

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

APPLICANT'S PETITION FOR RECONSIDERATION

Pursuant to 10 CFR 2.771, Florida Power & Light Company (the "Applicant" or "FPL") hereby petitions for reconsideration of the Partial Initial Decision ("Initial Decision") of this Board, dated February 28, 1975 (served March 4, 1975), in three respects.

I.

Among the "conditions for the protection of the environment" which paragraph 126 of the Initial Decision directs to "be incorporated in any construction authorization or permit issued for the proposed St. Lucie Nuclear Power Plant Unit No. 2...." is:

"(c) the Applicant shall utilize a figure of 75 man-rem/yr as a guideline dose for in-plant occupational exposure...."

The basic discussion explaining and supporting this language is contained in paragraph 28 of the Initial Decision, which reads as follows:

"28. Witness Morgan asserted that the estimated dose to plant personnel is much too high.^{83/} The Staff estimate for a typical plant is 450 man-rem/yr, including non-routine events, based on operating experience.^{84/} While Applicant's calculations for St. Lucie Unit No. 1 were cited as 75 man-rem/yr,^{85/} nevertheless the figure of 450 man-rem/yr was adopted by the Staff in the FES. Both the Applicant and Staff used 450 man-rem/yr in calculating genetic effects of radwaste in an effort to be conservative. The Board expects the Applicant to apply the principle of keeping occupational exposures, as well as exposures to the general population, 'as low as practicable'. The Board concludes that 75 man-rem/yr is a reasonable, practicable level, and hereby makes it a condition of this license.

^{83/} See note 32, p. 3; Tr. 2895, 2902, 3103, 3126

^{84/} FES p. 5-22.

^{85/} Tr. 2481, 2902"

Applicant submits that there exist facts in the record which the Board may have overlooked^{1/} and other considerations which require reconsideration and the elimination of paragraph 126(c) and the last sentence of paragraph 28 from the Initial Decision. Applicant hereby requests their elimination.

Applicant recognizes that in-plant occupational exposures are an appropriate concern of a licensing board both under NEPA^{2/} and as a radiological health and safety matter.

^{1/} Power Authority of the State of New York and Niagara Mohawk Power Corporation (James A. Fitzpatrick Nuclear Power Plant, Unit 1), ALAB-169, RAI-73-12, 1157, 1158 (December 28, 1973).

^{2/} See, e.g., Iowa Electric Light and Power Co., et al. (Duane Arnold Energy Center), ALAB-134, RAI-73-7, 483 (July 6, 1973).

Nevertheless, Applicant submits that, however viewed, the record does not support the 75 man-rem/yr limit imposed by the Board. On the contrary, the evidence points to the conclusion that the 75 man-rem figure is unrealistic in the light of the experience of large operating plants, and the assumed level (i.e., 450 man-rem/yr) both satisfies the Commission's regulations and constitutes an acceptable component of the cost-benefit balance. In addition, the man-rem/yr method of regulation is sharply at variance with the Commission's regulatory practices. Accordingly, it should not be adopted by a licensing board.

The record does not support the conclusion that "75 man-rem/yr is a reasonable, practicable level ..." for in-plant occupational exposure. To be sure, in its PSAR Applicant has estimated a dose of 73.2 man-rem/yr to Plant workers at the St. Lucie No. 2 Plant. App. Exh. 3A, pp. Q 12.22-1 to 12.22-7. However, it is expressly stated that these estimates are based upon only routine operation and routine (planned or preventive) maintenance. Applicant said that "unplanned for maintenance and emergency operations and repairs are excluded from the annual estimate...." Id. at p. Q 12.22-1. Applicant also explained that "unplanned maintenance and repair work, etc. may result in different true exposures". Id. at p. Q 12.22-2. Thus, the 73.2 figure^{3/} does not include any estimate for major

^{3/} A similar estimate, also similarly limited, is contained in Section 12.1.6 of FSAR for St. Lucie Unit No. 1. Docket No. 50-335.

maintenance operations, such as steam generator repairs, non-routine patrolling and non-routine testing. These and other jobs make it inevitable that a figure such as 73 or 75 man-rem will be exceeded.

Based upon past experience from large operating nuclear reactor plants, the Staff estimated the average collective on-site dose to be 450 man-rem/yr.^{4/} However, the Staff Safety Evaluation (pp. 12-2 to 12-3, follows Tr. 3344) described the difference between the Staff estimate and the Applicant's calculations as follows:

"The applicant has estimated the total man-rem that would accrue annually due to normal operation of St. Lucie Unit 2. The basis for this estimate was an examination of some thirty routine patrolling and checking operations and some twenty periodic tests and jobs including filter changes and maintenance of valves and pumps. The estimated man-rem exposure was about 75 man-rem per year of plant operation without allowing for major maintenance operations such as steam generator repair. The method used by the applicant to make this estimate is acceptable to the staff.

"The number used by the staff for evaluating potential environmental impact is 450 man-rem/yr/plant, which is the average collective dose to all onsite personnel experienced at large operating nuclear power plants...." (Emphasis supplied)

It is true that one witness, Dr. Morgan, expressed the view that 450 man-rem (900 for both plants) per year is too high (Initial Decision, paragraph 28) and, when the 75 man-rem/yr figure for St. Lucie Unit No. 2 was called to his

^{4/} FES (Staff Exh. S-1) p. 5-22.

attention, stated that "the Applicant is to be commended for this goal, and I would like to hold them to this as what they will in fact accomplish". (Tr. 2902) In this same breath, however, he stated he did not know the basis for either figure, recognizing "a big disparity between an estimate of 450 and the 75", he said, "I would like to know - perhaps I should ask those who prepared this and other reports which is the more realistic figure". (Ibid) Dr. Morgan also readily conceded that he had no detailed knowledge of the contents of the PSAR or of the health physics program of the Applicant. (Tr. 3060-3061, 3127, 3186) It is, therefore, clear that, although Dr. Morgan felt that in-plant occupational exposure could be reduced, his testimony does not constitute the basis for the imposition of any specific minimal limit.

No evidence contradicting the Staff's 450 man-rem figure was introduced in the hearing. Rather, in its Proposed Findings of Fact and Conclusions of Law (Paras. 206-208), Applicant stated that the calculations resulting in the 73.2 figure "exclude the exposure resulting from unplanned maintenance and emergency operations....", recognized that the "Staff's estimate is based on experience from other plants and includes total exposure from all sources....", and concluded that it would be "prudent to rely on industry experience (namely the Staff's estimate of 450 man-rem per year per Unit) to assess the radiological impact of St. Lucie Unit No. 2". In its Proposed

Findings of Fact and Conclusions of Law (Paras. 78 and 79), the Staff took the same position;^{5/} and the Board itself recognized the broader scope of the 450 man-rem estimate than the 75 man-rem estimate.^{6/}

While the Staff expected "several factors...to lead to lower doses to onsite personnel...." than the 450 man-rem industry experience figure, it expressly stated that "definitive numerical values are not available" to quantify those factors.^{7/} This conclusion was wholly uncontradicted. Accordingly, the factual record is clear. All the relevant evidence indicates that total occupational exposure would inevitably exceed 75 man-rem/yr and that that numerical standard cannot serve as the basis for a condition or guide^{8/} either to effectuate NEPA or the regulations of the NRC relating to radiological health and safety.

So far as NEPA is concerned, both the Staff and the Applicant evaluated the radiological environmental impact of

^{5/} The "Intervenor's Proposed Findings of Law" failed to address the issue. See Initial Decision, paragraph 10.

^{6/} In paragraph 28 of the Initial Decision, set forth above, the Board describes the Staff's 450 man-rem/yr estimate as "including non-routine events, based on operating experience."

^{7/} FES (Staff Exh. S-1) p. 5-22.

^{8/} Paragraph 28 states that the Board is making 75 man-rem/yr "a condition of this license". Paragraph 126(c) states that it shall merely be a "guideline dose". Accordingly, the precise scope of the limitation is not wholly clear. In any event, Applicant submits that the record can support neither a guideline nor a condition.

the plant. Assuming that in-plant exposure would reach 450 man-rem/yr (Initial Decision, Paragraph 28), both concluded that the expected radiological effects of the plant would not affect the NEPA cost-benefit balance, and Dr. Morgan agreed that the benefits of the plant outweigh the risks. (Initial Decision, paragraph 30) In addition, the FES concluded that the "site exposure is a small percentage of the annual total" man-rem delivered to the 1980 population living within a 50-mile radius of both St. Lucie plants and that: "No significant environmental impacts are anticipated from normal operational releases of radioactive materials".^{9/}

In view of these considerations and the uncontradicted evidence that definitive numerical values for any man-rem figure below 450 are not available, the 75 man-rem figure cannot be justified on the basis of NEPA.

Indeed, the Board's reference to the "as low as practicable" principle in paragraph 28 seems to point to 10 CFR 20.1(c) rather than NEPA as the basis of the imposition of the 75 man-rem limitation. That regulation reads as follows:

"(c) In accordance with recommendations of the Federal Radiation Council, approved by the President, persons engaged in activities under licenses issued by the Atomic Energy Commission pursuant to the Atomic Energy Act of 1954, as amended, should, in addition to complying with the requirements set forth in this part, make every reasonable effort to maintain radiation exposures, and

^{9/} FES (Staff Exh. S-1) p. iii, 5-22."



releases of radioactive materials in effluents to unrestricted areas, as far below the limits specified in this part as practicable. The term 'as far below the limits specified in this part as practicable' means as low as is practicably achievable taking into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety and in relation to the utilization of atomic energy in the public interest."

However, the preceding discussion demonstrates that, taking into account the state of the technology and the other considerations required to be weighed by 10 CFR 20.1(c), there is no basis for the conclusion that "improvements" (i.e. reduction in onsite doses) to a specifically quantified level can be effectuated. The Staff stated that "definitive numerical values are unavailable", and Dr. Morgan did not even attempt to supply any. The Applicant undertook to apply the principle of "as low as practicable" to occupational exposures through its health physics program,^{10/} but Dr. Rodger, its witness, also recognized the difficulties which limit the possibility of quantification. (Tr. 2165-2166, 2225-2227) Accordingly, 10 CFR 20.1(c) does not justify imposition of the 75 man-rem/yr limit.

Moreover, the imposition by the Board of an aggregate dose limit for the in-plant population is a substantial departure from the existing regulatory approach to the control of levels of radiation exposure. The basic regulations are contained in

^{10/} App. Exh. 2F, pp. 12.3-1 to 12.3-10.



10 CFR, Part 20, "Standards for Protection against Radiation". With respect to onsite exposures, specified limits are imposed upon the dosage "which any individual in a restricted area" may receive during specified periods of time. 10 CFR 20.101(a) Doses to any individual off site are fixed at far lower levels (10 CFR 20.105), and quantitative limits are imposed upon the release of concentrations of radioactive materials to unrestricted areas. 10 CFR 20.106 However, the radiation protection regulations do not impose a limit upon the aggregate dose to an entire affected population group.

It is true that 10 CFR 20.1(c) states that licensees should "make every reasonable effort to maintain radiation exposures, and releases of radioactive materials in effluents to unrestricted areas, as far below the limits specified in this part as practicable". (Emphasis supplied) However, "the limits specified" in Part 20 are limits upon the doses to which "any individual" may be exposed and limits on the quantity of releases of radioactive concentrations to unrestricted areas. The "as low as practicable" language in 10 CFR 20.1(c) is, therefore, an injunction to try to minimize the doses to "any individual" and releases to unrestricted areas below the limits established elsewhere in Part 20. It does not constitute the basis for the imposition - by use of a man-rem/yr standard or guide - of limits of aggregate dose to any particular population group.

To the contrary, any such aggregate dose limit carries no guaranty that doses to individuals will not exceed the limits specifically contained in Part 20. Yet limitation of doses to individual workers is precisely the concern in this case because the purpose of any such limitation is to protect individual workers from somatic damage. The record reflects that a reduction from 450 to 75 man-rem/yr would result in an insignificant decrease in the genetic effect of radiation exposure from the Plant. (Tr. 2906)

To be sure, the AEC (now NRC) system of regulations is intended to effectuate the recommendations of the Federal Radiation Council (now the recommendations of the Environmental Protection Agency)^{11/} which include, not only proposed limits on "whole body exposure of individuals", but also "a radiation protection guide for the genetic exposure of the entire population...."^{12/} However, the AEC has not attempted to achieve the latter objective by imposing numerical limits on aggregate population doses for any particular group in the population. Instead, the objectives of population protection are achieved by

^{11/} Section 274 of the Atomic Energy Act, as originally enacted in 1959 (P.L. 86-73; stat. 688), established the Federal Radiation Council and gave it the function of providing "guidance for all Federal agencies in the formulation of radiation standards...." That function was transferred to the Environmental Protection Agency by Reorganization Plan No. 3 of 1970. See 42 U.S.C.A. 2021 and the "Historical Note" there contained.

^{12/} Statement of Considerations accompanying the adoption of 10 CFR 20.1(c). 35 F.R. 18385, December 31, 1970.

imposing quantitative limitations on individual doses and effluent releases.

This practice was recently articulated in the as yet unconcluded "as low as practicable" rule-making proceeding relating to the adoption of numerical guides for design objectives limiting the discharge of radioactive effluents offsite.^{13/} One of the alternatives discussed and opposed by the Staff would be to modify the proposed new Appendix I to provide guidelines based on total population doses. However, the Final Environmental Statement states that no population dose limit was included in the proposed new Appendix I. This is apparently in part because limitations on population doses are "intrinsic" in dose design objectives for individuals, the latter serving to limit the population dose.^{14/} However, it also appears to be because of technical problems involved. Apparently for these reasons the Staff has recommended the adoption of design objectives based only on a dose "to a highest exposed individual offsite".^{15/}

Accordingly, the regulations fail to vest this Board with authority to impose limits on aggregate population doses,

^{13/} In the matter of Rule Making Hearing, Effluents from Light-Water-Cooled Nuclear Power Reactors, Docket No. RM-50-2.

^{14/} See Final Environmental Statement (Wash-1258) in RM-50-2, Vol. 1, pp. I-57 to I-59; Vol. 3, pp. 7-8.

^{15/} Concluding Statement of the Regulatory Staff in RM-50-2, pp. 47-48.

and we have found no reported instance in which either a licensing board or the AEC Staff has imposed such limits: We believe this history represents deliberate Commission policy. Applicant respectfully suggests that that policy should be acknowledged by this Board and should be changed only by a generic proceeding.

II.

Paragraph 105 of the Initial Decision reads as follows:

"105. There is no direct use of groundwaters at the site because no fresh groundwater has been found on Hutchinson Island. Subsurface waters will receive inflows from plant waste waters discharged to the sanitary treatment system and the settling basins. In view of the relatively small labor force to be used for operation the Board sees little significant contamination of ground waters from these sources. However, the Applicant has committed itself to connect with the municipal sewage treatment facilities as soon as the sewer line is brought within approximately 5 miles of the plant". (Emphasis supplied)

The Decision contains no citation for the commitment referred to in the last sentence. In fact, the record discloses that the Applicant's commitment is to:

"(8) Discontinue use of the present septic system and connect to a municipal sewer treatment line if and when such a line is extended to the applicant's site". (Ref. 4, p. 5) 16/
(Emphasis supplied)

The language of the last sentence of paragraph 105 is not reflected in paragraph 126. Nevertheless, the language is erroneous and might be thought to hold Applicant to a commitment it did not in fact make. If the last sentence of paragraph

16/ FES (Staff Exh. S-1), pp. 4-6; A-32 to A-33.

105 were enforced as a commitment, it would, without justification, expose the Applicant to very substantial expense. In addition, environmentally detrimental action might also be required under certain circumstances. For example, if a sewer line were to be extended along the west side of the Indian River within five miles of the Plant, unjustified environmental injury, as well as expense, would be involved in dredging the river and laying a connecting sewer line.

Accordingly, it is requested that the last sentence of paragraph 105 be revised to read:

"However, the Applicant has committed itself to connect with the municipal sewage treatment facilities if and when a municipal sewage treatment line is extended to the plant site".

III.

Contention 2.1(b) states:

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"Whether the proposed site meets the requirement of 10 CFR Part 100 as to meteorological conditions including:

"(b) Whether hurricanes pose such a severe threat to the safe operation, due to their accompanying land erosion, high winds and storm surges, and their resultant effect on the site, its equipment, buildings, and the intake water canal and emergency cooling canal and means of ingress and egress, that the site is unsuitable".

That contention was resolved favorably to the Applicant.^{17/}

However, with respect to the matter of "stalled hurricanes", the Board stated:

"Since Witness Hulman did not directly address this matter the testimony of Witness Sugg appeared to the Board to be more responsive on this point". (Para. 54)

"However, since the Staff did not formally consider stalled hurricanes, and since additional protection may be required for safety related structures in the event of this type of storm, the Board directs the Staff and Applicant to specifically address the question of stalled hurricanes and their possible safety related effects on St. Lucie No. 2 at the health and safety hearings". (Para. 59)

Applicant submits that these statements are not supported by the record and that apparently the Board did not adequately consider evidence of record which would require it to reach a different conclusion in this respect. Applicant, therefore, requests that the two sentences be deleted from the opinion.

In addressing contention 2.1(b), both Applicant and Staff reviewed historical hurricane data, and then analyzed the

^{17/} The Board's findings and conclusions with respect to contention 2.1(b) are contained at pages 31 through 40, paragraphs 52 through 55a, of the Partial Initial Decision. Two typographical errors should be noted and corrected. In paragraph 53, on page 33 in the fourth line, the word "lower" should be "higher". In paragraph 54, on page 34 in the fourth line, the word "Intervenor" should be "Applicant".



[The body of the document contains several paragraphs of text that are extremely faint and illegible due to the quality of the scan. The text appears to be organized into multiple lines and paragraphs, but no specific words or phrases can be discerned.]

effects that a Probable Maximum Hurricane (PMH) would have on the site. (Hulman, pp. 4-9, follows Tr. 1686; Yeh, pp. 1-4, follows Tr. 1838, PSAR Section 2.4) A PMH is defined as "A hypothetical hurricane having that combination of characteristics which will make it the most severe that can probably occur in the particular region involved. The hurricane should approach the point under study along a critical path and at optimum rate of movement". (Hulman, p. 5, follows Tr. 1686, quoting from U.S. Department of Commerce, E.S.S.A. (now NOAA), U.S. Weather Bureau, "Interim Report Meteorological Characteristics of the Probable Maximum Hurricane, Atlantic and Gulf Coasts of the United States", HUR 7-97, 1968). The PMH is postulated to move along a critical path toward the site at an optimal rate of movement to produce the highest surge level considered reasonably possible at the site. (Hulman, p. 5, follows Tr. 1686). Under Regulatory Guide 1.59, "Design Basis Floods for Nuclear Power Plants", if a nuclear power plant is protected from the water-induced effects of a PMH, it meets the requirements of 10 CFR Part 100. (Hulman, p. 5, follows Tr. 1686; Yeh at Tr. 1845).

In analyzing the effects of the PMH, both Applicant and Staff assumed that the beach, the sand dunes, and Highway 1A in front of the Plant site would be completely eroded so that the calculated open coast surge level of 16.2 feet MLW^{18/}

^{18/} The Staff calculated an open coast surge level of 16.7 feet MLW. The difference between the Applicant and Staff's calculations were "negligible". (Hulman, p. 8, follows Tr. 1686).



existed at the nuclear plant island. (Hulman; pp. 10-11, follows Tr. 1686; Yeh, pp. 3-4, follows Tr. 1838; Yeh at Tr. 1869-1875, 1883, 1948-1949)

Both Applicant and Staff then calculated the amount of wave run-up which would occur during the period of peak surge, and concluded that the Plant, and particularly all safety related structures, would be adequately protected. (Hulman, pp. 11-13, follows Tr. 1686; Yeh, pp. 3-4, follows Tr. 1838; Yeh at Tr. 1949).

Intervenors' witness, Sugg, reviewed historical data concerning "great hurricanes", and concluded that if one occurred in the area of Hutchinson Island a storm surge "possibly 15 feet" could occur. (Sugg, p. 1, follows Tr. 2000 B) Cross-examination established that the 15 foot surge used by Mr. Sugg was based on a computer model at the University of Miami, constructed three or five years ago. (Tr. 2012, 2014) Cross-examination also established that the figure of "15 feet" was expressed as 15 feet MSL, which corresponds to 13.7 feet MLW. (Tr. 2017, 2062, 2064-2065) Mr. Sugg concluded, in his direct testimony, "that the St. Lucie Nuclear Power Plant is vulnerable to serious erosion damage that is likely to undermine key structures in the complex, particularly along Big Mud Creek, and render the Plant inoperative". (Sugg, p. 3, follows Tr. 2000 B). Mr. Sugg's conclusion in this regard is based on the alleged erosion damage which would be caused by a "stalled

hurricane" (Tr. 2071-2072). Mr. Sugg was under the impression (albeit mistakenly, as will be hereafter shown), that the effects of a stalled hurricane had been "omitted" from the analysis of the PMH performed by the Applicant and the Staff. (Tr. 2069) This impression appears to be reflected in the language of paragraphs 54 and 59, set out above, which the Applicant seeks to have deleted from the Initial Decision.

Applicant submits that the uncontradicted evidence in the record shows that Applicant and Staff have considered the effects of the "stalled hurricane" hypothesized by Intervenor's witness, Sugg. The hypothesis appears most clearly ^{19/} in a question by Intervenor's counsel on redirect examination of Mr. Sugg at Tr. 2071-2072:

"Q. All right.

"I would like to pose a hypothetical, what we asked Dr. Yeh, if I may.

"And that was a hurricane that stalled twenty or forty miles at sea, making landfall, or projected to make landfall about ten miles south of the Plant.

"This hurricane stalling for two to four days, eroding the beach, the dune, and the road, adjacent to the Plant on the Atlantic side, and then moving in, making its landfall with the full peak storm surge striking at the Nuclear Plant Site, and approaching and crossing over and around or whatever the Nuclear Plant Island, which is that eighteen foot elevation specially defined area which we have referred

^{19/} It also appears in a series of questions asked by Intervenor's counsel of Applicant's witness, Yeh, beginning at Tr. 1905, summarized at Tr. 1923, and restated at Tr. 1928.

to where the reactor building and its auxiliary structures are located, recognizing it would be a distance of approximately six feet between the height of the surge and the Atlantic waters, and the height of the surge in the Indian River.

"The question is, in your judgment, what would occur? Would there be erosion?

"Try to describe for us, to the best of your ability, what we might expect in that set of circumstances".

Mr. Sugg gave the following answer:

"A. Well, if I understand the question correctly, we have stalled the hurricane some distance offshore, but with gale winds and possibly hurricane force winds affecting the coastline for a matter of two days, theoretically maybe four days, but that is unlikely here, but two days is not unlikely, the erosion from the gales would take care of the ALA and the sand dunes, just like your Northeasters do, and just like many times in the past ten years you have seen minimal storms, or even Northeasters, cut holes through the sand dune upon which ALA lies in some places, or many places.

"The natural barrier, then, no longer exists, so that if and when the hurricane did come in, preferably at a distance of some ten to twenty miles south of the site, you would have essentially the same storm surface [storm surge] at the site as you would if the site were sitting right on the beach.

"That is my estimate of what is going to happen.

"So if we're talking about a fifteen foot storm surge, and the barrier reef and what not, all the natural protection is gone, I think that you could get almost that amount inland, to where the site is". (Tr. 2071-2072)

Thus, the sum and substance of Mr. Sugg's testimony is that a stalled hurricane would erode the beach, the dunes, and Highway A1A so that the open coast storm surge level would exist at the nuclear plant island when the hurricane moved ashore. Yet, as noted above, analysis of the PMH by both Applicant and Staff included such characteristics (i.e., no beach, dune, or Highway A1A), so that open coast storm surge level occurred at the nuclear plant island and also included a maximum surge level of 16.2 feet MLW, 2.5 feet greater than that predicted by Intervenor's witness, Sugg, who, as noted above, had calculated a level of 15 feet MSL or 13.7 MLW. That analysis by Applicant and Staff concluded that there would be no erosion of the nuclear plant island. (Yeh, pp. 3, 4, follows Tr. 1838; Hulman, at Tr. 1704)

With respect to that conclusion, Mr. Sugg acknowledged that he possessed no special expertise to comment on erosion characteristics (Tr. 1995), admitted that the effects of a hurricane storm surge striking the coast involved a "hydrology problem" (Tr. 2018), further admitted that his testimony about possible erosion was made without any specific knowledge of the characteristics of the St. Lucie Plant or the site itself. (Tr. 2060), and finally admitted that he could not describe the "volume of it, and size, width, depth". (Tr. 2072) For that reason, the analysis and conclusions made by Applicant and Staff are uncontradicted.

From the foregoing, it is clear that both Applicant and Staff have analyzed the effects of the "stalled hurricanes" hypothesized by Mr. Sugg, and that the analysis included consideration of a maximum storm surge level occurring at the nuclear plant island more severe than that posed by Witness Sugg. Consequently, there remains no uncertainty about the extent of erosion which would occur in that situation and no need to "address the question of stalled hurricanes and their possible safety related effects on St. Lucie No. 2 at the health and safety hearings".

Respectfully submitted,

LOWENSTEIN, NEWMAN, REIS
& AXELRAD

Co-counsel for Applicant

By Harold F. Reis
Harold F. Reis

March 19, 1975

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Applicant's Petition for Reconsideration", dated March 19, 1975, have been served on the following by deposit in the United States mail, first class or air mail, this 19th day of March, 1975.

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