



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
 )  
HOUSTON LIGHTING & POWER )  
COMPANY ) Docket No. 50-466  
 )  
(Allens Creek Nuclear )  
Generating Station, Unit 1) )

APPLICANT'S RESPONSE TO SECOND AMENDMENT  
FOR LEAVE TO INTERVENE AND CONTENTIONS  
SUPPLEMENTING A PETITION FOR LEAVE TO INTERVENE  
FILED BY TEXAS PUBLIC INTEREST RESEARCH GROUP, INC.

Applicant is in receipt of a "Second Amendment in Petition for Leave to Intervene Filed by Texas Public Interest Research Group, Inc.," dated August 27, 1978 (Second Petition Amendment), and "Contentions Supplementing a Petition for Leave to Intervene Filed by Texas PIRG, Inc.", dated August 29, 1978 (Contentions), and files this response thereto.

INTEREST

In its Second Petition Amendment, TexPirg (Petitioner) again attempts to establish a legal interest in this proceeding based on the alleged status of its Board members and contributors as ratepayers and on certain general health and safety concerns. Every alleged concern set forth under these two general categories are interests held solely

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and independently by named individuals who purportedly authorized Petitioner to act as their representative. This fact is important in defining the true basis of Petitioner's standing allegations.

The judicial pronouncements on standing and the Commission's decisions make clear that an association may assert a collective interest held by the entity itself or it may assert other interests as the representative of its members. See, e.g., Warth v. Seldin, 422 U.S. 490 (1975); and Public Service Company of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-322, 3 NRC 328 (1976). The carefully shaped test repeatedly applied in the Commission's decisions concerning intervenor groups' standing is always phrased to indicate its bifurcated nature:

[T]he test is whether a cognizable interest of the petitioner might be adversely affected if the proceeding has one outcome rather than another. And, to repeat, no such interest is to be presumed. There must be a concrete demonstration that harm to the petitioner (or those it represents) will or could flow from a result unfavorable to it . . . . Nuclear Engineering Co., Inc. (Sheffield, Illinois, Low-Level Radioactive Waste Disposal Site) ALAB-473, Slip Op. p. 9 (May 3, 1978) (emphasis added).

See also, Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LEP-73-28, 6 AEC 666, 671, aff'd ALAB-15, 6 AEC 811 (1973).

Petitioner's Second Petition Amendment makes no effort to show that TexPirg has any corporate interest in this proceeding.<sup>1/</sup> Petitioner now asserts only that it represents certain named individuals who allegedly will be affected by this proceeding.

When an organization claims that its standing is based on the interests of its members, the organization must identify specific individual members whose interests might be affected by the proposed action, describe specifically how the interests of each of those members might be affected and show that each of those members has authorized the organization to act on his behalf. Allied General Nuclear Services, et al. (Barnwell Fuel Receiving and Storage Station), ALAB-328, 3 NRC 420, 422 (1976); Public Service Electric & Gas Company (Salem Nuclear Generating Station, Units 1 & 2), ALAB-136, 6 AEC 487, 488-89 (1973); Duquesne Light Company, et al. (Beaver Valley Power Station, Unit 1), ALAB-109, 6 AEC 243, 244 at n.2 (1973). As discussed below, this has not been done here and TexPirg's petition is defective in this regard.

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<sup>1/</sup> In its original pleadings, Petitioner did allege an interest arising as a result of its solicitation of funds with the "understanding that Petitioner shall represent and advocate their interests as consumers, and with respect to the environment." As the Applicant noted in response, it is well settled that a "general" interest in the issues of the proceeding will not suffice as a basis for standing by an organization. Allied General Nuclear Services, et al. (Barnwell Fuel Receiving and Storage Station), ALAB-328, 3 NRC 420 (1976).

No organizational interest having been shown, it comes down to an evaluation of whether the interests of the named individual members are sufficient to confer standing on them as a matter of right.

A. Individuals' alleged interest as ratepayers.

In Part II of its Second Petition Amendment, Petitioner attempts to establish a legal interest in this proceeding based on its alleged status as a ratepayer. It is now well established, however, that status as a ratepayer of an applicant for a nuclear license is not an interest sufficient to support standing to intervene. See, e.g., Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 & 2), CLI-76-27, 4 NRC 610 (1976); Tennessee Valley Authority (Watts Bar Nuclear Plant, Units 1 & 2); ALAB-413, 5 NRC 1418 (1977). Applicant discussed this point in detail in its August 17 response to TexPirg's First Amended Petition. There is no need to repeat those arguments here, because Petitioner has no new points. On the basis of Part II alone, therefore, Petitioner has failed to establish a sufficient interest and should not be permitted to intervene.

B. Individuals' Alleged Health and Safety Interests.

Part III of the Second Petition Amendment sets forth certain health and safety concerns but all are of a general nature, and there is no indication as to how the interests of specific members of petitioner are affected. The only assertion in Part III which attempts to identify any interest of a member of the group (Mr. Scott) is in connection with



certain real property owned by him but the location of that property, other than the county in which it is situated, is not specified. It may be possible for petitioner to remedy these defects by identifying which of the members of the organization are affected by the "health and safety interests" identified in Part III, but that has not been done in the instant pleading. Petitioner has had every opportunity to remedy these defects, and has not done so; therefore, the petition should be denied.

#### CONTENTIONS

Apart from the deficiencies in its standing arguments, Petitioner has also failed to satisfy the requirement that at least one of the contentions must describe with reasonable specificity a genuine issue in controversy. 10 CFR § 2.174(b). See, e.g., Mississippi Power and Light Company (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 423-24 (1973). For the reasons discussed below, none of Petitioner's contentions are acceptable and Applicant opposes their admission as issues in controversy in this proceeding.

Contentions 1, 2, 3, 6, and 7

These contentions take issue with the Staff's analysis of the cost of generating electricity with a coal plant versus a nuclear plant, without mention of the relative environmental effects of these alternatives. As a result, the contentions are irrelevant to this proceeding and should not be allowed. In this regard, the Appeal Board has recently noted:

The passage of the National Environmental Policy Act increased our concern with the economics of nuclear power plants, but only in a limited way. That Act requires us to consider whether there are environmentally preferable alternatives to the proposal before us. If there are, we must take the steps we can to see that they are implemented if that can be accomplished at a reasonable cost; i.e., one not out of proportion to the environmental advantages to be gained. But if there are no preferable environmental alternatives, such cost-benefit balancing does not take place. Manifestly, nothing in NEPA calls upon us to sift through environmentally inferior alternatives to find a cheaper (but dirtier) way of handling the matter at hand. In the scheme of things, we leave such matters to the business judgment of the utility companies and to the wisdom of the State regulatory agencies responsible for scrutinizing the purely economic aspects of proposals to build new generating facilities. In short, as far as NEPA is concerned, cost is important only to the extent it results in an environmentally superior alternative. If the "cure" is worse than the disease, that it is cheap is hardly impressive.

Consumers Power Co. (Midland Units 1 & 2), ALAB-458, 7 NRC 155, 162-63 (footnotes omitted). Absent even an allegation of the environmental superiority of coal generation, these contentions should be disallowed.

Aside from the foregoing argument, contention 3 is so unclear that it is impossible to define precisely what Petitioner views as the infirmity in the staff's analysis, and on what basis. Contention 6, on the other hand, is not even allegedly based on new information, contains none, and thus fails to meet the requirements of the Board's Memorandum and Order. For these additional reasons alone, the contentions should be disallowed.

While neither contention 1 (related to capital costs) nor 7 (related to fuel costs) make specific reference to the coal versus nuclear comparison, these two contentions can only be understood when analyzed in the context of the arguments presented in contentions 2, 3 and 6. That is, it is irrelevant that capital costs and fuel costs have increased, even to the extent alleged, unless it is alleged that these changes somehow affect some particular economic analysis such as the comparison between the total cost of coal and nuclear plants. No such allegation exists and these contentions must be denied.

#### Contention 4

This contention contains on its face an admission that it is not based on new evidence. Petitioner specifically alleges that the technology regarding solid waste combustion has existed in Europe for over 40 years and further alleges that there are 21 operational plants in the U.S. Petitioner attempts to justify its failure to present these allegations in 1975 by arguing that Houston has enough solid waste to support 800 to 1000 MWe of production, which level of supply could not have substituted for two units but can now substitute for one unit. Obviously, Petitioners could have argued in 1975 that a solid waste combustion plant could be substituted for one of the two originally planned units. Aside from this point, Petitioner

is simply wrong in its argument that a 3000 ton per day conversion plant will support 800-1000 MW(e) production per day. Petitioner presumably has improperly equated the thermal output of a power plant with the electrical output. Once these factors are appropriately calculated on the basis of Petitioner's assumptions it can be seen that a three thousand ton per day conversion plant would support, at most, a plant 360 MW(e) in size, as compared to the size of ACNGS Unit 1 which is 1146 MW(e). This calculation is explained in Appendix A hereto.

#### Contention 5

This contention should not be allowed because it is not based on new information or evidence and thus fails to meet the requirements of the Board's Memorandum and Order.

The only recent event mentioned is the presentation of testimony by Dr. Frederick Wells "before the Public Utility Commission of Texas in 1978, outlining ways in which the Applicant's rate structure should be modified to reduce power demand." However, there is no indication -- nor even an allegation -- that Dr. Wells' testimony provided new information that was not available earlier. The mere restatement of, or elaboration on, previously available facts or theories does not constitute



genuinely new information,<sup>2/</sup> and the contention must be denied for this reason.

Applicant is in fact involved in the generic rate hearings in which Dr. Wells testified. A review of his testimony demonstrates on its face that Dr. Wells is not raising any new evidence. In fact, his testimony clearly states (at p. 7) that he is testifying in support of the theory that rates should be based on marginal costs:

"Q. Would you summarize your recommendations and conclusions at this point? Please start with your rationale behind your recommendations.

"A. My main contention is that rates should be based on marginal cost, because these are costs created or saved when a customer decides to increase or decrease his consumption level. Thus, marginal cost assigned to the customer are the actual costs involved when she or he turns a light on or off. Setting prices equal to marginal cost is, therefore, equitable."

Of course, the marginal cost theory did not evolve after December, 1975. It was in fact adopted by one state regulatory commission in 1974. See, Re Madison Gas and Electric Company, 5 PUR 4th 28 (Wis. Pub. Serv. Comm'n 1974). Both the Applicant and the Staff previously addressed the impact

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<sup>2/</sup> Neither is it new evidence. Within the context of the Board's Memorandum and Order, "new evidence" or "new information" must be taken to mean something, in fact, only recently available -- that is, previously not known or reasonable discoverable -- and tending to prove that which is alleged in a given contention. Thus, a statement by Dr. Wells in the form of testimony is not new evidence, at least in the absence of a specific showing that it is based on newly discovered data or facts.

of changes in the rate structure (ER pg. 1.1-3; FES pg. 8-4). Petitioners have made absolutely no effort to explain how Dr. Wells' testimony or any other allegedly new evidence changes any of the prior conclusions reached by Applicant and Staff.

#### Contention 8

This contention is improper in that it is based on no new information. Enrichment plants have been in operation in this country for decades, and "recent (1976) calculations" cannot constitute new information when the impacts of enrichment -- including electrical power requirements -- have long been known and widely publicized. E.g., U.S. Atomic Energy Commission, Environmental Survey of the Uranium Fuel Cycle (WASH-1248 1974), pp. D-1 to D-29. The contention should be denied.

#### Contentions 9 and 10

These contentions allege deficiencies in the environmental analysis as it pertains to decommissioning. They purport to criticize both the factors considered and costs utilized by the NRC staff. These matters, however, have been noticed as the subject of a proposed rulemaking. This rulemaking is in fact in response to a petition filed by the Public Interest Research Group:

"In a petition dated July 5, 1977, as supplemented October 7, 1977, the Public Interest Research Group, and others, requested the Commission to initiate rulemaking to promulgate regulations for nuclear power plant decommissioning. The regulations requested by the petitioners would require plant operators to post bonds to be held in escrow, prior to each plant's operations, to ensure that funds will be available for proper and adequate isolation of radioactive material upon each plant's decommissioning. The petitioners state that the regulations should also require that nuclear power plants already in operation establish plans and immediately post bonds, to be held in escrow, to ensure proper decommissioning. The petitioners argue that this arrangement will ensure that the cost of decommissioning is paid for by current beneficiaries and not by future generations." (43 F.R. 10370, 10371; March 13, 1978).

Since the Commission has undertaken to consider these issues on a generic basis, it makes no sense to adjudicate them in individual licensing cases. In fact, the Appeal Board has specifically stated, in a similar context involving the Commission's fuel cycle rulemaking, "that licensing boards should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission." Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974). Thus, these contentions should be dismissed.

#### Contentions 11 and 21

Both of these contentions contain allegations concerning the staff's failure to properly consider solar energy. Both

suffer from the same infirmity, however, in that they are not based on new information and could have been raised earlier.

Insofar as contention 11 is concerned, reference to one more report (the extract from which is clearly argumentative) does not establish that new information or evidence, not previously available, has been developed. See note 2, supra. As for contention 21, the situation with respect to the discussion of "'passive' solar systems" remains essentially unchanged from the original FES. The contention, if valid, could have been raised earlier, irrespective of alleged work "[w]ithin the last two years, [by] an Austin architect." In addition, the contention hinges in substantial part on the need to alter city building codes which, of course, is a matter completely beyond the control of the Applicant or the NRC.

Since both contentions fail to meet the requirements of the Board's Memorandum and Order, they should be disallowed.

#### Contention 12

Petitioner contends that there are new population projections for Harris County and Fort Bend County. This contention standing alone is meaningless and irrelevant. It is assumed that the contention is intended to relate to the assertion set forth at page 5, paragraph (c), of the Second



Petition Amendment which appears to be an allegation to the effect that population changes have increased traffic congestion, which congestion is likely to hamper the effectiveness of the emergency plan and thereby exacerbate the consequences of an accident.<sup>3/</sup> It is important to note, however, that the Appeal Board has stated that the Commission's regulations do not require an emergency plan for protection of persons outside the low population zone (LPZ). New England Power Co. (NEP, Units 1 and 2), et al., ALAB-390, 5 NRC 733 (1977); Metropolitan Edison Co., et al. (Three Mile Island Nuclear Station, Unit No. 2), ALAB-486 (1978). Petitioners make no effort to relate the changes in population to the LPZ (Harris County is substantially beyond the 3.5 mile LPZ), so the contention must be denied. Last, but not least, there seems to be an implication in Petitioner's pleading to the effect that the Applicant and Staff did not anticipate future population changes. This is, of course, not true. The question of population change was specifically addressed in the prior hearings. For example, the Staff assumed that there would be increasing population density within 30 miles of the site:

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<sup>3/</sup> While other constructions of paragraph (c) are possible, this was the only one Applicant could devise which relates to the standing of the individual petitioners.

"The 1970 population density within 10 miles of the site averaged 25 people per square mile, and is projected to increase to 41 and 90 people per square mile by the years 1980 and 2000, respectively. Within 30 miles of the site, the 1970 population density was 33 people per square mile. By 1980 and 2000 the population density is projected to increase to 68 and 185 people per square mile, respectively. Since the nearest large city, Houston, is sufficiently distant, no special considerations contemplated by 10 CFR 100.11(a)(3) need to be given to distance from that population center." (NRC Staff Site Suitability Testimony, pp. 2-3; following tr. p. 303).

Petitioners have not even alleged that these Staff projections are now in error.

Contentions 13, 14, 15 and 16

The primary problem with this group of contentions is that they are so self contradictory as to be incomprehensible. Contentions 13 and 14 appear to relate to certain adverse effects which reduce the recreational benefits of the lake. Petitioner then asserts in contention 15 that by simply moving the location of the lake there would be more recreational benefits without any explanation as to how this change in location would solve the problems addressed in contentions 13 and 14. To further compound the confusion, contention 16 contains the assertion that the same recreational benefits could be achieved through the location of the State parks on the "smaller cooling lakes

required for the cooling tower." It is fair to say that taking these contentions as a whole it is impossible for one to discern whether Petitioner is asserting that (1) the presently planned lake should be built if the problems identified in contentions 13 and 14 are satisfactorily resolved, or (2) the location of the lake should be changed, or (3) notwithstanding (1) and (2), the Applicant should build cooling towers with "small lakes." The Applicant is entitled to know exactly what it is Petitioner thinks should or should not be done so those matters can be addressed in the hearing process.

Aside from the foregoing problems, contention 15 simply alleges "that the changed dam location can be better located at no increase in cost and yet provide for more fish production, less use of Brazos River water, more water and shore recreational benefits, and reduced flooding effects on those living across the river . . . ." This very generalized statement wholly fails to meet the requirements of section 2.714(b) in that it is without a stated basis.

Contention 16 also has a number of specific deficiencies. First, there is no reference to the alleged "new prices" for

cooling tower and dams. Second, there is not even any allegation that the plan to "import water from other states" is new evidence, nor is there any identification of such a plan. Third, the allegation with respect to the "state law creating a Subsidence District" is completely self-defeating for Petitioner. The only such district known to Applicant was created by H.B. 552 passed by the 64th legislative session (1975) of the State of Texas. That act became effective on April 23, 1975. The pendency of this legislation was known at the time of the original hearing in this proceeding in March, 1975, and was in fact addressed by the NRC Staff, albeit in a slightly different but related context:

"We and our consultants (Harza Engineering Company) reviewed each phase of the applicant's study, independently checked each projection to determine its conservatism, and reviewed calculational procedures and assumptions to assure their correctness and conservatism. Specifically, population projections, per capita water demand, industrial projections, and projected local demands for ground water were checked against other sources where possible (5) to assure their conservatism. Local conditions, such as on-site pumping and the influence of the relatively large proposed plant cooling lake were also evaluated. In addition, such factors as future ground-water legislation (the State of Texas presently has no legal restrictions on ground water withdrawal), the availability and cost of surface water supplies, and future agricultural trends were considered.



"Based upon our independent review and analyses, the applicant's regional projections of future ground water requirements (municipal, industrial, and agricultural) and calculational procedures are judged to be conservative. We understand that Houston's commitment to surface water supplies from the Trinity River basin will probably preclude the development of more ground water supplies by the City of Houston for sometime in the future. In addition, bills presently being considered in the Texas Legislature will probably result in less ground water withdrawal in the future. Thus, we conclude that the applicant's estimate of 200 feet of total decline in the ground-water peizometric level at the site from present and future regional water requirements is conservative." (NRC Staff Site Suitability Testimony, pp. 13-14; following tr. p. 303).

In short, contention 16 simply cannot stand.

#### Contention 17

This contention alleges that, "due to the new information about the effects of low level radiation causing cancer, the new population projections, and their location and the changed emissions of gaseous radioactivity that the location of the proposed plant should be moved to a much less populated area...." However, the "new information about the effects of low level radiation," "new population projections," and "changed emissions of gaseous radioactivity" of concern are nowhere specified. As a result, the contention is too vague and should be dismissed.

The somatic and genetic effects of low level radiation have been the subjects of continuing investigation over the past twenty-five or more years. A host of such studies existed prior to 1975 and could have been relied upon by the petitioners in framing contentions in 1974-75. The addition of one more study of opinion to the continuing body of scientific literature is not "new evidence or new information" within the meaning of the Board's Order.

In addition, to the extent the contention alleges that insufficient consideration has been given to alternative sites in "much less populated" areas, such as those "nearer the Gulf," there is no indication that the facts have changed with respect to the availability of such sites since December 9, 1975. Since there is no reason why Petitioner could not have contended earlier that less populated alternative sites should have received additional consideration, the contention is deficient. It fails to comport with the Board's Memorandum and Order of August 14.

Contention 18

This contention simply states

that new information on Brazos River flow for the last three years will show that the average flow has decreased since the 1975 hearing. This effect should be considered before issuing a permit to construct.

The new information and the effect of concern, however, are neither identified nor related and it is not even clear that

the statement raises a contention of any kind. It should not be of surprise to anyone that an average flow in a river computed on a 3-year base would vary from an average flow computed on a 20-year base period. Even if the facts on average flows had changed, the facility does not depend on flows in the Brazos River but upon releases from upstream reservoirs. In short, the allegation is meaningless, without a stated basis and impermissibly vague. It should be denied.

#### Contention 19

In this contention

Petitioner contends that adults as well as infants drink milk and the effect of milk consumption for adults should be considered in the DS-FES, also. Further new information (see contention 12) shows that people may live within the range of the radioactive fallout for longer than shown on page 5-24, (see contention 12).

Although page 5-24 is mentioned, the contention appears to refer to Table S.5.13 on page S.5-26. This table, however, does not presume that adults do not drink milk. Rather, it tabulates maximum annual dose commitments from radioactive effluents divided into three categories. For one of these categories, "radioiodine and particulates in gaseous effluents," the table simply indicates that an infant receives the maximum dose commitment. However, in the liquid effluent category,

for example, adult commitments are greatest, including specifically that resulting from drinking milk.

In any event, no new information -- either in contention 12, which is cited, or elsewhere -- is offered in support of the statement that "people may live within the range of the radioactive fallout for longer than shown on page 5-24 . . . ." Accordingly, the contention both fails to state an issue with specificity, and is not based on new information; therefore, it should be disallowed.

#### Contention 20

Contention 20 is unacceptably vague. Beyond making a general statement that "new information shows that air traffic has increased at least 30 percent since 1975" petitioner fails to identify the location of the increased air traffic, the types of aircraft involved or any information which would establish that under NRC guidelines (Reg. Guide 1.70, Rev. 2) and precedents the facility must be redesigned to accommodate aircraft impacts. To the extent it seeks to raise the issue of sabotage by means of a deliberate crash, it is clearly a challenge to Part 73 of the Commission's regulations, which specifies the requirements for the "Physical Protection of Plants and Materials," especially Section 73.55. See also 10 CFR § 50.13. It is, therefore, improper under 10 CFR § 2.758. E.g., Ohio Edison Co. (Erie Nuclear Plants



Units 1 & 2), Licensing Board Order Subsequent to the First Prehearing Conference p. 5 (Aug. 18, 1977) (unpublished opinion), [hereinafter Erie].

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Contentions 22A and 22B

Contention 22A refers to "fishery losses associated with ACNGS" and "reduction in freshwater and nutrient input to [the] downstream estuarine system [which] will also adversely affect the [Brazos] River's fishery production." The only mention of conceivably new information, however, is reference to unidentified "1978 fishery production maps of the U.S. Fish and Wildlife Service," and unspecified changes in the ACNGS which will allegedly "result in the entrainment of plankton and fish." There is no showing, however, that the information contained in the "1978 fishery production maps" was not available prior to December 9, 1975; nor is there any explanation as to how "changes in the ACNGS" will affect the entrainment of plankton and fish or reduce freshwater and nutrient input downstream. In sum, the contention is vague, unspecific and not related to identified new information. As a result, it should be denied.

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4/ Petitioners' Contentions contain two contentions numbered 22. For convenience Applicant has referred to the first one as 22A and the second as 22B.

Contention 22B seems to allege that the ACNGS automatic scram system does not have automatic and redundant features required by current NRC regulations. The ACNGS scram system is redundant and automatic. The Applicant is not aware of any current NRC requirement to provide additional equipment beyond that which exists in the present design for ACNGS. Petitioner fails to identify the "new state-of-the-art rules" alleged to be the basis for the stated deficiency and thus fails to show any meaningful compliance with the Board's requirement that the contention be related to new information or changes in the plant.

#### Contention 23

In this contention, Petitioner seeks a comparison of BWR and PWR designs in light of allegedly new information which is characterized as raising questions "about the safety of the BWR reactors" and "the advisability of licensing" them. According to Petitioner "Clearly, such serious doubts should, at least, be reflected in a renewed consideration of the safest possible design, and radiation levels 'as low as practicable'."

There is nothing in the Atomic Energy Act of Commission precedent contemplating an analysis of comparative technology of the type suggested by Petitioner. Rather, under the Atomic Energy Act of 1954, the Commission is charged with prescribing regulations defining what is and is not licensable. Absent a special showing of a deficiency within the web of safety regulations, compliance with them is a sufficient demonstration

of safety. See Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Station, 6 AEC 1003, 1008-10 (1973)), aff'd sub nom., Citizens for Safe Power v. NRC, 524 F.2d 1291 (1975). Since there is no basis whatever in the contention to support an allegation that the ACNGS will fail to comply with any of the Commission's regulations -- including the "as low as reasonably achievable" regulations -- the contention raises nothing which may properly be placed in issue as a matter in controversy in this proceeding.

Finally, it should be remembered that the ACNGS project has always incorporated BWR reactors. Any assertion, regarding differences between BWR's and PWR's and their relative merit, (whether under the Atomic Energy Act of 1954 or NEPA) could, without question, have been made before December, 1975.

#### Contention 26

This contention asserts that construction should be deferred until after full scale testing of the MK III containment. It is based on a false premise. There is no requirement for full scale experimental verification. Containment design and testing requirements are specified in Appendices A and J to 10 C.F.R. Part 50. This contention can only be construed as a challenge to the adequacy of NRC regulations and the contention should be denied. See, e.g. Erie, p. 11.

In general, the Commission has issued numerous regulations and made the safety findings required by the Atomic Energy Act of 1954 notwithstanding the absence of experimental verification. Thus, in promulgating its Interim Acceptance Criteria for Emergency Core Cooling Systems, the Commission noted that it lacked

analytical methods capable of detailed realistic prediction of all phenomena known or suspected to occur during a [LOCA], supported in every aspect by definitive experiments directly applicable to the accident.

Union of Concerned Scientists v. Atomic Energy Commission, 499 F.2d 1069, 1086 (D.C. Cir. 1974). Nevertheless, the Commission, using conservative analyses, assumptions, and procedures issued the Interim Acceptance Criteria, and the Court of Appeals for the D. C. Circuit upheld the Commission. The Court observed that since "empirical certainty . . . is rarely to be expected," it would not substitute its judgment (or that of the petitioner in that case) for the Commission's. Id.

In addition, issues concerning the adequacy of the MK III containment were raised at least as early as 1974 in the ACNGS docket itself. Concerns regarding the MK III containment were discussed in the November, 1974 SER for ACNGS (SER Sec. 6.2). Thus, the allegedly new information was available prior to December 9, 1975.

For the above reasons, this contention should not be allowed.



#### Contention 27

Stress corrosion cracking in BWR's has been the subject of considerable attention since before December 9, 1975. See, e.g., Hearings on Nuclear Regulatory Commission Action Requiring Safety Inspections which Resulted in Shutdown of Certain Nuclear Powerplants Before the Joint Committee on Atomic Energy and the Senate Committee on Government Operations, 94th Cong., 1st Sess. (Feb. 5, 1975). In addition, the matter was specifically discussed in the November, 1974 SER for ACNGS. (pp. 5-9, 10).

In addition, the Commission's ECCS regulations, Section 50.46, are designed to cope with the worst pipe rupture -- whether resulting from stress corrosion cracking or any other cause -- while keeping the consequences well within the limits of 10 C.F.R. Part 100.

Accordingly, this contention should be disallowed since it is not, in fact, based on new information and, even if it were, would constitute an impermissible challenge to NRC regulations.

#### Contention 28

The "new information or new evidence" to support this contention is a statement to the effect that "NRC announced plans to study the concern [failure of hermetic seals on instrumentation] on January 1, 1978." As in the case of contention 22B, Petitioner has failed to identify the announcement referred to so the Board and the parties can judge whether

this is in fact new information. Absent such identification the contention must be denied.

#### Contention 29

This contention seeks to raise the issue of the flammability of electrical cables. In alleging "new information," Petitioner cites "a 1976 study by Sandia Laboratories."

The flammability of electrical cables and the possibility of fires spreading among separated cable trays, however, has been known since at least March 22, 1975, with the occurrence of the Browns Ferry fire. See, e.g., U.S. Nuclear Regulatory Commission, Annual Report 1975, pp. 294. Moreover, by December of that year, much information was available on the public record. See, e.g., Hearings on the Browns Ferry Nuclear Plant Fire Before the Joint Committee on Atomic Energy, 94th Cong., 1st Sess. (Sept. 16, 1975). Accordingly, this contention could have been raised earlier, is not based on "new information" within the meaning of the Board's Memorandum and Order and should be denied.

#### Contention 30

This contention discusses the flow-induced vibration inside the reactor pressure vessel and refers to testimony by former General Electric (GE) engineers in 1976 disclosing that "such vibration caused failure of feedwater spargers at five BWR units from 1975 to 1976." The matter of flow induced vibration was specifically discussed at page 3-27 of the November, 1974 SER on ACNGS.

The feedwater sparger cracking referred to above occurred in plants with earlier BWR designs and no similarity in the design of the referenced reactors with the ACNGS reactor is alleged. Accordingly, the contention is irrelevant to this proceeding.

Further, testimony by the NRC before Congress in March of 1976 indicates that incidents of feedwater sparger cracking had been observed over the preceding year and that they were not serious. See, Hearings on Investigation of Charges Relating to Nuclear Safety Before the Joint Committee on Atomic Energy, 94th Cong., 2d Sess., pp. II-11 to 17. This suggests that the phenomenon was known prior to December 9, 1975 and, thus, does not constitute new information.

For all the foregoing reasons, this contention should be dismissed.

#### Contention 31

This contention essentially appears to have been copied from the prepared testimony of three GE engineers presented to the Joint Committee on Atomic Energy in February 1976. See Hearings on Investigation of Charges Relating to Nuclear Safety Before the Joint Committee on Atomic Energy, 94th Cong., 2d Sess., pp. 514-15 (1976). In responding to the testimony of the three, the NRC staff noted:

The postulation of a rupture of each of the pipes connected to the reactor vessel is required and the consequences of each separate rupture are investigated as part of the staff's safety review. The term "instantaneous pressure wave" cited in the February 18, 1976 testimony characterizes a very short unbalanced pressure that places a load on the exterior of the reactor vessel. Other loading phenomena, reaction forces from the rapid fluid flow in the system and temporarily unbalanced pressure internal to the reactor vessel also result under the conditions that would exist if the postulated pipe rupture were to occur. The staff requires that the stability of the piping attached to the vessel, the control rods, and the vessel internals be evaluated and assured under the combined effect of all loading phenomena associated with the loads resulting from a design basis earthquake. Id., at 768.

The foregoing shows that, although the GE engineers made their assertion in February 1976, the NRC staff had for some time included analyses of the postulated event and its consequences in previous safety reviews. Such safety reviews are, of course, public documents. For purposes of this proceeding, the importance of the NRC staff testimony is not that it answers fully the charge of the GE engineers, but rather than the matter raised by the GE engineers has been dealt with routinely by the NRC staff -- a fact reasonably discoverable by a potential litigant before December 9, 1975.

Because the contention is also vague, however, it may be meant to refer to a concern over the capability of the biological shield to withstand a double-ended pipe break at the safe ends. This matter, however, was reported by the Advisory Committee on Reactor Safeguards to have been resolved at least as far back as late 1972. See Id., at 634-35.



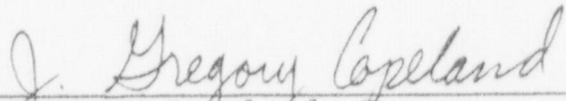
Finally, to the extent the contention seeks to raise the issue of pressure vessel integrity, the requisite showing of "special circumstances" has not been made. See, e.g., Consolidated Edison Co. (Indian Point Unit 2), CLI-72-29 5 AEC 20, 21 (1972).

In sum the contention is wholly improper and should be rejected.

### III.

In conclusion, Applicant notes that page two of the Contentions asserts that this statement of the contentions may "not . . . be the only contentions advanced as an intervenor in this hearing." The suggestion is that Petitioner has an unrestricted right to amend its petition at any time. This is not correct, however, since the Commission's rules specifically require submission of "the contentions which petitioner seeks to have litigated" at a prescribed time. See, 10 C.F.R. §2.714(b). Petitioner has no unrestricted right to submit additional contentions after the time set forth in §2.714(b) without a showing of good cause.

Respectfully submitted,

  
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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	§	
	§	
HOUSTON LIGHTING & POWER COMPANY	§	Docket No. 50-466
	§	
(Allens Creek Nuclear Generating	§	
Station, Unit 1)	§	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Response in the above-captioned proceeding were served on the following by deposit in the United States mail, postage prepaid, or by hand-delivery this 28th day of September, 1978.

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Atomic Safety and Licensing  
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## Appendix A

### TexPIRG assumptions:

- (1) heat content of solid municipal waste approx.  
5000 BTU/lb\*
- (2) heat content of solid municipal waste with light and  
non-cumbustibles removed greater than 10,000 BTU/lb\*\*
- (3) daily amount of solid waste in Houston = 6000 tons/day
- (4) waste conversion plant capacity necessary to replace  
ACNGS = 3000 tons/day

\* or 40% of heat value of coal as stated by TexPIRG petition.

\*\* or 90% of heat value of coal as stated by TexPIRG petition.

### HL&P calculation:

Utilizing the TexPIRG values for waste equivalent heat values compared to coal (13,600 BTU/lb), the approximate waste heat value with light - and non-combustibles removed is:

$$0.9 \times 13,600 \text{ BTU/lb} = 12,240 \text{ BTU/lb}$$

This value quantifies the contention 4b assumption for waste heat value "in excess of 10,000 BTU/lb or 90% of the heat value of coal".

Using the TexPIRG 3000 ton/day waste conversion plant capacity, the heat value of garbage "that would obviate the need for the proposed ACNGS" is:

$$12,240 \text{ BTU/lb} \times 2000 \text{ lb/ton} \times 3000 \text{ ton/day} = 7.34 \times 10^{10} \text{ BTU/day}$$

Convert to BTU/hr:

$$7.34 \times 10^{10} \text{ /day} \times 1 \text{ day/24 hr} = 3.06 \times 10^9 \text{ BTU/hr}$$

Convert from BTU/ hr to kw:



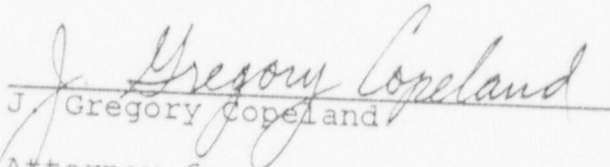
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From Babcock and Wilcox, "Steam-It's Generation and Use",  
page T-3.

$$1 \text{ kw} - \text{hr} = 3412 \text{ BTU}$$

$$3.06 \times 10^9 \text{ BTU/hr} \times 1 \text{ kw} - \text{hr} / 3412 \text{ BTU} = 8.97 \times 10^5 \text{ kw}$$

Convert to MW:

$$8.97 \times 10^5 \text{ kw} \times 1 \text{ MW} / 10^3 \text{ kw} = 8.97 \times 10^2 \text{ MW(th)} = 897 \text{ MW(th)}$$

Note that this is thermal power and does not consider the  
waste burning plant efficiency. Typical efficiency of a  
steam turbine plant is 33%.

Using a conservative waste-burning plant efficiency of  
40%, the gross electrical output of the plant would be:

$$897 \text{ MW} \times 0.40 = 358.8 \text{ MW(e)}$$

Thus, the "three thousand ton per day conversion plant that  
would obviate the need for the proposed ACNGS" would support,  
at most, a plant of approximately 360 MW(e) size, as compared to the  
ACNGS 1146 MW(e) size.