

November 21, 2016

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE SECRETARY OF THE COMMISSION**

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| In the Matter of |) | |
| |) | |
| DTE ELECTRIC CO. |) | Docket No. 50-341-LR |
| (Fermi Nuclear Power Plant, Unit 2) |) | |
| |) | |

**CITIZEN’S RESISTANCE AT FERMI 2 (CRAFT)’S CONSOLIDATED MOTION TO
REOPEN THE RECORD OF LICENSE RENEWAL PROCEEDING AND TO FILE A
NEW CONTENTION FOR FERMI UNIT 2 NUCLEAR POWER PLANT**

I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.326, CRAFT hereby moves to reopen the record in this proceeding to admit a new contention challenging the legal adequacy of “Supplement 56 to the Final Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Fermi Nuclear Power Plant” (NUREG-1437, Supp. 56, Sept.26, 2016) (“Final SEIS”).¹ This Motion supports the attached CRAFT’s Hearing Request and Petition to Intervene in License Renewal Proceeding for Fermi Unit 2 (August 18, 2014) (“Petition to Intervene”). This motion to reopen the record is necessary because the hearing record is closed. Memorandum and Order LBP-15-25 (Sept. 11, 2015).

As discussed in CRAFT’s Petition to Intervene, CRAFT contends that under the National Environmental Policy Act (“NEPA”), the Supplemental FEIS does not adequately address SAMA Analysis as it pertains to potassium iodide distribution in the Primary Emergency Planning Zone (EPZ) and Secondary EPZ.

II. ARGUMENT

Several overlapping factors, set forth in three regulations, govern motions to reopen and admit new contentions. *See* 10 C.F.R. §§ 2.309(c), 2.309(f), and 2.326. This motion and the accompanying contention satisfy each of these factors.

A. Jurisdiction

Until issuance of its initial final decision, a Licensing Board has jurisdiction to reopen a proceeding. *See* 10 C.F.R. §§ 2.318(a), 2.713(a), 2.319(m), and 2.341; *Metro. Edison Co.* (Three Mile Island Nuclear Station, Unit 1), ALAB-699, 16 NRC 1324, 1326, 1327 (1982). After that, jurisdiction lies with the Commission. Therefore, CRAFT has filed this Motion before the Secretary of the Commission.

B. This Motion Satisfies the Standards for Reopening a Closed Hearing Record Set Forth in 10 C.F.R. § 2.326(a).

10 C.F.R. § 2.236(a) provides three criteria which must be satisfied for this motion to be granted:

- (1) The motion must be timely. However, an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented;
- (2) The motion must address a significant safety or environmental issue; and
- (3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.

Id. This motion and the accompanying contention satisfy all three criteria, as discussed below.

1. This motion is timely.

Pursuant to 10 C.F.R. § 2.326(a)(1), motions to re-open the record must be “timely.” Petitioners must also satisfy the timeliness requirements in 10 C.F.R. §§ 2.309(c) and

2.309(f)(2).5 Timeliness is judged by:

whether the contention could have been raised earlier – that is, whether the information on which it is based was previously available or whether it is materially different from what was previously available, and whether it has been submitted in a timely fashion based on the information's availability.

Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-12-21, 76 NRC 491, 498 (2012).

2. This motion and the accompanying contention address a significant environmental issue.

This Motion and the accompanying contention raise the significant environmental issue that the Supplemental Final EIS for Fermi Unit 2 is not supported by an adequate SAMA Analysis as it pertains to potassium iodide distribution in the Primary Emergency Planning Zone (EPZ) and Secondary EPZ.

- (i) (5 NRC regulations 10 C.F.R. §§ 2.309(c) and 2.309(f)(2) call for a showing that:
- (ii) The information upon which the amended or new contention is based was not previously
- (iii) available;
- (iv) The information upon which the amended or new contention is based is materially different
- (v) than information previously available; and
- (vi) The amended or new contention has been submitted in a timely fashion based on the
- (vii) availability of the subsequent information.)

As discussed in CRAFT's Combined Motion the above regulations are met.

3. This motion and the accompanying contention would likely produce a materially different result in this proceeding.

The purpose of CRAFT's contention is to bring DTE Fermi 2 to comply with NEPA, and that the NRC will withdraw the SEIS for Fermi Unit 2 as a basis for re-licensing the reactor, until compliance is achieved. Thus, admission of this contention would likely produce a materially different result in this proceeding.

C. This Motion Satisfies the Standards for Reopening a Closed Hearing Record Set Forth in 10 C.F.R. § 2.326(b).

10 C.F.R. § 2.326(b) requires that a motion to reopen the record must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of Section 2.326(a) have been satisfied. CRAFT has not submitted affidavits, because the bases for this motion are purely legal: as discussed in CRAFT's contention.

D. This Motion and the Accompanying Contention Satisfy the Standards for Contentions Filed After the Deadline Set Forth in 10 C.F.R. §§ 2.326(d) and 2.309(c).

10 C.F.R. § 2.326(d) provides that "[a] motion to reopen which relates to a contention not previously in controversy among the parties must also satisfy the § 2.309(c) requirements for new or amended contentions filed after the deadline in § 2.309(b)."⁶ As discussed above in Section III.A, this Motion and CRAFT's placeholder contention are timely because they are based on information that did not previously exist.

D. This Motion and the Accompanying Contention Satisfy the Standards for Contentions Filed After the Deadline Set Forth in 10 C.F.R. §§ 2.326(d) and 2.309(c).

10 C.F.R. § 2.326(d) provides that "[a] motion to reopen which relates to a contention not previously in controversy among the parties must also satisfy the § 2.309(c) requirements for new or amended contentions filed after the deadline in § 2.309(b)." (#6 is footnote) As discussed above in Section III.A, this Motion is timely because it is based on information that was not publically available.

III. CONSULTATION CERTIFICATION PURSUANT TO 10 C.F.R. § 2.323(B)

The undersigned agent for CRAFT hereby certifies that on November 20, 2016, I contacted counsel for the Applicant and the NRC Staff in an attempt to obtain their

consent to this motion. Counsel for both parties stated that they would oppose the motion.

IV. CONCLUSION

For the foregoing reasons, CRAFT's Motion to Reopen the Record should be granted.

Respectfully submitted,
Signed (electronically) by:

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

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|------------------------------------|---|----------------------|
| In the Matter of: |) | Docket No. 50-341-LR |
| DTE Electric Company |) | NRC-2014-0109 |
| Fermi 2 Nuclear Power Plant NPF-43 |) | |
| License Renewal Application (LRA) |) | |

**CITIZENS' RESISTANCE AT FERMI 2 (CRAFT) MOTION REQUESTING LEAVE TO
FILE A NEW CONTENTION BASED ON NEW AND EXISTING SAMA
CONSIDERATIONS OF POTASSIUM IODIDE DISTRIBUTION IN THE PRIMARY
EPZ AND SECONDARY EPZ**

INTRODUCTION

In accordance with 10 CFR Part 2.309 and the Board's Initial Scheduling Order (February 27, 2015) to govern this proceeding, *pro se* Intervenor CRAFT hereby respectfully submits this Consolidated Briefing including a Motion Requesting Leave to File a New Contention and the Substance of the New Proposed Contention. CRAFT requests the Board to Reopen Adjudication for Admission of a New Proposed Contention.

BACKGROUND

Although the Board terminated the adjudicatory proceeding for the Fermi 2 License Renewal on September 11, 2015 (ASLB Order LBP-15-25), the Board can now reopen the adjudication stage for purposes of ruling on CRAFT's motion to admit a new contention. This filing serves as a petition to intervene and request for a public hearing, under the rules of 10 CFR Part 2.309.

CRAFT meets the general requirements for standing in this proceeding, according to 10 CFR Part 2.309(c)(4).

This consolidated filing specifies how the motion satisfies the "good cause" criteria of 10 CFR Part 2.309(c)(1)(i)-(iii), including timeliness, and how the proposed contention satisfies the admissibility criteria of 10 CFR Part 2.309(f)(1)(i)-(vi). This new contention complies with 10 CFR Part 2.309(f)(2), including but not limited to the requirements in Section 2.309(c)(1)(i)-(iii) that any new contention must be submitted "in a timely fashion" based on new information. This proposed new contention should be deemed timely because CRAFT filed it within thirty (30)

days of the date when the new and material information on which it is based first became available and within the FEIS filing deadline of November 21, 2016.

In any event, CRAFT demonstrates good cause for the Board to entertain this motion to allow intervention. Reopening this proceeding will not inappropriately broaden or delay the issue of license renewal and will actually assist in developing a sounder record.

DISCUSSION

CRAFT contends that the Applicant's Fermi 2 LRA Environmental Report (ER) and SAMA analysis are materially deficient due to the alleged use of incorrect input data, thus resulting in incorrect and unreasonable conclusions about the costs versus benefits of possible mitigation alternatives, such that further analysis is called for under NEPA. NEPA's hard-look requirements are in place to ensure that environmental consequences of a proposed project "have been fairly evaluated." (*Robertson v. Methow Valley Citizens Council*, 1989).

CRAFT is directly challenging the Applicant's SAMA analysis, which is within the scope of license renewal. While it can be reasonably inferred from this proposed contention that CRAFT genuinely disputes the proclaimed adequacy of the existing Fermi 2 Emergency Preparedness Plan, CRAFT acknowledges the Commission has concluded that such arguments are outside the scope of a license renewal proceeding. The Commission handles emergency preparedness for licensed plants as an ongoing safety issue under 10 CFR Part 50 and generally does not revisit the issue as part of license renewal.

Therefore, CRAFT's new contention does not challenge the adequacy of the existing Fermi 2 Emergency Preparedness Plan; rather, CRAFT challenges alleged incorrect SAMA analysis assumptions and inputs derived from the existing Fermi 2 Emergency Preparedness Plan. Thus, CRAFT has a genuine dispute with the Applicant over a material issue of fact within the scope of license renewal.

CRAFT argues that the issue raised in this contention is material to the findings the NRC must make to support the action that is involved in the proceeding. The issue raised is inherently relevant and material to the proposed action of license renewal. This contention alleges a deficiency or error which has enormous independent health and safety significance. CRAFT contends that the Applicant's LRA and associated ER analyses have material deficiencies to an extent that could cause significant adverse impact to public health and safety. Further, CRAFT argues that an adjudicatory hearing is the only way to properly address these concerns and that license renewal, even with its own set of barriers to effective citizen participation, is the proper and appropriate time to address these material issues of public concern. Indeed, NEPA requires effective and meaningful review of environmental concerns associated with proposed federal actions, and the Applicant's ER fails to adequately evaluate such concerns.

Within the thirty (30) days immediately preceding the filing of this new proposed contention, new and materially different information has come to light and all within the FEIS filing deadline of November 21, 2016. Such new information upon which this filing is based was not previously available to CRAFT, and such information is materially different from information previously available to CRAFT.

CRAFT's staff recently granted an in-person meeting with Monroe County Emergency Management Division Director Mark Hammond on October 24, 2016. Mr. Hammond substantiated that certain potential assumptions about the Fermi 2 Emergency Preparedness Plan pertaining to potassium iodide (KI) distribution are inaccurate. CRAFT staff contacted Michigan Department of Community Health who indicated that actual distribution of KI to persons living in the Emergency Evacuation Zone (EPZ) although now reported as 15% in 2012 was more accurately described as 10%-15%. Substantiation of Vouchers returned indicates 5.2%. There have been no follow up reports as had been recommended. Data collected at the Michigan Department of Community Health relies on returned vouchers and has not been kept current.

After further investigation, CRAFT has discovered that the human population residing within the 10-mile Fermi EPZ is mostly unprepared in the event of a severe accident, specifically regarding the existing potassium iodide (KI) distribution program. To the extent that the Applicant's SAMA analysis relies on the input assumption that the KI distribution program is largely effective and adequately protective of public health, CRAFT contends that the Applicant's SAMA analysis errs by significantly underestimating the economic costs and consequences of a severe accident. Importantly, this contention is not necessarily a challenge to the MACCS2 code's embedded modeling or methodology but rather an assertion that the consequences analysis provided by the Applicant may be wholly unreasonable and knowingly disingenuous. To the extent that the Applicant has incorporated such flawed and erroneous assumptions into the Fermi 2 SAMA analysis, the Applicant's analysis is similarly erroneous and deficient.

CRAFT takes issue with both the NRC and the State of Michigan over the development and implementation of the KI distribution program intended to cover the area surrounding the Fermi 2 plant, CRAFT's genuine material dispute with the Applicant specifically regarding its SAMA analysis serves as the sole basis for this proposed contention. That said, CRAFT submits the following evidence, referencing specific source documents on which CRAFT intends to rely for support to dispute the Applicant's ER.

The Michigan Department of Community Health (MDCH) now estimates that KI voucher use among Fermi EPZ residences is only around 5.2%. According to the 2010 census, more than 94,000 individuals were estimated to be living in residences either fully or partially located within the 10-mile Fermi EPZ.

Following the initial KI voucher mailing upon the inception of the state's KI distribution program, the MDCH conducted an evaluation to assess the program's effectiveness and

acceptability by the public. * The study authors used data from redeemed KI vouchers to create voucher user and voucher non-user databases:

| <u>EPZ Residences</u> | <u>Vouchers Redeemed</u> | <u>Coverage</u> |
|-----------------------|--------------------------|-----------------|
| Fermi 42,332 | 2,186 | 5.2% |

The original study results and follow-up assessments are clear and unequivocal; the KI distribution program serving the Fermi EPZ residents is a disaster and a scandal to the extent that agencies knowingly give false public assurances about family and community readiness. The study concluded that “different” and “improved communication and delivery strategies are needed ... to increase nuclear power plant emergency preparedness and facilitate awareness of emergency protocols....” Indeed, particularly for the sake of children, who are disproportionately at risk from exposure to Iodine-131, the American Thyroid Association (ATA) recommends an international best practices program based on wide pre-distribution and free direct delivery of KI tablets rather than an inferior system based on redeemable KI vouchers.

* Laura R. Zwolinski, MPH; Martha Stanbury, MSPH; Susan Manente, MA, “Nuclear Power Plant Emergency Preparedness: Results from an Evaluation of Michigan’s Potassium Iodide Distribution Program,” *Disaster Medicine and Public Health Preparedness*, 2012, 6:263-269.

More evidence abounds below, demonstrating with further specificity that the Applicant’s alleged input assumptions pertaining to KI coverage in the Fermi EPZ are significantly flawed, yielding an unreasonable SAMA analysis. CRAFT contends there is genuine plausibility that the Applicant’s use of more appropriate and realistic inputs pertaining to KI coverage in the Fermi EPZ may change the cost-benefit conclusions for the SAMA candidates evaluated. Therefore, “good cause” would be served to further refine the Fermi 2 SAMA analysis, the goal of which is to identify cost-effective supplemental safety enhancements at the license renewal stage.

Potassium iodide (KI) is highly recommended by the world’s most respected medical authorities as an effective prophylactic public health supplement for use as an adjunct to a robust emergency preparedness plan for nuclear power plant communities. It is well established that young children and females are disproportionately vulnerable to radiation exposures, and the global history of nuclear power plant accidents bears that out. Therefore, CRAFT is confident that calculations of severe accident consequences are highly sensitive to the proper and due consideration of an affected community’s KI distribution program. Likewise, fundamental changes are warranted for any SAMA analysis which fails to incorporate inputs and methodologies pertaining to KI coverage.

FEMA Report (2014 Biennial Emergency Exercises for Fermi 2)
KI-related issues identified:

The FEMA Report contains no apparent reference to having KI available for members of the public residing within the 10-mile Fermi EPZ;

There is no indication that FEMA evaluated whether individuals other than emergency first responders receive KI. Oddly, Monroe County Ambulance staff members were not issued KI as County Emergency Workers;

In Wayne County, within the 50-mile ingestion zone, KI was neither observed nor mentioned by either the hospital staff or controllers;

In Monroe County, FEMA noted that bus drivers may not complete the evacuations of schools within the 10-mile EPZ before the radiological release occurs from the plant. The report conveyed the agency's expectation that plans be revised to ensure that KI be provided to bus drivers for this contingency. However, there is no mention of having any KI protection for the children on the buses or for those children who would be waiting to be transported;

FEMA observed that it was "an underlying assumption that all risk schools will be evacuated prior to any radiological release and declaration of a General Emergency." According to FEMA, under the Monroe Public School District's Radiological Emergency Response Plan, "the possibility of a GE (general emergency) occurring in less than five to seven hours does not appear to have been considered."

CRAFT argues that the KI distribution program is factored and accounted for within the Applicant's Fermi 2 SAMA analysis and that the data input assumes KI coverage is widespread and very effective within the 10-mile Fermi EPZ. CRAFT requests the Applicant reveal all codes and methodological models for the sake of transparency and to be able to substantiate the adequacy or the inadequacy of their assumptions on which the SAMA analysis relies.

This year presents unprecedentedly new and materially different circumstances for various human population groups residing within the international 10-mile Fermi EPZ. Due to new regulations, currently being implemented in Canada by the CNSC, a remarkable situation of unequal KI protection is commencing for certain affected U.S. persons compared to their Canadian counterparts residing within the international 10-mile Fermi EPZ. The result of this societal disparity is an environmental injustice. The U.S. NRC must be in the vanguard by advocating international public health by protecting our citizens from radiation exposure and not in the rearguard. The moral and legal responsibility of the NRC to protect its own citizens from radiation must be paramount. CRAFT's new and material dispute with the Applicant extends to the environmental justice implications that a proper ER SAMA analysis would surely expose in a dramatic and undeniable fashion; a "good cause" for further review, indeed.

CONCLUSION

For the reasons set forth above, CRAFT requests that the ASLB Board reopen adjudication for the Fermi 2 License Renewal proceeding in order to rule on *pro se* Intervenor CRAFT's motion for admission of a new proposed contention. This new contention is timely and CRAFT has demonstrated good cause to allow this intervention. The reopening of this proceeding will not inappropriately broaden or delay the issue of license renewal and will actually assist in developing a sounder record. This contention can easily and readily be mitigated through actual physical distribution of potassium iodide (KI) into citizens' homes within the Primary EPZ and the Secondary EPZ.

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Secretary of the Commission**

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| In the Matter of |) | Docket No. 50-341 |
| DTE Electric Company |) | November 21, 2016 |
| (Fermi Nuclear Power Plant, Unit 2) |) | |
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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing “CRAFT’S MOTION TO REOPEN THE RECORD OF LICENSE RENEWAL PROCEEDING FOR FERMI UNIT 2 NUCLEAR POWER PLANT” were served by me upon the parties to this proceeding via deposit into the NRC’s Electronic Information Exchange system this 21st day of November, 2016. This document is also being submitted as matter of courtesy to email addresses of NRC and DTE Attorneys and to the Hearing Docket Secretary

Respectfully submitted,

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