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

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Petitioners’ Combined Reply in Support of Second Supplemental Petition
For Admission of a New Contention on ESBWR Quality Assurance


Prior to the filing of their Reply, Petitioners solicited the agreement of counsel for DTE Energy, the Applicant, and counsel for the NRC Staff to allow them to file. DTE and the NRC staff, by

See Staff Answer p. 3 fn. 4: “Severity Level IV violations are the least significant for which NOVs are issued.... Factors considered when determining the Severity Level of a violation are actual safety consequences, potential safety consequences, potential for impacting the NRC’s ability to perform its regulatory function, and any willful aspects of the violation.”
this broad problem and its big-picture implications will evade serious scrutiny in the only proceeding which affords such scrutiny.

Perhaps DTE and the NRC staff presuppose that the QA layers at manufacturer, regulator and utility levels will to some extent provide a failsafe function, backing up one another. Unfortunately, in light of the current facts, that is only a theory – one which Petitioners challenge – which the Board must examine. While newly-discovered program implementation problems, such as the violations at issue, are not in themselves grounds for admitting a contention, see Texas Utilities Generating Co. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-83-75A, 18 NRC 1260, 1262-1263 and n. 6 (1983), the ESBWR NOV and the NOV concerning Fermi 3 quality assurance and the Inspector-General’s poor measure of NRC Staff competency levels, together, paint a very troubling picture.

DTE asserts (Response p. 7) that “Severity Level IV violations are the least significant of the four severity levels under the NRC’s Enforcement Policy and involve non-compliances with NRC requirements for which the associated risks are not significant.” The NRC most often brings enforcement charges at Severity Level IV. Pursuit of this logic to conclusion would mean that merely because it appears to be nonserious, a NOV could never become the subject of ASLB scrutiny. As has previously been demonstrated, QA problems start on paper but end in corroded reactor heads, defective welds, unqualified personnel, operator errors, undiscovered construction problems, extended maintenance outages and associated multimillion-dollar cost overruns.

\(^{3}\)Cited at DTE Response p. 7.
Supposedly insignificant ESBWR violations may be attributable to the view that they reflect QA failings in the design, and not operation, of a built reactor. But rigorous quality assurance adherence must begin at the design stage, if QA is to be exist and be effective through the long prospective reactor operations stage. If a critical lack of QA information remains uncorrected at the outset, the early mistakes can compound until at some point Fermi 3 will either be a less-than-optimally functioning reactor and perhaps even an unsafe one. DTE’s assertion that “the NRC Staff and GEH will necessarily resolve the violations through the enforcement process” (Response pp. 7-8) disparages Petitioners’ point that there are multiple QA breakdowns in three distinct places of the COLA and design processes. It is not that “the adequacy of NRC Staff inspection and oversight” is being brought up as an issue here. Rather, the potential that DTE’s quality assurance deficiencies and GE/Hitachi’s ESBWR QA omissions may not be properly identified and/or remedied over time by unqualified NRC Staff through enforcement activity (i.e., outside of the COLA licensing proceeding) - that is what is pertinent. The uninspiring suggestion that the NRC’s “routine enforcement process”¹ will take care of the problems belies the reality that the NRC enforcement process is now problematic, according to the NRC Office of Inspector-General.

The Staff’s attempt to “expose” Petitioners’ argument (Staff Answer p. 5) by pointing out that employee training databases are the

¹DTE Response p. 12.
missing ESBWR QA\textsuperscript{5} actually strengthens the Petitioners’ argument: in effect, the NRC is alleging that GE/Hitachi has no clue how, or if, the employees involved in ESBWR design are being trained as the design process advances.

Similarly, the Staff’s citation to Tennessee Valley Authority (Bellefonte Nuclear Power Units 3 and 4), Memorandum and Order (Ruling on Request to Admit New Contention) (Apr. 29, 2009) at 6 (unpublished) misquotes the ASLB’s holding to reinforce the unduly-narrow perspective the Staff takes of the Contention No. 16. The portion quoted by the Staff appears in the margin.\textsuperscript{6} The full passage from Tennessee Valley Authority, by contrast, states:

In considering the question of the adequacy of a showing proffered in support of the admissibility of a new contention under the section 2.309(f)(2) precepts, a central element is a determination whether the information provided in support of the contention was, in fact, the appropriate ‘trigger’ for the contention \textit{to the degree the information was not previously available/materially different from information that was available and was timely submitted once it became available.} (Emphasis supplied)

The NOV issued to GE/Hitachi was not previously available, since it is an enforcement action initiated in November 2009, well after the first, March 2009, contention Petitioners raised about the ESBWR design. The gist of the earlier contention was that the COLA process was unfair insofar as intervening parties had to contend with an

\textsuperscript{5}“The Intervenors omit from their summary the information that the databases in question are those that track employee training, not all computer databases related to the ESBWR design.”

\textsuperscript{6}“[A] central element” in any decision on the admissibility of a new contention under 10 C.F.R. § 2.309(f)(2) “is a determination whether the information provided in support of the contention was, in fact, the appropriate ‘trigger’ for the contention.”
incomplete and uncertified design in selecting their contentions. Contention No. 16 is not a reprise of Contention No. 4, but instead, raises litigable concerns about enforcement of QA, which has clear safety implications. There can be no issue over the timeliness with which Petitioners raised the issue of the NOV as representative of ongoing QA problems at GE/Hitachi.

So the occurrence of the November NOV was a “trigger,” but one which evoked Petitioners’ focus of Contention No. 16 on a “chain reaction” of multiple Quality Assurance shortcomings at multiple levels in the reactor planning continuum. There is no question but that Petitioners have met the tests of Tennessee Valley Authority.

The March 25, 2009 and November 12, 2009 enforcement notices sent GE/Hitachi by the NRC include wording that the underlying inspections were "limited" and of "selected" portions of Appendix B to 10 C.F.R. Part 50. Given the other QA breakdowns, including at the NRC, there can be no confidence that other QA problems with the ESBWR, or with the construction planning at DTE, are being or will be consistently identified by NRC enforcement staff, much less addressed. It is the distinct possibility that enforcement will be spotty or nonexistent, and that QA efforts are not at all redundant or interactive, that should cause the ASLB to be concerned.

The comprehensive range of effects which are likely to flow from the multiple quality assurance problem signals must be considered before important resources are committed and wasted in the Fermi 3 COLA process. The ASLB must not restrict its inquiry to discrete QA difficulties, and must instead take account of the multiple trouble
signs documented at the utility, regulator and reactor manufacturer levels. Neither DTE nor the NRC Staff can provide assurance that there will be no interrelated problems caused by no QA contractor oversight at DTE, insufficient production of database information at GE/Hitachi, and poorly-informed QA staff oversight at the NRC.

Some years ago a Nuclear Regulatory Commission inspector for the Midwest region, Ross Landsman, identified faulty welds in Holtec dry storage casks used to hold spent nuclear fuel. What alarmed him was that records of who did the welding and the process they used did not exist, in the deployment of a very unforgiving technology. Said Landsman, "The NRC should stop the production of the casks, but they do not have the chutzpah to do it. This is the kind of thinking that causes space shuttles to hit the ground."^7

Petitioners believe the ASLB is the only means to keep Fermi 3 from “hitting the ground” from a serial range of quality assurance defects.

**WHEREFORE**, Petitioners pray the Atomic Safety and Licensing Board admit their proffered Contention No. 16 for litigation.

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^7http://www.pbs.org/newshour/bb/environment/jan-june05/nuclear_5-03.html
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

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

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the “Petitioners’ Combined Reply in Support of Second Supplemental Petition For Admission of a New Contention on ESBWR Quality Assurance” has been served on the following persons via Electronic Information Exchange this 15th day of January, 2010:

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