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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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4 ATOMIC SAFETY AND LICENSING BOARD PANEL

5 HEARING

6

7 IN THE MATTER OF Docket Nos.

8 NUCLEAR INNOVATION NORTH 52-012-COL

9 AMERICA, LLC (NINA) 52-013-COL

10 (South Texas Project ASLBP No.

11 Units 3 and 4) 09-885-08-COL-BD01

12

13 Friday, August 19, 2011

14

15 Room 201 Building E

16 Texas Commission on

17 Environmental Quality

18 12100 Park 35 Circle

19 Austin, Texas

20

21 9:30 a.m.

22 BEFORE:

23 MICHAEL M. GIBSON, Chairman

24 GARY S. ARNOLD, Administrative Judge

25 RANDALL J. CHARBENEAU, Administrative Judge

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1 CONTENTS

2 CLOSING STATEMENTS PAGE

3 Applicant 1659

4 NRC Staff 1665

5 Intervenors 1672

6

7

8

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1 P R O C E E D I N G S

2 JUDGE GIBSON: Back on the record. I
3 understand that there have been some developments
4 since we recessed yesterday, so perhaps it may affect
5 how we proceed, so can you all let us know what's
6 going on?

7 MR. EYE: I'll do my best, Your Honor.

8 Mr. Mosenthal is, as we speak, either
9 headed to the hospital or there. I spoke to him about
10 45 minutes ago, give or take, and he had just left his
11 physician's office.

12 He was advised that they intend to do some
13 kind of a procedure on him today to try to deal with
14 this infection that is evidently not responding the
15 way they had hoped.

16 I spoke with Mr. Frantz, Mr. Spencer, and
17 we have also tried to come up with some alternatives
18 in terms of how to handle this contingency. The
19 alternatives range from doing simultaneous written
20 submissions to cross-examination questions by the
21 various witnesses, which would dispense with live
22 testimony today, I believe, under that plan, to
23 reconvening this proceeding, and I think that the
24 consensus was in order to kind of minimize the
25 logistics for everybody involved, that we would

1 perhaps suggest to do that in Rockville; to perhaps
2 even a telephone proceeding.
3 Am I leaving any of the possibilities out?
4 MR. FRANTZ: One other possibility is to
5 rest upon the written filings and have the board make
6 a decision based upon that without any further
7 questioning or, if the board has questions for the
8 staff's witness and the Applicant's witness but not
9 for Mr. Mosenthal, proceed today and then close the
10 record at the end of the day.
11 JUDGE GIBSON: Okay.
12 MR. EYE: We sort of presumed that you had
13 questions for Mr. Mosenthal; otherwise you would have
14 likely informed us at some earlier time. So that
15 seemed not like a likely --
16 JUDGE GIBSON: Yeah. I think there's
17 probably a good chance of that. Hold on just one
18 second.
19 (Pause.)
20 JUDGE GIBSON: Okay. Well, and with
21 respect to CL-2, are you envisioning that we would --
22 we're obviously not going to be able to resolve DEIS-1
23 today.
24 Are you envisioning that we would proceed
25 on CL-2, do closing arguments with respect to that,

1 submit proposed findings and conclusions, and then we
2 would resolve that issue, then proceed forward with
3 DEIS-1 when Mr. Mosenthal is well?
4 MR. EYE: That is certainly --
5 JUDGE GIBSON: Whatever mechanism we chose
6 to do it. Is that a fair statement?
7 MR. FRANTZ: Yes. I would urge the board
8 to do it that way while it's still fresh in the
9 parties' minds, preparing proposed findings, and fresh
10 in the board's minds then for issuing a partial
11 initial decision on CL-2.
12 JUDGE GIBSON: Right. I can only say that
13 I -- you know, having spent -- having been in your
14 shoes before, if I had prepared a closing argument and
15 didn't get a chance to give it for a month later, I
16 might -- that would be kind of like taking the air of
17 a balloon for a while.
18 MR. EYE: The only drawback that I would
19 see that it does -- given the nature of the questions
20 that you posed, they apply with equal force to both
21 contentions, I would seem.
22 JUDGE GIBSON: Uh-huh.
23 MR. EYE: I mean, conceptually they do.
24 My only reluctance would be that, depending on what
25 the evidence is on DEIS-1, it might affect how we

1 argue this at the end.

2 I mean, I don't know, because I don't know

3 what all the responses will be on the cross-

4 examination. But that's the only sort of drawback

5 inasmuch as we would not be able to have the benefit

6 of whatever evidence is going to come in on DEIS to

7 help know what we should say on closing.

8 And I think that we could proceed to a

9 closing today on CL-2, and then I guess maybe in the

10 form of proposed findings and conclusions sort of wrap

11 up a summation kind of argument in that on DEIS-1.

12 JUDGE GIBSON: Yeah, I -- that was going

13 to be my response until you made that last sentence,

14 and that is that your closing argument today is not

15 going to be the last word on it; you have an

16 opportunity to prepare proposed findings and

17 conclusions, and presumably the conclusions are going

18 to address the issue of the standard that the board

19 has to meet in evaluating the preponderance of the

20 evidence here.

21 So I think that it would make sense if --

22 from our standpoint, subject to Judge Charbeneau and

23 Judge Arnold disagreeing with me, but I think it would

24 sense to proceed with CL-2 and then to close out the

25 record on that part of the case.

1 And then we will address DEIS-1
2 subsequently. Perhaps how we address it, you know, may
3 depend in part on the state of your witness. I mean,
4 if the -- if he got some, you know, marine bacteria
5 that -- you know, I know that a few years ago my
6 daughter was visiting a friend, and they went to
7 Victoria, and there was some flesh-eating bacteria
8 that was out in the bay in Victoria, and they couldn't
9 do their jet-skis and swim out there like they
10 normally would have done.
11 So I think that there is -- there's some
12 really nasty marine bugs out there, so I guess it's
13 very possible that, you know, his recovery could take
14 a significant amount of time.
15 Consequently, you know, what we do I think
16 may be -- unless you all free strongly about this,
17 maybe how we proceed we shouldn't lock in at this
18 point until we know a little more information about
19 his medical condition.
20 And it doesn't seem to me that it would
21 be -- it would oblige us to do that until -- you know,
22 since we're going to go ahead and segregate out DEIS-1
23 from CL-2.
24 But, Mr. Frantz, Mr. Spencer, do you have
25 a contrary view or other considerations?

1 MR. FRANTZ: I think that's certainly true
2 in terms of the timing of what we do on DEIS-1. The
3 mechanism of whether we do it through written
4 questions or whether we do it through oral questions,
5 either in person or through teleconference, I think we
6 can probably decide that now and wait for the exact
7 timing based on Mr. Mosenthal's condition.
8 JUDGE GIBSON: Okay. Well, if we're going
9 to do that, then I think, you know, we might want
10 to -- the board might want to have a chance to recess
11 for a few minutes and consider this.
12 But go ahead, Mr. Spencer. You had
13 something to say.
14 MR. SPENCER: Your Honor, if -- the staff
15 would prefer live testimony, either physically present
16 or telephonic hearing, although we would be fine with
17 written questions.
18 If the board would want to go with the
19 written question route, there are two exhibits that we
20 filed on Wednesday -- submitted to the board on
21 Wednesday and were entered into evidence on Thursday
22 regarding renovations.
23 There were calculation worksheets in
24 those. We had intended on having those being, you
25 know, discussed at a live hearing. If the board would

1 want to go to the route of written questions, we would
2 want those exhibits -- two of those exhibits, the
3 calculation exhibits, to be considered in the form of
4 testimony.
5 JUDGE GIBSON: Okay. Fair enough.
6 Anything else about this?
7 MR. EYE: I don't believe so. I think
8 we've sort of covered the front on it.
9 JUDGE GIBSON: If you all could, let the
10 board recess for just five minutes. Let us consider
11 this, and then we'll see if we can't reach a decision
12 in how we want to proceed, make sure that's agreeable
13 to you, and then we'll plan on that. Okay?
14 MR. EYE: Thank you.
15 (Whereupon, a short recess was taken.)
16 JUDGE GIBSON: I think that what we -- how
17 we would like to proceed is this: We will have
18 closing arguments on CL-2, and that will include as
19 well your perspectives on this preponderance-of-the-
20 evidence issue.
21 We will then have -- talk a little bit
22 about proposed findings and conclusions and dates,
23 closing the record and what-not, after closing
24 arguments.
25 We will -- one of the things I would like

1 you all to give some thought to when we do take that
2 issue up is whether or not the date by which we'll
3 need to get those proposed findings and conclusions
4 in -- because if we're looking at having -- trying the
5 DEIS contention in September, presumably your proposed
6 findings and conclusions are going to be -- you're
7 going to be preparing those, and you may be stretched
8 thin.
9 So it seems to me we've got a couple of
10 things that are going to be going on at the same time,
11 and I know that's -- I know you'd be involved in it no
12 matter what it was, Mr. Frantz, but I know that Mr.
13 Eye has, you know, got a little smaller law firm than
14 you do, and so I suspect that, you know, this along
15 with his other workload, you know, may impact that.
16 So all I'm saying is I just would like you
17 all to give some thought to that so when we do take up
18 proposed findings and conclusions, you're sort of
19 factoring in when we might try this DEIS contention.
20 I do think that the board members I think
21 feel strongly that we need to have live trial, not
22 written statements. If for some reason, you know, Mr.
23 Mosenthal is unable to travel, I guess we could always
24 hold it in Vermont instead of in Rockville, but short
25 of that, I think we'll plan on when we can do this,

1 and hopefully it won't be too long.

2 I mean, I know it's not going to be next

3 week or the week after, but it's going to be in

4 September or it's going to be in October probably, and

5 I think that's really what we're looking at here.

6 And then we've got to account for

7 everybody's schedule, because everybody's busy, and

8 they've got other things going on, because they had

9 assumed that this thing was going to be over today.

10 So there's just a lot of things to be

11 thinking about, so I would appreciate it if you all

12 would give some thought to that so that when we do

13 take that up after closing arguments, we can discuss

14 when proposed findings will be due and when -- you

15 know, sort of bracket when the trial might occur.

16 Is there anything else on this? Does that

17 pretty well give you all what you need in order to

18 plan?

19 MR. FRANTZ: Yes, it does. Thank you.

20 JUDGE GIBSON: Mr. Spencer?

21 MR. SPENCER: Yes, Your Honor.

22 JUDGE GIBSON: Mr. Eye?

23 MR. EYE: Yes, it does.

24 JUDGE GIBSON: Okay. Well, then I guess

25 we can go ahead and -- if there's nothing else, we can

1 go ahead and proceed to closing arguments, and then we
2 will take up all these final issues after that.
3 Have you all discussed -- reached any
4 agreement among yourselves about how much time you're
5 going to need, or are you just going to tell me?
6 MR. FRANTZ: We've not discussed it with
7 the other parties. I would need less than 10 minutes.
8 JUDGE GIBSON: Mr. Spencer?
9 MR. SPENCER: Eight to ten minutes.
10 MR. EYE: I'm in the same range, Your
11 Honor.
12 JUDGE GIBSON: Okay. You want to split
13 your time, Mr. Frantz?
14 MR. FRANTZ: Yeah. I would like to have
15 an opportunity to respond to the other parties, if
16 need be.
17 JUDGE GIBSON: Okay. Well, if we're --
18 how about if we give you guys ten minutes each. Is
19 that okay?
20 MR. FRANTZ: Yes.
21 JUDGE GIBSON: Is that plenty? And then
22 you can say whatever you want to and then reserve some
23 time of that at the end. Okay?
24 MR. FRANTZ: Yes. Thank you.
25 JUDGE GIBSON: And then we'll have Mr.

1 Spencer, then Mr. Eye, and then you can conclude. Is
2 that okay, Mr. Frantz?
3 MR. FRANTZ: Yes.
4 JUDGE GIBSON: Okay. Do you want to do it
5 from your chair, or do you want us to bring the little
6 lectern in or --
7 MR. FRANTZ: I'm happy to do it from my
8 chair.
9 JUDGE GIBSON: You're okay?
10 MR. FRANTZ: Uh-huh.
11 JUDGE GIBSON: Okay. All right. Please
12 proceed.
13 CLOSING ARGUMENT ON BEHALF OF THE APPLICANT
14 MR. FRANTZ: I would first like to address
15 the issue posed by the board on the legal standard for
16 judging these contentions.
17 Under NEPA there is no requirement that
18 the best possible methodology be used, that
19 conservative or worst-case assumptions be postulated,
20 or that remote and speculative possibilities be
21 considered.
22 Instead, NEPA is subject to a rule of
23 reason. In that regard, the Applicant and the NRC
24 staff's methods are acceptable under NEPA as long as
25 they are reasonable.

1 As the Commission stated in Pilgrim, in
2 CLI-10-11, which dealt with SAMDA issues, there is no
3 NEPA requirement to use the best scientific
4 methodology. NEPA should be construed in the light of
5 reason if it's not to demand virtually infinite study
6 and resources.
7 Similarly, the Commission stated in
8 Private Fuel Storage, at CLI-04-22, that it asks not
9 whether every assumption contained in an FEIS was the
10 best or whether it will turn out to be true, but
11 whether economic assumptions were so distorted as to
12 impair fair consideration of any environmental
13 effects.
14 Similarly, in the context of power
15 forecasts, the Appeal Board stated in Nine Mile Point
16 at ALAB-264, that inherent in any forecast is
17 substantial margins of uncertainty, and therefore a
18 forecast should be accepted as long as it is
19 reasonable.
20 Therefore, as long as the environmental
21 analyses performed by the Applicant and the NRC staff
22 are reasonable, they are not open to criticism because
23 the Intervenors advocate a different methodology or a
24 different number.
25 When applying these considerations to the

1 contentions that we have today before the board, it is
2 clear that the board need not decide which number or
3 which method is the best or optimal number or method.
4 Instead, the board should simply evaluate
5 the analysis performed by the staff in the FEIS and
6 the analysis performed by the Applicant in the
7 environmental report to determine whether are not they
8 are reasonable.
9 If the preponderance of the evidence shows
10 that they are reasonable, the board should therefore
11 rule in favor of the Applicant and the NRC staff.
12 In this regard I would note that the
13 Intervenors have not claimed that our analysis or the
14 staff's analysis is unreasonable. Instead they simply
15 propose alternative methods or alternative numbers,
16 the case in point, for example, being the escalation
17 factors.
18 There's no dispute that we have used
19 reasonable escalation factors, the staff has used
20 reasonable escalation factors. The Intervenors have
21 had different numbers to be used, but they have not
22 claimed that our numbers are unreasonable.
23 And the board need not decide which of the
24 three alternatives is the best. All it needs to
25 decide is whether our method is reasonable.

1 In any event, even if you disregard these
2 legal principles, both the Applicant and the NRC staff
3 have performed bounding analysis using many of the
4 assumptions postulated by the Intervenors.
5 Even using the Intervenors' numbers, the
6 Applicant and the NRC staff have shown that the
7 conclusions in the SAMDA analysis are not affected.
8 Therefore the board, again, does not need to decide
9 whether they should use our numbers or the staff's
10 number or the Intervenors' numbers, because these
11 bounding analyses show that the conclusions are not
12 affected and that there is not cost-effective SAMDA.
13 With respect to CL-2, the Applicant has
14 demonstrated in its environmental report that it has
15 used the accepted NRC methodology for calculating the
16 various replacement power costs and performing the
17 SAMDA analysis.
18 We would stipulate -- or postulate that
19 using the NRC-accepted methodology is inherently
20 reasonable, and we would urge the board to rule that
21 our environmental report on these SAMDA analysis is
22 reasonable under NEPA and that there is no cost-
23 effective alternative based upon that.
24 Nevertheless, we have, as I said, used our
25 bounding assumptions. We believe we are very

1 conservative in what we have evaluated. For example,
2 our analysis has five very conservative assumptions.
3 First we have used the escalation rate
4 based upon the consumer price index and even the
5 escalation postulated by the Intervenors, and based
6 upon that escalation rate, we again have shown that
7 there is no cost-effective SAMDA.
8 Second of all, in addition to using the 7
9 percent discount rate recommended by both the NRC
10 staff guidance document and by the Office of
11 Management and Budget, we have used a 3 percent
12 discount rate recommended by the Intervenors as a
13 sensitivity analysis, and again we have shown that
14 there is no cost-effective SAMDA.
15 Third, we have used the highest market
16 prices for electricity in the ERCOT region ever since
17 ERCOT was deregulated back in the early 2000s, and
18 again, using that highest price, which is from 2008,
19 we have shown that there is no cost-effective SAMDA.
20 Fourth, we have assumed that an outage of
21 the four STP units would cause price spikes. In fact,
22 we have assumed that the price spikes will last for an
23 entire year, which is far longer than I think anybody
24 would postulate. In actually the price spikes would
25 probably only last a couple days.

1 Fifth, we have assumed that an outage of
2 the STP units could result in a loss of the grid,
3 which has never occurred in Texas since the
4 deregulation of the market. We have further assumed
5 that the loss of the grid would have an economic
6 impact of $45 billion, which is four times the cost of
7 the Northeast blackout in 2003 and is 10 times the
8 cost that we calculated for a blackout here in Texas.
9 Despite making these very conservative
10 assumptions, we have shown that there is no cost-
11 effective SAMDA. In fact, we have shown that the cost
12 of the most cost-effective SAMDA is several times
13 higher than the benefit to be achieved by the SAMDAs.
14 The Intervenors don't dispute these
15 underlying facts. Instead they appear to be arguing
16 that the Applicant should not be allowed to account
17 for risk reduction in its SAMDA analysis.
18 However, a SAMDA typically can eliminate
19 only a few percent of the actual damage caused by a
20 range of severe accidents at a plant and it's only
21 reasonable to account for this risk reduction to be
22 achieved by any particular SAMDA.
23 In that regard, both NRC guidance
24 documents and our initial environmental report allowed
25 for accounting for risk reduction in evaluating

1 SAMDAs.

2 There's simply no basis in either law or
3 fact for not accounting for risk reduction, and once
4 we account for risk reduction, as allowed by our own
5 environmental report, there is -- it's not even close.
6 There is simply no cost-effective SAMDA by a very,
7 very wide margin.

8 Thank you.

9 JUDGE GIBSON: Thank you.

10 Mr. Spencer, are you all going to be
11 splitting your time here?

12 MR. SPENCER: No, Your Honor.

13 JUDGE GIBSON: Okay.

14 CLOSING ARGUMENT ON BEHALF OF NRC STAFF

15 MR. SPENCER: Your Honor, I will begin by
16 addressing the question posed by the board to the
17 parties regarding the proper focus of the board's
18 decision; namely whether the board should be deciding
19 which party has the best, most accurate calculations
20 or whether the board should simply find that the
21 Applicant and the staff's analyses are reasonable.

22 The answer to the board's question is that
23 the board need only determine that the staff's
24 analysis was reasonable and in compliance with NEPA.
25 This answer is supported by four points.

1 First, the board's decision should focus
2 on the work of the NRC staff. As the Commission
3 stated in the Levy COL proceeding, the ultimate burden
4 with respect to NEPA lies with the NRC staff. This
5 decision is in CLI-10-02, at page 9 of the slip
6 opinion.
7 The Commission has also held that NRC
8 hearings on NEPA issues focus on the adequacy of the
9 staff's work. The citation for this is Vogtle ESP,
10 CLI-7-17, 65 NRC 392 at page 395.
11 I do note, however, that a licensing board
12 has held that if an applicant is a proponent of a
13 position that is taken in the EIS and that that
14 position is challenged in a contention, then the
15 applicant also bears the burden on that issue.
16 The second point supporting our answer is
17 that the Commission has held that an agency is free to
18 select its own methodologies, so long as these
19 methodologies are reasonable.
20 This was stated in the Pilgrim decision,
21 CLI-10-11, page 37 of the slip opinion. This means
22 that a reasonable analysis by the NRC staff complies
23 with NEPA even if the Intervenors were to have
24 preferred that a different analysis had been
25 performed.

1 Also according to the Commission, the
2 staff's NEPA analysis is adequate, unless the staff
3 has failed to take a hard look or, in other words, the
4 staff has unduly minimized or ignored pertinent
5 environmental effects, and the Commission stated this
6 in the McGuire/Catawba proceeding, CLI-3-17, 58 NRC
7 419 at page 431.
8 The third point supporting the staff's
9 answer is that the board does not have to determine
10 for compliance with NEPA whether the parties
11 calculations are the best or the most accurate,
12 because NEPA does not require reliance on the best
13 methodology or the most precise methodology.
14 To support this I cite the Commission's
15 decision in Pilgrim, in which the Commission said that
16 NEPA does not require the use of the best scientific
17 methodology or the use of alternative methodologies
18 simply because they are plainly better. This decision
19 is CLI-10-11, at page 37 of the slip opinion.
20 In addition, the Commission said in the
21 LES proceeding that NEPA does not call for certainty
22 or precision. This decision is CLI-5-20, 62 NRC 523
23 at page 536.
24 The fourth and final point is that the
25 Commission had held that licensing boards do not sit

1 to flyspeck environmental documents or add details or
2 nuances. The Commission said instead that if the ER
3 or EIS comes to grip with all important
4 considerations, nothing more needs to be done. The
5 Commission said this in the Clinton ESP decision, CLI-
6 5-29, 62 NRC at page 811.
7 All this means that the staff should
8 prevail on these contentions if it has performed a
9 reasonable analysis in compliance with NEPA. The
10 staff has done just this.
11 I will now turn to contention CL-2.
12 Contention CL-2 concerns the STP SAMDA analysis. In
13 the Pilgrim decision the Commission said that the only
14 goal of a SAMDA analysis is to determine whether there
15 is a cost-beneficial SAMDA. It stated this CLI-10-11,
16 page 37 of the slip opinion. The evidence presented
17 by the staff clearly shows that there are not cost-
18 beneficial SAMDAs.
19 In contention CL-2 the Intervenors claimed
20 that the Applicant's SAMDA analysis was deficient
21 because it failed to account for five factors: 1,
22 replacement power cost using 2008 ERCOT prices; 2,
23 market effects, 3, consumer impacts; 4, price spikes;
24 and, 5, grid outages.
25 In response to this contention, the

1 Applicant later updated its SAMDA analysis to address
2 each of these five factors. In the staff's direct
3 testimony, the staff's three highly qualified experts
4 performed an independent analysis of the Applicant's
5 analysis and made appropriate adjustments.
6 The staff conservatively accounted for the
7 five economic factors raised by the Intervenors. They
8 did this by, 1, using historically high 2008 ERCOT
9 prices in the replacement power costs calculation; 2,
10 calculating market effects based on these historically
11 high 2008 ERCOT prices; 3, calculating consumer
12 impacts based on these historically high 2008 ERCOT
13 prices; 4, accounting for price spikes by adding an
14 additional 20 percent impact to the 2008 ERCOT prices
15 that already include price spike impacts; 5, the staff
16 accounted for grid outages by assuming a 10 percent
17 conditional probability of occurrence and a $10
18 billion impact based on the 2003 Northeast blackout.
19 This $10 billion impact is an impact that
20 Mr. Johnson, in his testimony, stated was close to a
21 worst-case example.
22 The staff's direct testimony also included
23 consideration of the actual risk-reduction potential
24 of the SAMDAs, accounting for the extent to which the
25 SAMDAs would reduce core damage frequency.

1 After more realistically accounting for
2 the actual risk that the SAMDAs could avert, the staff
3 determined that the SAMDA that was closest to being
4 cost beneficial had an implementation cost that was 29
5 times greater than the actual cost it could possibly
6 avert: 29 times greater.
7 The Intervenors' expert, Mr. Johnson, has
8 not claimed that the staff analyses of the five
9 economic factors raised in contention CL-2 is
10 unreasonable. In addition, the Intervenors have not
11 provided any qualified expert to contest the staff's
12 consideration of the actual risk-reduction potential
13 of the SAMDAs.
14 In his direct testimony Mr. Johnson did
15 differ with the staff in three areas. One was
16 discount rate; the other was inflation index; the
17 third was cost-of-living adjustment.
18 In the staff's rebuttal testimony, the
19 staff, even though they disagreed with Mr. Johnson's
20 proposals, incorporated each of his proposed numbers
21 into the staff's refined analysis.
22 And even after doing so, the staff found
23 that the SAMDA that was closest to being cost
24 beneficial was still 14 times greater than the actual
25 cost it could possibly avert.

1 Clearly there are no cost-beneficial
2 SAMDAs at the STP site, but this was to be expected.
3 As NRC staff witness Mr. Emch explained yesterday, the
4 risk insights from the PRA were used in designing the
5 ABWR; that is the reason why the ABWR has such a very
6 low amount of risk.
7 The ABWR SAMDA analysis concluded that
8 there were no cost-beneficial SAMDAs, and the STP
9 SAMDA analysis performed by the staff confirms that
10 result and shows that there are clearly no cost-
11 beneficial SAMDAs for the STP site.
12 Because the only goal of a SAMDA analysis
13 is to determine whether there is a cost-beneficial
14 SAMDA and the staff's analysis demonstrates that there
15 are no cost-beneficial SAMDAs, contention CL-2 is
16 without merit, and the board should find in favor of
17 the staff.
18 JUDGE GIBSON: Thank you. One thing: You
19 used the phrase PRA; that's probabilistic risk
20 analysis? Is that correct?
21 MR. SPENCER: Probabilistic risk
22 assessment.
23 JUDGE GIBSON: Assessment. Okay. Just
24 wanted to be sure our court reporter knows about that.
25 Thank you.

1 Mr. Eye?

2 MR. EYE: Thank you, Your Honor.

3 CLOSING ARGUMENT ON BEHALF OF THE INTERVENORS

4 MR. EYE: Your Honor, as far as the
5 questions that the panel posed that you wanted to have
6 addressed in our closing, I don't know that there's
7 anything particularly complicated about burdens of
8 proof and how those are apportioned in this particular
9 case.

10 As articulated by both the Applicant and
11 the staff, there's a recognition that on -- the
12 proponent or an order or rule has the burden of proof,
13 and the burden of proof is the preponderance of
14 evidence, and that's well established in both
15 statutory and case law.

16 The real complexity that happens in this
17 case when you try to apply that rule happens because
18 of the very nature of the moving parts, if you will,
19 that have a bearing on CL-2.

20 But before we get into that in somewhat
21 more detail, I think it's important to note that under
22 NEPA -- that's the National Environmental Policy
23 Act -- 42 USC 4321, et seq., there must be a
24 discussion in the Environmental Impact Statement that
25 is sufficient to allow you as decision makers and your

1 counterparts on the Commission to be confident that
2 there has been a hard look at the environmental
3 impacts and then be able to make reasoned decisions
4 from those analyses.
5 An EIS has to be adequate -- sufficiently
6 adequate to enable those who did not participate in
7 its preparation to both understand the environmental
8 factors and understand how those environmental factors
9 apply to the particular facts of this case.
10 Contention CL-2 addresses the Severe
11 Accident Mitigation Design Alternatives that are
12 required to be considered in these proceedings. When
13 this is applied to NEPA, it's clear that design
14 alternatives that may bear on NEPA's mandate to
15 consider alternatives -- there has to be consideration
16 whether or not that's been met under NEPA.
17 It's required under 10 CFR Section
18 51.71(d). The contentions -- our contention that
19 we've advanced related to SAMDA is germane because it
20 in fact does appear that adopting Mr. Johnson's
21 analyses would add an additional factor that, using
22 other assumptions or models, may change the cost-
23 benefit conclusions that have been reached in the
24 Environmental Impact Statement and in the
25 environmental report that was prepared by the

1 Applicant.

2 In our judgment this board is confronting
3 the primary question of whether the SAMDA analysis
4 resulted in erroneous conclusions as the cost-benefit
5 analysis that has been reached -- or the conclusions
6 regarding the cost-benefit analysis that have been
7 reached by the staff and Applicant.

8 In our view, in order to deal with that
9 issue, four things should be considered: 1, what
10 inflation rate should be used to adjust SAMDA costs;
11 2, whether SAMDA costs should account for regional
12 economic differences; 3, whether the Applicant's
13 projection of market effects caused by loss of all
14 four STP units is reasonable; and, 4, whether a 3
15 percent or 7 percent discount rate should be applied
16 to the SAMDA costs.

17 Mr. Johnson, in his testimony, both direct
18 and rebuttal, and in his response to cross-examination
19 questions yesterday, addressed all four of those
20 points, and I do not believe that there was any
21 indication that his position had either altered or was
22 substantially or materially changed from his testimony
23 that he had prefiled.

24 It appears to us that Mr. Johnson's
25 methodology is a more refined approach to determining

1 proper SAMDA escalation costs than either the
2 Applicant or the staff have advanced.
3 And I think it's important to note that in
4 cross-examination yesterday, a question was posed as
5 to why NUREG should be used as a -- I believe it's
6 NUREG 1084 -- should be used to calculate replacement
7 power costs rather than focusing on the ERCOT data,
8 and I believe Mr. Johnson suggested using 2008 data in
9 that regard; why we should essentially default to the
10 NUREG as opposed to using a more precise and accurate
11 and contextual ERCOT data point?
12 And I think that the question that was
13 asked in the regard is very -- is extremely salient.
14 Remember Mr. Johnson's response. He said NUREG
15 assumed that electricity rates would be determined on
16 a regulated basis.
17 Contrast that with ERCOT, that is
18 essentially a market-based methodology to determine
19 rates. NUREG might work in some instances, but it
20 doesn't work here, and to rely on NUREG when it's
21 clear that it does not have the kind of precision and
22 applicability that using ERCOT data would yield is not
23 reasonable. There is too much of a gap between that
24 which NUREG anticipates and what the ERCOT data would
25 yield.

1 So relying on the NUREG methodology in
2 other jurisdictions where there are rate-based -- or
3 I should say regulatory based rates doesn't work here.
4 And relying on anything other than ERCOT data, which
5 are accurate and applicable we believe is
6 unreasonable.
7 ERCOT has a lot of unique attributes, and
8 NUREG just doesn't take those into account, and we
9 don't think that that's a reasonable approach.
10 As Mr. Johnson has pointed out, his more
11 refined methodology yielded a SAMDA cost of -- there
12 was about a $3000 range, between $128,159 up to
13 $131,515. That is below the threshold of $141,211
14 that the Applicant projects as a monetized impact.
15 There has been nothing in the course of
16 cross-examination of witnesses that has really altered
17 that particular conclusion.
18 A while ago we heard Mr. Frantz and Mr.
19 Spencer argue that all they have to do is show that
20 their methodology is not unreasonable or, stated in
21 a more direct way, that their methodology is
22 reasonable.
23 And that is certainly the general rule,
24 but in the Pilgrim case -- that's in the matter of
25 Entergy Nuclear Generation Company and Entergy Nuclear

1 Operations, Incorporated; Pilgrim Nuclear Power
2 Station; that's CLI-10-11 (2010), Westlaw 1235387 at
3 page 19 of that opinion -- it's the -- the Commission
4 recognized that to the extent that a more precise
5 methodology actually yields a result that makes a
6 material benefit in the cost-benefit analysis, that
7 should be adopted rather than the more generalized
8 approach that has been advanced by the Applicant and
9 the staff.
10 It is -- as that opinion points out, it is
11 genuinely plausible that looking at Mr. Johnson's
12 analyses does allow a conclusion that the assumptions
13 and models that have been advanced in this case to
14 support the staff and the Applicant's positions are
15 altered in a material way.
16 And in that regard it takes this case out
17 of the general analytical context of simply
18 determining whether or not the methodology is
19 reasonable and instead advances it into looking at
20 whether or not Mr. Johnson's analysis actually changes
21 the cost-benefit test. And we contend that it does.
22 Therefore our position is that the
23 Applicant's and staff's reliance on the generic
24 methodology that has been relied upon is not
25 reasonable because of the distinctions that are fact

1 based in this case.

2 Clearly the SAMDA question is an important

3 one to the Intervenors. The Intervenors have been

4 involved in this case -- I think most would conclude

5 that our reason for being here is an attempt to make

6 sure this plant is never licensed, and if we were to

7 rank-order our objectives, that would be number one.

8 However, in recognition of realities that

9 are both historical and present, we recognize that

10 there is the chance that this plant will be licensed.

11 If so, then SAMDAs ought to be implemented to the

12 extent that they can be demonstrated to fall within

13 the range of where they would have to meet the cost-

14 benefit test, because what we are doing at that point

15 is adding on safety measures that would either prevent

16 or, importantly -- and minimized by both the staff and

17 Applicant -- mitigate the effects of severe accidents.

18 And to the extent that we now have a means

19 by which to make that comparison, looking at Mr.

20 Johnson's methodology, as opposed to the staff and

21 Applicant's, this panel can reach a conclusion that

22 would indicate that the cost-benefit analysis used by

23 the staff and Applicant is not sufficiently refined

24 and precise, nor relies on data from ERCOT to form the

25 basis for this panel's decision to approve the SAMDA

1 analysis that has been advanced by the staff and
2 Applicant.
3 We are, of course, interested in, as I
4 said, our objectives, but we also recognize that the
5 demands of NEPA point us in the same direction.
6 It is true, as the staff and Applicant
7 have argued, that NEPA generally requires only a rule
8 of reason, but we urge that this panel take into
9 account the unique attributes that apply to this
10 particular case, this particular plant and adopt Mr.
11 Johnson's methodology as one that is not only more
12 reasonable but more precisely tailored to the facts at
13 hand.
14 And if that is done, then this panel can
15 conclude that the burden of proof that is required to
16 be met by both the staff and Applicant has not been
17 met and have an order that essentially says that
18 because the burden of proof was not met, these
19 contentions are -- the ruling on these contentions is
20 made in favor of the Intervenors, and at point the
21 staff and Applicant can either drop back and try to
22 redo the environmental review, in the case of the
23 Applicant; the EIS in the case of the staff, and
24 conform their findings more consistently with the
25 actual facts and evidence that have been yield in

1 these proceeding.

2 Thank you.

3 JUDGE GIBSON: Thank you, Mr. Eye.

4 And, Mr. Frantz, you have some --

5 MR. FRANTZ: Yes, very quickly.

6 First of all, we really have done two
7 analyses; one, we had the analysis in our
8 environmental review, and, two, we have a second
9 analysis in our testimony that uses the assumptions
10 postulated by Mr. Johnson. We've used a 3 percent
11 discount rate; we've used his recommendation on the
12 inflation rate. We've used the 2008 most conservative
13 ERCOT data.

14 Despite piling conservatism on
15 conservatism on conservatism, we have shown in our
16 testimony that there still is no cost-effective SAMDA
17 by a wide margin.

18 You heard some of the numbers
19 postulated -- posed by Mr. Spencer that showed a large
20 difference between the cost of a SAMDA and the
21 benefits of the SAMDA, and it's not even close.

22 Mr. Johnson essentially has ignored the
23 impact of the risk-reduction factor in a SAMDA. If
24 you look at these SAMDAs, the lower-price SAMDAs do
25 not achieve very much reduction in core damage

1 frequency.

2 You're looking for most of these at just

3 several percent, at most. When you take into account

4 the fact that most of these SAMDAs do not affect core

5 damage frequency to any significant effect, there just

6 simply is no cost-effective SAMDA.

7 Mr. Johnson does not dispute that.

8 There's nothing in his testimony -- written testimony;

9 there's nothing that he said yesterday that would

10 dispute that once risk reduction is taken into

11 account, there is not cost reduction -- no cost-

12 effective SAMDA by a very wide margin, and therefore

13 both the staff and the Applicant are entitled to a

14 judgment in this case.

15 JUDGE GIBSON: Thank you, Mr. Frantz.

16 If y'all don't mind, we can proceed with

17 closing out the case today. Is that okay?

18 First I think we need to talk about

19 transcript corrections. When you do get a copy of the

20 transcript, I would you to submit your proposed

21 transcript corrections with this in mind: It is

22 designed to correct an error that the court reporter

23 made in transcribing, not an error that your witness

24 made in testifying.

25 I would like to ask NINA to take the lead

1 on coming up with hopefully an agreed proposed
2 transcript corrections and to come up with a list that
3 you can share with the other parties. The other
4 parties will be reviewing the transcript as well, but
5 at least if you can come up with the draft.
6 Let me ask you: How long do you need? Is
7 10 days going to be enough? We only have like one day
8 of testimony.
9 MR. FRANTZ: That should be sufficient.
10 Ten days after we receive the transcript?
11 JUDGE GIBSON: Right. Is that okay, Mr.
12 Eye?
13 MR. EYE: Yes, sir.
14 JUDGE GIBSON: So within 10 days you'll
15 circulate the proposed transcript corrections, and if
16 for any reason one of the parties does not like the
17 proposed corrections, has any disagreement, you can
18 have five days thereafter to file an objection to
19 whatever someone proposes that you can't agree on.
20 MR. FRANTZ: Mr. Chairman? I'm sorry.
21 JUDGE GIBSON: Yes.
22 MR. FRANTZ: Typically we do not receive
23 notice of when the transcript's available. It would
24 be helpful if we could receive notice so that all
25 parties would be aware of when the transcript's

1 available.

2 JUDGE GIBSON: Okay. Well, I have to tell

3 you this is my first experience, as well as Judge

4 Charbeneau and Judge Arnold, so I don't really know

5 exactly how that's going to happen, but we'll ask the

6 court reporter and Mr. Welkie to be sure that the

7 parties are notified that the transcript is ready to

8 be reviewed.

9 MR. FRANTZ: Thank you.

10 JUDGE GIBSON: Thank you.

11 Mr. Esser will also try to make sure that

12 happens.

13 One thing to be sure is whatever you do to

14 correct the transcript, please be sure and consult

15 10 CFR 2.327(d) and use that format.

16 Now, we can't close the record in this

17 case until the transcript itself is corrected, so once

18 the record is closed, the 90-day clock begins to run

19 on this board to issue its final -- its initial

20 decision.

21 So in order for us to do that, we're going

22 to need to get your proposed findings and conclusions.

23 Under 10 CFR 2.1209, each party is to submit its

24 proposed findings and conclusions within 30 days of

25 the conclusion of this hearing, as opposed to the

1 conclusion of the record, or such different time as
2 the board deems appropriate.
3 Now, I think this again goes back to what
4 I talked about earlier, which is you guys are looking
5 at trying the DEIS contention at the same time you're
6 trying to prepare this.
7 But at the same time, we've only got one
8 day of testimony, just one contention. This is not
9 like a two-week trial. So what do you say?
10 MR. FRANTZ: Your Honor, I also note, of
11 course, that presumably we've all prepared our
12 witnesses; they're already to go, so there shouldn't
13 be much time associated with preparation.
14 JUDGE GIBSON: Or the trial.
15 MR. FRANTZ: Or the trial.
16 JUDGE GIBSON: Right.
17 MR. FRANTZ: So I would suggest that we
18 adhere to the 30-day period.
19 JUDGE GIBSON: Okay. Mr. Spencer?
20 MR. SPENCER: I'm fine with that, as long
21 as any hearing that we would have on DEIS-1 would not
22 be so close to the 30-day date, which I believe is
23 September 19.
24 JUDGE GIBSON: Okay. Mr. Eye?
25 MR. EYE: Your Honor, I would ask for just

1 a little bit more time. I have a trial that begins
2 September 12, will go either four or five days that
3 week.
4 If we could -- which begins to overlap
5 with getting --
6 JUDGE GIBSON: Right.
7 MR. EYE: -- these done. So if we could,
8 instead of the 19th being our due date, move that out
9 just a few days, that would give me adequate time to
10 both try that case and get --
11 JUDGE GIBSON: Okay. If we say 35 days
12 instead of 30, will that be okay?
13 MR. EYE: That's fine.
14 MR. FRANTZ: That's fine with me.
15 JUDGE GIBSON: That will work for you, Mr.
16 Frantz, Mr. Spencer?
17 MR. SPENCER: Thirty-five days is fine
18 with me, Your Honor.
19 JUDGE GIBSON: Okay.
20 MR. EYE: Thank Your Honor. I appreciate
21 that.
22 JUDGE GIBSON: Okay. Normally the board
23 would be squawking about 35 days, but since we only
24 have one contention, I don't think that we're going to
25 be in a -- you know, we're getting squeezed a little

1 bit on our end, because we have to get the initial
2 decision out, but I think that 35 days will be just
3 fine.
4 Just a minute, Mr. Frantz. I think Mr.
5 Matthews is anxious to talk to you.
6 (Pause.)
7 JUDGE GIBSON: Was there anything else?
8 MR. FRANTZ: No.
9 JUDGE GIBSON: Okay. So we're looking at
10 35 days from now is when your proposed findings and
11 conclusions will be due, and your transcript
12 corrections, on which you'll be basing those findings
13 and conclusions, so keep that in mind.
14 So obviously you guys have 10 days from
15 the date that the transcript is available to do those
16 corrections, but if you can get it sooner, it will
17 make your job easier. So you're squeezing yourself in
18 that sense. Okay.
19 Is there anything else that we need to
20 deal with in terms of CL-2?
21 MR. FRANTZ: I don't believe so.
22 MR. SPENCER: No, Your Honor.
23 MR. EYE: I don't think so, Your Honor.
24 JUDGE GIBSON: Okay. With respect to
25 DEIS-1 or DEIS-1(g), whatever the proper name of it

1 is, we're going to be sort of in a state of suspension
2 until we hear more from you, Mr. Eye. I guess you'll
3 just apprise us of Mr. Mosenthal's state?
4 MR. EYE: When we closed our phone call
5 today with Mr. Mosenthal, I said I'd check with him on
6 Monday, and I think we'll just sort of do that maybe
7 day to day or something like that.
8 JUDGE GIBSON: Okay. Let's just think for
9 a second. You've got a trial coming up September
10 12 --
11 MR. EYE: Yes, sir.
12 JUDGE GIBSON: -- to 17. Proposed
13 findings and conclusions are going to be due 35 days
14 from now. Okay. That's going to be the following
15 week.
16 So I'm just guessing that we're going to
17 end up trying the DEIS contention in October. That's
18 just what I'm thinking is going to happen. If you've
19 got a trial in the middle of September, that kind
20 of -- and these proposed findings and conclusions are
21 due -- I think we're looking at October.
22 Does anybody have any --
23 MR. FRANTZ: One of our key people is not
24 going to be available from October 4 through 13.
25 JUDGE GIBSON: That's fine. We should be

1 able to do it sometime after the 13th, then.

2 MR. FRANTZ: Okay.

3 MR. EYE: Right. I think that that would

4 work on our end as well.

5 JUDGE GIBSON: Okay.

6 MR. EYE: Things kind of finally ease up.

7 JUDGE GIBSON: All right. Hold on a

8 minute. Mr. Spencer wants to check with his witnesses

9 to see.

10 (Pause.)

11 MR. SPENCER: Your Honor, our witnesses

12 would need a few minutes to check their calendars to

13 see about --

14 JUDGE GIBSON: Well, we're not going to

15 set the date anyway, Mr. Spencer.

16 MR. SPENCER: Okay.

17 JUDGE GIBSON: I think the only point

18 is -- this is what I would ask. Okay? We already

19 know that your witness can't be available till the

20 13th, Mr. Frantz, and so I'm thinking -- and September

21 just looks nuts. I mean, I don't see how we could do

22 this.

23 So if we're doing that, I think what we

24 really need to be doing is to try to make sure that we

25 find some dates. And what I would suggest is the

1 three of you will talk and come up with some ideas,
2 and then you can advise Mr. Esser; we can have a
3 conference call, a status conference on that. We can
4 set a date, and then we'll get an order out.
5 Is that okay?
6 MR. FRANTZ: One other possibility -- I
7 hope -- we all hope, of course, for Mr. Mosenthal's
8 speedy recovery.
9 JUDGE GIBSON: Right.
10 MR. FRANTZ: If in fact he does have a
11 speedy recovery, would even before Labor Day be a
12 possibility for the hearing, perhaps in Rockville,
13 because we have more control over those facilities.
14 MR. EYE: That would probably be tricky
15 for me, because between now and the 12th of September
16 I'm pretty jammed up, and to work in a travel day and
17 trial day and -- I don't know that that's realistic on
18 our end, Your Honor.
19 JUDGE GIBSON: And let me just say we
20 have -- the board has some of our own difficulties
21 before then, because we had assumed we'd all be done
22 today, and so some of us had planned on, you know,
23 having a little bit of vacation, and so hopefully we
24 won't be getting as much criticism as Obama is from
25 the Republicans for our vacation, but anyway --

1 (General laughter.)

2 JUDGE GIBSON: So I guess we're -- you

3 know, I think realistically we're probably looking at

4 October, but in any event, what I need you guys to do

5 is to confer once you've had a chance to talk to your

6 witnesses, and we'll try to find a day that we can do

7 this.

8 We should be able to knock this out in a

9 day in Rockville, so it shouldn't be that hard to

10 schedule; we just need to make sure all our witnesses

11 can be in one place at one time.

12 The one thing I would also add is, you

13 know, we are -- as you know, the Commission and the

14 board have a very strong preference to try to hold all

15 of our oral arguments and hearings close to where the

16 site is, but I do think under the circumstances

17 hopefully folks here have gotten an opportunity to

18 hear most of what was going on; they will miss this

19 one contention. They had to miss that since the oral

20 argument that we had, but, you know, I do think that

21 your suggesting we do this in Rockville does make

22 sense.

23 But again, if you all think we need to

24 come back here, you can suggest that, too, but we will

25 try to do this as soon as we can, but I'm just

1 thinking October is probably more realistic.

2 Okay. If there is nothing further, before

3 we close, I would like to express the board's

4 appreciation to the parties, to their witnesses, and

5 to their counsel.

6 I know that all of you have spent an

7 enormous amount of time and effort marshaling your

8 evidence, and you've certainly made our job easier

9 with the excellent presentation that you've made

10 getting your witnesses ready.

11 I also again want to thank TCEQ for

12 affording us this magnificent hearing room and making

13 our stay here so pleasant.

14 Again, thank you so much, and we will

15 stand adjourned with respect to contention CL-2, and

16 we will take up the rest of the matters subsequently.

17 Thank you.

18 (Whereupon, at 10:45 a.m., the hearing was

19 recessed, to resume sine die.)

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CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of: South Texas Project

Units 3 & 4

Name of Proceeding: Hearing

Docket Number: 52-012-COL and 52-013-COL

Location: Austin, Texas

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

Penny Bynum
Official Reporter
Neal R. Gross & Co., Inc.