## **Official Transcript of Proceedings** NUCLEAR REGULATORY COMMISSION

Title:

Detroit Edison Company Fermi Nuclear Plant, Unit 3

Docket Number: 52-033-COL

**ASLBP Number:** 09-880-05-COL-BD01

Location: Monroe, Michigan

Wednesday, October 30, 2013 Date:

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	ATOMIC SAFETY AND LICENSING BOARD PANEL
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6	HEARING
7	x
8	In the Matter of: : Docket No.
9	DETROIT EDISON COMPANY : 52-033-COL
10	: ASLBP No.
11	(Fermi Nuclear Power : 09-880-05-COL-BD01
12	Plant, Unit 3) :
13	x
14	Wednesday, October 30, 2013
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16	Monroe County Courthouse
17	Board Meeting Room
18	125 E. Second Street
19	Monroe, Michigan
20	
21	BEFORE:
22	RONALD M. SPRITZER, Chair
23	DR. ANTHONY J. BARATTA, Administrative Judge
24	DR. RANDALL J. CHARBENEAU, Administrative Judge
25	

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25	

## PROCEEDINGS

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9:27 a.m.

CHAIRMAN SPRITZER: As I indicated my name is Ron Spritzer. I'm the chairman of this Board. We are here in the matter of Detroit Edison Company. The specific facility at issue is Fermi Nuclear Power Plant Unit 3. Our docket number, NRC docket number is 52-033-COL.

And we are here today to conduct an evidentiary hearing on the two pending contentions in this case, contentions 8 and 15. There's one other contention that's been held in abeyance and we're not going -- or proposed and held in abeyance dealing with the Waste Confidence Rule. We're not hearing anything regarding that issue here today.

As I said I'm Ron Spritzer. I am an administrative judge and an attorney. I'll ask the other two judges sitting up here with me to introduce themselves.

JUDGE BARATTA: My name's Anthony Baratta.

I'm the associate chief administrative judge with the

Atomic Safety Licensing Board. My background includes

about 45 years dealing with nuclear technology issues

and such. I was formerly a professor at Penn State of

nuclear engineering and I've been with the Panel for

1	about 10 years.
2	JUDGE CHARBENEAU: I'm Randall Charbeneau.
3	I'm a part-time administrative judge with the Atomic
4	Safety and Licensing Board. I'm a faculty member in
5	civil and environmental engineering at the University
6	of Texas at Austin. I've been there since 1978. I've
7	been a member of the Board since 2008. Thank you.
8	CHAIRMAN SPRITZER: All right and let me
9	ask the parties to introduce themselves for the
10	record, I should say parties' representatives that is
11	since all parties are represented by counsel, the
12	attorneys who are representing each of the parties.
13	Why don't we start on my left with the applicant.
14	MR. T. SMITH: Yes, good morning. My name
15	is Tyson Smith. I'm an attorney with Winston &
16	Strawn. With me I have my partner David Repka also
17	with Winston & Strawn. And at the end of the table is
18	Bruce Matters who is assistant general counsel with
19	DTE.
20	CHAIRMAN SPRITZER: Very well. And for
21	the interveners?
22	MR. LODGE: Thank you. Good morning, my
23	name's Terry Lodge. I'm counsel for the joint
24	interveners. To my right is Michael Keegan who is

assisting us and is also one of the -- is a

1	representative of Don't Waste Michigan. To my left is
2	Arnold Gundersen who is our expert witness on
3	contention 15.
4	CHAIRMAN SPRITZER: Very well. And for
5	the NRC staff?
6	MS. CARPENTIER: I'm Marcia Carpentier.
7	I'm one of the attorneys for the NRC staff. And with
8	me are Megan Wright and Kevin Broach.
9	CHAIRMAN SPRITZER: Very well. Good
10	morning to everybody.
11	Hopefully you know where the breakout
12	rooms are located for each of the parties. Everybody
13	is set up as far as those are concerned? Okay.
14	I've been advised we may have this may
15	be a rather odd coincidence but there's apparently
16	going to be an alarm test at 10 a.m. related I believe
17	to DTE and the Fermi plant, an emergency zone alarm
18	test. It won't, however, require us to do anything.
19	We'll simply stay here. Somebody may come in the room
20	and say you don't need to leave, but other than that
21	we're not expecting that we'll have to evacuate the
22	premises.
23	In case hopefully everyone is clear
24	where the witnesses will be, but if not they will be
25	seated over to my right. We have three working

1	monitors. I'm not sure whether was one of DTE's
2	panels, do you have four witnesses or is it the
3	maximum?
4	MR. T. SMITH: That's correct, we have
5	four witnesses for one panel, the contention 15.
6	CHAIRMAN SPRITZER: Well, we'll have to
7	work out some mutually satisfactory arrangement where
8	all the witnesses can have access to a monitor.
9	MR. T. SMITH: I'm sure we'll be able to
10	make do. Thank you.
11	CHAIRMAN SPRITZER: Okay. I should before
12	going any further, I don't know if there are any
13	representatives of the county here but we greatly
14	appreciate their making this excellent facility
15	available. We've had great luck.
16	We also had an outstanding facility from
17	the Montgomery County Community College yesterday
18	where we held our limited appearance session.
19	Of course we couldn't do these hearings or
20	limited appearance sessions without the assistance
21	from local governmental units and we greatly
22	appreciate that.
23	For this morning I think we'll take a
24	break at about 11 and then another break probably
25	around 12.30 for lunch

There appear to be at least some members

of the public here. I'll briefly say what this -
what we are here to do. We are here to conduct as

I've said an evidentiary hearing on two contentions,

essentially two claims made by the group that's seated

in the center here, the joint interveners.

One of those contentions, contention 8, concerns the adequacy of the document known as an Environmental Impact Statement which was prepared by the NRC staff based on -- in large part based on an environmental report submitted by Detroit Edison, DTE, and the contention concerns the adequacy of that statement and particularly the adequacy of its treatment of potential impacts to a species listed as threatened under Michigan law known as the eastern fox snake.

The second contention, contention 15, concerns quality assurance issues, specifically the claim that proper quality assurance procedures were not followed in preparation of the application that DTE submitted for a combined license from the NRC. And we will be looking into that question and whether those alleged inadequacies have been satisfactorily remedied.

As far as for anyone who was at the

1	limited appearance session last night I think I
2	explained there that this proceeding, unlike that, is
3	a proceeding for the parties, well, essentially for
4	the judges to ask questions of the parties' witnesses.
5	It is not a public participation session although we
6	certainly welcome your presence here today and
7	hopefully you will find it interesting and
8	educational.
9	Late last night we, or at least it was
10	approximately 5 p.m. a motion was filed by the
11	interveners requesting that this proceeding be held in
12	abeyance or terminated, suspended. I'm not sure what
13	exact word was used.
14	I can say for the judges we're obviously
15	here ready to go and we have no interest in postponing
16	anything.
17	Does DTE share that view, that we should
18	proceed with this today?
19	MR. T. SMITH: Yes, Your Honor.
20	CHAIRMAN SPRITZER: And the staff?
21	MS. CARPENTIER: Yes, Your Honor.
22	CHAIRMAN SPRITZER: All right. Well, we
23	will proceed and hear the two contentions as we
24	intended to do. Mr. Lodge, you may of course either
25	file a request to add an additional contention to the

case. That I assume will be briefed by the parties in the normal manner and we'll address it as soon as we're able to.

All right, in terms of the order of proceeding here, this morning we will start with opening statements from the parties. After that we will proceed to move the exhibits into evidence. Each party will submit the exhibits that are on their exhibit list. We'll ask if there are any objections. If not, they'll be admitted into evidence. We'll then swear the witnesses and proceed with the questioning of witnesses on contention 8.

During the course of the proceeding parties have all submitted proposed written questions for us to ask. Hopefully you all have index cards on which you can submit additional questions. We will of course consider those.

Seated to my left are two law clerks, Matt Zogby and Onika Williams. They'll be available to pick up the cards from you. You can make some sort of hand signal or whatever. We don't mind you doing this during the course of the proceeding, during the course of the questioning. And they'll bring them up to us and we'll get to them as soon as we're able to.

Seated next to the law clerks is of course

281 our court reporter. For the benefit of people here who are witnesses please be careful to -- in our cases we tend to get a lot of acronyms. And that's not necessarily prohibited but when you're using an acronym for the first time try to the extent you're able to tell us what the acronym stands for. That way the record is a lot easier to interpret both for us and anybody else who might be looking at transcript of the case. Other than that as far as rules or witnesses you're more than welcome -- if you don't understand the questions we're asking you're more than welcome to ask us to state it more clearly.

want to look at an exhibit, something you believe to be an exhibit in the case let us know. We do have as you can see monitors available to bring up specific exhibits electronically.

All right. I don't think I have anything further in the way of preliminaries before we move onto opening statements. But do either of my colleagues have -- any of the parties have any issues raised before that need to be do opening we statements?

> MR. T. SMITH: No, Your Honor. CHAIRMAN SPRITZER: Mr. Lodge?

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1	MR. LODGE: Just to clarify, when
2	testimony is ongoing we can submit questions.
3	CHAIRMAN SPRITZER: That's right. Write
4	them down on a card. Hopefully I'll be able in
5	legible
6	MR. LODGE: I was going to say.
7	CHAIRMAN SPRITZER: Pen or pencil, it
8	doesn't matter, just as long as I can read it.
9	Preferably one question to a card unless you have two
10	that are short and can easily be read on one card.
11	All right. Very well. Let's proceed to
12	opening statements and we'll begin with the
13	interveners.
14	MR. LODGE: We believe that there has not
15	been adequate consideration nor are there adequate
16	guarantees in place for the mitigation arrangements
17	for the destruction of habitat and indeed some of the
18	actual individual eastern fox snake species which are
19	found at the site where the proposed Fermi 3 is to be
20	constructed.
21	I will reserve any further statement or
22	argumentation for closing. Thank you.
23	CHAIRMAN SPRITZER: All right, do you have
24	anything on contention 15 in the way of an opening?
25	MR. LODGE: Oh, I'm sorry. We also

1	believe that there is not reasonable assurance I
2	thought there would be a separate opening.
3	CHAIRMAN SPRITZER: No, we're doing
4	opening on all contentions right now.
5	MR. LODGE: As to contention 15 we do not
6	believe that the applicant has demonstrated nor can it
7	presently demonstrate that there is reasonable
8	assurance that matters of quality assurance have been
9	adequately addressed in the FSAR and that there are
10	serious deficiencies dating back to as early as 2007
11	which have implications right down through the present
12	and into the future developmental planning for the
13	Fermi 3 Nuclear Power Plant. Thank you.
14	CHAIRMAN SPRITZER: All right, thank you.
15	Let's hear next from the applicant, DTE. I take it
16	Detroit Edison is now known as DTE.
17	MR. T. SMITH: That's correct.
18	JUDGE CHARBENEAU: And we should refer to
19	them by that.
20	MR. T. SMITH: DTE Energy or DTE is fine.
21	CHAIRMAN SPRITZER: Okay, thank you.
22	MR. T. SMITH: DTE Electric, I'm sorry.
23	Good morning. We're here in Monroe today to discuss,
24	as you mentioned, two contentions related to the
25	application for a combined license or COL for the
ı	I and the second

Fermi 3 project.

First, there's contention 8 which as you mentioned relates to the adequacy of the NRC staff's evaluation of the potential impacts to the fox snake in the Environmental Impact Statement.

And then contention 15 which relates to the adequacy of the quality measures applied by DTE during the development of the application and the QA program to be applied to design and construction of the facility.

As you'll hear I think from the DTE and NRC staff witnesses the issues in both contentions have been the subject of extensive reviews by both DTE and the NRC staff and in the case of the fox snake by the Michigan Department of Natural Resources, or MDNR.

DTE has fully addressed and resolved the issues in both contentions, and both contentions should be resolved in DTE's favor.

I think first some background is useful to help us understand why these issues are now the subject of the hearing. This isn't a case where the interveners had identified a problem that was overlooked or that was not resolved during the Fermi 3 application reviews.

Instead, at the core of each contention

1 are issues that were identified more than 4 years ago by regulators during their review of the application, 2 MDNR for the fox snake and the QA issue by the NRC 3 4 staff. 5 Now, this is significant not only because it demonstrates that these agencies were doing their 6 7 jobs and doing them well but also because these same 8 agencies that raised these concerns initially now 9 consider those issues resolved. 10 For its part MDNR has found DTE's comprehensive fox mitigation plan 11 snake to be acceptable and the NRC staff for its part took a hard 12 look at those impacts including the mitigation plan 13 14 and the EIS. And for contention 15 the NRC staff 15 16 determined after an in-depth review that DTE has and 17 will assure the quality of the safety-related information in its application. 18 19 So, as we go through the hearing process over the next couple of days you'll have on the one 20 hand expert public agencies charged with conducting 21 technical and environmental reviews of the application 22 who have decided that the application meets regulatory 23 24 requirements and is otherwise acceptable.

the other hand you have the

And on

interveners who are focused narrowly on a single moment in time, a snapshot in the past during a long, multi-year review. They've latched onto issues that have been identified by other agencies many years ago and that have been long since considered, addressed and resolved.

They offer no expert witnesses on contention 8 and their expert on contention 15 has identified no issues of material significance or flaws in the application or the DTE QA program.

Now, that's not to minimize the importance and potential significance of these issues. As DTE's expert will testify later today DTE revised the site layout in a way that substantially reduces the impacts to wetlands which are the primary fox snake habitat.

DTE also developed a comprehensive mitigation plan to minimize impacts to the fox snake during construction. This included consulting with an expert herpetologist who is here today to testify and also introduce feedback from biologists at the State of Michigan.

DTE's commitments to protect the fox snake during construction, they're very significant. This is a gold standard of mitigation plans. It includes preconstruction surveys and relocations, employee

trainings and pre-job briefs, barrier fences around construction areas, vehicle speed limits, warning habitat restoration and eventually postconstruction monitoring. Now, DTE's experts will testify that these measures will not only be effective at minimizing impacts to fox snakes but may even lead to improved

So overall the NRC staff's assessment of the fox snake impacts in the FEIS is reasonable and represents a hard look at these issues. Contention 8 should be resolved in favor of DTE and the NRC staff.

conditions for the species as a whole in the area.

With respect to contention 15 DTE confident that the safety-related information in its application is of the highest quality. The company has a long history in the nuclear industry including a strong commitment to quality assurance. And for Fermi 3 DTE has a QA program that meets industry standards and NRC requirements.

Far from showing a lack of commitment to ΟA the interveners alleged DTE has have demonstrated its commitment to QA throughout project, from the site investigation work to the COL application to the ongoing COL review. DTE's dedication and commitment to a quality product cannot

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seriously be questioned.

Contention 15 has two parts. The first part of contention 15 relates to the safety-related information that's in the application.

As DTE's witnesses will explain there's really only a limited amount of safety-related information in the application that DTE developed. Most of the information in the application that's safety-related is part of the ESBWR design which is incorporated by reference into the application.

The DTE piece of safety-related information is limited to Chapter 2 and portions of Chapters 3 and 6 in the final safety analysis report.

DTE has the highest confidence of the quality of that information.

All the safety-related information was collected under an Appendix B or Part 50 Appendix B quality assurance program which is the standard for nuclear applications.

DTE's contract for site investigation activities specifically required its contractor Black & Veatch, or B&V, to have an Appendix B program. And DTE knew that B&V had a preexisting program that had been audited by an industry group, the Nuclear Procurement Issues Committee, as well as other NRC

licenses.

Acceptance of work done under a vendor's Appendix B program is absolutely allowed by regulation and is typical in the nuclear industry. In fact, DTE specifically informed the NRC that it intended to apply B&V's QA program to site investigation work.

With respect to the site investigation work itself you're going to hear directly from DTE and B&V personnel who are personally responsible for that work. This is going to include individuals who were onsite while the work was being performed and who also had the responsibility for assuring the quality of that information as it was gathered.

They're going to personally attest to the extensive controls that were in place including training requirements, minimum qualifications, detailed work instructions, verification activities such as observation, surveillances and audits, and record-keeping.

And perhaps most importantly there have been no issues of material significance identified with respect to the quality of any safety-related information in the application.

If the program were as deficient as the interveners claim surely there would be a material

problem that they could point to. That they point to none I think is an obvious sign of the strength of DTE's QA program.

Now, with respect to the second part of contention 15, that concerns the adequacy of DTE's current QA program and the one that will be applied to future construction and operation of the plant. Here again, all indicators lead inexorably to the conclusion that DTE has established a QA program that meets NRC requirements, industry standards and the NRC-endorsed QA template.

For its part the NRC staff has performed an extensive review and evaluation of the DTE program and found it acceptable. While the interveners will undoubtedly focus on individual comments, and discrepancies, and issues that arose during the COL review these only prove that the process worked as intended.

A QA program is a system that's designed to identify and capture issues and identify areas for improvement and then take steps to correct errors, avoid recurrence and drive improved performance. As our experts will testify the Fermi 3 QA program has worked and is working precisely as intended.

In the end DTE has taken a deliberate and

1 transparent approach to QA at every stage of the 2 application process. All safety-related information 3 in the application is of the highest quality. 4 just as importantly DTE is fully committed to applying 5 the Fermi QA program if and when construction begins. Contention 15 should be resolved in favor of DTE. 6 7 Thank you. 8 CHAIRMAN SPRITZER: Thank you. Last we will hear from the NRC staff. 9 10 MS. WRIGHT: Thank you, Judges. morning to the judges and parties and members of the 11 My name is Megan Wright and I'm representing 12 public. the NRC staff in this proceeding. 13 Thank you for 14 providing us with the opportunity to address the two 15 contentions admitted by the Board. Contentions 8 and 15 are without merit and 16 17 the Board should find as such. I will briefly summarize the staff's position on the issues raised by 18 19 interveners in contention 8 and then I will address the issues and staff's position on contention 15. 20 Contention 8 concerns the staff's analysis 21 in the final EIS of impacts to the eastern fox snake 22 from building activities on the proposed Fermi site as 23 24 well as mitigation for those impacts.

The Board should resolve contention 8 in

favor of the staff because the pre-filed testimony, exhibits and the testimony that you will hear today from NRC staff witnesses will demonstrate that the staff reviewers took a hard look at reasonably foreseeable impacts to the fox snake as well as reasonable methods to mitigate these impacts.

With this information the Board will be able to conclude that the final EIS meets the requirements of NEPA and the NRC's regulations and thus that contention 8 lacks merit.

The staff has demonstrated that the final EIS satisfies NEPA's legal requirements. Under NEPA the staff must take a hard look at environmental impacts of a proposed action. However, this requirement is tempered by a rule of reason. NEPA does not require the elimination of adverse impacts, but rather a reasoned consideration of them. The staff is free to choose its own method for complying with NEPA so long as it is reasonable.

As described in its direct testimony the staff followed its guidance when evaluating the reasonably foreseeable direct, indirect and cumulative impacts to terrestrial resources in the final EIS which includes impacts to the eastern fox snake.

The staff conclusion in the final EIS that

terrestrial resource impacts from building activities could range from small to moderate indicates conservatism in the staff's review approach.

As described in its testimony the staff determined that moderate impacts to terrestrial resources could occur if the eastern fox snake mitigation plan proposed by the applicant is not implemented.

But ultimately the staff concluded that because a number of factors indicate that it is reasonably foreseeable that the proposed mitigation will occur impacts to terrestrial resources would be small.

One of the factors considered by the staff is that the State of Michigan has legal mechanisms in place to require that protective measures be taken when activities may result in the taking of a protected species. Therefore, it is reasonable for staff to conclude that the protective measures will be taken by applicant as described in the proposed mitigation plans because state law requires that such measures be taken.

Also, the staff independently evaluated the detailed and prescriptive measures proposed in the mitigation plans.

You will also hear today that in the professional opinion of the staff reviewers the mitigation plans are comprehensive and consistent with protective industry standard mitigation plans.

In conclusion, the staff's review complies with NEPA's call to take a hard look at impacts and alternatives. Although there are many reasons supporting the staff conclusion that the proposed mitigation for the eastern fox snake will occur and that terrestrial ecology impacts will accordingly be small the staff's analysis also evaluated the outcome if no mitigation occurred.

If this unexpected scenario occurred the staff concluded that impacts would not exceed moderate. In light of its comprehensive review the staff requests that the Board find in its favor because the FEIS fully complies with NEPA.

Regarding contention 15 interveners allege that applicant's quality assurance or QA program does not meet the requirements of Appendix B to Part 50 and that these deficiencies therefore adversely impact the quality of the safety-related design information used in NRC staff's review of the COL application.

As stated in staff's statement of position and in staff pre-filed testimony activities subject to

1 Appendix B are those that are both site-specific and affecting safety-related functions. The Board should 2 3 resolve contention 15 in favor of the applicant for 4 three reasons. 5 the staff conducted a thorough technical review of the applicant's quality assurance 6 7 program description, or QAPD, and found that it meets the regulatory requirements in Appendix B to Part 50. 8 9 You will hear from staff witnesses today 10 who will describe that process and will testify that the QAPD was reviewed against the acceptance criteria 11 in the NRC standard review plan and found to meet all 12 relevant NRC regulatory requirements. 13 14 Staff witnesses will also testify that 15 applicant's QAPD was reviewed against NEI template NEI-06-14A revision 7 and was found to be consistent 16 17 with this NRC-endorsed template. Contrary to intervener's arguments the 18 19 applicant was not required to use this template as it is guidance and was not required to inform the NRC if 20 it intended to deviate from this template. 21 pre-application all 22 Secondly, related to applicant's QA program have been resolved 23 24 using the licensing process. In 2009 staff raised

questions as to the adequacy of applicant's QA program

1 and conducted an inspection of QA activities in August of 2009. 2 3 Following this inspection the staff issued 4 Notices of Violation, or NOVs, in 2009 and 2010, 5 citing three issues with applicant's QA program which are categorized as severity level 4, the lowest level 6 7 assigned to the least significant safety violation. 8 As staff witnesses will testify applicant 9 responded to the NOVs by outlining corrective steps taken to address the violations and staff found that 10 the information provided by applicant was sufficient 11 to resolve the NOVs. 12 Additionally, staff used the licensing 13 14 process and reviewed pre-application QA activities to ensure that the deficiencies cited in the 2009 NOV did 15 affect the quality of safety-related design 16 17 information in the COL application. This review included the issuance of many 18 19 Requests for Additional Information, or RAIs, which applicant responded to and which were resolved as 20 described in Chapter 17 of the SER. Staff witnesses 21 will testify as to how this process was executed and 22 how the issues were resolved. 23 24 Third and finally, audits and inspections

applicant's contractor, Black & Veatch, which

handled many of applicant's pre-application activities also show that its QA program complies with Appendix B.

Staff conducted two separate audits and inspections of Black & Veatch in 2007 and 2010. Black & Veatch was found to be in compliance with the QA requirements in Appendix B both times.

Applicant also conducted audits of Black & Veatch activities which lent additional support for the conclusion that Black & Veatch activities were carried out under appropriate QA controls.

the NRC staff appropriately In sum, the Agency's licensing processes determined that the Fermi 3 QA program meets all relevant NRC regulatory requirements with respect to the design, construction and operation facility.

In order to reach that determination staff reviewed the QAPD against regulations and staff guidance, conducted inspections of applicant's QA activities, issued RAIs to collect and clarify information, and conducted audits of applicant's contractor, Black & Veatch to ensure that all preapplication activities were done in a manner that does not compromise the safety of the project. As such,

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1 the Board should find in favor of the applicant on contention 15. 2 conclude, NRC 3 To staff pre-filed 4 testimony, exhibits and the witness testimony you will 5 hear today demonstrate that neither contention 8 nor 6 contention 15 have merit. NRC staff respectfully 7 requests that the Board find in favor of the staff on 8 contention 8 and in favor of the applicant 9 contention 15. Thank you. 10 CHAIRMAN SPRITZER: Thank you. Very well, we'll move onto admission of exhibits. Why don't we 11 start with the interveners. I'm going to bring up 12 what I believe to be your final exhibit list. 13 14 we're going to have some matters to go over because 15 there were some exhibits that we declined to allow you 16 to file and others that you withdrew. And I want to 17 make sure we get -- we properly identify what those 18 are. 19 First of all, the list I'm looking at says "Intervener's Final Public Exhibit List for Contention 20 21 15." Why don't we start with that? We've got several marked as withdrawn. 22 Am I looking at your -- have I correctly 23 24 identified your final exhibit list? This actually

includes -- it says "Intervener's Final Public Exhibit

1	List for Contention 15."
2	MR. LODGE: Yes, Your Honor. This was
3	filed I believe before the Board's ruling.
4	CHAIRMAN SPRITZER: Okay. But is this the
5	final list you've actually submitted to us?
6	MR. LODGE: Correct, yes.
7	CHAIRMAN SPRITZER: All right. And it's
8	dated October 23, 2013.
9	MR. LODGE: Correct.
10	CHAIRMAN SPRITZER: And I take it you want
11	to move into evidence all the exhibits other than
12	those marked as withdrawn.
13	MR. LODGE: Correct. Yes, sir. And to
14	the extent necessary to have the record reflect that
15	we are requesting that the Board reconsider its order
16	of last week which denied I guess receipt into the
17	record of exhibits that were submitted after the
18	October 4 deadline.
19	CHAIRMAN SPRITZER: You may need to keep
20	your voice up. I can hear you but are you able to
21	able to hear?
22	MR. LODGE: I will.
23	CHAIRMAN SPRITZER: Okay.
24	MR. LODGE: I'll do better.
25	CHAIRMAN SPRITZER: Okay. All right.

1 Here are the exhibits that I understand -- well, let me list the exhibits first of all that we've excluded. 2 I appreciate your Motion for Reconsideration but we'll 3 4 deny that. 5 The excluded exhibits are 6, 34 and 35, 37 through 49, and 64. And if you disagree with that 6 7 please let me know. 8 MR. LODGE: No, I think that's correct. 9 That is correct, sir. 10 CHAIRMAN SPRITZER: All right. And the withdrawn exhibits, you've marked a number of them on 11 here as withdrawn but I'll give you my understanding 12 of the ones that are withdrawn, 12 through 30, 32 and 13 14 33, 36, 50 through 55 and 65. MR. LODGE: 15 Correct. 16 CHAIRMAN SPRITZER: All right, so all 17 those have been withdrawn. Now, according to my calculations therefore the ones that you would -- that 18 19 we would admit into evidence absent some further objection from either DTE or the staff would be 20 Exhibits 1 through 5, Exhibit 7 although that one as 21 we indicated in our order of last week would be 22 admitted as an exhibit but not as new testimony, 8 23 24 through 11, 31, 56 through 63, 66 through 70.

25

would be for contention 15.

1	MR. LODGE: Yes, that's correct.
2	CHAIRMAN SPRITZER: All right.
3	MR. LODGE: And we so move.
4	CHAIRMAN SPRITZER: Now, as to the ones
5	I've identified as exhibits that have neither been
6	withdrawn or that the Board has excluded are there any
7	further objections to those from either from DTE or
8	the staff?
9	MS. CARPENTIER: The staff renews its
10	objection to non-public Exhibits 57 and 59 for the
11	record but we do understand your ruling on the issue.
12	MR. T. SMITH: DTE has no objection.
13	CHAIRMAN SPRITZER: All right. The
14	exhibits listed as neither excluded nor withdrawn will
15	be admitted into evidence on contention 15.
16	(Whereupon, the above-referred to
17	documents were marked for identification as
18	Intervener's Exhibit Nos. 6, 34, 35, 37-49, 64 for the
19	record and were admitted into evidence).
20	CHAIRMAN SPRITZER: Eight, I understand
21	that you have four exhibits labeled Intervener's or
22	INTE, capital E, 1 through 4. Those to my
23	knowledge there have been no rulings. We haven't
24	withdrawn any of those exhibits. We haven't excluded
25	any. Are there any objections to those being admitted

1	into evidence?
2	MR. T. SMITH: DTE has no objections.
3	CHAIRMAN SPRITZER: Staff?
4	MR. ROACH: The staff has no objections.
5	CHAIRMAN SPRITZER: All right. So those
6	will be admitted into evidence on contention 8.
7	(Whereupon, the above-referred to
8	documents were marked for identification as
9	Intervener's Exhibit Nos. 1-4 for the record and
10	admitted into evidence).
11	CHAIRMAN SPRITZER: Are there any further
12	exhibits from interveners that I have not covered?
13	MR. LODGE: No, sir.
14	CHAIRMAN SPRITZER: Very good. All right,
15	let's move onto DTE. And we have one exhibit list
16	from you I believe.
17	MR. T. SMITH: That's correct.
18	CHAIRMAN SPRITZER: And just a minute
19	here. The copy I have doesn't actually have a date.
20	It says DTE Electric Company, Fermi COL proceeding.
21	I guess it has make sure we're on the same page so
22	to speak.
23	It has an identification number on the end
24	of page 7, the letters SF350993.8. Are we looking at
25	the same document?

1	MR. T. SMITH: Yes.
2	CHAIRMAN SPRITZER: All right. And I take
3	it you move all those exhibits into evidence?
4	MR. T. SMITH: We so move.
5	CHAIRMAN SPRITZER: Any objection from
6	either interveners or staff?
7	MR. LODGE: None from interveners.
8	MS. CARPENTIER: None from staff.
9	CHAIRMAN SPRITZER: Those exhibits will
10	all be admitted into evidence therefore.
11	(Whereupon, the above-referred to
12	documents marked on the DTE Exhibit List for the
13	record were admitted into evidence).
14	CHAIRMAN SPRITZER: And then we'll move
15	onto the staff. And you have two exhibit lists as I
16	understand it, one for contention 8, one for
17	contention 15. Am I correct on that?
18	MS. CARPENTIER: Yes.
19	CHAIRMAN SPRITZER: All right. And this
20	was I'm looking at the version that says "Re-filed
21	9/20/13 with added Exhibits E-20, E-21 and E-22." And
22	the original apparently was submitted March 29. Is
23	that the final exhibit list for contention 8 for the
24	staff?
25	MR. ROACH: Yes, Judge Spritzer.

1	CHAIRMAN SPRITZER: All right. And I take
2	it you move those into evidence?
3	MR. ROACH: The staff moves.
4	CHAIRMAN SPRITZER: Any objection from
5	either DTE or the interveners to those exhibits?
6	MR. LODGE: None from interveners.
7	MR. T. SMITH: None from DTE.
8	CHAIRMAN SPRITZER: All right, they'll all
9	be admitted.
10	(Whereupon, the above-referred to
11	documents marked on the Staff Exhibit List for
12	Contention 8 for the record were admitted into
13	evidence).
14	CHAIRMAN SPRITZER: And last but not least
15	we will do the staff's list for contention 15. And to
16	be sure again that we're talking about the same
17	document this one says "Submitted September 26, 2013,
18	Revised NRC Staff Exhibit List for Contention 15." Is
19	that the one, the latest version for the staff on
20	contention 15?
21	MS. CARPENTIER: Yes, it is.
22	CHAIRMAN SPRITZER: All right. And I take
23	it you move those into evidence.
24	MS. CARPENTIER: We do.
25	CHAIRMAN SPRITZER: Any objection from

1	either DTE or interveners to any of those exhibits?
2	MR. T. SMITH: None from DTE.
3	CHAIRMAN SPRITZER: Any objection from
4	interveners?
5	MR. LODGE: No.
6	CHAIRMAN SPRITZER: Very well, those will
7	all be admitted into evidence.
8	(Whereupon, the above-referred to
9	documents marked on the Staff Exhibit List for
10	Contention 15 for the record were admitted into
11	evidence).
12	CHAIRMAN SPRITZER: Finally, we have Board
13	Exhibits 1 and 2. We obviously let you know rather
14	late in the day about those. We tried to make them
15	available through the EIE system. I don't know
16	whether you were able to review them or not before
17	coming here today.
18	MR. T. SMITH: DTE was able to review them
19	and is familiar with them. We have no objection to
20	the NQA-1-1994.
21	NQA-2 as our witnesses can explain in more
22	detail has actually been superseded and is subsumed
23	within NQA-1-1994. DTE has committed to NQA-1-1994.
24	So we believe NQA-2 has no relevance to anything in
25	this proceeding so we don't believe it's necessary to

1	introduce it into evidence.
2	CHAIRMAN SPRITZER: From interveners, were
3	you able to review those documents?
4	MR. LODGE: We were, thank you.
5	CHAIRMAN SPRITZER: And if so, do you have
6	any objection to our
7	MR. LODGE: We were and we have no
8	objections, thank you.
9	CHAIRMAN SPRITZER: And for the staff?
LO	MS. CARPENTIER: We have no objections.
L1	CHAIRMAN SPRITZER: All right. We'll
L2	admit that into evidence.
L3	(Whereupon, the above-referred to
L4	documents were marked for the record as Board Exhibits
L5	NQA-1-1994 and NQA-2 and were admitted into evidence).
L6	CHAIRMAN SPRITZER: I understand your
L7	position, Mr. Smith, but in order to ask the witness
L8	to explain them we probably need to have them as
L9	exhibits. So we'll admit NQA-2 for the purpose of
20	explaining what relevance, if any, it may have to this
21	proceeding.
22	Very well, let's move on then. Unless
23	there's anything further on exhibits let's move onto
24	well, let me ask first, are all the witnesses who
25	are going to testify on either contention here at the

1	moment.
2	MR. T. SMITH: Yes, Your Honor, all of
3	DTE's witnesses are here.
4	MR. LODGE: Yes, Your Honor. Intervener's
5	witness is here.
6	CHAIRMAN SPRITZER: And for the staff?
7	MS. CARPENTIER: All staff witnesses are
8	also here.
9	CHAIRMAN SPRITZER: Very well. Let me ask
10	all the people who will be testifying as witnesses to
11	stand. I'm going to swear you in in a group. Please
12	answer "yes" as opposed to a shake or nod of the head
13	or a grunt or something like that. You will remain
14	under oath during the course of the proceeding
15	including when, of course, you testify. Very well.
16	(Whereupon, the witnesses were sworn).
17	CHAIRMAN SPRITZER: All right, unless
18	there's anything further of a procedural nature why
19	don't we proceed to the witnesses on contention 8. I
20	believe we're going to start first with the staff
21	witnesses. Staff counsel will introduce those
22	witnesses and they can come up and take a seat at the
23	witness stand.
24	MR. ROACH: Yes, Your Honor. The

witnesses for the NRC staff on contention 8 are Joseph

1	Peyton Doub and David Weeks.
2	WHEREUPON,
3	JOSEPH PEYTON DOUB
4	DAVID WEEKS
5	were called for examination by the NRC staff, having
6	been first duly sworn, assumed the witness stand, were
7	examined and testified as follows:
8	CHAIRMAN SPRITZER: The first three
9	monitors should all be operating. Bear with me a
10	minute. I'm going to bring something up on the screen
11	here.
12	All right, can we bring up the staff's
13	pre-filed direct testimony that's Exhibit NRC E-21?
14	We'll go to page 23. At the bottom. Can we go all
15	the way to the bottom of the page? Yes, okay.
16	Let's take a look at the last sentence
17	although of course you can read the whole paragraph if
18	you need to.
19	"In other words we concluded that the
20	potential impacts of building the project would be
21	small if the proposed mitigation were successfully
22	implemented but moderate if not."
23	What does the word "successful" or the
24	term "successfully implemented" mean? In your
25	opinion.

MR. WEEKS: Successful implementation would be -- consist of actually carrying out the measures that are provided for in the plan. And that the indicators of performance would be met in terms of whether the -- in the case of the training for the employees whether that would be carried out and duly noted. And in the case of the habitat mitigation that the steps outlined in the plan would be carried out and then ultimately the vegetation and other habitat characteristics, hydrology and so on would be measured and would comply with the plan as written.

CHAIRMAN SPRITZER: How would one measure success in terms of -- the plan has a number of requirements, provisions, things that are going to be done. What I'm trying to understand is how would one measure success. I understand one component of it would be do they actually do the things called for in the plan. But are there other indicators that would be used to measure success?

One that obviously comes to mind, at least for me it seems obvious, would be to compare -- to monitor in some way what happens to the snake population over time which I would assume would involve some initial study of how many snakes, how many members of the species are present at the Fermi

3 site and how that changes over time.

But tell me what -- if I'm wrong about
that in what ways there would be -- what someone would
look at to see if the plan is really working in terms
of protecting the species.

MR. WEEKS: The plan does not call for research measures such as determining populations onsite, but it does call for monitoring, of course recording any instances where the fox snakes would be located and relocated within the site, or at any point to the offsite wetland mitigation site.

Those snakes that would be captured would be -- have PIT transponder tags inserted into the snakes that would enable the applicant's staff or consultants to track those snakes so they would be able to assess what is going on with those snakes that were, in fact, found. So that would provide some measure of saying are we -- what's happening to the snakes that we find over time.

And that would be tracked for at least 5 years after all the building actions were carried out.

CHAIRMAN SPRITZER: Now, I take it by building actions -- well, tell me what you mean by that. My understanding was the period in which snakes would be moved from wherever they happen to be at

1	present would be areas that would be, what is it,
2	grade essentially the site preparation activities,
3	grading, excavating, clearing of vegetation, as
4	opposed to actual constructing the reactor building
5	and the generator and so forth. Am I mistaken about
6	that?
7	MR. WEEKS: My understanding is that, yes,
8	most of the activities that would potentially impact
9	the habitat or the individual fox snakes would be
10	during the site preparation and clearing.
11	CHAIRMAN SPRITZER: And the monitoring,
12	will that occur during the site preparation phase? As
13	well as after.
14	MR. WEEKS: It would begin then by
15	tracking those snakes that were captured and
16	relocated.
17	CHAIRMAN SPRITZER: And as I understand it
18	they could be relocated onsite and then when this
19	additional mitigated wetland area becomes available,
20	this is, I think it's a farm about near the Monroe
21	coal-fired plant, when that becomes available the
22	snakes could be relocated there as well?
23	MR. WEEKS: That's correct.
24	CHAIRMAN SPRITZER: And so both
25	wherever they're relocated the snakes would be

1 monitored in some way to see, I assume if they survive, number one. 2 3 MR. WEEKS: That's correct. 4 CHAIRMAN SPRITZER: And what else? 5 MR. DOUB: We would also track the movement of the snakes and the behavior of the snakes. 6 7 It's not mere survival, but also behavior and response 8 to the new setting. 9 CHAIRMAN SPRITZER: Now, if as a result of 10 this monitoring it appears that snakes in one or both of these locations where they may be transported, 11 either onsite wetlands or offsite, if they aren't 12 doing well what happens then? If anything. 13 14 MR. WEEKS: The intent is to assess what 15 determine what the causes for going on, 16 potential problems would be and to develop adaptive 17 measures to change whatever is happening to reduce the impact on the snake. And I believe that that would 18 19 also involve consultation with the Michigan Department of Natural Resources, or DNR. 20 MR. DOUB: The DNR would be -- the DNR 21 would be involved in reviewing the process. 22 And they would be -- the staff would expect that they would 23 24 prescribe adaptive measures should the monitoring

25

reveal potential problems.

1	CHAIRMAN SPRITZER: Who's going to be in
2	charge of conducting the monitoring and reviewing the
3	results?
4	MR. WEEKS: Ultimately that would be the
5	applicant and any consultants that they would hire for
6	that.
7	MR. DOUB: But under the ultimate
8	direction of the Michigan Department of Natural
9	Resources. But the applicant would be the ones
10	collecting the monitoring field data.
11	JUDGE CHARBENEAU: How frequently are the
12	snakes identified in the field?
13	MR. WEEKS: They are somewhat secretive
14	and due to their habitat location and their coloring
15	not easily observed.
16	As I understand, DTE staff have observed
17	the snake on the site several times. The number is
18	somewhere on the order of 15 times over the last 10 or
19	so years, maybe a little more than that. Plus it was
20	observed twice during wetland delineation surveys for
21	preparation of the environmental report.
22	JUDGE CHARBENEAU: So the preconstruction
23	monitoring could be just a matter of seeing if you
24	have any identifications, is that correct?
25	MR. WEEKS: The

1	JUDGE CHARBENEAU: For site
2	MR. WEEKS: Yes, the mitigation plan calls
3	for all the areas to be disturbed to have a walk-down
4	a week before any construction activities and also the
5	day before. So that would be the first opportunity,
6	really, to make sure.
7	MR. DOUB: And the walk-down would be
8	performed by a qualified biologist who knows how to
9	recognize the fox snake, the eastern fox snake.
10	JUDGE CHARBENEAU: I've got a couple of
11	other questions. We had the limited appearance
12	hearings yesterday. And I understood from those that
13	there have been four populations of the snakes in this
14	region. Do you know that that's a correct number?
15	MR. WEEKS: We were unable to obtain the
16	document that was cited, but the Michigan Natural
17	Features Inventory, its primary document that
18	summarizes knowledge of the natural history of the
19	snake cites that document and others. And it is more
20	recent, includes other sources.
21	So the Michigan Natural Features Inventory
22	does not state that that is the case. It may or may
23	not be, I don't know.
24	MR. DOUB: If you go back to a paper that

was prepared by A. Conant in 1940 they document

1	occurrences of the eastern fox snake and they tend to
2	be clustered on the western shore of Lake Erie, on the
3	northwestern shore of Lake Erie and Canada, and on the
4	on the eastern shore of Lake Huron, and clustered
5	around Saginaw Bay.
6	Although scientists do not recognize
7	distinct subpopulations of the eastern fox snake it is
8	recognized that there is a regional population that
9	encompasses most of the western shore of Lake Erie.
10	JUDGE CHARBENEAU: So that extends
11	aerially well beyond the 50-mile radius which I
12	understand was your reason for not considering a
13	finding of large if no actions were taken.
14	MR. WEEKS: That was part of our
15	assessment, yes.
16	MR. DOUB: Although if you look at the
17	7.5-mile radius that does encompass most of the
18	concentration of eastern fox snake observations on the
19	western shore of Lake Erie. Most, but not all.
20	CHAIRMAN SPRITZER: Let's bring up Exhibit
21	I believe it's DTE 14, that is 000014. Have you
22	both seen this document previously?
23	MR. WEEKS: Yes.
24	MR. DOUB: Yes.
25	CHAIRMAN SPRITZER: Do you know anything

1 -- I suspect this looks like this is a letter written 2 to DTE, not to the NRC staff, but do you have any 3 knowledge as to how this document came about? 4 MR. WEEKS: My understanding is that upon 5 completion of the eastern fox snake habitat and species conservation plan prepared by DTE 6 7 provided it to Michigan Department of 8 Resources for their review since MDNR had previously 9 expressed the desire for DTE to prepare such a plan. 10 CHAIRMAN SPRITZER: All right. move down a little on the document? First, it says --11 or I should say there's a box checked, this is down on 12 the second half of the page. 13 14 Well, first it says that the plan 15 submitted was found to adequately address the concerns for potential threatened and endangered species at the 16 site in question. I take it that would be the Fermi 17 3 site? 18 19 MR. DOUB: Yes. 20 That's what my understanding MR. WEEKS: is. 21 And that the Okay. 22 CHAIRMAN SPRITZER: proposed project should have minimal direct impacts on 23 24 known special natural features at the location specified if it proceeds according to the plans 25

1 provided with the last five words underlined. 2 And then it notes that the one special 3 feature that may occur at the site is the eastern fox 4 snake. Can we go onto the next page? 5 It then says an endangered species permit is required if, with the word "if" underlined, 6 7 activities will harm the species that are present, including transplanting them to another location. 8 the word "transplanting" is underlined. 9 Now, my interpretation of this document, 10 you tell me if I'm wrong, is what they're saying will 11 require a permit from MDNR is the implementation of 12 the plan because it will involve transplanting a 13 14 threatened species to different locations. Is that a fair reading of the document? 15 That's my understanding, yes. 16 MR. WEEKS: 17 CHAIRMAN SPRITZER: I don't see anything here where MDNR is saying we will require a separate 18 19 permit, or let me rephrase that, where MDNR is saying they will require DTE to apply for a take permit for 20 the construction activities that we've been talking 21 Do you see anything in here that indicates 22 that would be required? 23 24 MR. WEEKS: My reading of it is that the taking permit is required for the activities that 25

1	would potentially result in a take and that those
2	activities would include implementation of the habitat
3	and species conservation plan. So I see it as one
4	action is my reading.
5	CHAIRMAN SPRITZER: So, your excuse me,
6	go ahead.
7	MR. DOUB: Also, I would note that the
8	statement says if activities will harm the species,
9	i.e., take, including but not necessarily limited to
LO	transplant or actually a more correct scientific term
11	would be relocation of the snakes to another location.
L2	So what this is saying is that if there is
L3	take, harm, then a permit's required. And that permit
L4	would have to also address the act of relocating the
L5	snakes to other receiving habitats.
L6	CHAIRMAN SPRITZER: If DTE well, let me
L7	put it this way. Even with implementation of the
L8	mitigation plan, full implementation of the mitigation
L9	plan, is it your understanding that there would be, or
20	are realistically likely to be a taking of eastern fox
21	snake during the construction activities?
22	MR. WEEKS: It is reasonable to think that
23	some taking could occur, yes.
24	CHAIRMAN SPRITZER: How would that happen?
25	What would that consist of?

1	MR. WEEKS: Especially during site
2	clearing and preparation, since the snakes live on the
3	surface of the ground or just burrow at shallow depth
4	if they are not out on the surface and could move away
5	from disturbance they could be damaged by or crushed
6	by machinery and the bulldozing or other site
7	leveling.
8	MR. DOUB: Also, the loss of habitat would
9	constitute harm as well.
10	MR. WEEKS: Yes.
11	CHAIRMAN SPRITZER: Have either of you had
12	any discussions with MDNR about what they expect to
13	require from DTE in the way of incidental strike
14	that. In the way of a take permit?
15	MR. DOUB: Just via the written
16	correspondence that we have reviewed.
17	CHAIRMAN SPRITZER: Which would include
18	the exhibit we've just been looking at, I assume.
19	MR. DOUB: Correct.
20	MR. WEEKS: Yes.
21	CHAIRMAN SPRITZER: Any other documents
22	that you can recall off the top of your head?
23	MR. DOUB: As part of our review we
24	reviewed correspondence between the applicant and the
25	MDNR dating back to what's called the Sargent letter

1 which is one of our exhibits. So we have performed a comprehensive 2 review of all the correspondence 3 received. 4 We also note that the Michigan wetlands 5 permit issued also refers to the need for 6 implementation of the eastern fox snake mitigation 7 plan. 8 CHAIRMAN SPRITZER: Okay. All right. My 9 recollection was -- I think I know the document you're 10 referring to. This is the Michigan Department of Environmental Quality wetlands permit? 11 MR. DOUB: Correct. 12 CHAIRMAN SPRITZER: My recollection is it 13 14 did refer to the potential need to get a permit. 15 don't recall any indication that they had actually reviewed the so-called mitigation plan that's been 16 17 talked about with respect to this contention. DOUB: It simply states that the 18 19 mitigation would have to be performed. 20 CHAIRMAN SPRITZER: All right. Well, we have that document in evidence, I believe, so we can 21 22 see what it says. Can we go back to the first page of the 23 24 exhibit? Let's go to the top of the page. This is DTE 14. 25

I take it -- the documents you reviewed that are in evidence, the MDNR documents that you have reviewed and that led to your opinions that you've expressed are documents that are in evidence in this proceeding so we can look at them as well and draw our own conclusions as to what they mean. MR. DOUB: Yes. 

CHAIRMAN SPRITZER: All right. Prior to this case have either of you in your work had any prior experience with the Michigan Department of Natural Resources' implementation of the Michigan Endangered Species Act?

MR. WEEKS: I have not.

MR. DOUB: I have prepared a biological assessment for the Forest Service of a program non-native invasive plant control on the Ottawa National Forest. It was an environmental assessment and as part of that in addition to authoring the biology sections of the environmental assessment I also wrote the biological assessment that had to address both the federal species and per requirements of the Forest Service impacts to what they call regional forests or sensitive species that includes many of the state species.

CHAIRMAN SPRITZER: Was that biological

1	assessment prepared for the United States Fish &
2	Wildlife Service or for the Michigan Department of
3	Natural Resources? Or both?
4	MR. DOUB: Both.
5	CHAIRMAN SPRITZER: Okay.
6	MR. DOUB: And that should be in my CV
7	which is one of the exhibits, E-2 or E-3.
8	CHAIRMAN SPRITZER: Is that the full
9	extent of your prior experience with the MDNR's
10	implementation of the Michigan Endangered Species Act?
11	MR. DOUB: Correct, but I do have
12	experience in a number of other states doing similar
13	work.
14	CHAIRMAN SPRITZER: What would let's
15	assume, as you predict, MDNR issues a permit that
16	requires implementation of the mitigation plan, DTE's
17	mitigation plan. How would MDNR go about verifying
18	compliance with that plan? If you know.
19	MR. WEEKS: I don't know, but I would
20	assume that part of that would be to review the
21	reports that DTE has said they will produce on the
22	data that they collect.
23	CHAIRMAN SPRITZER: Those would be the
24	monitoring reports you mentioned earlier?
25	MR. WEEKS: I assume that would be one, at
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1 least one source of information they would use, yes. 2 We would expect that they would MR. DOUB: 3 develop a relationship with DTE over the course of the 4 implementation of the mitigation plan. However, these 5 details are not spelled out in the actual plans. 6 CHAIRMAN SPRITZER: So it would be up to 7 the state to determine how to best go about enforcing 8 the plan? 9 But the plan itself is prepared MR. DOUB: 10 in a highly detailed, prescriptive manner with very exacting performance standards, actions that would be 11 12 performed and that would have successes So we would expect that the state would 13 accomplished. 14 -- that the state would -- we would expect that the 15 state would expect that the plan would be implemented 16 the way it was written. 17 MR. WEEKS: And the plan has to be approved by the MDNR and I would assume that they 18 19 would include any permit conditions that they saw necessary, including how they would verify the success 20 of the mitigation plan itself. So they could be 21 that the actions 22 certain taken were, in effective, or at least to determine how effective they 23 24 were. 25 JUDGE BARATTA: So, you're -- let me

1	interrupt for a second. So, you're you're not
2	familiar with then the regulations that Michigan has
3	with regards to the implementation of the Natural
4	Resources and Environmental Protection Act, Act 451
5	that's referenced in Exhibit E-5, the you've cited
6	in your testimony.
7	MR. WEEKS: I am familiar with the law,
8	but the question posed earlier is whether we had prior
9	experience with the MDNR and its implementation of
10	that law.
11	JUDGE BARATTA: Okay. Have you looked at
12	the regulations that implement that law to see what is
13	actually required?
14	MR. WEEKS: I have not.
15	MR. DOUB: We do have in one of our
16	exhibits, I think it's E-18, we have the application
17	form that DTE would have to complete to obtain a
18	permit under Part 451.
19	JUDGE BARATTA: Okay, but you haven't
20	looked at any seen any like staff guidance, for
21	example, that MDNR looks at, uses to review the
22	mitigation plan?
23	MR. WEEKS: I have not looked at any
24	internal
25	MR. DOUB: I'm not aware
ļ	I and the second

1	MR. WEEKS: internal rules.
2	JUDGE BARATTA: Okay, thank you.
3	CHAIRMAN SPRITZER: Do either of you have
4	any knowledge of how when it finds a violation, or
5	believes it has found a violation of the Endangered
6	Species Act what enforcement mechanisms are available
7	to the Michigan Department of Natural Resources? If
8	you don't know that's fine, I'm just asking whether
9	you have any knowledge about that area.
10	MR. WEEKS: You mentioned Endangered
11	Species Act. I assume you're talking the state.
12	CHAIRMAN SPRITZER: The state, that's
13	correct.
14	MR. DOUB: Part 451. I'm not aware of the
15	specific mechanisms.
16	MR. WEEKS: Nor am I.
17	CHAIRMAN SPRITZER: All right. I have
18	some questions for you that have been propounded to
19	us. The parties have asked us to ask a few. That has
20	been submitted before we got started today. Let me
21	get those out and we'll move onto those.
22	Does the NRC staff routinely employ a
23	bounding analysis in NEPA evaluations?
24	MR. DOUB: Yes, we do look at if there
25	is uncertainty in our analysis we will take a
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1	conservative approach. We do adhere to the concept of
2	NEPA requires consideration of what is reasonably
3	foreseeable, not worst case. But we do employ a
4	degree of conservatism, and this degree of
5	conservatism is indeed reflected in our inclusion of
6	small to moderate rather than small or potential
7	impacts of terrestrial resources including the eastern
8	fox snake.
9	CHAIRMAN SPRITZER: Is the use of bounding
10	analyses permitted under NRC's NEPA guidance documents
11	such as the standard review plan, NUREG/1555?
12	MR. DOUB: To my knowledge there's nothing
13	prohibiting it.
14	CHAIRMAN SPRITZER: Do you know whether
15	it's mentioned at all in that guidance document? The
16	standard review plan.
17	MR. DOUB: I don't believe that term is
18	specifically used. But it's important to bear in mind
19	that NEPA calls for consideration of reasonably
20	foreseeable impacts.
21	CHAIRMAN SPRITZER: Now, in terms of I
22	understand the analysis you did and I'll refer to it
23	as a bounding analysis. You have the lower bound
24	which would be minimal impacts on the fox snake. I
25	assume that means full implementation of the

1 mitigation plan and that it will in fact be successful in identifying and transplanting snakes that might 2 otherwise be killed to a location where they're 3 4 successful. Is that a fair statement? 5 MR. DOUB: Yes. The term we use is small. We conclude the impacts would be small. Small as 6 7 defined in 10 C.F.R. 451. 8 CHAIRMAN SPRITZER: And the upper bound 9 would be on the assumption that the mitigation plan 10 were not implemented at all. MR. DOUB: Yes. And in that case we 11 conclude that the potential impacts would be moderate, 12 i.e., noticeable but not destabilizing. 13 14 CHAIRMAN SPRITZER: Destabilizing I take 15 it means you'd be having a significant impact on the 16 population of the eastern fox snake as a whole, not 17 just at the Fermi 3 site? MR. DOUB: Actually we took a considerably 18 19 more conservative approach than that examining the potential impacts in the context not of the eastern 20 fox snake as a species, but the regional population of 21 eastern fox snake on the western shore of Lake Erie. 22 So, if we had felt that the project would 23 24 destabilize simply that portion of the eastern fox snake's distribution along the western shore of Lake 25

1 Erie then we would have concluded large, i.e., destabilizing impacts. But we did not feel -- even 2 3 with no mitigation at all we did not feel that these 4 destabilizing impacts to the eastern fox snake on the western shore of Lake Erie would occur. 5 CHAIRMAN SPRITZER: Has anybody done any 6 studies of how many snakes there are on the eastern 7 shore of Lake Erie? 8 Because the eastern fox snake 9 MR. DOUB: 10 cryptic, i.e., its colors blend in with the vegetation to effectively camouflage, typically most 11 scientific literature referring to the eastern fox 12 snake will use habitat as a metric for the occurrence 13 14 of the species. I'm not aware -- I am not aware of 15 any direct censusing. Doesn't mean that it hasn't 16 occurred but I'm not aware of it. 17 CHAIRMAN SPRITZER: All right. And for the Fermi 3 site has there been any such censusing as 18 19 I believe you termed it? MR. DOUB: No, not to my knowledge. 20 CHAIRMAN SPRITZER: Okay. Now, in terms 21 of the bounding analysis we have, I take it there's a 22 gray area between the upper and lower bounds where you 23 24 miaht have either partial but not complete implementation of the mitigation plan. 25 Is that one

1	way you would wind up in this intermediate gray area?
2	MR. DOUB: Yes, it could fall somewhere
3	along the spectrum from small to moderate.
4	CHAIRMAN SPRITZER: And would that gray
5	area also include full implementation of the plan, but
6	you learn through monitoring that snakes aren't doing
7	very well, or at least some of them aren't doing very
8	well in the areas they've been relocated to.
9	MR. DOUB: That uncertainty is factored
10	into our range of small to moderate.
11	CHAIRMAN SPRITZER: So we could have
12	something in the gray area as a result of lack of full
13	implementation or lack of success, or some combination
14	of the two I take it.
15	MR. DOUB: And the impacts per our
16	analysis would still be no worse than moderate.
17	CHAIRMAN SPRITZER: All right, fine. Do
18	either of you know what the staffing levels for
19	endangered species mitigation oversight are at MDNR?
20	MR. WEEKS: I do not.
21	MR. DOUB: No.
22	CHAIRMAN SPRITZER: There's been some
23	I believe we had an internet posting entered into
24	evidence in this case indicating that I think it's
25	called an environmental review program that MDNR does

1 was terminated for lack of funding. Does that have any -- first of all, do you recall what I'm referring 2 3 to? 4 MR. WEEKS: Yes. 5 CHAIRMAN SPRITZER: Does that have any relationship to MDNR's ability to enforce mitigation 6 7 plans or permit requirements? MR. WEEKS: We don't think it does. 8 9 really refers to what MDNR actually already did at the early stages of this project which was to evaluate the 10 environmental report and that actually I believe led 11 to the scoping letter, the so-called Sargent letter. 12 So that step has actually already happened. 13 14 And even with that what is referred to is an early review stage. It does not reflect -- does 15 not refer to MDNR as enforcement or administration of 16 17 the law. It simply refers to early stage evaluation of projects which now are to be covered by the 18 19 Michigan Natural Features Inventory for a fee. 20 MR. DOUB: In fact, that very notice specifically calls out that all enforcement action 21 under Part 451 remains in place. It is simply the 22 termination of a service. It is not a change in the 23 24 regulations.

CHAIRMAN SPRITZER: No, I understand that.

1 JUDGE BARATTA: So you're referring to, I 2 guess it's NRC Exhibit E-19 is that notice. 3 MR. WEEKS: I don't recall which notice 4 that is. If you could put that --5 MR. DOUB: Yes. 6 JUDGE BARATTA: Okay. And I guess what 7 you're referring to, if you go down to the bottom of 8 that it says -- references Public Law 451. 9 the enforcement phase that you're talking about? 10 MR. DOUB: Yes, where it says endangered species and wetland laws remain in place. Correct. 11 12 JUDGE BARATTA: Okay. So it's only that opening paragraph where it refers to -- except review 13 14 requests to the environmental review program. Is that 15 -- that's where they would have -- are you saying that 16 where they would have submitted 17 environmental report for them, for the MDNR to review to determine if permits are required? 18 19 MR. DOUB: And in fact they did because they initiated this in 2009 and the Sargent letter was 20 a response to just such a review. But because of 21 funding shifts in 2011 the DNR ceased providing that 22 review service directly for no fee and instead 23 24 offloaded that service to the Michigan

Features Inventory which provides the same service for

1	a fee.
2	JUDGE BARATTA: Okay, thank you.
3	CHAIRMAN SPRITZER: Have either of you
4	ever heard the term "sentinel species?"
5	MR. DOUB: Yes.
6	CHAIRMAN SPRITZER: What does that refer
7	to?
8	MR. DOUB: It refers to a species impacts
9	to which can serve as an early warning of potential
10	greater impacts to other species.
11	CHAIRMAN SPRITZER: Is the eastern fox
12	snake a sentinel species?
13	MR. WEEKS: I've not in all the research
14	we did seen any reference to the eastern fox snake as
15	such a species.
16	MR. DOUB: I would not it would not be
17	my opinion that the eastern fox snake is a sentinel
18	species, except for the fact that declines in eastern
19	fox snake could be reflective of wetland losses that
20	have historically taken place along the western shore
21	of Lake Erie.
22	CHAIRMAN SPRITZER: If the eastern fox
23	snake is removed from a particular area on the Fermi
24	site did you look at the issue of how that would
25	impact species that remain in that area?

1	MR. WEEKS: Excuse me, if you could
2	clarify, the species remaining in the area from which
3	the snakes were taken?
4	CHAIRMAN SPRITZER: Yes, exactly.
5	MR. WEEKS: We did not specifically
6	address that, but we did look at the broader picture
7	of impacts to wildlife on the site.
8	MR. DOUB: And in that consideration we
9	did consider food chain impacts. For example, the
10	eastern fox snake preys on small mammals, mice, voles,
11	et cetera. It is therefore part of the food chain.
12	So when we drew our overall conclusions of
13	small to moderate for impacts to terrestrial resources
14	we did consider those potential food chain impacts.
15	CHAIRMAN SPRITZER: What would those
16	impacts be?
17	MR. DOUB: The eastern fox snake is a
18	predator that feeds upon small mammals among other
19	prey sources. If you were to remove the eastern fox
20	snake from an area one might expect according to basic
21	ecological theory that populations of the prey species
22	would increase as a result. That in turn could affect
23	other species.
24	MR. WEEKS: Other predator species could
25	perhaps fill in the role that the eastern fox snake
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1	was taking.
2	MR. DOUB: Yes.
3	MR. WEEKS: So over time there would be
4	some balance.
5	CHAIRMAN SPRITZER: Did you consider the
6	possibility this question refers to, I believe, the
7	mitigation site near the Monroe Power Plant. Did you
8	consider the possibility of toxicity in the soil there
9	as a result of emissions from the nearby coal-burning
10	plant?
11	MR. WEEKS: There were no indications,
12	there's no data that would indicate that that site in
13	any way would not be suitable for use as a wetland
14	mitigation site that would also potentially be used as
15	habitat for the eastern fox snake. It's currently in
16	agriculture production.
17	And although most of the planet is subject
18	to contamination and there may be something there,
19	there's a condition in the wetland mitigation plan
20	that calls for the site to be free of contaminants at
21	the completion of the mitigation process.
22	MR. DOUB: Yes, I believe it's performance
23	standard number 11 or 12 requires that the site be
24	free of various contaminants.

CHAIRMAN SPRITZER:

Is that a performance

1	standard in the mitigation plan?
2	MR. DOUB: That's in the mitigation plan.
3	MR. WEEKS: In the wetland mitigation
4	plan.
5	MR. DOUB: The wetland mitigation plan
6	which is Appendix K I believe of the FEIS.
7	CHAIRMAN SPRITZER: All right. And would
8	that also cover agriculture pesticides? That
9	performance standard.
10	MR. WEEKS: I would assume so.
11	MR. DOUB: Yes.
12	CHAIRMAN SPRITZER: Assume or it would?
13	MR. WEEKS: Yes.
14	MR. DOUB: I would expect it, yes.
15	CHAIRMAN SPRITZER: Do you have any
16	understanding of how DTE will fund its mitigation
17	plan, including the monitoring that is supposed to
18	continue?
19	MR. DOUB: Actually, the fox snake
20	mitigation plan, Exhibit E-5, specifically identifies
21	a funding source.
22	CHAIRMAN SPRITZER: Which is what?
23	MR. FITZGERALD: It clarifies it would be
24	funded directly by DTE's budget.
25	MR. WEEKS: Construction budget.

1 CHAIRMAN SPRITZER: Do you know who is -well, we can move on. Is there a current date for 2 commencement of preconstruction activities at Fermi 3? 3 4 MR. WEEKS: I'm not aware of one. 5 MR. DOUB: That would be more a question for the applicant. 6 7 CHAIRMAN SPRITZER: All right. In terms of the site preparation activities that we've been 8 9 talking about including ground-clearing, excavation, and so forth, do you know the approximate time period 10 that's expected to take once it does start? 11 I believe the site preparation 12 MR. DOUB: activities would probably extend over the course of 13 14 perhaps 2 years. But again we don't have specific 15 dates from the applicant as to when this work would 16 begin. Before the site 17 CHAIRMAN SPRITZER: preparation work begins is there going to be any 18 19 monitoring to try and identify areas where the snake is likely to be located? 20 MR. WEEKS: Well, the -- our assessment 21 based on the most recent available information about 22 the natural history of the fox snake is that virtually 23 24 all the undisturbed areas and naturally vegetated areas of the Fermi 3 site are potential fox snake 25

habitat.

MR. DOUB: And the fox snake mitigation plan calls for walk-downs of these areas prior to disturbance. So any naturally vegetated area would be walked down prior to disturbance. Any snakes found would be tagged and relocated according to the plan.

CHAIRMAN SPRITZER: In the final

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there's a statement to the effect that EPA recommends

that to minimize work on wetlands should be performed

during frozen ground conditions if feasible.

But then at Section 2.3.2 of the Fermi 3 operational conservation and monitoring plan for the eastern fox snake appears the statement that land-clearing activities should be scheduled to be performed out of the fox snake's hibernation periods so that they are active, easier to locate and safely removed from the area.

I take it what this question is suggesting is that there is some potential conflict there with, on the one hand recommending work in wetlands being done during frozen ground conditions, and work being done during warmer periods for protection of the snake. Do you have any idea how those two recommendations will be reconciled?

1 MR. WEEKS: My understanding is that EPA 2 was providing what would be a fairly standard approach 3 to work in wetlands where if the ground is frozen 4 there's less ground disturbance. But it also says if 5 And there's many considerations when it comes to construction that the applicant would be more 6 7 aware of. But one of those possible reasons for not 8 9 preparation during conducting the site frozen 10 conditions would be to protect another resource, including the eastern fox snake. 11 CHAIRMAN SPRITZER: Did the NRC staff 12 prepare any estimates of eastern fox snake survival 13 14 assuming implementation of the removal of numbers of the snake to the re-wilded farmland? 15 MR. DOUB: Once again it's important to 16 bear in mind that the relocated snakes would be 17 monitored, would be tagged and monitored. 18 19 CHAIRMAN SPRITZER: No, I understand that, but my question is simply did the staff prepare any 20 estimate of survival of the species if they're 21 relocated to the farmland. 22 No, because we expected that 23 MR. DOUB: 24 issue would be addressed by this proposed 25 monitoring.

1 MR. WEEKS: And the monitoring would be an 2 activity over several years and provide 3 opportunities to address any problems. 4 CHAIRMAN SPRITZER: Is DTE presently the 5 owner of the farmland we were just talking about, the used for 6 that's going to be the wetland 7 mitigation? MR. DOUB: While I believe so that would 8 be a question for the applicant. 9 10 CHAIRMAN SPRITZER: All right. know if any arrangements exist or are planned to be 11 established to assure that the mitigation farmland 12 will serve in perpetuity as mitigation for the eastern 13 14 fox snake? I believe that there's a 15 MR. WEEKS: 16 requirement for a conservation easement to be placed 17 on that property as a condition of the permit. Ι think that's actually -- that wetland mitigation would 18 19 be conducted as a condition of the U.S. Army Corps of Engineers permit, wetland permit. And that is one of 20 the conditions that they would put in their permit, 21 that it would be protected from development in 22 23 perpetuity. 24 CHAIRMAN SPRITZER: I know that the Michigan Department of Environmental Quality 25

1	issued its wetland permit. Is there a 404 permit
2	issued by the Corps as of today?
3	MR. WEEKS: I stand corrected. Actually
4	what I was reading was from the MDEQ permit. It was
5	not the Army Corps of Engineers but it's the same
6	mitigation area.
7	MR. DOUB: To answer your question,
8	though, the Corps is still reviewing the application
9	so the 404 permit has not yet been issued. But we
10	expect that it will be.
11	CHAIRMAN SPRITZER: Are there any means
12	available for enforcement of the mitigation plan by
13	private parties?
14	MR. WEEKS: I'm not sure I understand the
15	question fully.
16	MR. DOUB: I don't either.
17	CHAIRMAN SPRITZER: All right. You may be
18	familiar in the environmental law context with the
19	concept of citizen enforcement. For example, there
20	are certain federal statutes like the Clean Water Act,
21	Clean Air Act that permit citizen enforcement in
22	various circumstances.
23	I think what this question is getting at
24	is is there any mechanism available if a private party
25	thought DTE wasn't doing what it was required to do

1	under the mitigation plan that they could enforce that
2	in some way.
3	MR. WEEKS: I do not know.
4	MR. DOUB: I don't know but I would
5	imagine I would expect that a private party could
6	bring that to the attention of the Corps of Engineers
7	or the Michigan Department of Natural Resources. I
8	suspect they would take action accordingly. But I
9	don't know exactly what the mechanism would be.
10	CHAIRMAN SPRITZER: Is a combined license
11	transferrable by the licensee? Assuming one is issued
12	for Fermi Unit 3.
13	MR. DOUB: I do not know.
14	MR. WEEKS: That would be perhaps a
15	question for our legal staff.
16	MR. DOUB: Yes.
17	CHAIRMAN SPRITZER: All right, fine. As
18	far as the monitoring reports, the reports of the
19	monitoring that you referred to previously, would
20	those be available to the public or only to MDNR?
21	MR. WEEKS: I don't know. Perhaps the
22	applicant could address that.
23	CHAIRMAN SPRITZER: We have a lot of
24	questions I'd like to ask MDNR. Unfortunately we
25	don't have that option.

1	Finally, who will be in charge of
2	implementing the mitigation plan? That is, will it
3	I assume it will be a DTE employee. Is that
4	realistic?
5	MR. WEEKS: Again, that's a question for
6	the applicant. But that I assume would be an employee
7	or
8	MR. DOUB: Or a contractor.
9	MR. WEEKS: a contractor.
10	MR. DOUB: Under the direction of an
11	employee.
12	CHAIRMAN SPRITZER: All right. So did the
13	NRC staff though, given that you were relying on this
14	mitigation plan as a or expecting the mitigation
15	plan to be implemented and to be successful to some
16	degree, did you look at all at the question of who
17	what the qualifications would be for the person who
18	would be in charge of implementing this plan?
19	MR. WEEKS: The qualifications of the
20	individual who was primarily responsible for
21	developing the plan are excellent.
22	CHAIRMAN SPRITZER: No, I'm familiar with
23	that, but that's it's not clear to me that that
24	individual will be in charge of implementing it. We
25	can ask DTE as you point out. I'm just asking whether

1	the staff looked into this issue. If you didn't
2	that's fine, I just want to know.
3	MR. DOUB: The staff's reasonably
4	foreseeable expectation would be that the plans would
5	be implemented by appropriately qualified personnel.
6	But I cannot say with exact specificity who would be
7	in charge of the plan.
8	CHAIRMAN SPRITZER: All right, I think
9	this would be a good moment to take a break. We'll do
10	the questions that have been submitted by the parties
11	and we may or may not have anything further for you.
12	Why don't we come back it's now
13	according to that clock it's 11 o'clock. So we'll try
14	and come back 10 after 11.
15	(Whereupon, the foregoing matter went off
16	the record at 10:57 a.m. and went back on the record
17	at 11:12 a.m.)
18	CHAIRMAN SPRITZER: All right, I think
19	we're ready to go back on the record. I don't have
20	any further questions for you two gentlemen but my
21	colleagues do so I'll let them proceed.
22	JUDGE CHARBENEAU: I just have one
23	question. This may have been answered.
24	When Michigan DNR issues a 451 Act permit
25	do they assign an individual to the permit to follow
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1	up, do you know?
2	MR. WEEKS: I don't know.
3	MR. DOUB: I would expect they would but
4	I don't know.
5	JUDGE BARATTA: The draft EIS, what did it
6	say about the impact on the eastern fox snake?
7	MR. WEEKS: It said that impacts would be
8	small.
9	JUDGE BARATTA: And the final EIS says?
10	MR. WEEKS: Small to moderate.
11	JUDGE BARATTA: Okay. What was the reason
12	or rationale for changing that?
13	MR. WEEKS: We we looked at the
14	response to the draft EIS and looking at the totality
15	of the comments and the facts before us we decided it
16	would be best to take a more conservative approach,
17	recognizing that however unlikely implementation of
18	the mitigation plan was, that it was entirely likely
19	that the mitigation plan would be implemented and
20	reasonably successful. But there is nothing that
21	would totally preclude the possibility that the
22	that that would all work as planned.
23	So we saw that it is reasonable to think
24	it is possible that the mitigation would not be
25	entirely successful. However, we do still believe the

1	most likely outcome is that the implementation will be
2	successful and impacts will be small.
3	MR. DOUB: It was simply a more
4	conservative interpretation of the same information
5	Bruce added in the DEIS.
6	JUDGE BARATTA: Okay, so it wasn't a
7	question of lacking confidence in DTE's commitment to
8	the mitigation effort?
9	MR. DOUB: No.
10	MR. WEEKS: That's correct. We are still
11	fully confident that DTE will do as they say and that
12	the law will be implemented.
13	JUDGE BARATTA: Or the ability of Michigan
14	to enforce the requirements. There's no lack of
15	confidence in that?
16	MR. WEEKS: No, sir.
17	MR. DOUB: We remain as confident as we
18	were with the draft.
19	JUDGE BARATTA: Okay. That's all the
20	questions that I have.
21	CHAIRMAN SPRITZER: All right. I believe
22	we are finished with you, gentlemen, so you may step
23	down. Thank you for your testimony.
24	And next we will hear from the DTE
25	witnesses on contention 8. If DTE counsel would

1	identify your witnesses for us?
2	MR. T. SMITH: Yes, the DTE witnesses on
3	your right. The first witness is Peter Smith who's
4	the director of nuclear licensing and engineering for
5	the Fermi 3 project. Then you have Mr. Randy
6	Westmoreland who's the environmental lead for the
7	Fermi 3 project. And then you have David Mifsud who
8	is our expert herpetologist.
9	WHEREUPON,
10	PETER SMITH
11	RANDY WESTMORELAND
12	DAVID MIFSUD
13	were called for examination by the DTE, having been
14	first duly sworn, assumed the witness stand, were
15	examined and testified as follows:
16	CHAIRMAN SPRITZER: Very well. Let's
17	bring up DTE Exhibit 000001, that's five zeroes and
18	then the number one. And turn to page 11. Right, it
19	indicates the eastern fox snake is not listed as
20	threatened or endangered, nor is it a candidate
21	species under the federal Endangered Species Act.
22	Perhaps Mr. Mifsud, am I pronouncing your name right?
23	Is it miff-sudd?
24	MR. MIFSUD: Miff-sudd, correct.
25	CHAIRMAN SPRITZER: Do you know why it is
	I and the second

_	not a candidate species under the rederal Endangered
2	Species Act?
3	MR. MIFSUD: To my understanding it has
4	not been previously proposed for federal listing. It
5	is protected as a state threatened species in Michigan
6	and it is both provincially and federally protected in
7	Canada. The range extends from Michigan/Ohio into
8	Ontario. In Ohio it's a species of special concern.
9	CHAIRMAN SPRITZER: Okay. Is that
LO	designation under Ohio law, is that equivalent to
L1	threatened or endangered, or do you know?
L2	MR. MIFSUD: I do not believe it is.
L3	CHAIRMAN SPRITZER: Okay. It's a lesser
L4	designation?
L5	MR. MIFSUD: Correct.
L6	CHAIRMAN SPRITZER: But it is in some
L7	manner protected under Ohio law it sounds like?
L8	MR. MIFSUD: If it's similar to Michigan
L9	law it's indicating that there is a no-take, meaning
20	you can't collect the animal, possess it, harm,
21	harass. There's no possession of the species. It is
22	a species that is in decline but not at a level such
23	that it warrants threatened or endangered status.
24	CHAIRMAN SPRITZER: All right, let's go to
25	page 15 of the same document. And probably in the
1	

1 middle of the page I believe. Yes, in kind of toward the -- there's a sentence starting in about the middle 2 3 of the page that we have up here. 4 Under the mitigation plan DTE will remove 5 eastern fox snakes during preconstruction construction up to a 90 percent targeted collection 6 7 goal with continuing opportunistic collection. I believe the question would again be for 8 9 you, Mr. Mifsud. What does targeted collection goal 10 refer to? MR. MIFSUD: The targeted collection goal 11 is referencing the number of individuals within the 12 population at the Fermi facility that we want to 13 14 collect during the preconstruction phase. CHAIRMAN SPRITZER: So I take it 10 15 percent could permissibly be uncollected pursuant to 16 17 the plan. Based off of the way our MR. MIFSUD: 18 19 plans are designed we have built-in redundancies. objective was to a minimum of 90 percent during the 20 prior 21 weeks to any construction activities. 22 From that point there would be another 23 24 walk-down 1 week prior to construction and then the

day of construction additional assessments looking for

fox snakes.

Importantly, also as part of the construction mitigation plan contractors are obligated to learn about the eastern fox snake as well. If they encounter the snakes they are to stop work activities, inform the site point person who's in charge of the fox snakes for the project to inform them that a snake is present and to stop work.

MR. WESTMORELAND: And I'd just add to that for preconstruction activities where the potential would be there for an impact on fox snake there would be a daily pre-job briefing. In that pre-job brief the folks doing the work would be reminded that they are to stop if they see a fox snake and wait until it's removed or collected.

CHAIRMAN SPRITZER: Okay. So if I'm understanding what you're telling me the 90 percent targeted collection goal is what you try to do initially. And then you're going to do the individual, what do you call them, walk-downs of specific construction sites later to try and go above the 90 percent?

MR. MIFSUD: That is correct.

CHAIRMAN SPRITZER: Okay. So ultimately you'd hope to remove all the snakes, I take it, from

1 construction areas, not just 90 percent of them. That would be the objective, 2 MR. MIFSUD: 3 correct. 4 JUDGE CHARBENEAU: Does the 90 percent 5 presuppose that you know the total number that are there? 6 7 MR. MIFSUD: I'm sorry? 8 JUDGE CHARBENEAU: Does the 90 percent 9 presuppose that you know the total number that were originally there? 10 The approach that we're 11 MIFSUD: taking includes establishing barrier fences within the 12 construction areas. And by doing so we're using a 13 14 capture-per-unit effort approach to getting to that 90 15 Meaning the areas that are going to be percent mark. under construction will be fenced off and measures 16 17 implemented within those areas to collect the snakes during their active season. 18 19 So it is not to presume that we know prior to that, but within the framework of that time period 20 that we're working once we have achieved a low enough 21 capture-per-unit effort where our efforts over 22 entire day or two and we're not recovering snakes, the 23 24 presumption will be that we have collected out that

Again, during that 6 to 8 week period if we

area.

1 encounter additional snakes we would obviously remove those. 2 3 JUDGE CHARBENEAU: Do you do an initial minor disturbance of the land in order to just to 4 5 mobilize the snakes beforehand? 6 MR. MIFSUD: I'm sorry, I don't 7 understand. 8 JUDGE CHARBENEAU: Is there any action 9 taken before you actually would go into construction 10 to do a minor disturbance of the property to mobilize the snakes so you would be able to capture? 11 To the extent that any land MR. MIFSUD: 12 disturbance would be is to establish the barrier 13 14 fence. What we're relying on is a visual observation, visual detection. 15 As previously indicated the snakes can be 16 17 quite cryptic. We are implementing barrier fences as I mentioned, but also utilizing cover objects. 18 19 snakes are attracted to mud and wood objects, flat surfaces, plywood, corrugated metal roofing and we're 20 using that as an attractant to draw the snakes in. 21 As we're walking doing transect surveys, 22 walking up and down these potential construction areas 23 24 the movement of our feet would potentially result in

having a snake become mobilized. But nothing invasive

1	to cause the animals to be disrupted.
2	CHAIRMAN SPRITZER: Let's go to page 19 of
3	the same document. Again that's DTE 1. Yes, that's
4	good. And this is the question 37 and the answer that
5	I'm focusing on.
6	Metrics of success will be gauged through
7	the accomplishment of measures of habitat restoration,
8	enhancement and mitigation success found in Appendix
9	C of the mitigation plan. If problems or deficiencies
10	in the mitigation or restoration plans are identified
11	corrective actions will be taken.
12	Who decides what corrective actions will
13	be taken if problems or deficiencies in the mitigation
14	or restoration plans are identified?
15	MR. WESTMORELAND: That would be the lead
16	biologist at the time who would be somebody recognized
17	within DTE as a subject matter expert biologist.
18	CHAIRMAN SPRITZER: Whose lead biologist,
19	DTE's or MDNR's?
20	MR. WESTMORELAND: DTE's.
21	CHAIRMAN SPRITZER: Okay. That leads to
22	a question I'd asked earlier of the staff and probably
23	was more appropriate for DTE to answer and that is who
24	is going to be in charge of the mitigation plan.
25	Implementing the mitigation plan I should say.

1	MR. P. SMITH: So we obviously haven't
2	hired
3	CHAIRMAN SPRITZER: Right, I understand.
4	MR. P. SMITH: that position yet. But
5	we would be looking for someone of the right
6	qualifications.
7	CHAIRMAN SPRITZER: The reason I ask is
8	there was somewhere, I think it was on we don't
9	have to bring this up, but my recollection is in
10	Appendix C page 1 there was reference to an
11	environmental engineer or project
12	herpetologist/biologist.
13	That made me wonder, well, which is it
14	going to be. Are you going to have an environmental
15	engineer in charge of this plan, or a herpetologist,
16	or some combination of the two? Have you gotten that
17	far in your thinking that you can answer that?
18	MR. P. SMITH: No, we haven't, but we have
19	a large environmental monitoring and resources
20	division within the company of which Mr. Westmoreland
21	came from originally before this project. And they
22	develop specialties and have specialties to support
23	whatever the company's needs are.
24	CHAIRMAN SPRITZER: I'm neither an
25	environmental engineer nor a herpetologist, but it

strikes me there's a significant difference between the two, party in terms of the ability to implement a plan like this. It seems to me it calls for a substantial amount of expertise in biology. Mr. Mifsud appears to have that.

On the other hand, an environmental engineer, and I certainly mean no disrespect to the profession as my colleague to the left is one of them, but they don't generally have training, at least in my understanding, in the kind of skills that would be required to implement a monitoring and species protection plan like this that is very detailed.

Mr. Mifsud, do you have any response to that?

MR. MIFSUD: One thing I would like to build on is as part of the monitoring itself the reports are submitted to the Department of Natural Resources and they in turn would review those. And as part of the renewal of the following year's take permit, as part of the whole threatened/endangered species permit there's the obligation of submitting the monitoring reports. And as these deficiencies are identified, assuming any are identified, the DNR would be engaged as part of that process in making the corrective actions.

1	MR. WESTMORELAND: I'd like to add the
2	reason the environmental engineer is in there is
3	because at every site including Fermi there's usually
4	several given the title environmental engineers on
5	staff that are responsible for monitoring the
6	environment on the site, all the regulatory compliance
7	and environmental compliance.
8	So, you know, like Peter said we haven't
9	gotten that far down the road but I would imagine we
10	would hire someone like a Mr. Mifsud, if not Mr.
11	Mifsud himself to oversee the implementation of this
12	plan. And there would be other folks within DTE that
13	would be trained by an individual like himself and
14	that would work to assist in the implementation.
15	CHAIRMAN SPRITZER: Have you prepared
16	this plan sounds like it's going to require a good
17	deal of effort. Have you prepared a cost estimate yet
18	for what you think the cost will be?
19	MR. MIFSUD: At one point I was asked to
20	develop a preliminary proposal based of of the
21	information we had at the time.
22	CHAIRMAN SPRITZER: And what was the
23	result?
24	MR. MIFSUD: To be honest I don't
25	remember. I guess I don't understand the question,

1	the results.
2	MR. T. SMITH: Judge Spritzer, I believe
3	DTE would likely consider specific cost information to
4	be proprietary information.
5	CHAIRMAN SPRITZER: All right. Well,
6	we'll save that if we need to for are these
7	gentlemen going to be available when and if we do have
8	a question and answer session for proprietary issues?
9	MR. T. SMITH: Certainly we can make them
10	available, yes.
11	CHAIRMAN SPRITZER: Okay. Great. Let's
12	move on then. Well, let me return just briefly to
13	this issue of what happens if problems or deficiencies
14	in the mitigation or restoration plans are identified.
15	Let's assume hypothetically that MDNR says we think
16	certain things need to be done differently. And DTE
17	may agree, they may disagree. Is there any procedure
18	for working out differences of that nature?
19	MR. MIFSUD: Typically the resolution
20	comes from both parties. In my previous experiences
21	on projects such as this the resolution or proposed
22	resolutions are already proposed.
23	One thing I guess I would not to de-
24	emphasize the potential risks, but there's a number of

safeguards and implementations that are put into this

1 project that I'm at least for myself quite proud of 2 that limit the potential of this. wanted introduce 3 to this an 4 additional safeguard that these things could happen. But the reality is based off the natural history, 5 based on the efforts that DTE has initiated in terms 6 7 of utilizing and implementing the mitigation plan from my personal feelings and opinion that the likelihood 8 9 of deficiencies would be very low. 10 That being said, the DNR and DTE would likely come together to find a resolution to whatever 11 12 matters were to come up. MR. P. SMITH: Let me add that the take 13 14 permit of which the mitigation plan is a part of is an 15 annual permit. Is that incorrect? And so we would be 16 subject to the annual permitting aspect of this to 17 ensure that our mitigation plan would correct any deficiencies. 18 19 LODGE: Your Honor, could the witnesses keep their voices up? When they lean away 20 from the microphone it almost is not amplified at all. 21 All right. 22 CHAIRMAN SPRITZER: I think that would help particularly to our court reporter. 23 24 I'm able to understand them but if anybody else is having a problem, let us know. 25

1	All right, let's return to DTE Exhibit
2	000014. That's four zeroes followed by 14.
3	JUDGE CHARBENEAU: Before we go on from
4	this question you said that the take permit is an
5	annual permit. What is the duration of the
6	construction period where you would have the need for
7	a take period or a take permit?
8	MR. P. SMITH: It would be a number of
9	years.
LO	JUDGE CHARBENEAU: So, 2 or 3?
L1	MR. P. SMITH: No, I think it would
L2	probably be more like 6 or 7.
L3	JUDGE CHARBENEAU: Oh, okay. Thank you.
L4	CHAIRMAN SPRITZER: All right, we're
L5	looking again at DTE Exhibit 14. Move up a little.
L6	There we go.
L7	Mr. Mifsud, I believe you would have been
L8	involved in this in some way. Can you explain to me
L9	how this document came about? If you know.
20	MR. MIFSUD: Yes. Mr. Westmoreland and
21	myself met with Lori Sargent and Dan Kennedy of the
22	Department of Natural Resources Wildlife Division.
23	They are the individuals who are charged with
24	overseeing the threatened and endangered species
25	program and any permits that are issued.
J	I .

1 We went to meet with them to discuss the proposed -- the eastern fox snake mitigation plan to 2 3 get their feedback and to discuss with them any 4 concerns that they might have about the project. 5 This letter is a response to the plans which are -- is this tone? I don't want to be too 6 7 loud either. I have a tendency to be loud. 8 CHAIRMAN SPRITZER: No, you're fine. The louder the better. 9 10 MR. MIFSUD: Okay. DTE Exhibit 6 which is the eastern fox snake mitigation plan. That is the 11 plan that we submitted at that time of the meeting 12 with the MDNR. 13 14 CHAIRMAN SPRITZER: Okay. And I take it 15 the meeting was focused on the eastern fox snake as 16 opposed to other species that might be present at the site? 17 MR. MIFSUD: Correct. 18 19 CHAIRMAN SPRITZER: Let's go to the next Just so you know where this line of questioning 20 is coming from, we're trying to figure out what MDNR 21 is really going to do here. We don't have a permit. 22 We have projections about what's going to be in a 23 24 permit. I'm looking at this document and it says 25

1 an endangered species permit is required if -- with 2 the word "if" underlined -- activities will harm the 3 species that are present including transplanting --4 again underlined -- them to another location. 5 As I read it -- or certainly that can be 6 interpreted to say that what they're going to require 7 a permit for is actually the transplanting, not the 8 construction activity itself. 9 MR. MIFSUD: It will require a permit for 10 transplanting or translocation is another term that we use for that. That is in addition to any construction 11 activities on the site. 12 For example, if I were to be the person 13 is doing the translocation, the rescue and 14 15 recovery, that would be potentially covered under my threatened/endangered 16 species 17 regardless of the construction permit that DTE would have or the take permit that DTE would have for 18 19 impacts associated with construction. CHAIRMAN SPRITZER: Did this whole issue 20 of what DTE needed to apply to MDNR for a permit for 21 come up at this meeting you've described that led to 22 this document? 23 24 MR. WESTMORELAND: I just want to back up

a little bit and just put this in context.

25

DTE had

1 been engaging with the DNR for several years. So we first met with the DNR back in 2009 2 and sat down and gave them an overview of the project 3 4 and said here's our project we're planning. You know, will we require a take permit? What is the process? 5 What would you need? 6 7 And as we sat with them they said well, you're going to need a mitigation plan for the fox 8 9 So that's when it started. snake. 10 And we had drafted one plan and then they gave some comment on it and then we came to this final 11 plan here after meeting three times in person. 12 CHAIRMAN SPRITZER: Okay. I understand 13 14 that part. But did they tell you at the meeting that 15 led to this document, DTE 14, we will expect you to apply for 16 an incidental take permit 17 construction activity, not just for the translocation of the snake. 18 19 MR. WESTMORELAND: Yes. 20 CHAIRMAN SPRITZER: And that's your understanding of their position as of today? 21 MR. WESTMORELAND: It is. 22 CHAIRMAN SPRITZER: And as part of the 23 24 application for that permit you will have to provide a mitigation plan? 25

1	MR. WESTMORELAND: That is correct.
2	CHAIRMAN SPRITZER: And they will review
3	that and presumably decide whether they still believe
4	it's adequate or not and so forth.
5	MR. WESTMORELAND: Yes. They may, you
6	know, want to add more. It depends on who is
7	CHAIRMAN SPRITZER: And you would expect
8	that to be incorporated in the permit as a condition
9	of the permit. That is, the implementation of the
10	plan.
11	MR. WESTMORELAND: Yes. Absolutely.
12	CHAIRMAN SPRITZER: Okay. Do their
13	permits typically have any kind of stipulated penalty
14	for non-compliance? If you know. I'm just asking.
15	MR. MIFSUD: Off the top of my head I
16	don't recall. I do know that they can do a stop work
17	order and which can be quite costly on a project,
18	something of this caliber.
19	MR. WESTMORELAND: The actual act itself
20	indicates that there are potential criminal penalties
21	for non-compliance.
22	CHAIRMAN SPRITZER: Who would initiate
23	that regardless of whether we're talking about
24	civil or criminal penalties. If MDNR came to the
25	conclusion you weren't complying with your permit in

1 some way what kind of action could they take under 2 their authority as you understand it and how would 3 that come about? If you know. 4 MR. MIFSUD: The department has a law 5 enforcement division that would be charged with enforcing any criminal actions. 6 As Randy mentioned 7 both financial penalties as well as potential 8 enjailment for violation of the take. Or the permit. 9 CHAIRMAN SPRITZER: If they want to 10 initiate an enforcement action do you know whether -this is a legal question so if you don't know tell me 11 you don't know. But do they have the legal authority 12 to initiate an action on their own? Or do they have 13 14 to go to, for example, the state attorney general and 15 get his authorization? That I don't know the 16 MR. MIFSUD: 17 specifics of. To go to another exhibit. JUDGE BARATTA: 18 19 Could we bring up DTE 000012? And I guess go to page I think that's it. That's the -- yes, go to page 20 It's actually the sixth page in the exhibit as 21 opposed to -- does that clarify who has the authority 22 to -- and could you describe what this is? 23 24 excerpt from what? MR. MIFSUD: Is the question addressed to 25

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1	me?
2	JUDGE BARATTA: Whoever.
3	MR. MIFSUD: Yes, it's the Department of
4	Natural Resources Environmental Protection Act, Act
5	451 that was modified in 1994 which is the Threatened
6	and Endangered Species Act for Michigan.
7	JUDGE BARATTA: And this says what then as
8	to who can enforce it?
9	MR. MIFSUD: As it reads Section 36506, a
10	law enforcement officer, police officer, sheriff,
11	deputy, or conservation officer shall enforce this
12	part and the rules promulgated under this part.
13	JUDGE BARATTA: Okay. And this part
14	refers to the
15	MR. MIFSUD: The Threatened and Endangered
16	Species Act.
17	JUDGE BARATTA: Does that answer your
18	question?
19	CHAIRMAN SPRITZER: No, not really, but he
20	had told me before he didn't know whether they have
21	independent enforcement authority or whether they have
22	to go through as I understand your testimony you do
23	not know whether in order to bring an enforcement

action the MDNR has -- it can do that entirely on its

own, or it has to go through the state attorney

24

1	general's office.
2	MR. MIFSUD: Yes, that's beyond my scope.
3	CHAIRMAN SPRITZER: That's fine.
4	MR. MIFSUD: I can say that if someone
5	were to take a deer illegally a conservation officer
6	has the legal authority to arrest, fine that
7	individual. In the context of this situation I don't
8	know if additional measures. But any one of the
9	groups indicated there has the legal authority to
10	enforce the Threatened and Endangered Species Act.
11	CHAIRMAN SPRITZER: Right, I understand
12	that. I'm trying to envision how MDNR could go about
13	enforcing this plan. It involves a number of
14	different steps, procedures that DTE will have to take
15	during the site preparation work.
16	It seems to me wouldn't someone from MDNR
17	have to be onsite fairly regularly to check up on what
18	DTE is doing in order to be able to tell whether you
19	were actually implementing the plan?
20	MR. P. SMITH: I'm not going to speak for
21	MDNR but from our perspective when we commit to a plan
22	we comply with it.
23	CHAIRMAN SPRITZER: No, I understand, and
24	I'm not disputing. All I'm asking is what MDNR could
25	do, how they would go about as a practical matter

trying to determine compliance.

MR. MIFSUD: The DNR within their guidelines are allowed to visit a site. Through a cooperative agreement also between the U.S. Fish & Wildlife Service there is property on the DTE grounds that is under a cooperative agreement.

As indicated in the list of authorized agents who can do enforcement the Fish & Wildlife Service conservation officer would also be eligible as a deputized sheriff to do enforcement and the Fish & Wildlife Service staff is out at the site. The DNR would have the legal authority to visit the site to conduct an inspection if there was reason to believe that there was anything that was not being conducted within the scope of the permit.

CHAIRMAN SPRITZER: I understand they have the authority. I guess what I'm getting at, and I won't belabor the point any further, but it just seems to me this would be a -- under the Clean Water Act, for example, you're probably familiar with discharge permits under the Clean Water Act. Somebody violates that permit, you have a discharge monitoring report, you look at the number, they're out of compliance, we're done.

For this it seems much more complicated.

1	You'd have to be there, I would think, to monitor in
2	some way what's actually going on at the site.
3	MR. WESTMORELAND: The only requirement in
4	the plan at this point is for an annual monitoring
5	report to the DNR.
6	CHAIRMAN SPRITZER: Okay. So you do have
7	that.
8	MR. WESTMORELAND: Yes.
9	CHAIRMAN SPRITZER: And that would provide
LO	them information they could look at. I take it that's
L1	basically going to tell them although in a more
L2	complicated way are you succeeding
L3	MR. WESTMORELAND: Yes.
L4	CHAIRMAN SPRITZER: with what you're
L5	trying to accomplish which is ultimately to protect
L6	the species, not just to implement the plan. Right?
L7	MR. MIFSUD: Correct.
L8	JUDGE BARATTA: You mentioned guidelines.
L9	I'd like to ask you the same question I asked the
20	staff earlier. We have before us in Exhibit 12 the
21	act. And then are there implementing regulations and
22	guidelines to the staff as to how that act is in fact
23	implemented?
24	MR. MIFSUD: The staff is required to
25	evaluate the plans to minimize impacts. To my
	•

knowledge I do not believe that there is a specific 1 set of guidelines, a punch list if you will 2 3 specific things that need to be addressed. They rely 4 on the expertise within the department as well as 5 relying on outside experts with background in particular tags or organisms that are being considered 6 7 for the threatened/endangered species permit impacts. 8 JUDGE BARATTA: Anybody want to add 9 anything to that? What about for the quidelines No. 10 for enforcement of the act? You mentioned I think how they review the mitigation plan, but what about for 11 enforcement of the act? 12 I quess could you -- I don't 13 MR. MIFSUD: 14 understand the question. JUDGE BARATTA: Well, enforcement of the 15 16 permit that would be issued under the act I should 17 say. MR. MIFSUD: Their enforcement is, as I 18 19 mentioned they have the authority to visit a site, to conduct inspections if they feel there is a warranted 20 need to do so. The mitigation monitoring report will 21 also entail any sorts of, as we discussed, 22 potential deficiencies, the successes of the program 23 24 and the project, the number of animals relocated, and

any take that occurred during that time frame.

1 If the take is deemed by the state to be in excess they would potentially consult with DTE and 2 3 their consultants to review that. At the end of the 4 year DTE is obligated to submit that monitoring report 5 before they can get a new permit. And the permits are also tied to other 6 7 conditions. For example, as a condition of the wetlands permit they have to maintain an active 8 threatened/endangered species permit. So there is 9 10 some checks and balances with other agencies in making sure that the permit conditions are 11 maintained. 12 Are you familiar with 13 CHAIRMAN SPRITZER: the term "sentinel species?" 14 15 MR. MIFSUD: Yes. Is the eastern fox 16 CHAIRMAN SPRITZER: 17 snake a sentinel species? MR. MIFSUD: I would not go as far as to 18 19 say it's a sentinel species, but it is considered a bioindicator species. It has a mid-level position on 20 food webs meaning that it is both a predator and a 21 22 prey item. And one of the things that we caution on 23 24 this is that there will potentially be take on a

project on this scale. There's take going on at Fermi

1 potentially right now. Bald eagles, redtail hawks, blue herons, large snapping turtles, any number of 2 3 things will predate or eat an eastern fox snake. 4 when we look at those potential impacts we have to also consider that there's natural predation that goes 5 6 on. 7 So the eastern fox snake is a coastal 8 wetlands specialist. It occurs in a relatively narrow 9 band of habitat along the Lake Erie/Lake Huron 10 shoreline within Michigan. Because of the association with those 11 habitats we do use it as an indication of its presence 12 that there are certain habitat types present. 13 14 that being said it also can be somewhat of an adaptive different 15 species that occurs in a variety of 16 landscapes within this region. 17 CHAIRMAN SPRITZER: What will the impact be on the remaining species in areas from which the 18 19 fox snake is, what's the term, transported? Translocated? 20 MR. MIFSUD: Translocated? Wherever the 21 eastern fox snake is being relocated we have discussed 22 the fact that while we're conducting that it would be 23 irresponsible to not also collect an eastern garter 24

snake or a turtle that might be in that same region.

1 So we're going to be relocating the herpetofauna with 2 the emphasis on the eastern fox snake which is the 3 state threatened species. 4 That being said, as part of those areas where activities are going to be constructed the 5 animals are going to -- anything within that area is 6 7 ultimately going to be displaced. So there would not be a disruption in terms of higher prey item densities 8 least 9 those areas would during at construction phase for temporary impacts be 10 habitat. 11 CHAIRMAN SPRITZER: You used the term 12 herpetofauna, I believe. Could you spell that perhaps 13 14 for the benefit of our court reporter and tell us what it means? 15 MR. MIFSUD: Sure. 16 I have to write it 17 down some days myself here. H-E-R-P-E-T-O-F-A-U-N-A. Herpetofauna refers to the regional amphibian and 18 19 reptile species assemblage, the different amphibians and reptiles that occur within a particular area. 20 if we refer to the herpetofauna of the Fermi facility 21 we're referring to those facilities that are specific 22 to that area. 23 24 CHAIRMAN SPRITZER: Has there been any characterization of the alternate site, that's the 25

1	site near the Monroe Power Plant in terms of toxicity
2	of the soil?
3	MR. WESTMORELAND: We haven't done any
4	kind of analytical testing on the soil, at least not
5	our group. I'm not aware of any other work like that
6	through DTE although that's possible.
7	But we have no reason to believe that that
8	site is contaminated. It's been farmed for many, many
9	years and is currently farmed.
10	The I've walked the site with
11	representatives from the DEQ and the Army Corps
12	several times. They're quite happy with that site for
13	mitigation and they express no concerns about
14	contamination of the site.
15	CHAIRMAN SPRITZER: DEQ is what is
16	that?
17	MR. WESTMORELAND: Michigan Department of
18	Environmental Quality.
19	CHAIRMAN SPRITZER: Okay. I guess this
20	question is for you, Mr. Mifsud. What are the
21	staffing levels for endangered species mitigation
22	oversight at the Michigan Department of Natural
23	Resources? If you know.
24	MR. MIFSUD: I don't know the specifics
25	because the Department of Natural Resources has
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1	reorganized multiple times in the last few years.
2	I know at least the two people we're
3	dealing with on a regular basis are Dan Kennedy and
4	Lori Sargent. But they do have a support staff and
5	including the law enforcement department that does do
6	site inspections.
7	CHAIRMAN SPRITZER: Do you know the
8	staffing level of the enforcement department?
9	MR. MIFSUD: I do not.
10	CHAIRMAN SPRITZER: All right, I'm going
11	to be continuing with questions that have been given
12	to us by the parties. I'll try and interpret them as
13	best I can.
14	Right now I take it there's no current
15	date for start of site preparation work at the Fermi
16	3 site.
17	MR. P. SMITH: That's correct.
18	CHAIRMAN SPRITZER: When in relation to
19	the start of site preparation work would
20	implementation of the mitigation plan start?
21	MR. P. SMITH: We've got a number of
22	mitigation plans. For example, the wetlands
23	mitigation plan which would be for the Monroe site
24	that we've just talked about
25	CHAIRMAN SPRITZER: Right.

1 MR. P. SMITH: We'd have to start that in advance of or contemporaneous with the start of site 2 3 activities. 4 In our schedule for when we make a 5 decision to go forward actually the first couple of years of that schedule are mostly devoted to planning 6 7 and mobilizing activities. So there's a fair lag before we would actually start physical construction 8 9 of preparing the site. So there's -- that whole period would be 10 available to be doing any characterization work that 11 we would need to to determine where the populations 12 are and start implementing the mitigation plan. 13 14 haven't made a specific time line on that but it would be in advance of the construction as described in the 15 mitigation plan. 16 17 JUDGE CHARBENEAU: How long does it take to receive a permit? For take. 18 19 MIFSUD: The threatened/endangered species permit? 20 JUDGE CHARBENEAU: Yes. 21 MR. MIFSUD: It depends on the project and 22 the time frame. Typically a couple of months at the 23 24 most. JUDGE CHARBENEAU: Would you apply for the 25

1 permit well before you would consider construction 2 just to have it on hand, or is that something you 3 would do in the immediate? 4 MR. P. SMITH: We did not apply for a take 5 permit for fox snake because of the annual expiration. There was no point in doing that prior to knowing 6 7 exactly when we were going to actually start having to 8 implement that. 9 But you would apply for JUDGE CHARBENEAU: 10 a permit as part of your decision to move forward with construction. 11 We would apply for the MR. P. SMITH: 12 permit at the appropriate time after we've made a 13 14 decision go forward commensurate with the to 15 activities that we would be engaging. 16 CHAIRMAN SPRITZER: Have you made any 17 estimate of eastern fox snake survival assuming implementation of the removal of large numbers of 18 19 eastern fox snake to the re-wilded farmland? MR. MIFSUD: We haven't evaluated the 20 mitigation area. The emphasis for this project will 21 first and foremost be to mitigate onsite, keeping the 22 eastern fox snakes within the current Fermi facility 23 24 to the extent possible. The goal in terms of the referencing for 25

1	potential relocation of animals to the mitigation
2	would be as a secondary or tertiary step. Once that
3	facility or once that area has successfully progressed
4	to a point that would potentially support the eastern
5	fox snakes include the opportunity for relocating
6	neonates or juvenile animals that would be young of
7	the year or juvenile snakes to innoculate that to help
8	expand the population.
9	MR. P. SMITH: I'd just like to add that
10	a large percentage of the site is unimpacted by
11	anything related to a Fermi 3 construction which is
12	available for as habitat for relocation of snakes
13	relative to the amount of area that we're actually
14	going to impact.
15	MR. WESTMORELAND: Or 800 acres.
16	CHAIRMAN SPRITZER: That's the Fermi site
17	as a whole I take it you're referring to, not the
18	farmland.
19	MR. P. SMITH: The Fermi site as a whole
20	is twelve hundred and sixty some acres of which 650
21	acres of are part of the Detroit International
22	Wildlife Refuge that are co-managed with the U.S. Fish
23	& Wildlife Service. And then our actual impacted area
24	for construction of all types is
25	MR. WESTMORELAND: Well, the wetland

1	impact is about 35 acres and the overall construction
2	impact once construction is complete is 50 acres.
3	That's including restoration after construction.
4	MR. MIFSUD: That's for both wetland and
5	upland.
6	MR. WESTMORELAND: Yes.
7	CHAIRMAN SPRITZER: So I take it if you
8	don't have the offsite mitigation area ready when you
9	start trying to translocate snakes you'll have wetland
10	area onsite that you can move them to?
11	MR. P. SMITH: Correct.
12	CHAIRMAN SPRITZER: And that's part of
13	your plan?
14	MR. P. SMITH: And that's the focus. The
15	use of the Monroe mitigation site is really an extra
16	alternative that if we need to we would have that
17	available.
18	CHAIRMAN SPRITZER: Now with respect to
19	the offsite farmland that you'll use as wetland
20	mitigation is that owned by DTE already?
21	MR. P. SMITH: Yes, it's part of the
22	Monroe Power Plant property.
23	CHAIRMAN SPRITZER: And there was some
24	mention earlier of a conservation easement. What can
25	vou tell us about that?

1	MR. P. SMITH: That's correct. As part of
2	the wetlands permit when you mitigate, use
3	compensatory mitigation, part of that is you have to
4	provide a perpetual conservation easement for that
5	property which would prevent you from, or anybody else
6	from in the future of withdrawing that as wetland.
7	CHAIRMAN SPRITZER: And that would be true
8	even if you sold the property to someone else?
9	MR. P. SMITH: Yes, that's true. To my
10	understanding.
11	CHAIRMAN SPRITZER: All right. How will
12	mitigation be guaranteed if DTE receives a permit? I
13	think this is referring to a permit from the NRC, the
14	combined license that you're seeking. And
15	subsequently sells and transfers that license, the
16	COL.
17	MR. P. SMITH: So we're talking about
18	mitigation related to the fox snake?
19	CHAIRMAN SPRITZER: Exactly.
20	MR. P. SMITH: I know licenses are
21	transferrable but I'm sure there's a lot of legalities
22	that I don't understand about transfer of licenses.
23	But just from the perspective is it's not
24	just the license, it's everything that goes along with
25	the license that's part and parcel of it. From my

1 understanding of other license transfers that I'm aware of that have occurred. 2 3 CHAIRMAN SPRITZER: Okay. Will there be 4 any provision -- we've heard a lot about 5 monitoring that will be done pursuant 6 mitigation plan. Is there any way that that will be 7 -- the monitoring reports will be available for the 8 People outside of the state regulators to 9 look at. 10 MR. WESTMORELAND: Well, I can say that when we submit it to the MDNR it's essentially a 11 12 public document and it can be easily FOIA'd. CHAIRMAN SPRITZER: Does MDNR ever require 13 14 a posting of a performance bond, or performance of 15 obligations under a take permit? 16 MR. WESTMORELAND: They never discussed 17 that with us in terms of the take permit that I recall. 18 19 MR. MIFSUD: Not that I'm aware of. CHAIRMAN SPRITZER: We asked a question 20 earlier, or I asked a question that had 21 propounded by one of the parties earlier about EPA's 22 concern on the one hand of doing work during the 23 24 period when the ground is frozen versus the indication in the plant that it would be better to do site 25

disturbance activity when the snakes are not in hibernation. How have you attempted to reconcile those two concerns?

MR. WESTMORELAND: So, what I recall in our wetland permit, we had some provisions around where appropriate do work in the wintertime. And what I'm recalling specifically is one aspect of the permit was the relocation of our transmission towers, the transmission corridor which would actually kind of go through an emergent wetland between forested wetland.

And where the agencies considered that truly a temporary impact because it would only take a couple of months to do. And you'd basically be just digging a small foundation but you're going to have to bring heavy equipment in. And so if you do that particular piece of work in the wintertime it will minimize the impact to the surrounding wetlands greatly. So in that case that kind of thing makes sense. And that's what I recall that was for.

MR. MIFSUD: And to build on that, within wetlands the eastern fox snake does not hibernate within the wetlands. The objective to collect the animals during and have the construction activities during the active season. Because for the areas that are upland we would have the greatest opportunity to

1	maximize the success of collection and relocation.
2	They do not hibernate within the wetlands themselves,
3	though, so the two would not be conflicting.
4	CHAIRMAN SPRITZER: Okay. I understood
5	your counsel's objection earlier to talking about
6	specific amounts of cost, but I think this question
7	may avoid that problem. Will there be funds,
8	regardless of the amount, dedicated to accomplishing
9	the mitigation and the follow-up monitoring?
10	MR. P. SMITH: Absolutely.
11	CHAIRMAN SPRITZER: Where will they come
12	from?
13	MR. P. SMITH: They'll come from the
14	construction financing as part of the overall project.
15	To put it in perspective, when we looked at the costs
16	associated with the mitigation plan they're a very,
17	very small portion of the overall construction cost.
18	We saw the letter from 2012 where MDNR
19	reviewed your mitigation plan. Have you had any
20	further contacts with MDNR since then about mitigation
21	at the Fermi site? For the eastern fox snake, that
22	is.
23	MR. WESTMORELAND: No, not that I recall.
24	CHAIRMAN SPRITZER: Do you agree with the
25	staff's conclusion that if mitigation for the eastern

1 fox snake were ultimately not successful that impacts 2 on the species would be no greater than moderate? 3 I quess you'll have to use the NRC's definition of 4 "moderate" if you know what it is. 5 MR. WESTMORELAND: I agree with that. I would say yes. When you 6 MR. MIFSUD: 7 consider also in the previous questions there was a discussion of the number of populations that occur. 8 9 Michigan has four known populations. 10 biggest population would be that which occurs within Wayne and Monroe Counties. When you consider the 11 proximity of the Fermi facility to adjacent contiguous 12 coastal habitats that are available to the snakes you 13 14 have Pointe Mouillee, you have Lake Erie Metropark to 15 To the south you have Pointe Aux Peaux as the north. 16 well as Sterling State Park. All four of these 17 locations support populations -- are part of the corridor and support eastern fox snakes at those. 18 19 And building on that too, one of the things that is important to consider is even with all 20 those protected areas or those natural areas that are 21

parklands the Fermi facility long-term uniqueness to it that from the standpoint that it is, even with these temporary or permanent impacts, it is actually the most highly protected area within that

22

23

24

1 region in the sense that one of the biggest threats to eastern fox snakes is actually persecution by people. 2 3 Within the open protected areas on the 4 Fermi facility there are armed guards keeping people 5 from going within those regions, potentially harassing and causing harm to the eastern fox snake. So there's 6 7 a uniqueness to the facility that actually affords a 8 level of protection that is not typically seen in that 9 area. 10 So at maximum I would say that moderate would be an appropriate designation, though DTE is 11 committed and I believe that the impacts are going to 12 be small. 13 14 CHAIRMAN SPRITZER: With respect to the 15 offsite mitigation area will there be any kind of 16 security or limitations on public access there? 17 will that be freely open to the public? MR. WESTMORELAND: I'd have to go look at 18 19 the specifics, but I believe it's limited access. CHAIRMAN SPRITZER: But in the event for 20 snakes relocated onsite there will not be people just 21 walking on and off your property, is that a fair 22 statement? 23 24 MR. P. SMITH: That's correct. The site is encompassed by a fenced owner-controlled area. 25

1	CHAIRMAN SPRITZER: All right. Very well
2	I think we've covered everything that I need to cover.
3	Do either of you have any further questions?
4	JUDGE CHARBENEAU: I guess just one.
5	During the construction period will conservation
6	personnel have free access to the entire area under
7	contract?
8	MR. P. SMITH: I believe that's the case.
9	Clearly we have access rules that we have to follow
10	but we currently have access for conservation officers
11	and other outside agencies, and we make arrangements
12	to bring them onsite. And they can see whatever they
13	want.
14	JUDGE BARATTA: Are you at all familiar
15	with kind of the everyday monitoring that DNR does?
16	For example, do they routinely show up on an irregular
17	basis to check out things?
18	MR. WESTMORELAND: Do you mean show up at
19	our at the Fermi site presently?
20	JUDGE BARATTA: Yes.
21	MR. WESTMORELAND: No. I'm not aware of
22	that, not the DNR. A lot of other agencies do. You
23	know, if there's a permit or something. But that kind
24	of drives it a lot of times is they're, you know, MPDS
25	permit they're monitoring, is there some other kind of

1	soil erosion, sedimentation permit they're monitoring.
2	A dredge permit. That's when regulatory agencies
3	typically show up. So you know, if we have a take
4	permit ongoing the odds of
5	JUDGE BARATTA: You would expect them to
6	show up then?
7	MR. WESTMORELAND: Yes, much more likely.
8	JUDGE CHARBENEAU: How about Fish &
9	Wildlife conservation officers? Do they show up
10	regularly?
11	MR. WESTMORELAND: We interact with the
12	Fish & Wildlife officers a fair amount. They come to
13	site. They plan projects. They're not policing
14	because for the most part because the site's
15	protected and the eight hundred some acres of the
16	site, or the 650 acres for the wildlife refuge is
17	protected and it's basically undisturbed. And they
18	don't have a lot of concern about that.
19	MR. P. SMITH: We have a cooperative
20	agreement with Fish & Wildlife for the management of
21	the Detroit International Wildlife Refuge portion of
22	the site. So they're frequently involved onsite and
23	a good relationship with the people onsite who
24	administer it.
25	CHAIRMAN SPRITZER: All right. I think

1	we're done with questions on contention 8. We did say
2	we'd go to 12:30 but unless anybody has any violent
3	objections I think this would be a good time to take
4	the break for lunch, come back and we'll proceed to
5	contention 15.
6	If that's acceptable we'll adjourn. I
7	think let's try and get back why don't we aim for
8	1:30 for resuming. And we will start, I believe first
9	on the list will be the DTE witnesses on contention
10	15. Is that the order? Let me check.
11	MR. T. SMITH: I don't believe that's the
12	order that you had established previously.
13	CHAIRMAN SPRITZER: Let's stick to
14	whatever the order was we have on our schedule. I
15	thought it was DTE first. Oh no, it's Mr. Gundersen.
16	Sorry. And then we will proceed to the DTE witnesses
17	(Whereupon, the foregoing matter went off
18	the record at 12:09 p.m. and went back on the record
19	at 1:28 p.m.)
20	CHAIRMAN SPRITZER: All right, let's go
21	back on the record. Is everybody here that needs to
22	be here? Apparently they are.
23	A couple of housekeeping matters. First,
24	we had mentioned Mr. Smith had brought up the issue
25	about one of my questions on contention 8 getting into

1	a proprietary issue. We suggested we would defer that
2	till a later session. I think in retrospect we don't
3	need to do that so if those witnesses want to leave
4	they may. They're certainly not required to leave but
5	they don't need to stay for just one question.
6	MR. T. SMITH: Okay, thank you. And we
7	could in a public setting give you a range if that
8	would be helpful.
9	CHAIRMAN SPRITZER: Sure, that would be.
10	MR. T. SMITH: It's on the order of a
11	couple of hundred thousand dollars at most. Not \$1
12	million, more than \$10,000. So, in that range.
13	CHAIRMAN SPRITZER: Okay, fine. That's
14	helpful.
15	The schedule for the rest of today, we're
16	going to try and go till about 5:30. It will depend
17	where we are.
18	We've been told that the doors close at 5
19	so if you go out after 5 be sure and have somebody
20	there to let you back in or you're going to get rather
21	chilly.
22	As I said we'll go to about 5:30. We'll
23	probably take two brief breaks in between so we're not
24	torturing people.
25	During Mr. Gundersen's testimony I'm going

1	to be asking a number of questions that have been
2	given to me by counsel for the staff and DTE. There
3	are going to be some instances in there where you may
4	need to help me and direct me to a particular portion
5	of the document. You want me to have the witness look
6	at some of the documents or multiple-page documents
7	and it's not immediately obvious to me what portions
8	you want me to have him look at. So just keep that in
9	mind. I'll ask you of course as we're going through
10	that.
11	Unless there's anything else why don't we
12	proceed with the interveners' witness on contention
13	15. And if counsel for interveners will introduce
14	your witness.
15	MR. LODGE: Thank you. At this time the
16	interveners call Arnold Gundersen to testify.
17	WHEREUPON,
18	ARNOLD GUNDERSEN
19	were called for examination by the interveners, having
20	been first duly sworn, assumed the witness stand, were
21	examined and testified as follows:
22	MR. GUNDERSEN: Good afternoon.
23	CHAIRMAN SPRITZER: Good afternoon, Mr.
24	Gundersen, and welcome. And I remind you, of course,
25	you're still you've been sworn this morning and you

1 are still under oath. 2 JUDGE CHARBENEAU: Mr. Gundersen, I'd like to start off with a couple of questions going through 3 4 your non-proprietary testimony. 5 And I noticed in a couple of parts of your testimony that you criticize DTE for deviating from 6 7 the NRC NEI template without having first specifically notified the NRC. 8 9 exactly where you point to the 10 requirement is that the NRC be noted deviations? 11 12 MR. GUNDERSEN: It's on -- actually I found confirmation of it in DTE's initial statement of 13 14 position on contention 15 of April 30 on page 28. 15 They say applicants are using a template 16 applicants using the template must 17 conformance with the NRC's regulatory quidance by including a commitment to applicable regulatory guides 18 19 or by providing an alternative or exception to be reviewed by the NRC staff. 20 So I think that's recognition by DTE that 21 there was an obligation that when you deviate from the 22 template you're required as they say to provide an 23 24 alternative or exception to be reviewed by the NRC

staff.

1	JUDGE CHARBENEAU: No, I was thinking more
2	of pointing to an NRC requirement or NEI requirement.
3	MR. GUNDERSEN: I don't have that on the
4	top of my head, but as I said, DTE has already entered
5	this on the record. So I think that I'll go with that
6	sentence from DTE.
7	JUDGE CHARBENEAU: Okay. In your
8	responses to questions 14 and 15 from your testimony
9	you disagree with the NRC decision concerning
10	violation A of the Notice of Violation.
11	As you look at in particular Appendix B
12	does the NRC regulations refer to applicants?
13	MR. GUNDERSEN: Actually 10 C.F.R. 50.2 on
14	definitions says, quote, "An applicant means a person
15	or entity applying for a license." It doesn't say,
16	what DTE misinterpreted the law to say that they had
17	already applied and what the NRC then later accepted
18	the misinterpretation. The definition in 10 C.F.R.
19	50.2.
20	And it applies interestingly not just to
21	Part 50 licenses but to Part 52 licenses. It says an
22	applicant is a person or entity applying for a
23	license.
24	Now, my position is that DTE notified the
25	NRC in February of `07 that they were applying. But

1 more importantly, in May, May 31 of `07 DTE responded as if they were the applicant. This is a DTE -- this 2 was in DTE's testimony, same -- the April 30, 2013 3 4 testimony, page 13, footnote 27. 5 It's a 4-page letter from Detroit Edison, DTE, 000047. And it was dated May 31 of `07. 6 7 It's interesting, it's their voluntary response to the RIS. And in it there's five times 8 9 where they are asked does the applicant plan to submit 10 an environmental report. What scope and schedule does the applicant project for the site characterization? 11 What month and year will the applicant complete a 12 detailed design information? So, in that document 13 14 they had the opportunity to say we're not 15 applicant until apply, but they answered we 16 affirmatively that in fact they were the applicant. 17 So I think the history of Part 50.2 saying that you are an applicant when you notify the NRC 18 19 you're applying and DTE's response just 4 -- 3 months after they notified the NRC, they didn't 20 exception to the concept of applicant until 2009 when 21 So I think the record's pretty clear 22 the NOV came up. that they believed they were the applicant until it 23 was inconvenient. 24

JUDGE CHARBENEAU: Well, does that mean

1 that the staff would need to maintain a record of all correspondence on ADAMS for all inquiries before an 2 3 application was received? 4 MR. GUNDERSEN: I believe the staff 5 misinterpreted NRC regulations and that you're applicant from the time you apply, you notify the --6 7 you're an applicant from the time you notify the NRC 8 you are applying. 9 It's a dangerous precedent that established if that's not true because all of the 10 deliberate misconduct requires an applicant. Employee 11 protection requires an applicant. Completeness and 12 accuracy requires an applicant. Part 21 requires an 13 14 applicant. Appendix B requires an applicant. 15 And if we don't consider quality assurance necessary until you file your application to me that 16 means that deliberate misconduct, employee protection, 17 completeness and accuracy of information, Part 21 all 18 19 use those same terms. So the entire fabric of a license application is torn to shreds unless the 20 applicant really is the applicant at the time they 21 notify the NRC of their intent. 22 JUDGE CHARBENEAU: We'll bring that up 23 24 again with staff. Did the applicant or soon-to-be applicant 25

1	have a quality assurance program in place before the
2	application was submitted?
3	MR. GUNDERSEN: In 2008, early 2008 a
4	quality assurance program was put in place. But the
5	purpose was very limited. The documents DTE 000106,
6	and I cite it in my testimony. It was the DTE COLA
7	selection and chapter review and applicant.
8	DTE said, quote, "The regulations require
9	that DTE as an owner retain responsibility for
10	complying with specific requirements" and then they
11	put "relative to COLA submittal to achieve quality
12	results."
13	It goes on to say that they implemented a
14	quality assurance program but it was very limited to
15	it was very limited to just the COLA preparation
16	document itself. So the quality assurance
17	JUDGE CHARBENEAU: Receiving the document
18	
19	MR. GUNDERSEN: was on the COLA
20	documentation itself.
21	And the only reason that was implemented
22	according to this document is that they were afraid of
23	completeness and accuracy issues if they when they
24	filed. Without a QA program on the COLA application
25	itself they were afraid that they might run into legal

1 issues on completeness and accuracy. And then of course the constraint there 2 3 was that they said that the reason they didn't want to 4 do it was that the schedule to complete the work would be aggressive which is why they limited their QA 5 effort to just the COLA application itself. 6 7 JUDGE CHARBENEAU: Would you judge -- I 8 believe that was the QA program that's referred to as 9 the ND QAPD. 10 MR. GUNDERSEN: Yes. JUDGE CHARBENEAU: Would you agree that 11 that quality assurance program was sufficient for 12 review of the material being transferred from Black & 13 14 Veatch to DTE for submittal to NRC as a license? 15 it follow sufficiently the parts of Appendix B that 16 would be necessary for that transfer? 17 MR. GUNDERSEN: You know, I have other concerns about who is the quality assurance manager 18 19 and the organizational structure and things like that that fall under that QAPD. 20 I would agree that they had -- they 21 attempted to have a quality assurance program in place 22 for the transfer of information as it related to the 23 license amendment. I really can't answer was it

adequate enough based on the time I spent on this

24

1	application.
2	JUDGE CHARBENEAU: As a vendor providing
3	services did Black & Veatch have an Appendix B quality
4	assurance program in place during the DTE geotechnical
5	program?
6	MR. GUNDERSEN: Black & Veatch had its own
7	program. It had an Appendix B program, yes.
8	JUDGE CHARBENEAU: Okay. So that work was
9	done under quality assurance under an Appendix B
LO	program.
11	MR. GUNDERSEN: Not under the
L2	JUDGE CHARBENEAU: No, I understand but
L3	Black & Veatch did have.
L4	MR. GUNDERSEN: Black & Veatch had a
15	program, yes.
L6	JUDGE CHARBENEAU: Okay. And this is a
L7	question regarding your question 20 in your testimony.
L8	By June of 2007 had Geovision or ARM Geophysics done
L9	any work as part of the geotechnical program? I think
20	you'll see that there are two dates listed there, one
21	is April and one is June.
22	MR. GUNDERSEN: I believe I have another
23	answer in there on that. There was the quick start
24	schedule indicated that within 7 weeks of contract

award geotechnical work was done. That's another --

1	I'll need a minute here to look at my testimony.
2	But what I said here is that geotechnical
3	work had begun in April.
4	JUDGE CHARBENEAU: The program was
5	initiated in April.
6	MR. GUNDERSEN: And then what I also said
7	was that in June B&V conducted pre-work surveillance.
8	JUDGE CHARBENEAU: And the question was
9	had these two entities done any work at that time on
10	behalf of the geotechnical program for Fermi 3. To
11	your knowledge.
12	MR. GUNDERSEN: Yes, I was just looking.
13	I had analyzed the PERT chart that they had developed
14	and there were quick start dates. And I believe I can
15	find that in about a minute or two if I look. But to
16	my knowledge, yes, the geotech work had begun at that
17	time.
18	JUDGE CHARBENEAU: That's probably true
19	but I was wondering whether these two because the
20	criticism in that question response was these two
21	companies had not been reviewed. And my question was
22	had they done any work at that point in time.
23	MR. GUNDERSEN: I have question 20 open
24	but I was looking to try to find that quick start
25	response. If you'll just give me a minute I might be

1	able to find it.
2	JUDGE CHARBENEAU: Fine.
3	MR. GUNDERSEN: The answer is yes but it's
4	found in the proprietary my proprietary response,
5	question 5 in my proprietary response confirms that
6	the work was begun. But I guess I can't go into it
7	any further than that.
8	JUDGE CHARBENEAU: We'll look at that at
9	a later time. Thank you.
10	Okay, this is a follow-up part of that
11	question though. In your Q 21 response you state that
12	two non-nuclear vendors with non-nuclear QA programs
13	were used. Were these two programs the same ones,
14	Geovision and ARM Geophysics, referred to?
15	MR. GUNDERSEN: Yes, they were.
16	JUDGE CHARBENEAU: In your earlier
17	response did you not state that the in June 2007
18	that Black & Veatch did a QA audit and found them
19	acceptable?
20	MR. GUNDERSEN: Black & Veatch did an
21	audit of their programs and found them acceptable,
22	that's true. But their programs, I think what I was
23	trying to say was that these programs had not been
24	quality assurance blessed or developed by those firms

for quality assurance application. But it was Black

1	& Veatch's opinion that the analysis was adequate to
2	meet Black & Veatch's QA program.
3	JUDGE CHARBENEAU: In your question 22
4	response you refer to the quality assurance program
5	for the ESBWR design process. And my question here is
6	why is this necessary for DTE.
7	MR. GUNDERSEN: I would agree with you,
8	the ESBWR portion of the QA program does not fall
9	under contention 15.
10	JUDGE CHARBENEAU: Okay, thank you.
11	CHAIRMAN SPRITZER: Mr. Gundersen, I'm
12	going to ask you some questions going to your
13	experience and background. We of course have your
14	very detailed CV so we know a lot about you already,
15	but there's some specific questions I have.
16	First, have you ever worked in the quality
17	assurance department for an NRC-licensed power
18	reactor?
19	MR. GUNDERSEN: No, I was responsible on
20	a Part 50 license application as the lead nuke. And
21	
22	CHAIRMAN SPRITZER: Lead nuke? What is
23	that?
24	MR. GUNDERSEN: The lead nuclear engineer,
25	I'm sorry. And I worked side by side with the QA
Į.	•

1	professionals as we developed a QA plan. It was a
2	Part 50 license that was later canceled. It was New
3	York State Electric & Gas Units 1 and 2. And no.
4	I have routinely worked with quality
5	assurance and in that case actually helped them build
6	a program. But I was not in the QA department.
7	CHAIRMAN SPRITZER: The New York license
8	application you referred to, when was that?
9	MR. GUNDERSEN: `77 to `79 or `80.
10	CHAIRMAN SPRITZER: And again what quality
11	assurance-related work have you done since then?
12	MR. GUNDERSEN: As the senior VP of an
13	inspection division, ultrasonic inspection, and as a
14	senior VP of an engineering division I would routinely
15	interface with quality assurance.
16	But again, as an engineering professional
17	working with quality assurance and not in quality
18	assurance.
19	CHAIRMAN SPRITZER: What time period was
20	the work you've just referred to?
21	MR. GUNDERSEN: From 1980 to 1990.
22	CHAIRMAN SPRITZER: Okay. Have you ever
23	testified before an Atomic Safety and Licensing Board
24	on quality assurance issues?
25	MR. GUNDERSEN: I submitted testimony on

1	Bellefonte about quality assurance. That was not
2	there was no ASLB though. And Bellefonte had serious
3	quality assurance problems that were confirmed by NRC
4	Chairman Jaczko.
5	I don't believe I've ever testified in
6	front of an august body like this on quality
7	assurance.
8	CHAIRMAN SPRITZER: So I take it you have
9	never been found either qualified or not qualified to
LO	give expert testimony on quality assurance issues
L1	prior to this proceeding that you're in today.
L2	MR. GUNDERSEN: Yes, that's correct. I've
L3	never been disqualified, right.
L4	CHAIRMAN SPRITZER: Or qualified, either
L5	one.
L6	MR. GUNDERSEN: Well, that's true, because
L7	I've never been in a hearing like this before.
L8	CHAIRMAN SPRITZER: Right. Are you now or
L9	have you ever been certified as a quality assurance
20	auditor?
21	MR. GUNDERSEN: No, I have not.
22	CHAIRMAN SPRITZER: Have you taken any
23	recent training courses on quality assurance? I'll
24	take recent to mean approximately the last 10 years.
25	MR. GUNDERSEN: No, I have not.

1	CHAIRMAN SPRITZER: Do you have any
2	experience in developing new quality assurance
3	programs?
4	MR. GUNDERSEN: I think I addressed that.
5	I worked with from the inception of a nuclear
6	program, a Part 50 license, I worked with quality
7	assurance professionals to come up with a QA program.
8	And then of course as a senior vice
9	president whenever we had a project that required QA
10	we would develop our own QA plan and work with quality
11	assurance to make sure that was implemented.
12	CHAIRMAN SPRITZER: Have you read the
13	American Society of Mechanical Engineers Standard NQA-
14	1 entitled "Quality Assurance Requirements for Nuclear
15	Facility Applications?"
16	MR. GUNDERSEN: It's voluminous but I have
17	at points in my life read parts of it. So I think
18	I've probably read the whole thing over time, yes.
19	CHAIRMAN SPRITZER: And have you read
20	Regulatory Guide 1.28 Quality Assurance Program
21	Requirements Design and Construction, Revision 3? Or
22	any revision.
23	MR. GUNDERSEN: Reg 1.28. I don't know if
24	it was revision 3 or not, I'm sorry.
25	CHAIRMAN SPRITZER: But you have read
	1

1	Regulatory Guide 1.28?
2	MR. GUNDERSEN: Yes.
3	CHAIRMAN SPRITZER: All right. Now, do
4	you agree we're going to move on from your
5	qualifications. Do you agree the delegation as
6	specifically allowed under NRC regulations in 10
7	C.F.R. Part 50 Appendix B criterion looks like roman
8	numeral i. Take a look at that certainly.
9	MR. GUNDERSEN: The applicant may
10	delegate, but the applicant cannot delegate
11	responsibility for overall QA but can delegate
12	implementation of QA programs to others. But there
13	has to be an applicant in order for delegation to
14	occur and DTE and the NRC are saying that there was no
15	applicant until the day they applied. So I agree that
16	that's exactly what Appendix B requires, that an
17	applicant may delegate, but there must be an applicant
18	in order for that delegation to occur.
19	CHAIRMAN SPRITZER: On that question of
20	the meaning "applicant," I take it, and correct me if
21	I'm wrong, once an entity gets, receives a combined
22	license it would no longer be an applicant, it would
23	be a licensee. Is that the general your
24	understanding?
	i i

MR. GUNDERSEN: Yes, I think so.

1 CHAIRMAN SPRITZER: Do they continue to be subject to the Appendix B QA requirements after they 2 3 become a licensee? 4 MR. GUNDERSEN: Yes, they do. 5 CHAIRMAN SPRITZER: Would that suggest to you then that perhaps the term "applicant" was not 6 7 intended to be given a precise, literal meaning? It's in the definitions in 8 MR. GUNDERSEN: 9 think it was given a precise, literal 50.2 so I 10 meaning as any person applying for a license. know, they felt it was important enough to define in 11 50.2. 12 CHAIRMAN SPRITZER: All right. 13 14 mentioned the distinction between allowing 15 authorizing implementation by a different an 16 applicant authorizing implementation, but also being required to retain responsibility. Can you elaborate 17 on what your understanding of that distinction is? 18 19 MR. GUNDERSEN: Yes. When you -- I think it goes back to the ASLB on Midland. You cannot have 20 a self-executing QA program. You can't turn over 21 responsibility to a vendor to do your QA for you, 22 which is exactly what DTE did for the period from `07 23 24 through `08. So I guess I would go back to the Midland 25

1 decision in that it appears in this case that there was a self -- what would I call it here -- yes, a 2 3 self-executing QA program which is doomed to fail. 4 CHAIRMAN SPRITZER: I take it you mean by 5 "self-executing" one where the applicant does not retain responsibility for implementation of the QA 6 7 program. The term "self-executing" 8 MR. GUNDERSEN: came from the ASLB on Midland. 9 And I believe it was one where the applicant did not retain responsibility 10 and overall control of the work which happened here 11 until sometime in `08 or potentially even into `09. 12 Referring to your 13 JUDGE BARATTA: 14 testimony, in a statement by choosing to delegate the 15 quality assurance function to a subcontractor in the 16 COLA development of the Fermi 3 licensing project, and 17 it goes on. But my question really is the delegation of the execution of the quality assurance program, is 18 19 that allowed by Appendix B and NQA-1? MR. GUNDERSEN: As long as you retain 20 adequate oversight functions. For instance, having a 21 QA manager in your own QA program, you can delegate 22 the responsibility to a third party. 23 24 JUDGE BARATTA: Okay. Now, you mentioned

that you had in fact read NQA-1 at one time or

1 another. Can we bring up Board Exhibit 1, please? And could you go to page little roman numeral iv? 2 3 Okay, and let's see. Go down a little further on that 4 page there. All right. 5 If you take a look at the paragraph that starts out, "The standard sets forth." Do you want to 6 7 enlarge that? Not that big. 8 (Laughter) 9 JUDGE BARATTA: You've heard, of course, 10 that the staff says that -- interpreted Appendix B to require someone -- the term "applicant" to apply only 11 to someone who has actually filed an application. 12 could you give me your interpretation of that sentence 13 14 that says the standard set forth requirements and also 15 the following sentence that says a quality assurance 16 program requirements, particularly with respect to the word "siting." What do you think that means there in 17 terms of NQA-1 and QA? 18 19 MR. GUNDERSEN: I lined up -- before I came here I lined up Appendix B with NQA-1 on Article 20 2 of Appendix B which shows up as basic requirement 2 21 And to me they matched. 22 in NQA-1. JUDGE BARATTA: Well, they should. 23 If you 24 look at the --25 MR. GUNDERSEN: Yes.

1 JUDGE BARATTA: In the beginning of NQA-1 I think there may be a statement that says that. 2 3 But what I was particularly interested in, 4 you notice the word "siting" appears in there? 5 MR. GUNDERSEN: Yes. What does that mean in 6 JUDGE BARATTA: terms of the activities that were conducted prior to 7 8 2008 by DTE? 9 MR. GUNDERSEN: Well, to me that's the 10 geotechnical borings, especially -- frankly, I'm not too, too worried about the meteorological side of 11 this, 12 the geotechnical side, especially but considering the structural issues still in play on the 13 14 development of this license, adequate control of the 15 boring program needed to be not just within DTE's 16 responsibility but also properly overseen by -- I'm 17 sorry, they needed to be not just within the control of B&V, but also under the quality assurance oversight 18 19 of DTE. 20 Is that what this says? JUDGE BARATTA: MR. GUNDERSEN: I interpreted NQA-1 as 21 basically saying the program shall be -- this is NQA-1 22 Basic Requirement 2. And it says the program shall be 23 established at the earliest time consistent with 24

schedule and they're referring to the QA program.

1	And then it says management of those
2	organizations implementing the quality assurance
3	program or portions of those thereof shall regularly
4	assess the adequacy. So, there is the program and
5	then there's management of organizations that
6	implement the program.
7	JUDGE BARATTA: What I'm trying to get at
8	though is what would those siting activities that
9	were conducted prior to 2008 have to be covered by a
10	quality assurance program.
11	MR. GUNDERSEN: Absolutely, yes.
12	JUDGE BARATTA: Based on the statements
13	that are in NQA-1.
14	MR. GUNDERSEN: I believe that the most
15	critical work on this project was done in the 2007
16	time frame to get the boring data right. The sites on
17	karst which is like what is in Florida, for instance,
18	with the sinkholes. And I was actively involved in
19	the Levy County project before it was canceled.
20	And karst geography is extraordinarily
21	difficult for heavy structures to withstand. The
22	problems that Fermi is encountering now are almost
23	identical to the problems that Levy County was
24	encountering on the karst geography.
25	And the determination of where you can put

1 such a heavy weight as a nuclear plant is all driven by the work that was done in 2007. And I believe that 2 3 not only did B&V need a program but also they needed 4 adequate oversight by DTE as well. 5 JUDGE BARATTA: Even though the staff says that they were not an applicant and therefore Appendix 6 7 B did not apply. MR. GUNDERSEN: I understand -- I think 8 9 this whole debate revolves around that one word, 10 "applicant." And I don't think the staff made the right decision. 11 I go back to the definition in Part 50.2 12 which says the applicant is someone who is applying 13 14 for a license, not someone who has applied. 15 think the staff misinterpreted that. 16 But they had a right to misinterpret 17 because 3 months later in May DTE wrote to the NRC in a voluntary response to the RIS and the question said 18 19 does the applicant do this or that or the other thing. And DTE never took exception to the NRC's question. 20 They basically said that DTE has contracted B&V to run 21 the program and I'm okay with that. 22 But they also led the NRC to believe in 23 24 May of 2007 that they were the applicant.

didn't ever get addressed until the NOV at sort of the

1 third or fourth quarter of 2009. And it's specifically addressed in the NRC 2 3 emails in mid-2009 where the NRC recognized that an 4 applicant must have quality assurance oversight of its 5 contractors which didn't exist. So, I think that the 6 NRC believed until the NOV response that an applicant 7 was somebody who was in the process of applying. 8 I don't know why the NRC reversed itself in 2009 and 9 basically ignored Part 50.2 definition. 10 JUDGE BARATTA: Let's assume for a moment that the staff is right. How would you see -- well, 11 have the applicant, DTE, or the staff ever referenced 12 NQA-1 in any of their testimony? Or any of their --13 GUNDERSEN: Yes, I've seen NQA-1 14 MR. 15 referenced in DTE's April testimony, for instance, 16 yes. 17 JUDGE BARATTA: So it's something that you feel applies in this case. 18 19 MR. GUNDERSEN: Yes. Okay. Then how -- if they 20 JUDGE BARATTA: didn't have a QA program during that time period, or 21 they didn't retain responsibilities required by NQA-1 22 now, not Appendix B, how could they satisfy the 23 24 requirement that the siting be done as seems to be

implied here under a quality assurance program?

1 MR. GUNDERSEN: I'm sorry, could you ask 2 that question a second time? 3 JUDGE BARATTA: The question is if they --4 let's assume that Appendix B because it uses the word "applicant" means literally they had to have filed an 5 But NQA-1 which both the staff and 6 application. 7 applicant, at least the applicant as referenced, 8 requires a QA program during siting. If DTE did not 9 have responsibility for a QA program how could they 10 satisfy NQA-1 which they seem to think is an important standard that they have to satisfy? 11 I don't believe that NQA-1 12 MR. GUNDERSEN: can be satisfied unless there is an applicant, unless 13 14 DTE had a program in place in `07 to monitor those 15 site activities. And I did search NQA-1 for the word 16 17 "applicant" and a definition and I couldn't find one. It might be there but I couldn't find one. When this 18 19 Board said they were going to put in NQA-1 into evidence I went through NQA-1 for that definition. 20 And the only definition I can find is in 50.2. 21 If we could go to 22 JUDGE BARATTA: Okay. page Arabic numeral 59, please. Okay, that Section 23 24 Could you read the title associated with Subpart 2.20? Just scroll down a little bit. 25

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1	is.
2	MR. GUNDERSEN: Oh, okay, 2.20. I'm
3	sorry.
4	JUDGE BARATTA: Yes.
5	MR. GUNDERSEN: Quality Assurance
6	Requirements for Subsurface Investigations for a
7	Nuclear Power Plant.
8	JUDGE BARATTA: Is that what they were
9	doing, subsurface investigations, during 2007?
10	MR. GUNDERSEN: I'm not sure where I am in
11	NQA-1. It's broken into the mandatory part and the
12	not mandatory part.
13	JUDGE BARATTA: This is the Part 2 which
14	is the not mandatory.
15	MR. GUNDERSEN: The not. Okay, so this is
16	in Part 2 of that.
17	JUDGE BARATTA: It's the old NQA-2 I
18	think.
19	MR. GUNDERSEN: No, there are some
20	there are some subsurface investigations which are not
21	mandatory and some of which are mandatory.
22	JUDGE BARATTA: Okay. But subsurface
23	investigations in general you say some are or have
24	to have QA requirements and some don't.
25	MR. GUNDERSEN: Yes, that's correct.

1	JUDGE BARATTA: Okay. So were they doing
2	subsurface investigations during 2007?
3	MR. GUNDERSEN: Yes, they were.
4	JUDGE BARATTA: Do you know if those would
5	have required mandatory QA requirements?
6	MR. GUNDERSEN: I believe some of them
7	must have had QA requirements and some may not have.
8	JUDGE BARATTA: Okay.
9	CHAIRMAN SPRITZER: I've gotten since
10	during the time Judge Baratta's been asking you
11	questions one more question on qualifications. Have
12	you worked in a QA capacity under programs committed
13	to ASME NQA-1, 1994 edition?
14	MR. GUNDERSEN: I became a nuclear
15	whistleblower in 1990. My work before that was as a
16	senior VP in the industry. After 1990 a partner at
17	Winston & Strawn said Arnie, in this business you're
18	either for us or against us, and you just crossed the
19	line. So, while I've continued in the nuclear
20	business as a consultant mainly to NGOs and the State
21	of Vermont I have not been employed by a nuclear
22	vendor or a nuclear licensee since 1992.
23	CHAIRMAN SPRITZER: Okay. I think you've
24	answered that question.
25	If the NRC had chosen to issue a violation

1 for the pre-application period and had used your 2 definition of "applicant" how would it 3 difference now to the issues that are before us in 4 this proceeding? 5 MR. GUNDERSEN: According to the NRC's own emails leading up to the issuance of the NOV, I'm on 6 7 page 12 of my original testimony, this puts into question the quality of the overall application. 8 9 13, the NRC felt -- that was an NRC statement in an NRC email. 10 Another NRC statement. Fermi is not 11 52.79(a)(25) 12 meeting the requirements οf which applicant 13 an to provide a ΟA 14 consistent with Appendix B. Page 14 similarly, 15 Detroit Edison does not have a QA program for the design phase of Fermi 3. Our QA folks believe DTE 16 needs to have oversight of B&V in the form of a QA 17 it program without their application is 18 and 19 incomplete. 20 Then finally it was -- it's not an email, it was in a memorandum between two branch chiefs 21 saying it's not evident that the FSAR provides a QA 22 program that governs the design activities performed 23 24 in support of the FSAR.

So, I guess to finish a long answer to a

short question, I basically believe that the foundation document for this siting, I would agree with the NRC's emails and memorandums up until the time they issued the NOV in that the quality of the entire licensing process until that time is called into question because DTE didn't have a program in place to provide adequate oversight to the B&V contractor.

CHAIRMAN SPRITZER: Okay.

JUDGE CHARBENEAU: Let me ask a follow-up question. This goes back to your response on question 21 concerning do non-nuclear vendors with non-nuclear QA programs. Do you know whether Geovision and ARM Geophysics were working under their own QA programs, or were they working under Black & Veatch's QA program?

MR. GUNDERSEN: I would assume they were hired with their own program and then Black & Veatch either modified that program, or put their program on top of the subcontractor's program as an umbrella program.

They couldn't be doing work without a quality assurance program. So either they did it themselves or they worked under the umbrella of B&V and I don't know which.

1	JUDGE CHARBENEAU: Thank you.
2	CHAIRMAN SPRITZER: Do you agree that
3	delegation is specifically addressed in the Nuclear
4	Energy Institute quality assurance program
5	description, a template in Part 2 Section 2.2? And I
6	can I believe I can show you that section if that
7	would be helpful. Or if you have it.
8	MR. GUNDERSEN: You probably would be
9	faster than me if you can.
10	CHAIRMAN SPRITZER: All right. Can we
11	bring up Exhibit this is DTE Exhibit 91 page 12.
12	We can move around. I assume we're looking at, yes,
13	Section 2.2.
14	MR. GUNDERSEN: I see it.
15	CHAIRMAN SPRITZER: Delegation of work.
16	MR. GUNDERSEN: And your question was do
17	I believe delegation is allowed?
18	CHAIRMAN SPRITZER: Under this provision.
19	MR. GUNDERSEN: The answer is yes. I
20	think I said that earlier. But delegation of the QA
21	function does not mean that you don't have to also
22	provide adequate oversight through your own program.
23	But delegation to B&V is certainly allowed assuming
24	DTE had a program in place as well which it did not.
25	CHAIRMAN SPRITZER: I notice in that

regard the language of this Section 2.2 includes the 1 2 parenthetical at the end of the second sentence 3 requiring -- well, it doesn't use the term "applicant" 4 but whoever it's referring to shall retain the 5 responsibility for the program's effectiveness. That seems to me to be parallel to what Appendix B 6 7 requires. MR. GUNDERSEN: Yes, I think it is and I 8 9 think that's maybe more eloquently stated than I did. But DTE needed to retain responsibility. 10 certainly had the right to delegate to B&V QA 11 functions. 12 What types of activities 13 JUDGE BARATTA: evidence if you like that they did retain 14 responsibility would you expect to find? Give me some 15 examples of how they would demonstrate they retain 16 17 responsibility. MR. GUNDERSEN: Well, first off they would 18 19 need to have QA professionals on the staff which they didn't have. Secondly -- this is in `07. 20 And secondly, they would have needed to 21 have reporting responsibilities clearly defined for 22 those professionals that went outside the normal 23 24 reporting relationship. I've never met a QA manager

who wasn't proud of the fact that his dotted line

worked up to a senior VP three levels above me and 1 that allowed him the ability, although hopefully he 2 3 would never use it, to go over my boss's head and over 4 his boss's head. So that structure needed to be in 5 place. In addition, an adequate audit function of 6 7 the ongoing work would be necessary. I mentioned in my testimony DTE recognizes 8 9 that they put this program in place too late. was a comment in their PowerPoint addressing the NOV 10 if we had it to do over again we would have had a QA 11 program in place sooner. So I think that DTE 12 belatedly recognized that by not having a program in 13 14 place they got behind the eight ball. 15 Is it your position CHAIRMAN SPRITZER: that DTE never informed the NRC of its intent to 16 17 delegate some QA functions to Black & Veatch? MR. GUNDERSEN: I think that's not my 18 19 The letter, it's actually introduced by position. DTE, their April 30 -- I'm sorry, in their April 30 of 20 this year, 2013, testimony page 32, footnote 27, they 21 introduce a document DTE 000047 dated May 31, `07, 22 where they do acknowledge that B&V will be doing 23 24 quality assurance work.

But in that same document

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they

1 acknowledge that they are the applicant. And I can understand where the NRC then would get lulled into 2 3 complacency believing that Appendix B was adequately 4 being implemented. 5 And it was only in `09 when the NRC realized that B&V was delegated but that DTE was not 6 7 the applicant. 8 CHAIRMAN SPRITZER: Okay. Can we bring up 9 DTE 000048? I believe we want to look at the -- go to 10 the top of page 2. And the paragraph says, DTE Energy has contracted Black & Veatch to support preparation 11 of the COL application -- I assume that's what's 12 The Black & Veatch quality assurance 13 14 program which meets the requirements of 10 C.F.R. 50 15 Appendix B and ASME NQA-1 is being applied to the geotechnical investigation work scope. 16 So I take it this letter does indeed 17 inform the NRC that Black & Veatch will be doing 18 19 qeotechnical investigation under Black & Veatch's quality assurance program? 20 MR. GUNDERSEN: There was two letters 21 submitted at the same time 000047 and this one's 22 000048. And I would agree that the NRC was aware that 23 24 B&V was the quality assurance contractor on the job.

they also identified themselves,

But

Detroit Edison also identified themselves as 1 the applicant in answering the voluntary response to the 2 3 RIS in 000047. 4 So, I'm okay with DTE being brought in. 5 That's not the question. These responsibilities didn't have to be solely hired or solely staffed by 6 7 DTE. But the quality oversight could not -- the 8 responsibility for overseeing that could not 9 And DTE has acknowledged that they did. delegated. 10 They said we are not the applicant until the day we applied and therefore Appendix B doesn't 11 apply until the day we applied. And I think that 047 12 lulled the NRC into complacency because they were --13 14 they didn't take exception to being an applicant in And it wasn't until 2009 when the NRC quality 15 2007. 16 assurance staff dug into this. 17 There was -- based on the FOIA request on billings, NRC billings. The NRC spent 450 hours over 18 19 the time from February of `07 until the license was submitted, they spent 450 total hours over that 20 roughly 18-month time span. 21 And in that though almost half, 220 of 22 those hours were in the first quarter and the other 23 220 of those hours were over the remainder of the 15 24

months which doesn't amount to a heck of a lot of NRC

oversight.

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That first quarter's oversight was the team of structural engineers, I'm sorry, geotechnical engineers who went out to the site and observed the borings. They went out on the impression based on 047 that DTE was the applicant. And I think they were lulled into complacency as a result.

CHAIRMAN SPRITZER: We'll be hearing from the NRC staff later and they can explain their position in more detail.

But at least one way that I read their position in this proceeding is for purposes of issuing a Notice of Violation they have agreed with DTE that they can't issue a Notice of Violation until DTE becomes an applicant.

I don't understand them to be saying, at least not necessarily, however, that they believe Appendix B requirements simply don't apply at all until the application is submitted. If that were to be their position would that give you some greater degree of comfort? That is, they would acknowledge that information submitted safety-related information in the COLA must meet Appendix requirements, but they can't cite DTE for a violation of those requirements till they actually become an

applicant.

MR. GUNDERSEN: I guess I get back to that tapestry that has to be woven at the beginning of the project. And it's Appendix B, it's Part 21, it's whistleblower protection. And if you claim not to be the applicant for Appendix B, then your whistleblowers are not protected. Then your materially false statements are not violations. So the interpretation of the staff and DTE I think tears that whole fabric apart.

And in fact, Dave Lochbaum at the Union of Concerned Scientists has told me that this has become the new NRC standard. He was approached by a whistleblower on Bellefonte during the COL pre-COLA phase of Bellefonte who had whistleblowing allegations. And he went to the NRC on that whistleblower's behalf and was rejected for the reason that there was no applicant until the day you applied.

And I think that's a dangerous precedent. And frankly, what --

MR. T. SMITH: Judge Spritzer, I think we'd like to object to Mr. Gundersen's hearsay about what other people told him about some other application that's not available in the record. It's not admitted into evidence.

1 CHAIRMAN SPRITZER: All right, well, yes, I don't think we need to get into other --2 MR. GUNDERSEN: It was on the record. 3 Ιt 4 is in my testimony. 5 CHAIRMAN SPRITZER: Let me ask you this Would it make a difference 6 question, Mr. Gundersen. 7 in your testimony if you knew -- let me ask you to 8 assume it was the case that the definition of 9 "applicant" in Section 50.2 that you referred to was 10 new and only put into the regulations in August 2007. Assume that to be true. Would that make a difference 11 12 to your testimony here today? MR. GUNDERSEN: I don't believe it does 13 14 because again the entire regulatory framework is 15 preconditioned on protections and punishments for applicants. And to wait until a COLA is received to 16 17 me seems like that whole regulatory fabric is torn asunder. 18 19 CHAIRMAN SPRITZER: Was Black & Veatch relying on the Fermi 2 quality assurance program at 20 the time of the core borings? 21 I discuss that in my 22 GUNDERSEN: Black & Veatch had uncontested facts and 23 testimony. 24 they gave a list of approved vendors. Fermi 2 was not on that Black & Veatch response of approved vendors. 25

1 But yet Black & Veatch relied on Fermi 2 for some of the core boring work. And I don't know how you can do 2 3 You're either on the approved list or you can't be relied upon. 4 5 So I base my opinion on the uncontested facts that were in the -- I believe in the RAI where 6 a vendor list, approved vendor list was given and one 7 8 of those was not Fermi 2. 9 JUDGE BARATTA: Was it the core boring, or 10 was it the meteorological data they got from Fermi 2? MR. GUNDERSEN: It was core boring. Oh, 11 there was -- they did use the Fermi 2 met tower for 12 the meteorological data. And -- but as I said I'm 13 14 not, you know, that's a long-established program 15 that's essentially continuous for 30 years. data from that program I didn't look at because I just 16 17 -- I felt that the core borings were more important. CHAIRMAN SPRITZER: Let's go to the top of 18 19 DTE 000048 which is up on the screen. Is there a letterhead up here? Yes. It looks to me like this 20 letter is written on -- again, that's Exhibit 48 -- on 21 22 Fermi 2 letterhead. Does it look that way to you, Mr. Gundersen? 23 MR. GUNDERSEN: Yes, I saw that too. 24 wasn't a very professional letterhead. It looks like 25

1 that got typed in. But I would agree they give a 2 return address of Fermi 2. 3 CHAIRMAN SPRITZER: Is it your 4 understanding that at the time this letter was 5 written, May 31, 2007, the Fermi 2 quality assurance 6 program was being applied to pre-application 7 activities for Fermi 3? 8 MR. GUNDERSEN: I looked at this letter, 9 that was just the return address. And it was signed 10 by an executive at DTE, not someone at Fermi 2. So I guess Fermi 2 had an NRC-approved QA 11 program but that doesn't mean that it's -- that that 12 material can be accepted on Fermi 3 unless it's on the 13 14 approved vendors list for the work on Fermi 3. 15 CHAIRMAN SPRITZER: All right. Apart from 16 the objection about Fermi 2 not being on the approved 17 vendors list, is there any reason why DTE couldn't use a Fermi 2 QA program that met Appendix B requirements 18 19 to supervise work -- pre-application work, safetyrelated pre-application work for Fermi 3? 20 MR. GUNDERSEN: I think there were two 21 different entities, the Fermi 2 and the separate --22 the Fermi 3 licensing project was a separate entity 23 24 that needed its own QA program. So, yes, I don't see how -- first of all 25

1	I don't believe that occurred. I don't think DTE used
2	any QA program. They relied on B&V. And then over
3	time they wrote a QAPD that was designed to handle
4	COLA transmittal information initially and then it
5	over time grew to be more comprehensive.
6	But it should have been the Fermi 3 QAPD
7	that should have driven the site characterization work
8	on the site borings. And that of course didn't happen
9	because all those site borings were done before the
LO	QAPD was ever developed.
L1	CHAIRMAN SPRITZER: Do you agree that the
L2	Black & Veatch QA program complies with 10 C.F.R. Part
L3	50 Appendix B and NQA-1?
L4	MR. GUNDERSEN: Yes, I think that's
L5	probably true.
L6	CHAIRMAN SPRITZER: So you're not claiming
L7	that Black & Veatch's QA program is deficient under
L8	NRC regulations.
L9	MR. GUNDERSEN: Correct.
20	CHAIRMAN SPRITZER: What sections of the
21	Fermi 3 application contain safety-related material
22	that is based on site investigation activities?
23	MR. GUNDERSEN: It was announced earlier
24	today. It was all of Chapter 2 and I believe portions
25	of 3 and 6.

My biggest concern is the geotechnical work. That seems to be where I spent more of my time.

CHAIRMAN SPRITZER: Now, do you claim that specific date collected during the site investigation is of poor quality and cannot be used in the COL application?

MR. GUNDERSEN: I guess I would rely on the NRC emails that occurred before the NOV, and that the entire program was jeopardized because -- the entire program was jeopardized because DTE didn't have an Appendix B program in place. So I would agree with what the NRC determined in June of 2009 in that series of emails that I quoted.

CHAIRMAN SPRITZER: Well, someone such as myself who's a lawyer and not an engineer and is quite new to this, I guess one of the issues that I'm having a problem with is if Black & Veatch has a QA program that meets NRC requirements, they follow that program, but let's assume you're correct that the applicant, DTE, was supposed to have more actively supervised the work B&V was doing, looking over their shoulder more frequently. Why can't the NRC staff go back and confirm to its own satisfaction that B&V did in fact follow its own valid QA program, its own program that meets Appendix B requirements? Why can't the staff do

1 that and say in the end this violation, if there was one, didn't make any difference? 2 3 MR. GUNDERSEN: You know, again, I think it gets back to that issue of the fabric. 4 The 5 integrity of that work is -- B&V wasn't building this 6 plant for B&V. They were building it for Detroit 7 Edison. 8 And as part of that the regulatory web has Part 9 protections for whistleblowers in 21 10 materially false statements. And none of that was B&V's responsibility. All of that was DTE's 11 responsibility. So they had to exert oversight over 12 B&V or else the integrity of all that work product can 13 14 be questioned. 15 Ιf employees were afraid to bring 16 concern forward because they were not protected under 17 employee protection because they weren't an applicant. The program is useless unless it has the web. 18 19 not just Appendix B. It's the web of five or six things that the applicant must have in place as this 20 data is being developed. 21 22 CHAIRMAN SPRITZER: I'm not really familiar with the whistleblower protections you're 23 24 referring to. Is it the case that once you become an

applicant you have to have certain whistleblower

1	protections	in	place?

MR. GUNDERSEN: Yes. There's four. I bring them up in my -- I'm sorry, I have too many stickies.

CHAIRMAN SPRITZER: Take your time.

MR. GUNDERSEN: Okay, yes, Part 52 has three examples of where you must have programs in place as an applicant that affect the very integrity of the data collection as well as the FSAR. 52.4 is about deliberate misconduct and an applicant is clearly referenced in there. 52.5 is on employee protection. And again, as an applicant you must have employee protection in place. 52.6 was on completeness and accuracy which was a concern that DTE had as they were developing this document. And then of course Part 21 also requires that you be an applicant to have a Part 21 process.

So it's not just QA. So the fifth wheel here is the QA. But it's that entire web of protections that are in place and legal recourse by the NRC that's in place. And if you're not an applicant and the NRC's position stands then the entire integrity of all the data that was collected has got to be suspect.

CHAIRMAN SPRITZER: So if we have, and I'm

1	not remotely suggesting anything like this happened,
2	but if it were the case that someone working at Black
3	& Veatch or one of its subcontractors working on
4	safety-related work said something is really not being
5	done correctly here, if DTE is an applicant there will
6	be a whistleblower program that individual could go to
7	and say
8	MR. GUNDERSEN: Yes, that's correct.
9	CHAIRMAN SPRITZER: there's a problem.
10	But if they're not an applicant there would be no such
11	program.
12	MR. GUNDERSEN: That's correct.
13	CHAIRMAN SPRITZER: And without such a
14	program it's kind of hard to sit back now and say
15	well, we do or don't know whether that would have made
16	any difference.
17	MR. GUNDERSEN: Yes, that's correct.
18	JUDGE BARATTA: Let's say for argument's
19	sake that they were just evaluating the feasibility of
20	building a plant there. That is to say they would do
21	some test borings to see what's there. Would you
22	consider them to be an applicant would you consider
23	that they would have to have been considered an
24	applicant under Appendix B at that phase? In other

words when do they become -- when does the work have

1 to be covered by an Appendix B program? MR. GUNDERSEN: Well, in this case a site 2 already chosen. And I've been involved on 3 projects where many sites were in play and you pop 4 5 down a couple of borings on each site and not need 6 quality assurance. 7 When you narrow it down to the likely 8 candidate at that point a QA program comes into play 9 because at that point the integrity of the data drives 10 the remainder of the process. JUDGE BARATTA: And in your opinion they 11 were beyond that point in 2007. 12 They were beyond that 13 MR. GUNDERSEN: 14 point not because they hadn't chosen an NSSS design, 15 that's irrelevant. But they had already chosen the So the site boring work definitely would fall 16 17 under a QA program. JUDGE CHARBENEAU: Let me try something on 18 19 the other side of the fabric. Could the NRC have written a Notice of Violation to DTE back in April 20 2007 when the DTE nuclear development program was 21 established? 22 MR. GUNDERSEN: I think the NRC believed 23 24 that they had an applicant at that time. Certainly in

May of 2007 they believed they had an applicant at

1 that time because DTE answered questions on behalf of the applicant. 2 3 So between -- there's not much to write 4 about, to write an NOV on from the time February 15 5 roughly when they announced that they were going to build some sort of plant at Fermi, and the May letter 6 7 that came across announcing that they were 8 applicant. Not much went on. 9 But, so I guess -- so I believe the NRC 10 believed there was an applicant at the time they applied because that's what 50.2 says. An applicant 11 is someone who is applying. And the announcement that 12 they were applying came in February of `07. 13 I'm having a very hard 14 JUDGE CHARBENEAU: 15 time trying to understand the basis for a Notice of 16 Violation that's received before an application is I don't understand how there's any 17 received. enforcement capability. Or authority. 18 19 MR. GUNDERSEN: There clearly is enforcement capability on, for instance, whistleblower 20 If you're working for an applicant under an 21 whistleblower 22 applicant's program and you have concerns relating to the data that's collected you are 23 24 protected. So, I think the NRC -- and separately not 25

just whistleblowing but on the deliberate misconduct 1 and things like that. 2 3 JUDGE CHARBENEAU: But if I'm working for 4 Black & Veatch at that time period I have all those protections because I'm working under their Appendix 5 quality 6 assurance program which has those 7 protections. MR. GUNDERSEN: Not by the NRC's position 8 9 which says if you're not an applicant you don't have 10 those protections. And that's what happened at the plant I'm not allowed to discuss. 11 CHAIRMAN SPRITZER: Do you agree that DTE 12 had in place -- well, let me stop you. 13 We've been 14 going at you for about an hour and 15 minutes so I 15 think you probably need a little rest. Why don't we come back in 15 minutes. We'll give people 15 minutes 16 17 this time. So we'll start again at about 3 o'clock. (Whereupon, the foregoing matter went off 18 19 the record at 2:41 p.m. and went back on the record at 2:59 p.m.) 20 CHAIRMAN SPRITZER: We're ready to go back 21 on the record. Mr. Gundersen, you're still under 22 Do you agree that DTE had in place an Appendix 23 24 B NQA-1 quality assurance program prior to accepting

any COL application work product from Black & Veatch?

1 MR. GUNDERSEN: The scope of the program was limited to accepting COL material. But they did 2 in place to accept COL-related 3 program 4 material. 5 CHAIRMAN SPRITZER: What does that mean precisely, accept? I mean, they get a document from 6 7 Black & Veatch that says we've done the following 8 tests and here's the data? What do they do with it at 9 that point? 10 MR. GUNDERSEN: Well, in my experience, and this was a point of contention. I was involved 11 with the ASLB in January of this year on San Onofre 12 where the FSAR does not contain all of the design 13 14 bases of the plant. It's more of a top document. 15 And supporting information for that FSAR, 16 Friends of the Earth who I was representing believed 17 was part of that process. So the top document, the COL in this case, is much smaller, much more limited 18 19 than all of the raw data that's compiled before it gets to the COL. 20 So, they didn't have a program in place to 21 determine the adequacy of the raw data, but they did 22 have a program in place to make sure that the written 23 24 data they got from B&V to support the COL was

transmitted and handled in a controlled fashion.

CHAIRMAN SPRITZER: Okay. But the actual development of the data, the raw data, that would in your opinion that was not done under an Appendix B program at least prior to submission of the application?

MR. GUNDERSEN: Yes, it's a little more than my opinion though. 000106 which is that document I referred to before which was the decision to have a QA program in place just for the COLA transmittals clearly identifies that the only reason they had that program in place was to avoid issues on oath and affirmation.

And their concern is expanding it, this is a DTE document, DTE's concern in expanding even to that level of quality assurance was that the schedule to complete this work is aggressive. So, they incorporated a QA program on the transmittals because they were afraid of affirmation -- under oath and affirmation issues. But the remainder of the data was not addressed until later.

CHAIRMAN SPRITZER: Do you have any basis to conclude that DTE did not conduct its acceptance reviews in accordance with standard work instructions including SWI-03-001-001-0529 entitled "COLA Section and Chapter Review and Acceptance Process?"

1	MR. GUNDERSEN: I think the only piece of
2	this process that was controlled was the COLA
3	acceptance review process.
4	CHAIRMAN SPRITZER: Okay. Didn't DTE
5	conduct audits and surveillances of the B&V QA program
6	after February of 2008?
7	MR. GUNDERSEN: I'm sorry, I cannot
8	remember when the first audit of the overall B&V
9	program was completed.
10	CHAIRMAN SPRITZER: What specific data
11	accepted by DTE during this period do you claim is of
12	poor quality and cannot be used in the COL
13	application?
14	MR. GUNDERSEN: Well, my biggest concern
15	is the structural logs of data that was collected
16	onsite. Specifically, when you do a boring the
17	qualifications of the people doing the boring are
18	obviously important. The raw core itself, the
19	integrity of that core is important. Where that core
20	is stored and how it's transmitted to the storage
21	location is important. And how it's accessed and
22	analyzed after the fact and when it's pulled out of
23	storage is also important.
24	So, my biggest concern on the work done in
25	`07 and `08 is the geotech work. Because it spins

1 over into these structural problems that are still part of this docket. 2 3 These are incredibly heavy buildings and 4 making sure the integrity of that, the foundation 5 document, literally the foundation document to me is the most important piece. 6 7 And I don't see any data that shows that DTE had exercised oversight of that process in `07 and 8 into `08. 9 10 JUDGE CHARBENEAU: Does that mean that you question the Black & Veatch work and quality assurance 11 program? Since they were the ones that were doing the 12 work at that time. 13 14 MR. GUNDERSEN: If a B&V employee had 15 concerns about that program he was not protected 16 because there no applicant, there was 17 whistleblower program. So, the integrity of the Black & Veatch information is -- has to be questioned based 18 19 on the NRC's position that you're not an applicant until the day you apply. 20 JUDGE CHARBENEAU: If I'm a Black & Veatch 21 I'm working under an Appendix B quality 22 employee, assurance program, I don't have protections? As a 23 24 Black & Veatch employee. MR. GUNDERSEN: I addressed that in my 25

1 testimony that the NRC's position is you don't have protection unless the application has been submitted. 2 JUDGE CHARBENEAU: 3 No, if I'm a -- I'm not 4 a Detroit Edison employee, I'm a B&V employee doing 5 work out in the field, doing the geotechnical work. I'm not protected as I'm doing that work under their 6 Appendix B program? 7 8 MR. GUNDERSEN: 52.5 says that you must be 9 an applicant and the applicant must have appropriate 10 protections in place. Black & Veatch was not the applicant. So without an applicant I don't believe 11 the Black & Veatch employees were protected using the 12 NRC's present position on quality assurance which got 13 14 us here today. 15 CHAIRMAN SPRITZER: Have you read Chapter 16 17 of the applicant's Fermi 3 final safety analysis 17 report including the Fermi 3 quality assurance program description? 18 19 MR. GUNDERSEN: Yes, I think I actually had a head-to-head comparison with Chapter 17 COLA 20 versus the NEI quidelines. Yes, I have. 21 Have you read the NRC 22 CHAIRMAN SPRITZER: staff's safety evaluation of Chapter 17? I take it 23 24 that's Chapter 17 of the FSAR, the final safety 25 analysis report.

1	MR. GUNDERSEN: No, I have not.
2	CHAIRMAN SPRITZER: Do you agree that the
3	Fermi 3 quality assurance program description
4	satisfies Appendix B as well as NQA-1? I take it this
5	was what was submitted in September 2008.
6	MR. GUNDERSEN: Do I agree that the QAPD
7	satisfies NQA-1 and Appendix B? I believe it was
8	implemented in pieces. You know, the first piece was
9	on the transfer. At this point it is more
10	comprehensive. So, yes, as it was implemented in
11	pieces I do believe that the pieces that it was
12	implemented on did meet Appendix B and NQA-1.
13	CHAIRMAN SPRITZER: Okay. Have you
14	identified any specific concerns with DTE's
15	implementing procedures? I take it that means
16	implementing procedures for the Fermi 3 QAPD.
17	MR. GUNDERSEN: I don't believe those were
18	in the documents that DTE sent us. I don't remember
19	reading a lot of B&V implementing procedures.
20	My concern is on the quality of the
21	geotechnical data.
22	CHAIRMAN SPRITZER: All right. Has DTE
23	performed audits and surveillances since submitting
24	the COL application?
25	MR. GUNDERSEN: Yes, it has.

1	CHAIRMAN SPRITZER: Does DTE have a
2	corrective action program?
3	MR. GUNDERSEN: Now it does, yes.
4	CHAIRMAN SPRITZER: Do you have any
5	concerns with the manner in which DTE has implemented
6	the Fermi 3 quality assurance program description
7	since becoming an applicant?
8	MR. GUNDERSEN: My concern is that the
9	geotechnical foundations that were used in `07 and `08
10	are that raw data is now driving the seismic
11	structural analysis which is occurring now on the
12	ESBWR foundation. And I don't know how you can have
13	any faith in the integrity of that raw data given that
14	DTE had a self-executing QA program back in `07 and
15	`08.
16	CHAIRMAN SPRITZER: Have you been able to
17	identify any pattern or trend of corrective actions to
18	suggest that the Fermi 3 corrective action program was
19	not functioning effectively?
20	MR. GUNDERSEN: I address that in pages 3,
21	4 and 5 of the proprietary testimony. I did have
22	concerns but obviously we can't talk about them today.
23	CHAIRMAN SPRITZER: All right.
24	MR. GUNDERSEN: They're on pages it's
25	question 2 which runs from page 3 to page question
J	I control of the cont

1	2 which runs from page 3 to page 5 of the proprietary
2	testimony does address some specific concerns.
3	CHAIRMAN SPRITZER: Okay. Very good. We
4	can read that.
5	The Notice of Violation issued by the NRC,
6	did it identify any problem with the safety-related
7	information in the Fermi 3 COL application?
8	MR. GUNDERSEN: The Notice of Violation
9	was vague but the emails and internal memorandum
10	leading up to it were quite specific and did identify
11	problems with the overall quality of the information
12	developed until that date.
13	CHAIRMAN SPRITZER: Now, Appendix B
14	contains a criterion 18, roman numeral XVIII, entitled
15	Audits. Are you familiar with that?
16	MR. GUNDERSEN: Yes.
17	CHAIRMAN SPRITZER: Does that criterion
18	contain any specific direction on the frequency of
19	audits?
20	MR. GUNDERSEN: No, it does not.
21	CHAIRMAN SPRITZER: Did DTE perform an
22	annual audit of Black & Veatch following issuance of
23	the proposed Notice of Violation?
24	MR. GUNDERSEN: DTE did audit Black &
25	Veatch after the NOV, yes they did.

1 CHAIRMAN SPRITZER: All right. Has DTE performed annual audits subsequent to the Notice of 2 Violation? 3 4 MR. GUNDERSEN: Yes, they have. 5 CHAIRMAN SPRITZER: Criterion 16, again 6 that's roman numeral XVI in Appendix B entitled 7 Corrective Action. Are you familiar with that criterion? 8 I'm sure I've read it. 9 MR. GUNDERSEN: 10 was trying to think when you said 16 which one was it. I'm definitely familiar with criteria 16 Corrective 11 Action. 12 CHAIRMAN SPRITZER: Does that criterion 13 require corrective action trending? 14 MR. LODGE: Your Honor, I'd like to object 15 16 on grounds that this document says whatever it says 17 and I'm not sure that it is relevant to pick the witness's brain as to whether or not he can recall. 18 19 CHAIRMAN SPRITZER: Right, I understand 20 your objection. I'd like an answer to the question. MR. GUNDERSEN: Off the top of my head I 21 cannot remember if trending and tracking is part of 22 it, or it's -- Appendix B is a pretty broad document 23 24 so I would guess that it does not get into the weeds on the tracking frequency and trending data. But I'm 25

1 sorry, I cannot remember the exact words of Section 2 16. 3 CHAIRMAN SPRITZER: Okay. Did DTE perform 4 corrective action trending following issuance of the 5 proposed Notice of Violation? MR. GUNDERSEN: Yes, they do. 6 They do 7 have a corrective action trending program now. 8 CHAIRMAN SPRITZER: And has DTE performed 9 corrective action trending subsequent to the notice --10 well, I think you just answered that question. DTE states that while it was not legally 11 required to have an Appendix B program before it 12 became an applicant it nevertheless had in place an 13 14 Appendix B program, the nuclear development quality 15 assurance program description starting in February You argue that DTE was subject to Appendix B 16 17 requirements before it became an applicant. difference does it make whether DTE was legally 18 19 required to have an Appendix B program so long as DTE voluntarily implemented such a program prior 20 becoming an applicant? 21 MR. GUNDERSEN: I don't think DTE had the 22 right to voluntarily implement the program first of 23 24 all. It was a requirement that had to be met. Secondly, the only thing in their QAPD 25

that was implemented was the transfer of data on the

COLA which is that 000106 document. And the rest of

that material revolved over time.

I think the point of the NRC emails shows

that they had no control over the design process

that they had no control over the design process leading up to that point because they didn't have their own QA program in force for the whole program. It was a very narrow focus QA program designed to save schedule and designed to be sufficient to support the oath and affirmation that is required to be part of the DTE COLA submittal is their exact words.

The reason they put that part of the program in place is that they wanted a program that was, quote, "sufficient to support the oath and affirmation that is required to be part of the DTE COLA submittal."

Other than that there was no program in place to assess the broader data that was being developed and analyzed until after the NOV was in place. And that was identified in all those NRC emails back and forth in June where the NRC was pretty clear that they had no program in place to assure the design of the project up until that time.

CHAIRMAN SPRITZER: You've stated a general concern regarding geotechnical raw data that

you say is now driving seismic and structural analysis 1 2 regarding the ESBWR, the proposed reactor foundations. 3 Can you be more specific as to the analysis you are 4 referring to? 5 GUNDERSEN: There currently is a significant problem as the project is being designed 6 7 with the weight of the structure on the 8 geography that's below the surface which is one of the 9 reasons why the docket is delayed as much as it is. 10 That analysis draws upon the foundation documents, literal foundation documents, from `07 and 11 So, and I believe the integrity of that `07-`08 12 `08. data is questionable because of -- actually because of 13 14 the NRC's words back in `09 when they were evaluating 15 the QA program. 16 And if the data they collected 17 questionable in `07 and `08 then the analysis they're doing now that relies on that data is also -- has to 18 19 be questionable. 20 CHAIRMAN SPRITZER: Can you please give an example of how you think the lack of whistleblower 21 protections pre-September 2008 could be significant? 22 I take it this is referring to the Fermi 3 site, not 23 24 other plants.

MR. GUNDERSEN: Well, let's say a core

boring is stored improperly and labeled improperly. 1 Or in the wrong location, in the wrong bin with the 2 wrong number on it or something like that. And an 3 4 employee becomes aware of that improper placement. 5 He's got no outlet -- he or she has no outlet for that concern unless DTE is an applicant at 6 7 which point he or she has some protections. So the --8 I'm choking on the word. The security of supply --9 The sanctity of supply -- the that's not the term. 10 chain of command, that's the word. I'm sorry. chain of --11 JUDGE BARATTA: Custody? 12 MR. GUNDERSEN: 13 Yes. 14 JUDGE BARATTA: Chain of custody? 15 MR. GUNDERSEN: Yes, chain of custody. 16 I'm sorry. The chain of custody must be assured from 17 the time the sample's drawn out to the time it's put into a bin and then the time it's withdrawn from that 18 19 bin and analyzed. If an individual is aware that there's a 20 problem they have no vehicle to bring that forward 21 unless there is an applicant and unless whistleblower 22 23 protections apply. 24 JUDGE BARATTA: Wouldn't that -- I mean 25 the example is clearly one where you gave

1	whistleblower concerns could come in. But wasn't
2	wouldn't that aspect of the example actually be done
3	by Black & Veatch which did have a QA program? And
4	would they have likely had a whistleblower program as
5	a result too?
6	MR. GUNDERSEN: I think that's the
7	question that Judge Charbeneau asked too. Does the
8	B&V program have whistleblower protection built into
9	it. And as I read whistleblower protection is
10	52.5. As I read 52.5 there has to be an applicant to
11	have the protections. And B&V was a contractor. And
12	without an applicant that that contract is associated
13	to the answer is no.
14	CHAIRMAN SPRITZER: I'm going to ask you
15	some specific questions now about the quality
16	assurance program description for Fermi 3.
17	Do you agree that the nuclear development
18	QA manager was a position that existed only while the
19	nuclear development quality assurance program
20	description was in effect?
21	MR. GUNDERSEN: I think I address that on
22	page 17 of the non-proprietary testimony. And the
23	problem is the COLA says there's somebody called the
24	new plant oversight manager and lists responsibilities

for that new plant oversight manager. But the RAI

reply says there's a nuclear development QA manager that has the same responsibilities.

And then as I said earlier the quality assurance begins with titles and organizational structure. And here's two documents with two different names for the same person, or for the same responsibilities. So I don't really know if there was a nuclear development QA manager or if that person was the new plant oversight manager. There's -- the data is conflicted. The COLA disagrees with the RAI reply.

CHAIRMAN SPRITZER: If I understand your answer correctly you do agree that the nuclear development QA manager and the new plant oversight manager, they appear to have the same responsibilities, those two titles.

MR. GUNDERSEN: It looks like -- to me it looks like DTE didn't have a title for the person that assumed those responsibilities. One document, the COLA, calls that person a new plant oversight manager. And the RAI reply gives the same responsibilities to someone entitled the nuclear development QA manager.

So I don't know if there was a nuclear development QA manager or if there was a new plant oversight manager, and at which point the transition in title occurred. Clearly the RAI reply disagrees

with the COLA. And to me that's unacceptable. That's indication is all about titles - -QΑ and organizational structure. And for that kind of a problem to manifest itself as late as the RAI replies tells me that even that late in `09 there were serious organizational problems.

CHAIRMAN SPRITZER: Wouldn't it be reasonable to interpret that -- the different titles, nuclear development QA manager and new plant oversight manager to simply mean that at one point there was a title that had those responsibilities. Then the title changed but the responsibilities remained the same.

MR. GUNDERSEN: Well, the term "QA manager" sneaks into the lexicon after the NOV whereas the new plant oversight manager was part of the docket when it was docketed in `08. It appears that as time evolved the title was changed to a quality assurance manager.

So the role of quality assurance after the docket was -- after the COL was docketed begins to have a prominent role. But the role of quality assurance before it was docketed and even while it was early in the docketing stage is minimized as the COLA's own words indicate. A new plant oversight manager's reporting responsibilities was lower in the

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1	organization than a nuclear development QA manager.
2	CHAIRMAN SPRITZER: What about the title
3	director of quality management in the Fermi 3 quality
4	assurance program description revision 1? Have you
5	seen that title and description?
6	MR. GUNDERSEN: I know I have and I'm
7	sorry, I I was actually, that was an example, I was
8	doing a head-to-head comparison with NEI's criteria
9	and DTE's criteria. And I found more than just
10	nuances in the words of their descriptions. It looked
11	like to me that as the COL was being written QA was
12	pushed down in the organization further than I would
13	have anticipated that to be.
14	CHAIRMAN SPRITZER: You've reviewed DTE's
15	direct and rebuttal testimony in this case?
16	MR. GUNDERSEN: Yes, I did.
17	CHAIRMAN SPRITZER: On contention 15?
18	MR. GUNDERSEN: Yes, I did.
19	CHAIRMAN SPRITZER: Do you still maintain
20	that there was a 3-month long gap from April 2009
21	through June 2009 in which there was no person in
22	charge of QA?
23	MR. GUNDERSEN: Yes. The data that I base
24	that on was accurate. Since that time DTE has
25	presented additional information. But I think that

1	shows the confusion in the docket early on and really
2	doesn't exonerate DTE for correcting the record at
3	this late date. There was confusion and the RAI
4	response where that came from indicated a poorly put
5	together document.
6	CHAIRMAN SPRITZER: After reviewing DTE's
7	direct and rebuttal testimony do you still maintain
8	that there was insufficient independence between
9	quality assurance and the line organization?
10	MR. GUNDERSEN: There was no QA person for
11	a long period of time. They even acknowledge that.
12	They also acknowledge that they wish they had
13	implemented QA sooner. So yes, I definitely believe
14	that there was no there wasn't enough structural
15	independence between QA and the line organization.
16	CHAIRMAN SPRITZER: Is DTE's approach to
17	separation and independence consistent with the NEI
18	template?
19	MR. GUNDERSEN: I'm assuming you mean
20	within DTE. I mean we went over the issue of I
21	don't believe its approach in having Black & Veatch
22	essentially run the entire program was correct.
23	As the DTE program developed which at this
24	point is `09 it was it became consistent with NQA-1
25	and other documents.

1 CHAIRMAN SPRITZER: Can we bring up DTE Perhaps DTE counsel can let me know if 2 Exhibit 94? 3 we're at the right -- we are? Okay. 4 Does this help to improve your 5 understanding of the transition of titles and responsibility in the various quality assurance 6 7 program descriptions? 8 MR. GUNDERSEN: I think I answered that, that the --9 10 CHAIRMAN SPRITZER: Well, I'm talking about this specific document. 11 MR. GUNDERSEN: Yes, the middle line there 12 says that the new plant oversight manager title was 13 14 changed in October of `09 to a different title. 15 CHAIRMAN SPRITZER: Okay. And can we 16 bring up DTE 15? 17 JUDGE BARATTA: Before you do that, this chart, what -- does not address anything prior to 18 19 February 2008 from what you can see, is that --20 MR. GUNDERSEN: Yes, that's correct. that table I put together in my testimony comparing 21 the new plant oversight manager with the director of 22 quality management was based on the data available at 23 24 the time. And it appeared to me that DTE was trying to paper over the fact that they had no quality 25

1	assurance manager until October of 2009 which this
2	document supports.
3	CHAIRMAN SPRITZER: Let's bring up DTE 15.
4	All right. I'm going to need a little help in
5	locating.
6	MR. T. SMITH: It was just that same
7	figure.
8	CHAIRMAN SPRITZER: Oh, it's the same
9	all right. Do you understand that DTE's Request for
10	Additional Information response specifically addressed
11	the organization in place during site investigation
12	activities, that is, before COL submittal? And we can
13	bring that up for you if you want to look at it.
14	MR. GUNDERSEN: The RAI specifically
15	addressed
16	CHAIRMAN SPRITZER: This is DTE Exhibit
17	54. Is this non-proprietary?
18	MR. T. SMITH: It is non-proprietary.
19	CHAIRMAN SPRITZER: And it's DTE 54. And
20	we're going to go to attachment 1 at page 3.
21	MR. T. SMITH: It's page 5.
22	CHAIRMAN SPRITZER: Oh, is it page 5?
23	Sorry.
24	MR. T. SMITH: Well, it's page 5 of the
25	PDF.

1	CHAIRMAN SPRITZER: Okay.
2	MR. T. SMITH: The bottom of the page.
3	CHAIRMAN SPRITZER: Down to the bottom,
4	all right.
5	MR. T. SMITH: And I guess the point here
6	was to look at the response to the italicized portion
7	is the question that DTE was responding to and discuss
8	the positions and persons who were in place during the
9	pre-application activities and the ND QAPD.
10	CHAIRMAN SPRITZER: Okay. Do we need to
11	go onto the next page?
12	MR. T. SMITH: On the next page you'll see
13	the response that Mr. Gundersen has been referring to
14	where he says there was some confusion about the
15	titles. And the RAI differed from what was in the
16	COLA. And the point is that the RAI addressed the
17	period before the COL was submitted.
18	CHAIRMAN SPRITZER: All right. So let me
19	repeat the question, Mr. Gundersen. Do you understand
20	that the RAI response specifically addressed the
21	organization in place during the site investigation
22	activities, that is, before the COL submittal?
23	MR. GUNDERSEN: Could you back up to the
24	no, not on this document. The three-bar slide that
25	you had put up. That's it. If that's the case this
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1	slide is wrong because it would have had to be the
2	NDQA manager role change. The COL was submitted in
3	September of `09 of `08 rather and this shows the
4	transition occurring in October. So I understood what
5	the words said that we read, but this slide disagrees
6	with those words.
7	CHAIRMAN SPRITZER: All right. I think
8	you've answered the question.
9	Do you agree that the environmental report
10	is not a safety-related document?
11	MR. GUNDERSEN: Yes, I do.
12	CHAIRMAN SPRITZER: Several of the
13	corrective action request examples that you highlight
14	discuss issues that were identified prior to any
15	information being sent to the NRC or included in the
16	COL application. Can you explain why this is not a
17	positive outcome?
18	MR. GUNDERSEN: Is that in the proprietary
19	section?
20	MR. T. SMITH: I'm sorry, could he please
21	repeat the question?
22	CHAIRMAN SPRITZER: Yes. Several of the
23	corrective action request examples that you highlight
24	discuss issues that were identified prior to any
25	information being sent to the NRC or included in the

1 COL application. Can you explain why this is not a positive outcome? 2 That's the question. I think he's asking 3 4 he responds is he going to be getting into 5 proprietary information. I think that responding to 6 MR. T. SMITH: 7 question doesn't require him to get into 8 proprietary information. 9 CHAIRMAN SPRITZER: All right. I believe 10 you can respond. If they have a problem they'll immediately let us know. 11 I would agree that at MR. GUNDERSEN: 12 least one, maybe two of those occurred before. 13 14 the trend continued after. So I think the trend is 15 disturbing and is a problem. If the trend had stopped it wouldn't have 16 17 been a problem. But the fact is that problems in it looks like September of `08 carried over into `09 as 18 19 well. The purpose of a QA 20 CHAIRMAN SPRITZER: program is to identify problems. 21 Is that a fair In safety-related information, that is. 22 statement? That's one of the purposes 23 MR. GUNDERSEN: 24 of a QA program, yes. I would like to say it's to prevent problems from occurring in the first place. 25

456 1 And then if a problem arises to identify it soon enough that trends like the ones I identified don't 2 3 develop. 4 JUDGE BARATTA: Could we go back to DTE 5 Exhibit 54, the one you had up a moment ago? 6 let's go to just page 7 of the document. And go down, 7 a little further down the page there where you get to 8 1, item 1 there. 9 I draw your attention to that paragraph 10 that begins with the number 1 and then all field and laboratory activities would be performed. It mentions 11 this fact that the Black & Veatch quality assurance 12 and part of the Black & Veatch would be performed --13 14 part of the quality assurance would be performed by someone from another division of Black & Veatch. 15 that it says would perform a series of pre-work 16 17 surveillance, audit activities and such. Now, that individual I believe is referred as the owner/engineer 18 19 elsewhere in the testimony and such. What's the problem with having somebody 20 like that as opposed to a DTE employee perform those 21 22 audits and such which are things that you mentioned earlier would indicate responsibility? 23

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owner's engineer was Black & Veatch and DTE also

Can I read that?

MR. GUNDERSEN:

24

1 contracted Black & Veatch to do the quality assurance. I have a small problem with the fact that there's a 2 3 conflict of interest that it's the same firm. 4 But the broader problem is that the owner didn't own the quality assurance program. 5 So, whether it's Black & Veatch inspecting Black & Veatch, or 6 7 whether it was Shaw inspecting Black & Veatch is a 8 secondary problem to the fact that the applicant 9 abrogated its responsibility to assume that top role 10 and provide adequate quality assurance direction to in the Black & Veatch quality assurance 11 this case function. 12 So even though that would 13 JUDGE BARATTA: 14 be a separate contract presumably and that individual 15 would be responsible solely to DTE for that function 16 you don't feel that's sufficient -- that DTE maintains 17 sufficient responsibility in that case? Is that what you're saying? 18 19 MR. GUNDERSEN: I don't think there's a sufficient arm's length relationship between a B&V 20 employee and the owner engineer's organization and B&V 21 22 and the QA organization. But essentially the money's going to go to the same corporation so there's a 23 24 conflict there. But what I've -- I really didn't get into 25

that because I didn't think that was the important 1 issue as I was writing it. 2 The key is that as the NRC noted in their 3 4 email exchanges back in June of 2009 there was no 5 responsibility by DTE for the design functions, for quality assurance oversight of the design functions 6 7 and they needed to do that. And I think that's supported by what the 8 9 ASLB said at Midland, that you can't have a self-10 executing QA program and that's really what it had become. 11 JUDGE BARATTA: Thank you. 12 CHAIRMAN SPRITZER: Bear with me a moment, 13 14 Mr. Gundersen. I'll be right back with you as soon as 15 I find something here. 16 Have you seen in the record that DTE hired 17 two QA professionals to oversee quality assurance for Did they eventually do that? Fermi 3? 18 19 MR. GUNDERSEN: Yes, they eventually hired QA professionals to do that, yes. 20 CHAIRMAN SPRITZER: I believe you stated 21 in your testimony, I haven't been able to find the 22 exact location, that DTE had no intention of hiring QA 23 24 professionals. MR. GUNDERSEN: Actually DTE said that. 25

1	I could find it in half a minute.
2	CHAIRMAN SPRITZER: All right. It's on
3	page 35 of 38, question 39. It's a DTE quote. It
4	says, I think at the time Bing put the QA plan
5	together we had not envisioned hiring a deco QA
6	professional. Conventionally the QA plan needs to be
7	owned by deco and the QA professional, i.e., a QA
8	manager role needs to have a reporting relationship at
9	a level that is independent of line functions to which
10	the program applies.
11	So this personnel performing QA oversight
12	function are not subject to line influence. And the
13	key was that they had not envisioned hiring someone to
14	fulfill that role. It was written in January of `08.
15	CHAIRMAN SPRITZER: Have you identified
16	any information developed during the site
17	investigation that is inaccurate?
18	MR. GUNDERSEN: I haven't reviewed
19	that's not part of the ADAMS database and it wasn't
20	part of what we were given by DTE. There are no
21	boring logs and calculations and things like that to
22	review. It was not part of the information I was
23	privy to to analyze.
24	CHAIRMAN SPRITZER: So I take it your
25	position is more that the information can't be trusted

1	because it wasn't developed under an appropriate QA
2	program.
3	MR. GUNDERSEN: Yes, that's correct. That
4	is my position.
5	CHAIRMAN SPRITZER: Have you identified
6	any specific instance of a material safety significant
7	error in a safety-related portion of the Fermi 3 COL
8	application?
9	MR. GUNDERSEN: No, the calculational
10	basis for the geotechnical foundation work that's
11	ongoing is a serious concern of mine. But again we
12	were not provided any of that analysis to dissect as
13	to its accuracy.
14	CHAIRMAN SPRITZER: Now, other than the
15	violation described in the NOV issued by the NRC staff
16	have you identified any other violation of NRC QA
17	requirements?
18	MR. GUNDERSEN: Yes, it's broader than the
19	NOV. It was the and frankly if it were just the
20	NOV I don't think this report would have the legs it
21	has.
22	It was the NOV was the culmination of
23	a series of NRC emails and internal memoranda that
24	questioned the entire integrity of the design process
25	up until June of 2009. I mean, QA professionals

within the NRC. It's not Arnie Gundersen speaking but QA professionals within the NRC felt that the entire process was jeopardized because DTE did not exercise a quality assurance role. And so it goes beyond the NOV and in fact is -- the NOV is the end of a long series of critical dialogue that's important to my reaching the conclusion I did.

CHAIRMAN SPRITZER: In the Board's order of February 28, 2013 in our question 8 we asked the interveners to explain what difference they maintain existed between the Black & Veatch quality assurance program and the applicant's Fermi 3 QA program.

The answer to that basically told us that our question was irrelevant. You're entitled to that position of course if you want to maintain it, but I'd still like an answer to the question. Can you tell me what difference there was, if any, between the Black & Veatch quality assurance program and the applicant's Fermi 3 QA program? If there is one.

MR. GUNDERSEN: I think the Midland ASLB decision speaks to that. The ASLB in Midland said you can't have a self-actuating QA program. And without a DTE program in place that's effectively what was happening, that the B&V program can't be a proxy for DTE assuming overall responsibility for the quality of

1	not just the COLA document, but the quality and
2	integrity of all the work that goes into it as well.
3	CHAIRMAN SPRITZER: I certainly understand
4	your position on that and you've stated it many times.
5	What I'm asking though is let me refer
6	specifically to the Fermi 3 QA program that was
7	submitted with the COLA in September 2008, the license
8	application in September of 2008.
9	In terms of just looking at those programs
10	side by side is there any significant difference
11	between them? I'm not asking whether one can be used
12	as a substitute for the other.
13	MR. GUNDERSEN: Oh, I'm sorry. You want
14	me to line up the QAPD for the COLA and compare that
15	to the quality assurance plan for Black & Veatch.
16	CHAIRMAN SPRITZER: Yes.
17	MR. GUNDERSEN: I would say the while
18	the words don't match, the intent of both documents
19	mirrors each other.
20	CHAIRMAN SPRITZER: All right.
21	MR. GUNDERSEN: Can I add to that?
22	CHAIRMAN SPRITZER: As long as it's
23	responsive to the question and not another question.
24	MR. GUNDERSEN: Yes. No, adding to the
25	response. I would add, though, that the staff in June
	•

1	of 2009 felt that the quality assurance program that
2	drove the 2007-2008 and early 2009 work was inadequate
3	to support the COLA. And that series of emails
4	involving some of the attorneys who are here today is
5	actually the foundation of the fact that unless you
6	assume ownership you don't really have quality.
7	JUDGE BARATTA: You're aware that once the
8	NRC staff modified the Notice of Violation I think
9	didn't DTE go out and do an audit of Black & Veatch?
10	MR. GUNDERSEN: Yes, they did.
11	JUDGE BARATTA: And they also did trending
12	I think?
13	MR. GUNDERSEN: I'm sorry?
14	JUDGE BARATTA: They did trending
15	analysis.
16	MR. GUNDERSEN: Yes, they did.
17	JUDGE BARATTA: Okay. Is it possible for
18	that to rehabilitate the data that was collected prior
19	to 2008?
20	MR. GUNDERSEN: I thought a lot about that
21	and I and I come back to that issue of the fabric
22	including QA but also the whistleblower protection,
23	the materially false statements, the oath and
24	affirmation and Part 21. If you're not the applicant
25	in one you're not the applicant on any of those. And

1 without that web, without that fabric behind it I 2 don't think that `07-`08 data can be reconstituted. 3 JUDGE BARATTA: What about in some of the there's 4 testimony Ι think reference to other 5 applicants making -- doing audits of Black & Veatch's 6 program. 7 MR. GUNDERSEN: I noticed that. And the 8 example was River Bend. It's interesting because 9 River Bend is portrayed as being in front of Black & 10 Veatch when in fact River Bend actually was docketed after this project. So instead of it being a plant 11 that was well down the runway and toward takeoff, in 12 fact its takeoff occurred after the Fermi 3 COLA was 13 14 provided to the NRC in September. 15 So that it's not like we had a program that was well established. In fact, the River Bend 16 program arrived on the NRC's desk later. 17 Then the other issue is that I don't see 18 19 anywhere in law where a license is -- because I'm licensed to this guy I can then use the same program 20 with another person. I don't see that within 10 21 C.F.R. that there's transferability of a contractor's 22 program from one to the other when the owner of the 23 24 program is not assuming responsibility.

SPRITZER:

CHAIRMAN

25

All right, Mr.

1	Gundersen. I'm sure it's going to break your heart
2	but I think we're done with questions for you for now.
3	MR. GUNDERSEN: Okay, thank you. Thank
4	you very much.
5	CHAIRMAN SPRITZER: And it's about 4
6	o'clock so we'll take another 15-minute break and
7	we'll come back this time I believe I'm correct
8	that the next witnesses up will be the applicant's
9	witnesses on contention 15.
10	MR. T. SMITH: Yes, Your Honor.
11	(Whereupon, the foregoing matter went off
12	the record at 3:55 p.m. and went back on the record at
13	4:13 p.m.)
14	CHAIRMAN SPRITZER: Let's go back on the
15	record. We seem to still be missing a couple of
16	people. Can we get started?
17	MR. T. SMITH: Yes, Your Honor. Our
18	witnesses are ready.
19	CHAIRMAN SPRITZER: Okay. Would you
20	please introduce your witnesses to us?
21	MR. T. SMITH: To the farthest from you we
22	have Peter Smith who is the director of nuclear
23	licensing and engineering for the Fermi 3 project. He
24	testified earlier on the fox snake contention.
25	Next to him we have Steve Thomas who's the

1	project manager for B&V. Next to him we have Mr. Stan
2	Stasek who's the director of quality management at
3	DTE. And then next to him we have Mr. Ron Sacco who
4	is the head of quality assurance for B&V.
5	CHAIRMAN SPRITZER: Very well. Good
6	afternoon, gentlemen. And you are all of you have
7	already been sworn in. You're of course still under
8	oath.
9	WHEREUPON,
10	PETER SMITH
11	STEVE THOMAS
12	STAN STASEK
13	RON SACCO
14	were called for examination by DTE, having been first
15	duly sworn, assumed the witness stand, were examined
16	and testified as follows:
17	JUDGE BARATTA: All right. I'd like to
18	begin by asking a few questions relative to your
19	initial direct testimony. I'm looking at page 2. Can
20	we get Andy, could you bring up the DTE's direct
21	testimony? I don't have the exhibit number. And go
22	to page 2. Should be page 2 I think. That's the
23	Arabic numeral 2. Go down towards the bottom of the
24	page there.
25	Referring to this statement where the

1 application review phase of the project DTE has 2 through systematic processes ensured the 3 suppliers, et cetera. Could you describe what those 4 systematic processes were prior to 2008? 5 previous to that it references the pre-application phase and COL application review phase. 6 7 MR. Ρ. SMITH: So, prior -- when we 8 embarked on this project we went and -- went out with 9 requests for proposals from engineering firms who were 10 doing similar activities for other applicants prospective applicants in that time frame, developing 11 And we specified in our requests for 12 COLA products. that they demonstrate that they have a 13 14 quality assurance program in place that meets the requirements of 10 C.F.R. 50 Appendix B. So that was 15 16 the first step. And then during our review of the bids all 17 of the prospective suppliers that were qualified and 18 19 reviewed their proposals we verified in the proposal review that they had provided evidence in 20 fact that they did have a functioning Appendix B QA 21 22 program. 23 JUDGE BARATTA: In the case of Black & 24 Veatch what was that verification that you used?

MR. P. SMITH:

25

So, there was a previous

1	NUPIC audit that had been performed.
2	JUDGE BARATTA: Could you explain what
3	NUPIC is?
4	MR. P. SMITH: Stan
5	MR. STASEK: Would you like me to do that?
6	MR. P. SMITH: Please.
7	MR. STASEK: Okay, NUPIC stands for the
8	Nuclear Procurement Issues Committee. It was a
9	committee that was formed quite a few years ago
10	because of the additional resources that were becoming
11	necessary to monitor and audit all of the vendors that
12	the operating plants had in place.
13	For instance, at Fermi there's several
14	dozen vendors that they maintain on their approved
15	suppliers list. And if they had to go and do the
16	required audits of those vendors it would be a very
17	large group of folks needed to do that.
18	So NUPIC was formed and their function was
19	to do resource-sharing between the utilities such that
20	all of us could take credit I'll say for the audits
21	that were done by the NUPIC format. Meaning it's a
22	combined team that goes from representatives from
23	different utilities to a vendor. They use standard
24	checklists from vendor to vendor so that there is

consistency between the audits that are done. And

1	then there's information-sharing between the
2	utilities. And that's really a standard for the
3	industry these days and has been for several years.
4	JUDGE BARATTA: Okay. You heard Mr.
5	Gundersen identify what he felt might be attributes
6	that would show that DTE retained responsibility for
7	the QA program, one of which was the audit function.
8	Do you feel that a NUPIC audit would satisfy that
9	function?
10	MR. STASEK: The NUPIC audits are done on
11	all of the vendors that are on approved supplier lists
12	throughout the industry and as such yes, I agree that
13	if there was a NUPIC audit that was done by another
14	plant. When I say another plant we all take turns
15	leading those audits. So for instance, I believe in
16	2007 the NUPIC audit was led by River Bend.
17	MR. P. SMITH: Entergy.
18	MR. STASEK: Entergy. And so that
19	information is available on their central database and
20	yes, we could take credit for that.
21	JUDGE BARATTA: Did DTE actually review
22	the NUPIC audit or the audit that Entergy did of Black
23	& Veatch? The audit report.
24	MR. P. SMITH: Yes.
25	JUDGE BARATTA: Were there any
I	I and the second

1 deficiencies that you recall? 2 MR. P. SMITH: None that I recall. In addition to the review 3 MR. STASEK: 4 that Peter did when I started on the project in March 5 2009 we subsequently did an audit of I wanted to do that. I was new to the 6 ourselves. 7 project and wanted to ensure that we had an up-to-date 8 approved suppliers list that we were looking at 9 putting in place. 10 And so in July of 2009 we performed an audit of Black & Veatch as well. And during that 11 audit we also reviewed the earlier NUPIC audit and did 12 not identify that there was any issues that were 13 14 identified during that previous audit as well. 15 JUDGE BARATTA: Could we go to question 16 number 21 which is on page 7? Okay. In question number 17 21 the response says there ΟA are requirements applied prior to submittal of a COL 18 19 application. Earlier I believe we had NQA-1 up and that clearly requires QA for siting and in particular 20 Section 2.20 references subsurface investigations. 21 How do you reconcile the statement that appears in 22 your answer 21 with the NQA-1 requirements? 23 24 MR. P. SMITH: So first of all, at the

time we started this project and started working

toward this project in late 2006 and were preparing 1 2 our requests for proposal the term "applicant" had yet 3 to be defined within the regulation. 4 JUDGE BARATTA: NQA-1 does not use the 5 term "applicant." MR. P. SMITH: I understand that. 6 7 also understood our obligation to provide quality 8 information in support of our application and that, 9 the way we went about doing that was we went about 10 finding a vendor who had in place a quality assurance program that met the requirements. And chose to use 11 that program for the conduct of all of the safety-12 site investigation work and other 13 14 development work. And that was our plan from the 15 beginning. In addition to that in the same time frame 16 17 the inspection quidance for the pre-application geotechnical inspection or audit also had a discussion 18 19 that there is requirement there no prospective applicant to have a QA program in place. 20 JUDGE BARATTA: That seems to conflict 21 with what NQA-1 clearly says. 22 SMITH: Wait, but we didn't 23 MR. Ρ. 24 conflict with NQA-1 because we applied a program that

to

the

requirements

the

NQA-1

met

25

subsurface

1	investigation and all of the other safety-related
2	aspects of the application.
3	JUDGE BARATTA: But NQA-1 doesn't NQA-1
4	still use language similar to Appendix B without the
5	term "applicant," namely that you have to retain
6	responsibility. It allows delegation of the authority
7	to conduct the program but you have to retain
8	responsibility for that QA program.
9	MR. P. SMITH: And we clearly were
10	responsible for the work product.
11	JUDGE BARATTA: Okay.
12	MR. P. SMITH: We imposed contractual
13	requirements on our vendors. We were actively
14	involved in the site activities. We did not receive
15	any work product from the vendor until we had our own
16	program in place.
17	JUDGE BARATTA: Let's go back to your
18	active involvement in the site investigations. Could
19	you describe exactly what was done?
20	MR. P. SMITH: So, the geotechnical
21	investigation plan, for example, was developed by
22	Black & Veatch. It was sent to DTE Energy for our
23	review and approval.
24	We facilitated all of the site work, all
25	of the coordination with the existing plant. We were
l	I and the second

1 in the field all the time that there were people working on our site throughout the entire geotechnical 2 3 investigation. So we had firsthand knowledge of what 4 work was being done. 5 JUDGE BARATTA: You may have -- but when you say firsthand knowledge it sounds -- what you 6 7 describe is more the type of thing involved scheduling and site access, and not verification that 8 9 procedures are being properly followed. MR. P. SMITH: So in addition to that I 10 had personnel from my extension, the owner's engineer 11 who were assisting me in providing oversight. 12 was aware that Black & Veatch was providing from their 13 14 quality assurance organization within Kansas City 15 oversight of the activities. 16 JUDGE BARATTA: You've heard a question 17 about the owner's engineer as whether or not there was sufficient separation from the two organizations. 18 19 do you reconcile the comments made by Mr. Gundersen that there was not? 20 So, there was probably more 21 MR. P. SMITH: So if you take a typical 22 separation than was needed. organization like we have at DTE Energy where we have 23 quality 24 line organization and assurance organization at some point within that organization 25

1	they all report to a common point.
2	Within Black & Veatch the owner's engineer
3	organization was based out of Ann Arbor and it was
4	completely independent from the line organization
5	within Black & Veatch Kansas City that was performing
6	the site investigation work.
7	And the QA that was in Kansas City of
8	Black & Veatch as well.
9	JUDGE BARATTA: So because they're two
10	physically separated but common company you
11	MR. P. SMITH: All utilities have exactly
12	the same setup within their own organizations.
13	Ultimately the QA organization and the line
14	organization in any company that has a quality
15	assurance program ends up at a common point.
16	JUDGE BARATTA: Isn't it true typically
17	that in the utility or any organization that has a QA
18	program that the line function, production function
19	shall we say, is separate from the quality assurance
20	and they only come together at the very top?
21	MR. P. SMITH: They come together Stan,
22	if you can describe the level that they
23	MR. STASEK: In response to your question,
24	yes, that's true. It really relates to what do you
25	consider at the top.

1	So, when you look at an operating nuclear
2	plant, for instance, the QA organization and the line
3	organization, they meet at the top typically at the
4	chief nuclear officer role. That's defined as really
5	the uppermost senior leader level that is full-time
6	associated with nuclear.
7	So what we've had on the project is that
8	same concept as well where when I first joined the
9	project Peter Smith was the line organization lead, I
10	was the QA organization lead and we both reported to
11	the director for nuclear development who at the time
12	was the uppermost full-time leader associated with the
13	project.
14	And that's a minimum. In some
15	organizations the QA group actually can report up
16	through a totally separate chain up to the company
17	president or up to the CEO. But as a minimum that's
18	typically how the industry is aligned.
19	JUDGE BARATTA: And when did you join the
20	project?
21	MR. STASEK: I joined the project in March
22	of 2009.
23	JUDGE BARATTA: Okay. So who performed
24	that function prior to March 2009? And was that
25	reporting relationship comparable?

1	MR. P. SMITH: Yes, it was. It was
2	identical, in fact. It was Jim Warner who filled
3	initially the ND QAPD manager role that was described
4	until Stan came onboard and we had transitioned into
5	the Fermi 3 QAPD after we had submitted the
6	application. And those reporting were both to the
7	director of nuclear development, myself and.
8	JUDGE BARATTA: The bar chart that we saw
9	a little while ago had Mr. Warner on it, did it not?
10	MR. P. SMITH: It did.
11	JUDGE BARATTA: Okay. And did it it
12	seemed to show it only went back to 2008. Did Mr.
13	Warner have that position prior to 2008?
14	MR. P. SMITH: No. Mr. Warner came
15	onboard around the February time frame of 2008.
16	Prior to that time we had not staffed our
17	nuclear development organization. It was minimally
18	staffed. There was myself. I had a financial analyst
19	working with me.
20	And then the model that we were heading
21	down the path which was also common in that time frame
22	was using an owner's engineer organization to expand.
23	So the owner's engineer performed a lot of functions
24	for us in the early days of this project.
25	JUDGE BARATTA: And who did that owner's

	engineer report to:
2	MR. P. SMITH: That owner's engineer
3	reported to me. But at that time we didn't have the
4	ND QAPD in place. We put that in place in February of
5	2008 and that's when we also staffed the organization.
6	JUDGE BARATTA: But at that time were you
7	not performing subsurface investigations of the site?
8	MR. P. SMITH: That was done previously
9	which is what we've been talking about a whole bunch
10	today from essentially April of 2007 up until February
11	of 2008 that we did not have a DTE Energy QA program
12	in place for this project that we relied on.
13	JUDGE BARATTA: And I go back to how do
14	you meet the requirements that are in NQA-1 to retain
15	responsibility for the program even though it allows
16	you to delegate the program to a contractor.
17	MR. P. SMITH: But that implies that we
18	have to have a program to well I'm trying to figure
19	out how a greenfield plant with a non-nuclear
20	background would enter this business.
21	I mean, one approach would be to up-front
22	develop a QA program.
23	JUDGE BARATTA: That's correct.
24	MR. P. SMITH: Another approach is the
25	approach that we took.

1	JUDGE BARATTA: The question is does that
2	approach meet NQA-1 or not. I think that's what we're
3	here to determine. Okay.
4	MR. P. SMITH: Well, I think just to add
5	on that though, you know, I think it's fundamentally
6	how did we assure quality in the work product.
7	JUDGE BARATTA: Well, yes, that's the
8	question.
9	MR. P. SMITH: Ultimately
10	JUDGE BARATTA: I mean, how do you, you
11	know, ensure that. You do agree that the subsurface
12	investigations that were done in 2007 involved
13	investigations that were safety-related or would
14	support safety-related
15	MR. P. SMITH: Absolutely, which is why we
16	insisted that they be done under a program.
17	JUDGE BARATTA: And the basis for saying
18	that it was done under a program is strictly that
19	Black & Veatch had a program.
20	MR. P. SMITH: Had a program.
21	JUDGE BARATTA: Which had been audited by
22	other folks doing similar work. Is that correct?
23	MR. P. SMITH: Correct.
24	JUDGE BARATTA: Actually I guess it's more
25	that there was a NUPIC audit, not because in the
	I .

1	testimony I think don't you talk to both?
2	MR. P. SMITH: So there was a NUPIC audit
3	that was done in the end of 2007. There was an
4	earlier audit oh, 2006, I'm sorry. Thank you,
5	Steve. In 2006. And that's what we based our
6	selection on.
7	There was a subsequent audit done in the
8	end of 2007 that we were invited to participate in but
9	were unable to by Entergy.
LO	JUDGE BARATTA: Going to the owner's
L1	engineer concept, you said you had him doing or her
L2	doing a variety of functions, correct?
L3	MR. P. SMITH: Correct.
L4	JUDGE BARATTA: Were any of those
L5	functions did they perform both line functions? Or
L6	as well as
L7	MR. P. SMITH: They weren't safety-
L8	related. We had the owner's engineer gather data for
L9	us. Mine our document library to fulfill responses
20	for a request for information from Black & Veatch
21	Kansas City on the COLA project.
22	We had the owner's engineer do a site
23	planning for us as to where we would locate a cooling
24	tower, help us select cooling tower technology.
25	The owner's engineer facilitated our

1	reactor technology selection effort. Owner's engineer
2	developed an early implementation schedule. A number
3	of activities.
4	JUDGE BARATTA: Did that particular
5	individual have QA training? And if so, what level?
6	MR. P. SMITH: So, the owner's engineer is
7	an organization. It's not an individual.
8	The owner's engineer within one of the
9	tasks that we had set out originally for the owner's
10	engineer was the development of the Fermi I'm
11	sorry, the ND QAPD. And so that was an activity. And
12	within the organization they had Mr. Ashworth and
13	there was one other individual too that I don't recall
14	his name right now that were QA professionals.
15	JUDGE BARATTA: And are they the same ones
16	that observed the activities at the site?
17	MR. P. SMITH: Yes.
18	JUDGE BARATTA: And are they the same ones
19	who I believe there was reference to yes.
20	MR. P. SMITH: I'm sorry, I just wanted to
21	clarify. So, Mr. Ashworth from the owner's engineer
22	was out on the site and the other individual who I
23	can't recall his name right now was out as well. From
24	the owner's engineer side.
25	And then in addition to that Black &

1	Veatch Kansas City, QA organization, the Appendix B
2	NQA-1 performed surveillances of activities
3	periodically on the site. And the individual who did
4	that was Art Layfield.
5	JUDGE BARATTA: What was done relative to
6	the data that came from Fermi 2 to ensure that it was
7	collected under a QA program? Were any audits or
8	reviews done of the Fermi 2 program?
9	MR. P. SMITH: Not from a Fermi 3
10	perspective. So I think what you're referring to
11	well, first of all, I think met data was mentioned
12	previously.
13	JUDGE BARATTA: Yes.
14	MR. P. SMITH: Met data is collected under
15	the Fermi 2 met tower. It's an operational met tower.
16	It's part and parcel of operations. That data is
17	logged, computer logged.
18	What we did is we got downloads of the
19	information from the Fermi 2 plant computer system and
20	transmitted that to Black & Veatch for use in the COLA
21	under a request for information from Black & Veatch.
22	JUDGE BARATTA: How was that, the
23	transmittal of that data done so as to ensure that
24	there was a clear chain of custody to avoid any
25	manipulation of the data? If there was no QA program

that DTE --

MR. P. SMITH: Right. Go ahead, Steve, and answer the question.

MR. THOMAS: As part of the COLA development we established a process called the request for information process, also referred to as the RFI process. So that was done underneath our QA program, underneath the Black & Veatch program.

So we submitted -- and the RFI process allowed us to request information from DTE or from GEH or other vendors that we needed design input for for the COLA.

One of those RFIs related to the met data that we requested from DTE. So as part of that RFI process we would fill out the request with the information that we were looking for. DTE would then provide that information and they would sign saying here's the information. And then we would sign that we received the information and that it met our needs.

Now, in the case of the met data what we did to ensure the fidelity of the data or the usability of the data, we didn't just use the data carte blanche. We went and reviewed all that data and established a criteria for which data should be excluded. Because sometimes an instrument will stick

1 or you know, for example, and we don't want to use incorrect data. 2 3 So that review of that data was all 4 documented as part of a Black & Veatch calculation 5 which had a preparer, a verifier and an approver. then that data could be used as input into the various 6 7 analyses that relied on that data. 8 JUDGE BARATTA: Okay, and that was a Black 9 & Veatch developed process. Correct? 10 MR. THOMAS: That's correct. JUDGE BARATTA: What did DTE do to ensure 11 that Black & Veatch was following that process? 12 that a requirement typically of a QA program, to make 13 14 sure that a vendor is following their processes? 15 MR. So, during the COLA Ρ. SMITH: 16 development the next phase for us was the acceptance review of that information. 17 So when it was turned into the COLA work product we had our ND QAPD in place 18 19 and all of its implementing procedures. And we had checklists and we had review packages that were 20 produced by B&V for us to review and comment on. 21 And those included all of the sources of 22 information. Not physically the sources of 23 24 information but we were able to verify that there was

a path via the DBM, the site development basis matrix

1	for each chapter and section that there was a
2	reference to a B&V calculation, a reference to where
3	the source was and that there were trails. So we
4	reviewed that as well as we reviewed it against
5	JUDGE BARATTA: Right. When you do it
6	isn't it true that when you do a calculation under a
7	QA program typically what you have is a set of calc
8	notes with sample calculations followed by a series of
9	checks and balances? Is that true?
LO	MR. P. SMITH: Go ahead and describe the
L1	calculation.
L2	MR. THOMAS: I think that's a fair summary
L3	but I believe that's a very brief summary. The
L4	calculation obviously has several sections
L5	JUDGE BARATTA: I can't testify. That's
L6	why I'm asking you.
L7	MR. THOMAS: Yes, it has design inputs.
L8	We have to identify all the design inputs. All the
L9	design inputs have to have a reference so that whoever
20	is doing the independent verification can go back and
21	not necessarily have and not have to rely on the
22	preparer. But he can verify that that calculation is
23	correct based on the information that's presented. So
24	there's design inputs.
25	Any assumptions that are made in the

1 calculation are identified, what the basis for those 2 assumptions, the methodology is provided in calculation and then the results. And then obviously 3 4 whatever attachments that you have to go with that 5 calculation. MR. P. SMITH: So, but every calculation 6 7 is not reviewed by an in-line QA person. QA -- the 8 quality is built into the system that develops the 9 calculation. The calculation was developed under a 10 procedure that tells you what the criteria are for It tells you if you're going to use an 11 design inputs. 12 analytical method how you have validate the to analytical 13 method you're going to use, 14 attributes like that. The function of quality assurance in that 15 performance of audits and 16 the system is 17 surveillances that verify on a sampling basis that those procedures and programs are being followed. 18 19 JUDGE BARATTA: All right, that's my -understood. Now, the question is did your acceptance 20 program do any surveillance to or sampling of the data 21 that was cited. 22 Did you not say earlier that you checked 23 24 to make sure there was something referenced where the

data came from? Did you go back to that reference?

1	MR. P. SMITH: No, we didn't go beyond
2	that because that function was fulfilled by Black &
3	Veatch quality assurance in their oversight of the
4	COLA development.
5	JUDGE BARATTA: But how did you ensure
6	that they in fact performed that oversight?
7	MR. P. SMITH: Because I had access to the
8	audits and surveillance reports that Black & Veatch
9	did.
10	JUDGE BARATTA: What I asked a minute ago,
11	did you go back and look at those to make sure that
12	they were in compliance.
13	MR. P. SMITH: Well, no, I did not go and
14	physically look at everything that Black & Veatch did.
15	JUDGE BARATTA: But did you sample at
16	least?
17	MR. P. SMITH: No. The extent of the
18	review that we did for acceptance was as I described
19	against the checklists and verifying that we had
20	evidence of the information and how it had been
21	developed.
22	JUDGE BARATTA: So I go back to how did
23	you maintain responsibility as required by NQA-1 for
24	the QA.
25	MR. P. SMITH: I think that is maintaining

1 responsibility. 2 I'm sorry, I'm a little JUDGE BARATTA: skeptical about that. You want to ask a few questions 3 4 while I catch up? 5 JUDGE CHARBENEAU: Let me ask a couple. 6 Can we go forward to page -- trying to get to Q 28. 7 Forty-eight, I'm sorry. It's probably page 28. 8 it's page 29. There we are. 9 Okay, if we start with the line that says 10 during the initial -- this is -- now we're looking at the time period, as I understand kind of a time line 11 contract with Black & Veatch is March 2007. 12 nuclear development program for DTE was established in 13 14 April 2007, and the DTE quality assurance program in 15 February 2008. So we're at the time frame prior to 2008. 16 17 And we're seeing here that during this initial phase there were no audits. There was no 18 19 surveillance by DTE personnel. And yet further down there's an assertion that DTE is providing oversight. 20 What exactly are we doing at that time? 21 During the conduct of the 22 MR. P. SMITH: site investigations? So this is the sentence. 23 24 addition to the applicable programs for operating the

Fermi Unit 2 for access work control and contractor

1 oversight were utilized for that site work. Is that 2 what you're referring to? 3 JUDGE BARATTA: Yes. 4 MR. P. SMITH: Okay. So that -- so I was 5 paired with BNV's site manager who -- all of the drillers, 6 contractor personnel, the the B&V 7 geotechnical engineers, the laborers, everybody who 8 was involved in the drilling. And we were paired and 9 basically our daily routine looked something like 10 this, is that on the day that -- on a particular day we'd have our first morning meeting, pre-job brief and 11 go through the activities for the day. 12 Typically we were operating three drill 13 14 rigs in three different locations on the site. I had 15 an interface responsibility with the Unit 2 operations department because they needed to know where I was 16 17 drilling onsite on that particular day. Once all of those things were fulfilled I 18 19 -- and I had one other person who we were trading off for the period of time. We went out throughout the 20 day and observed the activities at the drill rigs. 21 22 JUDGE CHARBENEAU: So you were actually observing the activities, the collection of core? 23 24 MR. P. SMITH: Yes. 25 JUDGE CHARBENEAU: Were there any -- and

1	you were aware of the work plan for that day.
2	MR. P. SMITH: Yes, I was.
3	JUDGE CHARBENEAU: Were there any daily
4	notes that were being kept?
5	MR. P. SMITH: By me?
6	JUDGE CHARBENEAU: in the record.
7	MR. P. SMITH: Not by me.
8	JUDGE CHARBENEAU: By anybody in DTE?
9	MR. P. SMITH: No.
10	JUDGE CHARBENEAU: So the oversight was
11	really just sight and not record.
12	MR. P. SMITH: That's correct.
13	JUDGE CHARBENEAU: If we go down another
14	sentence below that, in addition to the applicable
15	programs of the operating Fermi 2 unit for access work
16	control and contractor oversight were utilized. What
17	is the nature of the use of the Fermi 2?
18	MR. P. SMITH: So, the Fermi 2 access
19	so since we were within the owner-controlled area of
20	the plant I had to provide site access for all of the
21	people who were working on the project which we ran
22	them through all of the Fermi 2 general orientation
23	training program and background qualifications and all
24	of the things for site access for all the folks that
25	were doing this. So that was just complying with the
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1 access rules.

JUDGE CHARBENEAU: Okay, so the mention of Fermi 2 has nothing to do with their quality assurance program.

MR. P. SMITH: Exactly. It's solely we were working on the Fermi 2. Fermi 2 has to be operationally cognizant of things that are --activities that are going on on the site from both an operations and security standpoint.

I had to get permits to be able to do core borings which were digs, considered excavations within the Fermi 2 work control process. We had -- we were listed on the daily schedule of Fermi 2 activities so there was cognizance within the Fermi 2 organization that we were doing things. And if we had issues that had the potential for impacting Fermi 2 we reported through that chain. So it was really to fulfill the interface activities.

And for doing work on a nuclear power plant site there are expectations regarding contractor oversight from the standpoint of there's a lot of operating experience in the early two thousands regarding contractor workforces causing upsets in plants.

And so we established -- well, Fermi 2,

1 and I was part of the Fermi 2 organization originally, that's where I came from -- established expectations 2 3 and procedures for contractor oversight. A lot of it had to do with industrial 4 5 safety and ensuring that the industrial safety was 6 done correctly, ensuring that all of the rules of the site were followed appropriately and there was -- and 7 8 I fulfilled those roles from a Fermi 2 perspective. 9 JUDGE CHARBENEAU: Were you the only 10 individual from DTE that was taking this action? P. SMITH: Well, I had one other 11 individual who was a former operations manager from 12 And during the whole course of the site 13 14 investigation we traded off and shared so that we had 15 continuous coverage over all the time that there was 16 onsite activities. 17 JUDGE CHARBENEAU: And at the same time the owner's engineer organization was there as well. 18 19 SMITH: They weren't -- some Ρ. owner's engineer people were physically onsite, some 20 of them that were doing research in response to 21 22 requests for information. If you're referring to the two individuals 23 24 that had a QA background from the owner's engineer, they periodically came onsite. But the large bulk of 25

1	the owner's engineer work that I described of cooling
2	tower, technology selection was actually done out of
3	the Ann Arbor office of Black & Veatch.
4	JUDGE CHARBENEAU: I thought, and maybe
5	it's even on the next page, but let me just kind of
6	check my memory. I thought there was a reference that
7	the owner's engineer was also doing some audits and
8	surveillance.
9	MR. P. SMITH: That's correct. He called
10	them surveillances and he wrote surveillance reports.
11	JUDGE CHARBENEAU: And audits as well.
12	MR. P. SMITH: I don't believe he did
13	anything that was called an audit. I don't recall
14	that.
15	JUDGE CHARBENEAU: Okay. I think you're
16	correct. I think on the next page or so there's a
17	listing of four surveillance reports.
18	So, all of the oversight that you were
19	DTE was providing at this time was coordinated through
20	you and another individual in observing being aware
21	of the work plan and observing presumably that the
22	work plan was being followed and kind of just
23	observing what was going on.
24	MR. P. SMITH: Correct. And we did, you
25	know, I was particularly concerned about industrial
	I

1	safety activities. So we did stop work on more than
2	one occasion to ensure that we had no industrial
3	safety accidents or we didn't cause any issues for the
4	Fermi 2 organization.
5	JUDGE CHARBENEAU: Any analyses were being
6	done then by Black & Veatch under their quality
7	assurance program?
8	MR. P. SMITH: That's correct. So at each
9	drill rig Black & Veatch had a qualified geotechnical
10	engineer or geologist that was supervising the
11	drilling and core recoveries. And then they were
12	examining the cores and creating the logs,
13	photographing and everything else that went along with
14	that. And I observed them doing that on a frequent
15	basis.
16	JUDGE CHARBENEAU: Okay. And then all of
17	that work product was just put in storage until
18	roughly the February 2008 time period.
19	MR. P. SMITH: No, the information was fed
20	back to Black & Veatch Kansas City and they started
21	their evaluations to develop the COLA. So that work
22	was ongoing in Kansas City. All of the back
23	JUDGE CHARBENEAU: I guess all of the
24	product you've got the oversight coming from the
25	owner's engineer. You're doing the observing. The

1	analyses are being done in Kansas City.
2	MR. P. SMITH: Correct.
3	JUDGE CHARBENEAU: And anything that is
4	done there is put into storage until October or
5	February of
6	MR. P. SMITH: Yes, it started to arrive
7	in the new year, in 2008. We didn't start reviewing
8	any of it until we had our procedures and programs and
9	people in place.
10	JUDGE CHARBENEAU: So that's roughly the
11	February 2008 time period with your ND
12	MR. P. SMITH: QAPD.
13	JUDGE CHARBENEAU: quality assurance
14	program.
15	MR. P. SMITH: That's correct.
16	MR. T. SMITH: Perhaps Mr. Sacco could
17	elaborate on some of the quality measures that B&V was
18	applying during that period.
19	MR. SACCO: Of course. Black & Veatch
20	obviously had a QA program that met Appendix B. We've
21	had one for a number of years. So once we had the
22	contract it was my responsibility to make sure we had
23	a QA program implemented within the DTE project for
24	Black & Veatch.
25	So we had quality assurance procedures.

1 There were also project procedures that had to meet NQA-1 and those were reviewed and approved by me among 2 3 others. 4 And there were detailed site procedures for how the work would be collected and stored and 5 whatever. A person who was working for me, Art 6 7 Layfield, was doing site surveillances to make sure 8 that people were following those processes 9 procedures as they were doing the site collection 10 work. And also he did surveillances of how these 11 handled, 12 samples the chain of custody were surveillances, also surveillances of the supplies as 13 14 well. So we did the QA oversight for all those activities at the site. 15 16 JUDGE CHARBENEAU: This is in the early 17 time period. MR. SACCO: That's correct. Certainly 18 19 from day one we had a QA program in place. 20 JUDGE BARATTA: And that was specified in that -- I think it's the PMM. 21 MR. SACCO: Well, it's basically a two-22 There's B&V nuclear's QA program, its 23 part process. 24 approved QA program. And then within that, within the PMM you have a specific project quality plan which 25

1	talks about how you're going to implement that
2	corporate program, which procedures you're going to
3	use, which procedures are you not going to use. Which
4	ones do you need. So it kind of lays it out on that
5	basis how the program is going to be applied to you
6	and your subcontractors.
7	JUDGE BARATTA: And that is in that PMM.
8	MR. SACCO: It's in the PMM.
9	JUDGE BARATTA: It's an exhibit I believe.
10	MR. SACCO: Yes, that's correct.
11	JUDGE BARATTA: Which exhibit is that?
12	MR. T. SMITH: I believe DTE 000056 was
13	revision zero of the project management memorandum.
14	March 30 of 2007.
15	JUDGE BARATTA: Sorry to interrupt.
16	JUDGE CHARBENEAU: No, that's fine. Go
17	ahead if you want to.
18	JUDGE BARATTA: No, no, go ahead.
19	JUDGE CHARBENEAU: Let me jump to an issue
20	that Mr. Gundersen has brought up. Under the
21	contracts between Black & Veatch Kansas City and
22	owner's engineer Ann Arbor and Detroit Edison what
23	protections and whistleblowers let's say protections
24	are available for somebody observing the work or this

work that was going on? Are there any protections

available?

MR. SACCO: Within the Black & Veatch program absolutely. In fact, you talk about the NUPIC checklist that is used by all auditors in nuclear. There's a specific line item in that checklist that talks about having a whistleblower protection, addressing the Energy Reorganization Act Section 210 or 211.

and it's part of being able to pass an audit, you have to show that you have what we called an employee concerns program which we did. And you have to show that you've got the postings all over the work areas. You also have to show that you've trained people to that procedure. So if you don't do that you don't pass a NUPIC audit. So we definitely had that program in place.

And as a Black & Veatch procedure there's no option to not follow it. You have to follow it. And it's very specific as what people can do to report these, who they report them to. The reporting mechanism is to someone totally separate from either the nuclear line management or QA. It's a separate nuclear compliance manager who will handle all employee concerns and under strict confidence. So it is in place within Black & Veatch corporate to make

1	sure that you are following those processes.
2	JUDGE BARATTA: Can you point to in the
3	PMM is there a procedure cited that would describe
4	that program?
5	MR. SACCO: The procedure is called
6	nuclear procedure or NP 1.2 in our program. I'm not
7	sure where it is in the record.
8	JUDGE BARATTA: Maybe DTE could see if
9	they can find that.
10	MR. T. SMITH: Certainly.
11	JUDGE BARATTA: Okay, sorry. Did DTE at
12	any time audit Black & Veatch to determine that in
13	fact they were in accordance that the work was in
14	fact conducted in accordance with the PMM?
15	MR. P. SMITH: Not specifically to the PMM
16	in process. I don't recall, Stan, whether we looked
17	at that during the 2009.
18	MR. STASEK: If we're talking post
19	application, yes, in July of 2009 we did look at the
20	PMM.
21	JUDGE BARATTA: You mean you paid these
22	guys, you didn't make sure that they were doing what
23	you told them to do?
24	MR. STASEK: In 2009 we reviewed the PMM
25	and it's actually a document that can be revised based

1 upon the activities that are currently going on at a particular time. And so we did need to re-look at the 2 3 most recent revision to the PMM to ensure that the 4 activities going on in 2009 were being conducted in 5 accordance with procedures. JUDGE BARATTA: And let's see, this is 6 7 curious. There was a Black & Veatch audit done of 8 Black & Veatch. Or I quess actually what it was, in 9 the testimony there's mention of an audit that was 10 contracted by Black & Veatch during this time period. Anyone recall that? There's reference to it in Black 11 & Veatch audit report number 07NP01. It's on page 25 12 of the testimony. I think it's DTE Exhibit 21. 13 14 MR. SACCO: I'm not sure. Black & Veatch 15 performs an annual audit of itself, Black & Veatch Nuclear, which is not performed by someone -- not led 16 17 by someone from my organization. We get someone independent to do the evaluation -- or the audit, lead 18 19 the audit of our program. It's assisted by my QA staff, but the lead 20 auditor is not someone who works for me because we 21 wanted to make sure we had an independent look at our 22 And that is done annually. 23 program. 24 JUDGE BARATTA: Basically what my question

was what the purpose of it and who did it.

25

Okay, yes.

1	All right.
2	JUDGE CHARBENEAU: In that audit do they
3	go back in and review the oversight that's being
4	provided to the different projects at Black & Veatch?
5	MR. SACCO: Yes. It encompasses
6	everything that we do in Black & Veatch Nuclear. So
7	we would look at all active projects and pretty much
8	do a sampling of everything that's going on that's
9	available for the 18 criteria. So obviously a project
10	doesn't necessarily hit the 18 criteria of NQA-1, we
11	wouldn't hit.
12	But for major projects, for projects that
13	have a large scope we would pretty much look at all
14	aspects of their QA program as part of that annual
15	audit.
16	And that audit is like it's a week or
17	two-week long audit. So it's meant to look at all
18	activities to make sure that we are performing our QA
19	function in accordance to requirements.
20	JUDGE CHARBENEAU: And is the results from
21	that audit shared with DTE during a transfer of I'm
22	sorry during the transfer of the information past
23	the February 2008 time period? So that that does
24	the audit essentially transfer to DTE?

MR. SACCO: We provide our audit reports.

1 And what we also do is any findings that we have against the project we would definitely inform the 2 3 Detroit Edison of those as well as the audit report. 4 MR. STASEK: And from the DTE side my 5 organization does an annual evaluation of Black & 6 Veatch as part of maintaining them on our approved 7 suppliers list. And then once every 3 years, we just did 8 9 one I think it was last year, we re-audit the Black & Veatch organization and we would be looking at those 10 audit results as well. 11 Would it be possible 12 JUDGE CHARBENEAU: for you to go back and take credit or semi-credit for 13 14 an audit that was done back in the 2007 time period? An independent Black & Veatch audit of the work that 15 was being done at your site at that time period. 16 17 Before you had a quality assurance program in place. MR. STASEK: That's -- I mean obviously 18 19 that's a mechanism that can be used to provide additional information as to performance levels at any 20 given period of time. And the audits are maintained 21 22 in your Documentum system, your records archive 23 system. 24 JUDGE CHARBENEAU: I was going to say you take credit for the supplier audits that are done. 25

1	MR. STASEK: And the supplier audits, when
2	they are done they do look at the internal audits as
3	well.
4	MR. SACCO: And the audit record is much
5	more than just the audit report. The audit record
6	also includes all the checklist which itself is a
7	document like about this thick. And also it has
8	which has exact resources, exactly what you looked at
9	during that audit and exactly to which you are finding
10	either sat or unsat, satisfactory or unsatisfactory.
11	So that information is all in the audit file.
12	And it also includes the people you talked
13	to. It also includes backup information so that you
14	can justify what you've found. So an audit package is
15	actually quite large.
16	And if someone chooses to go back and look
17	at a 2007 audit all that information is readily
18	available in our Documentum system.
19	JUDGE BARATTA: To get back now to the
20	issue of Black & Veatch did an internal audit. You
21	shared it with DTE from what I gather. But in 2007-08
22	time frame what did DTE do with that report? Did you
23	review it? Did you
24	MR. P. SMITH: I don't recall reviewing
25	that report, no.

1	MR. SACCO: There's a lot of documentation
2	that routinely goes to our clients such as the PMM.
3	Every time we did an issue of the PMM we would send it
4	to our client. So there's a lot of documentation that
5	goes just through the process of just performing a
6	project. Part of that PMM talks about some of the
7	things that we share with our clients. So there's a
8	lot of documentation that's available.
9	JUDGE BARATTA: So, prior to I guess it
10	was February 2008 when Mr. Warner came onboard the
11	main check on Black & Veatch were what I'll call
12	surveillance activities, is that correct?
13	MR. P. SMITH: That's correct.
14	JUDGE BARATTA: There was no auditing done
15	of Black & Veatch other than the NUPIC audit. And
16	there was no inspections done of Black & Veatch, is
17	that also true?
18	MR. P. SMITH: So, Black & Veatch was
19	subject to the pre-application geotechnical audit that
20	was done in
21	JUDGE BARATTA: By NUPIC.
22	MR. P. SMITH: No, by NRC in July of 2007.
23	JUDGE BARATTA: But that I'm looking
24	for what DTE did.
25	MR. P. SMITH: So, you used the term
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1	"inspection" and so
2	JUDGE BARATTA: I apologize.
3	MR. P. SMITH: that's why I answered
4	that way.
5	JUDGE BARATTA: Okay, I understand. I
6	apologize. I'm sorry I confused you.
7	MR. P. SMITH: That's okay.
8	JUDGE BARATTA: There were no DTE
9	inspections done.
10	MR. P. SMITH: No.
11	JUDGE BARATTA: During that time.
12	MR. P. SMITH: No.
13	MR. SACCO: Just as a matter of record so
14	that you understand what kind of oversight a company
15	such as Black & Veatch Nuclear gets, since I've been
16	with the company, it's been 7 years, we average being
17	audited about six times a year by various clients.
18	Some of them are utilities, some of them are
19	manufacturers, reactor manufacturers. Some of them
20	are other clients that we have.
21	So it's almost literally like every other
22	month we have somebody coming in and doing an audit of
23	our program. So we get looked at pretty much
24	constantly.
25	JUDGE BARATTA: And a point of

1 clarification relative -- I just want to make sure I understand the Fermi 2 role. That was basically to 2 3 ensure access control, industrial safety, but there 4 was no -- did they do anything more than that? 5 MR. P. SMITH: It was all of the plant 6 interfaces. So that the plant operating authority was 7 aware of the activities that were going on on the 8 Fermi 2 site. So we performed all of the interface 9 activities. 10 JUDGE CHARBENEAU: This may already be in the record but I'll just ask it one more time. Going 11 back to the actual coring that is being done for the 12 geotechnical work, that's being observed by Mr. Smith 13 14 and his colleague. 15 In terms of documenting quality assurance Black & Veatch has people on the ground observing the 16 17 handling of the cores, the storing of the cores, the recording of depths and everything else. That's all 18 19 going on at the same time independently of --MR. P. SMITH: That's correct. Now, Mr. 20 Layfield who was from the Black & Veatch quality 21 assurance organization out of where we have the COLA 22 contract wasn't onsite continuously. 23 JUDGE CHARBENEAU: So these would be 24 periodic visits to document quality control. 25

1	MR. P. SMITH: Correct.
2	JUDGE CHARBENEAU: Roughly the frequency
3	of those?
4	MR. SACCO: During the activities of the
5	2007 time frame where all the activities were
6	happening I would venture it was once a month. I
7	mean, it was probably even a little more than that.
8	Anytime that we were aware there were
9	significant activities going on at the site Art would
10	go we would dispatch Art to go to the site.
11	Because a lot of times in the process of doing the
12	work at the site there's a lot of setup and whatever.
13	But when we were aware of significant activities Art
14	would be there to review the cores coming out, the
15	chain of custody, the boxing them up, how the lab
16	handled them. You know, and that all would be
17	documented on his surveillance report.
18	JUDGE CHARBENEAU: Were those
19	surveillances scheduled, or unannounced?
20	MR. SACCO: The very nature of
21	surveillances is that you do them based on the
22	activities being conducted whenever you're doing it.
23	So we might schedule a surveillance
24	because we do have a surveillance schedule, but that
25	doesn't necessarily mean you would do that
l	I control of the second of the

1	surveillance. For instance, you might schedule it for
2	doing it at a particular time and you find out really,
3	well, the activity is really not going to happen till
4	next week so you do it next week.
5	So it was scheduled but it was a very
6	flexible schedule. That's one of the great things
7	about surveillances. They're not audits that require
8	a 30-day notice and advance planning or whatever.
9	Surveillances are pretty in and out types
10	of things where you go there, you go there with a
11	specific plan, you go there to look at specific
12	activities and you write it up and it's meant to be a
13	quick turnaround in a few days.
14	JUDGE BARATTA: You had some surveillance
15	reports that were put in as exhibits. I think they're
16	41, 42 and 43. And they cover different things from
17	July, August and September of 2007.
18	Did any of those identify any
19	deficiencies?
20	MR. SACCO: There were issues identified
21	within some of the audit reports I mean, excuse me,
22	some of the surveillance reports. They were all
23	considered relatively minor.
24	There's one of the things that when I go
25	over the audit I mean the surveillance report with

Art prior to its publication we have a back and forth 1 Okay, is this a significant issue. 2 discussion. 3 this require follow-up. Is this something that's just documentation or just a step skipped in the 4 5 procedure. So we go back and forth and decide whether or not -- the significance of it. 6 7 And most of them were, you know, of the 8 type that oh, where's the document, or where's the 9 attachment, or this box was marked this. It might 10 have been an incorrect marking. You know, relatively minor types of things that are easily corrected. 11 don't recall any issue in the surveillance as being 12 what we would consider significant. 13 14 JUDGE BARATTA: During the 2007, the ones 15 that were cited there, did -- this is a question for 16 Did you review any of those surveillance 17 reports? MR. P. SMITH: Yes. 18 19 JUDGE BARATTA: Okay. And did you take any action as a result of that, like go beat them up 20 or anything? 21 So, in working with the 22 MR. P. SMITH: site manager all of the issues that were identified in 23 the surveillances were corrected. 24

For example, Art referred to the marking

1 of boxes. Well, the issue there was the spec said mark it on the top and mark it on the end, for 2 3 example, and it was only marked on the top. 4 Another issue that was identified was the 5 internals of the core boxes, the first -- one of the earlier sets of core boxes we had the internals were 6 7 stapled instead of screwed and so they were fragile. 8 And so that issue was corrected. Those were the kinds of issues that I recall from these surveillances. 9 10 And B&V was already on top of them fixing So we reviewed them collectively and assured 11 they were corrected. 12 JUDGE CHARBENEAU: Was most of the field 13 14 work done by B&V employees, or was it subcontractors? 15 MR. P. SMITH: So I -- go ahead, Steve. 16 MR. THOMAS: I would say most of it was 17 done by -- well, speaking to the individuals who were actually -- the geotechnical engineers and 18 19 geologists who were manning the drill rigs most of those were direct B&V employees. We had one or two 20 that were subcontractors basically from an agency firm 21 that were directly working for us underneath our 22 control. 23 like --24 But it wasn't it wasn't subcontract company, it was like a seconded labor 25

1	person that we brought in.
2	MR. P. SMITH: The drilling was done, the
3	physical drilling was done by a company called Boart
4	Longyear. The companies that brought in downhole
5	instrumentation to do downhole instrumentation were
6	subcontractors to B&V as well.
7	JUDGE CHARBENEAU: And they had gone
8	through QA training before coming into the field?
9	MR. THOMAS: That is correct.
LO	JUDGE CHARBENEAU: And were the
L1	individuals that were handling the cores, were those
L2	B&V employees?
L3	MR. P. SMITH: The geotechnical engineers
L4	and geologists were yours, and those were the guys
L5	that were trained and qualified under your program.
L6	MR. THOMAS: That's correct.
L7	JUDGE CHARBENEAU: And as well the people
L8	running the geophysical logs.
L9	MR. THOMAS: That's the same people. The
20	people who were manning the drill rigs were the people
21	who are or the person who was when I say manning
22	the drill rig what I mean, the geotechnical engineer
23	or the geologist who is standing by the drill rig
24	monitoring what's going on.
25	JUDGE CHARBENEAU: Not who's actually

1	MR. THOMAS: Recording all the
2	information. He's not actually running it.
3	JUDGE CHARBENEAU: Okay.
4	MR. THOMAS: He's more in a supervisory
5	role who is watching what's going on. He's obviously
6	interfacing with the drill rig operator, but he's the
7	one recording all the data, taking the pictures,
8	filling out the logs.
9	JUDGE CHARBENEAU: And there are early
10	morning meetings each day before work?
11	MR. P. SMITH: That's correct.
12	JUDGE CHARBENEAU: Going through work
13	plans.
14	MR. P. SMITH: Yes.
15	JUDGE CHARBENEAU: And you were part of
16	those?
17	MR. P. SMITH: Yes, I was.
18	JUDGE BARATTA: Going to question 63 which
19	appears on page 40. Did the company agree with the
20	findings this is referring to the I believe the
21	Notice of Violation of November 9, 2009. At least
22	what's in the Answer.
23	You state that because you were not an
24	applicant prior to September 18, 2008 thus were not
25	subject to Appendix B requirements to this date.

1	Again, I go back to this issue of NQA-1 requires
2	subsurface investigation to be conducted under a QA
3	program.
4	How can you say and later on it says DTE
5	took responsibility for the program. Are you
6	referring to the program prior to becoming an
7	applicant or after becoming an applicant? At that
8	point.
9	MR. P. SMITH: I believe we had
10	responsibility for the entire conduct of our COLA
11	application. I think the issue is how we went about
12	fulfilling that responsibility.
13	JUDGE BARATTA: That's exactly
14	MR. P. SMITH: So, and that's what we
15	that's the position that we have taken. We were
16	always focused on making sure that the information
17	that we gathered was done in a quality manner.
18	JUDGE BARATTA: And you exercised that
19	through organizational oversight, is that one of the
20	ways you did it?
21	MR. P. SMITH: Yes.
22	JUDGE BARATTA: And that was through the
23	use of an individual within this organizational
24	excuse me, the
25	MR. P. SMITH: The owner's engineer.
	I

1	JUDGE BARATTA: The owner's engineer, yes
2	MR. P. SMITH: Yes.
3	JUDGE BARATTA: Got the acronym but I
4	couldn't get the name. Sorry. The owner's engineer
5	as well as I gather you did some surveillances
6	yourself.
7	MR. P. SMITH: Right. But I didn't write
8	anything. I think that's unlike what my owner's
9	engineer representatives did is they documented what
10	they looked at.
11	JUDGE BARATTA: Okay. Was there anything
12	else that you did that I mean we have the NUPIC
13	audit that established that at least at that time they
14	were qualified. And you did the surveillances. And
15	you had the owner's engineer doing some of the work.
16	Any other activities?
17	MR. P. SMITH: And then of course what we
18	talked about previously. Once we started to receive
19	the COLA work product from B&V in 2008 which we did
20	under our program.
21	JUDGE BARATTA: And I take it there were
22	no programmatic issues identified at any time during
23	that period prior to becoming an applicant that were
24	of concern.
25	MR. P. SMITH: No.

1	JUDGE BARATTA: What about once they
2	became you became an applicant? You refer to
3	audits later on in your testimony that were done in
4	2010-2011. These are Exhibits 59 and 60. Without
5	going into detail on those were there any programmatic
6	issues that were identified later on?
7	MR. STASEK: So we're referring to the
8	audits that we did of
9	JUDGE BARATTA: Yes.
10	MR. STASEK: Black & Veatch in 2010 and
11	2011?
12	JUDGE BARATTA: Yes.
13	MR. STASEK: I don't remember specifics
14	offhand. However, nothing comes to mind that
15	indicated that there was anything significant. If we
16	identified any issues they were lower tiered issues
17	and did not affect whether or not we would retain them
18	on the approved suppliers list.
19	JUDGE BARATTA: Okay.
20	MR. P. SMITH: Stan, I think the exhibits
21	were the our annual audits of Fermi 3, not of B&V
22	I think. In 59 and 60. Yes. I'm sorry, that's why
23	I wanted to make sure you had it.
24	JUDGE BARATTA: Okay. I'm sorry. Was I
25	mistaken as to what they were?

1	MR. P. SMITH: Right. That's what I
2	believe, yes. I believe they were because we did
3	an audit of B&V in July of 2009 which would have been
4	our first of and then 3 years later we did another
5	audit of B&V. And then in the interim years we do an
6	annual supplier evaluation.
7	JUDGE BARATTA: And did any of those show
8	any problems?
9	MR. P. SMITH: There was nothing
10	significant out of either of the two supplier audits
11	or the supplier evaluations.
12	MR. THOMAS: So while I was reading here
13	was your question associated with the vendor audits,
14	or was that associated with the internal audits of the
15	Fermi 3 quality assurance program?
16	JUDGE BARATTA: Okay. I guess yes, I
17	guess I'm sorry. It was the internal audits. The
18	annual audit of implementation of the Fermi 3 quality
19	assurance program description requirements which is
20	Exhibit 59 and 60. I misstated it.
21	MR. P. SMITH: So that's the QA audit that
22	Stan's organization or Mr. Stasek's organization does
23	of my implementation of the QAPD.
24	MR. STASEK: And yes, there were audit
25	findings that occurred as a result of those audits.
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We identified that to the line organization. 1 They 2 initiated corrective action request documents, CARs, to address those. They did address those. 3 4 reviewed their resolution and had no further issues 5 following that. We felt their corrective actions were appropriate. 6 7 JUDGE BARATTA: And were the -- there was audit findings that dealt with -- or actually NRC 8 9 inspection findings dealing with trend reports, right? 10 Is that correct? MR. STASEK: That's correct. 11 JUDGE BARATTA: Okay. Where does the 12 requirement for trending arise from? 13 14 MR. STASEK: From a regulation standpoint 15 regulations requiring trending of no 16 corrective actions. Where there was a requirement 17 specified was in the Fermi 3 QAPD that specified that trending of corrective actions would be performed and 18 19 that if there were any -- I'm paraphrasing -- if there were any adverse trends identified that would be 20 documented and communicated to management. 21 And then in the summer of 2009 I caused a 22 revision to one of our procedures to occur and that 23 24 embedded a requirement to do trending of corrective

actions.

1 JUDGE BARATTA: Does NQA-1 require trending? 2 3 MR. SACCO: NQA-1 discusses trending in 4 the non-mandatory appendices. It's not required. 5 It's quidance. JUDGE BARATTA: And what's considered best 6 7 practices? MR. STASEK: So best practices within the 8 9 nuclear industry is that programs will include a 10 trending requirement. Just from a background standpoint if you 11 look C.F.R. 50 Appendix B criterion 12 10 at associated with corrective action it indicates that 13 14 for conditions adverse to quality that you establish corrective actions for those. 15 For significant conditions adverse to 16 17 quality you establish a corrective action such that you prevent reoccurrence. So it's considered a really 18 19 bad thing if you have a reoccurrence of something really significant. 20 And the way the industry has addressed 21 that is to establish lower tiered trending such that 22 if you find your issues when they're less significant 23 24 you will never end up having to deal with

significant issue adverse to quality that repeated.

1	And so trending is a good thing. It's a
2	standard within the industry. And such that we did
3	include that in the Fermi 3 program as well.
4	JUDGE BARATTA: All right. One last
5	question. Did we find that Black & Veatch program for
6	the employee concerns?
7	MR. T. SMITH: No, Black & Veatch, that
8	particular procedure I believe you referred to as NP
9	1.2 is not an exhibit in this that's been
LO	submitted.
l1	JUDGE BARATTA: Okay.
L2	MR. THOMAS: Just to add to that really
L3	quick because I think the question was is that
L4	procedure listed in the PMM as being
L5	JUDGE BARATTA: Yes, that was the
L6	question. Yes.
L7	MR. THOMAS: And the PMM does not cull out
L8	that procedure specifically, but it does say that we
L9	are in attachment Charlie of the PMM. It does say
20	that we're going to perform all the safety-related
21	aspects in accordance with the nuclear quality
22	assurance program which would include a full suite of
23	the nuclear procedures including NP 1.2.
24	JUDGE BARATTA: Okay, so that's how it
25	gets into the program.

1 MR. THOMAS: Exactly. Exactly. 2 JUDGE BARATTA: Okay. 3 JUDGE CHARBENEAU: Let me just ask one 4 more question. During the time period pre-application 5 what was the communication stream with the NRC? MR. P. SMITH: So, initially in February 6 7 of 2007 we informed NRC of our intent to submit a combined license application along with many, many 8 9 others in that time frame. 10 And then subsequently to that, and I'm just going to have to build my recollections, we 11 submitted a letter which indicated or provided the 12 timing of when we were going to do our geotechnical 13 14 investigation in order to inform NRC of when it would 15 be appropriate to come and perform the pre-application inspection of those activities. 16 I think we did that 17 at the end of May. And I think at about the same time at the 18 19 end of May we responded to a regulatory issue summary which NRC sends out on an annual basis trying to do 20 their resource planning for the future years, and asks 21 several questions regarding the timing and other 22 issues about the prospective application. And that 23 -- I believe the extent of the formal 24

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communication.

1 We had the pre-application geotechnical 2 audit in July. There was a report issued on that. 3 Also on the environmental side there were 4 two similar interactions, environmental T-1 and T-2 meetings to look at the in-progress of the 5 environmental report in development. 6 7 And we had some visits from the 8 construction inspection branch in Region 2 again 9 trying to figure out what our future plans were going 10 to be from a resource planning standpoint. CHAIRMAN SPRITZER: All right, it's 5:30. 11 We will have to ask these 12 We are done for today. witnesses to return tomorrow. And then we will 13 14 proceed to the NRC staff witnesses. I think it would be realistic that we can 15 16 finish tomorrow for people to take into account in 17 their planning. That does mean counsel should be prepared to make their closing arguments tomorrow. 18 19 I'm not sure exactly when that will be but we should be able to finish the whole proceeding tomorrow. 20 in terms of getting ready for tomorrow assume that 21 counsel will be making closing arguments. 22 And I think it's realistic to expect we 23 24 will have questions for you unlike opening statements

where we pretty much let you tell us what you wanted

1	without questions. We would expect to be asking some
2	questions tomorrow.
3	Very well. Are there any procedural
4	issues we need to address before we all go home for
5	the evening?
6	MS. CARPENTIER: Your Honor, the witnesses
7	for contention 8 would like to know if they're excused
8	from attendance tomorrow.
9	CHAIRMAN SPRITZER: I don't have any
10	further questions for them. I don't see any reason
11	for them to return.
12	MS. CARPENTIER: Thank you.
13	CHAIRMAN SPRITZER: We will have there
14	were some questions I should note. There were some
15	questions propounded by DTE and the staff for the
16	interveners on contention 8. Those we'll take
17	those up in the closing arguments since we didn't have
18	a witness to ask those of.
19	Yes, sir?
20	MR. LODGE: What time is the convening
21	time tomorrow morning?
22	CHAIRMAN SPRITZER: I believe we're
23	starting at 9:30 again.
24	MR. LODGE: Still 9:30? All right.
25	CHAIRMAN SPRITZER: And as I said we

1	should be able to finish. So, if people want to
2	change travel reservations to get out of here tomorrow
3	night that would be realistic.
4	Very well, thank you. We'll see you
5	tomorrow morning.
6	(Whereupon, the foregoing matter went off
7	the record at 5:29 p.m.)
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