in its favor. But a plausible mechanism for

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[3] Norman Begay's Letter of April 30, 1997, at 1.

[4] The requirement of "injury in fact" must not be taken literally. It is fulfilled by demonstrating that there is reason to believe an accident may occur. *Curators of the University of Missouri,* LBP-90-18, 31 NRC 559, 566. (1990). Note that this Subpart L case interprets "injury in fact" in light of the extent to which facts may be available to a petitioner.

[5] A petitioner may not allege an injury to anyone other than itself. For example, a member of the general public may not allege an injury to a worker at the plant. *Florida Power and Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989).

injury must be described. I recommend that Petitioners become familiar with an excellent discussion of standing found in *Consumers Power Co.* (Palisades Nuclear Plant), LBP-79-20, 10 NRC 108 (1979).

I note that it is the policy of the United States Nuclear Regulatory Commission to encourage settlement in cases pending before it. Pursuant to that policy, I have encouraged the parties to negotiate and have offered my services in on-the-record mediation. At this time, there is no interest in those efforts and I have abandoned them. Parties are still encouraged to negotiate. Even if they do not negotiate a settlement, parties may find negotiations fruitful in facilitating the exchange of information and devising efficient ways of proceeding with this case. There is no rule prohibiting contact among parties. The Presiding Officer continues to offer, on request, either his own mediation services, which must be on the record, or the mediation services of a Settlement Judge, who could be appointed on request and could assist in private discussions.

Procedural Requirements

In accordance with my authority under 10 C.F.R. § 2.1209, I set forth the following directives regarding the further conduct of this proceeding:

I. SCHEDULE FOR ADDITIONAL FILINGS REGARDING PETITIONERS' HEARING REQUEST

A. Supplements to Petitioners' Hearing Requests

On or before *Monday, June 9, 1997,* Petitioners may file supplements to their hearing requests. In the supplements, a petitioner should address in detail the following items:

1. An interest in the proceeding and how that interest may be affected by the results of the proceeding, including the reasons why the judicial standards for standing are met, so as to be permitted a hearing, with particular reference to the factors set forth in 10 C.F.R. § 2.1205(h); and
2. Amended areas of concern about the license amendment.

Any factual information provided in support of the petitioner's supplement (such as statements providing details regarding the petitioner's proximity to the facility) should be set forth in an accompanying affidavit that (a) is notarized, or (b) states that all statements in the affidavit are true to the best of the affiant's knowledge and belief and are made under penalty of perjury.

B. Answer to Petitioner's Hearing Request and Supplement

This order is being served by express mail. Any Applicant answer to a petitioner's hearing request and any supplement thereto shall be filed so that it is received by all recipients on or before *Monday, June 23, 1997.* A Staff answer likewise shall be filed so that it is received by all recipients on or before *Monday, June 23, 1997.*

II. NOTICE OF APPEARANCE

If they have not already done so, within *15 days* of the date of this Memorandum and Order, each attorney or representative for each participant shall file a notice of appearance complying with the requirements of 10 C.F.R. § 2.713(b). In each notice of appearance, in addition to providing a business address and telephone number, if an attorney or representative has a facsimile number and/or an Internet e-mail address, the attorney or representative should provide that information as well.

III. SERVICE ON THE PRESIDING OFFICER AND THE SPECIAL ASSISTANT

For each pleading or other submission filed before the Presiding Officer or the Commission in this proceeding, in addition to submitting an original and two conforming copies to the Office of the Secretary as required by 10 C.F.R. § 2.1203(c) and serving a copy on every other participant in accordance with sections 2.701(b) and 2.1203(e), a participant should serve conforming copies on the Presiding Officer and on the Special Assistant by one of the following methods:

1. Regular Mail. To complete service via United States Postal Service first-class mail, a participant should send conforming copies to the Presiding Officer and the Special Assistant at the following address:

   Atomic Safety and Licensing Board Panel
   U.S. Nuclear Regulatory Commission
   Washington, DC 20555-0001

   For regular mail service, the Staff may use the NRC internal mail system (Mail Stop T-3F23) in lieu of first-class mail.
2. Overnight or Hand Delivery. To complete service via overnight (e.g., express mail) or hand delivery, a participant should send conforming copies to the Presiding Officer and the Special Assistant at the following address:

Atomic Safety and Licensing Board Panel
Third Floor, Two White Flint North
11545 Rockville Pike
Rockville, MD 20852

3. Facsimile Transmission.[6] To complete service by facsimile transmission, a participant should (1) send one copy by facsimile transmission to the attention of the Presiding Officer and the Special Assistant at (301) 415-5599 (verification (301) 415-7405); and (2) that same date, send conforming copies to the Presiding Officer and the Special Assistant by regular mail at an address given in paragraph 1, above.
4. Timely Service. To be timely, any pleading or other submission served on the Presiding Officer and the Special Assistant by hand delivery, facsimile transmission, or e-mail must be received by the Presiding Officer, the Special Assistant, and each of the other parties no later than 4:30 p.m. Eastern Time on the date due. The Secretary of the Commission also should receive a copy, which may be mailed regular mail at the same time the other service is effected.
5. Parties may send, for my convenience, a computer-readable copy of any filing, either on a floppy disk or as an attachment to e-mail. Any format readable by Wordperfect 6.1 would be useful.

IV. MOTIONS FOR EXTENSION OF TIME

For any motion for extension of time filed with the Presiding Officer in this proceeding, except upon a showing of good cause, the participant requesting the extension shall:

1. Ascertain whether and when any other participant intends to oppose or otherwise respond to the motion and apprise the Presiding Officer of that information in the motion; and
2. Serve the motion on the Presiding Officer and the parties so that, if possible, it is in their hands at least three business days before the due date for the pleading or other submission for which an extension is sought.

V. EXHIBITS/ATTACHMENTS TO FILINGS

If a participant files a pleading or other submission with the Presiding Officer that has additional documents appended to it as exhibits or attachments, a

[6] E-mail filing also will be accepted providing paper copies also are served. The Presiding Officer will respond to questions about e-mail service.

separate alpha or numeric designation (e.g., Exhibit 1, Attachment A) should be given to each appended document, either on the first page of the appended document or on a cover/divider sheet in front of the appended document. Each attachment also should have a tab so that it may be easily accessed without thumbing through all the pages.

It is so ORDERED.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland
May 27, 1997