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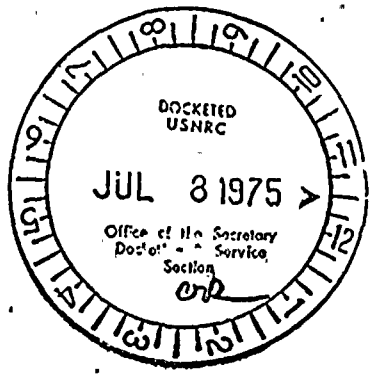
RELATED CORRESPONDENCE



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	
FLORIDA POWER & LIGHT COMPANY (St. Lucie Nuclear Power Plant, Unit 2)	Docket No. 50-389

INTERVENORS BRIEFS ON EXCEPTIONS 2-45 AND MOTION FOR ADDITIONAL TIME TO BRIEF EXCEPTIONS

Intervenors motion for additional time to brief exceptions No. 8, 9, 10, 11, and 43 for every reason stated in their Motion for Additional Time to Brief Exceptions dated June 12, 1975 which are not addressed in this brief.

Dated July 3, 1975.

Exceptions 2, 24, 27, 33

These exceptions state:

Exception 2
The ASLB decision improperly failed to consider the possibility and effects of class nine accidents in its NRC Environmental Hearing pursuant to the requirements of 10 CFR 100.

Exception 24
The Board finds, as further set forth in paragraphs 69-74 below, that the Intervenors have failed to show that evacuation planning in the control area was inadequate. In view of the contention, the Board itself reviewed this subject matter but found no evidence that would persuade us to reach a contrary conclusion from that testified to by its failure to consider a class nine accident pursuant to 10 CFR 100 failed to develop a sufficently full record.

Exception 27
Accordingly in view of the findings herein the Board concludes that contentions 3.2 and 2.2(d) are without merit. (PID p. 55, par. 74) Contrary to fact and law.

Exceptions 33
The Board agrees and concludes that the plans, statements and commitments of the Applicant meet the intent and requirements of 10 CFR Part 100 and 10 CFR Part 50 Appendix E on evacuation planning at the construction permit stage. (PID p.64, par 87) Contrary to law and fact.

Early in the proceedings Intervenors had raised a contention known as Contention 1.7 which stated in the Stipulation and Joint Motion dated June 25, 1974 at p. 12 it states:

> "As to Contention 1.7 on accidents. Intervenors seek to raise the issue of Class 9 accidents."

The ASLB in an Order dated July 12, 1974 stated:

> "As to statement on Contention 1.7 (page 12 Joint Motion) Board agrees there has been no showing of a reasonable probability of a class 9 accident at St. Lucie and therefore an issue relating to a Class 9 accident is denied."

Regarding ASLB, Staff & Applicants position, there should ba a showing of reasonable possibility of a Class 9 accident at St. Lucie 2 as required by the Appeal Boards decision in the Shoreham proceeding.(RAI-73-10) Intervenors having read the Shoreham decision respectfully take exception that holding in that the argument supporting the decision does not logicaly uphold the result. First the ALAB in discussing the various classes of accidents 1-9 which must be analyzed for NEPA purposes quotes the Commissions Safety Regulations 10 CFR 100.11(a) (1). However, they simply omit to quote the next and only remaining sentence in the same paragraph which states "Such accidents have generally been assumed to result in substantial meltdown of the core with subsequent release of appreciable quantities of fission products." Somewhere later on in the Shoreham decision on page 847 in a paragraph unrelated either to NEPA or Class 9 accidents, in evaluating pressure vessel integrity, the ALAB states "the probability of rupture is so low that it becomes an appropriate area of inquiry only upon showing of

can pick and choose to be exclusion of other portions of 10 CFR 100 (1) (a) nor can the Staff and Applicant apply this conflicting "dictum" to support their view that special circumstances need be shown. Intervenors therefore take exception to Shoreham as interpreted and argued by the Staff and Applicant as having no logical basis for the stated result of that decision.

Intervenors witness Richard Schmidt testified a great length concerning adverse aspects of evacuation feasibility as applied to the problem of quick evacuation of Hutchinson Island in the event of a Nuclear Accidnet. (Schmidt testimony (p. 11-13 following TR 1096) However, the various police and other civil defense and public safety officials were advised that with additional engineered safety features they would have 30 days to achieve safe evacuation. Therefore the ASLB PID as relates to exceptions 24, 27 and 33 were grounded upon the false premise that the chance of a Class 9 accident occuring was so remote that it could not be considered by the parties or the ASLB in determening compliance with 10CFR Part 50, Appendix E and 10 CFR Part 100 on evacuation planning.

Contentions 3 and 6 are addressed in this Brief.

They state:

Contention 3
The ASLB decision erred by its failure to consider the cost of perpetual storage and/or transmutation of trans-uranic or trans-plutonic radio isotopes generated by St. Lucie Unit II in its cost-benefit analysis of the proposed facility when it held at prehearing Conference Order dated January 24, 1974 such issues were generic to the fuel cycle.

Contention 6
In issuing a construction permit for St. Lucie Unit II, the Applicant, FPL is being subsidized by the Nuclear Regulatory Commission contrary to the intention of Congress for the costs of waste disposal. This violates the intent of the Atomic Energy Act of 1954, as amended.

At the very outset of the proceeding this issue was raised in Petition to Intervene and Intervenors raised it again as Contention4. Where they sought to consider as a NEPA "cost", long term storage of waste from a nuclear unit. (See p 12 Stipulation and Joint Motion dated June 25, 1974)

As originally framed Contention 4 stated:

The petitioners recognizing that while applicant may be financially qualified to construct the proposed facility, note that it may not be financially qualified to bear the burden of disposal of radioactive waste so generated which should be properly included in any assessment of project cost. Under present law after storage of radioactive wastes by private industry the utility companies may then transfer them to the Atomic Energy Commission for permanent storage. In assuming the duty of safe storgge and disposal of these very large quantities of extremely lethal substances which will remain deadly for centureis the AEC is shouldering a burden that should properly be incumbent upon the electric utility companies who having profited upon them may now legally evade any further, their responsibility for the wastes they generated. This constitutes an immoral if not illegal subsidy of private industry not intended by Congress in the Mandate of the Act of 1954 and is infact in contravention of the Act and directly injurious to the public health and welfare of this nation. The payments presently projected by AEC to be made by the Applicant for waste storage do not adequately represent ultimate management and disposal costs. (Motion to Amend Petition to Intervene dated December 28, 1973)

The ASLB denied the Contention 4 as framed above in an order dated Jan. 24, 1974 and reaffirmed that denial in a subsequent order dated July 12, 1974 where it was described on page A-11 par 6.

Intervenors contend that denial was error in contradiction of the Mandate of the Atomic Energy Act of 1954 and the National Environmental Policy Act of 1969.

In their Environmental Report, the Applicant states:

Long-lived radioactive materials will be produced by fission of nuclear fuel in the reactor core by neutron activation of reactor parts near the core. A certain amount of space, probably remote from the Plant site will be needed for the eventual desposal and storage of radioactive materials for a very long period of time. This space, an a sense could be considered an irretrievable commitment of resources but is not peculiar to this plant site. (ER vol2 p. 5-8-1)

Clearly, the operation of St. Lucie 2 will generate hazardous radioisotopes. The ASLB erred in its failure to consider or allow consideration within the framework of a NEPA cost-benefit analysis;
(1) the environmental effects of the storage of long-lived radioactive waste products
(2) the true cost of perpetual storage of long-lived radioisotopes to be generated at St. Lucie No. 2.

Intervenors are aware of the ALAB-60, Wash 1218 (Supp.1) 459 July 19, 1972, and Shoreham Nuclear Power Station ALAB-99, RAI 73-2-53 (2-1-73) as they apply to paragraph 1 above and they reject that finding as not reflecting the mandate and express intent of the Atomic Energy Act of 1954 as amended 42 U.S.C. 2011 and the National Environmental Policy Act of 1969 Public Law 91-190, 42 U.S.C. 4321 et. seq.

However, after reading the decisions one can discern that where a fuel cycle issue that was directly applicable to a given plant such as fuel transportation exists then ALAB allowed that as an item of consideration in the NEPA cost-benefit analysis.

The issue in paragraph 2 above as raised by Intervenors has not been addressed by any previous ALAB and thereby is a case of first review. It relates to the actual payment the Applicant Utility makes toward perpetual storage of long-level waste and poses the issue of whether that payment included in "nuclear fuel cost" is truly adequate to cover payment for the duty of long term storage of hazardous radioisotopes which may have to be isolated from the biosphere for periods of up to 250,000 years.

Intervenors contend the true cost of fuel as defined above should be included in any NEPA cost-benefit analysis as and the ASLB erred in relying on the decisions in Shoreham as previously cited.

This Brief addresses Exception 4 which states:

Exception 4
The ASLB decision was error in its failure to consider the limitations of liablility of the Applicant, imposed by the Price Anderson Act of 1957 as amended in 1967 when it considered site suitability. See Prehearing order dated January 24, 1974.

Intervenors Contention No. 5 raised in the beginning of this proceeding in a motion dated December 28, 1973, was denied by the ASLB in an order dated January 24, 1974 as being clearly ouside the jurisdiction of this Board. The ASLB then cited Florida Power and Light Company (Turkey Point Units 3 and 4) Commission "memorandum and order" March 30, 1972. That contention as originally framed stated:

> 5. "The Protections of the Price Anderson Act of 1957, in limiting liability of FPL arising from a nuclear accident invalving a loss in excess of 560 million dollars should not be available to FPL when they knowingly have sited a nuclear reactor in an area likely to achieve high population density in the very near future.

It is the position of Intervenors that the ASLB's refusal to hear evidence on this question (Intervenors original Contention 5) deprived them of the hearing required by the Atomic Energy Act of 1954. as amended 42 U.S.C. 2011 et. seq., the National Environmental Policy Act of 1969, Public Law 91-190, 42 U.S.C. 4321 et seq. as well as rights under the due process clause of the fifth amendment of the United States Constitution and the Administrative Procedure Act.

Counsel for Intervenors diligently searched for the logic or reasoned decision behind the Commission "memorandum and order" dated March 30, 1972 which was the basis of the ASLB denial of Contention 5, but could not find any instance where it was reported in either the Set of Regulatory Adjudication Issuances (RAI) or The Commerce Clearing House Atomic Energy Law Reporter. Intervenors can only conclude it was decided by fiat of the ASLB and if this be the case it is apparent the problem has not been addressed in sufficient depth by the Commission. Nearly 20 years ago in 1957 when the commercial nuclear power industry was virtually non-existant and nuclear reactors were relatively small and serious inflation was yet to come the Congress enacted the Price Anderson Act, imposing limitation of liability over 560 million dollars to encourage the budding nuclear industry. This was even before the days of Wash-740 a decade later which described the terrible toll in lines property and billions of dollars an accident at a commercial nuclear reactor can produce. The vast majority of the 57 operating commercial power reactors in the United States have been constructed since 1970.

Section 170 of the Atomic Energy Act of 1954 known as Price Anderson is not scheduled for review by the congress again until 1977. In this interim period only the Nuclear Regulatory Commission is charged with the responsibility of protection of the health and safety of the public pursuant to the mandate of the ACt. By relying on the position stated in the March 30, 1972 "memorandum and order" the Commission is abrogating and breaching that responsibility to look after the public's interest.

Surely the Commission cannot blind itself to the real, though remote, possibility of extensive loss of life and property in the event of a catastrophic nuclear accident based on an archaic and ill-reasoned decision that liability of an applicant utility is exclusively within the purview of the congress. To do so would be to encourage an irresponsible attitude on the part of Applicant utility companies building their reactors ever closer to dense population centers. Clearly, the Commission cannot change the impact of Price Anderson as to imposition of limitations of liability but neither can it ignore the limitations of liability in their consideration of ~~a~~ reactor site suitability within the framework of a NEPA cost-benefit analysis where monetary values are ascribed to the costs and benefits of a proposed facility.

In recent years the courts have become increasingly strict in requiring that Federal Agencies live up to their mandates to consider the public interest. See e.q. Udall v. FPC 387 U.S. 428 (1967), Environmental Defense Fund Inc. v. Ruckleshaus, 439 F. 2d. 584 (1971). And thus came the decision Calvert Cliffs Coordinating Committee Inc et. al. v. AEC and U.S.A. U.S. Court of Appeals, District of Columbia which mandated the AEC must give broader consideration to environmental impact issues.

The ASLB in its January 24, 1974 Order, the Staff in its Answer to Motion to Amend Petition to Intervene dated January 11, 1974 and the Applicant in Applicants Response to Motion to Amend Petition to Intervene dated December 28, 1973 all follow the crooked "cowpath" of the memorandum and order of March 30, 1972 in the Turkey Point case by mischaracterizing Intervenors' contention 5 as an "attack on section 170 e." Intervenors are well aware the Commission cannot legislate change, however, it is very apparent that it can and must consider limitations of liability within the framework of a NEPA cost-benefit analysis as mandated in the Calvert Cliffs decision which was what Intervenors desired. It was error for the ASLB to deny Intervenors original contention 5.

Exceptions 5 and 45

Exception 5

The ASLB decision was based in part upon the Applicant's obtaining certification from the State of Florida Department of Pollution Control in accordance with section 401 of the Federal Water Pollution Control Amendments of 1972 and Sections 301(b) and 302 and Sections 306 or 307. Intervenors contended this certification is defective and are treating it in a seperate motion. See PID p. 93, par. 125 and p. 87, par. 118.

Exception 45

Intervenors object to admission of Florida Department of Pollution Control variance, Exhibits 8,9 and 10 PID.

The ASLB erred in admitting into the Hearing Record Applicant's Exhibits 8,9,10 (Partial Initial Decision p.5, par. 8) the alleged certificates issued by the Florida Department of Pollution Control (DPC) under Section 401 of the Federal Water Pollution Control Act (FWPCA). Since said documents were not properly sponsored by testimony as to their authenticity or accuracy by their author or any DPC personnel or counsel. Counsel for Intervenors raised the issue at TR. 3300 line 9. If the ASLB had properly required the alleged certificate to be properly sponsored, they would have discovered that the position of the Florida Department of Pollution Control is that it has not yet certified the site as being in total compliance with applicable water quality standards as required by the FWPCA Amendments of 1972. The Intervenors tried to establish this by filing the Fla. DPC letter of April 24, 1975 with the ASLB and ALAB. However, this information could be had for the asking if either the ASLB, ALAB or NRC Staff made inquiry of the State of Florida Department of Pollution Control or its counsel.

As a further proof of Intervenors position that the Applicant does not presently hold a certificate of 401 Compliance, the Intervenors urge this Appeal Board to take official notice of the fact that the State of Florida Department of Pollution Control is presently holding site certification hearings on the St. Lucie No. 2 site pursuant to the requirements of Florida Statutes 403.501 et seq. and the FWPCA of 1972 and two of the contentions being considered at that hearing which commenced June 16, 1975 at Ft. Pierce, Fla. are:

> Contention 4.9 Has the Applicant demonstrated compliance with applicable water quality standards during construction and operation of the proposed facility?
>
> Contention 4.10 If so, what conditions need to be imposed on the certification to assure the issuance by the DPC of all further certification necessary under the FWPCA Amendments of 1972?

Intervenors have addressed this issue in a separate motion as referred to in Exception 5 which was filed on May 5, 1975 in which they attached as an offer of proof and exhibit a letter from Hamilton S. Oven, Administrator, of the Florida DPC. Intervenors adopt herein and incorporate by reference each and every allegation of that motion as constituting part of this Brief.

Specifically Intervenors wish to point out the ASLB in its PID mischaracterized the DPC letter of November 25, 1974 in stating.....

> "DPC had no intention of issuing further certification or Modifying its May 28 28, 1974 certification pursuant to Section 401 of the FWPCA." (PID p. 88, par. 118)

The November 25, 1974 letter in actual quotation states:

> "In response to your letter of November 25, 1974 we wish to advise you that the Department has no present* intention to issue further certification.....Consequently our "negative certificate" of May 28 will not at this time be modified in light of the adoption of the EPA regulations (39 FR 36176, October 8, 1974) to which you refer in your letter". *Emphasis Supplied

At TR. 3304 lines 8-10 and TR. 3305 lines 18-20 Counsel for Intervenors stated no final decision can issue until that certification (401) is issued.

The Staff Counsel and Chairman Farmakides agreed. (TR. 3304 line 13) Mr. Seiffert and Chairman Farmakides noted at TR. 3306 lines 6-18 "there need be a 401 certificate issued in order to complete the environmental, site suitability and LWA-2 phase of this proceeding."

Therefore the LWA-2 issued by the ASLB in its PID as it is presently grounded on a defective 401 certification is invalid.

Brief on Exceptions 7, 18, 39, 40, 41.

The exceptions addressed in this Brief are:

Exception 7

The ASLB Order on Motions for Summary Disposition dated September 25, 1974 was error in granting Applicants and/or Staff's Motion for Summary Disposition on the following contentions:

(a) 1.6 (a) (b)
(b) 1.7
(c) 2.1 (a) (c) (d)
(d) 2.2 (e) (3)
(e) 1.4

Exception 39.

The Board also agrees with the Staff that conversion of the present plant to a fossil facility is feasible but involves large cost penalties with no significant nt improved in environmental impact.PID p. 85, Par. 115)

Exception 40

The Board concludes that nuclear fuel is the best alternative. (PID p.86, par. 115) Alternatives were not sufficiently considered by the Board and this conclusion is thereby defective.

Exception 41

The Board concludes that the present St. Lucie design is the best environmental choice of alternatives. (PID p. 90, par. 120)

Exception 18

Contentions 1.6(a) and 1.6(b) dealing with alternative energy sources and sites, were summarily dismissed. (PID 30, PAR 50) The Board failed to give adequate consideration to alternative sites and sources pursuant to 10CFR Part 50, and NEPA.

Intervenors adopt and incorporate by referenace in this Brief on Exceptions 7 and 18 every argument raised in their Argument Against Granting Applicant and Staff's motions as they applied to Contentions 1.6(a), 1.6(b), 1.7, 2.1(a), 2.1(c), 2.1(d), 2.2(e)(3) and 1.4.

At hearing the ASLB allowed sufficient lattitude to Intervnors in the areas addressed by contentions 2.1(a)(c)(d) and 2.2(e) such that Intervenors were not seriously disadvantaged by their omission although Intervenors contend it was error to have granted Motions for Summary Disposition on those contentions. However, granting of Motinn for Summary Disposition of Contention 1.4 is a perfect example of how Intervenors case was damaged not just due to illness of a potential witness but by lack of funds to replace him and his research efforts. Granting of Applicant's Motion for Summary Disposition of Contention 1.7 was error since only the applicant

had this information available and the matter should have been more fully discussed since if there were findings of fact favorable to Intervenors on Contention 2.2 and 3.2, the ASLB would necessarily have to consider suitable alternative sites as the Commission did in the Newbold Island Case.

Originally Intervenors had planned to present their case on alterntive sites through cross examination and discovery since only the applicant possessed this knowledge. But, Intervenors had difficulty with the Applicant in their effort to discover the number, locale, and identification of alterntive sites. The FES indicated the NRC Staff did not even know the identity of the single alternative site they list as having been considered in the FES Sec. 9.1.2 Table 9.1, which Intervenors regard as a serious omission by the Staff. Intervenors could not and did not expect the cooperation of the Applicant by providing affadavits on alternative sites so as to provide the Intervenors with a defense to the self-same applicants Motion for Summary Disposition.. Therefore, Intervenors did not seek or request such affadavits when confronted with Applicant's Motion. Instead in Intervenors Argument to Deny Motion for Summary Disposition of Contention 1.6 and at even greater length in Intervenors Argument to Deny Motion for Summary Disposition of Contention 1.7 and 2.2(e) pointed out that the Applicant in seeking Summary Disposition of contentions 1.6(a) and 1.6(b) and the Staff in supporting their motion for Summary Disposition had both relied upon Section 2.749 of the Commissions Rules of Practive which provides a procedure for summary disposition. Applicant had stated in his motions for Summary Disposition:

> "Section 2.749 of the Commissions Rules of Prctice provides a procedure for summary disposition of Contentions in AEC licensing proceedings which is parallel to Rule 56 of the Federal Rules of Civil Procedure providing for Summary Judgement in the Federal Courts 10CFR 2.749. Between the time it was proposed and it was adopted, Section 2.749 was revised to track more closely the Federal Rules of Civil Procedure37 FR 15127 July 28, 1972. Where the Commissions Rules of Practice closely parallel provisions of the Federal Rules Of Civil Procedure, the Atomic Safety and Licensing Appeal Board had interpreted them in accordance with interpritations of the Federal Rules." -Applicants Motion for Summary Disposition.

Intervenors concurred with this view and would refer this appeal Board to FRCP(f) which provides:

> "When affadavits are unavailable. Should it appear from the affadavits of a party opposing the motion that he cannot for reasons stated present by affadavit facts essential to justify his opposition, the court may refuse the application for judgement or may order a continuance to permit affadavits to be obtained or depositions to be taken or discovery to be had or may make such other order as is just." The same language appears at 10CFR 2.749(c).

Regarding Contention 1.6(a) and 1.6(b). Regulatory Guide 4.7 states:

> "Chapter 9 of Regulatory Guide 4.2 presents the basis for the choice of a site from among alternative sites. Although it recognizes that planning methods will differ among applicants, it states that the applicant should present its site-plant selection process as the consequence of an analysis of alternatives whose environmental costs and benefits were evaluated and compared and then weighed against those of the proposed facility. An acceptable evaluation of the site characteristics discussed in this guide can generally be based on existing information and on information derived from site reconnaissance by specialists knowlegeable of

the local region of interest. P 4-7-3 Regulatory Guide 4.7 Draft General Site Suitability Criteria for Nuclear Power Stations".

Granting of Applicants Motion for Summary Disposition of Contentions 1.6(a) and 1.6(b) was a most serious error of the ASLB since Intervenors had raised it in the context of serious and unique site suitability issues concerning the demography of the site environs and non-feasibility of evacuation of major portions of the LPZ.

The Applicant alone made the motion for summary disposition of Intervenors Contention 1.6 a-c which stated:

Whether the *Staffs Final Environmental Statement has sufficiently considered alternatives to the proposed action including:

a. alternative fossil generating methods in that fuel costs and more economical fuel delivery systems have not been explored.

b. alterntive sites such as sparsely populated areas such as southwest Florida.

c. alternative ultimate heat sink methods such as auxiliary ocean intake or wet or dry cooling towers using salt or fresh water or treated sewage effluent. *Emphasis supplied.

The Applicant through the affadavits of C.D. Henderson addressed contentions 1.6(a) and 1.6(b) separately in supporting Applicants motion and the ASLB granted that motion in an order dated September 25, 1974 the ASLB granted that motion as it related to Intervenors Contentions 1.6(a) and 1.6(b). That was error.
Henderson stated:

"....These matters are discussed in the following references

AEC Final Environmental Statement Sec 9.1.2.
FPL Environmental Report Sec 9.2,9.3

When the St. Lucie site was selected as a site for Unit No. 1, a nuclear power plant, sites in several other areas of the state were evaluated. The selection of the St. Lucie site was based upon distance from population centers, availability of adequate land, lowest environmental empacts, proximity to the West Palm Beach load center, access to navigible water and availability of cooling water.

It was decided that Unit No. 2 should be installed at this same site because the criteria were still valid for a nuclear unit* needed to serve the growing demand of South Florida and because it had some additional advantages over any other site". Page 2 Hendersons Affadavit *Emphasis Supplied.

The basic error in Henderson's affadavit was his contention that the population density data "were still valid." (See Henderson's Affadavit) Intervenors had prior to September 9, 1974, the date of the Henderson Affadavit advised the ASLB, the Staff and L. Manning Muntzing by letter that the applicants population data were not valide as pertained to Unit No. 2 as is developed more fully in Intervenors Brief on exceptions 22, 23, 28, 29 and 44 attached herein. In that Brief it was pointed out that the existance of errors of considerable signifigance were established by Intervenors at the ASLB hearing in the FES which resulted in a signifigant modification of the Staff's FES as listed following TR. 2353 and as testified to by Mr. Francis A. St. Mary and Dr. Emile Bernard of the AEC Staff

Henderson acknowledged in his affadavit that none of the six alternative sites considered in the Staff's FES for Unit one at Table XI-1. on page XI-3 were considered since the Unit one population data was valid.

Since Henderson's entire affidavit was grounded upon the premise, Staff population data was accurate, his affadavit fails to the extent it can be deemed factually supportive of the Applicants motion and the Applicants motion should have thereby failed. Furthermore, the FES failed to reflect that the E.R. Sec. 9.2 of Applicant stated at page 9.2-2a:

> "Florida Power & Light Company is presently developing two inland sites in South Florida that are suitable for either fossil or nuclear generation.These include the Martin site located in Martin County approximately 50 miles west of West Palm Beach and the South Dade site located in Dade County south of the Turkey Point Plant. The Martin Site is a cooling tower site. Two 800-850 Mwe oil-fired fossil units are scheduled to be installed in the period between 1977 and 1980 at each of tese these sites."

These sites and other in Soutwest Florida such as the Energy Park site near Arcadia should have been considered by the Staff in the FES in view of the substantial modification of demographic projections. It is clear the Staff did not make such a consideration of alterntive sites as alternatives to St. Lucie No. 2 and only considered one alternative site back in 1967 at the time of their selection of the Unit I site as is evidenced in Applicants Response to Intervenors Interrogatory No. 61:

> 61. Which alternative sites were considered to the Hutchinson Island site for a nuclear reactor?"
>
> Answer:
>
> Sites designated "Salerno" and "Flagler Beach" the location of which is more fully described in the 1967 study referred to in answer No. 56.

Therefore, for all the foregoing reasons the ASLB erred when it granted Applicants Motion for Summary Disposition of Contentions 1.6(a) and 1.6(b).

Exceptions 12,13, 14, 15, 16, 17, 38.

These exceptions address need for power. Rather than "whip this dog to death" in this already lengthy brief Intervenors concede that within Applicant, FPL's system there will occur the need for the base load generating capacity represented by the addition of St. Lucie Unit No. 2 at some future time.

Intervenors were not allowed, to their detriment, to sufficiently consider alternative sources of Energy when summary disposition of their contention 1.6 (a) was granted.

Certain arguments Intervernors could raise are now moot. For example the parties should take official notice that although Intervenors took issue with Applicants use of a 15 minute peak load to set reserve margin requirements at the ASLB hearing, since Jan 1, 1975, the Applicant has utilized the 60 minute peak load as reccomended by the Fedeaal Power Commission.

The only issue remaining then, is determination of when the base load capacity represented by the addition of St. Lucie No. 2 will be required.

It is the position of Intervenors that this need will not materialize until sometime after 1982 since the rate of growth of peak load and sales that has occured in the past two consecutive years in the FPL system has been at the lowest range of the projected growth spectrum or below 5%.

Furthermore, the Applicant has manipulated need calculation by deferral of three 800 mw fossil units in the same Eastern Division of Applicants system as the proposed St. Lucie Unit No. 2. Those Units are unnamed#1, Martin No.1 and Martin No. 2.

These deferrals were made due to the slowed rate of growth of consumption and peak load in the Applicants system which is presently occurring and the shorter lead time required to put fossil units on the line.

To the extent the Applicant or ASLB in PID relied on the theory of "substitution" of nuclear for less efficient older generation capacity. Intervenors wish to note the Applicant has gone on record in the E.R. to the effect they shall not retire any existing capacity before 1982. (ER 9.1.2.4) Intervenors motion ALAB take notice of all these facts. Further on need, Intervenors sayeth naught.

Exception 19

The Board concludes that the proposed system using Big Mud Creek is the best alternative both from the standpoint of cost and environmental impact. (PID p. 31, par. 51) This conclusion is contrary to the fact.

In granting Applicants Motion for Summary Disposition Intervenors abandoned their effort but not their desire to put on a case addressing the issue in Exception 19. This is the heartbreaking aspect of the situation of where an Intervenor through his impecuniousness must abandon a valid contention. It is an excellent argument as to why Intervenors should receive funding from the NRC where their case is proven meritorious. The conclusion of the ASLB as grounded upon the record is reasonable, however, Intervenors motion pursuant to the substantial good cause requirement of the Commissions Rules of Practice 10 CFR Part 2.711 that the ASLB and ALAB take official notice of and/or reopen the hearing record and receive as evidence the testimony of the Florida Department of Pollution Control Hearings at Ft. Pierce Florida in the Matter of State Site Certification of St. Lucie Unit No. 2 Case No. 74-006 Florida Division of Administrative Hearings and specifically consider the testimony of witnesses for the Florida Department of Pollution Control, the St. Lucie County Conservation Alliance and Citizens United Against Radiation in the Environment (C.U.R.E.) as they addressed issues of impact on the marine environment around St. Lucie Unit No. 2 and weigh said testimony in the NEPA Cost benefit analysis.

Exceptions 22, 23, 29, 28, 44. are addressed in this Brief.

They state:
29. The Board finds the site suitable as to the population density and land use requirements of 10 CFR Part 100. PID p 59, par. 80. This fidding is contrary to law and fact.

23. The Board after considering the entire record concluded that the difference between these experts is largely moot in view of the testimony of Van Niel and Bernard and Moore tht projected improvements in plant design by the Applicant would allow the LPZ to be reduced to one mile. Even the most conservative population projections of Schmidt will meet the hypothetical doubling of Schmidt's projections for the LPZ apparently does not result in conflict with the applicable Commission regulations.(PID p45, par 62) The decision of the Board is in conflict with the requirements of 10 CFR Part 100.

22. The Board gave less weight to his (Dr. Bernard's) opinions on population projections. (PID p.42, par. 61) As a matter of law the Board should have found Dr. Bernard unqulaified to testify on any future population.

28. These data were corrected by the testimony of Dr. Bernard. The Board was persuaded that the errors in Fig. 2.5 and 2.6 of the FES (PID p. 58-59 par 80.) These errors or similar ones existed in the Applicants FR and PSAR as well.

44. Intervenors wish to note their exception to ASLB decision to admit those portions of the Applicant's ER, (4a, TR. 350) PSAR (sa-2H TR 350), and the Staff's FES (s-1, TR 358) that pertain to population present and future in the proposed nuclear plant site environs.

10 CFR Part 100, "Reactor Site Criteria." Requires in part:
An Exclusion area surrounding the reactor in which the reactor licensee has the authority to determine all activities including removal of personnel and property;

A "low population zone" (LPZ) which immediately surrounds the exclusion area and in which the population number and distribution is such that appropriate measures could be taken in their behalf in the event of serious accident.

That at any point on the exclusion area boundary and on the outer boundary of the LPZ, the exposure of individuals to a postulated release of fission products (as a consequence of accident) to be less than certain prescribed values.

That the "population center distance" defined as the distance from the nuclear reactor to the nearest boundary of a densily populated center having more than 25,000 residents be at least 1-1/3 times the distance from the reactor to the outer boundary of the LPZ.

In order to assess and properly determine population in the site environs

the Applicant and Staff must expetly and diligently research the population projection in the plant area.

The findings of the Atomic Safety and licensing Board (ASLB) as characterized in Exception 29. ("The Board finds the site suitable as to the population density and land use requirements of 10 CFR part 100" (PID p44, par 74).) is contrary to law and fact. and
Paragraph 74 of the Partial Initial Decision is based upon a consideration of Contention 2.2 which states::

Contention 2.2

"Whether the proposed site meets the requirements of 10 CFR Part 100 as to population density and use characteristics of the site environs, including: (a) whether Applicant and Staff have adequately considered present population and future demographic change near athe site, particualrly:

(1) whether increased population of Hutchinson Island resulting from high-rises, high-density condominiums and resort hotel development with larger tenant capacities;
(2) whether within the low-population zone (LPZ), real estate developments and subdivisinns on the mainland three to five miles away from the proposed site which are currently more populous than Staff and Applicant estimate and whether this will result in the very high population density within the next decade far in excess of Applicant population projections in the Environmental Report (ER) and Preliminary Safety Analysis Report (PSAR);
(3) in nearby cities of Stuart, Jensen Beach, White City, and Fort Pierce within 10 miles of the proposed site;

(b) whether Applicant's presentation in the PSAR, Figure 2:1-2, an aerial photograph of Hutchinson Island, fails to include the entire area from five to ten miles from the proposed site and the development occurring there, and whether such information is necessary to accurately assess site suitability;
(c) whether the demographic studies performed for Applicant by First Research Corporation of Miami are inaccurate and misleading and underestimate the high population in the site environs including the LPZ;
(d) whether there is a reasonable probability that appropriate measures could be taken in the event of an accident to protect residents including evacuation of LPZ personnel, particularly whether the single, two-lane highway, A1A, on Hutchinson Island;"

The basis for the ASLB PID was the testimony of witnesses for the parties and the then atomic Energy Commission's (AEC) Final Environmental Statement (FES) and the Applicant's Environmental Report Volumes I and II ER) and Preliminary Safety Analysis Report Volumes 7-8 (PSAR) This exception specifically addresses Section 2.1 et seq. of the Applicants ER and PSAR respectively for Unit No. 2.

The Applicant's Case

The witness for the Applicant was Philip Walsh Moore, graduated from Princeton University with a B.A. in English and holder of an M.B.A. from New York University Graduate School -of Business Administration and founder/owner and operator of First Research Company Inc. See Educational and Professional Qualifications of Philip W. Moore following TR 751.

Mr. Moore testified that First Research Corp. was engaged by the Applicant to perform a population study for the St. Lucie Site in 1968. We should note that Mr. Moore at that time, was not affiliated with First Research Corp and he provided no input into that report since he testified at TR. 736 line 19 that he sold the company in 1967 and went away to New York City for four years where he was with the First Boston Corp, a financial corporation (TR. 742, line 9). First Research Corp. then went bankrupt. (TR. 736)

In July 1971, Mr. Moore returned to Miami and took over First Research Company from the trustee in bankruptcy, of the holding company First Research Corp(TR 737).

Inspite of the fact that the Applicant had submitted demographic studies of unspecified origin in their application submitted in May, 1973, Mr. Moore further testified that First Research Company was not again consulted by the Applicant from 1968 until late March of 1974 to perform population studies and projections of the Hutchinson Island Site Environs. (TR. 767 line 8-11) At that time, for the first time, Mr. Moore became involved personally in the study of Hutchinson Island. His involvment and study consisted of a field survey of 4 or 5 days wherin he made inquiries of mailmen (TR. 835), took a sampling rather than an actual count (TR. 835, line 16) in drawing the conclusion that condominium units sold on Hutchinson Island will be occupied only a month or two a year leaving those units unoccupied for remainder of the year (TR. 834, line 3) In reaching this conclusion witness Moore states he failed to consider timesharing or interval sales which are allowed under Florida law. (TR. 823, line 4)

At Tr. 839, Mr. Moore testified he failed to research the point of origin of owners of RecVee lots on Hutchinson Island, also at TR 841, line 6 he states....."have not done a survey."

At Tr 748, Moore testified he studied the Stuart, Martin County, Hutchinson Island area for the first time in 1974.

Mr. Moore testified plans existed to construct a city of 45,000 population to be known as "New Town" in conjunction with the Ashland Oil Refinery proposed 20 miles from the Nuclear Plant Site. (TR. 844)

In describing techniques Moore testified he did not employ the component method. (TR. 825)

Mr. Moore after indicating allowed zoning density reductions would have a retarding effect on development on Hutchinson Island, was un - able to cite any zoning reductions in effect in either Martin or St. Lucie Counties (TR. 849, line 7).

The Applicant in providing Witness Moore to authenticate and sponsor the population data contained in their ER and PSAR and amendments thereto have done a disservice to their own witnesses weight by the very tardiness by which they sought his services.

Without even assessing the qualifications of Mr. Moore or First Research Company, it is obvious that the weight to be given Mr. Moore's testimony is impaired by the fact both he and his firm, First Research Company, through no fault of their own, were never consulted by the Applicant on St. Lucie Unit II until almost a year after they filed their application for a construction permit. This lache on the part of the Applicant is inexcusable.

Mr. Moore testified he performed "other studies" and he then prepared written testimony up dating the submittals of the Applicant in the ER and PSAR.

The INtervenors on voirdire objected on the record to the qualifications of Philip W. Moore as a witness and said objection was over ruled. (TR. 751) (TR. 764)

In its Partial Initial Decision the ALAB ruled:

> "Applicant's Witness Moore based his testimony on relatively extensive experience over many years in population forecasts and his familiarity with other projections of population levels in the LPZ and the surrounding area to the year 2000. Mr. Moore had made numerous short range forecasts for various business enterprises and appeared to have considerable practical experience in this area. The Board was not a persuaded by his opinions on long range tends, which tneded to extrapolate on past experience only." * (PID p. 43 par. 61) *Emphasis supplied.

The Intervenors feel based on his lack of time input into the Hutchinson Island Site Environs study and his lack of expertese, Philip W. Moore was not qualified by educational experience or actual work effort to assess as an expert witness the projected future population levels on Hutchinson Island and the surrounding area and that the ASLB erred to the extent it gave any weight to the opinions of Mr. Moore concerning future population levels on Hutchinson Island and within a 50 mile radius of the proposed facility. Therefore the Applicant has failed to the extent it relies on the testimony of Philip W. Moore to extablish that the proposed site meets the criteria of 10 CFR 100 as forecasting future population around the proposed site.

The PSAR and ER which was sponsored by Ellis H. O'Neil, Assistant Chief Engineer, FPL and Clifford S. Kent, Jr. Engineer, FPL, Neither Mr. O'Neil or Mr. Kent who both possess engineering and nuclear engineering educational and professional backgounds are qualified to authenticate the testimony on population density both, present and projected for the future in the area of the site. (TR. 341) During the course of this hearing it was never clearly established who actually prepared the population data presented in the Applicant's Environmental Report and Preliminary Safety Analysis Report. (TR 344) except to the extent it carried over from the Unit I ER. Testimony of Philip Walsh Moore (TR 767) indicated that First Research Corporation, which is now bankrupt, (TR 736) prepared the demographic data submitted by the Applicant to the AEC in their application, ER and PSAR for Hutchinson Island Nuclear Plant Unit No. I (now renamed St. Lucie Nuclear Plant Unit No. I Docket No. 50-335. (TR 814)

At Tr. 814, line 10, Mr. Moore indicated FPL, not First Research Corp. or First Research Company performed the revisions of the 1968 Unit I data submitted to the AEC in their Construction Permit application for St. Lucie Plant Unit II dated May 1973. Mr. Moore further testified that his present firm, First Research Company, the sucessor to First Research Corporation, which is bankrupt, (TR. 736) was not consulted by the Applicant until late March of 1974 to perform population studies and projections of the Hutchinson Island site environs. (TR. 767, line 8-11)

The presentation of the Applicant is seriously flawed by their failure to seek professional timely expert advise in assessing present and future population data prior to March of 1974 on a Construction Permit Application which was filed in May of 1973. The weight tht the Board should have given to Mr. Moore's testimony was thereby impaired due to this omission by the Applicant since Mr. Moore testified he was unable to calculate or count wintertime residents on Hutchinson Island since he was employed too late by the Applicant to perform such a study. (TR. 827 line 11) (TR. 830 line 15-17) "The only study we did on Hutchinson Island pertaining to tourism or the like was done on the basis of other statistical evidence subsequent to the winter of 1974." (TR. 830 line 15-17) Mr. Moore further states in preparing his testimony he did not consult or rely on the Martin County Civil Defense population study performed by Mr. E. K. Shinn in February of 1974. (TR. 832) When given the opportunity to do so, Mr. Moore did not indicate he agreed with the Applicant's population figures in the ER and PSAR, but rather that he was in agreement with only the updated figures he prepared in his testimony addressing Contention 2.2(a) (TR. 768)

To the extent that the Applicant relies on population data contained in the ER and PSAR of Unit No. II as sponsored by witnesses Kent, Jr. and O'Neil Intervenors contend such data is not properly in the record since it was not sponsored by any witness qualified as a demographer, economist or any related field.

Intervenors incorporate by reference and adopt as part of this brief their Motion to Strike all Population Data submitted by Applicant, Florida Power and Light Company in the Environmental Report and PSAR. dated Nov. 22, 1974. The aforestated motion was denied by the ASLB in an order dated November 27, 1974. To the extent the ASLB relies on data demographic contained in the Applcants ER and PSAR it errs since no qualified witness sponsored admission of these documents into evidence.

Concerning relavence, Chairman Farmakides himself questioned the relavence of the PSAR in a construction permit hearing when counsel for the Applicant offered it as an exhibit. (TR 348)

It is the position of the Intervenors that the PSAR was improperly admitted since it was not properly authenticated and contained immaterial irrelavent and redundant material for consideration at a Hearing within the framework of a National Environmental Protection Act (NEPA) hearing.

The (NRC) AEC Staff's Case

The AEC Staff witness on demography Emile A. Bernard, Ph.D received a B.S. in Physics from the University of NOtre Dame in 1958, an M.S. in Physics from Georgia Institute of Technology in 1963 and a Ph.D in Nuclear Engineering from the University of Florida in 1968. See Emile A. Bernard, Professional Qualifications, Accident Analysis Branch, Directorate of Licensing, follows TR. 904.

Nothing in Dr. Bernard's educational or occupational experience qualifies him as an expert in the area of demography, economics or any related field. Bernard testified that in the past year he had performed population analyses for three other sites for nuclear reactors, River Bend, Perkins and Cherokee. (TR. 988, 989) Yet he states he did not employ any accepted methodologies in the demographic projection.(TR. 990, line 4) The reasoning behing these assignments escapes the Intervenors to this day.

In his opening statement counsel for Intervenors indicated that on voir dire he would contest the qualifications of Dr. Bernard to testify as a witness (TR. 296 line 16-23) In an effort to spare Dr. Bernard (TR 904) embarassment, Intervenors reserved their right to question Dr. Bernard's qualifications and give him every chance possible to rehabilitate himself. This was not accomplished sucessfully and as a matter of fact and a matter of law Dr. Bernard should have never been allowed to testify as a demographic expert at the St. Lucie Unit No. 2 Construction Permit Hearing. The ASLB allowed Dr. Bernard to testify and stated in the PID concerning that testimony:

> "By education Dr. Bernard is a physicist but has been employed recently (relatively short period) by the Regulatory Staff in a capacity that includes population surveys and forecasts relating to proposed nuclear power plants 179/. He was assigned in this capacity to the Staffs evaluation of the proposed St. Lucie facility after the Intervenors had advised the Staff of what appeared to be errors in the FES and ER 180/ Dr. Bernard provided both fact and opinion testimony. The Board gave considerable weight as to the former; however since he had little or no experience in making regional planning studies and was not familiar with the usual methodology used in planning and projections, the Board gave less weight to his opinions on population projections. (PID p.42, par. 61)

Intervenors incorporate by reference and adopt as part of this brief their Noverber 6, 1974 Motion to Strike portion of Written Testimony of AEC Regulatory Staff Witness Dr. Emile Bernard. On Novermber 7, 1974 this Motion was amended and remade to apply to certain additional supplemental testimony filed by Dr. Bernard and to certain other staff testimony filed by witness Mr. St. Mary. The motions were denied by an ASLB order dated November 27, 1974.

The motions as submitted herein constitute a chronicle of the defects and failures of Dr. Bernard as an expert witness on demography in an NRC hearing and Intervenors rely upon assertions therein in stating their case before the ALAB. Therefore, to the extent the Board relied upon Dr. Bernard's testimony in finding the site suitable pursuant to the requirements of 10 CFR Part 100, it erred, since such testimony was in admissible and unreliable as a matter of fact and law. The NRC Staff should never again be allowed to treat so lightly such deadly serious issues as 10CFR Part 100 Reactor Site Criteria with unqualified incompetent witnesses and it is incumbent upon this Appeal Boardto so mandate.

To the extent that the ASLB relies upon the FES Intervenors wish to note that they made a timely objection to the FES (Staff Exhibit S-1)(TR. 358-359) on voir dare. At that time Mr. St. Mary stated he could not vouch for the accuracy of each figure (TR 363 line 18), in the population projections in the vicinity of the plant as evidenced by the presentation in the FES. Counsel for Intervenors was not allowed at this stage to inquire into the accuracy of the FES further. However, later in the hearing it was clearly established that there were errors consisting of grossly understated population projections in the FES at figure 2.5, 2.6 and 2.7 and interpreted in remarks on page 2-6 of the FES. Similar

data in the ER is found at Sec 2.1 et. seq. and PSAR 2.1 et. seq.

Counsel for Intervenors had advised the Counsel for the Staff and project managers of the NRC Staff on St. Lucie Unit II on a personal visit to the AEC Staff headquarters in Bethesda, Md. a few days before July 4th in 1974. (TR 1463 line1) that the applicant and staff had grossly understated population figures in the ER, PSAR and FES.

Counsel for Intervenors furthermore had respectively advised the ASLB of these errors in a Motion to Amend Issues in Controversy and Continue and Compell Discovery dated August 31, 1974, by submitting photo copies of those portions of the Applicants PSAR and the Staffs FES that were objected to as being grossly understated. See paragraphs 1and 2 of motion refer specifically to enclosures B1, B2 and B3 attached to that motion.

At hearing the FES was extensively amended on Nov. 6, 1974 following (TR. 2353) by the Staff to reflect Dr. Bernards new research and sponsored by Mr. Francis St. Mary. Such Amendment was improper since Dr. Bernard was not sufficiently qualified as a demographer or economist, to make the amendments which he prepared. Therefore amendments based on the Bernard Data are not properly authenticated as valid, although they are clearly an improvement over previous FES data.

The Intervenors Case

Intervenors presented three witnesses on demography, Richard Schmidt a professional urban and transportation regional planner of Peat, Marwick, Mitchell and Company of San Francisco, Calif.; J. Gary Ament, St. Lucie County Planning Coordinator and E. K. Shinn Martin County Civil Defense Deputy Director.

1. Mr. Shinn testified about population count he performed on Hutchinson Island in February 1974 which established there were 4621 persons on the island from the plant site south to the Martin county line approximately 6½ miles from the plant (TR. 1009, 1022) This is contrasted with the testimony of Philip Moore, who never had performed such a count (R (TR. 839, 841) and the applicants ER and PSAR 2.1 et seq as well as the FES sec 2.1 et seq.

2/ J. Gary Ament St. Lucie County Planning coordinator had a Master of Science degree in urban and regional planning. He had been employed by the Middle Georgia Area Planning Commission and Southeast Alabama Regional Planning and Development Commission (TR. 1035, 1037)

3. Intervenors Witness, Richard W. Schmidt holds a Bachelor of Science degree in Civil Engineering and a combined Masters degree in Civil Engineering (Transportation Planning) and City Planning. See Educational and professional qualifictions of Richard W. Schmidt following TR 1089 TR 1083-1087. From 1966 to 1973 Mr. Schmidt was Chief of Transportation Planning, Fairfax County Virginia. Mr. Schmidt held the rank of Captain in the U.S. Army Corps of Engineers among his many achievements.

Mr. Schmidt assisted in analyzing and developing growth management policies and ordinances for Hutchinson Island (Martin County, Florida). In addition he is currently involved in reviewing and updating the comprehensive plan, ordinances and development controls for the city of West Palm Beach, Flroida. Mr. Smith was one of the PMM& Co. consultants who prepared the publication entitled, "Hutchinson Island Planning Study, The Impact of Mangement and Growth", published December 28, 1973 Peat Marwick Mitchell & Company P.O. Box 8007 San Francisco International Airport, San Francisco, CAlif. 94128.

Regarding Mr. Schmidt, the ASLB ruled at PID, p.43 Par. 61:

> "Intervenor witness Schmidt, a professional urban and transportation regional planner was found by the Board to be well qualified to assess the likelihood of population levels in the vicinity of the proposed St. Lucie No. 2 site."

Mr. Schmidt testified (1)that on the 22 mile long barrier island known as Hutchinson Island where the proposed St. Lucie No. 2 is to be built, population on the island alone could approach between 92,7000 and 133,700 persons within the 40 year life of the proposed facility and (2) further that up to 500,000 persons could be living within 15 miles of the proposed site. (3) That the population of the LPZ area on Hutchinson Island would increase from almost 7000 persons to approximately 37,000 persons and (4)that this would increase the total LPZ population to almost 67,000 persons.(Schmidt testimony p 10 following TR. 1096) Lengthy cross examination by Applicant's counsel did not result in any significant modification in witness Schmidt's testimony.

The Board found-however in PID p 45, par 62 that a hypothetical doubling of Schmidts figures for the LPZ "apparently does not result in conflict with the applicable Commission regulations". This was error because it suggests the LPZ has been or will be modified. The size of the LPZ here has not been modified. There has only been the representation that certain unspecified engineered safety features (ESF's) could be installed which would reduce offsite doses in the event of a postulated accident. The effectiveness or exact design of these ESF has not been stated.

The United States Court of Appeals for the Seventh Circuit in setting aside an AEC decision authorizing issuance of a construction permit for the Bailly Nuclear Plant observed:

> " Population density and use characteristics are further defined in 10CFR 100.11. A license applicant is directed to assume:
>
> (a) a fission product release from the core
>
> (b) the expected demonstrable leak rate from the containment and
>
> (c) the meteorological conditions pertinent to his site in order to derive the three area or population buffer zones of (1) exclusion area; (2) low population zone and (3) population center distance. The size or area of the first two buffer zones is determined by

calculating that certain maximum radiation dosages for stated periods after an accident, to an individual located on the outer boundaries of each zone not be exceeded. The third zone is one and one third times the distance from the reactor to the second zone 5.

In the Bailly case the Applicant, Northern Indiana Public Service Company (NIPSCO) emphasized the complexity of determining the first two buffer zones (exclusion area and LPZ). Never the less the present boundary of the LPZ at St. Lucie No. 2 is five miles in radius from the reactor and it is this distance that must be used as a basis for determination of population center distance. 10 CFR part 100. 11(a) (3) describes that as:

"A population center distance of at least one and one third times the distance from the reactor to the outer boundary of the low population zone."

10 CFR Part 100.3(c) adds

"Population center distance" means the distance from the reactor to the nearest boundary of a densily populated center containing more than about 25,000 residents."

The Applicant and Staff considered the City of Ft. Pierce to be the nearest population center and stated that distance as being approximately 8 miles away (FES, 2-6) (ER 2.2.1.5) It was established at hearing that the actual boundary of the nearest population center (Ft. Pierce city limits) was about 6.5 miles away and that that boundarary occurred on Hutchinson Island 6.5 miles north of the proposed reactor. The Applicant using Ft. Pierce as a population center calculated it was 1.6 times the distance to the outer boundary of the LPZ away(E.R. 2.2.1.5)
Using the actual distance of 6.5 miles for the nearest boundary of Ft. Pierce a calculation would show that the Applicants reactor distance narrowly misses the 1 and 1/3 times the LPZ distance requiredment of 10 CFR Part 100.11(a) (3).

Applicant and Staff erred even more seriously, however, in their failure to consider the nearest potential population centers which consist of (1) the city of Port St. Lucie and (2) Hutchinson Island itself. The Staff witness Dr. Emile A. Bernard offered into evidence as Staff exhibit S-2 the letter of September 30, 1974 of Jessica I. Ritter of General Development Company, the developers of Port St. Lucie. That letter which contains population projections through the year 2050, indicated that in the decade from 1974-1985 the cumulative total population projection for the City of Port St. Lucie is 39,180 persons. The eastern boundary of the city of Port St. Lucie is only 4.5 miles from the St. Lucie No. 2 reactor and since the letter indicates the 1974 population is around 15,000, Port St. Lucie would have been more suitably considered than Ft. Pierce as the nearest population center during the period of time in which the plant is operational. If this had been done, there would have been the requirement of a 6 mile LPZ around the reactor and therefore the applicant by designating a five mile LPZ has not complied with the requirements of 10 CFR Part 100.11(a)(3). It is very significant that General Development projects a population of 190,305 for Port St. Lucie during the time frame of 2015-2024 which is within the 40 year expected life of St. Lucie No. 2.

The court held in Bailly:

> "The ASLB and eventually the ASLAB accepted the Regulatory Staff's argument that the political boundary of Portage was to be ignored and instead some amorphous flexible and movable center or centroid of population was to be considered. The fatal error in this alleged logic is that AEC itself has defined "population center distance" as the distance from the reactor to the nearest boundary of a densely populated center containing more than about 25,000 residents/10 CFR Part 100.3 (c) (emphasis added) NIPSCO's own witness conceded that "the centroid itself doesn't have a boundary; it is a point".

Section 100.11 (a)(3) also adds:

> "In applying this guide, due consideration should be given to the population distribution within the population center. But giving such due consideration to population distribution does not eliminate the need to establish a boundary. County Chapter of the Izaak Walton League of America v. AEC etal U.S. Court of Appeals for the 7th Circuit No. 74-1751 April 1, 1975.

The most serious omission of the Applicant and the Staff was their failure to consider Hutchinson Island itself as a population center. J. Gary Ament testified that present zoning on Hutchinson Island would allow the construction of 23,893 dwelling units in the St. Lucie county unincorporated area alone. He testified further that the recently adopted Plan for Hutchinson Island would permit approximately 10,200 dwelling units in this same area if its zoning recomendations were implemented as changes in the zoning law. (See Intervenors Exhibit 1 TR 1057) Whether one uses the maximum allowable number of units (23,893) or the reccomended reduced number of 10,200 at 2.5 persons per units, the unincorporated portion of Hutchinson Island alone would constitute a population center since it would number in excess of 25,000 persons. As further proof of development near the proposed site Dr. Bernard of the then AEC Staff testified:

> "The Compass Bay Development which will be located on the Northern edge of the St. Lucie site, just over one mile from Unit 1, has received site plan approval for 740 dwelling units which I have subsequently confirmed with St. Lucie County Officials." At Compass Bay the density of dwelling units will be about 11.3 units per acre, which is consistent with the proposed density of 9 to 11 units per acre of the Hutchinson Island plan for St. Lucie County." (TR 905-906)

At 2.5 persons per unit we would have dense population beginning at the very site boundary in the form of 1644 people in one building cluster.

As further evidence of development occurring on Hutchinson Island Dr. Bernard testified:

> "A newer development of Deal Development Company called Moontide to be located about four and one half miles south of the St, Lucie site, will contain 650 dwelling units at a density of about 9.1 units per acte". (TR. 906)

Recently ASLAB in another case found that the city limits of San Clemente, with an estimated future population likely to exceed 25,000 was within the population center distance and required a recalculation of radiation dosage distances (RAI 74-12 pages 957-959)

Recalling the testimony of Intervenors witness Schmidt who projected an LPZ population on Hutchinson Island of approximately 37,000 persons and a total island population of from 92.700-133,700 persons, there would result the situation on Hutchinson Island where a nuclear reactor is sited in the center of a population center having in excess of 25,000 residents which violates the spirit and intent of the Atomic Energy Act of 1954 as amended 42 V.S.C. 2011 et. seq. and more specifically violates the requirements of 10 CFR Part 100.11(a) (3).

Not only is Hutchinson Island in and of itself slated to become a population center within the definition of 10 CFR Part 100.3(c) but it is a population center that is unique since it is the only known case where a nuclear reactor is sited on a long narrow island likely to achieve high population density with minimal means of access. Furthermore, the ASLB in its decision did not sufficiently address the large number of transients that might be expected to use the beaches and capp grounds on Hutchinson Island within the 5 mile LPZ during the 40 year life of the proposed facility.

Draft Regulatory Guide4.7 states:

> "Sites adjacent to some lands devoted to public use may be considered unsuitable. In particular, the use of some sites close to special areas administered by Federal, State, or local agencies for scenic or recreational use may cause unacceptable impacts regardless of design pa (NRC Draft Regulatory Guide 4.7)

It should be recognized that the Hutchinson Island Nuclear Plant Site is within 4.5 miles on Nettles Island a commercial campgound with 1564 campers spaces (ER 2.2.1.4) within 5 miles of the Savannahs Recreation area (E.R. 2.2.1.6), within 5 miles of Douglas Memorial Park a public beach and park area (ER 2.2.1.4) and there is the ocean beach the entire length of 22 mile long Hutchinson Island. The Hobe Sound National Wildlife Preserve is 15 miles south of the site and Johnathan Dickinson State Park lies within 29 milse of the plant site.

As Judge Sprecher queried in Bailly:

> "And this is in reference to a quiet Sunday afternoon. What would occur if a large but unknown number of campers and visitors unfamiliar with the area and with no nearby homes in which to take shelter heard a public address anouncement to evacuate the area due to a nuclear accident"? Izaak Walton League v. AEC et al.

Therefore for all the foregoing reasons the ASLB should have found as a matter of fact and as a matter of law that the proposed site failed to meet the Reactor Siting Criteria established in 10CFR Part 100 and that it was not in accordance with the Atomic Energy Act of 1954, as amended 42 USC 2011 et seq.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was mailed this 3rd. day of July, 1975, to the following:

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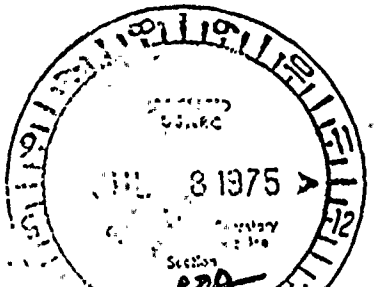

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UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)

FLORIDA POWER & LIGHT COMPANY) Docket No. 50-389

(St. Lucie Nuclear Power Plant Unit No. 2))

INTERVENORS' ARGUMENT TO DENY MOTION FOR SUMMARY DISPOSITION OF CONTENTION 1.6

It should be noted at the outset that Counsel for the AEC Regulatory Staff did not motion for Summary Disposition of Contention 1.6, only the Applicant did this. Intervenors view the Applicant's Motion for Summary Disposition of Contention 1.6 as a most crucial test of the strength of their case. This is true because Intervenors have raised serious and unique site suitability issues concerning the demography of the site environs and non-feasibility of evacuation of major portions of the LPZ. Alternative sites are keyed to this discussion since if a finding of fact should be made in favor of the Intervenors on Contentions 2.2 and 3.2, the ASLB would necessarily immediately consider available alternative sites for the proposed plant as was done in the Newbold Island case. It has been the position of Intervenors that the responses by the Applicant to their discovery attempts to ascertain alternative sites has been non responsive, evasive and incomplete. In their response to interrogatories #61 of Intervenors, Applicant has designated the Flagler and Salerno Beach sites as the only alternative nuclear plant sites considered. Yet, when one reads the E.R. for Unit 2 there is reference to an unidentified coastal site within 40 miles radius of West Palm Beach (which Intervenors suspect may be the one known as Riviera Beach site) and no mention ofother alternative sites.
Conversely again, in reading the FES on St. Lucie Unit 1, there are six alternative sites listed on page XI-3 complete with ratings as to their areas of acceptability. It is therefore readily apparent that Applicant has been less than candid and quite confusing in their response to Motions and requests for discovery by the Intervenors and they should not be rewarded by a granting of Summary Disposition in their favor of Contention 1.6.

Furthermore, since Sec. 2.749 of the Rules of Practice are said to track closely the Federal Rules of the Civil Procedure, the ASLB should on its own motion allow whatever additional discovery it deems appropriate to Intervenors pursuant to F.R.C.P. 56(f).

The motion of Applicant should be denied with respect to contention 1.6 for reasons aforestated.

Martin Harold Hodder

Martin Harold Hodder
Counsel for Intervenors

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)

FLORIDA POWER & LIGHT COMPANY) Docket No. 50-389

(St. Lucie Nuclear Power Plant Unit No. 2))

INTERVENORS' ARGUMENT TO DENY MOTION FOR SUMMARY DISPOSITION OF CONTENTION 1.7 and 2.2 (e)

Regarding Applicant's motion for Summary Dispositions with respect to Contention 1.7 and 2.2 (e) there is indeed an issue of material fact as to whether: (1.) Whether Applicant has provided appropriate and effective arrangements to control traffic on Highway A1A within and without the "exclusion area"? (2.) Whether in the event of an emergency condition requiring access controls or evacuation, the Florida Highway Patrol, the St. Lucie County Sheriffs Department and the Martin County Sheriffs Department could be contacted in time and whether a planned response, adequate to implement access control to Highway A1A exists and/or is feasible? (3.) Whether Applicant has relinquished control over the beach area?

Applicant's motion in regard to 2.2 (e) is supported by only one affadavit, which in view of the fact the affiant is an employee of the Applicant, there exists the distinct possibility of intrinsic bias. Counsel for Intervenors in attempting to prove this contention contacted the Sheriffs of the affected counties, L. Norvail of St. Lucie County and James Holt, of Martin County and Captain W. Oliver, Commander of troop K of the Florida Highway Patrol. As is their custom, each of these law enforcement officers made candid responses but declined to give formal affadavits. Some of them pointed out they were subject to subpoena and would ofcourse then testify to the best of their ability. Nevertheless, Intervenors failed to obtain affadavits. Both Applicant and Staff rely on Section 2.749 of the Commissions Rules of Practice. Counsel for Applicant specifically states: "Section 2.749 of the Commission's rules of practice provides a procedure for summary disposition of contentions in AEC licensing proceedings, which is parallel to Rule 56 of the Federal Rules of Civil Procedure providing for summary judgment in the Federal courts. 10 CFR 2.749. Between the time it was proposed and the time it was adopted, Section 2.749 was"...revised to track more closely the Federal Rules of Civil Procedure." 37 FR 15127, July 28, 1972. Where the Commission's Rules of Practice closely parallel provisions of the Federal Rules of Civil Procedure, the Atomic Safety and Linensing Appeal Board has interpreted them in accordance with interpretations of the Federal Rules. Commonwealth Edison Company, ALAB 196, RAI-74-4, 457, 460-61 (April 25, 1974). The Appeal Board's analogy to the Federal Rules is equally applicable Here."

Intervenors concur with this view and would refer the Board to FRCP 56 (f) which provides: (f) "When Affidavits are Unavailable. Should it appear from the affidavits of a party oppossing the motion that he cannot for reasons stated present by affidavit facts essential to justify his opposition, the court may refuse the application for judgment or may order a continuance to permit affidavits to be obtained or depositions to be taken or discovery to be had or may make such other order as is just."

It is the position of Counsel for Intervenors that a material issue of fact exists and that Intervenors are unable to obtain affadavits necessary to support their position which information could be adduced at hearing by use of the supoena device. Therefore, Intervenors argue the Motion of Applicant regarding 2.2(e) should be denied. Regarding the Applicant and Staff's similar motion on Contention 1.7, the portion pertaining to transportation of fuel offsite, should be similarly denied, since this too is an area of interest to the local law enforcement authorities.

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