UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	Docket No. 50-341
DTE Electric Company	)	NRC-2014-0109
Fermi 2 Nuclear Reactor License NPF-43		
Extension Application	)	

COMBINED REPLY OF CITIZENS' RESISTANCE AT FERMI 2 (CRAFT) TO NRC STAFF AND DTE ELECTRIC CO. ANSWERS TO CRAFT'S PETITION FOR LEAVE TO INTERVENE AND REQUEST FOR A PUBLIC HEARING

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19 September 2014

Submitted by Jessie Pauline Collins on behalf of CRAFT, herself, and the 50 affected people who signed affidavits objecting to the 20-year extension of the Fermi 2 nuclear reactor's operating license.

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INTRODUCTION

On 18 August 2014, Citizens' Resistance At Fermi Two (hereafter, CRAFT) filed a Petition for Leave to Intervene and Request for a Public Hearing upon DTE Electric Company's (hereafter, DTE) Request of 20-year License Extension for the Enrico Fermi 2 nuclear reactor. CRAFT is a grassroots organization that often feels doomed by a system that seeks to unnecessarily ruin life on this planet for money, and to do so in secrecy; therefore we seek a public hearing to shed light on this most important issue of extending Fermi 2's license.

Now comes Citizens' Resistance At Fermi 2, and members (hereafter, CRAFT) to make their Combined Reply to the NRC Staff Answer and Applicant's Answer to their Petition for Leave to Intervene and Request for a Public Hearing. This combined reply will differentiate between replies by referring to comments as "Staff Answer" or "DTE (or Applicant) Answer".

On 12 September 2014, both the NRC Staff and Counsel for DTE filed their Answers to the CRAFT Petition. Both recommending denying CRAFT a public hearing using among other reasons, circular logic, i.e., if the reactor is running, therefore it must be safe because the NRC requires it to be safe See DTE Answer to this issue, p.5,

> "[CBL is] a term of art comprehending the various Commission requirements applicable to a specific plant that are in effect at the time of the license renewal application … The [CLB] represents an "evolving set of requirements and commitments for a specific plant that are modified as necessary over the life of a plant to ensure continuation of an adequate level of safety." 60 Fed. Reg. at 22,473.

. Nuclear produced power is an outdated and dangerous technology and must be replaced by sustainable energy sources. The risks of continuing to run an aged reactor are not worth the benefits. DTE then goes on to on to state that, "Accordingly, ongoing implementation of programs and regulatory oversight are presumed." CRAFT holds that DTE is making a large

assumption that NRC oversight could possible prevent an accident, by an act of God or human error. Therefore they wish to dismiss CRAFT's safety concerns by stating, "The NRC's license renewal regulations thus deliberately reflect the distinction between aging management issues to be addressed in license renewal and operation issues addressed by the ongoing regulatory process (e.g., inspection and oversight)." p.7. Our valid concerns and contentions cannot be dismissed for the sake of the sanity and the security of future generations. There are moral issues involved here and they supersede financial issues.

Reply to NRC's Objection to Standing of Individual Petitioners

While NRC allowed Standing for the 24 individuals with proximity-bases standing, we disagree with the decision that 26 tribal members with treaty rights at the Fermi site were not allowed standing. Many of those disavowed are CRAFT members. A point of clarification: three of the CRAFT members with Proximity-Based standing were incorrectly identified as Tim Greenhoof (Greenhoot is the correct spelling); David H. Schonoberger (Schonberger is the correct spelling); and Craig Toeffer (Toepfer is the correct spelling).

I only point out the incorrect spelling of names to show that NRC Staff is capable of making mistakes, as well as DTE Counsel when they failed to add an end quote mark on footnote #34; and again a mistake on footnote #41 (p. 11) when stated "the Pilgrim SAMA analysis inadequately considering (should be considered) filtered vents." These minute mistake show neither Staff, nor Applicant is above human error; and neither are the Fermi 2 workers, whose tasks are far more dangerous than a missing quotation mark. Knowing an NRC Inspector is on-site cannot prevent human error.

CRAFT disputes the NRC Staff's rejection of standing for all 26 tribal members mentioned above. By contemporaneous judicial concepts of standing, all interested persons seeking to intervene have established that: "(1) they have suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interests arguably protected by that governing statues (e.g., the AEA, 42 U.S.C. Part 2011 et seq., NEPA, 42 U.S.C. Part 4321 et seq.); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision." (Staff Answer, p. 6; see *Yankee Atomic Electric Co.,* 1996, and *Southern Nuclear Operating Co.,* 2010).

Therefore, CRAFT and the NRC Staff hold opposite evaluations of the significance and validity of the substantive content put forth by the declined affidavits of affected persons. CRAFT contends that the legal threshold is met and exceeded for the purpose of determining standing eligibility for the interested parties seeking ASLB recognition for this proceeding. Therefore, let the record show that those with approved standing are: James Aquash; Russ Blackbird; Carla Collins; Jessie Pauline Collins; Keith Dayson; James DeBussey; Gloria F. Eggleston; Kenneth Fink; Sally C. Fink; Margaret M. Gistinger; Eva Kennedy; Esther A. Marcus; Yvonne Moore; Jacob Roark; David H. Schonberger; Leland H. Scott; James Sherman; Jennifer Stowell; Nina Stowell; Tom Stowell; Craig Toeffer; and Thomas R. Zerafa.

Let the record also show that those rejected for Standing were: Phyllis Anderson, Eric Angell, Nicole Angell, Derek J. Bailey, Calvin Ballew, Jefferson Ballew IV, Madalene Big Bear, Prettyrock Big Bear, Madalene C. Big Bear, Christina Buschlen, Joel Buschlen, Jennifer Cottrelle, George Elmer, Mandy Elmer, Leticia Flores, Teresa Johnson, Brian Loney, Robert C. Memberto, Judith A. Nedeau, Michelle Reyna, Paul Shananaquet, Georgianna Walkington, Emily Warren, Tone Winchester, Monee Zapata, Onyleen Zapata, and Gayle Bachert.

DISCUSSION

CRAFT has proposed fourteen (14) admissible contentions and hereby disputes any and all assertions to the contrary from the Applicant and the NRC Staff. Herein, CRAFT restates an outline of the ***Preface*** of the Petition for application to all contentions in order to counter the predictable arguments offered in the Applicant's and NRC Staff's Answers. The Petitioner notes, as follows, that the fundamental thesis of the ***Preface*** has not been refuted.

By any independent and reasonable standard, the issues raised in each of these contentions are inherently relevant and material to this license renewal proceeding, and the deficiencies highlighted by the Petitioner have enormous impact on the public interest, by definition. Furthermore, an adjudicatory hearing is the only way to properly, timely and effectively address the Petitioner's concerns. First, a section 2.206 petition is granted very rarely to an extent that implies agency bias and misconduct. Even if granted, the hearing rights available to the public are inadequate, and NRC rules preclude appeal of 2.206 decisions. Second, a 10 CFR 2.802 rulemaking petition does not provide a realistic, credible, timely, available and accessible way for the public to challenge a license renewal application, so, therefore, for many reasons, any suggestion or reference to this avenue is an attempt to evade AEA and NEPA requirements for meaningful review of legitimate safety and environmental concerns.

REPLY IN SUPPORT OF CONTENTION 1: WIND ENERGY IS A VIABLE ALTERNATIVE: DTE's Environmental Report is unacceptably deficient because it omits an adequate analysis of the replacement of Fermi 2's power generating capabilities by sustainable sources, such as wind.

Michigan's locally available resources include ample opportunities to safely generate renewable energy. Michigan already has installed wind energy resources with combined capacity of at least 1,132.2 on line, with 1,470.9 under construction, according to the Michigan Public Service Commission: http://www.michigan.gov/documents/mpsc/wind_map_407661_7.pdf

According to the American Wind Energy Association, Michigan ranks 16th in the Nation for installed wind energy production at 1,163 Mw of capacity online and more projects in the works. http://www.awea.org/Resources/state.aspx?ItemNumber=5216

In short, with 680 turbines in 21 wind projects already completed in state, Wind Power capacity already replaces Fermi 2's output, with more on the way. Given the relative capacity factors for wind versus Nuclear, Michigan wind generation is projected to out produce Fermi 2 before the current license expires, rendering license extension unnecessary to maintain baseload power.

Wind Power has a combination of clean generation, reliability and low cost that makes financial sense, as is demonstrated by the following projects, among many others:

200-MW wind project in Minn. to be bought by Algonquin Power

Canadian developer Algonquin Power & Utilities is set to purchase the 200-megawatt Odell wind project in Minnesota. The 100-turbine project is under construction and is expected to be commissioned in the fourth quarter of next year. North American Windpower online (9/5) http://www.nawindpower.com/e107_plugins/content/content.php?content.13367

Algonquin Achires 200 MW Wind Project In Minnesota

By NA Windpower Sept 5, 2014

Canada-based Algonquin Power & Utilities Corp. (APUC) has **announced** an agreement to acquire a 200 MW wind project in Minnesota from Geronimo Energy.

The Odell project is located on approximately 23,000 acres of land in Cottonwood,

and Watonwan counties. The project will feature 100 Vestas V110-2.0 turbines a ar power purchase agreement with a subsidiary of Xcel Energy. Construction costs are estimated to be approximately $313.5 million, and the wind farm is scheduled to be online in the fourth quarter of 2015. APUC also notes that the Odell project qualifies for federal production tax credits.

Concurrently, APUC announced that in connection with the Odell project, Emera Inc. has agreed to subscribe to a private placement of subscription receipts convertible into 7,865,170 APUC common shares, subject to regulatory approval, for total proceeds of approximately $70 million. APUC says proceeds of the subscription receipts will be used to partially fund the acquisition and completion of Odell.

"There is significant demand for renewable energy in the U.S., and the investment in Odell is one of several near-term opportunities that we see for accretive growth. The project further strengthens and diversifies our renewable energy generation portfolio with a 20-year power purchase agreement and a strong wind regime in a new geographic region," says APUC CEO Ian Robertson. "We are also pleased with Emera's continued financial and strategic support of APUC through a private placement of subscription receipts that underpin our growth initiatives."

New Reports Highlight Major Potential in Offshore Wind Energy

The Energy Department announced a new reportshowing steady progress for the U.S. offshore wind energy industry over the past year. The report highlights 14 projects in advanced stages of development, together representing nearly 4,900 megawatts (MW) of potential offshore wind energy capacity for the United States....

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http://www.nacleanenergy.com/articles/18558/new-reports-highlight-major-potential-in-offshore-wind-energy

New Reports Highlight Major Potential in Offshore Wind Energy

The Energy Department announced a new report showing steady progress for the U.S. offshore wind energy industry over the past year. The report highlights 14 projects in advanced stages of development, together representing nearly 4,900 megawatts (MW) of potential offshore wind energy capacity for the United States. Further, this year's report highlights global trends toward building offshore turbines in deeper waters using larger, more efficient turbines that increase the amount of electricity delivered to consumers.

This year's Offshore Wind Market and Economic Analysis, produced by Navigant Consulting for the Energy Department, found that there is significant potential to increase U.S. electricity capacity and create jobs through the further development of the U.S. offshore wind industry, and it also outlines policy developments that are influencing the offshore wind market.

The 14 U.S. projects examined in the report can now be considered in advanced stages of development, meaning they have either been awarded a lease, conducted site studies, or obtained a power purchase agreement. As these projects continue to advance, they will provide valuable data that will support the growth of the country's emerging offshore wind industry.

The report also finds that globally, developers continue to build offshore wind projects farther from shore in increasingly deeper waters, while increased turbine sizes and hub heights enable higher efficiency and output from turbines. Worldwide, the average capital cost for offshore wind projects completed in 2013 fell 3.7% per kilowatt-hour from 2012, with an additional decrease expected in 2014. Total project installation costs have fallen 6% since 2011.

The Energy Department today also announced the first National Offshore Wind Energy Grid Interconnection Study, prepared for the Department by the ABB Group. The study investigated the key economic and technological factors that will influence the integration of offshore wind energy onto the national grid. The findings suggest that the U.S. has sufficient offshore wind energy resources to enable installation of at least 54 gigawatts of offshore wind capacity—enough to power nearly 17 million homes—and that the appropriate transmission technologies already exist to connect this offshore wind energy to the grid.

Read these full reports, and download the Offshore Wind Market and Economic Analysis' underlying data on the Wind Program's webpage.

The Energy Department's Office of Energy Efficiency and Renewable Energy are accelerating development and deployment of energy efficiency and renewable energy technologies and market-based solutions that strengthen U.S. energy security, environmental quality, and economic vitality. Learn more about the Department's efforts to research, test, develop, and deploy innovative offshore wind energy technologies.

Department of Energy ~ Office of Energy Efficiency and Renewable Energy

http://energy.gov/eere

http://energy.gov/eere/wind/downloads/2013-distributed-wind-market-report

DOE Publishes 2013 Wind Market Reports

The U.S. Department of Energy's (DOE's) 2013 Wind Technologies Market Report provides a comprehensive overview of 2013 trends in the U.S. wind industry and wind power market. DOE's Lawrence Berkeley National Laboratory draws from a variety of data sources and covers a broad range of topics, including:

- Wind project installation trends

- Wind industry developments
- Domestic and imported content of wind turbines
- Wind technology developments and trends
- Wind project performance trends
- Wind turbine prices and installed wind project costs
- Wind power purchase agreement prices
- Comparing the price of wind energy to wholesale electricity and natural gas prices
- Integration, transmission, and policy developments
- Future outlook for the sector.

While the report documents modest industry growth in 2013, a key finding from the report is that wind energy pricing is at an all-time low. The prices offered by wind projects to utility purchasers averaged just $25 per megawatt-hour for projects negotiating contracts in 2013, spurring demand for wind energy. Wind energy now meets nearly 4.5% of the nation's electricity demand.

The full report, a presentation slide deck that summarizes the report, and an Excel workbook that contains much of the data presented in the report are available as free downloads.

According to the 2013 Distributed Wind Market Report, authored by DOE's Pacific Northwest National Laboratory, turbines used in distributed applications cumulatively produce 842 megawatts (MW), enough electricity to power 120,000 homes. In 2013, Texas, Minnesota, and Iowa retained their lead as the top three states with the most distributed wind capacity since 2003.

In addition to the financial viability of wind power, renewables generally are the one source of power that currently has consistent growth, due to an advantageous mix of long-term cost benefits and local acceptance of non-polluting generating facilities.

FERC: All added capacity in July came from renewable sources

All U.S. capacity that went online in the month of July came from renewable sources according to the Federal Energy Regulatory Commission. FERC's latest Energy Infrastructure Update found that of the new capacity commissioned last month, wind power added 379 megawatts, while solar and hydro added 21 MW and 5 MW, respectively. Renew Grid magazine online (8/20)

Renewable Energy Accounts For All New U.S. Power In July

http://www.renew-grid.com/e107_plugins/content/content.php?content.11236

by **Renew Grid** on August 20, 2014

All new U.S. electrical generating capacity put into service in July came from renewable energy sources, according to the latest **Energy Infrastructure Update** report from the Federal Energy Regulatory Commission (FERC).

Citing the FERC statistics, renewable energy advocacy group the SUN DAY Campaign says 379 MW of wind, 21 MW of solar and 5 MW of hydropower came online in the month.

For the first seven months of this year, renewables have accounted for more than half (53.8%) of the 4,758 MW of new U.S. electrical capacity that has entered service, with solar (25.8%) and wind (25.1%) each accounting for more than a quarter of the total. In addition, biomass provided 1.8%, geothermal 0.7% and hydropower 0.4%.

As for the balance, natural gas accounted for 45.9%, while a small fraction (0.3%) came from oil and "other" combined. SUN DAY notes that there has been no new electrical generating

capacity from either coal or nuclear thus far in 2014.

Renewable energy sources now account for 16.3% of total installed operating generating capacity in the U.S.: hydro - 8.57%, wind - 5.26%, biomass - 1.37%, solar - 0.75%, and geothermal steam - 0.33%.

"This is not the first time in recent years that all new electrical generating capacity for a given month has come from renewable energy sources," comments Ken Bossong, executive director of the SUN DAY Campaign. "And it is likely to become an ever more frequent occurrence in the months and years ahead."

As Renewables grow to comprise more and more of the grid mix, total demand in Michigan is in decline Demand destruction capacity is in its infancy, with opportunities for consumer and municipalities alike to realize substantial savings of money and reductions of environmental impacts, as is detailed in this study of energy efficiency lighting adoption in Ann Arbor:

http://annarborchronicle.com/2014/06/16/ann-arbor-oks-led-streetlight-conversion/

Ann Arbor OKs LED Streetlight Conversion

BY CHRONICLE STAFF JUNE 16, 2014 AT 11 PM

A purchase agreement with DTE – to convert 223 mercury-vapor cobrahead streetlights to LED technology – has been approved by the Ann Arbor city council. The up-front cost of the conversion will be $69,555 – but that amount will be reduced to $55,060 after rebates.

The annual electric bill from DTE for the 223 streetlights is currently $45,128. After conversion, the projected annual cost will be $30,910. The savings would result in about a 3.1-

year payback period on the net cost of $55,060. City council action came at its June 16, 2014 meeting.

The city is billed for 7,431 streetlights – of which 5,216 are DTE-owned. Of the 2,215 city-owned lights, 1,923 have LED fixtures. None of the streetlights to be converted under the agreement ratified on June 16 are in the Ann Arbor Downtown Development Authority tax capture district. Streetlights in the DDA district were part of a similar proposal considered by the DDA board at its May 7, 2014 meeting, but postponed by the board at that meeting until June 4. By the time of the June 4 meeting, however, a decision had already been made that the DDA would not be funding an LED conversion this year. [DTE's program has an annual cycle, but is not necessarily offered every year.] If the DDA board had approved funding for converting lights in the DDA district, it would have affected 212 non-LED streetlights.

Streetlight locations are mapped in the joint Washtenaw County and city of Ann Arbor GIS system. Data available by clicking on icons includes ownership as well as the lighting technology used. This one is a high pressure sodium light operating at 400 watts.

The project the DDA declined to fund this year would have included converting 100 watt MV (mercury vapor), 175 watt MV and 100 watt HPS (high pressure sodium) lights to 65 watt LED (light emitting diode). Further, 400 watt MV and 250 watt HPS lights would have been converted to 135 watt LED. Finally, 1000 watt MV and 400 watt HPS lights would have been converted to 280 watt LED. Currently, the city pays DTE $72,585 a year for the energy used by the 212 downtown streetlights. After conversion, the annual cost for the 212 lights would be expected to drop to $51,895, for an annual savings of $20,690.

In deliberations at the DDA board's May 7 meeting, DDA board member Roger Hewitt opposed the grant, because the savings that would be realized accrues to the city of Ann Arbor, which pays the energy bills for the lights. Hewitt noted that the relationship between the city and the DDA includes a number of fund transfers to the city. Even though the amount is not huge, Hewitt said, the expenditure of several small amounts could eventually impair the DDA's ability to pay for major infrastructure improvements.

Other board members joined Hewitt in their concerns, questioning what projects might be sacrificed if the DDA paid for the LED conversion. Concern was also expressed over the possibility that the result of a streetscape framework planning effort could result in a decision to replace all cobra headlights in the downtown area with pedestrian-scale lampposts. And that would mean that the new LED fixtures would be used for only a short while.

For deliberations at the council's June 16 meeting, see The Chronicle's live updates filed during the meeting. This brief was filed from the city council's chambers on the second floor of city hall, located at 301 E. Huron.

CRAFT asserts, as is detailed in the analysis below, that renewables, wind in particular, can easily be integrated into the existing grid, with financial, environmental and employment benefits for the local community making the investment.

America's Largest Grid Operator: Massive Renewables Push Won't Be a Problem

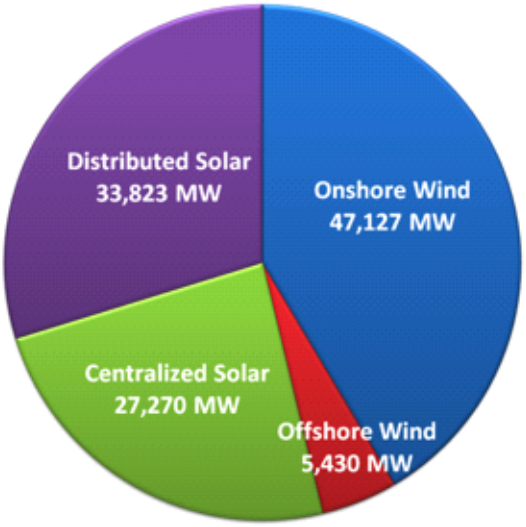
John Moore March 17, 2014

PJM Interconnection, the nation's largest power transmission grid organization, announced recently that wind and solar power could generate about 30 percent of PJM's total electricity for its territory covering the Mid-Atlantic region and part of the Midwest by 2026 without "any significant issues."

That's engineer-speak for "no big deal." Even better, we would see more clean power at less cost and with far less pollution than our current mix of coal and natural gas power plants.

PJM's new renewables integration report, prepared by General Electric, is required reading for anyone who questions the ability of the electric grid to handle large amounts of wind, solar and other renewable energy. GE estimates that about 113,000 megawatts of installed wind and solar power resources (including distributed/generation), could produce about 30 percent of the region's total energy. That's enough energy to power 23.5 million homes annually.

Here's the breakdown of the resource mix in one of the scenarios studied in the report:



Significant benefits from more clean energy

The report estimates that 30 percent penetration levels of wind and solar power in PJM territory would bring the following benefits:

- 40 percent less carbon pollution than "business as usual"
- Lower average energy prices across PJM's footprint, because wind and solar would avoid $15.6 billion in coal and natural gas fuel costs
- Very little additional power (only 1500 megawatts) needed to support the minute-to-minute variability of the renewable power
- No additional operating (known as "spinning") reserves needed for backup power
- 44 percent less gas-fired generation and 21 percent less coal-fired generation, which also reduces the amount of carbon pollution emitted into the atmosphere

The benefits derive primarily from several facts: 1) solar and wind power have zero fuel cost, which makes up most of the price of energy; 2) these resources are now commercially available

and competitive with other power; 3) they produce zero carbon and other pollution; and 4) PJM's large size across fourteen states significantly reduces the magnitude of weather-caused variations in power output that can occur during the day and night.

What grid changes may be necessary?

Getting all of this additional clean energy will require more transmission lines, which PJM's study estimated would cost $8 billion. That is still far less the $15.6 billion in energy savings. But even that's probably an exaggeration, since PJM's study looked only at renewable energy expansion inside PJM. It didn't consider, for example, the savings from importing some of the wind power from the Dakotas, Minnesota, Iowa, or other parts of the wind-rich Midwest and Great Plains. When you factor in those possibilities, the total transmission cost of achieving the 30 percent renewables integration could be lower than PJM's predictions.

The study also recommends several relatively modest steps that PJM can take to successfully integrate these resources into the system. They include changes in the way PJM operates its energy markets and dispatches power on a minute-to-minute basis, taking a more detailed look at reserve requirements, and potentially improving the "flexibility" of baseload plants to better integrate them with renewable energy resources.

Looking to the future and taking next steps

This study gives consumers, states, utilities, and others some things to think about in several areas.

First, it's clear that the grid can handle high levels of renewable power without compromising reliability. Of course, we already know this because the Midwest and Texas grids have seen wind energy constitute a significant portion of the power on the grid at a given time. The PJM study affirms that the grid can handle much higher power levels. It also provides a

stepping stone to evaluating the impacts and savings of even more renewable power on the grid, which will be a top priority for states looking to satisfy the U.S. Environmental Protection Agency's upcoming carbon pollution rules for existing power plants.

Second, as conventional power sources come to constitute less of the total energy production mix, power markets will need to evolve to encourage the development of complementary conventional resources. This is a critical point. PJM's study shows that existing coal and gas resources are going to suffer revenue losses; indeed, PJM even suggested that it might be necessary to consider raising energy prices to compensate for the lost revenue. No, no, no.

A better approach is to look into redesigning PJM's existing long-term power supply market (called a "forward capacity market") so that it, in combination with reasonable state power preferences, assures the right supply of conventional power sources are available to support renewable power.

Third, PJM's study was done in a relative vacuum; it didn't consider how several grid regions, working together, could manage significantly more clean power. PJM and the other grid operators across the country need to work in a more cooperative manner to conduct the studies and other work necessary to show states across the country that power-sharing saves even more money than for each region to plan for its own resources. FERC has encouraged this cooperation by issuing interregional coordination requirements in its landmark Order 1000 (more about that here), but the regions can do more -- and they don't need to wait for further instructions from Washington.

***

John Moore is a senior attorney with the Natural Resources Defense Council. This piece was originally published on NRDC's Switchboard blog and was reprinted with permission.

In conclusion, Demand destruction is advancing quickly, and the potential is demonstrably under addressed. Michigan's renewable generating capacity currently online is substantial, exceeding the capacity of Fermi 2, with the overall potential vastly undeveloped. Energy efficiency upgrades are proven reduce consumer costs substantially, and further implementation will greatly reduce the demand for the future operation of Fermi 2.

As we consider what type of energy future we want to invest in, we should consider the words of local energy expert, Dr. Rowe, Ph.D., "Renewable energies are the only forms of energy generation that pay for themselves and then provide free energy while reducing pollution and improving both human and ecosystem health," Rowe said.

Her credentials:

Debra Rowe, Ph.D.

President

U.S. Partnership for Education for Sustainable Development

www.uspartnership.org

Advisor

Higher Education Associations Sustainability Consortium

www.aashe.org/heasc

Founder and Facilitator

Disciplinary Associations Network for Sustainability

www.aashe.org/dans

Sustainability Improves Student Learning Project

http://serc.carleton.edu/sisl

Convener

Detroit Area Green Sector Skills Alliance

Detroit Green Skills Alliance

Senior Advisor

Association for the Advancement of Sustainability in Higher Education

www.aashe.org

Senior Fellow

Second Nature

www.secondnature.org

Chair, Technical Advisory Committee

Sustainability Education and Economic Development Resource Center

www.theseedcenter.org

American Association of Community Colleges

Faculty, Sustainable Energies and Behavioral Sciences

Oakland Community College

www.oaklandcc.edu/est

REPLY IN SUPPORT OF CONTENTION 2: WALPOLE ISLAND FIRST NATIONS (hereafter, WIFN) WERE EXCLUDED FROM PROCEEDINGS.

CRAFT sets forth that Walpole Island First Nations (hereafter, WIFN) is within the 50-mile evacuation zone, and therefore should have been notified as a sovereign government whose low-income, minority people would be devastated by an accident at the Fermi 2 reactor. These people are on an island, for goodness sake. NRC Staff rejects the need to notify them by quoting

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 565, & no. 60 (2005); *California v. Federal Energy Regulatory Commission,* 329 F .3d 700,707 (9th Cir. 2003) "Publication in the *Federal Register* is legally sufficient notice to all interested or affected persons regardless of actual knowledge or hardship resulting from ignorance, except those who are legally entitled to personal notice." (p.21)

How cavalier is that? Does Staff assume all the world reads the Federal Register cover to cover daily to be cognizant of what the colonists' plan to do next? We put forth the NRC cannot exclude the WIFN, who not only represents their members on the island and are in Proximity of the Fermi site, but they also many others living in the United States. Two of the individuals allowed Standing by the Staff were James Aquash, a WIFN tribal member, and Russ Blackbird, a WIFN tribal member whose resident address is the reservation, within the 50 mile evacuation zone. Why then, has Staff recommended the decline the tribal government Intervenor status?

Staff also goes on to state, "As the Licensing Board in the Fermi 3 COL proceeding recently explained in response to a contention submitted on behalf of WIFN, § 51.28(a)(5) is limited by the fact that the NRC's NEPA regulations "do not apply to … any environmental effects which NRC's domestic licensing and related regulatory functions may have upon the environment of foreign nations." *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-12-12, 75 NRC 742, 754-55 (2012). CRAFT asserts that Staff does not understand that WIFN is not a "foreign country", but rather a sovereign nation with government-to-government status with the United States government.

Staff and DTE state CRAFT has taken no issuance with DTE's ER. We take issue with their statement (ER, p.4-60) that "There are no location-dependent disproportionate impacts affecting minority and low-income populations. (NRC 2013c, Section 5.5.2.5) …"Thus, no

disproportionate impact on minority or low-income populations would occur from the proposed action of renewing the Fermi 2 OL." Environmental Justice is an Applicable Category 2 Issue to Fermi 2 and its proposed continuing operations, and that seems to be the issue of law validating this contention.

Since 1794, Aboriginal Peoples have been guaranteed the right to trade and travel between the United States and Canada, which was then a territory of Great Britain. This right is recognized in Article III of the Jay Treaty, also known as the Treaty of Amity, Commerce and Navigation of 1794 and subsequent laws that stem from the Jay Treaty. The NRC cannot no more exclude WIFN from these proceedings than the U.S. Government can exclude WIFN members from entry into the United States, or make them register for the military, or obtain a green card (Form I-551) to work. Neither does the United States government have the right to deport WIFN members. They are eligible for American benefits such as Medicaid, Supplemental Security Income (SSI), Medicare, Unemployment Benefits and other public services.

On February 11, 1994, President Bill Clinton signed into law Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." In this Order, the law requires in Section 2-2, "Each Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin."

Staff Answers (p.23) addresses their failure to notify WIFN, "Therefore, the NRC was not required to specifically invite WIFN or other Canadian First Nations to participate in the Fermi 2 license renewal scoping process." CRAFT holds that Staff very well may have violated Executive Order 12898, Sec. 5-5(c) "Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public."

DTE asserts the same argument (p.28, footnote 109), and CRAFT responds to that by stating that Michigan also has an Environmental Justice law, Executive Directive No. 2007 – 23 which DTE could also be violating. To be on the safe side, CRAFT requests a public hearing to sort this out.

Please find in support of CRAFT Contention One, a letter from the WIFN Chief .

REPLY IN SUPPORT OF CONTENTION 3: NRC Cannot Legally Extend Reactor Licenses

The Applicant's Answer to *CRAFT Contention 3* entirely fails to distinguish between two fundamentally independent requests existing within CRAFT's Petition to Intervene and Request for Hearing. CRAFT put forth the following two requests: (1) *Implicitly*, CRAFT requests the Board to recommend tabling and dismissal of the Fermi, Unit 2 LRA due to the Commission's moratorium on licensing and relicensing actions as part of the Waste Confidence (Continued Storage) rulemaking process; (2) *Explicitly*, CRAFT requests the Board to conduct a public hearing and issue a recommendation to the Commission to extend the moratorium until all legal

appeals through the federal courts have been exhausted or resolved, pertaining to the expected, now imminent, appeal of the 2014 Waste Confidence (Continued Storage) Rule by the same coalition of U.S. States and public interest groups and organizations which successfully appealed the previous 2010 version of the Waste Confidence Rule. (*New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012).

The U.S. NRC Commission's Continued Storage Rule of August 26, 2014 and associated but independent lifting of the moratorium on licensing and relicensing actions affected by the Waste Confidence (Continued Storage) Rule in no way alters CRAFT's explicit request above and in no way invalidates the principle put forth. Indeed, CRAFT maintains that as a matter of good faith, the NRC Commission could and should defer to the multiple standing intervening parties who together represent literally millions of U.S. persons, American citizens and residents alike, in this unresolved appellate matter, notwithstanding the NRC Staff's faulty assertion to the Board that the final revised Waste Confidence (Continued Storage) Rule of 2014 "and supporting analyses are not subject to challenge [by CRAFT] in this proceeding." (NRC Staff's Answer, p. 29).

Thus, for the sake of the public interest, Petitioner CRAFT continues to stand by this contention exactly as originally written and submitted, and CRAFT maintains that the Applicant's Answer has failed to refute the basis for the explicit request put forth in this contention.

Additionally, CRAFT disputes the Applicant's characterization of CRAFT's complaints and criticisms of the Waste Confidence DGEIS and Preparers as "generic complaints" and "collateral attacks." (Applicant's Answer, p. 29). The Applicant provides no factual basis for its subjective opinion. As a matter of fact, CRAFT's contention provides a substantial supporting

basis for its serious charges. CRAFT thoroughly considered its own analysis before filing a public submission. CRAFT maintains that the concerns expressed in the contention are fundamental to site-specific determinations pertaining to the review of the Fermi, Unit 2 LRA. Likewise, CRAFT objects to the NRC Staff's characterization of CRAFT's complaints and criticisms of the Waste Confidence DGEIS and Preparers. The Staff uses apparent *code words* to assert and imply that some of CRAFT's statements in the text of the contention are impertinent or spurious. The Staff refers to CRAFT's complaints as extraneous "attacks" and directly implies that "CRAFT takes aim at" the qualifications of such supposed targets in a personal way. (NRC Staff's Answer, p. 29). Apparently, the Staff seeks to invalidate the nature of CRAFT's thoughtful analysis by using a choice of words or phrases suggesting *ad hominem* remarks by CRAFT. Certainly, the Staff's Counsel must have carefully researched CRAFT's allegations in order to look for any possible way to refute CRAFT's complaints and criticisms based on the facts.

The Board should take note that, ultimately, the Staff found no credible way to dispute the accuracy of CRAFT's statements in order to redeem the alleged credibility deficiencies of the rulemaking process; rather, the Staff could only proffer the bare assertion that "[w]hile CRAFT might not like the credentials of the Staff who prepared the analyses in the Waste Confidence DGEIS, these analyses have been finalized . . . and adopted by the Commission . . . ." (*Id.*). CRAFT interprets the Staff's short and exasperated remark as a major concession to the Petitioner, and the Board should take note of that.

Furthermore, the U.S. Supreme Court has clarified that NEPA requires "the record" to show convincingly "that the [federal] agency has made a *reasoned decision* . . ." that can hold up to the rigorous scrutiny of an "arbitrary and capricious" test and serious judicial review.

(Emphasis added); (cited below). The Court determined that the agency's "reasoned decision" may "rely on the reasonable opinions of its own *qualified* experts . . . ." (Emphasis added); (cited below). So, while the Court struck a balance between granting automatic deference versus requiring strong judicial review and oversight of agency decisions, there is no doubt that the Court fully expected the agency's experts to be eminently *qualified* to competently render a reasoned decision on behalf of the agency. (*Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989)); (Farber, Daniel A., "Confronting Uncertainty under NEPA," UC Berkeley Public Law Research Paper No. 1403723, May 2009). Consequently, CRAFT stands by its analysis proffered above.

The NRC Staff's Answer is problematic for the following reasons. First, the Staff mishandles its regulatory role. In discussing CRAFT's seeking of regulatory actions by the NRC, the Staff states that, on August 26, 2014, "the Commission effectively rejected" CRAFT's explicit request for a Board recommendation to extend the licensing and relicensing moratorium while noting that "the Commission recognized the public's interest in this matter . . . " (Staff's Answer, p. 30). Certainly, the Waste Confidence (Continued Storage) rulemaking proceeding was open for public comment and participation, but CRAFT disputes that any of the above historical facts preclude the Board from issuing CRAFT's requested recommendation to the Commission, even if such a recommendation from the Board *may* have been effectively pre-empted or rejected. It is not for the Staff to make that determination. Rather, that administrative role is exclusively the domain of the Board. CRAFT asserts that the Staff is out-of-line and highly presumptuous to attempt to predict the outcome of a Board deliberation and to attempt to play the role of both Staff and ASLB for the purpose of rendering a judgment in this

matter. Indeed, CRAFT *contends* that the Staff's brazen overreach is outrageous and should be appropriately admonished by the Board forthrightly.

The NRC Staff's Answer also notes that CRAFT seeks NRC regulatory action with respect to requiring the expedited transfer of spent nuclear fuel from active wet storage (pools) to passively-safer dry storage systems and that CRAFT *contends* that, by law, such action should be a *prerequisite* for approval of the Fermi, Unit 2 LRA by the Board, the ACRS and the Commission. The Staff argues that the Commission has recently denied a motion to suspend reactor licensing decisions pending resolution of a petition for rulemaking regarding related spent fuel storage issues. CRAFT argues that the Commission's denial only pertained to a generic, fleet wide petition, not to a site-specific request, notably Fermi, Unit 2. It appears that the Staff is attempting to invalidate CRAFT's concern by incorrectly applying a generic ruling to a site-specific determination. Indeed, CRAFT argues that the Petition has met "the high standard for suspension" at Fermi, Unit 2 by documenting "compelling circumstances requiring the Commission to suspend a final licensing decision in this proceeding." Therefore, the Board should grant CRAFT's request for a public hearing. (Staff's Answer, pp. 30 - 31).

Finally, CRAFT reiterates the ***Preface*** of the Petition as it is outlined here, especially with regard to noting the inadequacy of other remedies suggested by the Applicant and Staff as alternatives to an adjudicatory hearing. CRAFT notes to the Board that the fundamental thesis of the ***Preface*** has not been refuted by either the Applicant or the Staff in this matter.

By any independent and reasonable standard, the issues raised in each of these contentions are inherently relevant and material to this license renewal proceeding, and the deficiencies highlighted by the Petitioner have enormous impact on the public interest, by definition. Furthermore, an adjudicatory hearing is the only way to properly, timely and

effectively address the Petitioner's concerns. First, a section 2.206 petition is granted very rarely to an extent that implies agency bias and misconduct. Even if granted, the hearing rights available to the public are inadequate, and NRC rules preclude appeal of 2.206 decisions. Second, a 10 CFR 2.802 rulemaking petition does not provide a realistic, credible, timely, available and accessible way for the public to challenge a license renewal application, so, therefore, for many reasons, any suggestion or reference to this avenue is an attempt to evade AEA and NEPA requirements for meaningful review of legitimate safety and environmental concerns.

In addition and in support of CRAFT *CONTENTION NUMBER 3: NRC CANNOT LEGALLY EXTEND REACTOR LICENSES* CRAFT incorporates by reference and realleges herein as its reply the Initial statements made August 18, 2014 regarding *CONTENTION 3: LACK OF SITE-SPECIFIC SAFETY AND ENVIRONMENTAL FINDINGS REGARDING STORAGE AND DISPOSAL OF SPENT FUEL* as put forth by Don't Waste Michigan, Beyond Nuclear and Citizen Environment Alliance of Southwestern Ontario in the Initial Petition. Further CRAFT incorporates by reference and realleges herein as its reply all germane subsequent filings including Don't Waste Michigan, Citizens Environment Alliance of Southwestern Ontario and Beyond Nuclear reply of September 19, 2014. CRAFT is aware of September 19, 2014 NRC rulings and filings pertaining to Spent Fuel Storage and contends that this matter has not been resolved and reserves the right to supplement the record in a timely manner as proceedings unfold.

CRAFT Contention 4: Fermi 2 Transmission Corridor Offsite AC Power Supply

The Answers offered by the Applicant and NRC Staff assert similar and predictable arguments to attempt to prove that the Petitioner CRAFT's proposed contention is outside the scope of this proceeding and therefore inadmissible. However, such arguments are based on a mischaracterization of CRAFT's thesis, as follows.

The Applicant notes that "license renewal focuses on equipment *aging* issues, not on current operating issues. This limited scope is based on the principle established in the original Part 54 rulemaking that the NRC's ongoing regulatory process is adequate to ensure compliance with the CLB [(Current Licensing Basis)] and to maintain an adequate level of safety during the renewal term." (Applicant's Answer, pp. 30 - 31). Here, CRAFT fundamentally disagrees that the design (final configuration and arrangement) issue raised in the contention is *entirely* a CLB issue in this case given the fact that the Applicant's AMP fails to address equipment aging issues in the context of a multi-unit facility, and, therefore, provides no *reasonable assurance* of maintaining "an adequate level of safety during the renewal term." (*Id.*, p. 31). CRAFT's proposed contention explicitly raises the specific issue of the relationship between Fermi, Unit 2 and Fermi, Unit 3 and the potential impact of the active and pending Fermi, Unit 3 COLA as it pertains to both equipment *aging* issues (AMP) and current *operating* issues (CLB), in that such issues are not mutually exclusive but, rather, are inseparable for the purpose of determining reasonable assurance of safety during the renewal term of Fermi, Unit 2.

Here, CRAFT's position is that making a distinction between AMP issues and CLB issues within the context of a proposed multi-unit facility would be profoundly disingenuous and specious and would artificially isolate holistic concerns, thus, preventing any meaningful consideration of relevant cost-beneficial SAMA's in the ER or aging-related AMP issues unique

to a multi-unit scenario. Therefore, by definition, the Fermi, Unit 2 license renewal application is dangerously incomplete, and CRAFT stands by the above genuine and material dispute.

The Applicant's counsel offers the following process suggestion: "Issues of this [(the above)] nature must be raised through the 10 CFR Part 2.206 process or, possibly, the rulemaking process [presumably, the Applicant is referring to 10 CFR Part 2.802]." (*Id.*, p. 31). The Petitioner notes in response that, throughout the Answers, the Applicant and/or NRC Staff *routinely* and *wrongfully* assert that the 2.206 and 2.802 petitions are the proper remedy available to the public including CRAFT for seeking the requests and actions which CRAFT has supposedly inappropriately put forth in the form of inadmissible proposed contentions as part of CRAFT's Petition for Leave to Intervene and Request for Public Hearing.

Included as a fundamental part of the above Petition, CRAFT *contends* that an *adjudicatory hearing* is the only way to properly, timely and effectively address the Petitioner's concerns. First, a section 2.206 petition is granted very rarely to an extent that implies agency bias and misconduct. Even if granted, the hearing rights available to the public are inadequate, and NRC rules preclude appeal of 2.206 decisions. Second, a 10 CFR 2.802 rulemaking petition does not provide a realistic, credible, timely, available and accessible way for the public to challenge a license renewal application, so, therefore, for many reasons, any suggestion or reference to this avenue or process is an attempt to evade AEA and NEPA requirements for meaningful review of legitimate safety and environmental concerns.

There is clearly an insidious and disingenuous reason for the Applicant's routine advocacy for alternative public remedies outside of the rules and protocol of an adjudicatory hearing. In reality, such alternatives are a *black hole* where good ideas go to die. CRAFT points to the existence of a long list of concerns that have been brought to the NRC's attention by

Petitioners and other citizens groups over the last twenty-five or more years. Despite these laborious efforts by the public to raise legitimate, and in some instances peer-reviewed and published, safety and environmental concerns, the NRC has granted only one of the dozens of 2.206 petitions submitted as of 2006 --- one submitted by T. Cochran, NRDC, 1997. In addition, NRC rules preclude any appeal of a 2.206 decision, and "the hearing rights available through a section 2.206 petition are scarcely equivalent to, and not an adequate substitute for, hearing rights available in a licensing proceeding." *Washington Public Power Supply System* (WPPSS Nuclear Project No. 3), ALAB-747, 18 NRC 1167, 1175-77 (1983). In addition, rulemaking under 10 CFR 2.802 takes a minimum of three years and can take up to nine years. (See *Note* below).

By the time CRAFT's issues raised are addressed in a rulemaking proceeding, this Fermi, Unit 2 relicensing process will be over and the facility would be operating without these issues being resolved. Because of barriers (not the least of which is the cost to public interest groups of hiring qualified legal representation and experts who can provide original testimony and credible legal arguments) which have barred concerned citizens from effective participation in rulemaking and enforcement in the past, this Petitioner asserts that license renewal (even with its own set of barriers to effective citizen participation) is the proper and appropriate time to address safety and environmental issues that are of concern to the public. Linking agency action in license renewals to effective and meaningful reviews of safety and environmental concerns is *required* by the National Environmental Policy Act (NEPA) and by the Atomic Energy Act (AEA).

Note: There is no way to predict the length of time to complete a rulemaking process. A spokesman for NRC's Region 1 said, "[I]t takes years for the rulemaking process to be carried

out . . . " (*Nucleonics Week*, July 14, 2005). He noted that NRC review of rulemaking generally takes two and a half years, but could take much longer, and in at least one case, nine years.

It is alleged by the Applicant that CRAFT's proposed contention "does not even acknowledge or dispute the discussion of offsite power discussed in the ER or LRA." (Applicant's Answer, p. 31). Again, that flawed logic presumes imposing an *artificial* and dangerous distinction between AMP issues and CLB issues in the context of a multi-unit facility, such as the proposed Fermi complex. A realistic review of this license renewal application would presume the Fermi, Unit 3 COLA as it stands and, therefore by necessity, would consider AMP and CLB issues as not mutually exclusive but, rather, as *inseparable* for the purpose of determining reasonable assurance of safety during the renewal term of Fermi, Unit 2.

In the context of a realistic and correct multi-unit design and aging analysis, CRAFT does indeed "acknowledge [and] dispute the [Applicant's] discussion of offsite power discussed in the ER [and] LRA." (*Id.*, p. 31). Indeed, CRAFT discusses Fermi, Unit 2 offsite power issues in detail through the lens of (a) the Fermi, Unit 3 COLA, (b) the Commission's Order EA-12-051 and Implementation at Fermi, Unit 2, and (c) the Commission's Order EA-12-049 as it pertains to safety margins for multi-unit facilities in the context of establishing a basis for determination of reasonable assurance of safety specifically during the renewal term of Fermi, Unit 2.

The Applicant's Answer (footnote 122, p. 31) reveals the egregious nature of its faulty logic. In the ER Section 2.2.10, *Power Transmission Systems*, at 2-29 et seq., the Applicant ominously distinguishes between "in scope" and "out of scope" transmission lines, as if a real-world event would care about or obliges the distinction. Furthermore, the "Station Blackout"-related, (so-called out-of-scope) CLB design issues discussed in the LRA (*Id.*) pertaining to

offsite power systems are actually fundamentally inclusive considerations for the ability to make an accurate determination of reasonable assurance of safety during the renewal term of Fermi, Unit 2. Thus, the Petitioner's *Supporting Statement* included as part of the proposed *Contention* reasonably puts forth from the public record a relevant analysis from an expert/specialist in nuclear power plant electrical systems (CORRECTION - clerical/typographical error - In Farouk D. Baxter's excerpted statement, the Petitioner intended to add emphasis to the word *separate*.). The expert's statement *refutes* the Applicant's NRC Staff-endorsed position that the Fermi, Unit 2 off-site power systems are *separate* and "physically independent preferred off-site power sources." (Applicant's Answer re: LRA content discussion, footnote 122, p. 31). As explained above, CRAFT's contention is based on an underlying premise that the determination of reasonable assurance of safety during the renewal term of Fermi, Unit 2 cannot be genuinely established without correcting the CLB and AMP flaws embedded within the LRA as a prerequisite for approval. CRAFT *contends* that any assertion to the contrary is, by definition, demonstrably false; therefore, CRAFT stands by the proposed contention and requests a hearing from the Board.

In addition and in support of CRAFT *CONTENTION NO. 4: ENRICO FERMI UNIT 2 TRANSMISSION CORRIDOR OFFSITE AC POWER SUPPLY,* CRAFT incorporates by reference and re-alleges herein as its reply the Initial statements made August 18, 2014 regarding *CONTENTION 4: INSUFFICIENT SEVERE ACCIDENT MITIGATION ANALYSIS (SAMA) OF POTENTIAL FERMI 2 AND 3 COMMON-MODE FAILURES AND MUTUALLY EXACERBATING CATASTROPHES* as put forth by Don't Waste Michigan, Beyond Nuclear and Citizen Environment Alliance of Southwestern Ontario in the Initial Petition. Further CRAFT incorporates by reference and re-alleges herein as its reply all germane subsequent filings

including Don't Waste Michigan, Citizens Environment Alliance of Southwestern Ontario and Beyond Nuclear reply of September 19, 2014.

CRAFT Contention 5: Spent Fuel Pool Instrumentation is Deficient

In support of CRAFT *CONTENTION NO. 5: SPENT FUEL POOL INSTRUMENTATION IS DEFICIENT*, CRAFT incorporates by reference and re-alleges herein as its reply the Initial statements made August 18, 2014 regarding *CONTENTION 2: INADEQUATE CONSIDERATION UNDER NEPA OF DENSELY-PACKED SPENT FUEL STORAGE POOLS* as put forth by Don't Waste Michigan, Beyond Nuclear and Citizen Environment Alliance of Southwestern Ontario in the Initial Petition. Further CRAFT incorporates by reference and realleges herein as CRAFT reply all germane subsequent filings including Don't Waste Michigan, Citizens Environment Alliance of Southwestern Ontario and Beyond Nuclear reply of September 19, 2014.

CRAFT Contention 6: Mitigation Strategies for Beyond-Design-Basis External Events

In support of CRAFT *CONTENTION NO. 6: MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS*, CRAFT incorporates by reference and realleges herein as its reply the Initial statements made August 18, 2014 regarding *CONTENTION 1: INADEQUATE SAMA ANALYSIS OF MARK I BWR VULNERABILITIES* as put forth by Don't Waste Michigan, Beyond Nuclear and Citizen Environment Alliance of Southwestern Ontario in the Initial Petition. Further CRAFT incorporates by reference and re-alleges herein as its reply germane subsequent filings including Don't Waste

Michigan, Citizens Environment Alliance of Southwestern Ontario and Beyond Nuclear reply of September 19, 2014.

CRAFT Contention 7: Aging Management Plan Does Not Adequately Inspect and Monitor for Leaks

The Applicant (Answer, pp. 37 - 40) alleges that the Petitioner CRAFT's "proposed contention is wholly unsupported." (*Id.*, p. 38). The Applicant alleges, in part, that "CRAFT does not cite to any portion of the license renewal application, nor does it identify any specific portion of the AMP that is alleged to be deficient. . . . Rather than identify, with *specificity*, the alleged inadequacies with the AMP, CRAFT simply alleges that 'more' must be done [i.e., 'a more robust inspection system']." (Emphasis added); (*Id.*). Furthermore, the Applicant alleges that "several assumptions underlying CRAFT's claims are simply incorrect [including lack of cathodic protection]" (*Id.*) and that CRAFT "fails to recognize the existence of other AMPs that apply to areas that CRAFT alleges must be addressed [including the Diesel Fuel Monitoring AMP and the Fire Water System AMP]." (*Id.*, p. 39). Therefore, the Applicant concludes, CRAFT's proposed contention "fails to demonstrate a genuine dispute with the application." (*Id.*, p. 40).

Notably, however, although the Applicant repeatedly asserts that no genuine dispute has been established by the Petitioner pertaining to specific deficiencies of the LRA, conspicuously *absent* from this particular section of the Applicant's Answer (pp. 37 - 40) is any usual or expected mention or declaration by the Applicant of the proposed contention's *inadmissibility*. CRAFT addresses this glaringly revealing and retreating omission below and challenges the above alleged lack of *specificity* while refuting the Applicant's analysis pertaining

to the supposed sufficiency of its existing cathodic protection, thus reviving the proposed contention from its unwarranted and untimely demise.

First, the 10 CFR Part 2.309(f)(1) *admissibility* requirements for proposed contentions, in reality and in practice, *unlawfully* function as a "fortress to deny intervention" and, thus, as a "fortress to deny" effective public remedy through high-level litigation versus weaker alternatives such as internal administrative petitions. (*Note A*). Such abuse of power on the citizenry by the federal government through the U.S. NRC is further exacerbated by the NRC's application of identical admissibility criteria and standards for both counseled petitioners and non-counseled *pro se* petitioners despite the fact that the NRC Staff cites a previous NRC ruling from 1975 in order to suggest that, at least in theory, "the same high degree of *specificity* as is expected by petitions drawn by counsel experienced in NRC practice is not expected here." (emphasis added); (*Note B*).

Note A: Matter of Duke Energy Corp. (Oconee Nuclear Power Plant), 49 NRC at 335 (quoting *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), 8 AEC 13, 20-21 (1974), *rev'd in part*, CLI-74-32, 8 AEC 217 (1974), *rev'd in part*, *York Committee for a Safe Environment v. NRC*, 527 F.2d 812 (D.C. Cir. 1975)).

Note B: (NRC Staff's Answer, p. 14; *Id.*, footnotes 45, 46, 47).

Second, CRAFT does indeed stand by its *specific* contention that the Buried and Underground Piping AMP must be enhanced or supplemented through additional measures such as a more robust inspection and monitoring system and full cathodic protection in order to adequately protect public safety in compliance with *reasonable assurance* requirements. To that end, another conspicuous and revealing aspect of the Applicant's Answer (pp. 37 - 40) is the failure to acknowledge or address the Petitioner's contention pertaining to unclear and poorly-

defined *reasonable assurance* requirements for establishing CLB compliance throughout the entire license renewal period. (see Petition and outline below).

This gross omission by the Applicant suggests a major concession to the Petitioner which should not go unnoticed by the Board. Furthermore, the Applicant remarkably distorts CRAFT's definition of adequate cathodic protection by suggesting that the LRA "explains (at B-25) that Fermi 2 already has a cathodic protection system" and that "more improvements are planned to increase system coverage … [LRA at B-27]." (*Id.*, p. 38). CRAFT hereby adds the *specificity* of these LRA citations to support the argument already proffered in the initial Petition that, based on the Applicant's own admissions, full, complete and adequate cathodic protection has absolutely *not* been implemented and established at Fermi, Unit 2. Clearly, any bare assertion to the contrary is demonstrably untrue. Indeed, the Applicant's above allegation is rendered moot as CRAFT does indeed establish and proffer a genuine, specific and material dispute with the application, and, therefore, the Petitioner concludes that the Board should grant the requested public hearing.

Additionally, CRAFT reiterates and stands by its position proffered in the Petition and outlined here that the *adequacy* of Fermi's AMP program must not be judged simply on whether it provides reasonable assurance that components will not leak so much as to cause a *design-basis failure* but, rather, whether the standard is to reasonably assure that the *Current Licensing Basis (CLB)* will be maintained throughout the renewal period based upon 10 CFR Part 54.21 and 10 CFR Part 54.29. Case law (see Petition) requires the Applicant to prove *reasonable assurance* by a *clear preponderance* of the evidence using a two-step process. Without defining what level of assurance is considered *reasonable*, there is no way for the Board or Commission to determine whether the Applicant has met the burden of proof to demonstrate compliance with

a particular standard. Whereas, the Applicant's Answer has failed to *specifically* acknowledge or challenge the above analysis, the Petitioner interprets that conspicuous omission as an unequivocal evasion and retreat; the Board should take note accordingly.

CRAFT Contention 8: SAMAs Are Materially Deficient

The Applicant's Answer (pp. 42 – 43) describes CRAFT's proposed contention is a conspicuous way. The Answer reads as follows: "The third part of CRAFT-8 addresses economic consequences. CRAFT alleges that DTE's 'cost calculations assume an arbitrary and scientifically inappropriate EPZ probabilistic model for the Fermi site and, as a result, that a radiological release will affect only a relatively small area.' ["170, CRAFT Pet. at 27."]. According to CRAFT, 'proper inputs specific to the Fermi site indicate a far larger affected area – potentially including the densely populated centers of Metro Detroit (MI), Ann Arbor (MI), Monroe (MI), Toledo (OH) *and Windsor (ON)*' (emphasis added) that would result in longer evacuation times and greater costs and consequences. ["171, *Id.*"]. But, [as the Applicant asserts,] the ER and SAMA analysis specifically account for population within 50 miles of the site, including Detroit, Ann Arbor, Monroe, and Toledo. ["172, *See* ER, Section D.1.5.2 (at D-95) (describing the inputs used to develop off-site dose and economic impacts for the cost-benefit analyses, including the projected population within 50 miles of the site for the year 2045)."]. There is no genuine dispute."

To the contrary, CRAFT replies that there clearly *is* a genuine dispute. Conspicuously absent in the Applicant's Answer above is any mention of cities in Ontario, Canada such as Windsor and Amherstburg which are located in the extreme vicinity of the Fermi site and are notoriously recognized as *downwind* communities. Given that the Applicant's Answer above first acknowledges CRAFT's mention of Windsor (ON) in the proposed contention, it is quite a

revealing omission that the above Answer then immediately neglects to include Windsor (ON) within the list of cited communities accounted for by the ER and SAMA analysis. Frankly, this is very suspicious, indeed. Hence, CRAFT stands by its proposed contention as well as its request for the Board to grant a public hearing to discuss this matter.

Furthermore, the Petitioner takes issue with the Applicant's conclusion that CRAFT's "[c]hallenges specifically to the ETE [evacuation time estimates] would also need to be asserted through the 10 C.F.R. Part 2.206 process." (Applicant's Answer, p. 42, footnote 169). In addition to reiterating here CRAFT's stated position about the inadequacy of the 2.206 process as an effective remedy for addressing the public's concerns, CRAFT takes this opportunity to point to the NRC-endorsed, gross corporate irresponsibility embedded within the assumptions of the Applicant's Fermi Emergency Plan. According to the active, pending Fermi, Unit 3 COLA, which incorporates the proposed multi-unit facility, the Applicant applies an unrealistic assumption that severe Michigan snow conditions will not impair the emergency evacuation plan by more than twenty percent (20%). In fact, the COLA states that the assumed impact from a potential severe winter storm has been significantly reduced from the previous model.

CRAFT *contends* that there is no rational basis for the Applicant's *new* model which is intended to cover the Fermi, Unit 2 license renewal period. First, the Fermi site is in the State of Michigan, not the State of Florida or Hawaii. Second, the remarkable winter of 2013 – 2014 proved that Southeast Michigan is very subject to experiencing extremely cold and snowy seasons. Thus, CRAFT stands by its proposed contention and maintains its request for the Board to grant a public hearing to discuss this matter.

"Arbitrary and capricious" and, therefore, *unlawful* as well as unnecessary, the *artificial time constraints* imposed by the U.S. NRC upon this *pro se* Petitioner effectively preclude

CRAFT from offering a more thorough and more complete Combined Reply at this juncture of the proceeding. (*Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989)). Therefore, the Petitioner respectfully *requests* that the Board defer to the U.S. Supreme Court and grant reasonable accommodation to this *pro se* Petitioner in order to address CRAFT's unequal position and compromised status relative to the other interested parties in this case for the purpose of determining what constitutes a fair amount of time for CRAFT to consider and compose a more complete Combined Reply. Compensating measures are necessary in this case in order to protect the public's access to effective recourse for proposed federal actions. As a matter of fact, even with extraordinarily limited capacity, CRAFT has successfully managed to establish sufficient *probable cause* through its Petition in order to justify a public hearing before the Board in this particular Matter.

Given that such probable cause has been demonstrated, the U.S. Supreme Court offers authority and guidance to the subordinate agency (U.S. NRC) in this Matter as follows. The Board must *assign and fund* legal Counsel to represent the Petitioner in order to ensure the credibility of this proceeding and must also *supply funds* for calling forth expert witnesses. A compensating measure of that nature would help offset the extraordinary investment of taxpayer-financed agency resources being used to defend the agency which is ironically opposing the public interest as represented by CRAFT, a recognized public interest group.

Finally, it must be noted that more than ten years remain from today until the Applicant's original operating license expires, so, therefore, a reasonable extension of time for preparation and filing of documents pertaining to this proceeding is feasible and, additionally, *prudent* in order to avoid the potential for inferior, hasty analyses and deficient regulatory

reviews. Notwithstanding all of the above protests and requests, CRAFT proffers this limited Combined Reply in support of the Petition.

CRAFT Contention 9: Quality Assurance Is Faulty

The Applicant's Answer (pp. 44 – 45) alleges that "NRC inspection and enforcement processes…require corrective actions and actions to prevent *recurrence*" of the type of issue referenced by the Petitioner as the basis for its proposed contention. (emphasis added). Further, the Applicant asserts that CRAFT "has alleged no link between this historical issue and aging effects or aging management, nor does [CRAFT] identify any specific AMP that is alleged to be deficient." Then, true to form, the Applicant advises the Petitioner to file a "petition for enforcement under 10 C.F.R. Part 2.206."

In addition to reiterating here CRAFT's stated position about the inadequacy of the 2.206 process as an effective remedy for addressing the public's concerns, CRAFT disputes the Applicant's Answer as follows. Foremost, the *generic* NRC processes referenced by the Applicant above have proved to be wholly inadequate for effectively preventing *recurrence* of the type of issue referenced by the Petitioner, as documented by a cited expert within the Petition itself; *therefore*, the *site-specific* aging-related, safety ramifications of this documented generic quality assurance (QA) deficiency are tremendous, as it is reasonable to conclude in this case that *every* specific AMP in the LRA is *deficient* because *no* AMP can be trusted or be considered credible under the current circumstances. As a result, CRAFT argues and contends to the Board that the site-specific aspects of this root-cause-unresolved, safety and aging-related QA issue must be addressed as part of the Fermi, Unit 2 license renewal review.

CRAFT Contention 10: Safety Assurance Violation

The Applicant's Answer (pp. 45 - 48) alleges that "CRAFT provides no support for its suggestion that, because the NRC issued a *security-related* violation to DTE, this somehow calls into question the adequacy of DTE's aging management programs. The contention ['Pet. at 29-30'] therefore rests on an unsupported (and unexplained) leap in logic." Later, true to form, the Applicant advises the Petitioner to file a "petition for enforcement under 10 C.F.R. Part 2.206." (Answer, p. 47, footnote 191).

In addition to reiterating here CRAFT's stated position about the inadequacy of the 2.206 process as an effective remedy for addressing the public's concerns, CRAFT disputes the Applicant's Answer as follows. Foremost, CRAFT reiterates to the Board the irony and travesty occurring here in plain sight by the fact that DTE Electric Company is actively applying for issuance of a license renewal for the very same facility for which DTE is currently operating under the terms of a federal probation resulting from an NRC-initiated escalated enforcement action against the licensee. Such absurd circumstances not only *call into question* the NRC's entire license renewal process but also *call into question* the credibility and reliability of the corporation itself.

As a result, CRAFT *contends* that it is reasonable to conclude that *every* specific AMP in the LRA is *deficient* because *no* AMP can be trusted or be considered credible under the current circumstances, where among many deficiencies is a lack of appropriate safety review (modeled according to principles established in 10 CFR 50.59) of *human factors* within AMP's. As a result, CRAFT argues and contends to the Board that the site-specific aspects of this ongoing, safety and aging-related QA issue must be addressed as part of the Fermi, Unit 2 license renewal review.

CRAFT Contention 11: DTE's ER Ignores Public Health Data

The proposed contention states, in part:

- The Petitioner contends that the Applicant's ER fails to consider new and updated public health data, unavailable at the time of issuance of the original Operating License [(1985)]; further, the Petitioner contends that the Applicant fails to adequately consider Mitigation Alternatives which could significantly reduce the alleged significant environmental and public health impact of Fermi, Unit 2 operations. Therefore, the Petitioner invokes NEPA requirements and contends that further analysis is called for.

The Applicant/Licensee's Answer puts forth the following arguments:

1) CRAFT's contention fails to cite any particular information in the Mangano report that should have been considered in the Fermi, Unit 2 LRA Environmental Report (ER).

2) CRAFT's contention does not explain how any information in the Mangano report is relevant to the Applicant's consideration of mitigation alternatives, and the contention points out no deficiency in the ER.

3) CRAFT's contention does not establish any non-compliance with NRC regulations, and the contention fails to demonstrate a genuine dispute with the Fermi, Unit 2 LRA to be addressed in this proceeding.

4) Human health impacts [including "radiation exposure to the public" (NRC Staff Answer)] associated with renewed operating licenses are a Category 1 [generically determined] issue under 10 CFR Part 51, Appendix B, Table B-1. Therefore, CRAFT cannot challenge the issue without a waiver. (10 CFR 2.335; 10 CFR 51.53(c)(3)(i)). Generic issues are, by definition, not site-specific and are outside the scope of admissibility for license renewal proceedings.

5) Challenges to NRC standards for radiation protection in 10 CFR Part 20 are inadmissible. NRC rules may not be challenged in adjudicatory proceedings (10 CFR 2.335(a)).

The NRC Staff's Answer makes similar arguments: Although "the effects of releasing radionuclides into groundwater is a Category 2 [site-specific] issue that must be addressed in the ER", CRAFT's contention does not "explain why the ER's analysis is insufficient or how it should be improved." Therefore, the Staff argues that CRAFT's contention "lacks an adequate factual basis and fails to raise a material dispute with the ER."

NRC Staff: "In the ER, [the Applicant] acknowledges that there have been inadvertent releases of radioactive materials into the groundwater. Nonetheless, [the Applicant] concludes that 'low-level concentrations of tritium detected were below the REMP [radiological environmental monitoring program] lower limit of detection (LLD) of 2,000 picocuries per liter (pCi/L), and less than one-tenth of EPA's drinking water limit of 20,000 pCi/L.'" (ER at 4-23).

NRC Staff: "A claim of new and significant information is not enough to bring generic Commission determinations within the scope of a license renewal proceeding." (Vermont Yankee . . . , 2007-2008).

With respect to the arguments outlined above as put forth by the Applicant and the NRC Staff, CRAFT submits this rebuttal in defense of its proposed contention: The authority for settling this public health matter is simple and straightforward and is found within the statutory language and intent of the applicable federal law which supersedes the U.S. NRC Commission's determinations, as the agency is neither rogue nor above the law:

- The *Atomic Energy Act (AEA)* precludes the U.S. NRC from licensing any new nuclear power plant or re-licensing any existing nuclear power plant if it would be "inimical . . . to the health and safety of the public." 42 U.S.C. § 2133(d).

Whereas, the full Mangano report and public health analysis is resounding in the court of public opinion and is a matter of public record in the docket of pending licensing and relicensing

proceedings, there is ample reason to suggest that further analysis is called for prior to issuance of a final decision on the Fermi, Unit 2 LRA.

To the extent that the NRC Staff believes that this public health impacts contention is rendered moot based on the Applicant's record of compliance with regulatory requirements pertaining to permissible releases, CRAFT *contends* that such logic is circular, incoherent and *unlawful*, in that there is no scientific basis for definitively concluding that ALARA emissions standards have any inherent relationship to public health outcomes including morbidity and mortality of all age groups within affected populations. That is, permissible limits themselves are not valid scientific proof of no adverse impact and harm to public health. Thus, further analysis is called for by applicable federal laws including the AEA and NEPA. The above is not a bare assertion; rather, there is widespread disagreement to the point of repudiation of the current emissions standards as being supposedly adequate to protect the public health and welfare.

This concern has both generic and site-specific implications based upon the unique human populations living in the vicinity of each facility. It is perfectly appropriate and rational to subject this issue to site-specific review within the context of a license renewal proceeding. Indeed, if the Board were to grant a requested public hearing to the Petitioner in this case, CRAFT would subsequently call forth renowned, world-class expert witnesses to testify in support of CRAFT's proposed contention.

CRAFT takes this opportunity to remind the Board that the Petitioner is not required to present its fully completed and final list of prospective witnesses during this current stage of the proceeding and that the Petitioner is also not required to prove the merits of its proposed contention at the admissibility stage. (*Matter of Entergy Nuclear Generation Co., et al.* (Pilgrim

Nuclear Power Station), 50-293-LR (ASLB, Oct. 16, 2006), 2006 WL 4801142 at (NRC) 85 (quoting *Oconee*, 49 NRC at 342)).

Furthermore, to the extent that the NRC Staff believes that this public health impacts contention is rendered moot based on the *absence* of NRC regulations requiring the Applicant to apply the *precautionary principle* in order to conclusively demonstrate that local rates of morbidity and mortality are not unusual during a correlative time period while the reactor is operating, CRAFT *contends* that such logic is contrary to the legislative intent of the AEA as cited above. Indeed, by omission, the NRC creates the appearance of unlawfully promoting the proprietary interests of the same industry which it is mandated by law to regulate. In so doing, the NRC makes itself and the Licensees look like they do not care about people or the environment. Thus, CRAFT stands by this proposed contention and reiterates the request for a public hearing during which CRAFT would call forth legal experts to demonstrate the NRC's failure to comply with the AEA and NEPA, as such laws do indeed pertain to this relicensing proceeding.

The Petitioner proffers this reply to the NRC Staff's claim that "new and significant information is not enough to bring generic Commission determinations within the scope of a license renewal proceeding." (Vermont Yankee . . . , 2007-2008). Daniel A. Farber points out that the U.S. Supreme Court clarified: "If new information shows that a federal action will affect the environment 'in a significant way or to a significant extent not already considered,' a supplemental [site-specific] EIS [(SEIS)] is required. . . . [Similarly, as with an EIS, the Court said that] NEPA requires an agency to take a 'hard look' at the environmental effects of its proposal." (*Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989) at 303); (Farber,

Daniel A., "Confronting Uncertainty under NEPA," UC Berkeley Public Law Research Paper No. 1403723, May 2009).

Furthermore, in another landmark case, the U.S. Supreme Court said: "NEPA . . . prohibits uninformed . . . agency action. . . . [and that] the adverse environmental effects of the proposed action [must be] adequately identified and evaluated . . . ." (*Robertson v. Methow Valley Citizens*, 490 U.S. 332, 350-351 (1989)). Farber emphasizes that the agency's environmental review under NEPA must "reflect[] a careful consideration of the available science[] and [ensure] that areas of disagreement or uncertainty are flagged rather than . . . dismissed from consideration [and] that the risk [is not] evaluated only under the agency's favored theoretical model without taking into account the possibility that other credible models might be correct." (Farber, p. 30).

Again, the Petitioner presents the Mangano public health report as one of many such items which the Board should consider in this proceeding. To the extent that a generic determination obviates the need for site-specific assessments, there must be independent, peer-reviewed analyses to credibly establish that any new and significant information brought forward by the public actually belongs within the scope and parameters of a generic determination. In any event, the federal agency, not the general public, has the burden of proof to show that new information does not justify further analysis. So, for the above reasons supported by cited authorities, CRAFT stands by its proposed contention that federal law requires further analysis of the site-specific impacts of the Fermi, Unit 2 LRA and requires inclusion of a detailed discussion of the Petitioner's proffered new and significant information.

CRAFT Contention 12: Thermal Discharge Increase Algal Blooms

Petitioner's reassert original position and again request a public hearing to examine the impact of daily thermal discharges from Fermi 2 as an accelerator and contributor to harmful algal blooms (HABS). The Fermi 2 releases 45 million gallons of water per day into Lake Erie. This thermal discharge averages 18 degrees (F) above ambient lake temperature 365 days per year.

Petitioner's contend that the Applicant's Environmental Report (ER) fails to consider new and updated environmental and public health data, unavailable at the time of issuance of the original Operating License; further, the Petitioner contends that the Applicant fails to adequately consider Mitigation Alternatives which could significantly reduce the alleged significant environmental and public health impact of Fermi, Unit 2 operations. Therefore, the Petitioner invokes NEPA requirements and contends that further analysis is called for.

Illustration: Petitioner puts forth the following NOAA Satellite Image of Lake Erie from August 10, 2014, http://coastwatch.glerl.noaa.gov/webdata/cwops/html/modis/modis.php?region=e&page=1&template=sub&image=a1.14222.1852.LakeErie.143.250m.jpg to illustrate how severe the algal bloom crisis has become.

Additional satellite imagery provided in this reply shows the severity of the Algae Blooms in current times in near proximity to Fermi 2 and just south at Monroe Power Plant. DTE has argued that assessments done in 2008, and 2011 hold today. Current satellite imagery shows a much exacerbated aglae bloom problem than is acknowledged in the ER. http://www.bing.com/images/search?q=lake+erie+algae+bloom+thermal&qpvt=lake+erie+algae+bloom+thermal&FORM=IGRE#view=detail&id=824FC0199D4645A1712198261300BA6A019690E0&selectedIndex=575

The year round thermal discharge from Fermi 2 of 45 million gallons water at temperatures 18 degrees (F) above ambient provides for algae bloom incubation conditions in the spring and algae bloom life extension in the fall. The thermal pollution provided for a longer life cycle which may have a cumulative impact from year to year. This is not examined in the ER.

Scope and Materiality:

In support of this Contention, the Petitioner submits into the docket the following analysis from the U.S. NRC, pertaining to the Fermi 2 Nuclear |Reactor: The U.S. Nuclear Regulatory Commission (NRC) has stated in Draft NUREG-2105, volume 1, October 2011, page 2-228: "Public and occupational health can be compromised by activities at the Fermi site that encourage the growth of disease-causing microorganisms (etiological agents). Thermal discharges from Fermi into the circulation water system and Lake Erie have the potential to increase the growth of thermophilic organisms. These microorganisms could give rise to potentially serious human concerns, particularly at high exposure levels." (Emphasis added).

Basis:

The Governor of the State of Ohio recently declared a "State of Emergency" (summer 2014) in response to a clean drinking water supply crisis in and around the City of Toledo, Ohio. There is no doubt about the significance of this public health crisis. To what extent does the thermal loading resulting from Fermi 2 continued operations contribute to and accelerate this this crisis, and what are the prospects for the future. Petitioners contends that one significant contributing factor is in fact the routine, thermal discharges from Fermi Unit 2 which add cumulative stress impacts to the fragile ecosystem of Lake Erie's shallow western basin and shoreline. Lake Erie already suffers from numerous environmental stressors, including pollution from agricultural runoff (such as phosphorus), sewage overflows and routine, authorized releases of industrial toxic chemicals (including releases originating from Fermi, Unit 2).

In addition, thermal pollution from nearby power plants is a known contributing factor to the conditions which produce toxic algal blooms and consequent hypoxic dead zones. The exact and precise extent to which Fermi, Unit 2 normal operations are directly causative, not just correlative, of significant environmental and public health impacts is "*unknown and unanalyzed*." Therefore, the Petitioner hereby invokes NEPA requirements and contends that a "hard look" and further analysis is called for, as a precondition for approval of the Applicant's Fermi, Unit 2 License Renewal Application (LRA).

The proposed twenty year license renewal, if granted will result in twenty years of accumulative thermal load to Lake Erie; this should not be ignored. The role of Fermi 2 in cumulative impact of thermal pollution from coal plants north and south has not been considered. Mitigation strategies to offset the thermal pollution from Fermi 2 must be considered. The utilization Cooling Towers at the Monroe Power Plant would be one example of mitigation. DTE discussion of Harmful Algal Blooms (HABS) provided in the ER (3-113, 114) relies on data from 2008, 2011 and concludes small impact misses the point that HABS are occurring now in real time and are having a devastating impact downstream. The role of thermal pollution from Fermi 2 must be understood and considered in a thorough analysis. Lake Erie must not be put in jeopardy to allow another twenty years of Fermi 2 operation.

CRAFT Contention 13: Inadequate Radiation Protection Standards

The Petitioner CRAFT requests an evidentiary public hearing in order to seek a Board recommendation for the U.S. NRC Commission to issue an Order to independently assess the adequacy of current and proposed U.S. EPA guidelines pertaining to environmental radiation protection standards for nuclear power operations, including for NRC-regulated facilities such as Fermi, Unit 2. CRAFT seeks stronger interagency regulations that (a) begin to integrate longer-

term strategies for assessing multi-generational impacts of chronic exposure to low doses of environmental radiation, including the consideration of a wider spectrum of known radiation-sensitive diseases and (b) adequately and equally protect the public health, including women and children, and, in particular, the vulnerable female infant.

The Answers put forth by the Applicant and the NRC Staff *predictably* argue that such a contention is, by definition, wholly and entirely outside the scope of this license renewal proceeding given that the *NRC* adjudicatory process is not an appropriate forum for entertaining challenges to an *EPA* regulation. Therefore, the Answers declare that this proposed contention is inadmissible and that a more appropriate avenue for redress might be found through a petition for rulemaking under 10 CFR Part 2.802.

In rebuttal, the Petitioner CRAFT sets forth and reiterates the ***Preface*** of the Petition as it is outlined below, especially with regard to noting the inadequacy of other remedies suggested by the Applicant and Staff as alternatives to an adjudicatory hearing. CRAFT notes to the Board that the fundamental thesis of the ***Preface*** has not been refuted by either the Applicant or the Staff in this matter.

By any independent and reasonable standard, the issues raised in each of these contentions are inherently relevant and material to this license renewal proceeding, and the deficiencies highlighted by the Petitioner have enormous impact on the public interest, by definition. Furthermore, an adjudicatory hearing is the only way to properly, timely and effectively address the Petitioner's concerns. First, a section 2.206 petition is granted very rarely to an extent that implies agency bias and misconduct. Even if granted, the hearing rights available to the public are inadequate, and NRC rules preclude appeal of 2.206 decisions.

Second, a 10 CFR 2.802 rulemaking petition does not provide a realistic, credible, timely, available and accessible way for the public to challenge a license renewal application, so, therefore, for many reasons, any suggestion or reference to this avenue is an attempt to evade AEA and NEPA requirements for meaningful review of legitimate safety and environmental concerns.

"Section 101 of the National Environmental Policy Act (NEPA) proclaims the policy of the federal government to administer federal programs in an environmentally sound fashion." (42 U.S.C. Part 4331); (Farber, Daniel A., "Confronting Uncertainty under NEPA," UC Berkeley Public Law Research Paper No. 1403723, May 2009). To the extent that NEPA is one authority governing the generic and site-specific Environmental Review of this relicensing proceeding, CRAFT *contends* that it is highly problematic to apply certain generic NRC regulations, which are based upon inadequate EPA standards, to an NRC-regulated facility in either a generic or site-specific context. If the Board were to grant the requested public hearing to the Petitioner, the Petitioner would call numerous, world-class expert witnesses and authors of peer-reviewed studies to testify to the inadequacy of the EPA standards and, by implication and incorporation, the inadequacy of NRC regulations as they pertain to generic and *site-specific* determinations which are materially pertinent to the outcome of this relicensing proceeding.

Therefore, the only potentially legitimate protest within the Applicant's and NRC Staff's Answers pertains to *process and venue*, not substantive content of the contention's allegations. CRAFT *contends* that the argument about process and venue is not a proper subject for the NRC Staff to advocate or rule on, and that, consequently, the Staff's Answer inappropriately overreaches beyond the Staff's limited scope of authority or function. Thus, it appears necessary for the Board to assert and enforce its own authority and rightful place in this

process by expeditiously and prudently granting a deserved public hearing to the Petitioner as requested.

CRAFT Contention 14: Fermi Does Not Meet EPA Standards

CORRECTION: The Petitioner CRAFT made a clerical typographical error in the heading (title) of this proposed contention as written and submitted in the original filing of the Petition for Leave to Intervene and Request for Public Hearing. As stated explicitly and repeatedly within the contention, the issues raised by the Petitioner specifically pertain to NEPA (federal law) and are not even implied or suggested to pertain to the U.S. EPA (federal agency). Therefore, *corrected*, the heading (title) of this contention should read as follows:

CRAFT Contention 14: Fermi Does Not Meet NEPA Standards

(By the word "*Standards*," CRAFT means "requirements.")

In the proposed contention, CRAFT requests a public hearing before the Board to seek reconsideration of a previous ruling which the Petitioner describes within the contention and which, by definition, pertains directly and materially to the outcome of this relicensing proceeding. CRAFT *contends* that the Applicant's Environmental Report (ER) utterly and unlawfully fails to address Severe Accident Mitigation Alternatives (SAMA's) which could substantially reduce the risks and consequences associated with onsite storage of high-level radioactive waste (HLRW), especially, spent fuel pool water loss and fires. In this regard, by incorporation, CRAFT raises a genuine, site-specific, material dispute with the Applicant's arguably deficient ER and license renewal application and *contends* that such issues raised should be appropriately classified as Category 2 issues within the scope of the site-specific review and, therefore, subject to adjudication in this relicensing proceeding.

The Applicant's Answer *mistakenly* states that CRAFT's contention "impermissibly challenges an NRC regulation." (Applicant's Answer, p. 52). Nonsense, replies the Petitioner. CRAFT's contention does *not* take issue with the "License Renewal GEIS" (*Id.*) (NUREG 1437) including Section 5 and Section 6. Rather, the contention *clearly* states (although too "vaguely-worded" for the Applicant's taste, *Id.*) that CRAFT *does* take issue with previous Board decisions, such as *Pilgrim*, in which the Board used discretion and choice to promulgate an incorrect interpretation of 10 CFR 51.53 to apply to license renewal proceedings.

That is, CRAFT *contends* that the Board impermissibly interpreted 10 CFR 51.53 to allow the classification of all spent fuel issues as Category 1 generically-determined issues addressed in Section 6 of the GEIS. In its contention, CRAFT explicitly *contends* that a permissible and correct interpretation of 10 CFR 51.53 would *require* the Board to address Severe Accidents involving spent fuel pools as a Category 2 issue addressed within Section 5 of the GEIS. Section 5 includes definitions of "Severe" and "Accident" and does not limit these to reactor core accidents; rather, determination of accident severity categorization is based upon *consequences* as opposed to *causes*, thus incorporating spent fuel pool leaks and fires into the *scope* of the Applicant's ER for a license renewal application. As such, the Fermi, Unit 2 ER would be considered severely deficient in its present form.

As explained above, CRAFT is not interested in using this contention for the purpose of challenging an established NRC agency rule or regulation. Rather, CRAFT is explicitly attempting to appeal to the Board for reconsideration of an arguably misguided previous ruling which would be extremely applicable and material to the site-specific review of this particular relicensing case if the Board were to recognize its own past failures described above. Therefore, an adjudicatory hearing of the Board is a perfectly proper forum for deliberating CRAFT's

concerns as raised in its proposed contention, and there should be no need for a waiver from the Commission, despite the Applicant's assertion to the contrary. (Answer, p. 52).

CONCLUSION

For the reasons set forth above, CRAFT holds that all fourteen contentions are lawful and admissible; thus the ASLB should grant CRAFT's Petition for Leave to Intervene and should expeditiously honor CRAFT's Request for a Public Hearing.

Respectfully submitted,

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
DTE Electric Co.	)	Docket No. 50-341-LR
(Fermi Nuclear Reactor, Unit 2)	)	

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305 (revised), I hereby certify that copies of the foregoing "COMBINED REPLY OF CITIZENS' RESISTANCE AT FERMI 2 (CRAFT) TO NRC STAFF AND DTE ELECTRIC IN SUPPORT OF CRAFT'S PETITION FOR LEAVE TO INTERVENE AND REQUEST FOR A PUBLIC HEARING," dated 22 September 2014, have been filed through the Electronic Information Exchange, the NRC's E-Filing System, in the above-captioned proceeding, this 22nd day of September, 2014.

/Signed (electronically) by/
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