UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

In the Matter of:	)	
		Docket No. 52-033-COL
The Detroit Edison Company	)	
(Fermi Nuclear Power Plant, Unit 3)		April 30, 2013
	)	

* * * * *

INTERVENORS' INITIAL STATEMENT OF POSITION ON CONTENTION 15

I. Introduction

Now come Intervenors Beyond Nuclear, *et al.*[1] (hereinafter "Intervenors"), by and through counsel, and pursuant to 10 C.F.R. § 2.1207(a)(1) and the Licensing Board's "Order (Granting Motion for Extension of Time for Submission of Testimony for Adjudication of Contention 15, and Modifying the Schedule)" dated March 29, 2013, hereby submit their Initial Statement of Position on Contention 15. This Initial Statement of Position is supported by direct testimony from Arnold Gundersen (Exh. A) and the exhibits submitted concurrently. For the reasons specified below, the Quality Assurance activities of Detroit Electric Company ("DTE" or "Applicant") do not satisfy the requirements of the Atomic Energy Act and regulations promulgated pursuant to it, and Contention 15 should be resolved in favor of Intervenors.

[1]In addition to Beyond Nuclear, the Intervenors include: Citizens for Alternatives to Chemical Contamination, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Sierra Club (Michigan Chapter), Keith Gunter, Edward McArdle, Henry Newnan, Derek Coronado, Sandra Bihn, Harold L. Stokes, Michael J. Keegan, Richard Coronado, George Steinman, Marilyn R. Timmer, Leonard Mandeville, Frank Mantei, Marcee Meyers, and Shirley Steinman.

II. Background of Contention 15

On November 6, 2009, the Intervenors filed a Supplemental Petition for Admission of a Newly Discovered Contention (Supplemental Petition), which included a quality assurance (QA) contention numbered as Contention 15. In June 2010, the Board admitted a reformulated version of the Contention:

Contention 15 (including subparts A and B)

> Detroit Edison (DTE) failed to comply with Appendix B to 10 C.F.R. Part 50 to establish and implement its own quality assurance (QA) program when it entered into a contract with Black and Veatch (B&V) for the conduct of safety-related combined license (COL) application activities and to retain overall control of safety-related activities performed by B&V. This violation began in March 2007 and continued through at least February 2008. Further, DTE failed to complete internal audits of QA programmatic areas implemented for the Fermi 3 COL Application, and DTE also has failed to document trending of corrective actions to identify recurring conditions adverse to quality since the beginning of the FermiUnit 3 project in March 2007.

Contention 15A:

> These deficiencies adversely impact the quality of the safety related design information in the FSAR that is based on B&V's tests, investigations, or other safety-related activities. Because the NRC may base its licensing decision on safety-related design information in the FSAR only if it has reasonable assurance of the quality of that information, it may not lawfully issue the COL until the deficiencies have been adequately corrected by the Applicant, or until the Applicant demonstrates that the deficiencies do not affect the quality of safety-related design information in the FSAR.

Contention 15B:

> Although DTE claims that in February 2008 it adopted a QA program that conforms to Appendix B, DTE has failed to implement that program in the manner required to properly oversee the safety-related design activities of B&V. This demonstrates an ongoing lack of commitment on the part of DTE's management to compliance with NRC QA regulations. The NRC cannot support a finding of reasonable assurance that the plant, as built, can and will be operated without endangering the public health and safety until DTE provides satisfactory proof of a fully-implemented QA program that will govern the design, construction, and operation of Fermi Unit 3 in conformity with all relevant NRC regulations.

Contention 15 was based upon a Staff inspection in August 2009 that resulted in a Notice of Violation (NOV) issued in October 2009 (the October 2009 NOV). The October 2009 NOV found that DTE had failed, in certain respects, to comply with the QA requirements of Appendix B. The violations included: (A) failing to establish and implement a Fermi Unit 3 QA program between March 2007 (when DTE initially contracted with B&V for the conduct of COLA activities for Fermi Unit 3) and February 2008 and failing to retain overall control of contracted COLA activities as required under Criterion II, "Quality Assurance Program" of Appendix B, resulting in inadequate control of procurement documents and ineffective control of contract services performed by B&V for COLA activities; (B) failing to perform internal audits of QA programmatic areas implemented for Fermi Unit 3 COLA activities; and (C) failing to document trending of DTE's corrective action reports.

DTE denied that any violation occurred before September 18, 2008, because it was not then a COL applicant and thus was not subject to Appendix B requirements. The Staff later agreed with DTE that it could not issue a NOV for actions or omissions before the date on which DTE submitted the Fermi 3 COLA to the NRC and withdrew the original Violation A and substituted a revised Violation A in its revised NOV (the April 2010 NOV). But the Staff also stated that DTE "must demonstrate compliance with Appendix B in order to receive a COL" from the NRC. Thus, the Staff made clear that DTE's compliance with Appendix B requirements between March 2007 and February 2008, as well as later, remained relevant to the question whether the NRC may issue the COL.

DTE's reply also disputed Violations B and C in the October 2009 NOV. The Staff determined, however, that those violations remained valid. In its April 2010 NOV, the Staff

reformulated those two violations into one new violation (revised Violation B). The Staff's reply also stated that DTE's response to Violations B and C was responsive to the October 2009 NOV, and DTE was not required to respond further concerning those violations or revised Violation B.

In May 2010, DTE responded to the revised Violation A, admitting the violation and outlining the corrective steps that DTE had taken to address it. In March 2010, the Staff issued a Request for Additional Information No. 26 (RAI 26) concerning DTE's QA activities prior to submittal of the application in September 2008. It stated in part, "[s]ufficient detail has not been provided in the Fermi 3 FSAR to enable the Staff to reach a final conclusion on whether all Fermi 3 project safety-related activities completed prior to the COL application date were consistent with the requirements of Appendix B to 10 CFR Part 50."

DTE responded in May 2010 to RAI 26, describing how, in its view, all Fermi 3 safety-related activities completed or in process prior to September 18, 2008, were consistent with the requirements of Appendix B, and identifying all safety related activities performed prior to that date that were related to the Application. On April 17, 2012, DTE moved for summary disposition of Contention 15 and subparts 15A and 15B. On May 7, 2012, the Staff filed an answer supporting DTE's motion. The Intervenors filed a response opposing summary disposition, to which DTE replied.

On November 9, 2012, the ASLB ruled to deny summary disposition. LBP-12-23 p. 35. The Board found, "In our view, the adequacy of the QA program both before and after submission by DTE of the COLA is a disputed issue of material fact that must be resolved through the evidentiary hearing process." *Id.*

III. Burden of Going Forward With Evidentiary Production

An applicant generally bears the ultimate burden of proof. *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), ALAB-697, 16 NRC 1265, 1271 (1982), but intervenors must give some basis for further inquiry. *Three Mile Island, supra*, 16 NRC at 1271, citing *Pennsylvania Power and Light Co. and Alleghany Electric Cooperative, Inc*. (Susquehanna Steam Electric Station, Units 1 & 2), ALAB-613, 12 NRC 317, 340 (1980).

The burden of going forward on any issues that make it to the hearing process is on the intervenor which is pursuing that issue. *Private Fuel Storage, L.L.C.* (ISFSI), LBP-05-12, 61 NRC 319, 326 (2005), *aff'd Private Fuel Storage, L.L.C.* (ISFSI), CLI-05-19, 62 NRC 403 (2005).

Once a party has introduced sufficient evidence to establish a *prima facie* case, the burden then shifts to the applicant, which must provide a sufficient rebuttal to satisfy the Board that it should reject the contention as a basis for denial of the permit or license. *La. Power & Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1093 (1983), citing *Consumers Power Co.* (Midland Plant, Units 1 & 2), ALAB-123, 6 AEC 331, 345 (1973); *La. Power & Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 56 (1985).

Respecting the adjudication of quality assurance violations, this Licensing Board opined earlier in this case as to what is required, and which party must carry the respective burdens of evidence, as follows (LBP-10-09 at pp. 29-30):

> The effect of a pattern of QA violations is not necessarily to show that particular safety-related information is false, but, as the Appeal Board stated in the Diablo Canyon licensing proceeding, to erode the confidence the NRC can reasonably have in, and create substantial uncertainty about the quality of, the work that is tainted by the alleged QA

violations. [Citing *Pac. Gas & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-763, 19 NRC 571, 576 (1984) (quoting that Board's Scheduling Order)]

> [P]erfection in plant construction and the facility construction quality assurance program is not a precondition for a license under either the Atomic Energy Act or the Commission's regulations. What is required instead is reasonable assurance that the plant, as built, can and will be operated without endangering the public health and safety. To be sure, this does not lead inexorably to the conclusion that the work must be rejected or the application denied. [Citing *Diablo Canyon*, ALAB-756, 18 NRC at 1345 (citing 42 U.S.C. §§ 2133(d), 2232(a); 10 C.F.R. § 50.57(a)(3)(i); *Power Reactor Dev. Co. v. Int'l Union*, 367 U.S. 396, 407 (1961); *Maine Yankee Atomic Power Co.* (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1004 (1973), *aff'd sub nom., Citizens for Safe Power v. NRC*, 524 F.2d 1291 (D.C. Cir. 1975)). *See also Union Elec. Co.* (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983)]

Similarly, in the Callaway licensing proceeding, the Appeal Board stated:

> In any project even remotely approaching in magnitude and complexity the erection of a nuclear power plant, there inevitably will be some construction defects tied to quality assurance lapses. It would therefore be totally unreasonable to hinge the grant of an NRC operating license upon a demonstration of error-free construction. Nor is such a result mandated by either the Atomic Energy Act of 1954, as amended, or the Commission's implementing regulations. What they require is simply a finding of reasonable assurance that, as built, the facility can and will be operated without endangering the public health and safety. 42 U.S.C. §§ 2133(d), 2232(a); 10 C.F.R. § 50.57(a)(3)(i).
>
> Thus, in examining claims of quality assurance deficiencies, one must look to the implication of those deficiencies in terms of safe plant operation. [Citing *Callaway*, ALAB-740, 18 NRC at 346]

Nevertheless, while perfection in the applicant's QA program is not required, once a pattern of QA violations has been shown, the license applicant has the burden of showing that the license may be granted notwithstanding the violations. For example, in the Diablo Canyon proceeding, petitioners successfully obtained reopening of the record with regard to design QA. The Appeal Board conducted an adjudicatory hearing to determine whether the applicant's design verification program established the adequacy of the unit's design notwithstanding the QA violations. [Citing Deukmejian v. Nuclear Regulatory Comm'n, 751 F.2d 1287, 1321 (D.C. Cir. 1984)]. *The Appeal Board made clear that the applicant, not the petitioners, had the burden of proof on that issue*:

> The [Appeal Board's scheduling order] . . . indicated we would take our lead from the Commission and permit the applicant's various verification efforts "to substitute for, and supplement, the applicant's design quality assurance program in order to demonstrate that the Diablo Canyon plant is correctly designed." It concluded by stating that the "real issue . . . has, in effect, moved

> beyond the question of what deficiencies existed in the applicant's Diablo Canyon design quality assurance program to the question whether the applicant can demonstrate that [its verification efforts] verify the correctness of the Diablo Canyon design."[2]

(Emphasis supplied).

As is demonstrated below, the evidence articulated for Intervenors' *prima facie* case describes many rank deficiencies in DTE's QA program from the outset, but proceeds to the question of whether DTE can demonstrate that it can verify the correctness of the Fermi 3 design.

IV. 'Reasonable Assurance' Standard Applies To Determinatin of Adequacy of Substantive Proofs

NRC regulations at 10 C.F.R. § 52.79(a)(25) require:

> A description of the quality assurance program, applied to the design, and to be applied to the fabrication, construction, and testing, of the structures, systems, and components of the facility. Appendix B to 10 CFR part 50 sets forth the requirements for quality assurance programs for nuclear power plants. The description of the quality assurance program for a nuclear power plant must include a discussion of how the applicable requirements of appendix B to 10 CFR part 50 have been and will be satisfied, including a discussion of how the quality assurance program will be implemented. . . .

An applicant has the burden of proving, prior to the issuance of a full-power license, that there is reasonable assurance that adequate protective measures can and will be taken in an emergency. *Philadelphia Elec. Co.* (Limerick Generating Station, Units 1 & 2), ALAB-836, 23 NRC 479, 518 (1986), citing 10 C.F.R. § 50.47(a)(1). Reasonable assurance "is not susceptible to formalistic quantification or mechanistic application. Rather, whether the reasonable assurance standard is met is based upon sound technical judgment applied on a case-by-case basis." Compliance with the Commission's regulations is a touchstone for reasonable assurance. *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-07-17, 66 NRC 327, 340

[2]LBP-10-09 at pp. 29-30.

(2007), *aff'd*, CLI-09-07, 69 NRC 235, 263 (2009). But if there is evidence "sufficient to raise legitimate doubt as to whether the plant can be operated safely," a ruling in favor of the applicant may be denied. *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-756, 18 NRC 1340, 1344-1345 (1983) (ruling on motion to reopen the record), citing *Union Electric Co.* (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983); *Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 15 (1985).

This same standard applies to an applicant's design quality assurance program. *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-775, 19 NRC 1361, 1366 (1984), *aff'd sub. nom. San Luis Obispo Mothers for Peace v. NRC*, 751 F.2d 1287 (D.C. Cir. 1984), *aff'd on reh'g en banc*, 789 F.2d 26, 29 (1986) (2,000,000 expert engineering hours expended on remediating quality assurance deficiencies at Diablo Canyon nuclear power plant to provide "adequate confidence" the plant could withstand a serious earthquake following discovery that blueprints had been reversed during reactor design and construction).

While the applicant "may delegate to others, such as contractors, agents, or consultants, the work of establishing and executing the quality assurance program, or any part thereof," in the end DTE must "retain responsibility for the quality assurance program." 10 C.F.R. Part 50, App. B(I) and "[t]he authority and duties of persons and organizations performing activities affecting the safety-related functions of structures, systems, and components shall be clearly established and delineated in writing." *Id.* In addition,

> The persons and organizations performing quality assurance functions shall have sufficient authority and organizational freedom to identify quality problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. The persons and organizations performing quality assurance functions shall report to a management

> level so that the required authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations, are provided.
>
> *** *** ***
>
> Irrespective of the organizational structure, the individual(s) assigned the responsibility for assuring effective execution of any portion of the quality assurance program at any location where activities subject to this appendix are being performed, shall have direct access to the levels of management necessary to perform this function.

Id., ¶ I.

Since the purpose of quality assurance activities is to make certain that low-grade parts or materials, inferior work, improper construction or implementation procedures, and the like are noticed and resolved, QA professionals must have access to levels of corporate management with the power inside the organization to require mistakes to be corrected:

> [C]onditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are [to be] promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Id., ¶ XVI.

Intervenors maintain that as a result of improper establishment and implementation of a QA program for the Fermi 3 Licensing Project, safety-related information in the FSAR is unreliable and should not be used to support the licensing decision because it is based in whole or in part on tests, investigations, or other safety-related activities performed by Black & Veatch during the period when DTE had neither established nor implemented its own Appendix B QA program to govern those activities. "Ruling on Proposed New Contentions 15 and 16," slip op., LBP-10-09 p. 15.

IV. Discussion of the Evidence in This Case

A. Intervenors' Expert Witness, Arnold Gundersen

Arnold Gundersen has more than 40 years of professional nuclear experience in the following areas, and more: Nuclear Power Operations, Nuclear Safety Assessments, Nuclear Power Management, Nuclear Quality Assurance, Archival Storage and Document Control, NRC Regulations and Enforcement, Licensing, Engineering Management, Contract Administration, Reliability Engineering, In-service Inspection, Thermohydraulics, Criticality Analysis, Radioactive Waste Processes, Decommissioning, Waste Disposal, Cooling Tower Operation, Cooling Tower Plumes, Consumptive Water Use, Source Term Reconstruction, Dose Assessment, Technical Patents, Structural Engineering Assessments, Nuclear Fuel Rack Design and Manufacturing, Nuclear Equipment Design and Manufacturing, Public Relations, Prudency Defense, Employee Awareness Programs, and Whistleblower Protection.

Mr. Gundersen earned a Bachelor's Degree in Nuclear Engineering from Rensselaer Polytechnic Institute (RPI) *cum laude*, and a Master's Degree in Nuclear Engineering from RPI via an Atomic Energy Commission Fellowship. Cooling tower operation and cooling tower plume theory were his chosen area of study for his Master's Degree.

Mr. Gundersen began his nuclear industry career as a reactor operator and instructor in 1971, and progressed to the position of Senior Vice President for a nuclear licensee prior to becoming a nuclear engineering consultant and expert witness. His current *curriculum vitae* is attached to his written testimony.

Arnold further has testified as a nuclear engineering expert witness before numerous Nuclear Regulatory Commission (NRC) Atomic Safety and Licensing Boards (ASLBs), as well as the NRC's Advisory Committee on Reactor Safeguards (ACRS). He has also provided

nuclear engineering expert testimony in Federal courts, before the State of Vermont Public Service Board, the State of Vermont Environmental Court, and the Florida Public Service Commission.

Mr. Gundersen served as a specially-appointed nuclear engineering advisor to the Vermont State Legislature for two years, during which time he served in an oversight capacity of Entergy Nuclear Vermont Yankee, and in an advisory role on nuclear reliability issues to the Vermont State Legislature.

He also authored the first edition of the U.S. Department of Energy (DOE) Decommissioning Handbook.

B. Significant Highlights of Gundersen Testimony

Early on, DTE deviated from an established NRC/Nuclear Energy Institute standardized template for Combined Operating License Applications for construction of a new nuclear power plant. Arnold Gundersen Testimony ("A.G. Testimony" or "A.G.") A8, p. 5. By choosing to delegate the Quality Assurance ("QA") function to a subcontractor, Black & Veatch, during its COLA development of the venture known as the "Fermi 3 Licensing Project," Detroit Edison implemented an approach to quality assurance which deviated from the template, and ignored its obligation to notify the NRC that portions of the Quality Assurance portion of the Fermi 3 COLA had to be modified. *Id.*

Following the receipt of three (3) regulatory citations from the NRC in October 2009 concerning deficiencies in QA delegation from 2007 through mid-2009, DTE responded that prior to submitting its COLA to the NRC in September 2008, it had no legal responsibility to develop a QA program. A.G. Testimony A12, p. 7. DTE inconsistently stated, also, that it

recognized the need for QA efforts throughout the pre-application period of 2007-2008. A.G. A12, p. 7. The witness concludes that "confusion and lack of organizational control reigned within Detroit Edison for years prior to the COLA submittal and to this day. These early QA problems are the root cause of the current site characterization issues that continue to plague the "Fermi 3 Licensing Project." A.G. A13 p. 8. Consequently, DTE QA efforts from 2007-2009 are "inadequate," "do not follow the statutory authority of the Code of Federal Regulations," and "it is implausible that the Atomic Safety and Licensing Board would be able to assure the public that it has reached the requisite conclusion of 'adequate confidence'" that Fermi 3 will satisfactorily perform its service function." A.G. A17 p. 9-10.

In examining records of the April 2007 construction of monitoring wells for hydrology investigation and core boring activities for geotechnical data collection at the proposed Fermi 3 site, Gundersen discovered that applicable programs for the nearby operating Fermi Unit 2 for access, work control, and contractor oversight were followed for site work on Fermi 3. A.G. A18 p. 10. This is a problem because there is no indication that use of the Fermi 2 QA Program was analyzed or approved by any DTE personnel connected with or managing the Fermi 3 project, nor by any personnel connected with or managing the Fermi 3 project via Black & Veatch. This includes the Owners Engineer (OE), which is also a Black & Veatch subsidiary located in a separate city and department. A.G. A19, p. 11.

Additionally, Gundersen found that a "combination of a separate unapproved corporate entity (Fermi 2) and two non-nuclear vendors with non-nuclear QA programs were used to attempt to satisfy the nuclear QA commitments required to provide essential seismic and structural information for licensing process applied to the COLA." A.G. A21 p. 12.

Intervenors' expert further has identified considerable correspondence within DTE and between DTE and B&V personnel circa 2007 and 2008 which reveal that DTE understood its primacy in overseeing QA for the Fermi Licensing Project (A.G. A33 and A34, pp. 29-30). There is also email evidence that one goal of the Fermi Licensing Project was to have a "self-executing" QA plan, something which is disfavored by the NRC. A.G. A32, p. 28.

When the Fermi 3 Licensing Project was commenced in 2007, there was no firm decision as to which reactor type (ABWR or ESBWR) would be built, nor the location of that new reactor at the existing Fermi complex in southeastern Michigan. A.G. A28, pp. 26. The apparent object to be accomplished by commencing geological assessment drilling under auspices of Fermi 2 was to avoid quality assurance oversight by Fermi 3 Licensing Project QA staff of B&V. A.G. A29 p. 26.

DTE's Quality Assurance Program Description ("QAPD"), published in February 2008, does not appear, as described, on DTE's contemporaneous organizational chart. A.G. A36, A37, A38, pp. 31-34. According to witness Gundersen, "The organizational chart . . . shows a position for a Nuclear QA Oversight Quality Assurance Program. This title is not addressed in the QAPD, and according to the key in the chart, the entire organization has yet to be hired. Furthermore, the QAPD states that on a daily basis the Nuclear QA Oversight Quality Assurance Program reports to the Manager of the Nuclear Development Program, whose first responsibility is Project Schedule Development & Coordination. According to the organizational chart, no independent reporting relationship exists between QA and higher levels of DTE management." A.G. A38, p. 34. Gundersen concludes from an email between two DTE managers, Smith and Allen, in January 2008, "it is clear that DE planned a *self-executing* QA program and had no intention of

hiring QA professionals." (Emphasis in original). A.G. A39, p. 35.

Gundersen believes that even after the QAPD was published in February 2008, DTE management still did not understand its organizational responsibilities concerning quality assurance oversight. Pointing to a 2008 DTE email wherein DTE asks B&V what type of reviews DTE needs to perform in order to meet COLA requirements, Gundersen comments that "This is yet another example of DTE's expectancy of a *self-executing* QA program being driven by B&V. Furthermore, the DTE QA manager's role should be determined by the QAPD and not via interviews with B&V personnel." (Emphasis in original). A.G. A40, p. 36.

Indeed, evidence from DTE itself proves that Applicant agrees that its QA program was poorly managed. In response to the NRC's 2009 Notice of Violation, DTE assembled a powerpoint slide presentation in September 2010 in which DTE recognized that its lack of a QA program had created organizational chaos. The last slide of the PowerPoint said:

> "If we could wind the clock back:
> – Establish a formal Quality Assurance program much earlier
> – Implement a procurement procedure before the first contract is issued
> – Do not document procedural requirements until they are already complete."

A.G. A41, p. 36. Gundersen finds that "No, it is not possible to wind the clock backwards. The problems that Detroit Edison is currently experiencing with its faulty foundation analysis are directly attributable to the decisions it made to emasculate the Fermi 3 QA program at the beginning of its COLA Licensing Application in 2007." A.G. A43, p. 37.

Intervenors' expert closes with this summary:

> My conclusion is that the current site characterization problems are rooted in the minimal role DTE chose for Quality Assurance and cannot be resolved by continuing to move forward. As early as 2007, senior management at Detroit Edison made imprudent strategic decisions about the role of Quality Assurance on the Fermi 3 Licensing Project that have created the problems the COLA is encountering today.

> The solution to the current problems with the COLA Licensing Project application is to stop work and begin the entire process from the beginning. Detroit Edison has always had the authority to issue a stop work on this project, but has lacked the organizational will to do so in light of the commercial pressures it faced to maintain its place in the nuclear renaissance lineup.
>
> Detroit Edison exclusively created these problems within the DTE Fermi 3 Licensing Project COLA when the corporation chose to make commercial shortcuts in order to speed up the licensing process. Rather than exercising proper control of the site characterization data required to safely construct and operate a nuclear power plant, DTE chose a short cut at the expense of the entire project. Legendary Hall of Fame basketball player/coach John Wooden said, "If You Don't Have Time to Do It Right, When Will You Have Time to Do It Over?"
>
> The Detroit Edison Fermi 3 Licensing Project for COLA is totally flawed and incapable of repair.

A.G. A44, p. 38.

V. Intervenors' Response to Licensing Board Question No. 8

On February 28, 2013, the ASLB issued an "Order (Identifying Questions for the Parties to Address in their Prefiled Written Testimony on Contention 15)." Question No. 8 of the Order is addressed to Intervenors: "What difference do Intervenors maintain existed between the B&V QA program and the DTE's Fermi 3-specific QA program?"

Intervenors respectfully respond, first, that this question seeks irrelevant information. NRC regulations, not to mention logic, require DTE, not B&V, to hold ultimately responsibility for implementation of the Fermi 3 QA program. As the foregoing discussion reveals, there are grave questions as to whether anything but a "self-executing" QA program - whatever that really means - existed under the auspices of DTE in the critical formative period of 2007-2009.

Moreover, the NRC Staff, 2009 edition, answered the ASLB's question in emails with which Intervenors agree. They are discussed in "Declaration of Arnold Gundersen Supporting Supplemental Petition of Intervenors Contention 15," December 8, 2009, filed in this proceeding at pp. 7-16). Intervenors believe these communications are responsive to the ASLB's question:

> email to Rivera-Varona (NRC) from Tonacci (NRC) (6/10/09) ("They do not have a Fermi QA program for design … the actual mechanics I believe have changed several times over the past 2 yrs via different contracts . . . ").

> email from Rivera-Verona (NRC) to Hale (NRC) (6/8/09) ("This issue puts into question the quality of the overall application").

> email from Rivera-Verona (NRC) to Tonacci (NRC) (6/8/09) ("Fermi is not meeting the requirements of 52.79(a)(25) which requires the applicant to provide a QA program consistent with [10 C.F.R. Appendix B]").

> email from Tonacci (NRC) to Carpentier (NRC) (6/10/09) ("Our QA folks believe that DTE needs to have oversight of B&V in the form of a QA program and without it their application is incomplete").

> Memorandum to Cruz (NRC) from Nakoski (NRC) (6/23/09) ("[T]he staff determined that DTE was not governed by a DE QA program meeting the requirements of Appendix B." "These concerns … are of sufficient concern … that they might question the quality of the application").

So Intervenors and the 2009 edition of the NRC Staff agree that the QA role was DTE's responsibility, but DTE brought in a contractor (Black & Veatch - "B&V"). It does not fall to the Intervenors to assess the sufficiency of the B&V program, but rather to assess the DTE program, which did not exist, according to the 2009 edition of the NRC Staff, as late as 2009. The point is, DTE had legal and organizational responsibility, and there is considerable evidence that corporate managers evaded the discharge of that responsibility, in derogation of NRC requirements.

A previous ASLB has already determined that the "self-executing" QA approach DTE chose is inappropriate: “No quality assurance program is self-executing. Thus, irrespective of how comprehensive it may appear on paper, the program will be essentially without value unless it is timely, improved and properly implemented.”[3] Notably, DTE's QA program is not comprehensive, it is *self-executing*.

VI. Conclusion

The evidence shows that the quality assurance arrangements for proposed Fermi 3 were fatally flawed from the outset, and that those failings have current implications, in the form of quality concerns for the physical foundation of this planned power plant. As Intervenors have explained, 10 C.F.R. § 52.79(a)(25) requires a description of a genuine quality assurance program, applied to the design, and to be applied to the fabrication, construction, and testing, of the structures, systems, and components of the facility. The regulation requires a QA program which genuinely applies the requirements of Appendix B to 10 CFR part 50, and shows how they have been and will be satisfied, as well as a discussion of how the quality assurance program will be implemented.

Intervenors’ evidence is “sufficient to raise legitimate doubt as to whether the plant can be operated safely,” and consequently, a ruling in their favor is warranted. *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-756, 18 NRC 1340, 1344-1345 (1983) . There being no “reasonable assurance” that ongoing quality assurance efforts are anything but hopelessly tainted by the Fermi 3 project’s process, it is incumbent upon

[3]Source: ASLB at Consumers Power Midland Station public licensing hearings, March 1973, from slide show, “Continuing Evolution of U.S. Nuclear Quality Assurance Principles,” www.hss.energy.gov /.../qa/docs/NQAContinuingEvolutionTutorial.ppt

the Licensing Board to deny the combined operating license.

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "INTERVENORS' INITIAL STATEMENT OF POSITION ON CONTENTION 15" have been served by me upon the following persons via Electronic Information Exchange this 30th day of April, 2013:

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