# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

# BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)
DTE ELECTRIC COMPANY,	) Docket No. 50-341-LA
(Fermi Nuclear Power Plant, Unit 2)	) ) April 10, 2020
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CITIZENS' RESISTANCE AT FERMI 2 (CI	,
STAFF ANSWER OPPOSING CRAFT'S LE FOR A HEARING AND APPLICANT'S ANS	SWER OPPOSING PETITION FOR LEAVE
TO INTERVENE AND HEARING REQUES FERMI 2 (CRAFT)	OI FILED BY CHIZENS' KESISTANCE AT

Jessie Pauline Collins

Pro Se Counsel for CRAFT

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CITIZENS' RESISTANCE AT FERMI 2 (CRAFT)'S COMBINED REPLY TO ANSWER FILED BY NRC STAFF REGARDING CRAFT'S REQUEST FOR A PUBLIC HEARING and APPLICANT'S ANSWER OPPOSING PETITION FOR LEAVE TO INTERVENE AND HEARING REQUEST FILED BY CITIZENS' RESISTANCE AT FERMI 2 (CRAFT)

# **STANDING**

Now comes Citizens' Resistance at Fermi 2 ("CRAFT"), Petitioner herein, and replies to the "NRC Staff's Answer Opposing CRAFT's Hearing Request" ("Staff Answer") and "Applicant's Answer Opposing Petition or Leave to Intervene and Hearing Request" ("DTE Answer").

# I. CRAFT Has Demonstrated the Requirements for Representational Standing

In their "Petition for Leave to Intervene and for a Hearing on DTE's License Amendment Request" ("Petition"), Petitioner Citizens' Resistance at Fermi 2 ("CRAFT") articulated

adequate grounds for physical proximity standing. However, DTE and the NRC Staff have improperly conflated the concept of legal standing-to-sue with the merits of the Petition and effectively require that the Petitioners prove their case-in-chief as a condition for getting a hearing. The Licensing Board should ignore these overreaching arguments because Petitioner CRAFT has articulated adequate bases for standing and must be accorded a hearing.

To establish representational standing, an organization must: (1) show that the interests it seeks to protect are germane to its own purpose; (2) identify at least one member who qualifies for standing in his or her own right; (3) show that it is authorized by that member to request a hearing on his or her behalf; and (4) show that neither the claim asserted nor the relief requested require an individual member's participation in the organization's legal action. *Hunt v. Washington State Apple Advertising Comm'n*, 432 U.S. 333, 343 (1977)).

The NRC applies judicial standing concepts that require a participant to establish: (1) it has suffered or will suffer "a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute[s]." (in this case, the Atomic Energy Act of 1954 ("AEA"), 42 U.S.C. §§ 2011-2297); (2) the injury is fairly traceable to the challenged action; and (3) the injury is "likely to be redressed by a favorable decision." *Georgia Institute of Technology* (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995) (reciting standards for judicial standing). Standing will lie "where 'a plaintiff demonstrates that the challenged agency action authorizes the conduct that allegedly caused the plaintiff's injuries, if that conduct would allegedly be illegal otherwise." *Am. Trucking Ass'n v. Fed. Motor Carrier Safety Admin.*, 724 F.3d 243, 248 (D.C. Cir. 2013) (quoting *Animal Legal Def. Fund, Inc. v. Glickman*, 154 F.3d 426, 440 (D.C. Cir. 1998) (*en banc*)).

The Petitioners urge, as discussed below, that DTE is not following the statutory and

regulatory provisions of the AEA with the challenged license amendment.

# A. Factual's Concerns of CRAFT's Members That Establish Proximity and Injury-in-Fact Standing

The Petitioners used a "form" declaration to assert their standing. Each individual declaration of CRAFT's members contains allegations of the Petitioner's residency and proximity to Fermi 2 (as little as between 4 and 5 miles from the plant out to about 25 miles), and a statement substantially like the ones below, taken from the Declaration of Hedwig Kaufman concerning her interest in the proceeding:

- 3) I have conducted some investigation into DTE's license amendment request to use SNAP-IN neutron conductors in their spent fuel pools instead of the fulfilling their license extension commitment to replace the degraded Boraflex storage racks with Boral racks.
- 4) I live within 4.75 miles of the Fermi reactor and am concerned about Fermi's degradation of my rights personally and as a homeowner.
- 5) In order to ensure that the licensing decision for the Fermi 2 nuclear reactor protects my interest in a safe and healthy environment, I authorize Citizens Resistance at Fermi 2 (CRAFT) to act on my behalf to ensure the permitting proceedings and any associated rulemakings are conducted fairly, efficiently, and in a manner that provides the full consideration of issues that could affect my safety and health, and the health of the environment left for future generations.

In the Petition to Intervene, CRAFT's members allege these bases for their concerns about safety which give dimension to their assertions of standing:

In License Amendment No. 141, DTE committed to replace the Boraflex racks with Boral racks. This was to be done in three "campaigns." The first two campaigns were completed in 2001 and 2007, but the third has not been completed yet, 13 years after the last campaign. The License Condition requires DTE to complete the third campaign so that credit for Boraflex is no longer required," DTE stated in this change of plan request.

It is CRAFT's position that if DTE is not held accountable to this License Amendment Condition and made to abide by their original agreement, then they have invalidated the license condition contract and therefore Fermi's 20-year extension should be revoked until such time as DTE upholds their legal commitment and replaces the Boraflex materials with the Boral. DTE has signed and committed to a legal agreement and cannot at this point make a substitution just because it is quicker and cheaper.

#### Petition at 4.

The Petitioners build upon that identified flaw in Contention 2, adding that

by not physically removing the degraded Boraflex from the spent fuel itself Fermi 2 will be out of compliance with License Condition No. 3. Cumulative longitudinal degradation to the spent fuel has not been evaluated for corrosion and degradation which could lead to failure in the spent fuel pool and potential for failure when transferred to Dry Cask Storage has not been evaluated. The Boraflex racks can become damaged and adhere to the fuel assemblies resulting in loading complications for the lifting of 125 tons, and this has not been evaluated. Therefore, the proposed change does create the possibility of a new or different kind of accident from any previously evaluated.

#### Petition at 13.

Further, Petitioners maintain as Contention 3 that "the credit for Boraflex as a neutron absorbing material as required by the License Renewal License Condition, the effective neutron multiplication factor, k-effective, is less than or equal to 0.95, if the spent fuel pool (SFP) is fully flooded with unborated water" and that this "does not leave conservative margin to stay subcritical. There is no conservative buffer. . .." Petition at 14.

In Contentions 4, 5 and 6, Petitioners assert that "that by not physically removing the degraded Boraflex from the spent fuel itself Fermi 2 will be out of compliance with License Condition No. 3. Cumulative longitudinal degradation to the spent fuel has not been evaluated for corrosion and degradation which could lead to failure in the spent fuel pool and potential for failure when transferred to Dry Cask Storage has not been evaluated. The Boraflex racks can become damaged and adhere to the fuel assemblies resulting in loading complications for the lifting of 125 tons," amid questions as to the ability of the spent fuel crane dating back to the

earliest days of the reactor is capable of bearing the weight. Petition at 13-14. "The Crane is rated at 125 tons, the weight of fuel bundle and basket 125 tons. Not much of a margin of error." Petition at 15. Petitioners point to the nonconservative risk of leaving degraded Boraflex in Fermi 2 and the flawed design of the crane at Fermi as worrisome features that could propel a major reactor accident, including spent nuclear fuel pool fires.

In Contention 7, the Petitioners allege that "the proposed use of Global Nuclear Fuel - 3, an experimental, higher enriched and longer burn-up fuel has not undergone adequate evaluation as it pertains to being placed into spent fuel pool and subsequent impact on criticality coefficient of the effective neutron multiplication factor, k-effective, is less than or equal to 0.95." Petition at 16. They worry that if the spent fuel pool "is fully flooded with unborated water there would not be a conservative margin to stay subcritical" and that "a spent fuel fire can happen here." *Id.* 

#### B. Proximity and Injury-In-Fact Analysis

For purposes of assessing injury-in-fact or any other aspect of standing, a hearing petitioner's uncontroverted factual assertions must be accepted. *Babcock & Wilcox* (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 82 (1993). The Atomic Safety and Licensing Board (ASLB) "must accept as true all material factual allegations of the petition, except to the extent [it] deem[s] them to be overly speculative." In an agency licensing proceeding, a hearing petition generally will be "construe[d] . . . in favor of the petitioner" as it seeks to demonstrate standing. *Envirocare of Utah, Inc.* (Byproduct Material Waste Disposal License), LBP-92-8, 35 NRC 167, 173 (1992). *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-15-25, 82 NRC 389, 394 (2015) (quoting *Ga. Inst. of Tech.* 

(Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995), and *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-15-13, 81 NRC 456, 468, *aff* d, CLI-15-25, 82 NRC 389, 394 (2015)).

But in any event, petitioners are not required to demonstrate their asserted injury with "certainty" at this stage of the proceeding. *Sequoyah Fuels Corp*. (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 74 (1994).

The proximity presumption, which has generally been applied in proceedings for reactor "construction permits, operating licenses, or significant amendments thereto such as the expansion of the capacity of a spent fuel pool," relieves a petitioner of the need to satisfy the traditional elements of standing. The proximity presumption permits a petitioner to establish standing based on proximity to the geographic zone of potential harm from a nuclear reactor. Whether a petitioner's stated concern is justified must be left for consideration when the merits of the controversy are reached. *Armed Forces Radiobiology Research Institute* (Cobalt-60 Storage Facility), ALAB-682, 16 NRC 150, 152, 154 (1982)

Here, contrary to the assertions of the NRC Staff (Answer at 12) and DTE (Answer at 8-9), the non-removal of Boraflex spawns a range of risks and accident scenarios, creating "obvious potential for radiological harm at a particular distance frequented by a petitioner."

USEC, Inc. (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311-12 (2005). "A petitioner may base its standing upon a showing that his or her residence, or that of its members, is 'within the geographical zone that might be affected by an accidental release of fission products."

Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-125, 6 AEC 371, 371 n.6 (1973); "Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), LBP-79-1, 9 NRC 73, 78 (1979).

Indeed, Petitioners have fulfilled the elements of the "proximity-plus" test by showing that the activity at issue involves geographical closeness to a "significant source of radioactivity producing an obvious potential for offsite consequences." Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 n. 22 (1994). See, also, Shaw Areva MOX Services, LBP-07-14 (2007) (petitioners living 20 to 32 miles from mixed oxide fuel fabrication facility have standing because NRC Staff included residents as far away as 50 miles from the facility in its calculation of potential population doses); see, also, Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-15, 59 NRC 256, 257 (2004) (groups with members living at 2.5- and 4.9-mile distances, respectively, from the proposed facility "live in [such] close proximity to the proposed LES facility" that they would have an obvious potential to be affected by the facility). Once a declarant shows proximity to a source of dangerously radioactive materials, she does not have the burden of articulating a plausible means through which those materials could cause harm to her; the inherent dangers of the radioactive materials comprise the obvious potential for offsite consequences. U.S. Army Installation Command (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 71 NRC 216, 218 (2010), citing *USEC*, *Inc*. (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311 (2005).

## C. Staff and DTE Standing Conflation Confusion

To repeat, CRAFT's individual members have shown proximity to Fermi 2 with its inherently dangerous operation as a nuclear power reactor; have articulated the nature of the license amendment to which CRAFT objects; have suggested potential significant operational problems if the amendment is allowed, including spent fuel pool fires. "[T]he emission of non-natural radiation into appellees' environment would also seem a direct and present injury, given

our generalized concern about exposure to radiation and the apprehension flowing from the uncertainty about the health and genetic consequences of even small emissions like those concededly emitted by nuclear power plants." *Duke Power Co. v. Carolina Environmental Study Group*, 438 U.S. 59, 74 (1978). Not only actual injury, but the threat of injury from radiation exposure is sufficient to satisfy the "injury in fact" requirement of traditional standing. *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 216 (2003) ("A threatened unwanted exposure to radiation, even a minor one, is sufficient to establish an injury."). *Id.; see also, Duke Power Co. v. Carolina Environmental Study Group, Inc.*, 438 U.S. 59, 74 (1978). Consequently, CRAFT has representational standing.

Nevertheless, both the NRC Staff and DTE have blurred concepts of Petitioners' legal standing with the merits of the Petition. This is apparent in tenuous arguments advanced by both. See DTE Answer at 14-15 (arguing factual averments and conclusions that license amendment request "does not seek approval to add 'additional materials'" to spent fuel pool, that "the physical capacity of the Fermi 2 SFP is *well below* its licensed design capacity" and that DTE is not attempting to change volume or capacity of the pool); Staff Answer at 15-16 ("CRAFT only summarizes the proposed action and claims without support that installing NETCO SNAP–IN® rack inserts into the existing Boraflex racks will 'endanger[] all life within a 50-mile radius' including that of CRAFT's members within 'the Fermi 2 radiation zone.").

The ultimate outcome of standing conflation is to elevate the requirement of standing to an expectation that at the outset of a proceeding, that petitioners must demonstrate clear and convincing evidence of their ability to prevail on the merits. But care must be taken to avoid "the familiar trap of confusing the standing determination with the assessment of petitioner's case on

the merits." *Babcock & Wilcox* (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 82 (1993), *citing City of Los Angeles v. Nat'l Highway Traffic Safety Admin.*, 912 F.2d 478, 495 (D.C. Cir. 1990), *cert. denied*, 117 L.Ed. 2d 460 (1992); *Sequoyah Fuels Corp.* (Gore, Oklahoma Site Decontamination and Decommissioning Funding), LBP-94-5, 39 NRC 54, 68 (1994), *aff'd*, CLI-94-12, 40 NRC 64 (1994); *Sequoyah Fuels Corp.* (Gore, Oklahoma, Site Decommissioning), CLI-01-02, 53 NRC 2, 15 (2001).

Based on the foregoing, CRAFT has established standing in this case.

# CRAFT Responds to Other Allegations.

First, we will reply to the NRC Staff's Answer. The first response is to Staff's assertion that

The Board should also deny CRAFT's hearing request because contrary to 10 C.F.R. 2.306(c) and 2.309(b), CRAFT did not serve the hearing request on the Staff and DTE by the deadline and, contrary to 10 CFR 2.309(c), CRAFT did not demonstrate good cause for its untimeliness.

And how were we to know who to serve the Hearing Request to since no one had weighed in on it yet? The Federal Register Notice said to serve the Secretary, and that's what we did. And Staff added: "counsel for CRAFT is experienced in NTC litigation and has filed via the NRC's E-Filing system as recently as 2017..." As counsel, I would like to add that two NRC employees helped me with those filings, and I also claim Hardship since I am a 76-year-old raising three grandchildren on the westside of Detroit during the Covid-19 pandemic lockdown.

Staff also refers to Wanda Hess, whose affidavit we provided during the initial hearing filing, but not in the March 9<sup>th</sup> filing because she is on the other side of Detroit and was unable to sign a new affidavit because her work at North American Indian Association Center is closed as . non-essential and she is homebound without a computer or printer. I have copied her original

affidavit for consideration.

Re: Federal Register Notice Applications and Amendments to Facility Operating Licenses and Combined Licenses Involving Proposed No Significant Hazards Considerations and Containing Sensitive Unclassified Non-Safeguards Information and Order Imposing Procedures: January 7, 2020

#### **DECLARATION OF WANDA LEE HESS**

- I, Wanda Less Hess, am the Declarant herein, and I hereby make the following statements under the penalty of perjury:
  - I am an adult citizen of the United States, am not under disability, and make the following statements voluntarily.
  - 2) My residence address is 4745 Casper St., Detroit MI 48210.
  - 3) I have conducted some investigation into DTE's license amendment request to use SNAP-IN neutron conductors in their spent fuel pools instead of the fulfilling their license extension commitment to replace the degraded Boraflex storage racks with Boral racks.
  - 4) I am a tribal member with hunting, fishing, and gathering rights in the area of the Fermi nuclear reactor and am concerned about Fermi's degradation of my rights.
  - 5) In order to ensure that the licensing decision for the Fermi 2 nuclear reactor protects my interest in a safe and healthy environment, I authorize Citizens Resistance at Fermi 2 (CRAFT) to act on my behalf to ensure the permitting proceedings and any associated rulemakings are conducted fairly, efficiently, and in a manner that provides the full consideration of issues that could affect my safety and health, and the health of the environment left for future generations.
  - 6) CRAFT is a grassroots organization with approximately 1,500 members in the 50-mile radius of the Fermi reactor. I request that CRAFT be accorded standing to proceed on my behalf. My interests will not be adequately represented unless CRAFT can participate as a full party in this proceeding on my behalf.

Date (Signature) Declarant

Direct Name (1) and 100 Hess

Comes now CRAFT to submit replies to DTE.

Quite naturally, DTE objects to CRAFT intervening in their operations at Fermi, but while they defend financial interest, CRAFT seeks to defend the Lake Erie Bio-Region, including people, water life, along with flora and fauna, from a major accident at Fermi 2.

And quite naturally, CRAFT objects to DTE being allowed to change whatever deal they make with the NRC on whatever decision is most financially beneficial to the company. And in this case, DTE by its own admission admitted making a commitment,

"Accordingly, during the Fermi 2 license renewal process, DTE committed to implementing the rack replacement approved in License Amendment No. 141 (i.e., making it mandatory, not optional." (DTE Answer, page 4, first full paragraph)

And yet, when they decide using SNAP-IN neutron absorbing materials (NAMs) instead of the Boral rods they committed to using. No private person could just decide to do something else after they had made an agreement with the government, so why is DTE allowed. Aren't corporations now persons?

How is it possible that DTE can say that "The inserts are installed in the existing Boraflex racks, within each spent fuel "cell" in the rack (i.e., between the stainless steel sheet and the cell area in which the spent fuel assemblies are placed)." (Lar, Encl. 1 at 8-9) when common sense can see that those snap-ins will add bulk and weight?

DTE's Answer states CRAFT doesn't deserve a hearing because this License

Amendment Request (LAR) isn't about a licensing issue. CRAFT thinks that it is and restates
that DTE made an agreement to remove and replace the Boraflex NAMs with new Boral NAMs,
and this LAR is violating that agreement.

And CRAFT is not legally allowed to challenge the NRC Staff's No Significant Hazards Consideration (NSHC) determination? Then whom could have challenged all those NSHCs that Staff had signed off on showing the Torus had giant paint chips floating around it in that could stop up the cooling water filter if used in an accident. How about Staff signing off on NSHCs saying pumps worked that were never connected? Who can challenge decisions that risk a meltdown just so DTE can save time and money? More than once in DTE's answer, CRAFT is charged with "an Impermissible Collateral Attack on the AEA and NRC Regulations." (So, could it be that 'it's a tough job' but someone must do it?) Your answer "...absent a waiver which CRAFT neither requested nor received" states that we can't challenge without a waiver. Who knew we could get a waiver?

## In II. BACKGROUND AND LEGAL STANDARDS, DTE lawyers state:

Fermi 2 uses two types of high-density storage racks in its SFP. The first uses Boraflex as the neutron absorbing material; the second uses Boral as the neutron absorber. In the Boraflex racks, the Boraflex material is sandwiched between the stainless steel (sic) sheets comprising the rack. In 2001, the NRC approved DTE's request for License Amendment No. 141, allowing (but not requiring) replacement of the Boraflex racks with Boral racks for the purpose of increasing the capacity of the SFP. This replacement was planned to occur over three campaigns, the first two of which were completed in 2001 and 2007. The third campaign, however, has not been implemented.

Why is it that if Campaign 1 was completed in 2001, and Campaign 2 was completed six years later, it is now 14 years later and DTE is focused on a new method for Campaign 3? And how is it possible for DTE to state it will not "alter the capacity of the SFP?" DTE doesn't even tell us if the fuel assemblies are channeled or not.

#### OVERREACHING ISSUES

In the response to our filing, there seems to be a few things that could potentially be loosely discussed, in circles without present evidence, which is no merit nor the opposite at this point in the proceeding.

License amendment 141 states that DTE should submit a letter within 60 days following completion of removal of Boraflex and installation of Boraflex. That would indicate to both no reliance on Boraflex as a neutron absorbing material (NAM) and the cleanup of the remaining degraded materials deemed unsuitable. Three campaigns were set to monitor the clean up and replacement, the first in 2001, the second in 2007 and the 13 years later the third is appears to be, in response put for by DTE associates, a completely different plan, potentially involving actions that may or may not be permissible in their license amendment. This is our belief as well as that in which was stated in our prior filing (which compelled the response of both the NRC and DTE) that should be remembered as well as other key issues that make it necessary for this important proceeding.

We also point to DTE response in reference to license amendment 141 and alternatives to the Boral commitment that could be done in a timely manner. We ask what the time the time frame of this would look like in comparison to their time frame laid out in license amendment 141 within the Boraflex monitoring program. The campaign-based program with 3 installments which 13 years have already passed without word on any action to fulfill this commitment. Will we wait another 13 years for the clean up and removal of the boraflex materials and the installation of the new 9+ NETCO SNAP-Ins neutron absorbing racks?

Within NRC License Condition #3 amendment #141 states a lot along with license renewal related safety evaluation reports like ML16179A224

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML16179A224 which both are NRC findings and likely to be the most just route of action currently to be enforced. Allowing DTE to allude this commitment clearly undermines the authority of the NRC and creates a lack of accountability on DTE's behalf while they may be able to frame it as a simple change of course.

DTE claims their intentions that are being met carry an overall higher personal value than the overall impacts of potential dangers from using supposedly faster cheaper methods to save money. Though the non-reliance and removal of Boraflex material in Amendment 141 has not been completed on 20 years, we do not seek any process in which haste or lack of overall caution in the removal and replacement of the Boraflex material with Boral commitment. We ask the NRC to consider the safety and prudence of not only this license request, but that that which is involved in the in the original Amendment 141 as well.

In the matter of safety, there is also a mention of radiological waste and worker exposure within DTE's response in relation to the snap in inserts. Particularly pertaining to there also being less radiological waste and worker exposure, assumed the workers were exposed only during that process including material removal. Within that same vein of existence, the current materials would be radioactive and add to the amount of worker exposure in related instances along with added amounts of onsite radioactivity, potentially adding to the negative impacts known to be caused by extended periods of increased radiation in higher doses. The condition must be met, the Boraflex must be removed and replaced with the Boral commitment.

Is DTE's response loosely piggy backing ties to NRC regulations by noting safety related specifications that are not directly involved with their NAM proposals? LAR only seeks changes relevant to the license condition by changes to technical specifications and safety analysis to effectuate the addition of a safety enhancement. is the SNAP-IN not considered "additional material" sought to be approved by the LAR? Is this an attempt to bypass the accountability for the approval needed instead or fulfilling Campaign 3 of the Boraflex monitoring program, thus fulfilling orders set out in Amendment 141?

Within the scope of the NAM must be pictures of the interaction's past, present, and future as that is all we have and will be impacted by this proceeding. One might assume that would include waste storage, type and capacity along with that in which might be have heavy or continued contact with all involved with NAM within scope of proceeding. This would include amount held in relation to capacity and though DTE states in their response that they are not at capacity, and under the 3,590 mark, they could have acknowledged a projection by Holtec of more than 3,590 and be around 4,608 - well surpassing that SFP max capacity. M99344O246. Does DTE plan to show how the SNAP-IN NAM will interact with max, and potentially beyond, capacity SFP fuel. Which comes to the GNF 3 fuel to be used in the future of the facility and its connection to the current NAM commitment and proposed alternatives. DTE fails to show the differences of both NAM interactions with SFP at max capacity and projected GNF 3 fuel.

Does DTE's approach to these regulatory requirements comply with the NRC?

#### **CRAFT Reply Contention Admissibility**

CRAFT has brought forward Contentions pertaining to Spent Nuclear Fuel with an integrated perspective. DTE and the NRC deems these Contentions to be out of Scope of the

proposed License Amendment Request to allow use of SNAP-IN instead of Boraflex; and non-removal of the existing Boraflex. This was previously committed to by DTE, and one reason the Fermi 2 was granted a 20-year License Renewal with the existing inadequacy of neutron absorption.

Currently the Spent Fuel Pool is packed to twice its capacity design, now storing 4608 spent fuel assemblies instead designed for 2300 spent fuel assemblies. This now overloaded Spent Fuel Pool was postulated by Holtec in 1999 (Holtec Report M1-992154, Revision 6 on November 4,1999 at ML993440246) to begin boil off of water at 4.2 hours into the loss of SFP circulation. This could occur when the SFP is filled with 4608 Spent Fuel Assemblies, this is currently the situation at Fermi 2.

Excerpt pdf page 126/279 or 5-16

[5.8.2 Minimum Time-to-Boil and Maximum Boiloff Rate Holtec Report IHI-992154 5-16 80964 SHADED TEXT DESIGNATES PROPRIETARY INFORMATION For the discharge/cooling described in Section 5.3, the calculated times-to-boil and maximum boiloff-rates are summarized in Table 5.8.2. These results show -that, in the extremely unlikely event of a complete failure of both the FPCCS and RHR System, there would be at least 4.20 hours available for corrective actions. The maximum water boiloff rate is less than 91 gpm. This is less than the minimum available makeup capacity of 100 gpm available from the condensate storage tanks, and additional sources of makeup are also available.]

In another example DTE and NRC deem the citation / inclusion of "Futility at the Utility" as outside of the Scope of the proposed SNAP-In LAR. CRAFT maintains that this example is germane to proposed SNAP-IN LAR, clearly showing that for 20 years Fermi operated without ability to provide backup power in the event of Station Black Out. The ability for neutron

absorption utilizing SNAP-IN instead of Boraflex replacement and removal has not undergone sufficient analysis.

The LAR relies on use of 10 CFR 50.59 to replace same with same, like with like. But the proposed SNAP-IN usage instead of Boraflex is not same with same, like with like, they are very different. CRAFT prays upon the ASLB to recognize that the 10 CFR 50.59 process should not be allowed, and that full proper engineering analysis be conducted, not the in-house 50.59 process.

The NRC Regulatory narrow Scope perspective misses the forest from the trees, ignoring the cumulative and interactive risk that DTE continues to engage in at Fermi 2 including the proposed use of SNAP-IN instead of Boraflex and not remove the existing Boraflex. This DTE Commitment to License Condition 3, partly on which Fermi 2 obtained the 20-year License Renewal is now put forth for a License Amendment Request. Utilization of 10 CFR 50.59 must not be allowed.

The NRC and DTE would place the SNAP-IN proposal into a separate silo antiseptically scrubbed of connectedness to time and space, analyzed in the narrowest of terms to the point of being meaningless, because there is no context provided.

CRAFT genuinely brings forth our concerns and has tried to provide context. The NRC and DTE have responded by advocating the exclusion of Standing and all proffered Contentions. In doing so the NRC and DTE would deny the opportunity for Public Hearing which could help to ferret out the Risk that the Public is being asked to incur.

CRAFT does appreciate the NRC Staff suggestion to raise our concerns in 10 CFR 2.206 Petitions, for Contentions numbering 4 through 8, and CRAFT takes it under advisement and may exercise that option soon. CRAFT is keenly aware that less than 1% of all 2.206 Petitions

have ever been found in Petitioners favor. However, on Contentions 1 through 3 CRAFT intends to pursue Hearing before the ASLB, where these concerns CRAFT does believe are better served.

CRAFT contends that the ASLB should not address the merits of a contention when determining its admissibility. Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), 28 NRC 440, 446 (1988); Sierra Club v. NRC, 862 F.2d 222, 228 (9th Cir. 1988).

What is required is that the intervenor state the reasons for its concerns. Public Service Co. of New Hampshire, (Seabrook Station, Units 1 & 2), 16 NRC 1649, 1654 (1982). The contention rules require only that contentions have "at least some minimal factual and legal foundation in support" and are not to be a "fortress to deny intervention."

U.S. Dept. of Energy (High Level Waste Repository), LBP-09-06 (May 11, 2009).

CRAFT also appreciates the NRC Staff suggestion to raise our concerns in a 10 CFR 2.208 Rule Making Petition. CRAFT looks forward to participating with the NRC in Consultation prior to and during a potential 10 CFR 2.208 Rule Making Petition.

Citizens' Resistance at Fermi Two stands by Contentions 1 through 3 as proffered and restates them as were first presented in Petition to Intervene dated March 9, 2020.

has put forward Alternatives which would help to resolve the severely over packed Spent Fuel Pool. The proposed Alternative to accelerate the emptying of the SFP through use of Dry Cask Storage. This should demonstrate to the ASLB that CRAFT indeed has tried to be helpful and reduce the overall risk with concrete quantifiable reduction of risk. While DTE and NRC deem this Alternative offered in good faith, CRAFT would ask that DTE of its own volition utilize more aggressively Dry Cask Storage.

#### **CRAFT Contentions 1 through 3.**

CRAFT Contends (Contention 1) that there is potential for a significant increase in the probability or consequences of an accident previously evaluated. License Condition No. 3 for License Renewal calls for the removal of Boraflex and replacement. By not physically removing the degraded Boraflex from the spent fuel itself Fermi 2 will be out of compliance with License Condition No. 3. Cumulative longitudinal degradation to the spent fuel has not been evaluated for corrosion and degradation which could lead to failure in the spent fuel pool and potential for failure when transferred to Dry Cask Storage has not been evaluated. The Boraflex racks can become damaged and adhere to the fuel assemblies and this has not been evaluated.

During the June 27, 2018 Pre-submittal Meeting on Neutron Absorbing Inserts DTE argued that corrosion criteria of less than 0.05 millimeters per year is not excessive corrosion or mass loss. The rate of corrosion is the speed at which any given metal deteriorates in a specific environment. The rate, or speed, is dependent upon environmental conditions as well as the type and condition of the metal. What has not been considered is the older Boraflex racks and the extent of corrosion adhering to those fuel assemblies.

CRAFT Contends (Contention 2) that corrosion leads to degradation and can result in unanticipated consequences and unaccounted for debris in the spent fuel pool. Exacerbating corrosion through prolonged exposure and reliance on faulty Boraflex must be examined and considered as potentially problematic when loading into the Dry Cask Storage. That evaluation has not been provided.

There have been problems at other U.S. nuclear power plants revolving around Boraflex. On June 21, 2010 the NRC fined Turkey Point \$70,000 for improper insertion of neutron absorbers in the spent fuel pool. <a href="https://www.nrc.gov/docs/ML1017/ML101730313.pdf">https://www.nrc.gov/docs/ML1017/ML101730313.pdf</a>

The Turkey Point "Apparent Violations" included: (1) failure to provide notification to the NRC in accordance with the requirements of 10 CFR § 50.73 when testing of Boraflex panels in the Unit 3 SFP revealed degradation beyond minimum design values specified in the Updated Final Safety Analysis Report (UFSAR);

(2) failure to comply with 10 CFR § 50.59, which requires licensees to maintain records, including written evaluations, which provide the bases for a determination that a change, test, or experiment does not require a license amendment; and (3) failure to update the FSAR in accordance with 10 CFR § 50.71(e) so that the report accurately reflects significant changes made to the facility. More recently, the Pilgrim nuclear power plant also lost proper control over neutron absorbers in the spent fuel pool.

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML16333A006

CRAFT Contends (Contention 3) that the credit for Boraflex as a neutron absorbing material as required by the License Renewal License Condition, the effective neutron multiplication factor, k-effective, is less than or equal to 0.95, if the spent fuel pool (SFP) is fully flooded with unborated water does not leave conservative margin to stay subcritical. There is no conservative buffer, DTE proposes to play on the margin to stay subcritical with less than or equal to 0.95 being subcritical and measurement of 1.00 being supercritical. CRAFT Contends that this is not Conservative.

# Contention 8: No regulatory relief for irresponsible operators:

We at CRAFT are continuously amazed, despite decades of confirmation, at the coordinated lengths the NRC and DTE will go to excuse the irresponsible operations of the licensee. It was with a measure of amusement that we read this latest group effort. As detailed

above, both DTE and the NRC have both conveniently conflated the legal definition of standing in a specious argument designed to improperly deny CRAFT's legal rights to intervene.

In their combined effort, attention was drawn heavily toward arbitrary procedural hurdles, which, as we have much experience with, are clearly placed to sharply limit any attempts at intervention. DTE's irresponsibility is irrelevant. Past accidents and cover ups are irrelevant. Poor economic performance as compared to renewable energy is irrelevant. Disinformation campaigns to inflate DTE's adoption of renewable energy while lobbying to kill meaningful deployment is irrelevant. The potential for catastrophic accidents is irrelevant.

How much collusion between regulator and licensee will it take to prove the real irrelevancies at play are the obsequious courtesies to the licensee of a captured regulatory body. While we have not addressed every instance of relevant irresponsible operation, we have established the necessity of a public hearing. The operation of Fermi 2 is a protracted form of premeditated random murder, the continuation of which, while safe, affordable alternatives exist, is a crime of moral turpitude. The public deserves an open and honest addressing of all the facts regarding the continued operation of Fermi 2 by DTE.

#### **CONCLUSION**

Based on the foregoing, CRAFT has established standing and its contentions are admissible. Citizens Resistance at Fermi Two pray upon the ASLB to grant the Public a Hearing on Fermi 2 proposed License Amendment Request. The Public Interest is best served by providing that Hearing before the ASLB.

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

	)	
In the Matter of:	)	
	)	
DTE ELECTRIC COMPANY,	)	Docket No. 50-341-LA
	)	
(Fermi Nuclear Power Plant, Unit 2)	)	April 10, 2020
	_)	

# **CERTIFICATE OF SERVICE**

Pursuant to 10 C.F.R. § 2.305, I certify that, on this date, copies of the foregoing "Citizens' Resistance at Fermi 2 (CRAFT)'s Combined Response to NRC Staff's Answer Opposing CRAFT's Hearing Request and Applicant's answer Opposing Petition for Leave to Intervene and Hearing Request filed by Citizens' Resistance at Fermi 2 (CRAFT)" was served upon the Electronic Information Exchange (the NRC's E-Filing System), in the above-captioned docket.

Signed (electronically) by Jessie Pauline Collins
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