UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
HOUSTON LIGHTING AND POWER CO., ET AL.	)	Docket Nos. 50-498 50-499
	)	
(South Texas Project, Units 1 and 2)	)	

SUPPLIMENTARY PETITION BY DAVID MARKE AND LISTING OF CONTENTIONS

With Requested Deficiency Corrections

I. Background

On August 2, 1978, the United States Nuclear Regulatory Commission (Commission) published in the Federal Register (33 F. R. 33968) a Notice of Opportunity for a Hearing on the Application for Operating Licenses for South Texas Project Units I & II (STP). On August 24, 1978, the above named petitioneer submitted a preliminary petition, admittedly informal, expressing his interest and desire to become a party to the above captioned proceedings. For reasons not yet understood, or in fact acknowledged by the petitioneer both the NRC staff and the applicants attorneys alledge to have received said petition bearing a postmark of 5September78, and have each urged the commission to deny my petition because it "appears to have been filed in an untimely manner". Petitioneer does not wish to argue at this time the point as to whether the petition was filed untimely as indicated by the postmark. The petition was filed in good faith, was prepared with every intention of meeting the delivery deadline, however was not posted by hand,

therefore the petitioneer cannot state irrevocablly that it reached the post office prior to the 1September78 deadline. It is my feeling however that late delivery, if indeed it did occur, was a situation well beyond my control, and perhaps due to difficulties in the postal service.

NRC staff has included in their response an itemization from 10 CFR 2.714 (a) (1) communicating the factors whereby the Commission may grant a petition which may appear to have been filed in an untimely fashion. I will therefore deal with each of the criteria in order, as set forth in the staff response and in 10 CFR 2.714:

(i) "Good cause, if any, for failure to file on time". As mentioned above, the petitioneer has made very good and reasonable effort to attempt to make a timely filing. It is with regret that such timeliness was not met, and good cause cannot be specified at this time due to lacking the means for discovery of the tardiness. Petitioneer however pleads the Commission to review this supplimentary petition as well as the orginal in the spirit in which it was submitted and make exception for the seemingly small technicality of timeliness as justified in the succeeding paragraphs.

* As requested at the special Pre-Hearing Conference this instrument is being submitted as modified on 19January1979, therefore is not untimely. Further, it is noted that on pages 2 and 5 of the staff response of 8January1979 that staff does not consider the alledged 4 day delay of the original instrument to be of enough significance to be deemed untimely.

(ii) "Availability of other means whereby the petitioneer's interest will be protected". Petitioneer Marke can see no way due to the lack of other possible participants from the local area, of assuring that his interests will be represented and protected. There is to my knowledge only one possible intervenor from San Antonio, and one seemingly very unlikely intervenor from Houston involved in the proceedings. It is therefore felt by the petitioneer that even were these other parties to be admitted to the proceedings that his interests not only as a citizen of Austin, but due to the particular nature of his interests (to be explained under contentions) could not reasonably be represented by these other individuals. Further owing to the fact that the board is not burdened by an over-large group of possible intervenors, petitioneer Marke requests the indulgence of the Commission not only as a matter of right, but as a matter of discretion in a proceeding not heavily laiden with public input.

* Petitioner feels further that the specifications of 2.714 are further served owing that the third possible intervenor was not present at the Pre-Hearing Conference, as well as the fact that should his petition on behalf of ACEE, attached, be accepted that broader public input, and thus concern will be prepresented. It seems obvious that no other petitioners representative of the group being present that those interests can in fact not be represented otherwise. Further staff seems to be in agreement.

(iii) "The extent to which the petitioneer's participation may reasonably be expected to assist in developing a sound record". Petitioneer Marke has considerable expertise which was perhaps not spelled out with sufficient particularity in the initial petition. I will spend sufficient effort by pleading for standing as a matter of right and discretion, the level, adequacy, and experience of my expertise, demonstrating I think fully my ability and readiness

* During the special Pre-Hearing Conference, my qualifications were discussed, at which time I offered if necessary do submit a proper resume', which was not specifically requested. Upon request of the Board I will still provide same. Staff asserts that these qualifications ..."would appear to weigh in favor of the petitioner".

(iv) "Extent to which the petitioneer's interests will be represented by exsisting parties". As discussed in section ii above the petitioneer feels that due to the total lack of other possible parties to the proceeding from this geographic and demographic area that his interests will be represented by no others, and therefore prays the indulgence of the board in order that his rights may be upheld and his interests protected.

* The "fourth factor" of 2.714 should be borne out by the record of 11January1979.

(7) "The extent to which the petitioneer's participation will broaden or delay the proceedings". The petitioneer is prepared to introduce in his contentions issues which he feels in good faith will broaden the scope of the hearing as pertaining to technical issues, environmental issues, and to a limited respect economic matters. The petitioneer has appraised himself of the operating procedure and rules of practice of the Commission and will make every effort to provide not only adequate and proper input to the proceedings, but do so in such fashion as to see them conducted expeditiously.

* Petitioner has already agreed in association with ACEE whom he also represents by attached instrument to provide experts as felt necessary in order that all issues may be dealt with expeditiously and completely, rather than attempting to burden only the petitioner in areas wherein others may have greater expertise, thus not only broadening, but streamlining the issues as well. Staff contends that the original alledged "4 day delay will not in any disrupt this proceeding" (page 3). This corrected document being filed at the request of the Board, and in the time specified, petitioner submits that it cannot be considered untimely.

While it is regretable that this was apparently not achieved, the petitioneer respectfully pleads the Commission on the basis of i thru v above that this petition be granted and that he be made a party in this decision making process.

II. Plea for Standing as a Matter of Right

Petitioneer Marke is prepared to show with sufficient particularity he is entitled to standing in the above proceedings as a matter of right under the law.

A. Request for Standing Before the Commission as an Individual

While petitioneer Marke is aware of the tradition of the Commission to discourage the admission of individuals not residing within a certain geographical area, variously cited by staff and the applicants attorney at ranges from 20-25 miles, 30-35 miles, and occassionally 50 miles, he not withstanding requests standing due to the fact that his health, both physical and mental would be endangered and placed in jeopardy by the unsafe operation of the proposed South Texas Project. The petitioneer's physical health is jeopardized not only by the possibility of a major accident at the plant site, but by the normal day to day operation of said reactor. It is well demonstrated in scientific history that levels of backround radiation over the past 25 years have increased significantly over extremely broad geographical areas due to no catastrophic accidents, but rather due solely to the aforementioned daily operation of similar facilities. This has been measured and well documented by numerous authorities in the field, including the petitioneer himself. It can easily be shown that normal release of radioactivity from STP can be carried by the winds to the area of Austin, as has been demonstrated by a ballon release within the last 12 months from the site. Further, the petitioneer's health is endangered by similar pollution introduced intothe food chain via atmospheric and water born discharges finding their way into crops grown in the vicinity of the plant and consumed by the petitioneer, water from the surrounding watershed consumed by the petitioneer during

frequent visits for business and recreational purposes, as well as introduction into the marine life cycle affecting the seafood both purchased in the area and gathered recreationally by the petitioneer. While it is fairly certain and acknowledged that this staff and attorneys for the applicant will consider this claim vague or nebulous, it is well established that the burden of proof to deny this allegation lies with the Commission, Staff and the Applicant. As regards similar matters, in Environmental Defense Fund, Inc. v. United States Department of Health, Education & Welfare [1/] regarding chemical pollutions, the court found that Congress imposed upon the Secretary of Health, Education and Welfare the burden of finding, before any pesticide-chemical residue may remain in or on an agriculture commidity, that the residue is "safe". Since a former secretary had found that there was no such thing as "safe" residue for a chemical known to produce cancer in experimental animals, the present secretary had the burden of determining on what basis any residue is safe.... etc.

Petitioneer Marke further asserts that he will suffer mental anguish and possible loss of his mental health due to the physchological impact of (unsafe) operation of a plant of this nature within such a close geographical zone. Further he is threatened by the fact that materials including fuel components, waste components if and when they are transported, pass by his residence and his place of business as will be described in the next paragraph. Recognizing that STP represents such mental anguish and impairment the petitioneer feels it well within his right to request standing in all further proceedings.

1/ 423 F. 2d 1083 (D. C. Cir. 1970)

The petitioneer is further endangered by the transport of the aforementioned materials owing to the fact that the major north-south rail line passes within less than 150 yards of his residence, and upon which may well be carried fuel assemblies, spent fuel assemblies, and other waste materials generated as a direct result of this plant's operation. Additionally the petitioner owns business interests within no more than 500 yards of IH 35, a major surface route leading to the area of the plant, and upon which is currently carried, and will no doubt be furthered as a result of STP operation, nuclear commodities at this time. In lieu of such conditions petitioneer represents that traditional geographic limitations cannot be held any longer in such proceedings. While the Department of Energy has developed a program over the last three years to demonstrate the safety of vehicle and railborne fuel casks it is also a fact as reported in the media that accidents have occurred during that period and indeed within no less than the last six months involving surface transportation of radioactive materials, some of which have resulted in the deaths of innocent bystanders living in no closer proximity to an operating reactor than does the petitioneer. While the probability of such an accident occurring is low it is the responsibility of the Commission and the licensees to assure that no possibility exists whereby such accidents can take place. Petitioneer asserts that at this time no such evidence has been presented.

Petitioneer further states that he is regularly involved in recreational pursuits particularly along the Southern Gulf Coast, specifically involved in off shore and on shore fishing in the area south of Galveston and Port Aransas. It is obvious from the topography of the surrounding area including Matagorda County that ultimate drainage of any waterborne residues which may escape the plant, or its cooling lake by any means, including drainage into the acquifier systems will in all likelihood affect the quality of marine life in that area, jeopardizing petitioneer Marke's recreational priveleges. In State of Washington Department of Game v. Federal Power Commission[2/] Washington States Sportsman's Council was upheld in their request for standing under 313b of the Federal Power Act, 16 USC 825 1 (b), stating "all are 'parties aggrieved' since they claim the Project will destroy fish in which they among others are interested in (sic) protecting." Indeed section 313 (b) of the Federal Power Act, 16 USC 8351 (b) reads: "(b) Any party to a proceeding under this chapter aggrieved by an order issued by the Commission and such proceeding may obtain a review of such order in the United States Court of Appeals for any circuit within the license or public utility to which the order relates is located...". This is pointed out recognizing that the petitioneer is not yet a party to the proceeding, however strives to point out the public utility of his residence, i. e. the city of Austin, is party to the license and thus affected by these proceedings.

2/ 207 F. 2d 391, 395 n. 11 (9th Cir. 1953)

While petitioneer Marke was not a party to the proceedings resulting in the construction license, due to his non-residence in the area at that time, he feels that standing is further indicated under the law due to his current and permanent status as an "interested consumer" in this proceeding. Section 308 (a) of the Federal Power Act, 16 USC 825 g (a) reads: "In any proceeding before it the Commission, in accordance with such rules and regulations as it may prescribe may admit as a party any interested state, state commission, municipality, or any representative of interested consumers or security holders, or any competitor of a party to such proceedings or any other person whose participation in the proceeding may be in the public interest." (emphasis added) Inasmuch as petitioneer Marke is an interested consumer, and as will be developed in the next section is the representative of a body of interested consumers, and indeed security holders, i.e. the utility in the city of Austin is publicly owned, therefore all citizens are effectively stockholders, and having stated his interest in good faith may as well be considered a party whose participation will be in the public interest, he should be granted standing in these proceedings. To do otherwise would be a clear and obvious violation of Fairness Doctrine. Further explanation on the part of the petitioneer is not considered necessary owing to the fact that the burden of proof in this and other such cases clearly rests with the Commission, Staff and the Applicant.

C. Conclusion of Pleading for Standing as a Matter of Right

In summation the petitioneer pleads the Commission that he has demonstrated areas under the law whereby he should be granted standing as a matter of right, although he will be pleased to entertain further questions by the Commission with regard to his pleadings. Petitioneer further asserts that he has answered the major questions raised by the responses of both the staff and the attorneys for applicant to his initial petition.

* The issue of the petitioner fishing areas and frequency was thoroughly discussed at the Pre-hearing Conference. For complete details, that record is refered. It was established that the frequency of such expeditions ranges dependent upon season from weekly to bi-monthly. Staff in page 5 indicates that the area between Port Aransas and Galveston is 175 miles. Petitioner would note that on page 2-2 of the final Environmental Statement, NUREG-75-019 it is clearly shown that the STP site is only 10-12 miles from Matagorda Bay, and no more than 16 miles from the Gulf side of Matagorda Peninsula. It is further noted that approximately 1/3 of the 50 mile radius "zone of interest", or nearly 2,600 square miles lies in the Gulf of Mexico, nearly equi-distant between Aransas and Galveston, the two ports from which the petitioner fishes. It is further noted that perhps 85-90 miles of coastline (which is fished) lie within the same zone It would seem that this demonstrates adequately that the petitioner's recreational interests lie well within the well established "geographical zone of interest".

III. Pleas for Standing as a Matter of Descretion

While petitioneer Marke has made every effort to show with adequate specificity that he should be granted standing as a matter of right under

the law, he is as well aware of the boards descretion to grant standing as pointed out in Portland General Electric Co. (Pueblo Springs Nuclear Plant, Units 1 & 2)[3/], that the petitioneer "may nevertheless make some contribution to the proceeding". In addition to such contribution as the petitioneer may make to the proceeding due to his expertise which will be ellaborated upon shortly, petitioneer Marke further pleads the descretion of the board to grant standing as per the qualifications outlined in 10 CFR 2.714 (a) (1) (ii, iii, iv).

While staff has made referrence to "abstract concerns", and "mere acedemic interest" the petitioneer would at this time prefer to ellaborate upon his qualifications as an expert in the field with useful commentary to make to the proceedings. Petitioneer is a graduate of the Unversity of Nevada and the University of California systems, having studied exclusively and extensively in the field of Nuclear Chemistry. Mr. Marke has been widely published in the scientific community on topics not only limited to radiochemistry, but in the field of radioisotope disposition and containment. Mr. Marke is regularly called upon by the city of Austin and the State of Texas, as well as other municipal bodies including the city of San Antonio, and various public groups in and around the other metropolitan areas of Texas for his expertise in the field of nuclear waste management. Mr. Marke has been an invited guest of the Texas House of Representatives Energy Resources Sub-Committee, testifing

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3/ CLI-76-27, 4 NRC 610 (1976)

with regard to waste disposal operations contemplated in the state of Texas, has testified frequently before and at the request of the Electric Utilities Commission of Austin regarding not only nuclear matters, and not limited exclusively to waste disposal, but energy related matters on a broad spectrum. Marke's expert testimony and advise have further been solicited by the Austin city council both in the nuclear field, as well as the traditional and non-traditional energy generating technologies. Further Mr. Marke has been called upon frequently by the Texas Energy Advisory Council for his expertise in the energy field, most particularly with regard to nuclear endeavors and the solar sciences. He has as well been engaged by that agency not only as a consultant but as a member of proposal evaluation panels in the contract awarding process of the Energy Development Fund administered by that agency.

The petitioneer is currently employed as chief of research and development and general partner of Solar Dynamics Limited, of Austin, a Texas limited partnership, organized for the purpose of researching and developing solar/thermal electrical generating technologies. As principal scientist at Solar Dynamics petitioneer Marke is daily and continuely abreast of developments not only in energy technology but in energy policy. As such he has been invited to testify on several occassions before the Department of Energy in efforts to establish, formulate and define the national energy plan. He has kept himself well abreast of scientific

developments in as many aspects of the energy field as possible, and considers that on the basis of expertise alone the board should exercise its discretion, granting him standing in the above captioned proceedings. Further petitioneer Marke alledges that his interests cannot be represented by other persons tentatively possible parties to this proceeding. As mentioned in the first portion of this pleading petitioneer Marke is aware of one other possible intervenor in San Antonio and one late arrival who has filed a petition from Houston, and does not feel in any respect that these persons if admitted will represent his interest, or the interests of ACEE whom he represents in the proceedings. Petitioneer does not feel that these persons possess the particular technical expertise which would represent his concerns for his health and property, nor that they can represent the concerns of the quasi-public body which he represents, Austin being the only municipally owned utility in the South Texas Project. Furthermore, owning specifically to the petitioneers location in Austin it is not felt that interests could be represented by other than a resident of the immediate geographic location, and none appearing, pleading is made as a matter of discretion on this basis.

Lastly petitioneer urges the board to weigh its discretionary powers in addition to the list of contentions presented by the petitioneer which will follow after this discussion. Upon close examination of those

contentions it should be obvious that the petitioneer has genuine concerns which need be represented, that he has a working knowledge and expertise on the subject and that he has considerable information of consequence to lend to the proceeding. Petitioneer therefore pleads the commission that he be allowed by discretion to represent the potential harm which may arise to his interests, the interest of those he represents to the issuance of this operating license.

BILL OF CONTENTIONS

The following is an identical listing of contentions prepared by petitioners Marke and ACEE.

Prior to the actual listing of the petitioneer's contentions it should be made clear that with the exception of contentions 1 & 2, no priority or weighted listing has been made. The petitioneer recognizes that this proceeding cannot speak to many generic issues affecting the entire nuclear program, however many "possible problems" which may pertain to STP can perhaps best be viewed by analogy to similar reactors. Every attempt has been made to be as totally site specific as possible. Petitioneer David Marke therefore contends:

1) The entire nature of this proceeding is untimely by no less than 18 months. When the August notice appeared in the Federal Register, it was "generally known" that another cost overrun would shortly be announced, along with a significant delay in the construction period. Within a few weeks of the deadline, perhaps by convenience, Project Management and the various participants released word that the delay, would amount to approximately 18 months. The purpose of Operating

License hearings are initially to assure that the reactor has in fact been constructed in accordance with the provisions of the construction permit. This fact combined with the fact that as of August 1978, NRC inspection reports indicate that Unit 1 is only 41.5% complete. Unit 2 is well behind that timeline. I contend that at least two actions are no less than obligitory upon this board: A) that this proceeding be tabled for no less than 18 months in order to allow construction to get to the point that it should have been, if on schedule, when the August notice was published, and B) that at the very least no action whatever should be taken towards lisencing Unit 2 until it reaches a commensurate level. No communicating from either staff or the applicant have acknowledged this matter; it is therefore imperative that the board address this issue.

* The question of this contention is not specifically related to Health and/or safety, but asks: Can the health and safety of the petitioner(s) be assured if operating licensing procedures are commenced at what

2) It has been well documented not only by the media but by NRC Inspection reports that both management and the contractor have been negligent in their responsibility to assure conformance with the construction permits. There have not only been numerous and frequent reports that here have been construction inadequacies and failures in such critical areas as improper cadwelds, improper tying, welding, and mounting of reinforcement steel, and voids in the concrete itself, but NRC Inspection of 4April78, 15May78, and 29 November 77, and other indicate that current plans have not been available on the job site, that QA & QC personell have performed faulty inspections, have

falsified inspection reports, and have certified complete inspections that have not been done. Not only are NRC guidelines being met, but HL & P's and Brown & Root's own proceedures are being violated. NRC has issued both infraction citations, and deviation citations regarding these issues. It is curious to note that regular announced inspections are generally passable, but that almost without exception, unannounced inspections regularly uncover infractions and deviations. This assuredly indicates a major amount of incompetence, and indeed fraud as indicated by falsified QA reports on the part of the contractor and project management. I would contend that one of the mandates of this board should be to apply enthusiastically stringent and continuous inspection to this project. The contractor and management have repeatedly demonstrated a lack of experience, and a willingness to falsify, therefore 24 hour NRC supervision should be imposed, and the costs borne by the contractor. The board should in no case consider until all past QA reporting has been verified, and compliance assured,

* The record of 11January1978 will reflect with great particularity the large details of evidence presented with this contention. It is further noted that one Mr. Dan Swayze has since the Pre-Hearing filed suite in federal court alledging violations of 10 CFR 50 Appendix B and 10 CFR 50.55 regarding similar acts of reported non-compliance. This suit may well involve "new evidence", and petitioner (s) would like to reserve the right to explore this issue at greater length. The question of the contention: In the light of cited falsification of QC/QA reports and others can the Health and Safety of the Petitioner (s) be assured?

3) The Emergency Core Cooling System (ECCS) has not yet been demonstrated effective with any great probability on four reactors of this size. This petitioneer is aware that a proposed rulemaking is underway to be attached to 10 CF R part 50, however the period for public comment does not end until 5February79, and it will no doubt be sometime yet before rules are firm, and sometime beyond that before such engine[illegible]an be completed. Surely an operating license based upon the construction of major safety systems not yet specified can not be complicated. This petitioneer is also aware that EECS has undergone LOFT within the last month in Idaho, however single test or even several successful tests are not at all conclusive owing in particular to the fact that the LOFT facility is approximately 1/20th the size of STP reactors. Again I contend that operating licenses are out of order and should be denied.

* The question of contention: Considering the relatively young state of the art as regards LOFT testing, the extreme risk of a LOCA, would the issuance of an operating lisence prematurely (before LOFT testing is complete) endanger the health and safety of the petitioner (s) ?

4) Radioisotope and Radionuclide pollution cannot be contained in an assured fashion; even to the 30-40 mile perimeter of the so called "zone of interest". The physical, mental, and genetic health of the petitioneer, ACEE, and the public are jeopardized by significant amounts of such materials in at least the following manners:

A) Airborne pollution, a result of "normal" reactor operations.

B) Poison products released or imparted into the cooling lake.

C) Further airborne contaminants released as a result of cooling pond surface evaporation, which will be high due to the relatively shallow depth and large area of the pond.

D) Similar contaminents released into the public and/or geologic water supply due to percolation of the cooling lake.

E) D, above, introduces undesireable materials into the food chain in at least four basic ways.

1) Direct intromission to the water system.

2) Acceptance from both water & atmosphere by food crops.

3) Carried by marine life, widely caught for food purposes in the area.

4) By birds (some of them migratory) which will be harvested by sportsman.

It must be borne in mind that most of these pollutants are carcinogenic in nature, taking 10-15 years to fully develop in the human body. Prevention of such tragedy can only be taken now, and it is the social/moral/legal obligation of this board to assure such action.

* The question of contention: In the event of "abnormal" operation STP, can the health and safety of the petitioner (s) be assured by plans currently in effect? It is also noted that in the Staff Response (page 11) that the staff concedes "... It is possible that a substantial contribution could be made by the petitioner either as a witness or through his cross-examination of other party's direct cases". (relating to conten 4)

5) I have in my possession a listing of 31 pressure transient excursions involving Westinghouse PWR reactors very similar and in some cases nearly identical to those employed at STP. These reactor vessel over pressurizations are documented from 1973 through 1977, and I have received unconfirmed information that another has occurred sometime in December of 1978. These over pressurizations normally occur during start up and blow down operations, and have resulted in

12 minutes. Some have been systemic failures, while others have been due to operator error. These events have resulted in the shut down of plants, i.e. such as Diablo Canyon Units 1 & 2, and can obviously not be tolerated. The problem appears to lie in the reactor equipment itself, and is peculiar to this type reactor, which I contend should not be allowed to operate until this defect is cured.

* The question of the contention: Understanding that "Tech-Specs" for the "fix" of this probelm are not yet available, can we reasonably be expected to lisence a reactor whose type has shown such profound defects? The record of 11January1979 also reflects that the petitioner(s) are willing to call upon outside expertise in this issue if necessary.

6) Due partially to cost overruns, at least some of the partner licensees are not finanically capable of building satisfactorily and/or operating such a reactor. Austin for instance is faced with two immediate problems: A) there is currently a city council sponsored referrendum

placed on the 20January79 ballot which will at least hold its financial committment to the $161 million currently allocated and B) due in part to the above, city officials fear that the bonds for the next progress payment on the original may not be saleable, placing Austin in default. It is nearly obvious that Austin has not the financial responsibility for such an undertaking, and it is questionable whether the other participants can "take up the slack" as we'l as meet their own overrun requirements. In this respect it would seem that such an economic matter would under the law be a matter of contention.

* Is it reasonable to expect co-operation (licensees) of STP who seem to be involved in grave financial difficulties at the construction stage to be sufficiently solvent to safely operate STP?

7) This reactor is not requisite for the assured energy futures of the participants. For example: the city of Austin, already owning well in excess of 200% generating capacity does not plan to receive power from STP for nearly a decade, and instead plans to sell it to HL & P. Corpus Christi wants to sell its portion out of state, a move heavily contested by HL & P, but indicating that STP is not a necessity for Corpus Christi either. San Antonio's needs are presently being adequately met, new coal plants are coming on line or are in construction certainly making their requirement uncritical. Thus a large portion of the planned capacity can be demonstrated unnecessary, and it would seem that a technology not so high in risk could be selected for the remainder, if in fact it is necessary.

* Is there in fact a demonstrable need for STP operation?

8) A further contention is made that the transport of incoming fuel supplies is not totally or satisfactorily proven. to present zero risk to the populace en toto. While signifi cant studies have in the past been carried out, notably by ERDA, accidents supposedly impossible continue to happen. Within the last 90-120 days there have been accidents in the Northeast of the nation resulting in the dispersal of radioactive material, the total effect of which will not be known for decades. While the Commission can regulate and/or enforce the procedures to be followed, it cannot even predict the influence of the human element. As in contentions 2 and 5 above, in spite of mammoth regulations, operator errors, insufficiencies, or even "purposeful accidents" are a major factor. Both the project manager and the contractor have demonstrated incompetence and/or lack of expertise during the construction phase. How are we to be assured of their zero-error performance when we get to a point that citizens involved with STP only by their presence are involved by virtue of such potentially dangerous shipments? This is to say absolutely nothing of the possibility for hijacking, etc., which I myself do not considera a real possibility, but which cannot be totally discounted.

Fur ther while short-term storage is provided for high level wastes on-site, when "permanent" storage becomes available, how will these materials bc transported off site? There is also underway new rule-making [4/] with regard to so-called l w level wastes, which will no doubt

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4/ Ammendment of 10 CFR part 20, Section 20.304, etc., #7590-01

change current plans in that area. This is the time to make such plans, and it is obligatory of not only the Applicant, but the Commission as well. Where are and what are these plans? I contend that if they do indeed exist, they are not sufficiently available to the public or this petitioneer that opinions or plans either in agreeance or dispute may be prepared. I urge that the Commission not lump this issue into that broad category known as "generic", for they are most definitely germaine to the operation of this reactor, which this proceeding adresses. This issue may not merely be swept aside with a statement that "it will be taken care of in due time", the public and this petitioneer have a right to know.

9) Recognizing as we all must that the fissioning of atoms represents a higher potential for danger than do many other forms of generation, what consideration has the applicant or any of the partner li en ees given to the alternatives available. Petitioner contends that no serious, unbiased investigations or studies have been done. In Austin, the studies "done" have been blatently biased and totally inconsistent from one study to the next. I contend that insufficient consideration has been given to traditional fuel sources such as coal or lignite, which fuels Texas possesses in great abundance.

Petitioner would further contend that virtually no objective analysis has been done with regard to non-traditional sources, i. e. solar,

coal generation, and coal liquifaction and gasification. Petitioner is aware, after extensive research, of no such studies, and asserts that they must be done in order to determine if operation of STP at this time is the best option available.

Lastly, Petitioner contends that an agressive conservation program could obviate the need for any new generating facilities in this area for the next decade, when, should fission still be the technology of choice, the dangers may be lessened, and the questions answered.

* The question of the contention: Can the public interest best be served by operation of STP when in fact there are alternatives which would portend no potential harm to the petitioner (s) and others?

10) Recent studies by the Texas Water Development Board 5/ indicates a cyclic drought pattern in Southern Texas at 10-12 year intervals, lasting from 5 to 6 years. "Drought" is defined as that condition reached when rainfall is 75% or less than normal. It is worthy of note that during the drought period from August 1975 to April 1976 all of Matagorda County received approximately the same rainfall as it did in the severe drought of August 1952 to April 1953. Only one county to the west even less rainfall was recorded.

In the area of the STP reactors, the Water Development Board considers that there is available 11.0 acre feet/megwatt available for nuclear reactor cooling. STP alone will require fully 1.4 years supply to meet its initial need, disregarding leakages, percolation, and evaporation. It is therefore also conceivable that the reciprocal, 1/1.4 years, or more

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5/ Continuing Water Resources Planning and Development for Texas Phase I, Texas Water Development Board, Austin, Texas May 1977.

specifically . 707 years of severe drought could feasibly present serious problems to reactor cooling operations. Petitioner contends that at any time more than 1 year's normal supply is anticipated for a single year's operation, that operational licenses should be reconsidered, again, what are the applicant's plans?

* There is large dispute as to the evedentiary portion of this contention between petitioner (s) and the applicant. Petitioner (s) have not yet been able to obtain a copy of the FSAR, wherein the applicant alledges lies the appropriate eveidence. Question: Should there be such a drought condition exist, how will petitioner (s) health and safety be assured, recognizing that the "allowable" hazards of STP operation would then be spread over fewer years due to shutdown from drought? This is elaborated upon in the record of 11January1979.

11) Petitioner contends it is obvious in light of nuclear history that the cooling lake will ultimately become contaminated without presuming an accident. It follows that the public for its own protection must be denied complete access to a 7,000 acre lake for recreational and all other uses. Three questions seem apparent:

A) How will the applicant "police" these grounds such that no public trespass, even accidental is allowed?

B) How do the Licensees propose to prevent leakage and percolation to other acquifiers or leaching to the sea itself?

C) How can it be proposed by anyone to prevent intromission into the food chain of radioactive pollution products as they are assimilated by crops, marine life, and transported in some cases to very large distances by water fowl, some of which are migratory?

These questions must affirmatively be answered before any operation of STP can be authorized.

12) How can the Applicant assure that significant airborne releases will not be allowed, and if so what measures can be applicant take to "clean up" such pollution. It seems clearly that the applicant must prove,

13) The petitioner recognizes that the Price Anderson Act has recently been upheld, but also that it has not been tested. In the case of a major accident, perhaps a LOCA, wherein it has variously been estimated that deaths could run into the thousands, and damages into the tens of billions of dollars who will ultimately bear the liability for same. Price Anderson, not withstanding, someone must bear such a burden: the populace is obviously unable on any major scale. What are the plans of the applicant and the partner licensees for such an event? While probabilities are high against such an occurance, it is emperical that each operational reactor-hour brings us statistically closer to such an accident. Petitioner contends that the gravity of such an occurance demands that the plans of the applicant/operators of STP be made known, not only if sought, but widely available to the public so affected.

14) Petitioner contends that adequate evacuation or environmental plans have not been made (public) by the applicant. Further contention is raised as to how the applicant plans to handle repairs of even a minor accident or breakdown, i. e. where will enough workers be obtained to maintain proper radiation dosage levels? Additionally how does the applicant plan to pay for or implement improvements brought about as a result of the many inevitable regulatory changes over the lifetime of STP? All of the partner constructors have contracts with fixed dollar amounts. Petitioner contends that owing to the whims, political in some cases, of the partners that HL & P must be prepared to bear the

brunt of such encumberances. What plans have been made to date?

* Question of the contention: Can the petitioner (s) or the public safety be assured or even postulated if an adequate plan for public education does not exist?

15) In early construction plans, fuel tanks for the standby generators were located in an upper floor of the building containing the Diesel engines, a seemingly supreme engineering error. What method of construction is being employed to correct this problem?

* Mr. Marke has considerable expertise which may be brought to bear in this issue, as does UCS, one of the potential consultants. The Question: Can the operational integrety of STP be assured in the event of a fire or accident in the diesels?

16) As regards storage of wastes, petitioner contends that guidelines from EPA are not expected until 1983-1985, [6] as stated in both proposed rulemaking [7] and from the interagency report to the President. It is further obvious from the previously cited interagency report that "optimistic" projections for long term storage could be realized under one plan no sooner than 1990, and under the other (seemingly the favored) no sooner than 1992. With very little of the same type of delays that have made this proceeding untimely as outlined in contention 1 above, it may easily be conjectured that the 10 year interim on-site storage will not be adequate.

In light of the proposed rulemaking [8] what plans are being made by the potential licensee to care for and store low level wastes in the amount generated by this reactor?

17) While there has been a recent settlement in favor of the licensees regarding fuel pricing, what plans are, or can possibly be made for fuel

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6/ Report to the President by the Interagency Review Group on Nuclear Waste Management, Draft, October, 1978, pg. 19

provision during the later operational lifetime of STP? Has the applicant considered the fact that assured fuel supplies may not be available, and the effect upon its ability to continue or even adequately disband operation of STP.

* Question of the contention: How is the cost/benefit ratio effected in the event of a nuclear fuel shortage beyond that already contracted?

18) Due to apparently deliberate falsification of QA and QC reports as documented in NRC Inspection and Enforcement Activity Reports in possession of this petitioner as referrenced in contention 2 above, petitioner contends that a stop work order should be issued until all previous QA and QC reports have been verified. Any such action would also obviously result in a postponement of this proceeding. Petitioner Marke feels that such a request falls well within the spirit of the announcement "Prior to the issuance of any operating licenses, the Commission will inspect the facilities to determine whether they have been constructed in accordance with the application, as ammended, and the provisions of the construction permits....", and further that licenses will not be granted until the Commission..."has concluded that the issuance of licenses will not be inimicable to the common defense and security or to the health and safety of the public." 9/ Under separate cover this petitioner is making a request for copies of all non-classified enforcement and activity reports relating to STP, and is prepared if necessary to seek aid under the Freedom of Information Act in that regard.

19) Petitioner further contends the Commission has been lax in its

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9/ F.R. Vol. 43, no. 149, August 2, 1978

duty to inform and invite public response to such action as these proceedings. This is evidenced by the fact that essentially no interest has been shown by Houstonians, the area most properly affected. I submit that a more enthusiastic method of announcement than publication in the Federal Register is indicated unless the Commission be found lax in its duties as representatives of the public in such cases. Inasmuch as parties on neither side of the issue have been involved to even a minor extent, petitioner contends that a re-announcement of these proceedings be made involving more conventional media approach, and that no less can be considered as the duty of the commission.

20) Petitioner Marke contends that in no fashion have even interim plans been laid for the ultimate decommissioning of STP. While the time frame for the specific technology may be quite some distance away (assuming no accidents occur in the "normal" lifetime of the plant), I am aware of no tentative plans, technical or fiduciary to provide for this eventiality. The City of Austin has set aside 4% of its total committment for the purpose, an amount that viewed in the light of recent costs and/or estimates for this procedure seems woefully in adequate. I contend that the Applicant(s) must show in sufficient detail their current plans, both mechancial and fiscal to deal with decommissioning not only at its expected time frame, but at an emergency interim point such as may be required by a major accident, or one merely incapacitating the reactor.

* There are large questions regarding decommissioning specific to STP yet unanswered. There is only minute mention made in FES and SER. Additionally the office of the Attorney General of the State of Texas has proffered questions in their petition. It would seem that sufficient question exists and is reflected in the record of 11January79 to constitute a valid contention.

21) This petitioner has an unconfirmed (at this writing, soon to be substantiated) report that a request for a congressional investigation of STP has been filed on 19December78 by Johnny Nelms, Business agent for Pipefitting Local #211, 2535 Galveston Road, Houston, Texas 77017, in a letter to Congressman Robert Damage, alledging that Brown & Root Co. is using "illegal aliens" and unskilled labor in the construction of STP, thus endangering the general public due to incompetent workmanship. I contend that this matter should be investigated for substance, and if true should be considered "new evidence" and be made a part of these proceedings.

Respectfully submitted,

David Marke