UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	Docket No. 50-305
WISCONSIN PUBLIC SERVICE CORPORATION	)	Amendment to License
Wisconsin Power and Light Company	)	No. DPR-43
Madison Gas and Electric Company	)	(Increase Spent Fuel
(Kewaunee Nuclear Power Plant)	)	Storage Capacity)

MOTION FOR SUMMARY DISPOSITION

Licensees in the above entitled proceeding, pursuant to the provisions of 10 C.F.R. Sec. 2.749, hereby move for a decision summarily disposing of the entire proceeding now before the Atomic Safety Licensing Board on the ground that there exists no genuine issue as to any material facts and that Licensees are entitled as a matter of law to the license amendment requested in their application in this proceeding.

Dated this 28th day of December, 1978.

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STATEMENT OF SUPPORT OF

MOTION FOR SUMMARY DISPOSITION

INTRODUCTION

On November 14, 1977 Licensees submitted an application for an amendment to their operating license which would change the permissible Keff figure for the Kewaunee Nuclear Power Plant Spent Fuel Pool from 0.90 to 0.95. On April 24, 1978, Safe Haven, Ltd. and Lakeshore Citizens for Safe Energy (hereinafter "the Intervenors") filed an untimely petition seeking to intervene. Following a preliminary order by the Invention Board (May 12, 1978), an amended petition was filed and intervention was granted by the Board on July 17, 1978. The State of Wisconsin (hereinafter "the State") has also been allowed to intervene as an interested state.

The list of amended contentions submitted by the Intervenors (the State having none of its own) was considered by the Licensing Board at a pre-hearing conference

on September 6, 1978. Thereafter on October 11, 1978, the Board issued an order allowing some contentions while disallowing and revising some others. In addition the Board posed two questions of its own.

The parties have subsequently engaged in discovery as provided in NRC regulations. The Staff Safety Evaluation Report and Environmental Impact Analysis were issued on December 1, 1978. Licensees have now moved for summary disposition granting the requested license amendment. This statement is submitted in support of that motion. Following a discussion of the legal framework for consideration of this motion, each contention will be considered separately including as to each contention a statement of facts as to which no genuine issue exists.

LEGAL FRAMEWORK

The granting of a motion for summary disposition requires the demonstration of the absence of any genuine issues of material fact and that the moving party is entitled to a ruling in its favor as a matter of law. The motion in this case is accompanied by a discussion of each contention with reference to evidentiary items in the record including the Final Safety Analysis Report for the Kewaunee Nuclear Power Plant ("FSAR"), the Licensees Spent Fuel Pool Modification Description and Safety Analysis

("DSA") and Environmental Impact Evaluation ("EIE"), the NRC Staff Safety Evaluation Report ("SER") and Environmental Impact Appraisal ("EIA") and the interrogatories and answers of each party.

Although the burden of proof for a motion for summary disposition rests with the moving party, 10 C.F.R. Sec. 2.749 makes it clear that a party opposing the motion "may not rest upon the mere allegations or denials of his answer" and that, in response to the motion, the opposing party must set forth evidentiary materials "showing that there is a genuine issue of fact."

The observation of a Licensing Board in another proceeding is particularly appropriate in the context of the showings made in this proceeding:

> To defeat summary disposition an opposing party must present facts in the proper form; conclusions of law will not suffice. The opposing party's facts must be material, substantial, not fanciful, or merely suspicious.
>
> One cannot avoid summary disposition "on the mere hope that at trial he will be able to discredit movant's evidence; he must, at the hearing, be able to point out to the court something indicating the existence of a triable issue of material fact" 6 Moore's Federal Practice 50.15(4). One cannot "go to trial on the vague supposition that something may turn up." 6 Moore's Federal Practice 56.15(3). See Radio City Music Hall v. U.S. 136 F.2d 715 (2nd Cir. 1943). In Orvis v. Brickman, 95 F.Supp. 605 (D.D.C. 1951), the Court, in granting the defendant's motion for

summary judgment under the Federal Rules said:

> All the plaintiff has in this case is the hope that on cross-examination. . . the defendants. . . will contradict their respective affidavits. This is purely speculative and to permit trial on such basis would nullify the purpose of Rule 56. . . .

Gulf States Utilities Company (River Bend Station, Units 1 and 2), LBP-75-10, 1 NRC 248 (March 20, 1975) [Footnotes omitted].

It is insufficient to oppose a motion for summary disposition merely to ask questions concerning the subject matter of the proceeding. To justify the delay and expense associated with a full evidentiary hearing, there must be some basis for concluding that disputed factual issues exist which require that procedure.

As noted by the Supreme Court in the context of agency procedures required by the National Environmental Policy Act intervenors do carry a burden:

> [I]t is still incumbent upon intervenors who wish to participate to structure their participation so that is is meaningful . . .
>
> > "[C]omments must be significant enough to step over a threshold requirement of materiality before any lack of agency response or consideration becomes of concern. The comment cannot merely state that a particular mistake was made; it must show why the mistake

> was of possible significance in the results . . . ." Portland Cement Assn. v. Ruckelshaus, 158 U. S. App. D. C. 308, 327, 486 F.2d 375, 395 (1973), cert. denied sub nom. Portland Cement Corp. v. Administrator, EPA, 417 U. S. 921 (1974).
>
> Indeed, administrative proceedings should not be a game or a forum to engage in unjustified obstructionism by making cryptic and obscure reference to matters that "ought to be" considered and then, after failing to do more to bring the matter to the agency's attention, seeking to have that agency determination vacated on the ground that the agency failed to consider matters "forcefully presented."

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., ____ U. S. ____, 98 S. Ct. 1197, 1216-17 (1978).

Examination of the record in this proceeding shows that prompt disposition on the merits without a hearing is particularly appropriate because Intervenors have identified no witnesses and provided no factual basis for any of their contentions. In addition, as demonstrated in the discussion below, the uncontroverted facts compel the conclusion that no impediment to the proposed licensing action exists.

DISCUSSION OF SPECIFIC CONTENTIONS

Contention 2:

Licensees have not shown that the cumulative radioactive emissions to the atmosphere resulting from spent fuel pool expansion at Kewaunee and Point Beach may not,

under certain atmospheric conditions such as an inversion, exceed allowable levels.

STATEMENT OF FACTS AS TO WHICH NO GENUINE ISSUE EXISTS:

1. Kr-85 is the only radionuclide as to which there exists the possibility of an increase in release due to long-term storage of spent fuel.

2. Any such potential increase in Kr-85 releases is vanishingly insignificant when compared to background levels and regulatory limits.

3. Even under adverse atmospheric conditions, the cumulative effect of increased emissions resulting from spent fuel Pool capacity expansion of the Kewaunee and Point Beach plants will not exceed allowed regulatory levels.

DISCUSSION OF CONTENTION 2:

The Licensees' Response to Intervenors' Interrogatory 2 discusses the potential for increased release of Kr-85. As presented in the DSA Sec. 7.1.2, Kr-85 was identified to be the only noble gas of sufficiently long half life to be a potential contributor to offsite radiation exposure associated with increased spent fuel storage. No other possible sources of increased radiation have been identified. The response to Intervenors' Interrogatory 2 clearified the Licensees' position on offsite noble gas exposure by stating the Kr-85 release from spent fuel should not be increased due to increased storage of spent fuel. As

stated in that response, the release of Kr-85 from spent fuel is related to fuel rod temperature and pressure which decrease rapidly following removal of fuel rods from the reactor. The rate of decay heat generation, which determines temperature and affects pressure, decreases to a small fraction of the decay heat of a fuel element recently removed from a reactor over the period of one year. The leakage rate of any leaking fuel rods will be proportional to the square root of the pressure difference between the exterior and interior of the rod cladding. Since no major mechanism for Kr-85 generation exists following reactor shutdown, the Kr-85 content of spent fuel will only decrease due to normal radioactive decay and leakage if a leaking fuel rod is involved. Kr-85 leaking from a fuel rod at the time of removal from the reactor will continue until the pressure difference across the cladding is decreased to zero by the leakage which should occur in a short time in comparison to the storage period within the spent fuel pool. The absence of mechanisms which degrade the integrity of the spent fuel rods during storage within the spent fuel pool precludes the generation of additional leaking fuel rods to cause additional Kr-85 release during the storage interval. The spent fuel rods within the Kewaunee pool will either complete their leaking process in a short time if leaking at the time of removal from the reactor or will remain intact

and will retain all Kr-85 until discharge offsite, therefore, no increase in Kr-85 releases are expected above those generated by the normal storage period of spent fuel on site if modification were not to occur. Without an increase in noble gases due to increased storage, no increase in offsite dose would occur above what was considered during the licensing of the plant and no issue as to such releases exists in this Proceeding. Stated in other terms, the current operation of KNPP contemplates storage of spent fuel onsite for about one year. By the end of this period of time no further release of Kr-85 is anticipated. The proposed modification has the limited effect of increasing the storage of "old" spent fuel. Accordingly, no increase in radioactive releases from levels considered at the licensing of the plant is anticipated and no additional cumulative atmospheric effects will result.

The Staff EIA addressed the matter of potential increase in offsite radiological impacts in Sec. 5.3.1. and 5.3.2. The NRC Staff states "Experience indicates that there is little radionuclide leakage from spent fuel stored in pools after the fuel has cooled for several months" and ". . . experience has demonstrated that after spent fuel has decayed four to six months, there is no significant release of fission products from defective fuel assemblies." The EIA also includes a conservative estimate

of noble gas release which assumes a continuous leakage and provides an upper bound estimate of environmental impact due to noble gases from spent fuel storage. This NRC staff upper bound estimate yielded an increase of 0.0005% in the dose at the site boundary above background.

The combined effect of both the Kewaunee and Point Beach Plants were addressed by the NRC staff in Section 5.3.6 of the EIA. That evaluation conservatively estimates the combined effects of the two plants to be a 50 miles population total body dose of 0.0025 manrem/yr. or an increase of less than 2% the assumed doses of either Kewaunee or Point Beach Final Environmental Statement.

The NRC Staff response to the State of Wisconsin Interrogatory No. 1 in regards to Contention 2 also provides additional information as to the merits of the contention. The response addresses the impact of an inversion upon the conservatively estimated dose due to the additional spent fuel. That response clearly indicates that even with the unrealistic assumption of a constant inversion the regulatory limits associated with noble gas releases would not be exceeded. It should be noted that the use of short term metereology is inappropriate to estimate long term doses such as consideration of hypothetical spent fuel noble gas release following many months of storage. Inversion effects would only result in regulatory limit problems if

the margin to limits were small rather than very large as in this case. As stated in the NRC response to the State of Wisconsin Interrogatory the ". . . contention is without merit. . . ."

Interrogatories directed to the Intervenors from the NRC Staff and the Licensees attempted to identify a issue of merit as interpreted by the intervenors such that a complete response and clarification of facts could be accomplished in testimony. The Intervenors' responses clearly indicate the absence of genuine issue appropriate for resolution by a hearing. The Intervenors response to NRC Interrogatory b on this contention indicates that their perception of the issue is that the combined effects of Kewaunee and Point Beach spent fuel modification radiological effects should be addressed in light of the regulatory limits. In response to interrogatories the Intervenors did not contend that the regulatory limits would be exceeded nor did they provide any identification of a substantive issue which requires additional investigation by either the NRC staff or the Licensees.

The State, in its Answers to Licensees' Interrogatories, agreed that it is unlikely that combined emissions will exceed regulatory levels.

This contention has been addressed by the NRC staff in their EIA and in responses to interrogatories by

both the NRC staff and the Licensees. The issue of the contention, the demonstration that regulatory limits would not be exceeded, has been addressed. No genuine issue in this contention remains to be addressed in a proceeding before the Board. Summary disposition of this contention is appropriate since no issue of merit remains and no factual dispute exists as demonstrated by the Intervenors' response to interrogatories.

Contention 8:

Applicant failed to discuss problems associated with defective or deteriorating neutron absorber plates and how the specimens will be monitored for loss of neutron absorber material, bulging and swelling.

STATEMENT OF FACTS AS TO WHICH NO GENUINE ISSUE EXISTS:

1. Licensees have discussed the planned monitoring program.

2. The neutron absorber material planned for use in the spent fuel pool has been demonstrated to meet design specifications and is not subject to offgassing, bulging, swelling, or gamma radiation damage for the period of proposed use in the Kewaunee spent fuel pool.

DISCUSSION OF CONTENTION 8:

The DSA states the neutron absorber material of the same type employed at Connecticut Yankee would be utilized in the proposed Kewaunee spent fuel racks. On July 10, 1978, as a result of a review of the problems

encountered at Connecticut Yankee due to off-gassing from the neutron absorber material of domestic manufacture, the NRC was informed that the neutron absorber material for the Kewaunee Plant would be supplied by Electroschmelzwerk Kempten (ESK) of West Germany. The July 10, 1978, letter also stated that as to the ESK plates; "no evidence of pressure buildup or loss of strength has been noted with an exposure of 3.4×10^8 rads." On September 5, 1978, a more complete presentation of ESK proprietary B_4C plate test results was provided to the NRC under the provision of 10 CFR 2.790(a)(4) and 10 CFR 2.790(d)(2). The test results clearly indicated that the performance specification for the neutron absorber material in the Kewaunee spent fuel rack design would be satisfied by the ESK material.

The DSA addressed the monitoring program for neutron absorber material in Sec. 3.8. Periodic removal and inspection of test specimens was discussed. The surveillance program includes checks for evidence of swelling or bulging and verification of neutron blackness to assure boron is not lost from the absorber plates. The Staff SER addresses the proprietary test results of the ESK B_4C plate material in Sec. 2.4.1. The SER states:

> Testing indicates the exposure to radiation results in no measurable decrease in strength. Also, results of the testing to date show that no significant offgassing of the material occurs.

The SER goes on to conclude that the proposed design of the spent fuel racks and materials are structurally and mechanically acceptable.

In response to the State of Wisconsin Interrogatory 1, the NRC Staff indicated that the proposed surveillance program addressed in the DSA is a satisfactory program and that the testing performed to date indicates acceptable performance of the ESK supplied B4C plate material.

The Intervenors were specifically requested to identify each and every problem associated with neutron absorber plates referenced in this contention. The Intervenors responded on November 20, 1978, by identifying bulging, swelling, offgassing and gamma radiation damage as the problems of concern to them. The itemization of potential problems by the intervenors was also included in their response to the Licensees' Interrogatory 9 where the same areas of concern were noted. In response to NRC Interrogatories C and D which inquired as to the desirability of monitoring of the B_4C spent fuel racks for potential problems and form of monitoring desired, the Intervenors responded by indicating monitoring was desired and visual inspection was suggested. The Intervenors provided no factual basis and proposed to present no witnesses to bolster their expression of concerns within this contention.

No basis for a dispute as to the soundness of the neutron absorber material has been presented.

The State in its Answers to Interrogatories does no more than state that the integrity of neutron absorber materials is unknown. No factual basis is presented for questioning the suitability of the material proposed for use.

No factual dispute exists with regard to Contention 8. The Licensees have provided proprietary data to the NRC for review which has demonstrated that each of the problem areas identified by the Intervenors has been considered and no actual problem exists. The Intervenors identified that a visual monitoring program was considered necessary by them, however, a program of greater scope was addressed in the DSA which was submitted more than one year prior to the Intervenors' request for a monitoring program. Thus, the contention that there has been a failure to discuss these issues is without basis and, substantively, the issues have been shown, beyond dispute, not to create any problem which is material to the proposed licensing action. It is insufficient to create a genuine issue for hearing for Intervenors and the State merely to repeat, without factual foundation, statements of alleged concern. Absent a factual showing of some basis for the alleged problems, no genuine issue remains to be addressed before

the Licensing Board and summary disposition of this contention is in order.

Contention 12:

Licensees have failed to provide a quantitative estimate of the incremental increase in low level radioactive waste that will be produced as a result of the spent fuel pool expansion.

STATEMENT OF FACTS AS TO WHICH NO GENUINE ISSUE EXISTS:

1. Licensees have provided a quantitative estimate of incremental waste expected from the proposed modification.

DISCUSSION OF CONTENTION 12:

The licensees, in response to the Intervenor Interrogatory 1 on Contention 12, specifically identified the volume and curie content of radioactive wastes associated with the increased storage capacity of the Kewaunee spent fuel pool. That response identifies the existing spent fuel racks and demineralizer resins from the spent fuel purification system as specific wastes with estimates of volume and curie content. The spent fuel pool filters were also addressed; however, due to the small volume of waste in comparison to the normal liquid waste system waste volume, an accurate estimate of volume and curie content could not be provided although sufficient data was provided to indicate that the additional amount of waste water to be processed was insignificant in comparison to normal liquid waste volume.

The response to Intervenor Interrogatory 1 on Contention 12 stated that, since decay heat and internal rod pressure are significantly reduced after one year of storage, the transport of contaminants to the spent fuel pool water will be much lower than the contamination from recently discharged reactor fuel (which will be in the pool in any event). Thus, the demineralizer resin usage is not expected to change due to the increased storage of spent fuel. The potential for increased particulate levels in the spent fuel pool requiring additional filter cleaning operations was also addressed. No mechanism for increased particulates within the spent fuel pool could be identified as being associated with increased storage.

The Staff EIA considered the potential for increased solid wastes associated with the increased spent fuel storage in Section 5.3.3. The EIA states: ". . . we believe that there should not be an increase in solid radwaste due to the modification. . ." . The NRC went on to estimate an increase to evaluate the possible impact in comparison to the normal solid waste generated by the plant. They concluded a significant environmental impact would not be associated with the conservatively assumed increased waste discharge considered in their evaluation.

The Licensees' responses to Intervenor Interrogatories 2 and 3 on Contention 12 provide further assurance

that no issue worthy of inclusion within a hearing exists. The response clearly indicates that the present Operating License does not include restrictions on the generation or disposal of radioactive wastes other than those restrictions which are included within the appropriate regulations. The existence of a disposal contract with an NRC licensed radwaste disposal enterprise has been affirmed as has the ability to transfer to that organization whatever low level wastes are generated by the pool modification and storage of spent fuel.

The Interrogatories of the Licensees to the Intervenors No. 10 through 13 attempted to determine if a factual dispute existed in regards to the contention. In response to those interrogatories the intervenors unambiguously indicated that they only wanted to be informed as to what the wastes resulting from the modification would be and where it would be stored. The intervenors also stated that they ". . . do not know whether or not there will be an increase in the level of radioactive wastes. . ." .

The State, in its response to Licensees' Interrogatories, agrees that no large increase in waste is expected. The State's principal contention appears to be that the Board should somehow "weigh" the possible increase in its licensing decision notwithstanding the fact that

there is no license limitation on the Licensees' generation of such material in any operations.

The potential of increased wastes due to the modification has been addressed by the Licensees and the NRC. The intervenors only want to be informed as to what increased wastes are anticipated and that they will be properly disposed of. Assurance has been provided that methods for disposal in accordance with regulations will be provided for whatever wastes are associated with the modification. Conservative estimates of potential increases in solid wastes show them to be insignificant in environmental impact. Therefore, no issue of merit remains and no factual dispute exists in regards to this contention. In addition there has been no showing of how this contention relates to the proposed licensing action, inasmuch as the operating license does not limit generation of such wastes. Summary disposition of this contention is, therefore, appropriate in accordance with the provisions of 10 C.F.R. Sec. 2.749.

Contention 13:

Applicant has not discussed the long-term integrity of the various components of and in the spent fuel storage pool in light of the proposed compaction and increased amount of spent fuel in Kewaunee. The health, safety, environmental and economic impact of the loss of integrity of these components due to more dense and increased storage of spent fuel for the period of licensing must be evaluated.

(a) Applicant should evaluate the corrosive affects [sic] of borated water on spent fuel and its cladding, support frames, storage racks, fuel basin liner,

neutron absorber plates, bundle bails, and any other components in contact with the storage pool borated water. According to A. B. Johnson in Behavior of Spent Nuclear Fuel in Water Pool Storage, Battelle North West Laboratories 2256, September 1977 at page 36: ". . .(P)ool and fuel bundle materials have appeared to function satisfactorily in boric acfd fuel pool chemistry, but very few detatled analysis of the materlals are available." These analyses are necessary to process the application to amend Kewaunee's operating license to compact spent fuel and to store an unprecedented number of spent fuel assemblies as proposed by Applicant. These analyses are also important because problems of spent fuel storage racks swelling associated with borated water have been experienced at the Connecticut Yankee facility, and, consequently, the possibility of this situation being duplicated at Kewaunee must be examined and studies documented.

(b) Applicant should examine the effects of accelerated corrosion, microstructural changes, alterations in mechanical properties, stress corrosion, cracking, intergranular corrosion, and hydrogen absorption and precipitation by the zirconium alloys due to the proposed compaction and long-term storage of spent fuel at Kewaunee. The Nuclear Regulatory Commission Draft Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel, NUREG-0404, Volume 2, March 1978, at page H-23 states that these corrosion effects in underwater spent fuel storage requires [sic] examination.

(c) Applicant must analyze the long-term electolytic [sic] corrosion effects of using dissimilar alloys for the pools liners, pipes, storage racks, and storage rack bases.

(f) Applicant should delineate anticipated thickness of crud layers and crud tendency to influence corrosion of spent fuel and its cladding due to increased and more dense spent fuel storage as proposed for Kewaunee. A. B. Johnson, in Behavior of Spent Nuclear Fuel in Water Pool Storage at page 65, indicates that study of existing crud analysis and selected other analyses ". . . may determine whether the corrosion environments in crud layers are as inerts as they currently are regarded to be."

STATEMENT OF FACTS AS TO WHICH NO GENUINE ISSUE EXISTS:

1. Borated water has no significant corrosive effects on materials expected to come in contact with it

in the spent fuel pool during the operating license period.

2. Storage of increased numbers of spent fuel assemblies does not affect mechanical properties or corrosion susceptability of materials in the spent fuel pool during the period of the operating license.

3. Materials in the spent fuel pool are not subject to significant corrosion, microstructural changes, alterations in mechanical properties, stress corrosion, cracking, inter-granular corrosion or hydrogen absorption or precipitation during the period of the operating license.

4. The materials in the spent fuel pool are not subject to any significant electrolytic effects during the period of the operating license.

5. The accumulation of crud layers has no significant effect on corrosion of spent fuel or its cladding within the spent fuel pool during the period of the operating license.

DISCUSSION OF CONTENTION 13:

The contention erroneously states that there has been no discussion of the long-term integrity of various components of and in the spent fuel storage pool. The corrosion of all materials in contact with borated water had already been evaluated and addressed in the FSAR on page 9.2-35a. This matter was again evaluated and discussed in the DSA in Sec. 3.7. In response to Intervenor interrogatories on contentions 13a, b, and c, the Licensees provided

additional documentation and references concerning the long-term integrity of the various components of and in the spent fuel storage pool. The Intervenors have not provided a basis for concluding that a problem exists and they have failed to identify any specific aspect of the issue which requires further inqu1ry. Out of context quotes from technical documents do not provide a showing of merit to the contention.

The Intervenors in response to interrogatories state that they have no witnesses nor additional information to present. They have stated in response to Licensees' interrogatory 14: "We do not have any specific information regarding corrosion effects on the components listed in this contention. . ." . The NRC staff's and Licensees' responses to the Intervenors' interrogatories on contention 13 demonstrate that there are no material problems associated with the proposed modification. The NRC staff's responses to the State of Wisconsin's interrogatories state that contentions 13a, b, c, and f are without technical merit. There are no current restrictions on the length of storage in the present pools and, therefore, fuel could be stored for the length of the operating license in the unmodified pools.

The boron carbide plate swelling that was experienced in the Connecticut Yankee facility is not relevant to Kewaunee Nuclear Power Plant because the neutron abosrber

material used in Connecticut Yankee is dissimilar from that proposed in Kewaunee Nuclear Power Plant. This is discussed in detail in Contention 8.

An examination of Westinghouse fuel irradiated to design burnup reported by R. H. Floers in testimony given at the Windscale Public Inquiry and studies made by the Battelle Memorial Institute on fuel irradiated to well past the point where irradiation saturation damage occurs confirmed excellent mechanical properties of the fuel and fuel cladding.

In response to Intervenors' Interrogatory on contention 13f, the Licensees provided the PWR fuel expected crud thickness and the effect on corrosion of this crud. "Since these same crud deposits were prevalent during reactor operation and have been found to have minimal effect on corrosion under reactor operation conditions, there is no reason to expect a significant effect under the far less demanding conditions in the storage pool. Examination of stored fuel with typical crud deposits confirms this expectation. . .".

In its answers to Licensees' Interrogatories, the State has done no more than restate the premises of the contention. No scientific or factual basis for the assertions of possible corrosion, electrolytic effects, or crud layer chemical action has been presented. The unsupported assertions of the contention are simply inadequate to

create a genuine issue requiring a hearing. Furthermore, mere claims that matters should be examined more closely without evidence or even allegations that real problems exist are insufficient to justify delay of issuance of the requested license amendment.

As to each part of Contention 13, it is only asserted that further studies should be undertaken. There is no identification, either in the contention or in responses to interrogatories, of any assertion that corrosive effects or the other situations are likely problems justifying further study at this time. There is also no showing that such studies, even if the need for them were demonstrated, provide any reason to delay the requested license change. The plant is already licensed to store spent fuel for the duration of the license period. Increasing the number of spent fuel elements in storage has no significant effect on the issues described in Contention 13.

Because the Intervenors have identified no further witnesses or documents to be presented in reference to Contention 13 and the record contains uncontroverted evidence that no problems exist with respect to the issues of Contention 13, summary disposition is appropriate.

BOARD QUESTION NO. 1:

> In the event of a total loss of cooling capability, what remedial action could be taken and how much time would be available to institute it?

STATEMENT OF FACTS AS TO WHICH NO GENUINE ISSUE EXISTS:

1. In the event of total loss of cooling capability, appropriate remedial action could be taken before any safety problems could develop.

DISCUSSION OF BOARD QUESTION 1:

The cooling system for the spent fuel pool is described in the DSA at Sec. 6.0 and was further explained by the Licensees in response to specific Staff inquiries.

The Staff evaluation and conclusions concerning this issue are set forth in the SER at 2.2-2.2.2. Pertinent portions of that report are quoted here:

> [T]here are three safety class I sources of water for the spent fuel: a six-inch emergency service water supply line, a boric acid addition line, and a reactor water makeup line. Water from these lines can be delivered to the spent fuel pool by opening valves in existing lines. The largest of these lines, the emergency service water supply line, could supply pool makeup water at a rate of more than 1000 gpm.
>
> Assuming a maximum fuel pool temperature of 150°F, the minimum possible time to achieve bulk pool boiling after any credible spent fuel pool cooling system failure will be about six hours. After bulk boiling commences, the maximum evaporation rate will be 46 gpm. We find that six hours would be sufficient time for WPSC to establish a 46 gpm makeup rate from makeup sources identified in Sec. 2.2

> We also find that under bulk boiling conditions the surface temperature of the fuel will not exceed 350°F. This is an acceptable temperature from the standpoint of fuel element integrity and surface corrosoin. It should be noted that because of redundant SFP cooling capability represented by the SFP cooling system and the RHR system, such a total loss of cooling would involve multiple single failures, an extremely unlikely situation.
>
> Conclusion
>
> We find that the present cooling capacity for the spent fuel pool at the Kewaunee Nuclear Power Plant will be sufficient to handle the incremental heat load includ1ng the increment that will be added by the proposed modifications. We also find that this total higher heat load will not alter the safety considerations of spent fuel cooling from those we previously reviewed and found to be acceptable. We conclude that there is reasonable assurance that the health and safety of the public will not be endangered by the use of the proposed design with respect to adequate spent fuel pool cooling to accommodate the proposed modification.

No assertion or evidence contrary to these conclusions has been presented by any party. Accordingly, summary disposition of this issue is appropriate.

BOARD QUESTION NO. 2:

Does the Environmental Impact Evaluation submitted by Licensees adequately address the radiological effects of increased storage on occupational personnel, and have Licensees demonstrated that the occupational dose associated with the implementation of the proposed modification is ALARA?

STATEMENT OF FACTS AS TO WHICH NO GENUINE ISSUE EXISTS:

1. The Environmental Impact Evaluat¹on adequately addresses the radiological effects of increased storage on occupational personnel and those effects are insignificant.

2. The occupational radiation dose associated with implementation of the proposed modification is ALARA.

DISCUSSION OF BOARD QUESTION 2:

The radiological effects of increased spent fuel storage are discussed in the EIE at Sec. 3.2.2. The adequacy of that discussion is borne out by the following conclusion from the Staff SER, Sec. 2.6:

> We have estimated the increment in the annual onsite occupational dose resulting from the proposed increase in stored fuel assemblies on the basis of information supplied by WPSC and by utilizing relevant assumptions for occupancy times and for dose rates in the spent fuel area from radionuclide concentrations in the SFP water. The spent fuel assemblies themselves contribute a negligible amount to dose rates in the pool area because of the depth of water shielding the fuel. The occupational radiation exposure resulting from the proposed action represents a negligible burden. Based on present and projected operations in the spent fuel pool area, we estimate that the proposed modification should annual occupational radiation exposure burden at this facility. The small increase in radiation exposure will not affect the licensee's ability to maintain individual occupational doses to as low as is reasonably achievable and within the limits of 10 C.F.R 20. Thus, we conclude that storing

> additional fuel in the SFP will not result in any significant increase in doses received by occupational workers.

Radiation doses expected from implementation of the proposed pool modification have been evaluated by the NRC Staff and the proposal has been found to result in doses ALARA. See Staff SER Sec. 2.5:

> In the matter of disposal of the old low density racks, WPSC is considering two alternative Plans: crating and shipping the racks intact versus cutting, crating and shipping the racks. The licensee has submitted an anlysis of the occupational explosure for the first step of the pool modification with the old racks being cut into smaller sections to permit more efficient packaging in the shipping containers. More efficient packing results in a smaller volume of radioactive waste to be disposed of with resulting economic and environmental benefits, e.g., fewer waste shipments and conservation of low level waste burial site space. This option, however, does require that the licensee expend efforts to cut the old racks and results in a slight increase in occupational radiation exposure. The occupational radiation exposure for the first step of the pool modification with cutting, crating and shipping the racks has been estimated by the licensee to be 11.6 man-rem. WPSC has not estimated the occupational exposure for the pool modification with crating and shipping the racks intact but this exposure w1ll be less than the estimated 11.6 man-rem for cutting the racks. Based on the licensee's estimate of occupational exposure for the SFP modification with crating and shipping the racks intact to be about 9.6 man-rem. WPSC has not yet quantified a cost-benefit

> analysis of the alternatives so that their disposal decision has not been finalized. In any event, WPSC will base their decision on this cost-benefit analysis of the alternatives so that exposures will be kept to levels that are as low as is reasonably achievable (ALARA).

As with Board Question 1, there has been no presentation contrary to this evaluation, and summary disposition is appropriate.

CONCLUSION

In accordance with the foregoing discussions, it is apparent that no genuine disputes as to factual issues remain in this proceeding which require or justify the holding of an evidentiary hearing. In answer after answer to interrogatories propounded by the Licnesees and the NRC Staff, the Intervenors have responded that they do not know whether their contentions have any substantive merit but merely that further inquiry is requested. No basis for even the assertion of the need for further inquiry has been provided. It is respectfully submitted that the mere asking of questions is insufficient to preclude the granting of summary disposition in this proceeding.

Licensees are entitled as matter of law to a decision granting the requested license change.

Respectfully submitted,

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