

1           BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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3       IN THE MATTER OF:

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5       WATER QUALITY STANDARDS AND)

6       EFFLUENT LIMITATIONS FOR     )

7       THE CHICAGO AREA WATERWAY    )

8       SYSTEM AND THE LOWER         )

9       DES PLAINES RIVER:            ) No. R08-9

10      PROPOSED AMENDMENTS TO       )

11      35 Ill. Adm. Code Parts       )

12      301, 302, 303 and 304        )

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15                   REPORT OF PROCEEDINGS had before the  
16       ILLINOIS POLLUTION CONTROL BOARD held on March 12,  
17       2008, at 9:00 o'clock a.m. at the 1215 Houbolt Road,  
18       Room- T-1000, Joliet, Illinois.

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1 A P P E A R A N C E S:

2 ILLINOIS POLLUTION CONTROL BOARD:

3 MS. MARIE TIPSORD, Hearing Officer  
MR. TANNER GIRARD, Member  
4 MR. ANAD RAO, Senior Environmental Scientist  
MR. THOMAS JOHNSON, Member

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6 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY:

7 Ms. Stefanie Diers  
Ms. Deborah Williams  
8 Mr. Robert Sulski  
Mr. Scott Twait  
9 Mr. Roy Smogor  
Mr. Howard Essign  
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23 BY: MR. THOMAS SAFLEY

24 Appeared on behalf of Exxon Mobil, and the

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5 BY: MR. KEITH HARLEY

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7        Environmental Task Force;

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10 BY: MR. THOMAS DIMOND

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1                   CHAIRMAN TIPSORD:  Again, my name is  
2                   Marie Tipsord.  This is day three of R08-9.  
3                   With me today to my immediate right is  
4                   Dr. Tanner Girard, presiding board member, to  
5                   my immediate left board member Thomas Johnson  
6                   and to Dr. Girard's right is Anand Rao from  
7                   our technical unit.  This, again, is our  
8                   third day, and if there's nothing else right  
9                   now, I think we are ready to start with  
10                  Midwest Generation's questions.

11                  Ms. Franzetti?

12                  MS. FRANZETTI:  Thank you, Madam  
13                  Hearing Officer.

14                  Good morning.  We left off with  
15                  subsection D of my pre-filed questions  
16                  entitled, Proposed "Period Average" and  
17                  "Daily Maximum" Elements of the Proposed  
18                  Thermal Standards.  And question one under  
19                  that, on page 83 of the statement of reasons  
20                  and page 14 of the Twait pre-filed testimony  
21                  the Illinois EPA states, "The daily maximum  
22                  of the summer months is preserved for the  
23                  entire year to ensure that no acute lethal  
24                  temperatures are present, rather than using

1 the 98 percentile ambient temperature values  
2 for the nonsummer months or some other  
3 statistical method as suggested by Chris  
4 Yoder." The question is, is the Illinois EPA  
5 saying that Yoder's recommended methods would  
6 not have insured that no lethal temperatures  
7 are present in the waterways? And if so,  
8 explain the basis for this conclusion.

9 MR. TWAIT: No, the Agency is not  
10 saying that Chris Yoder's methodology would  
11 have allowed lethal temperatures. The MBI  
12 methodology is more restrictive than the  
13 Agency's proposal. MBI's methodology used  
14 the 98 percentile of ambient data percent of  
15 daily maximum. By using the 98 percentile  
16 like he suggested, would automatically have a  
17 two percent exceedance in the values.

18 MS. FRANZETTI: Like you explained  
19 yesterday?

20 MR. TWAIT: Yes.

21 MS. FRANZETTI: (B)If the Agency had  
22 followed Yoder's recommendation of using the  
23 98 percentile of ambient temperature values  
24 for the nonsummer months, would it have

1           resulted in requiring the MWRGDC to cool its  
2           effluent?

3                   MR. TWAIT:  No, the Agency made the  
4           decision to use the MWRDGC as background.  
5           This decision would have been for the period  
6           average, as well as for the daily maximum.  
7           We just did not feel comfortable with the two  
8           percent exceedance at our background  
9           stations.

10                   MS. FRANZETTI:  Moving on to question  
11           1C, How does a daily maximum standard derived  
12           for the summer months, ensure that no acute  
13           lethal temperatures are present during the  
14           winter months?

15                   MR. TWAIT:  The Agency believes that  
16           the period average will protect the fish and  
17           their spawning ability.  However, the Agency  
18           didn't want to completely abandon the daily  
19           maximum, so it kept the summer daily maximum  
20           throughout the year.

21                   MS. FRANZETTI:  Scott, can you  
22           elaborate on why the Agency was reluctant as  
23           you say to abandon as you say the winter  
24           daily max?

1                   MR. TWAIT: Well, we just didn't want  
2                   to write the rule in such a way that it looks  
3                   that if the temperature in a receiving stream  
4                   could go up to 150 degrees and still meet the  
5                   average somehow. I don't think that could  
6                   possibly happen, but we just wanted to  
7                   eliminate the concerns that people would have  
8                   if we didn't have a daily maximum.

9                   MS. FRANZETTI: Actually based on that  
10                  answer, is the period average during the  
11                  winter months really going to drive the  
12                  dischargers compliance efforts?

13                 MR. TWAIT: I believe it will.

14                 MS. FRANZETTI: Is that in part  
15                 because there is a significant difference  
16                 between the period average value and the  
17                 daily max value, correct?

18                 MR. TWAIT: Yes.

19                 MS. FRANZETTI: Moving on to question  
20                 2. Why is it necessary to have period  
21                 averages -- did I just ask that question?

22                 MR. TWAIT: You just asked C.

23                 MS. FRANZETTI: Sorry, this doesn't  
24                 bode well for the day. It's only the first

1           fifteen minutes.

2                         Why is it necessary to have period  
3 averages during the nonsummer months when the  
4 summer daily maximum temperature is to be  
5 maintained in the winter months as well?

6                         MR. TWAIT: The Agency has relaxed the  
7 nonsummer maximum daily temperatures for the  
8 previous stated reasons, and the Agency  
9 believes that the nonsummer period average  
10 will accomplish the desired effect of  
11 maintaining season norms.

12                        MS. FRANZETTI: So once again, it  
13 really all comes down to this perceived need  
14 to maintain seasonal norms?

15                        MR. TWAIT: Yes.

16                        MS. FRANZETTI: Moving onto question  
17 13 at page 14 of the Twait pre-filed  
18 testimony it is stated that, "The chronic or  
19 sublethal impacts are protected through the  
20 period average." Identify the chronic  
21 impacts data upon which the period average  
22 limits for the nonsummer months are based?

23                        MR. TWAIT: That can be found on page  
24 15 of the MBI report, which is Exhibit 15,

1 and it would be gametogenesis and growth.

2 MS. FRANZETTI: Mr. Twait, are you  
3 referring to the paragraph that's captioned  
4 "Seasonal Temperature Criteria" on page 15 of  
5 Exhibit 15?

6 MR. TWAIT: Yes.

7 MS. FRANZETTI: And specifically the  
8 part that reads, "Nonsummer season criteria  
9 are derived to maintain seasonal norms and  
10 cycles of increasing and decreasing  
11 temperatures. Important physiological  
12 functions such gametogenesis, spawning and  
13 growth should be assured, since these are  
14 products of each species long-term adaptation  
15 to natural climatic and regional influences  
16 of which temperature is one controlling  
17 factor." Did I cover the relevant part?

18 MR. TWAIT: Yes.

19 MS. FRANZETTI: I understand that that  
20 is generally explaining what the thinking is  
21 behind this perceived need for the nonsummer  
22 period average limits, but with respect to  
23 the particular resident species on which  
24 these thermal or proposed thermal standards

1           have been based, is there any chronic data  
2           from testing, studying them indicating that  
3           the period average temperature values that  
4           have been proposed are what is necessary to  
5           achieve these purposes that are described in  
6           that paragraph in Exhibit 15?

7                         MR. TWAIT: The Agency did not look at  
8           any such data. We're relying on Chris  
9           Yoder's expertise.

10                        MS. FRANZETTI: Here is the thing  
11           though is, you actually didn't follow  
12           Mr. Yoder's recommended approach for  
13           addressing these types of issues. The agency  
14           used a different approach. So in that  
15           regard, there seems to be a bit of a  
16           disconnect.

17                        MR. TWAIT: I think I understand the  
18           question. The Agency in some respects  
19           followed Chris Yoder's methodology and his  
20           document, his temperature criteria options,  
21           and we chose some less stringent options  
22           along the way.

23                        MS. FRANZETTI: Do you know whether  
24           there are any CAWS fish that spawn in the

1 fall or winter?

2 MR. TWAIT: Can you answer that?

3 MR. SMOGOR: Fall or winter, not that  
4 I can think of.

5 MS. FRANZETTI: Do you know whether  
6 growth takes place during the winter months?

7

8 MR. SMOGOR: Some growth takes place.

9 MS. FRANZETTI: Of any significance?

10 MR. SMOGOR: I don't know what that  
11 means, "significant." When temperatures get  
12 colder, fish growth slows down.

13 CHAIRMAN TIPSORD: Mr. Safley, did you  
14 have a follow-up?

15 MR. SAFLEY: Before we leave that  
16 paragraph -- Tom Safley on behalf of Corn  
17 Products.

18 Mr. Twait, we discussed yesterday  
19 the reasons for the Agency wanting to  
20 maintain seasonal norms, and my recollection  
21 of the testimony yesterday was that the sole  
22 concern with seasonal norms as far as the  
23 Agency knew was gametogenesis. However, when  
24 I read this paragraph that Ms. Franzetti has

1 pointed you to talking about seasonal  
2 temperature criteria, the last full sentence  
3 on page 15 reads, "Important physiological  
4 functions such as gametogenesis, spawning and  
5 growth should be assured since these are  
6 products of each species' long-term  
7 adaptation to natural climatic and regional  
8 influences of which temperature is one  
9 controlling factor." I read that as saying  
10 that one of the reasons for seasonal norms is  
11 to, in Mr. Yoder's view at least, to take  
12 into account needs of spawning and growth,  
13 which seems to me to be different than the  
14 testimony we had yesterday, that the Agency's  
15 understanding the only reason for seasonal  
16 norms was gametogenesis. So I want to make  
17 sure I know what the answer is because I'm  
18 reading Mr. Yoder saying one thing and the  
19 testimony yesterday saying something else.

20 MR. TWAIT: I think we mentioned  
21 reproduction yesterday which would include  
22 spawning; however, the spawning for the CAWS  
23 use B waters, we don't think we're going --  
24 we're not protecting it for the CAWS B

1           waters. We're protecting it so they can  
2           leave those waters and spawn, and if I didn't  
3           mention growth yesterday, which I don't think  
4           that I did, I probably should have.

5                       MR. SAFLEY: And then just to wrap  
6           that up then, with regard to the Caws B  
7           Waters where the Agency does not think it's  
8           appropriate to protect for early life stages  
9           or spawning, am I correct the only reason the  
10          Agency might want to take into account  
11          seasonal changes in the Use B Waters is for  
12          gametogenesis, and spawning at least for Use  
13          B waters for spawning and growth purposes,  
14          seasonal changes are irrelevant, or at least  
15          growth in early life stages?

16                      MR. TWAIT: After reading the  
17          sentence, I think it's gametogenesis and  
18          growth that we're protecting by using the  
19          seasonal norms.

20                      MR. SAFLEY: I'm sorry, specifically  
21          to the Use B Waters?

22                      MR. TWAIT: Yes.

23                      MR. SAFLEY: But the Agency is not  
24          trying to protect spawning in the Use B

1 Waters?

2 MR. TWAIT: We are not protecting  
3 early life stages, and that would include  
4 spawning.

5 MR. SAFLEY: And that would include  
6 spawning and growth during early life stages?

7 MR. TWAIT: Correct.

8 CHAIRMAN TIPSORD: Mr. Fort?

9 MR. FORT: Yes, Jeff Fort on behalf of  
10 Citgo.

11 So with respect to the questions  
12 that Mr. Safley just asked you about Use B  
13 Waters, the same would be true even for the  
14 subset of the Use B Waters such as the lower  
15 Chicago Sanitary and Ship Canal?

16 MR. TWAIT: The Use B Waters, it would  
17 be all of the Use B Waters. Yes, it would be  
18 for all the Use B Waters.

19 MR. FORT: Not making any distinction  
20 amongst them as to habitat?

21 MR. SULSKI: That's how they were  
22 classified.

23 MR. FORT: I think that the underlying  
24 data that you have has differences saying

1 different things that you put into the Use B  
2 Water category, such as the lower north  
3 branch and the north branch turning basin of  
4 the Chicago River and so on down to the lower  
5 Des Plaines Brandon pool.

6 MS. WILLIAMS: Was there a question?  
7 Can you repeat the question or was there a  
8 question? Maybe there wasn't a question.

9 MR. FORT: I'm asking if there's  
10 differences in the habitat? I believe the  
11 testimony --

12 MS. WILLIAMS: Within the Use B  
13 Waters?

14 MR. FORT: Within the Use B Waters.

15 MR. SMOGOR: Well, there's probably  
16 some differences, but as a whole we're  
17 treating the Use B Waters as one group in  
18 terms of proposing uses, the aquatic life use  
19 for those waters. So as a whole, the habitat  
20 in Use B Waters is considered different  
21 enough from that of Use A Waters to treat it  
22 and give it a different proposed use.

23 MR. FORT: Within that broader general  
24 category, although there are differences

1           within the Use B Waters themselves?

2                       MR. SMOGOR:  There may be habitat  
3           differences from place to place within Use B  
4           Waters, but as a whole we're judging it as  
5           the biological potential of Use B Water as a  
6           whole is lower than the biological potential  
7           of the Use A Waters.

8                       MR. FORT:  You are not making any  
9           further distinction below Use B in terms of  
10          aquatic potential.

11                      CHAIRMAN TIPSORD:  Mr. Ettinger?

12                      MR. ETTINGER:  I'm Albert Ettinger.  I  
13          represent Environmental Law and Policy  
14          Center, Prairie Rivers Network and some other  
15          environmental organizations.

16                      My question was, do you know whether  
17          any spawning is in fact now occurring in the  
18          waters that are to be classified as B waters  
19          under this proposal?

20                      MR. SMOGOR:  I think there may be  
21          because once again inferred from sizes of  
22          fish from the MWRD data that was, that we  
23          attempted to add to the record, but that we  
24          still have to supplement with pieces -- I'm

1           trying to recall what Exhibit that was. That  
2           was Exhibit 28 I believe -- and based on  
3           looking at fish sizes, one can infer that  
4           some spawning may be taking place in those  
5           waters.

6                     CHAIRMAN TIPSORD: Then I think we are  
7           back to Ms. Franzetti.

8                     MS. FRANZETTI: But if I understand  
9           correctly, that's based solely on observed  
10          size of the fish?

11                    MR. SMOGOR: Can you excuse me for a  
12          second, please.

13                    MS. FRANZETTI: Absolutely.

14                    MR. SMOGOR: Sorry, thank you.

15                    MS. FRANZETTI: That inference that  
16          there may be spawning in some parts of the  
17          Use B Waters that you just mentioned, is  
18          based solely on the observed size of the  
19          fish?

20                    MR. SMOGOR: I have not done a  
21          complete examination of that data. A very  
22           cursory look at those data and some of the  
23          sizes that are available for the species, a  
24          quick look as I recall, looked like some of

1 the tolerant -- and pretty much right now  
2 there is a tolerant species living in  
3 there -- it looked like some of the species  
4 based on the sizes only of some of some  
5 individuals reported that one would infer  
6 that they are being created in those waters  
7 and they are not -- they are subadult sizes.

8 MS. FRANZETTI: Is it also a possible  
9 inference from that data that they were  
10 created outside of Use B Waters and have  
11 migrated into it?

12 MR. SMOGOR: Yes.

13 MS. FRANZETTI: So you really can't  
14 discern?

15 MR. SMOGOR: That's possible, no, I  
16 really can't discern for sure.

17 MS. FRANZETTI: Staying with the issue  
18 of growth. Would growth during the winter  
19 months be higher if you had warmer water  
20 temperatures, if that were allowed?

21 MR. SMOGOR: Because you weren't  
22 looking at me, I was off in la-la land.  
23 Could you repeat the question, please.

24 MS. FRANZETTI: Sure. Would growth

1           during the winter months be higher if higher  
2           winter water temperatures were allowed?

3                   MR. SMOGOR:  It's possible.  Growth of  
4           a fish is not solely based on temperature.  
5           It is a function of temperature.  So all the  
6           other needs of the fish would have to be met  
7           as well.

8                   MS. WILLIAMS:  May I ask a follow-up  
9           here real quick, not necessarily on that  
10          question, but maybe on Mr. Ettinger's  
11          question while I'm thinking about it.  I  
12          guess I'm even confused now at this point if  
13          there is some spawning that occurs in the Use  
14          B Waters.  Can you explain then what sets  
15          them apart from the Use A Waters, as far as  
16          the existing aquatic life situation?

17                   MR. SMOGOR:  Well, biological  
18          potential is not solely based on particular  
19          species' ability to spawn, and spawning can  
20          occur in different degrees as well.  Just  
21          because you have evidence or potential  
22          evidence of spawning, doesn't necessarily  
23          mean that the fish is spawning, doing as well  
24          as it can do.  Does that get it.

1                   MS. WILLIAMS: I don't know. Is there  
2 any difference in the types of fish that you  
3 found that you think may be spawning?

4                   MR. SMOGOR: Yes, I think again a  
5 cursory look, it appears that some of the  
6 tolerant species, the tolerant species that  
7 are in there are the ones that I noted had  
8 subadult individuals reported.

9                   MR. SAFLEY: Again, Tom Safley. If I  
10 could follow-up on that.

11                   Despite your observations,  
12 however, is it correct that at least for the  
13 Chicago Sanitary and Ship Canal, the Agency  
14 does not view that area as having the habitat  
15 that would be conducive to spawning?

16                   MR. SMOGOR: That's correct. You  
17 could never be absolute. When you say we're  
18 not going to support a water for spawning,  
19 you are making a call on -- you are not  
20 saying that there's no spawning whatsoever  
21 can occur here. But you are making a call,  
22 you are making a general determination on how  
23 suitable is this water for spawning. The  
24 typical fish, the fish that need to be there

1           to achieve the biological potential that  
2           you've set for the waters, and we've pretty  
3           much set or actually the biological potential  
4           higher for that water, for instance CAWS A.  
5           So we are talking about the difference in  
6           biological potential between, for instance,  
7           CAWS A and CAWS B, and what we believe the  
8           spawning habitat, to achieve anything higher  
9           than what we've set for CAWS B is just not  
10          there.

11                       MR. SAFLEY: Thank you.

12                       MS. FRANZETTI: Moving on to  
13           question 4. What is the justification for  
14           proposing a period average thermal standard  
15           that covers a period of 15 days during parts  
16           of the year and 30 days during other parts of  
17           the year?

18                       MR. TWAIT: The Agency used the same  
19           periods that Chris Yoder did and with the  
20           period is a 15 days, that's when waterways  
21           are usually changing the most in the spring  
22           and fall.

23                       MS. FRANZETTI: Mr. Twait, as you said  
24           spring and fall are when waterways are

1 typically changing the most, but is that  
2 typical of this waterway which we've had a  
3 lot of testimony about is very different from  
4 most waterways?

5 MR. TWAIT: I'd have to take a look at  
6 our proposal and see.

7 MS. FRANZETTI: I'm talking about what  
8 actually goes on in this waterway, not really  
9 what you've proposed in the standard, but  
10 what actually occurs given the effluent  
11 dominant nature of this waterway, and I'm  
12 talking about the Chicago Sanitary and Ship  
13 Canal up into the upper-Des Plaines island  
14 pool.

15 MR. TWAIT: I am looking at Exhibit 15  
16 once again, and Chris Yoder's thermal report,  
17 Appendix table 2, using the Route 83 CSSC  
18 Channel, Chicago Sanitary and Ship Canal, and  
19 I looked at the mean temperatures real quick.  
20 The change from January to February was 30  
21 degrees, from February to March was four  
22 degrees, from March to April was four degrees  
23 and from April to May was 8 degrees, and May  
24 to June was 7 degrees, and then -- well, from

1 July to August was two degrees, August to  
2 September was four degrees, September to  
3 October was nine degrees, and from October to  
4 November was 7 degrees, and November to  
5 December was 7 degrees. So I believe it does  
6 change the most in the spring and fall.

7 MS. FRANZETTI: And which column  
8 heading were you using on Appendix 2?

9 MR. TWAIT: I was using the Mean  
10 temperature.

11 MS. FRANZETTI: The first "mean" with  
12 the little footnote 1 above it?

13 MR. TWAIT: Yes. And I'm sure you  
14 could use several of those columns to --

15 MS. FRANZETTI: Evaluate that issue?

16 MR. TWAIT: -- to evaluate that issue.

17 MS. FRANZETTI: Okay. Now turning  
18 to --

19 CHAIRMAN TIPSORD: I'm sorry,  
20 Mr. Safley?

21 MR. SAFLEY: I have some follow-up on  
22 that question. I'll wait for you.

23 MS. FRANZETTI: No, go ahead.

24 MR. SAFLEY: Mr. Twait, you stated in

1 response to Ms. Franzetti's question that you  
2 used the same periods that Mr. Yoder had  
3 provided in his options; is that correct?

4 MR. TWAIT: Yes.

5 MR. SAFLEY: Did you have any  
6 discussions with Mr. Yoder regarding whether  
7 those periods were appropriate or the reasons  
8 why he had chosen them?

9 MS. WILLIAMS: I think we talked about  
10 that when he was here. You asked him about  
11 whether they were appropriate or why he chose  
12 them. It's on the record.

13 MR. SAFLEY: I didn't ask what  
14 Mr. Yoder said. I asked what conversations  
15 the Agency had had with Mr. Yoder about the  
16 issue.

17 MR. TWAIT: I did not have any  
18 additional conversations with him  
19 specifically about changing those.

20 MR. SAFLEY: Did the Agency conduct  
21 any other independent evaluations about  
22 whether or not those time periods were  
23 appropriate for setting changing seasonal  
24 temperatures?

1                   MR. TWAIT: The Agency didn't conduct  
2                   any particular study. I was part of the  
3                   ORSANCO Work Group, O-R-S-A-N-C-O, and they  
4                   had looked at changing to go to a complete  
5                   month rather than the two week period. And  
6                   what they found was during the summer -- or I  
7                   mean during the spring and fall months  
8                   because there was so much variation there,  
9                   when they chose their number based on the  
10                  75 percentile, that early in the month they  
11                  were having either high or low values, and at  
12                  the end of the month they were having just  
13                  the opposite as temperatures were changing,  
14                  and so they felt that it was, that Chris  
15                  Yoder's periods were appropriate.

16                  MR. SAFLEY: I noticed obviously in  
17                  your testimony and in the data that's in the  
18                  Exhibit to Mr. Yoder's testimony that we  
19                  talked about and in the standard itself,  
20                  everything is based on months or half months.  
21                  Is there a reason that the temperature  
22                  changes happen to line up with the 1st and  
23                  31st or 30th or 28th of each month other than  
24                  that's kind of normal record keeping period?

1           Is there a biological reason that on January  
2           31st things change?

3                   MR. TWAIT:  No.

4                   MR. SAFLEY:  So that your  
5           understanding is that comes out of, those are  
6           the kind of records that people normally keep  
7           on a monthly or weekly basis?

8                   MR. TWAIT:  I don't know the reason  
9           for Chris choosing the dates that he did.  
10          However I do note that it is, when you go  
11          from the 1st of the month to the 30th of the  
12          month and then divide that in half, that  
13          would correspond to the Agency's DMR,  
14          Discharge Monitoring Reports, but I don't  
15          think that was Chris' or our intention.  I  
16          don't know what Chris was thinking.

17                  MR. SAFLEY:  And my reason for asking  
18          the question -- I guess I'll ask you another  
19          question -- am I correct that you would agree  
20          that the changes in temperature don't pay  
21          attention to the calendar and whether or not  
22          it's the 31st of the month or the 1st of the  
23          next month?

24                  MR. TWAIT:  That is correct.

1                   MR. SAFLEY: Is it the Agency's  
2                   position that if someone, that the schedule  
3                   that Chris Yoder provided in his options and  
4                   the schedule that the Agency has thus  
5                   incorporated in the Rule is the only possible  
6                   schedule that will be protective of the uses  
7                   in these water bodies?

8                   MR. TWAIT: No, I think you could do  
9                   one week period if you so chose.

10                  MR. SAFLEY: So the Agency hasn't  
11                  conducted any kind of evaluation to say, this  
12                  is the only way it could be divided up and  
13                  the only way the temperatures could take  
14                  place. If we don't have a two week average  
15                  for the two weeks in April, then that's going  
16                  to have some kind of adverse impact on the  
17                  aquatic life, the Agency hasn't done that?

18                  MR. TWAIT: No, not at all.

19                  MR. SAFLEY: Keeping in mind the  
20                  seasonal changes, is that answer the same  
21                  with regard to the time periods that were  
22                  used, and also I guess the shape of the curve  
23                  I'll say keeping in mind that the Agency  
24                  wants to have a curve of higher temperatures

1           in the summer and lower temperatures in the  
2           winter, is it correct that the Agency has not  
3           conducted any evaluation to say the shape of  
4           the curve that we've proposed with the  
5           temperature changes taking place in the exact  
6           way that we've proposed them here is the only  
7           curve that's protective of the aquatic life?

8                     MR. TWAIT: The shape of that curve is  
9           based upon the quote-unquote background  
10          temperature that we chose. So if you  
11          shifted, if you wanted to go from the 20th of  
12          one month to the 20th of another month, I  
13          believe the same shape of the curve would  
14          happen but you'd get slightly different  
15          numbers.

16                    MR. SAFLEY: But the Agency hasn't  
17          concluded at this point that the schedule of  
18          changes that it has proposed is the only one  
19          that could possibly be protective of the  
20          aquatic life?

21                    MR. TWAIT: No.

22                    CHAIRMAN TIPSORD: Just a point for  
23          the record too, we talked yesterday about  
24          Appendix Table 2, as well as from Exhibit 15.

1           Because there are a lot of appendices and  
2           they are all mixed in, there's 2E and 2G, I  
3           want to be clear that Appendix Table 2 that  
4           we are talking about is the one that's in  
5           Appendix B of Exhibit 15, correct?

6                     MR. TWAIT: Yes, I believe that is  
7           correct. Yes.

8                     CHAIRMAN TIPSORD: Thank you.

9                     MS. FRANZETTI: Moving on to question  
10          5, and now I'm turning to the question on the  
11          actual implementation of these proposed  
12          thermal standards and how dischargers  
13          compliance with them will be determined. So  
14          that's the background on this question.

15                    How will compliance with the  
16          period average standard be determined? In  
17          other words, will it be the average  
18          temperature determined from all samples taken  
19          during the subject period? And if so, how  
20          many samples at a minimum will be required?

21                    MR. TWAIT: The Agency hasn't  
22          determined that. The number of samples --  
23          the Agency hasn't determined the number of  
24          samples that would be required, but those

1 samples would have to be representative of  
2 the entire period. So if the period was one  
3 month long, you couldn't wait for the last  
4 week of that month to take your samples. It  
5 would show a violation.

6 MS. FRANZETTI: What type of samples  
7 will need to be taken for thermal -- you  
8 know, we talk about samples. What are we  
9 dealing with?

10 MR. TWAIT: I don't know the answer to  
11 that. We haven't -- that hasn't been  
12 determined. I don't think it would be any  
13 different than what we consider for general  
14 use, but I don't know that we have a real  
15 good methodology.

16 MS. FRANZETTI: What do you currently  
17 use for general use?

18 MR. TWAIT: I would have to ask  
19 someone from the permit section.

20 MS. FRANZETTI: Does anyone on the  
21 panel know?

22 MR. SULSKI: Just generally when a  
23 permit is issued, the Agency says the sample  
24 shall be representative and they leave it at

1           that. And in some cases they will say 24  
2           hour composite on an estimate, for example,  
3           but there's always that underlying condition  
4           that the data you submit has to be  
5           representative. So that can be worked out in  
6           the permit-permittee negotiations on what  
7           they think is representative or not.

8                        MS. FRANZETTI: Well, I'm trying to  
9           understand for period average, what type of  
10          samples am I averaging the temperatures from?  
11          Does that make sense to you? I think it  
12          makes a difference whether it can be a grab  
13          or does it have to be some sort of 24 hour or  
14          continuous sampling, and how then does one,  
15          if the ladder, how does one average?

16                       MR. SULSKI: What a permit writer does  
17          is they suggest in a draft permit what they  
18          think is going to be representative sampling.  
19          At that point the permittee can come back and  
20          say, well, we don't agree with that and here  
21          is what we think and here is the data that  
22          supports that that wouldn't be representative  
23          and here is our alternative for what you've  
24          proposed in the permit. It gets worked out

1 on a case by case basis.

2 MEMBER RAO: May I ask a clarifying  
3 question? Are we talking about a discharger  
4 monitoring instream or just effluent  
5 monitoring that you are talking about when  
6 you talk about compliance?

7 MR. TWAIT: I think the question was  
8 more towards sampling in the stream if I'm  
9 not incorrect.

10 MS. FRANZETTI: Actually not. I was  
11 really seeking information so that the  
12 potentially effected dischargers of this  
13 proposed rule can take your answers and start  
14 applying them to their current effluent and  
15 see whether or not they are going to be able  
16 to comply with these proposed standards, and  
17 it's somewhat impossible to do that without  
18 having input on how are these, how is  
19 compliance with these proposed period  
20 averages going to be determined because I  
21 think you would agree it's a new concept.

22 MR. TWAIT: Yes. And the period  
23 average would have to be representative of  
24 what the stream is seeing out of your mixing

1           zone and whether it's continuous data that's  
2           averaged or if it's grab samples once a day  
3           that's averaged or if you think weekly  
4           samples that's averaged, just as long as it's  
5           representative. And I think that the permit  
6           section will have to work out how they want  
7           the discharger to come up with that data.

8                     MS. FRANZETTI: What you are saying  
9           is, it's up to each effected discharger in  
10          looking at these proposed rules to basically  
11          decide what is a representative sampling  
12          regime for their particular effluent.

13                    MR. TWAIT: I think it will be up to  
14          the discharger to make the argument to the  
15          permit section, yes.

16                    MS. FRANZETTI: And ultimately take  
17          that to the permit section and keep their  
18          fingers crossed that they agree.

19                    MR. TWAIT: Yes.

20                    CHAIRMAN TIPSORD: Mr. Safley had his  
21          hand up first.

22                    MR. SAFLEY: If I could follow-up on  
23          that, Mr. Twait. As I understand your  
24          answers, if one of my clients who is

1           discharging to one of these water bodies,  
2           wants to take your rule and evaluate whether  
3           they can comply with it as written, they've  
4           got to come up with what they think the  
5           permit section will accept, go out and take  
6           measurements, and then hope that they are  
7           right about what the permit section works  
8           out; they are making their judgments on how  
9           important this rule making is to their  
10          facility based on an assumption that the  
11          permit section is going to accept their  
12          sampling methodology; is that correct?

13                    MS. WILLHITE: Marsha Willhite. Can I  
14                    respond to that one? I would in that  
15                    situation encourage some conversation with  
16                    the permit section before they went about  
17                    doing that type of study.

18                    MR. SAFLEY: Is the permit section  
19                    prepared right now to have those kind of  
20                    conversations while this rule making is going  
21                    on?

22                    MS. WILLHITE: Because what you are  
23                    suggesting is essentially a study to  
24                    determine, and you know it's not regulatory

1 compliance based information, I don't see why  
2 they wouldn't.

3 MR. SAFLEY: That's fine. What I'm  
4 trying to get to is, I think everybody, all  
5 the dischargers in this room are trying to  
6 understand how this rule making is going to  
7 effect them and to do that as Ms. Franzetti  
8 has pointed out, the way in which samples has  
9 to be taken is very important. And if that's  
10 not something that we can figure out until we  
11 walk into the door with a proposed NPDS  
12 permit and we find out that, oh, you were all  
13 wrong, that's not what we are going to accept  
14 and what we thought we were going to be fine  
15 with, you are not at all fine with. And it's  
16 going to cost you whatever money.

17 MS. WILLHITE: If one of your clients  
18 would want to be doing a study to look at  
19 potential approaches to representative  
20 sampling, then I would be willing for folks  
21 to consult and come up with an approach.

22 MR. SULSKI: Can I just add something  
23 to that? I think you would be putting the  
24 cart before the horse. Generally how the

1           permits get written is, the permit writer  
2           looks at the regulations, look at the  
3           circumstances and suggests a monitoring  
4           scheme that will satisfy the Agency in terms  
5           of whether this discharge will comply with  
6           the regulations, and they put that in an  
7           internal notice permit which the permittee  
8           gets. At that point then there is a  
9           negotiation period whereby, you know, the  
10          permittee can say, well, I don't agree with  
11          you and here is why.

12                        MS. WILLIAMS: Let me jump in because  
13          I think Rob is also putting another cart  
14          before the horse. We are setting the reg  
15          here, so this is all about after the reg is  
16          set. I have at least discovered in this  
17          process that there may be information out  
18          there about impacts on dischargers that we  
19          did not know or consider were going to be  
20          effected. So if there's information out  
21          there now that can be submitted to us now  
22          that we can take into account now in  
23          evaluating what the range should be, we would  
24          like to see that information now -- not now,

1 but tomorrow.

2 MS. FRANZETTI: If I can, just  
3 following up on that. I think what would be  
4 helpful is for the Agency to think about,  
5 based on the more typical situations -- and  
6 bear with me. This will become a point  
7 hopefully -- but as I sit here, a lot of  
8 plants operate for a certain number of hours  
9 in the day and then may shut down. Those  
10 that are not going 24 hours. And certainly  
11 when they shut down, their effluent  
12 temperature may get cooler, because they are  
13 not using the water for cooling purposes in  
14 their manufacturing operation, and this is a  
15 period average value. Now so while typically  
16 a representative sample when you are dealing  
17 with a metal standard, I don't think one  
18 would say that is representative to be taking  
19 the samples when the facility is not  
20 operating. But this is a thermal period  
21 average and part of that whole averaging is  
22 you have some times of the day when there is  
23 a higher heated effluent going into the river  
24 but other parts where there's not and that

1           does average out in the river. Or am I not  
2           understanding this correctly?

3                       MR. TWAIT: I understand that, and  
4           yes, that would be my understanding is we are  
5           looking at a period average over sometimes  
6           two weeks and sometimes a month. So if you  
7           are, if a plant was to run full board for two  
8           weeks and then shut down for the last two  
9           weeks, somehow you would want to build that  
10          into your period average. I mean, because  
11          that's the temperature that the fish are  
12          seeing. Now, if -- the other thing that  
13          occurred to me is, if you are asking me how  
14          you have to do that, I could just say take a  
15          grab at noon on every day outside your mixing  
16          zone, but that wouldn't necessarily be an  
17          appropriate way to do it, and I'm sure that  
18          the dischargers know when they are operating,  
19          when they are shutting down and how to come  
20          up with a representative temperature outside  
21          their mixing zone. They would know much more  
22          than I would.

23                       MS. FRANZETTI: I understand what you  
24          are saying. I just wanted to establish that

1           the fact that a plant is not running does not  
2           make that nonrunning period unrepresentative  
3           necessarily based on what this period average  
4           standard is attempting to regulate; correct?

5                   MR. TWAIT: The period average is what  
6           the fish are seeing in the stream so, yes,  
7           that is correct. If your plant was operating  
8           eight hours of the day and you only wanted  
9           the sample or only wanted to figure out the  
10          temperature at that time, and that's when you  
11          took your samples, that's what would be  
12          representative. But on the other hand, if  
13          you're taking samples throughout the day,  
14          that would probably be more appropriate and  
15          representative of what the fish are seeing.

16                   MS. FRANZETTI: Okay. I take it that  
17          a potential alternative -- again, just to  
18          understand the Agency's thinking in response  
19          to your invitation for people to come forward  
20          to you with ideas -- another possible  
21          alternative for a discharger would be to put  
22          an instream monitoring station in, in the  
23          vicinity downstream of their discharge?

24                   MR. TWAIT: Outside of their mixing

1 zone, I think that would be appropriate.

2 MS. FRANZETTI: I don't know how  
3 feasible that is. I'm just exploring  
4 alternatives here.

5 CHAIRMAN TIPSORD: Mr. Ettinger and  
6 then Mr. Diamond.

7 MR. ETTINGER: Is there anyone at this  
8 table who is involved in writing permits?

9 MS. WILLIAMS: No.

10 MR. ETTINGER: Have any of you seen --

11 MR. SULSKI: Let me qualify that. I  
12 am involved.

13 MR. ETTINGER: Have any of you seen  
14 the NPDS permit for Midwest Generation's  
15 Joliet plant?

16 MS. WILLIAMS: Yes.

17 MR. ETTINGER: Have you seen how  
18 temperatures are handled in that permit  
19 regarding monitoring?

20 MR. TWAIT: Currently, yes.

21 MR. ETTINGER: Do you imagine that any  
22 of these principles that are established for  
23 that permit would apply in the case of this  
24 permit or permits written under the new

1 regulation?

2 MS. WILLIAMS: Can you explain?

3 MR. ETTINGER: No, I probably can't.

4 MS. WILLIAMS: Can you flush it out?

5 MS. FRANZETTI: Maybe I can help. Is  
6 there any average temperature standard like  
7 this period average applicable currently to  
8 the Midwest Gen Joliet plant?

9 MR. TWAIT: I don't believe so.

10 MS. FRANZETTI: Right. So is there  
11 anything in the Midwest Gen Joliet permit  
12 today that involves compliance monitoring for  
13 an average thermal standard?

14 MR. TWAIT: No.

15 MS. FRANZETTI: Thank you.

16 MR. ETTINGER: I guess it's a matter  
17 of what like is.

18 Are you aware of provisions in the  
19 current Joliet permit that calls for not  
20 allowing any excursion over a percentage  
21 period at the I-55 bridge?

22 MR. TWAIT: Yes.

23 CHAIRMAN TIPSORD: Mr. Diamond?

24 MR. DIMOND: Mr. Twait, in several of

1           your answers you've been referring to mixing  
2           zones, but didn't you testify back in Chicago  
3           that it's likely that most dischargers will  
4           not be eligible for a mixing zone because of  
5           the background ambient temperature of the  
6           river?

7                         MR. TWAIT: I think if the background  
8           temperature is elevated above the water  
9           quality standard, then, no, they would not be  
10          eligible for a mixing zone. However, I think  
11          that what would be reasonable is to expect  
12          that at some point the upstream facilities  
13          will be meeting the water quality standard.

14                        MR. DIMOND: Then a second question  
15          is, regardless of how dischargers will  
16          measure the compliance of their effluent with  
17          whatever their permit conditions are, how  
18          will the Agency or what data will the Agency  
19          use to determine compliance with the water  
20          quality standard that might be set in this  
21          proceeding?

22                        MR. ESSIG: It would be based on  
23          ambient sampling, whatever ambient sampling  
24          is occurring in those effected regions or

1 segments of those streams.

2 CHAIRMAN TIPSORD: Mr. Essig, remember  
3 to keep your voice up.

4 MR. DIMOND: How often is that ambient  
5 sampling conducted?

6 MR. ESSIG: Currently I know MWRD  
7 does, they do monthly sampling at most of  
8 their ambient stations. Illinois EPA usually  
9 does it nine times a year. There are various  
10 organizations that are doing continuous  
11 monitoring. We do some of that ourselves,  
12 but on a limited basis. Whatever data is  
13 available we will try to use it.

14 MR. DIMOND: And for the upper Dresden  
15 island pool, how many sampling stations are  
16 there in that region?

17 MR. ESSIG: As far as ambient stations  
18 go, there are none.

19 MR. DIMOND: I thought there was one  
20 at the I-55 bridge. Is that technically  
21 outside?

22 MR. ESSIG: Well, Midwest Gen has a  
23 sampling location on I-55, but MWRD no longer  
24 has any ambient stations in that pool. IEPA

1           hasn't had any in that pool. You had one  
2           upstream in the Braden pool, but not  
3           downstream of the Brandon damn.

4                   MR. DIMOND: So if you had multiple  
5           ambient stations, I understand you don't, but  
6           if you had multiple ambient stations within a  
7           particular reach, would you average all of  
8           those together for sampling at a particular  
9           time to determine compliance with the water  
10          quality standards?

11                   MR. ESSIG: No, we would probably use  
12          each individual station separately, but we'd  
13          have to look at that.

14                   CHAIRMAN TIPSORD: Mr. Fort?

15                   MR. FORT: Going back to a comment  
16          Mr. Twait made a short while ago about what  
17          happens if there is no mixing zone because  
18          upstream sources had elevated temperatures,  
19          and I thought I heard you say that those  
20          negatively impacted sources could expect in  
21          some period of time that the upstream sources  
22          would be meeting the thermal water quality  
23          standard. Did I basically characterize your  
24          testimony?

1                   MR. TWAIT: I think that's  
2 appropriate.

3                   MR. FORT: Do you have any sense of  
4 how long that might be for corrective  
5 measures or compliance measures to occur?

6                   MR. TWAIT: We did not write anything  
7 into the proposal simply because no one  
8 suggested a time period was needed, and we  
9 did not want to assume that that would be one  
10 year, two years, ten years or a hundred  
11 years. I think that it would be fair to say  
12 that the Agency understands that at some  
13 point in time it would be appropriate to have  
14 the standard met.

15                  MR. FORT: I'm going shift to gears a  
16 little bit, but I think it still follows onto  
17 this point. The period average values that  
18 have been proposed for temperature, and they  
19 are almost identical for all the stream  
20 categories, slight difference for the Use B  
21 Waters, are those all based upon the 75th  
22 percentile of the Metropolitan Water  
23 Reclamation District values on a monthly  
24 basis?

1 MR. TWAIT: No.

2 MR. FORT: Which are not?

3 MR. TWAIT: The summer months, June  
4 16th through September 15th, are based on  
5 Chris Yoder's methodology which can be found  
6 in Exhibit 15. And as I have testified  
7 previously, some of those months or periods  
8 are based upon the ambient station at the  
9 Route 83 bridge on the Chicago Sanitary and  
10 Ship Canal.

11 MR. FORT: So this again goes back to  
12 the background, that 75th percentile, that  
13 background at the Route 83 bridge is what is  
14 coming through the stream?

15 MR. TWAIT: Yes. All of the nonsummer  
16 months are based upon 75th percentile of the  
17 background.

18 MR. FORT: So in those other 25  
19 percent where it's above background, you have  
20 a violation occurring in the stream that any  
21 discharger might be facing?

22 MR. TWAIT: No.

23 MR. FORT: Why not?

24 CHAIRMAN TIPSORD: Excuse me, but we

1 covered this extensively yesterday afternoon  
2 about what the 75th percentile meant and what  
3 the 25th meant. I'm happy to go into it a  
4 little bit, but we spent a lot of time  
5 talking about math yesterday afternoon.

6 MR. FORT: I'm trying to do the mixing  
7 zone concept as opposed to the 75th  
8 percentile.

9 CHAIRMAN TIPSORD: That's fine. I  
10 think the bottom line is with averaging  
11 because the 75th percentile encourages the  
12 averaging, it does not mean 25 percent of the  
13 time people out are out of compliance.

14 MR. TWAIT: The 75th percentile is  
15 based upon all of the individual temperatures  
16 measured during that period, and we're taking  
17 the 75th percentile and using it as what's  
18 going to become an average.

19 MR. FORT: I understand.

20 MR. TWAIT: Okay.

21 CHAIRMAN TIPSORD: Go ahead.

22 MR. FORT: I'm going back to the  
23 mixing zone concept. We've already got some  
24 possibility -- we can argue the numbers --

1 but some possibility of the background here  
2 being higher than the period average, that  
3 would then seem to throw anybody downstream  
4 into no mixing zone conditions?

5 MS. WILLIAMS: I have to object  
6 because I think yesterday the testimony  
7 clearly was Scott did not think that that was  
8 a realistic possibility that would happen,  
9 what he just said.

10 MR. FORT: If that's his opinion,  
11 that's fine, but I'm asking for his opinion  
12 not yours so.

13 MS. WILLIAMS: Well, it was part of  
14 your question, I guess. Maybe you can  
15 rephrase the question.

16 MR. FORT: I was trying to ask the  
17 question differently.

18 CHAIRMAN TIPSORD: Let me try this,  
19 and correct me if I'm wrong. Mr. Twait, is  
20 it your opinion that the background levels  
21 will not -- I can't even get there. That the  
22 ambient temperature will not exceed the 75th  
23 percentile at the Route 83 bridge?

24 MR. TWAIT: The ambience data will not

1           exceed the -- the average of the data will  
2           not exceed the 75th percentile at that  
3           bridge.

4                   CHAIRMAN TIPSORD:  So there might be  
5           occasionally, like day one at 9:00 a.m. there  
6           might be exceedance, day two it would be low  
7           enough so that when you average those two  
8           together, there would not be an exceedance  
9           based on the average when you do the numbers  
10          that you came up with, that would be the 75th  
11          percentile that we talked about?

12                   MR. TWAIT:  I believe that would be  
13          correct.

14                   MR. FORT:  I am not sure I agree with  
15          that.  That's his testimony, that's all I'm  
16          asking for.

17                   MR. SAFLEY:  If I could briefly  
18          follow-up on that.

19                   Mr. Twait, we talked about this  
20          Appendix Table 2, and the fact that the  
21          numbers in there are averages based on seven  
22          year's worth of data, and I thought you said  
23          yesterday that in answer to Ms. Tipsord's  
24          question, for any one particular biweekly or

1           monthly period you would have to look at one  
2           year data; did I understand that correctly  
3           yesterday because I am hearing something  
4           differently from you now?

5                       MR. TWAIT: Yes. The Agency believes  
6           that by taking the 75 percentile of all the  
7           individual data, that the average will be  
8           met.

9                       MR. SAFLEY: And the Agency bases this  
10          decision on this Appendix Table 2 which  
11          includes seven year's worth of data.

12                      MR. TWAIT: I did not break out the  
13          data into individual years.

14                      MR. SAFLEY: So in order to evaluate  
15          over this seven-year period whether or not  
16          the period average had been violated, you  
17          would have to break that out?

18                      MR. TWAIT: You would have to break  
19          that out into the periods and into the years.  
20          However, I don't know that the data will be  
21          sufficient to -- I don't know that there's  
22          enough data in each individual month of the  
23          data base to come up with a representative  
24          average.

1                   MR. SAFLEY: Then how can you make the  
2 statement that it's the Agency's conclusion  
3 that there won't be a violation?

4                   MR. TWAIT: Because we using the 75th  
5 percentile to set the average.

6                   MEMBER RAO: Mr. Twait, you just now  
7 said that Agency does not have representative  
8 data right now to show compliance with the  
9 period averages. In the future if these  
10 rules are adopted, is the Agency going to  
11 change its ambient monitoring in CAWS to make  
12 sure you generate that kind of data or is  
13 current data acquisition sufficient?

14                   MR. ESSIG: At this point I don't  
15 think that will happen. It may. But right  
16 now we are cutting back our ambient program.

17                   MEMBER RAO: So how would you go about  
18 getting compliance with this?

19                   MS. WILLIAMS: I guess what I was  
20 going to say, very often once we know what  
21 the standard is going to be, then we look to  
22 see whether there's additional information  
23 that needs to be collected in order to help  
24 us use it. That comes along with we're in

1           the process, Howard mentioned that we're in  
2           the process of redefining our ambient  
3           monitoring network, and certainly if the  
4           timing is right, we would take into  
5           consideration what we end up with standards  
6           in this rule making.

7                     CHAIRMAN TIPSORD: I think we are back  
8           to Ms. Franzetti.

9                     MS. FRANZETTI: Moving on to question  
10          6, and this deals with, again, Section  
11          302.408 in the proposed rules which sets  
12          forth three different charts in subparts B, C  
13          and D, setting forth the specific numerical  
14          values for the proposed thermal standards.  
15          And if one looks at what we are terming the  
16          nonsummer months, which is everything outside  
17          of this June 16th through September 15th time  
18          period, as between the proposed use  
19          classification, A, aquatic life A, aquatic  
20          life B and Upper Dresden island pool, the  
21          nonsummer period average proposed thermal  
22          standards are identical across all three use  
23          designations when it seems the basis of the  
24          proposed thermal standards for, at least for

1 the summer months, is to protect the species  
2 that are there or are expected to be there.  
3 So can you explain how it is rational,  
4 justified to have the exact same nonsummer  
5 month thermal standards as you go from  
6 aquatic life A to aquatic life B, and then  
7 obviously up the use rung of the ladder to  
8 upper Dresden pool, which is a proposed  
9 higher use than even aquatic life use A?

10 MR. TWAIT: Sure. The Agency looked  
11 at what it would consider a background  
12 temperature, and when we were looking for  
13 that background temperature, we were trying  
14 not to put it to get our background  
15 temperature that's influenced by either Lake  
16 Michigan, a heated effluent or MWRD's  
17 facility, and this was one of the only  
18 stations that we felt appropriate and to  
19 represent the system because other stations  
20 that we had available to us were directly  
21 influenced by something else.

22 MS. FRANZETTI: Assuming it's possible  
23 to do this, would the Agency be open to  
24 nonsummer month period average values that

1           are shown to be protective of the expected  
2           level of aquatic life?

3                   MR. TWAIT: I don't see why not.  
4           That's our whole goal here is to protect  
5           aquatic life.

6                   MS. FRANZETTI: Okay. Moving on to  
7           question 7. Why is the January period  
8           average 54.6 degrees Farenheit so much lower  
9           than the December period average of 59.9  
10          degrees Farenheit?

11                   MR. TWAIT: I don't know the answer to  
12          that. They are both based on effluent data  
13          that was provided by MWRD.

14                   MS. FRANZETTI: Moving on to question  
15          8. Was the period average concept presented  
16          and discussed within the various UAA  
17          stakeholder group meetings?

18                   MR. TWAIT: Only at the March 2007 --

19                   MS. FRANZETTI: Public hearing?

20                   MR. TWAIT: -- public hearing --  
21          public meeting, sorry.

22                   MS. FRANZETTI: Meeting, I'm sorry.  
23          Moving on to question 9.

24                           Is the proposed daily maximum

1 thermal standard an instantaneous limit or a  
2 daily average limit?

3 MR. TWAIT: As it's written now, it's  
4 an instantaneous limit.

5 MS. FRANZETTI: Is the Agency open to  
6 considering instead the alternative of a  
7 daily average maximum limit?

8 MR. TWAIT: I don't know that I could  
9 honestly say that we wouldn't be open to  
10 anything.

11 MS. FRANZETTI: Okay. Sounds like we  
12 should talk.

13 Moving on to question 10. If the  
14 proposed daily maximum thermal standard is an  
15 instantaneous limit, which you said is  
16 proposed and currently is, how is the  
17 discharger supposed to calculate the two  
18 percent excursion hours proposed in the  
19 thermal quality water standards?

20 MR. TWAIT: I think that would be how  
21 it's done currently. I know that Midwest  
22 Generation's permit has excursion hours for  
23 the data that's generated at the I-55 bridge,  
24 so I don't think it would be any different

1           than it's done now based on hourly  
2           excursions.

3                   MS. FRANZETTI:  Moving on to --

4                   MR. ETTINGER:  Could I just ask a  
5           little more about that?

6                   CHAIRMAN TIPSORD:  Yes.

7                   MR. ETTINGER:  You say it's an  
8           instantaneous limit, but could you explain  
9           how the excursion works?

10                   MR. TWAIT:  It's an instantaneous  
11           limit.  Let's just say, pull out a number and  
12           say 91 degrees, any period of time that they  
13           go above 91 degrees, they would have to start  
14           including excursion hours, and I'm not sure  
15           if they calculate that in 15 minute  
16           increments or in hour increments, but there's  
17           only so much time that they can be above that  
18           91 degrees.

19                   MR. ETTINGER:  But basically they can  
20           use up their two percent allowance, and then  
21           after they use that up, then the next time  
22           they go over it, that would be a violation?

23                   MR. TWAIT:  Yes.

24                   MS. BARKLEY:  Tracy Barkley,

1 B-A-R-K-L-E-Y with Prairie Rivers Network.

2 And I had a similar question, but I'm  
3 interested in the data that's used to  
4 calculate compliance with thermal water  
5 quality standards or what is it continuous  
6 temperature monitoring or at what intervals  
7 are those data points collected?

8 MR. TWAIT: That would be based upon  
9 what the discharger determines to do. If  
10 they take samples once per day, then if they  
11 go over their temperature, that would incur  
12 for the whole day. If they are taking  
13 samples every 15 minutes and they were only  
14 over for 15 minutes, that 15 minutes would  
15 apply for their excursion hours. So it's  
16 based upon how often the discharger is  
17 evaluating the data.

18 MS. BARKLEY: Are you saying then that  
19 you don't know how often they are collecting  
20 the thermal temperature data?

21 MS. WILLIAMS: Who?

22 MS. BARKLEY: Midwest Generations?

23 MR. TWAIT: If it's specific to  
24 Midwest Generation, at the I-55 bridge it's

1 my understanding it's continuous data, and  
2 I'm not exactly sure how excursion hours are  
3 handled when they have -- when they note -- I  
4 would imagine it's based upon the time that  
5 they are above that value, whether it's per  
6 one minute, five minutes or ten minutes,  
7 since they are taking it on continuous data.

8 MS. BARKLEY: Okay, thank you.

9 MS. FRANZETTI: Moving on to  
10 Section E. This is proposed section  
11 302.408(a), which deals with the two percent  
12 excursion hours and two degree Celsius  
13 excursion provisions. Question 1, what is  
14 the basis for the selection of a two percent  
15 excursion hours provision in the thermal  
16 water quality standards versus the existing 5  
17 percent excursion hours provision,  
18 particularly for the proposed lower use  
19 classification waters, such as aquatic life  
20 B?

21 MR. TWAIT: The Agency chose 2  
22 percent --

23 MR. ETTINGER: I want to object. Five  
24 percent is to what?

1                   MR. TWAIT: Secondary contact.

2                   MR. ETTINGER: That's the secondary  
3 contact standard?

4                   MR. TWAIT: The Agency chose 2  
5 percent. It's between the 1 percent for  
6 general use and the 5 percent for secondary  
7 contact, and it's the same as the site  
8 specific standard at the I-55 bridge.

9                   MS. FRANZETTI: And by the site  
10 specific standard, you are referring to the  
11 Midwest Gen adjusted standard terms?

12                   MR. TWAIT: Yes.

13                   MS. WILLIAMS: AS96-10 for the record.

14                   MS. FRANZETTI: So in terms of the  
15 underlying rationale, I mean I recognize that  
16 2 percent excursion hours is a stricter  
17 provision than the existing secondary contact  
18 5 percent, not quite as strict as the  
19 existing 1 percent excursion hours allowed  
20 under the general use thermal standard, but  
21 I'm not quite sure why 2 percent as  
22 between -- I mean, why not 3, 3-1/2? Just  
23 trying to get in between them or -- I mean,  
24 can you elaborate on what the thinking was

1 for why 2 percent was selected?

2 MR. TWAIT: I think it was an  
3 arbitrary number. I don't know that there's  
4 any scientific rationale behind the 2  
5 percent, and there's no biological reason  
6 behind the 2 percent that I know of.

7 MS. FRANZETTI: I think question 2  
8 maybe we have covered with the various  
9 follow-up. It's, "How does one compute the  
10 2 percent excursion hours allotment is  
11 applied to the period average water quality  
12 standard?" I think we've covered it unless  
13 anybody disagrees.

14 Moving on to No. 3. Same question  
15 now with respect to, Mr. Twait, the two  
16 degrees Celsius limit on the degree of  
17 excursion over the thermal water quality  
18 standards. What was the Agency's basis for  
19 proposing that requirement in the thermal  
20 water quality standards?

21 MR. TWAIT: The two degrees Celsius is  
22 greater than the three degrees Fahrenheit for  
23 the general use, and it's less than the seven  
24 degrees Fahrenheit for secondary contact.

1           Once again, I don't believe that it had a  
2           scientific reason for choosing the two  
3           degrees Celsius. I will note that the two  
4           degrees Celsius was equal to the safety  
5           factor that was applied in the model.  
6           However, I don't necessarily know that  
7           there's any significance to that.

8                         MS. FRANZETTI: And by the model that  
9           you just referred to, that is once again you  
10          are referring to what Mr. Yoder calls his  
11          fish temperature model, correct?

12                        MR. TWAIT: Yes.

13                        Moving on to question 4. Does the two  
14          degree Celsius limit on the degree of  
15          excursion over the thermal water quality  
16          standard apply to both the period average and  
17          the daily maximum?

18                        MR. TWAIT: As the standard is  
19          proposed, the two degree Celsius applies to  
20          the daily maximum only.

21                        MS. FRANZETTI: Can you explain why  
22          it's limited to, in it's applicability, to  
23          the daily max?

24                        MR. TWAIT: Do you want why it was

1           written the way it was or do you want the  
2           rationale behind it?

3                   MS. FRANZETTI:  The rationale for why  
4           it should not apply to the period average and  
5           only to the daily maximum standard.

6                   MR. TWAIT:  It was written to apply to  
7           the daily maximum simply because of excursion  
8           hours that we're applying.  The period  
9           average, we couldn't come up with an  
10          excursion hour because those are -- I mean,  
11          we could come up with an excursion hour, but  
12          we couldn't come up with something that we  
13          felt comfortable with for excursion hours for  
14          the period average because that's based on an  
15          entire month in some cases.

16                   MS. FRANZETTI:  Moving on to F.  
17          Comparison of proposed thermal water quality  
18          standards to existing general use thermal  
19          water quality standards.  On page 36 of the  
20          statement of reasons and page 14 of the Twait  
21          pre-filed testimony it is stated that "The  
22          proposed thermal water quality standards are  
23          more stringent than the current general use  
24          standards for the months April through

1 November, especially when considering the  
2 period average." If the proposed use  
3 designation for the upper Dresden pool is  
4 lower than the general use designation, what  
5 is the rationale for proposing thermal  
6 standards for the upper Dresden pool that are  
7 more restrictive than the current general use  
8 thermal standards?

9 MR. TWAIT: That would simply be based  
10 on the protection of aquatic life. The  
11 general use standard has not been updated for  
12 over 30-some years.

13 MS. FRANZETTI: Which leads kind of  
14 into question 2. Does the Agency believe  
15 that the current general use thermal water  
16 standards are not adequately protective of  
17 full aquatic life use?

18 MR. TWAIT: Quite possibly, however we  
19 have not evaluated the general use waters at  
20 this time.

21 MS. FRANZETTI: So would that answer  
22 amount to that the Agency does not know?

23 MR. TWAIT: Correct.

24 MR. ETTINGER: Just to ask, in

1           answering those questions, were you keeping  
2           in mind the five degree above natural  
3           restriction in the general use standards  
4           currently?

5                     MR. TWAIT: I was only comparing the  
6           numeric values between the two.

7                     MR. ETTINGER: But the five degree  
8           above natural is in the general use standard  
9           and it's not in this proposal?

10                    MR. TWAIT: Correct.

11                    MS. FRANZETTI: Mr. Twait, if you do  
12           consider the five degree above natural  
13           restriction in the general use thermal  
14           standard, is your answer any different with  
15           respect to the adequacy of the protectiveness  
16           of the existing general use thermal standard?

17                    MR. TWAIT: I don't know that it does.  
18           Talking to Chris Yoder, as far as he knows,  
19           the five degrees Delta T has no scientific  
20           basis, and he believes that by having a  
21           period average, that that will protect the  
22           aquatic life.

23                    MS. FRANZETTI: Am I correct that with  
24           respect to what the Agency intends to do in

1 the future with respect to any potential  
2 revision to the general use thermal water  
3 quality standards, that the answer is you  
4 don't know; you have not made any decisions  
5 as to whether you would follow the same  
6 approach you did here to derive thermal water  
7 quality standards?

8 MR. TWAIT: I think that would be  
9 accurate.

10 MS. FRANZETTI: And I think we can  
11 skip B and C and move on to No. 3.

12 On page three of the Sulski  
13 pre-filed testimony there are references to  
14 numerous stressors in the subject waterway,  
15 including legacy contaminants, and it is  
16 noted that the system must support other  
17 critical functions, such as urban drainage,  
18 flood control and navigation. On page 8  
19 Mr. Sulski states that the Illinois EPA  
20 recognized reduced biotic integrity due to  
21 impoundment in the upper Dresden pool. Given  
22 all of these constraints and stressors and  
23 the lower use classification proposed for the  
24 upper Dresden pool, why does the Illinois EPA

1 believe that thermal water quality standards  
2 that are more restrictive than the current  
3 general use standards is more appropriate for  
4 the upper Dresden pool?

5 MR. SULSKI: Well, we recognize that  
6 there's reduced biotic integrity in the upper  
7 Dresden island pool, but not below the Clean  
8 Water Act goal. And then I would defer to  
9 Scott's answer that we haven't visited the  
10 thermal standards for 30-some years and we  
11 were compelled to in this proposal, so we  
12 have. And we're applying what we believe is  
13 the best thermal standard available to us at  
14 this point, and so that then becomes what is  
15 protective of the uses that we've defined.

16 MS. FRANZETTI: Moving on to the next  
17 question. On page 86 of the Statement of  
18 Reasons and page 14 of the Twait pre-filed  
19 testimony, it is stated "That in comparing  
20 the proposed thermal water quality standards  
21 to the existing general use water quality  
22 standards, that the proposed standard for the  
23 December through March time period are  
24 'approximately equivalent,' to the existing



1 more than ten degrees less than what you can  
2 currently attain as a discharger in that time  
3 period and remain in compliance, correct?

4 MR. TWAIT: Yes.

5 CHAIRMAN TIPSORD: Mr. Ettinger, did  
6 you have --

7 MR. ETTINGER: Under your proposal,  
8 leaving aside what these plants are capable  
9 of generating, in theory you could have an 88  
10 degree temperature in January, which would be  
11 a whopping violation of the current general  
12 standard?

13 MR. TWAIT: Yes. However, the chance  
14 of meeting a period average at that point  
15 would be small, but yes.

16 CHAIRMAN TIPSORD: This might be a  
17 good time to take a ten minute break.

18 Mr. Harley, you have some  
19 follow-up?

20 MR. HARLEY: Some materials were just  
21 brought in that were accidentally left here  
22 overnight. They are back here in the corner  
23 in case anybody is missing anything.

24 CHAIRMAN TIPSORD: Okay, thank you.

1 (Brief recess taken, after which  
2 the following proceedings were  
3 had:)

4 CHAIRMAN TIPSORD: Back on the record.

5 MS. FRANZETTI: We're now on Section G  
6 of my pre-filed questions, Comparison of  
7 Proposed Aquatic Life Use A Thermal Water  
8 Quality Standards To Proposed Upper Dresden  
9 Thermal Water Quality Standards." Question  
10 1, at page 82 of the statement of Reasons the  
11 Illinois EPA states that for aquatic life Use  
12 A Waters, eight RAS, representative aquatic  
13 species, plus White Sucker, were used to  
14 determine the summer thermal standards; where  
15 for the upper Dresden pool the option of 27  
16 RAS, modified use species were used to derive  
17 the thermal standards. However, even given  
18 this significant difference in the number of  
19 aquatic species used to derive these two  
20 proposed sets of thermal standards, the  
21 proposed thermal standards are identical for  
22 these two different use designations.  
23 Explain how this is scientifically justified  
24 given the differences in the expected

1 presence of the aquatic life between these  
2 two aquatic life use designations?

3 MR. TWAIT: As mentioned previously,  
4 the background stations were the same so that  
5 counts for the nonsummer months, and for the  
6 summer months both RAS species had the most  
7 sensitive -- had the same most sensitive  
8 species which was the White Sucker and based  
9 on the MBI methodology, the limits would be  
10 the same.

11 MS. FRANZETTI: Please -- moving on to  
12 B -- please explain how the resulting absence  
13 of any difference in the thermal standards  
14 derived for what is a limited use  
15 classification versus a use that is described  
16 as -- I'm going to change the question based  
17 on the testimony -- versus a use that is  
18 described as marginally meeting the full  
19 aquatic life use?

20 MR. TWAIT: The Clean Water Act  
21 supports the use of thermal water quality  
22 standards for the CAWS and lower Des Plaines  
23 waterways. Once again, that is just based on  
24 the protection of the most sensitive species

1           in those two RAS lists which would be White  
2           Sucker.

3                   MS. FRANZETTI:  If I might, just given  
4           the obvious importance then of the reliance  
5           of the White Sucker data, did the Agency do  
6           any review of information available with  
7           respect to the White Sucker species beyond  
8           what Mr. Yoder used and on which he derived  
9           his proposed values, thermal values, based on  
10          White Sucker literature data?

11                   MR. SMOGOR:  Based on White Sucker  
12          thermal tolerance?

13                   MS. FRANZETTI:  I'm basically asking,  
14          I'm simplifying it down.  Did you all look at  
15          any White Sucker information outside of what  
16          Mr. Yoder used and relied on to derive his  
17          values based on White Sucker?

18                   MR. SMOGOR:  No, I did not.

19                   MR. WILLIAMS:  Can we follow-up and  
20          ask him if he knows if there's any  
21          information on White Sucker thermal tolerance  
22          outside of what was cited in the reports?

23                   MR. SMOGOR:  I'm not aware of it if  
24          there is.

1                   MS. FRANZETTI: With respect to moving  
2 to section H --

3                   CHAIRMAN TIPSORD: Excuse me, I'm  
4 sorry Mr. Fort.

5                   MR. FORT: May I do a couple questions  
6 in the same vain as these. My question is  
7 really now that we've talked about a couple  
8 of the Use A Waters, I want to go to the Use  
9 B Waters and to the lower Chicago Sanitary  
10 and Ship Canal. My question is, with respect  
11 to the lower Chicago Sanitary and Ship Canal,  
12 are the present thermal standards protective  
13 of the recreation use which you've identified  
14 in this proceeding, which is nonrecreation  
15 for the lower Sanitary and Ship Canal?

16                   MR. TWAIT: You are asking if the  
17 current secondary standard is protective of  
18 the recreation use?

19                   MR. FORT: Yes.

20                   MR. TWAIT: The thermal?

21                   MS. WILLIAMS: So are you asking if  
22 it's too hot to swim? I don't understand.

23                   MR. FORT: Well, Counsel, I think your  
24 testimony is that this is a nonrecreation use

1           here. So my question is, maybe it's obvious  
2           but I thought it was a simple question -- do  
3           you understand the question, Mr. Twait?

4                     MR. TWAIT: Yes, I think so. Since  
5           we're not -- I don't believe that it's too  
6           warm based on the fact that we don't expect  
7           people to be swimming in it.

8                     MR. FORT: Now, with respect to the  
9           same body of water, the lower Chicago  
10          Sanitary and Ship Canal, with respect to the  
11          aquatic conditions in that part of the stream  
12          which the prior testimony said it was poor to  
13          a very poor habitat, does the present thermal  
14          standard protect that use of the, the  
15          existing uses of the lower Chicago Sanitary  
16          and Ship Canal?

17                    MR. TWAIT: No, I do not believe it  
18          does.

19                    MR. FORT: And what's the basis for  
20          that?

21                    MR. TWAIT: Because the temperatures  
22          are allowed to go up to a hundred degrees  
23          Fahrenheit, which we do not believe is  
24          protective of the aquatic environment.

1                   MR. FORT:  And what aquatic  
2 environment is there in that reach?

3                   MR. SULSKI:  What aquatic environment?  
4 Haven't we been through habitat description?

5                   MS. WILLIAMS:  Are you asking for what  
6 species or what type of habitat?

7                   MR. FORT:  I'm looking for data from  
8 the Chicago Sanitary and Ship Canal bridge.

9                   MS. WILLIAMS:  What kind of data?

10                  MR. FORT:  Biological data would be --

11                  MR. ETTINGER:  Would part of Exhibit  
12 28 be --

13                  MR. SULSKI:  That's some species, but  
14 in terms of overall what information went  
15 into making the proposal, it's contained in  
16 the CAWS attachment B report, and the lower  
17 Des Plaines attachment A report, that gets  
18 into the habitat in addition to what  
19 testimony that we've provided.

20                  MR. FORT:  I realize that it gets into  
21 that, but the data that is there says it's a  
22 poor to very poor habitat.  And I have yet to  
23 see any data of any species on which the  
24 thermal standard is purportedly based, any

1 species being taken from this reach of the  
2 ship canal.

3 MR. ETTINGER: I'm not quite clear  
4 what you mean by this reach of the ship  
5 canal.

6 MR. FORT: The lower Chicago Sanitary  
7 and Ship Canal.

8 Can you let him answer. Are you  
9 objecting, Counsel?

10 MR. ETTINGER: I am objecting because  
11 I'm not clear what reach you are talking  
12 about.

13 MS. WILLIAMS: Now I'm lost. Can we  
14 ask it again please or read it back.

15 CHAIRMAN TIPSORD: Can you read back  
16 the question.

17 MR. SULSKI: Let me try and answer and  
18 see --

19 MS. DIERS: I'm asking him not to  
20 answer.

21 MR. SULSKI: I want to answer your  
22 question.

23 CHAIRMAN TIPSORD: Are we now waiting  
24 for the read back? Let me see if I can do

1           this. The question, Mr. Fort, is the  
2           question what biological data you have on the  
3           lower sanitary and ship canal that you've  
4           used to come up with these, just what  
5           biological data you have?

6                       MR. FORT: Let me try it again here.  
7           The testimony has been that you've used  
8           either the 75 percentile from the Water  
9           Reclamation District or the Species data to  
10          propose the, to support the proposed  
11          temperature standards, thermal standards. My  
12          question is, what species do you know exists  
13          that you sampled and located in the lower  
14          Chicago sanitary and Ship Canal that fit into  
15          any of these model protocols that Mr. Yoder  
16          has talked about and Mr. Twait has talked  
17          about?

18                      MR. SULSKI: As an example, this is  
19          just one example, on page 477 of Attachment  
20          B, it tells you that a biological assessment  
21          of the fish was performed at Willow Springs  
22          Road and at the Lockport power house and  
23          lock, and there are accompanying tables  
24          shortly after that that provides that data.

1 MR. FORT: By species?

2 MR. SULSKI: Yes.

3 MR. FORT: But that data is not  
4 referenced by Mr. Yoder when he is doing his  
5 testimony that we spent so much time on,  
6 correct?

7 MR. SMOGOR: Correct. Not  
8 specifically that I'm aware of. The fish  
9 data provided on the following page, 478 in  
10 attachment 2, is a compiled list of the  
11 species CAWS at several Chicago Sanitary and  
12 Ship Canal sites that include the two sites  
13 that Mr. Sulski just mentioned. There is  
14 presence of White Sucker noted in that  
15 compiled list of fish. And, again, given  
16 that we were proposing the potential use for  
17 those waters, we believed it was  
18 reasonable -- well actually I'm going to  
19 strike White Sucker, because White Sucker was  
20 not included in the representative aquatic  
21 species list for this CAWS B water, I  
22 believe. So we believe that the list of fish  
23 that was used for the representative aquatic  
24 species list is consistent with the fish that

1 are known to occur in Chicago Sanitary and  
2 Ship Canal, and we believe that our proposed  
3 temperature standards are consistent with the  
4 aquatic life potential that we've proposed  
5 for the Chicago Sanitary and Ship Canal.

6 MR. FORT: I'm sorry, because I  
7 thought the testimony you had in Chicago was  
8 that for the Chicago Sanitary and Ship Canal  
9 the habitat was poor to very poor, and you  
10 were not expecting it to be better in the  
11 future?

12 MR. SMOGOR: And we are proposing a  
13 biological potential consistent with that.

14 MS. WILLIAMS: I think I can help.  
15 Can I try a follow-up? I hope. Maybe. I  
16 don't know if it will help or not. Do you  
17 have in front of you, Mr. Smogor, Exhibit 15?

18 MR. SMOGOR: Yes.

19 MS. WILLIAMS: Could you turn to pages  
20 9 and 10 of Exhibit 15.

21 MR. SMOGOR: Okay.

22 MS. WILLIAMS: And can you identify  
23 where -- this is a table, correct?

24 MR. SMOGOR: Yes.

1                   MS. WILLIAMS: Could you identify for  
2                   us where in the table we would look to  
3                   understand the RAS list that was used for the  
4                   Use B Waters?

5                   MR. FORT: Counsel, my question is not  
6                   with the RAS list. It's connecting the  
7                   assumptions in the RAS list to the actual  
8                   sampling --

9                   MR. WILLIAMS: I think I'll get there.  
10                  Is it okay if you give me a second to get  
11                  there.

12                  MR. SMOGOR: With Mr. Twait's  
13                  verification, I believe it's the right most  
14                  column. If there is an X in the right-most  
15                  column, that represents -- if you walk that,  
16                  if you see what species each of those X's  
17                  refers to, I believe that was the set of  
18                  representative aquatic species that Mr. Twait  
19                  used.

20                  MR. TWAIT: Yes.

21                  MS. WILLIAMS: Now, with regard to the  
22                  existing conditions -- I'm not asking about  
23                  biological potential at this point, but just  
24                  with regard to the existing biological

1 conditions in the Use B Waters as you are  
2 aware of it -- can you provide us any  
3 testimony with regard to whether these  
4 species on this list are found where you  
5 would expect them to be found in those waters  
6 as we sit here today?

7 CHAIRMAN TIPSORD: Which waters?

8 MS. WILLIAMS: The Use B Waters.

9 MR. FORT: Counsel, I'm not asking  
10 about use B.

11 MS. WILLIAMS: Restricted to the lower  
12 Sanitary and Ship Canal.

13 MR. FORT: Restrict it to the lower  
14 Chicago Sanitary and Ship Canal, please.  
15 That's what I've been looking at. And I see  
16 use B referenced a lot, including in the  
17 attachments you are talking about. I never  
18 see anything on the Chicago sanitary and Ship  
19 Canal. I asked Mr. Yoder that question in  
20 Chicago, and he said, yes, I believe this  
21 electro shocking testing that the District  
22 has done has that information. I think we  
23 established yesterday that he was in error,  
24 that there was no data from the Chicago

1 Sanitary and Ship Canal in that data set  
2 either.

3 MS. DIERS: Are you asking a question  
4 now? It sounds like you are testifying. He  
5 is testifying.

6 CHAIRMAN TIPSORD: He wants --

7 MS. WILLIAMS: Can you make objection.

8 CHAIRMAN TIPSORD: Can one of us speak  
9 at a time. He is asking Ms. Williams to  
10 limit her question to the Chicago Sanitary  
11 and ship Canal and he is explaining why.

12 MS. WILLIAMS: Can I ask it as I asked  
13 it?

14 CHAIRMAN TIPSORD: Go ahead ask it the  
15 way you asked it, and then we'll ask it the  
16 way Mr. Fort wants it asked.

17 MS. WILLIAMS: Do you understand the  
18 way I asked it? I asked it generally with  
19 regard to the Use B Waters. Can you try to  
20 answer that first?

21 MR. SMOGOR: In general, with regard  
22 to Use B Waters, I believe that the fish data  
23 available shows that those eight species can  
24 be expected to occur in Use B Waters.

1                   MS. WILLIAMS:  Then with regard to  
2                   Mr. Fort's question, are you able to be more  
3                   specific with regard to the lower Sanitary  
4                   and Ship Canal?

5                   MR. SMOGOR:  I can't specify to lower  
6                   Chicago Sanitary and Ship Canal because the  
7                   data that I've referenced at page 478,  
8                   Attachment 2, doesn't have the fish site by  
9                   site, but assuming that the sites mentioned  
10                  on page 477 -- and there are five sites --  
11                  assuming that fish can get from site to site  
12                  within the Chicago Sanitary and Ship Canal,  
13                  it looks like all eight of those species are  
14                  represented in that set of fish data on page  
15                  478.

16                  CHAIRMAN TIPSORD:  Of Attachment B?

17                  MR. SMOGOR:  Of Attachment B, thank  
18                  you.

19                  MR. ETTINGER:  For my benefit at  
20                  least, would you define what you are  
21                  referring to in these answers as the lower  
22                  sanitary ship canal?

23                  MR. SMOGOR:  I don't know what is  
24                  being referred to.

1                   MR. FORT: I'm using whatever is on  
2                   your Exhibit 29, which has a category there.  
3                   I think it's a defined segment.

4                   MS. WILLIAMS: So can you explain,  
5                   Rob.

6                   MR. SULSKI: Lower sanitary ship canal  
7                   is on page 1 of Exhibit 29. It's the bottom  
8                   row. It begins at the Calumet Sag channel  
9                   and ends at the lower Des Plaines  
10                  River-Brandon pool.

11                  MR. ETTINGER: So it includes this  
12                  portion of the Des Plaines above the Brandon  
13                  Road lock, the actual confluence area where  
14                  the Brandon Road lock and damn --

15                  MR. SULSKI: It's not the lower  
16                  Des Plaines.

17                  MR. ETTINGER: I'm sorry, the upper  
18                  Des Plaines. It's my understanding is the  
19                  upper Des Plaines merges with the Sanitary  
20                  and Ship Canal just above the Brandon Road  
21                  lock and damn, so the area that you are  
22                  defining as the lower Sanitary and Ship Canal  
23                  includes that confluence area?

24                  MR. SULSKI: Yes.

1 MR. FORT: And this confluence area?

2 MR. SULSKI: No, sorry.

3 MR. TWAIT: The lower Sanitary and  
4 Ship Canal that we're talking about I believe  
5 ends at the Lockport lock and damn.

6 MR. SMOGOR: I noticed yesterday, and  
7 I scratched my notes down, on Exhibit 29, if  
8 that's the Exhibit that we have each of the  
9 factors attributed to various sections, I  
10 believe it would be more correct where Rob  
11 mentions "lower Chicago Sanitary and Ship  
12 Canal," I think that would be more correct to  
13 say lower Chicago Sanitary and Ship Canal and  
14 the uppermost portion of Brandon pool. It's  
15 actually both those pieces because -- and  
16 they are all CAWS B Waters, so that  
17 distinction in the actual names of the water  
18 body wasn't necessarily all that meaningful  
19 in terms of they are all CAWS B waters.  
20 Because all of Brandon pool is a CAWS B  
21 water, and then upstream of Lockport, the  
22 lock and damn in the Chicago Sanitary and  
23 Ship Canal, that's also Use B Waters. Does  
24 that help?

1                   MR. FORT: Yes. Just so I make sure I  
2 understand this, in terms of this category,  
3 that is called on Exhibit 29, the lower  
4 Chicago Sanitary and Ship Canal, you would  
5 also include the Brandon Road pool?

6                   MR. SMOGOR: Not all of the pool.

7                   MR. FORT: The upper pool?

8                   MR. SMOGOR: Just the uppermost part  
9 of the pool that -- I'll be specific here --  
10 that extends from the confluence with the  
11 Des Plaines River upstream to the Lockport  
12 lock and damn, that body of water on a map is  
13 actually called the Chicago Sanitary and Ship  
14 Canal. So there is part of the Chicago  
15 Sanitary and Ship Canal that does extend  
16 below the Lockport lock and damn to the  
17 confluence of the Des Plaines River.

18                   MS. WILLIAMS: But not as it's defined  
19 in the regulations.

20                   MR. SMOGOR: But in the regulations --  
21 this is where it gets complicated, thank you  
22 -- we are calling Brandon Pool, the uppermost  
23 portion of Brandon pool in the regulation  
24 only extending to the confluence of the

1 Des Plaines River with the Chicago Sanitary  
2 and Ship Canal.

3 MR. FORT: So if I'm starting with the  
4 confluence of the Des Plaines River that  
5 you've talked about working upstream with the  
6 ship canal; you have the Lockport locks,  
7 correct?

8 MR. SMOGOR: Yes.

9 MR. FORT: Then we have this invasive  
10 species barrier?

11 MR. SULSKI: Yes.

12 MR. FORT: Yes?

13 MR. SULSKI: Yes.

14 MR. FORT: Then we go upstream from  
15 that, and this is still the lower Chicago  
16 Sanitary and Ship Canal?

17 MR. SMOGOR: Yes.

18 MR. FORT: Thank you.

19 MS. FRANZETTI: At the risk of going  
20 one more step, but just for those of us who  
21 like the simple map on Exhibit 25, is that  
22 cut-off point that you were referring to as  
23 the upper portion of the Dresden pool, is  
24 that right where you've got the color for the

1 Chicago Sanitary and Ship Canal, which one  
2 might call a brown color, changing to green  
3 on Exhibit 25, the Chicago Area Waterway  
4 System, Des Plaines River, UAA Segment?

5 MR. SULSKI: Correct.

6 MS. FRANZETTI: Back to my pre-filed  
7 questions. Section H, Thermal Rule  
8 Development Process. No. 1, at page 15 of  
9 the Twait pre-filed testimony it states,  
10 "Development of the Agency's proposal to the  
11 Board for thermal water quality standards was  
12 one of the most challenging aspects of the  
13 rule development process." Explain why this  
14 was the case.

15 MR. TWAIT: I made this statement  
16 because there's no U.S. EPA criteria document  
17 that's recent, and there was so many opposing  
18 views during the work group meetings with  
19 seemingly no middle ground.

20 MS. FRANZETTI: Mr. Twait, when you  
21 talk about so many opposing views during the  
22 work group meetings, can you give us a brief  
23 description of what you're recollecting were  
24 the many opposing views?

1                   MR. TWAIT: I believe our contractors  
2                   thought the secondary contact standard was  
3                   lethal. The environmental groups thought  
4                   they were not stringent enough, and according  
5                   to Midwest Generation's proposal at one time,  
6                   they thought the secondary contact standard  
7                   was appropriate. And that might still be the  
8                   case. I don't know.

9                   MS. FRANZETTI: That was basically the  
10                  opposing views, was some thinking secondary  
11                  contact was appropriate and others thinking  
12                  those weren't strict enough?

13                 MR. TWAIT: Yes.

14                 MS. FRANZETTI: Actually, you made  
15                  reference just a few minutes ago to the fact  
16                  that the allowance under the secondary  
17                  contact thermal standards for a maximum  
18                  thermal level of hundred degrees Fahrenheit  
19                  was not protective. Do you recall generally  
20                  what I'm talking about?

21                 MR. TWAIT: Yes.

22                 MS. FRANZETTI: The secondary contact  
23                  standard also has the other piece of it, that  
24                  the water shall not exceed 93 degrees

1 Farenheit more than 5 percent of the time.  
2 Are you as certain about that portion of the  
3 secondary contact thermal standards being  
4 nonprotected?

5 MR. TWAIT: I would say based upon  
6 Chris Yoder's work that those numbers are not  
7 necessarily protective, although our two  
8 degrees centigrade excursion for 2 percent of  
9 the time is somewhere around 93 degrees.

10 MS. FRANZETTI: When you say our, what  
11 are you referring to?

12 MR. TWAIT: The proposal.

13 MS. FRANZETTI: So it is rather  
14 similar in that regard, correct?

15 MR. TWAIT: It's similar only that  
16 it's the same number. In our proposal that  
17 number would be a maximum. In the secondary  
18 contact standard it is -- it's not a maximum,  
19 per se. It's the number that you shouldn't  
20 exceed more than 5 percent of the time.

21 MS. FRANZETTI: Moving on to question  
22 2 in Section H.

23 At page 15 of the Twait pre-filed  
24 testimony it states, "There will likely be

1 additional information developed in the  
2 record of this proceeding that the Board will  
3 have to consider in making a final decision."  
4 Explain the basis for this statement and  
5 expectation for additional information.

6 MR. TWAIT: The additional -- well, I  
7 made that statement because there was so  
8 much -- since this was a contentious issue,  
9 and like I said there was no middle ground  
10 that we could find, the additional  
11 information that I think could be generated  
12 is Midwest Generation's proposal or  
13 counterproposal that was mentioned  
14 previously, also with the possibility of  
15 economic data.

16 MS. FRANZETTI: And the Midwest Gen  
17 proposal you were referring to, since there  
18 was more than one, was the August 2007  
19 proposal?

20 MR. TWAIT: That would be one that I  
21 was specifically thinking about, but there's  
22 nothing stopping Midwest Generation from it's  
23 other proposal either.

24 MS. FRANZETTI: Moving on to Roman XI,



1           conducted on the Midwest Generation  
2           facilities, including the review of such  
3           factors as available space, conflicts with  
4           existing infrastructure, sensitivity of the  
5           area to fogging and other facility and  
6           environmental factors.

7                     MR. TWAIT: No such analysis was done  
8           by the Agency.

9                     MS. FRANZETTI: Moving on to Question  
10          B. Did the Illinois EPA conclude that it is  
11          technically feasible for each of the Midwest  
12          Generation facilities to comply with the  
13          proposed temperature water quality standards?

14                    MR. TWAIT: The Agency did not do a  
15          technical feasibility analysis for the  
16          Midwest Generation facility.

17                    MS. FRANZETTI: So no such conclusion  
18          was reached by the Agency as to the technical  
19          feasibility of compliance for each of the  
20          Midwest Generation facilities with the  
21          proposed temperature water quality standards?

22                    MR. TWAIT: Correct.

23                    MS. FRANZETTI: Question, C, what are  
24          the various factors referenced by the

1 Illinois EPA that will impact which  
2 technology will be more appropriate for each  
3 Midwest Generation facility?

4 MR. SMOGOR: Well, I think that it was  
5 beyond the various factors. We also said  
6 that this would be better known to Midwest  
7 Generation, and that's the type of  
8 information that we sought all along.

9 MS. FRANZETTI: So that was just a  
10 general reference that there are various  
11 factors that will probably implement this,  
12 but are not known to the Agency, they should  
13 be known to Midwest Generation?

14 MR. SMOGOR: Correct.

15 MR. ETTINGER: To follow-up. Do you  
16 know whether Midwest Generation supplied any  
17 of this information to you in the course of  
18 the -- do you know if Midwest Gen supplied  
19 any of this information to you in the course  
20 of the stakeholder process?

21 MR. SMOGOR: Yes, they did supply us  
22 with information. I think as we get through,  
23 we're going to cover some of that.

24 MS. FRANZETTI: Moving on to question



1 MS. FRANZETTI: And what is that  
2 knowledge based on, Mr. Twait?

3 MR. TWAIT: Offhand I would have to  
4 say the construction of cooling towers at one  
5 of the Joliet facilities. So we know they  
6 can be added. We didn't meet the  
7 statement --

8 MS. FRANZETTI: Do you have any such  
9 knowledge with respect to turning a  
10 once-through cooling plant into a closed  
11 cycle cooling facility?

12 MR. TWAIT: I know of no place that  
13 that's been done.

14 MS. FRANZETTI: Moving on to question  
15 3. At page 99 of its Statement of Reasons  
16 the Illinois EPA states, "In particular  
17 Midwest Generation will have to study the  
18 best way to provide cooling at its smaller,  
19 older facilities where the availability of  
20 additional land may determine how much  
21 cooling capacity can be installed." Question  
22 A, which Midwest Generation facilities is the  
23 Illinois EPA referring to as the smaller,  
24 older Midwest Generation facilities?

1                   MR. TWAIT: This statement should not  
2                   have listed any particular facility. It  
3                   should have included all of the facilities  
4                   where Midwest Generation will have to look  
5                   whether cooling can be installed. There's no  
6                   reason for it to be for any of the smaller,  
7                   older facilities. It should be for all the  
8                   facilities.

9                   MS. FRANZETTI: We'll consider that at  
10                  the older smaller facilities deleted.

11                  Moving on to B, has the Illinois  
12                  EPA made any determination as to whether it  
13                  is technically feasible for Midwest  
14                  Generation to install sufficient cooling  
15                  capacity -- well, I think actually now that  
16                  you've changed it, you've already answered  
17                  that question earlier that, no, you have not.

18                  Moving on to question 4. At page  
19                  99 of its Statement of Reasons the Illinois  
20                  EPA states, "As the Board is already aware,  
21                  Midwest Gen is currently considering whether  
22                  to close its will County, Crawford and Fisk  
23                  facilities. See attachment RR." What facts  
24                  is this statement based on?

1 MS. WILLIAMS: The information  
2 contained in Attachment RR which is a  
3 memorandum of understanding between Midwest  
4 Generation and the Agency.

5 MS. FRANZETTI: Okay. And nothing  
6 else?

7 MS. WILLIAMS: Nothing else.

8 MS. FRANZETTI: Well, then let me ask  
9 a few follow-up questions. Is the Agency  
10 aware that Midwest Gen has four units at the  
11 Will County plant and only two of those four  
12 units may or may not be shut down in 2010  
13 under the Mercury Emission Regulations?

14 MS. WILLIAMS: Someone at the Agency  
15 probably is. I don't know that I am, but  
16 I'll accept that if that's your --

17 MS. FRANZETTI: We believe that that  
18 is true.

19 MS. WILLIAMS: I would believe that is  
20 true if that's what you are telling me is  
21 true, I believe that.

22 MS. FRANZETTI: So would you agree,  
23 assuming that is accurate that under the  
24 Mercury Emissions Regulations it's only two

1 of the four units at Will County that may or  
2 may not be shut down, would you agree then  
3 it's not accurate to state that Midwest Gen  
4 is considering closing the Will County plant?

5 MS. WILLIAMS: Absolutely.

6 MS. FRANZETTI: With respect to  
7 Crawford and Fisk facilities, Midwest Gen may  
8 decide to install the applicable Mercury  
9 Emissions control technology rather than  
10 close those plants; would you agree that that  
11 is accurate?

12 MS. WILLIAMS: Yes.

13 MS. FRANZETTI: And even if Midwest  
14 Gen were to decide to close the Fisk and  
15 Crawford plants, those decisions would not be  
16 made until 2015 and 2018 respectively; isn't  
17 that correct?

18 MS. WILLIAMS: That is what the  
19 agreement provides for.

20 MS. FRANZETTI: And that agreement  
21 being Attachment RR which is what the Agency  
22 relied on?

23 MS. WILLIAMS: Right, I would assume  
24 that Midwest Generation could make that

1 decision earlier if they wanted to, but  
2 that's all they are required to do under the  
3 agreement.

4 MS. FRANZETTI: So moving on to  
5 question B, please explain the Agency's  
6 intent in including this statement that as  
7 the Board is already aware Midwest Generation  
8 is currently considering whether to close its  
9 Will County, Crawford and Fisk facilities,  
10 how is that relevant to the issue of the  
11 technical feasibility of these proposed  
12 rules?

13 MS. WILLIAMS: I would agree that it's  
14 not relevant to that issue. If it's  
15 relevant, it would only be relevant to the  
16 issue of a cost analysis possibly. I mean,  
17 our only intent was to provide the Board any  
18 information that seemed relevant, and the  
19 only way it would be relevant is if there was  
20 an argument to the value of investing money  
21 to comply with these standards in a facility  
22 that was going to close.

23 MS. FRANZETTI: Was the agency  
24 considering in making this statement that it

1           might be open to deferring any change in the  
2           thermal standards that are proposed here  
3           until after these deadlines in 2015 and 2018?

4                     MS. WILLIAMS:  No.

5                     MS. FRANZETTI:  At page 99 of its  
6           Statement of Reasons the Illinois EPA states,  
7           "Ultimately if these studies leave Midwest  
8           Generation to conclude that it is technically  
9           infeasible or economically unreasonable to  
10          install additional cooling capacity at these  
11          facilities, Section 316 of the Clean Water  
12          Act allows Midwest Generation to petition for  
13          relief from these requirements."

14                    Subpart A, question, is it  
15          Illinois EPA's position as this statement  
16          suggests that section 316(a) authorizes a  
17          variance from otherwise applicable water  
18          quality standards where the state determines  
19          that achieving these standards is technically  
20          infeasible or economically unreasonable?

21                    MS. WILLIAMS:  No.

22                    MS. FRANZETTI:  What is the Agency's  
23          position based on this statement?

24                    MS. WILLIAMS:  Well, I would say our

1 position with regard to 316(a) is that it  
2 seems to indicate an opportunity would be  
3 available for establishing alternative  
4 effluent limitations for thermal discharges  
5 so long as the Clean Water goals for aquatic  
6 life would be protected. It does not appear  
7 that technical feasibility and economic  
8 reasonableness are an explicit component of  
9 that provision in the statute.

10 Did that answer your question?

11 MS. FRANZETTI: Well, I think it  
12 answers this statement that is in your  
13 Statement of Reasons you're revising, aren't  
14 you?

15 MS. WILLIAMS: Yes, I would think it  
16 needs clarification.

17 MS. FRANZETTI: That as you said you  
18 are not saying that the requirements of  
19 316(a) are that you show technical  
20 infeasibility or economic unreasonableness;  
21 that's not your understanding of 316?

22 MS. WILLIAMS: That's not my  
23 understanding.

24 MS. FRANZETTI: I'm going to skip over

1           B. Given that answer, I don't think B is  
2           relevant or an applicable question.

3                         Do you know with respect to  
4           question C, if Midwest Generation were to  
5           seek a variance pursuant to Section 316(a),  
6           what standard would apply?

7                         MS. WILLIAMS: I think Midwest  
8           Generation would have to show that the  
9           requested effluent limitation would ensure  
10          the protection propagation of a balanced  
11          indigenous population of shell fish, fish and  
12          wildlife in and on the receiving stream.  
13          That's my understanding of the standard.

14                        MS. FRANZETTI: Do you also have an  
15          understanding of how that standard differs or  
16          does not differ from the standard Illinois  
17          EPA applied in developing the proposed  
18          aquatic life uses and standards?

19                        MS. WILLIAMS: Not specifically. So  
20          was the question with regard to the upper  
21          Dresden island pool in particular or the  
22          whole system?

23                        MS. FRANZETTI: Well, it basically  
24          would apply to any parts of the system to

1           which our five plants discharge. So it's not  
2           just to upper Dresden pool. It's all the  
3           Sanitary and Ship Canal.

4                   MR. ETTINGER: Is the answer the same  
5           to each of those areas?

6                   MR. TWAIT: I don't know the answer is  
7           the same to each of those areas because the  
8           Agency is not proposing, A, to protect -- the  
9           protection and propagation of a balanced  
10          indigenous population of shell fish, fish and  
11          wildlife for the CAWS B Waters.

12                   MS. FRANZETTI: With regard to that,  
13          Mr. Twait, has there been any discussion  
14          between Illinois EPA and U.S. EPA, Region 5,  
15          as to how 316(a) of the Clean Water Act would  
16          be applied to a water body like a CAWS B or  
17          aquatic life Use B Water body that has  
18          thermal standards that were not based on  
19          trying to maintain a balanced indigenous  
20          population?

21                   MR. TWAIT: Not that I am aware of.

22                   MS. FRANZETTI: Does the Agency know  
23          what new information would Midwest Generation  
24          have to collect and supply, if any, to seek a

1 variance pursuant to Section 316(a)?

2 MS. WILLIAMS: No.

3 MS. FRANZETTI: Does the Agency know  
4 what additional proceedings would be  
5 required, how long they would take and what  
6 administrative burden they would impose on  
7 the Agency, the Board and Midwest Generation?

8 MS. WILLIAMS: 316(a) requires  
9 opportunity for a public hearing. That's the  
10 only specific requirement I'm aware of.

11 MS. FRANZETTI: While any variance  
12 request is pending, what requirements would  
13 apply to Midwest Generation and what costs or  
14 other burdens would those impose?

15 MS. WILLIAMS: It would be our  
16 assumption that if Midwest Generation or any  
17 other discharger were to seek some type of  
18 site specific relief from any part of this  
19 proposal, whether it be through something  
20 under 316(a) or any other mechanism available  
21 under the Board's rules, we would assume that  
22 would occur during the compliance period  
23 established within the permits that are  
24 issued.

1                   MS. FRANZETTI: So are you saying the  
2                   Agency would be open to providing, a,  
3                   compliance period to cover the time  
4                   necessary, reasonably necessary to obtain a  
5                   316(a) variance or other similar or  
6                   appropriate relief?

7                   MS. WILLIAMS: If appropriate I am  
8                   sure we would be open to that.

9                   CHAIRMAN TIPSORD: Mr. Dimond?

10                  MR. Dimond: Let her finish up with  
11                  this line of questioning.

12                  MS. FRANZETTI: You know, I'm going to  
13                  No. 6.

14                  MR. Dimond: The 316(a) procedure,  
15                  does that apply to any facilities other than  
16                  electric generating units?

17                  MS. WILLIAMS: No I don't think so --  
18                  well, I don't think so. I think that's  
19                  right.

20                  MR. Dimond: So a chemical plant or an  
21                  oil refinery wouldn't be able to take  
22                  advantage of that?

23                  MS. WILLIAMS: Correct.

24                  MR. Dimond: Is it the Agency's

1 position that a normal Illinois variance or  
2 site specific for adjusted standard  
3 proceeding can't be pursued because of the  
4 Clean Water Act?

5 MS. WILLIAMS: No.

6 MS. FRANZETTI: Question 6, is it  
7 correct that nonpoint sources of temperature  
8 increases, such as urban run-off, will not be  
9 regulated under these proposed rules?

10 MR. ETTINGER: I want to the object to  
11 the statement that urban run-off is a  
12 nonpoint source.

13 MS. FRANZETTI: I'll strike that part  
14 of the question. I don't have a problem with  
15 that.

16 Is it correct that nonpoint  
17 temperature increases will not be regulated  
18 under these proposed rules?

19 MR. SULSKI: Any source can be  
20 regulated.

21 MS. FRANZETTI: Do you regulate  
22 nonpoint sources?

23 MR. SULSKI: Yes -- well, we do  
24 regulate nonpoint sources in the nonpoint

1 source elements of our NPS permit programs,  
2 storm water.

3 MS. FRANZETTI: Other than storm  
4 water -- well, let me strike that.

5 Mr. Sulski, doesn't the storm  
6 water have to come out of a point source in  
7 order for you to regulate it?

8 MS. WILLIAMS: Under NPDS the storm  
9 water that's regulated there is considered a  
10 point source construction and industrial.

11 MS. FRANZETTI: Are you currently  
12 regulating urban run-off that is not covered  
13 by your storm water program?

14 MS. WILLIAMS: I think the answer is  
15 no.

16 MS. FRANZETTI: That's what I think.  
17 No. 7, in the Illinois EPA's Statement of  
18 Reasons discussion of the technical  
19 feasibility of temperature water quality  
20 standards it identifies only the Midwest  
21 Generation facilities. Did the Illinois EPA  
22 conclude that no other dischargers would be  
23 required to control the temperature of their  
24 effluent in order to comply with the proposed

1 temperature standards, and if so what was the  
2 basis of this conclusion?

3 MR. TWAIT: The answer to your first  
4 question is, no, other dischargers may have  
5 to install cooling in order to meet the water  
6 quality standard. It would depend upon the  
7 size of their discharge and the temperature  
8 of their discharge and whether or not mixing  
9 is available.

10 MS. FRANZETTI: Moving on to Economic  
11 Justification B. At section Roman V, C, of  
12 the Statement of Reasons, page 99, the  
13 Illinois EPA states, "Regarding the cost of  
14 technology required to comply with the  
15 temperature standards of this proposed rule  
16 making, Midwest Generation has provided the  
17 Agency with only one statement of the  
18 estimated cost of the technology needed to  
19 control the temperature of their effluent at  
20 all five of their facilities in the effected  
21 waterways; Crawford, Fisk, Will County and  
22 Joliet 9 and 29 facilities." With respect to  
23 the "only one Midwest Gen statement of  
24 estimated costs submitted to the Illinois

1 EPA," is the Agency referring to, one, the  
2 April 26, 2004 thermal compliance cost study  
3 report for the lower Des Plaines River that  
4 Midwest Generation submitted to the Agency,  
5 or two, the economic impact analysis for  
6 Midwest Gen's Chicago area waterway power  
7 generating stations provided to the Agency on  
8 January 3, 2005, or three, the economic  
9 information presented by Midwest Gen in it's  
10 power point presentation during the public  
11 meetings on March 20th and 22nd and 2007?

12 MR. TWAIT: The answer to that  
13 question would be the third option there.  
14 The economic information presented by Midwest  
15 Generation in its power point presentation  
16 during the public meetings on March 20th and  
17 22nd of last year.

18 MS. WILLIAMS: Which is attachment SS  
19 to the Agency's proposal.

20 MS. FRANZETTI: Can someone explain to  
21 me why the Agency represented to the Board  
22 that only one economic statement was  
23 presented by Midwest Generation and deemed  
24 the April 26, 2004 and the January 3, 2005

1           submissions not to be economic impact  
2           information submitted by Midwest Gen?

3                   MR. SULSKI: I have the January 3rd  
4           submission.

5                   MS. FRANZETTI: I'm glad you have it.  
6           My question is whether or not the Agency  
7           disagrees or contends that the two submittals  
8           that we made in addition to prior and prior  
9           to, well prior to, the presentations made at  
10          the March 2007 public meetings did not  
11          constitute economic impact information. Or  
12          did you just make a mistake and not take it  
13          --

14                   MR. TWAIT: Let me start out here.  
15          After reading these, one of my jobs was to  
16          find the first study, and I have to apologize  
17          because my wife delivered early I was not  
18          able to find that particular study. And  
19          hopefully I'll be able to find it before next  
20          time. The II that you have here and part A  
21          does not have a dollar figure involved  
22          anywhere in here.

23                   CHAIRMAN TIPSORD: You are speaking  
24          about the January 3, 2005 information?

1                   MR. TWAIT: Yes. That does not have a  
2 cost to Midwest Generation. They do talk  
3 about some of the economic ramifications but  
4 there is no cost included, and it's my  
5 understanding that the April 26, 2004 did  
6 have some costs included, just based on my  
7 recollection, and like I said, I will try to  
8 find that for the next time. And so when we  
9 said the only one, that was incorrect.

10                   MS. FRANZETTI: So if I understand  
11 correctly --

12                   MR. TWAIT: I believe it was  
13 incorrect. Like I said, I will go back and  
14 try to find that particular study.

15                   MS. FRANZETTI: Okay.

16                   MS. WILLIAMS: Do you have it here? I  
17 mean, if we have it here, we can review it  
18 over lunch.

19                   MS. FRANZETTI: Well, I think you are  
20 going to need a little longer than over lunch  
21 to review that study, but we do have it. We  
22 will provide you with a copy. We were not  
23 aware until today that the Agency can't find  
24 it. Would have appreciated perhaps you

1           mentioning that to us a bit earlier.

2           However, now that you have, we will provide  
3           you with additional copies, but let me  
4           explore this a little bit further.

5                     CHAIRMAN TIPSORD:  Excuse me,  
6           Ms. Franzetti, before you do that, the Board  
7           needs copies.  If you have the January  
8           document, do you have only one copy?

9                     MS. WILLIAMS:  Yes.

10                    MS. FRANZETTI:  Madam Hearing Officer,  
11           if you want, we have no problem with  
12           supplying, submitting these to be filed with  
13           the Board just as the Agency has done some  
14           filings after each, after the last set of  
15           hearings.  We'll do the same on these.

16                    CHAIRMAN TIPSORD:  Okay, that's fine.

17                    MS. FRANZETTI:  Given that the Agency  
18           has other assignments to do, we'll take this  
19           one since it is our documentation.

20                    MS. WILLIAMS:  I think Mr. Sulski --  
21           Scott said he'd start out, I think Mr. Sulski  
22           would like to complete that answer.

23                    MS. FRANZETTI:  I am not sure what  
24           question is pending that you are answering.

1                   MR. SULSKI: I wanted to augment  
2                   Scott's answer with respect to the January 3,  
3                   2005, and you don't have to have it in your  
4                   hand yet, you'll get it. This was the  
5                   response to a wide request to what we thought  
6                   were the most effected facilities, Midwest  
7                   Generation and Metropolitan Water Reclamation  
8                   District to start generating some cost  
9                   numbers for what it would cost to meet at  
10                  that time the request was to meet general use  
11                  standards. Because that's what all the  
12                  assessments were done against general use  
13                  standards.

14                 MS. FRANZETTI: I'm sorry, Mr. Sulski,  
15                 just so we are clear is what you are saying  
16                 that the Midwest Generation, January 3, 2005,  
17                 submission was a response to a request by the  
18                 Agency for economic impact information using  
19                 the general use thermal standards as a basis?

20                 MR. SULSKI: Correct.

21                 MS. FRANZETTI: Okay.

22                 MR. SULSKI: And this is what we got,  
23                 and it didn't include any cost numbers. We  
24                 specifically asked for costs of meeting those

1 standards, general use standards. That was  
2 done in a meeting. There was follow-up back  
3 and forth in e-mails, and we were given the  
4 document when I requested an electronic copy  
5 of the document with the hopes of  
6 distributing it to the stakeholders, I was  
7 told that this was not to be distributed to  
8 the stakeholders. I would not be able to get  
9 an electronic copy. I should use the hard  
10 copy to distribute internally within the  
11 Illinois EPA.

12 MS. FRANZETTI: Were you told anything  
13 as to why the information in that document  
14 should not be distributed outside of the  
15 Agency or just don't distribute it?

16 MR. SULSKI: I was told maybe there  
17 were some trade secrets or I don't remember  
18 exactly how --

19 MS. FRANZETTI: You think maybe  
20 Midwest Gen may be concerned that it  
21 contained confidential business information,  
22 Mr. Sulski?

23 MR. SULSKI: That's what it said,  
24 protected as confidential business

1 information.

2 MS. FRANZETTI: Did the Agency review  
3 it and come to any decision that it did not  
4 contain such information and raise that with  
5 Midwest Gen?

6 MR. SULSKI: No, we reviewed it for  
7 some cost numbers that we hoped to get so we  
8 could move along on getting a better handle  
9 on the economic ramifications.

10 MS. FRANZETTI: And, Mr. Sulski, you  
11 are making all these statements not having  
12 reviewed the April 26, 2004 Midwest  
13 Generation submission, just so that's clear,  
14 correct?

15 MR. SULSKI: I don't know. I don't  
16 remember what was contained in that document.

17 MS. FRANZETTI: You saw it at one  
18 point?

19 MR. SULSKI: I don't remember whether  
20 I reviewed the April 26th document.

21 MS. FRANZETTI: Okay. But that's my  
22 point. You are making all these statements  
23 about no cost information being included in  
24 the January 3, 2005 submission without having

1 reviewed the April 26, 2004 submission,  
2 correct?

3 MR. SULSKI: I'm taking the document  
4 at its face value and with the contents  
5 therein.

6 MR. ETTINGER: Could we identify the  
7 individual at Midwest Generation who gave you  
8 this report and told you to keep it  
9 confidential; could we do that?

10 MR. SULSKI: Sure.

11 MR. ETTINGER: It was a human being I  
12 assume.

13 MR. SULSKI: Julia Wozniak. The  
14 submission came under the signature of  
15 Mr. Constantelos (phonetic).

16 MS. FRANZETTI: Moving on to question  
17 No. 2 --

18 CHAIRMAN TIPSORD: Excuse me,  
19 Mr. Harley has a follow-up.

20 MR. HARLEY: The statement that is  
21 referenced in the question from the Statement  
22 of Reasons specifically states, "Cost of  
23 technology required to comply with the  
24 temperature standards of this proposed rule

1 making," is it fair to say that the  
2 presentation that was made in 2007 was more  
3 related to this proposed rule making than the  
4 submission in 2005 that addressed a general  
5 use approach?

6 MR. SULSKI: I don't know. I would  
7 have to review the presentation more closely.

8 MR. HARLEY: Is it possible that the  
9 reason why the April 26, 2004 cost study  
10 report was not referenced in this Statement  
11 of Reasons was because it was not directly  
12 related to the temperature standards of this  
13 proposed rule making but was part of a  
14 preliminary process?

15 MR. TWAIT: It's possible.

16 MS. FRANZETTI: Well, I'll stipulate  
17 to that because it was submitted about two,  
18 three years before this proposal, so how  
19 could we have looked into our crystal ball  
20 and seen what this proposal was going to be.

21 MR. HARLEY: As long as we are drawing  
22 conclusions, it seems to me that the  
23 statement in the Statement of Reasons could  
24 be accurate.

1 MS. FRANZETTI: Well, if the Agency  
2 would like to clarify that they were simply  
3 making a statement that a proposal on thermal  
4 standards that nobody had seen before it was  
5 filed with this Board, Midwest Gen had not  
6 previously evaluated what the economic  
7 impacts would be of an unknown proposal, I  
8 will accept that clarification of that  
9 statement.

10 MR. TWAIT: I think the point of the  
11 statement is, we gave the Board everything we  
12 thought was relevant, and we will continue to  
13 give what we think is relevant to the Board.

14 MS. FRANZETTI: Is it correct --  
15 moving on to question No. 2. At least with  
16 respect to the April 26, 2004 submission, and  
17 the January 3, 2005 submission to the Agency  
18 by Midwest Generation, is it correct to state  
19 that the Illinois EPA requested that Midwest  
20 Gen submit these economic reports, and that  
21 the Agency did not provide Midwest Gen with  
22 any proposed thermal standards like those in  
23 this proceeding on which to base its economic  
24 information?

1                   MR. TWAIT: I believe that would be  
2 correct.

3                   MR. SULSKI: It says any proposed  
4 thermal standards.

5                   MS. FRANZETTI: I'm revising the  
6 question somewhat.

7                   MR. SULSKI: I see.

8                   MS. WILLIAMS: To the extent then that  
9 the revised question refers specifically to  
10 the April 2004, can we limit it to the one  
11 that we know what we are talking about? I  
12 don't think we know for sure.

13                   MS. FRANZETTI: That's partly why I  
14 changed it. I think you've already stated  
15 that as to the January 2005 submission I  
16 believe you asked Midwest Gen to base it on  
17 general thermal standards. Now given the  
18 fact that none of you is aware of and cannot  
19 find the April 26, 2004 submission, I think  
20 I'm correctly assuming you don't know what  
21 anyone asked us to base that proposal on; is  
22 that correct?

23                   MR. TWAIT: It could not have been  
24 this proposal.

1 MS. FRANZETTI: Yes, I understand  
2 that. But none of you as you sit here know  
3 whether with respect to the April 2004  
4 submission we were asked to base it on  
5 general use or something else?

6 MR. TWAIT: I could take a guess, but  
7 yes, I would agree that since we don't have  
8 did in our hands, we can't tell you.

9 MS. FRANZETTI: And, Mr. Twait, I  
10 don't want you to guess, is also a part of  
11 the problem here that this request to Midwest  
12 Gen to submit economic information was  
13 primarily handled by Toby Frevert?

14 MR. TWAIT: Yes, it was.

15 MS. FRANZETTI: And the rest of you  
16 who are sitting here really didn't have any  
17 involvement in those discussions between Mr.  
18 Frevert and Midwest Generation?

19 MR. TWAIT: That is true on some  
20 instances, but not all instances.

21 MR. SULSKI: I'd like to add that for  
22 so many years Midwest Gen has been a very  
23 excellent and worthwhile participator in all  
24 these stakeholder meetings and we've

1 appreciated it. Through this process  
2 assessments were done and stressors were  
3 being identified and the stressors kept going  
4 down to temperatures and DO's as primary  
5 stressors, the business of economics and  
6 costs came up in these stakeholder meetings.  
7 Midwest Generation and Metropolitan Water  
8 Reclamation District was aware of these  
9 discussions. Metropolitan Water Reclamation  
10 District started to generate costs. They  
11 knew. They saw the writing on the wall.  
12 Midwest Generation didn't offer any costs in  
13 the stakeholder process early on, and at  
14 least for this document they were requested  
15 to. And it was also known that the general  
16 use standards were what things were being  
17 compared against.

18 MS. FRANZETTI: And, Mr. Sulski, I  
19 hope you will stick to that answer once you  
20 review the 2004 submission.

21 MR. ETTINGER: May I inquire whether  
22 the 2004 submission was filed as CBI or  
23 confidential?

24 MS. WILLIAMS: We don't know. I can

1 tell you that there's no markings on the 2005  
2 one that we have found. I don't see any  
3 markings of that.

4 CHAIRMAN TIPSORD: And Ms. Franzetti  
5 has indicated that they will provide us with  
6 those. I'm assuming she'll know if any of  
7 that was confidential.

8 MS. FRANZETTI: I think that there may  
9 be portions that are CBI. I can't sit here  
10 and say the whole thing, portions -- I don't  
11 think that none is accurate.

12 MR. ETTINGER: Well, I would just note  
13 on the record that we would object to any  
14 portion of the Agency's burden to meet a --

15 CHAIRMAN TIPSORD: I can't hear you.

16 MR. ETTINGER: I would note our  
17 objection to any portion of the Agency's  
18 burden to show the appropriateness of a  
19 subfishable-swimmable designation for any  
20 water being based on information which is not  
21 provided to the public in this hearing.

22 MS. FRANZETTI: Moving on to question  
23 3. Please clarify whether Illinois EPA  
24 contends that it requested economic

1 information from Midwest Generation that was  
2 not provided to it?

3 MR. SULSKI: With respect to the  
4 January 4th submission, it did not address --  
5 well, it did not provide costs for meeting  
6 general use standards, which is what the  
7 request was.

8 MS. FRANZETTI: Moving on to question  
9 4. Did the Illinois EPA provide any comments  
10 or suggest Midwest Generation provide  
11 additional information to supplement the  
12 economic statement it submitted?

13 MR. TWAIT: I'm not aware of any.

14 MS. FRANZETTI: Moving on to question  
15 5. Did the Illinois EPA review the Midwest  
16 Generation Economic reports submitted to the  
17 Agency, and if so, what if anything did it  
18 conclude regarding the economic  
19 reasonableness of the cost of compliance by  
20 Midwest Gen with the proposed temperature  
21 water quality standards?

22 MS. WILLIAMS: So we are talking about  
23 the two reports that are referenced here?

24 CHAIRMAN TIPSORD: We're asking about

1 all three, aren't we?

2 MS. FRANZETTI: We're asking about all  
3 three, although I have to concede based on  
4 the answers today that I don't know whether  
5 the Agency reviewed the first one.

6 MR. SULSKI: Well, I could speak to  
7 the second one.

8 MS. WILLIAMS: I wasn't thinking of  
9 identifying of the power point presentation  
10 as a report. Are we considering that a  
11 report for the purposes of this question?

12 MS. FRANZETTI: No, I would not call  
13 that a report. I would call it a power point  
14 presentation.

15 MR. SULSKI: I will respond to 5.  
16 This references the proposed temperature  
17 standards which are here. This report was  
18 generated in response to a request to look at  
19 general use standards at the time.

20 MS. FRANZETTI: Am I correct that the  
21 Illinois EPA did not make any conclusions  
22 regarding the economic reasonableness of the  
23 cost of compliance by Midwest Generation with  
24 the proposed temperature water quality

1 standards?

2 MR. SULSKI: Since it doesn't make any  
3 costs, it was -- since it didn't involve any  
4 costs, it was fairly difficult to make a  
5 decision on costs.

6 MS. FRANZETTI: Okay, Mr. Sulski, I  
7 understand that's your position on the  
8 January 2005 submission. What about the  
9 power point presentation then during the  
10 meetings in March which the Agency does seem  
11 to be aware of, is it also your position that  
12 did not contain any costs of compliance?

13 MR. SULSKI: I would need to look at  
14 the power point presentation.

15 MS. FRANZETTI: Which you haven't done  
16 before today?

17 MR. SULSKI: I attended the  
18 presentation.

19 MS. FRANZETTI: But you didn't really  
20 review the information, the cost information  
21 we've presented at the March public hearings?

22 MR. SULSKI: I didn't to the extent  
23 that I can kick it out right now.

24 MS. FRANZETTI: Well, Mr. Sulski, the

1 whole point of this question is not to have  
2 you do your review and draw your conclusions  
3 today as you sit here; it's whether before  
4 the Agency proposed these standards it  
5 conducted any review of the economic cost  
6 information Midwest Gen had submitted to it  
7 and had drawn any conclusions regarding the  
8 economic reasonableness of the cost of  
9 compliance by Midwest Generation. Was that  
10 done before these rules were filed with the  
11 Board?

12 MR. TWAIT: We did include the  
13 information from the power point into the  
14 Statement of Reasons.

15 MS. FRANZETTI: I understand you  
16 included it. I am not blind. I see it. But  
17 that's not my question, People. I'm simply  
18 asking, did you or did you not conduct any  
19 review of the economic information we  
20 submitted to you prior to the filing of these  
21 proposed rules for purposes of evaluating the  
22 economic reasonableness of compliance by  
23 Midwest Gen? It can be no. You know, the  
24 answer can be no, but we just want to

1 establish on the record whether or not you  
2 conducted any such review.

3 MR. SULSKI: Reviews -- we attended  
4 the presentation. We received a January 4th  
5 response. I personally -- let me finish my.

6 MS. FRANZETTI: Well, you are not  
7 answering my question, Mr. Sulski, so you are  
8 really wasting all our time. With all due  
9 respect, I don't want to waste anybody's  
10 time.

11 CHAIRMAN TIPSORD: Let's go off the  
12 record for a second.

13 (Brief recess taken.)

14 MR. SULSKI: The answer is, yes, we  
15 reviewed it.

16 MS. FRANZETTI: What did you conclude?

17 MR. SULSKI: I concluded that the  
18 information did not fall in line with the  
19 affordability guidance in the Clean Water Act  
20 criteria.

21 MS. FRANZETTI: And is based solely on  
22 your review of the January 3, 2005  
23 submission, correct?

24 MR. SULSKI: I reviewed the

1 presentation as well, so it would apply to  
2 the presentation material as well.

3 MS. FRANZETTI: So now you do remember  
4 reviewing all that and drawing these  
5 conclusions, correct?

6 MS. SULSKI: Yes.

7 CHAIRMAN TIPSORD: Mr. Harley, you  
8 have a follow-up?

9 MR. HARLEY: In the course of  
10 answering your questions, you refer to the  
11 fact that there are other people at the  
12 Agency who participated in the preparation of  
13 this rule making package; is that correct?

14 MR. SULSKI: Yes.

15 MR. HARLEY: You've referred to Toby.  
16 Who is Toby?

17 CHAIRMAN TIPSORD: That's been asked  
18 and answered and that's on the record from  
19 the prior hearings.

20 MR. HARLEY: Is it possible that Toby  
21 was one of the people who reviewed the  
22 information, although he is not here to  
23 testify today?

24 MR. SULSKI: Yes.

1 MS. FRANZETTI: Let's ask about that.  
2 Mr. Twait, did Mr. Frevert give you our  
3 economic impact submission that we made on or  
4 about April 26, 2004 or do you recall?

5 MR. TWAIT: I believe that I received  
6 it and I do believe that I read it. However,  
7 as I mentioned before, I was not able to look  
8 for it.

9 MS. FRANZETTI: I understand. Did you  
10 ever discuss it with Mr. Frevert?

11 MR. TWAIT: If I discussed it with  
12 him, it would have been in 2004. I do not  
13 recall that discussion.

14 MS. FRANZETTI: You don't recall  
15 having any discussion about our submission in  
16 2004 with him?

17 MR. TWAIT: Not that I'd like to enter  
18 into testimony. I just don't remember.

19 MS. FRANZETTI: That's fine, if you  
20 don't remember. Does anybody else on this  
21 panel recall having any discussion with  
22 Mr. Frevert concerning the economic impact  
23 information submitted by Midwest Generation?

24 MS. WILLIAMS: In April of 2004?

1 MS. FRANZETTI: At any time.

2 MR. SULSKI: I don't remember any  
3 details of discussions. They may have taken  
4 place.

5 CHAIRMAN TIPSORD: Mr. Ettinger, you  
6 have a follow-up?

7 MR. ETTINGER: We've gone for a while  
8 on this. I fail to see the relevance  
9 involving internal discussions of the  
10 drafting of the petition here. The petition  
11 rises or falls based on the petition itself  
12 and evidence offered in front of it.

13 CHAIRMAN TIPSORD: I respectfully  
14 disagree. I think what we are trying to  
15 establish here is a record about the economic  
16 considerations by the Agency, and one of the  
17 things the Board has to decide is the  
18 economic reasonableness, and the Board can  
19 take it for what it's worth. But I do think  
20 it is relevant because it is what the  
21 economic considerations were that the Agency  
22 considered in developing its proposal and how  
23 they came to their conclusions. So with all  
24 due respect, I do think it's relevant.

1 MS. WILLIAMS: So then to respond  
2 to -- I mean, are we done? To respond to --  
3 I think we already did put on the record but  
4 maybe to reiterate to close this loop -- I  
5 think that we all felt that it was Toby's  
6 position that he communicated at the  
7 stakeholder's meetings that we did not have  
8 enough economic information available and we  
9 would hope that in these proceedings more  
10 information would be brought forward that  
11 would help the Board in making its decision.  
12 That was his opinion. That's what I recall  
13 as his opinion.

14 MS. FRANZETTI: Okay, wait a minute.  
15 I have got to ask you a couple questions on  
16 that to make sure I understand it. Are you  
17 saying that Toby Frevert told you that he had  
18 said at the stakeholder meetings, he had told  
19 the stakeholders that they hadn't submitted  
20 adequate economic impact information?

21 MS. WILLIAMS: I'm not saying that he  
22 told me that. I felt that that was  
23 communicated publicly by him, and I heard it,  
24 but I guess -- I can't quote him. I mean, do

1           you guys agree?

2                       MR. SULSKI: The request for economic  
3 information was put forth in the stakeholder  
4 meetings in the stakeholder process. We need  
5 dollars and cents on these now stressor  
6 remedies that we've been discussing. That's  
7 generally.

8                       MS. FRANZETTI: And, Mr. Sulski, you  
9 are referring to the CAWS, UAA stakeholder  
10 meetings, correct?

11                      MR. SULSKI: I am, yes.

12                      MS. FRANZETTI: You didn't attend the  
13 lower Des Plaines River?

14                      MR. SULSKI: Just one perhaps.

15                      MS. FRANZETTI: Yes, okay. I'll move  
16 on.

17                      I'm going to skip question 7.  
18 Moving on to 8. Does the information, and  
19 I'm going change this based on the testimony,  
20 does the information contained in the January  
21 3, 2005 Midwest Generation submission and the  
22 March 2007 power point presentation  
23 constitute the only economic information  
24 concerning the estimated costs of technology

1 to control effluent temperatures that the  
2 Illinois EPA obtained or reviewed in  
3 connection with its preparation of the  
4 proposed rules?

5 MR. TWAIT: Not that I'm aware of.

6 MS. FRANZETTI: You know, Mr. Twait, I  
7 don't understand the answer. Is the Midwest  
8 Gen economic information basically all the  
9 Agency got or had? That's what I'm trying to  
10 understand. Did you have other economic  
11 information?

12 MR. TWAIT: Yes, I believe the only  
13 economic information for thermal was from  
14 Midwest Generation.

15 MS. FRANZETTI: Okay. Moving on to  
16 Roman XII.

17 CHAIRMAN TIPSORD: Let's go ahead and  
18 take a lunch break at this point. We'll come  
19 back and finish up with Ms. Franzetti and  
20 move on.

21 (At which point a lunch recess was  
22 taken, after which the following  
23 proceedings were had:)  
24

1                   CHAIRMAN TIPSORD: Back on the record.

2                   MS. FRANZETTI: XII, Midwest  
3                   Alternative Standards. I'm going to propose  
4                   that questions 1 and 2 cannot be answered at  
5                   this time by the Agency because they are  
6                   based on the Agency having reviewed the  
7                   August 2007 Midwest Generation submission of  
8                   an alternative thermal standards proposal,  
9                   and I believe earlier today it was stated  
10                  that while that was received and while  
11                  Mr. Twait may have I think reviewed it, read  
12                  it, it came in too late to really be  
13                  considered by the Agency. Is that an  
14                  accurate summation of what the prior  
15                  testimony was?

16                  MR. TWAIT: Yes.

17                  MS. FRANZETTI: So let's jump to  
18                  No. 3. Please explain the Illinois EPA's  
19                  justification for encouraging biological  
20                  monitoring of water bodies effected by  
21                  anthropogenic discharges if the field data  
22                  are not accepted for use in establishing  
23                  water temperature criteria and standards.

24                  ROY: When you refer to field data not

1           accepted, can I ask you to clarify that?

2                   MR. ETTINGER: I guess there are a lot  
3           of presumptions in here. Did they appear  
4           somewhere? Did they encourage or where did  
5           they not accept it?

6                   MS. FRANZETTI: Let me break it down  
7           and ask the Agency. Has the Agency in its  
8           opinion encouraged by biological monitoring  
9           of water bodies effected by anthropogenic  
10          discharges?

11                  MR. SMOGOR: Yes, we use and believe  
12          that biological indicators are a useful  
13          indicator when we are assessing attainment of  
14          designated aquatic life uses throughout the  
15          state.

16                  MS. FRANZETTI: And then isn't it true  
17          that the Agency did not use any of that field  
18          data in establishing the proposed thermal  
19          water quality standards that it has presented  
20          to the Board?

21                  MR. SMOGOR: I'd have to defer to  
22          Scott. I don't think that was part of the  
23          methodology that we chose, but I am not sure.  
24          I'd have to defer to Scott.

1                   MS. FRANZETTI: I agree, that's what I  
2 think. Mr. Twait, any different answer to  
3 that?

4                   MR. TWAIT: If you are talking about  
5 IBI scores, review of those -- are you  
6 referring to that?

7                   MS. FRANZETTI: How did you use the  
8 IBI scores in developing the proposed thermal  
9 standards?

10                  MR. TWAIT: We've used that data to  
11 determine whether fish are there or not, but  
12 we have not used the IBI scores in this  
13 proposal.

14                  MS. FRANZETTI: Moving on to page  
15 four. At page 156 Mr. Twait's pre-filed  
16 testimony, it is acknowledged that "Fish can  
17 tolerate short-term elevations in  
18 temperature." Do the twenty or so years of  
19 fish data collected in the upper Dresden pool  
20 by ComEd and Midwest Gen support this  
21 finding?

22                  MR. TWAIT: I don't know that I can  
23 say that it either supports or doesn't  
24 support this data. I don't know that the

1 studies that you conducted were to determine  
2 whether they were short-term or long-term  
3 avoidance. I don't know the answer.

4 MS. FRANZETTI: And, Mr. Twait, is  
5 that due to the fact that you haven't really  
6 been able to study that twenty years or so of  
7 data with respect to this issue?

8 MR. TWAIT: I'm not a biologist, so I  
9 would have to defer.

10 MR. SULSKI: The data was reviewed,  
11 all that we have, and I think it is in the  
12 record in terms of attachments and that, and  
13 the data was used to assess current  
14 conditions in the waterways. That's what it  
15 was used for.

16 MS. FRANZETTI: And not to evaluate  
17 whether or not fish can tolerate short-term  
18 elevations in temperature?

19 MR. SULSKI: No.

20 MS. FRANZETTI: That's fine.

21 How does the Illinois EPA's  
22 approach to driving thermal water quality  
23 standards recognize or incorporate this  
24 principle that fish can tolerate short-term

1 elevations in temperature?

2 MR. TWAIT: The Agency's proposal has  
3 an exceedance period that the temperature,  
4 the maximum temperature can be exceeded by  
5 two degrees Celsius two percent of the time.

6 MS. FRANZETTI: And I don't know if  
7 you can answer B, Mr. Twait, based on your  
8 review of the Midwest Gen 2007 methodology or  
9 proposed methodology, but I will ask you.  
10 Does the Illinois EPA agree that the  
11 methodology proposed by Midwest Gen for  
12 deriving thermal water quality standards does  
13 take this principal into account because it  
14 is based on fish data collected in the upper  
15 Dresden pool?

16 MR. TWAIT: I don't know if you can  
17 say that there's short-term avoidance and  
18 also say that there's no long-term avoidance  
19 with the approach.

20 MS. FRANZETTI: And I'm sorry, but if  
21 I may go back to yesterday and the two  
22 questions where the Agency was asking me to  
23 cite to where Mr. Rankin's report contained  
24 the language that I had quoted, and before

1 the lunch hour I did give the Agency the page  
2 of the report that contains the two subject  
3 references. Has the Agency had an  
4 opportunity to look at that page of the  
5 report?

6 MR. SULSKI: Page 13?

7 MS. FRANZETTI: Well, my copy didn't  
8 have -- the copy that came from the January  
9 hearings --

10 MR. SMOGOR: We found the place and  
11 rank in the report that you are talking  
12 about. I think at least for question 8  
13 there's a quote in one of your question 8's.

14 MS. WILLIAMS: Page 24, is that where  
15 the question came from?

16 CHAIRMAN TIPSORD: And Rankin's report  
17 is?

18 MS. FRANZETTI: Attachment R.

19 "Mr. Reinke also states that,  
20 'Physical patterns in these watersheds are  
21 very strong and will have a predominant  
22 influence on the type of assemblages one  
23 might expect.' Does the Illinois EPA agree  
24 with Mr. Rankin's statement"?

1                   MR. SMOGOR: I think as a general  
2                   characterization, yes.

3                   MS. FRANZETTI: And then although the  
4                   Agency answered the question, which is  
5                   question No. 4 of that same section, it was  
6                   professing it wasn't sure whether or not the  
7                   meaning of "isolation" that my question was  
8                   implying was consistent with the way you read  
9                   Mr. Rankin's language in the report, so I  
10                  just -- now that you've had the language in  
11                  its context of the report -- my question is,  
12                  is your answer still the same to question 4  
13                  regarding, and I'll read it with respect to  
14                  the Brandon tailwater area, Mr. Rankin also  
15                  states in his report, attachment R that, "The  
16                  isolation of this site (among impounded  
17                  reaches) could influence the potential of  
18                  that site." And I asked whether the Agency  
19                  agreed that the isolation of the Brandon  
20                  tailwater area reduces its potential as  
21                  available good habitat for aquatic life in  
22                  the upper Dresden pool?

23                  MR. SULSKI: Well, his statement says  
24                  it could influence the potential. It doesn't

1 definitively say it will influence the  
2 potential.

3 MR. SMOGOR: We're interpreting that  
4 as a general observation being made by  
5 Mr. Rankin given his level of knowledge of  
6 the surrounding area. So we accept that as  
7 kind of a general impression, his general  
8 impressions of the area.

9 MS. FRANZETTI: Okay.

10 That is all the questions I have.

11 CHAIRMAN TIPSORD: Pre-filed?

12 MS. FRANZETTI: Pre-filed. And I  
13 would generally, as has been done by others,  
14 reserve the right based on more complete  
15 review of the Agency's filings last week to  
16 ask some additional questions.

17 CHAIRMAN TIPSORD: Absolutely. It  
18 would be my intent that at the next hearing  
19 when we finish with all the pre-filed  
20 questions, we'll go back to anybody that has  
21 questions on the materials more recently  
22 filed. With that, we go to Flint Hills. Do  
23 you want to exchange places?

24 MR. SAFLEY: Flint Hills' questions

1           are pretty short, at least in numbers. I'm  
2           okay in staying where I am. I think whoever  
3           is next after me has more questions, so I  
4           don't know.

5                         Tom Safley on behalf of Flint  
6           Hills Resources, and as I stated we have a  
7           limited number of questions.

8                         In starting, on the first page of  
9           our questions, Regulatory Background, that  
10          question has been asked and answered.

11                        At the top of the second page,  
12          Study Methodology, that question has been  
13          asked and answered.

14                        So moving on to the third  
15          question, which is in the middle of page two,  
16          Mixing Zones, some of the dischargers  
17          potentially effected by the proposed rule  
18          making are located downstream from large  
19          dischargers with established mixing zones per  
20          regulations under 35IAC 302.102. Will the  
21          Agency clarify if and how mixing zone  
22          designations will be established for  
23          dischargers who currently may be in the  
24          footprint of another discharger's zone?

1                   MR. TWAIT: I'm just looking for a  
2 particular section here.

3                   Basically this comes down to two  
4 particular points under 302.102, and one  
5 would be "No mixing zone can be larger than  
6 26 acres." And that would be 302.102(b)(12)  
7 in our regulations. And the other mixing  
8 zone requirement under 302.102(b)(7) states  
9 that, "The area and volume in which mixing  
10 occurs alone or in combination with other  
11 areas and volumes of mixing must not" --  
12 that's not the one I want. It would be  
13 302.102(b)(8) "The area and volume in which  
14 mixing occurs alone or in combination of  
15 other areas of volumes of mixing must not  
16 contain 25 percent of the cross sectional  
17 area or volume or flow of a stream, except  
18 where those streams where the dilution ratio  
19 is less than three to one."

20                   So basically what that says is,  
21 alone or in combination with the mixing zones  
22 they can't use up more than 25 percent  
23 received.

24                   MR. SAFLEY: If you had -- and

1 obviously the regulation you just read  
2 contemplates overlapping or commingled mixing  
3 zones. Would compliance for purposes of both  
4 dischargers in that circumstance then be  
5 measured at the edge of the total mixing zone  
6 each taking into account --

7 MR. TWAIT: Yes.

8 MR. SAFLEY: And the Agency doesn't  
9 intend to change that approach with the new  
10 rules at all?

11 MR. TWAIT: Not that I am aware of.

12 MR. SAFLEY: Moving on to our next  
13 question, "Narrative Water Quality  
14 Standards." Narrative standards exist in  
15 35IlAd302.210(f) for general use waters. Is  
16 it the Agency's intention to incorporate this  
17 substantial set of narrative standards into  
18 the proposed lower Des Plaines River  
19 standards?

20 MR. TWAIT: The answer would be, yes,  
21 the Agency included that in its proposal.

22 MR. SAFLEY: And can you point me to  
23 the proposed regulatory provision that  
24 includes that?

1 MR. TWAIT: It would be 302.410.

2 MR. SAFLEY: But the Agency is not  
3 proposing any corresponding change in  
4 302.210; is that correct?

5 MS. WILLIAMS: 302.210 is?

6 MR. SAFLEY: General use.

7 MS. WILLIAMS: General use?

8 MR. SAFLEY: So the Agency doesn't  
9 feel that -- well, I guess I should maybe  
10 phrase it a little bit differently. Strike  
11 that last one. Let me flip here.

12 I think the base, the reason for  
13 this question just to try to explain what the  
14 concern was, the proposed 302.410 like  
15 302.210 references provisions in subpart F of  
16 part 302, procedures for determining water  
17 quality criteria, but the Agency has not  
18 proposed any changes to subpart F. And for  
19 example, the first provision of subpart F  
20 302.601 Scope and Applicability states, "This  
21 subpart contains the procedures for  
22 determining water quality criteria set in  
23 302.210(A), (B) and (C) but the Agency did  
24 not propose to revise that section. And,

1           again, we obviously can read the proposed  
2           302.410, but in trying to follow all the  
3           rules through and understand how they are all  
4           going to apply and not seeing the  
5           corresponding change in subpart F, I just  
6           want to make sure we were understanding the  
7           Agency's proposal.

8                         MS. WILLIAMS: Right. It would  
9           probably be most correct to also open that  
10          section and cross reference this as well, but  
11          we did not propose to do that.

12                        MR. SAFLEY: So the Agency is  
13          proposing to subpart F to these waters in the  
14          same way subpart F currently applies to  
15          general use waters?

16                        MR. TWAIT: Yes, that was the intent.

17                        MS. FRANZETTI: That includes aquatic  
18          life Use B waters as well?

19                        MR. TWAIT: Yes, I believe there's no  
20          differentiation.

21                        MR. FORT: And that includes even the  
22          poor to very poor habitat waters within Use  
23          B, correct?

24                        MR. TWAIT: Yes.

1                   MR. SAFLEY: The next question, and  
2 still in this section that was pre-filed by  
3 Flint Hills, did the Agency evaluate the  
4 economic reasonableness and technical  
5 feasibility while incorporating these  
6 narrative standards into the proposed lower  
7 Des Plaines River standards?

8                   MR. TWAIT: No, the Agency did not  
9 look at economical reasonableness and  
10 technical feasibility. However, I will point  
11 out that it is replacing a narrative standard  
12 that's existing, and in some instances that  
13 narrative standard is based upon one half of  
14 a 96-hour median tolerance, 96 hours TLM for  
15 native fish for essential fish food  
16 organisms. And in some cases that is more  
17 stringent than what we've proposed, although  
18 not in all cases.

19                   MR. SAFLEY: What was going to be my  
20 next --

21                   MR. TWAIT: What we have proposed is a  
22 more up to date way to determine the toxic  
23 effects to aquatic life.

24                   MR. SAFLEY: And you've anticipated my

1 next question, which is, is the Agency's  
2 understanding that its proposal to  
3 incorporate subpart F is more or less  
4 stringent than the provision that's being  
5 replaced and perhaps you need to break that  
6 down by parameter but --

7 MR. TWAIT: I do not have those in  
8 front of me.

9 MR. SAFLEY: Okay. But it's your  
10 understanding that in some cases it may be  
11 more stringent and some cases it may be less  
12 stringent?

13 MR. TWAIT: My recollection that is  
14 true.

15 MR. SAFLEY: Moving on then to our  
16 next question which is entitled  
17 "Disinfection."

18 The proposed bacteria standard may  
19 require dischargers to disinfect effluence.  
20 Did the Agency evaluate the economic  
21 reasonableness and technical feasibility of  
22 incorporating the proposed disinfection  
23 standard into the proposed lower Des Plaines  
24 River standards?

1                   MR. TWAIT: We have not proposed a  
2 bacteria standard as a water quality  
3 standard. We just went with an effluent  
4 standard.

5                   MR. SAFLEY: And that's a fair point.  
6 The Agency is not proposing it to incorporate  
7 it into the lower Des Plaines water quality  
8 standards. So my question should have been  
9 phrased differently. Did the Agency evaluate  
10 the economic reasonableness or technical  
11 feasibility of the application of the  
12 proposed effluent standard to dischargers in  
13 the lower Des Plaines?

14                   MR. TWAIT: There are lots of  
15 facilities throughout the state that  
16 disinfect. The Agency did not do an economic  
17 reasonableness and technical feasibility, but  
18 we believe that it's technically feasible and  
19 economically reasonable because it's done  
20 throughout the state.

21                   MR. SAFLEY: And we've discussed that  
22 issue, Mr. Twait, to some extent in January,  
23 and I don't want to make you go over that  
24 again. But just so we're clear here, the

1 discussion that we had during the last set of  
2 hearings on the Agency's view that certain  
3 technologies exist and are used throughout  
4 the state, that was the extent of the  
5 Agency's review of technical feasibility and  
6 economic reasonableness for the application  
7 of the disinfection effluent standards to the  
8 lower Des Plaines?

9 MR. TWAIT: Yes.

10 MR. SAFLEY: Thank you. To the top of  
11 page three of our pre-filed questions titled  
12 "Chloride."

13 Industrial storm water outfalls to  
14 the subject waterways may include all site  
15 areas where the discharger does not have  
16 control over common activities that result in  
17 the discharge of high concentrations of  
18 Chloride. Such as application of road salt  
19 that may impair the waterway for chloride.  
20 Does the Agency intend to apply the proposed  
21 chloride standard to dischargers of storm  
22 water?

23 MR. TWAIT: I believe the answer to  
24 that is no.

1                   MR. SAFLEY: Is that made clear in the  
2 regulatory language proposed by the Agency,  
3 and if so, could you point me to that  
4 statement?

5                   MS. WILLIAMS: I guess I would say  
6 generally the way that -- generally storm  
7 water is regulated through best management  
8 practices, not through specific numeric  
9 effluent limits so that would be the answer  
10 to our no there. Does that help?

11                  MR. SAFLEY: Sure.

12                  MS. WILLIAMS: So I wouldn't say  
13 unregulated, but not regulated through a  
14 numeric number which is not reflected  
15 directly in this standard or any other  
16 standard.

17                  MR. SULSKI: Can I add that in some  
18 cases there are effluent technology, effluent  
19 limits for chloride that actually do apply to  
20 storm waters from certain industrial  
21 activities so that may apply. I don't know  
22 where right at the moment, but I wanted to  
23 let you know that.

24                  MR. SAFLEY: Thank you. And I'm going

1 to strike the first half of the final  
2 question here and just begin after the comma.  
3 Did the Agency evaluate the economic  
4 reasonableness and technical feasibility of  
5 incorporating its proposed chloride standard  
6 into the proposed lower Des Plaines River  
7 standards?

8 MR. TWAIT: The answer to that would  
9 be no --

10 MR. SAFLEY: Sorry, I didn't mean to  
11 interrupt. Those are all our pre-filed  
12 questions.

13 CHAIRMAN TIPSORD: We are ready to  
14 move to Citgo.

15 MR. FORT: I am going to start with  
16 our temperature questions because that at  
17 least will get most of the temperature things  
18 closer to Ms. Franzetti's questions. I think  
19 I've taken out everything that has been asked  
20 and answered, and I've tried to pair down to  
21 things that I don't think have been covered,  
22 but obviously if you think I'm beating  
23 something a second time, let me know.

24 CHAIRMAN TIPSORD: Absolutely.

1                   MR. FORT: I'm going to be cautiously  
2 optimistic here that I'm going to finish all  
3 of my questions before we're even close to  
4 being done today.

5                   CHAIRMAN TIPSORD: Cool. So you are  
6 going to start on page 9 of your pre-filed  
7 questions?

8                   MR. FORT: Actually I'm going to start  
9 with Roman IV, but the first question that I  
10 think hasn't been asked is number three on  
11 the top of page 10, so I'm going to start  
12 there and I will skip down.

13                   I have divided these by general  
14 versus individual testimony, but I think  
15 whichever is the right Agency witness is fine  
16 with me.

17                   First question, No. 3, has the  
18 Agency --

19                   MR. TWAIT: Could you hold on, please.

20                   MR. FORT: Has the Agency considered  
21 that biological treatment facilities even at  
22 industrial waste water treatment plants need  
23 to provide heat in the winter months to  
24 achieve nitrification?

1                   MR. TWAIT:  When we made the proposal,  
2                   I don't think that the Agency even considered  
3                   that.

4                   MR. FORT:  Is the Agency proposing now  
5                   that such plants will need to have cooling  
6                   towers, particularly in the winter months or  
7                   nonsummer months?

8                   MR. TWAIT:  Whether or not they will  
9                   need cooling towers, I don't know, but they  
10                  will need to meet the water quality  
11                  standards.

12                  MR. FORT:  So if it entails cooling  
13                  towers to be used in the fall or in the  
14                  spring to get to down to your period average,  
15                  that's what the Agency is proposing?

16                  MR. TWAIT:  That would be the  
17                  proposal, yes.

18                  MR. SULSKI:  Can I add to that?  Just  
19                  to clarify, I don't know any municipal waste  
20                  water treatment plant that heats up the water  
21                  to accomplish nitrification.  They do it  
22                  through the winter.

23                  MR. FORT:  My client Citgo does do  
24                  nitrification and it does have to provide

1 heat and it includes some of the time periods  
2 and your period average is actually going to  
3 be a problem.

4 MS. WILLIAMS: I'm going to object. I  
5 don't really feel -- this is the first I knew  
6 of this. I don't think there's information  
7 in the record about your client adding heat.  
8 I guess I would --

9 CHAIRMAN TIPSORD: I assume you are  
10 going to provide that information at a later  
11 date?

12 MR. FORT: Oh, yes.

13 MR. SAFLEY: Same would apply to Exxon  
14 Mobil.

15 MR. FORT: Some of your colleagues  
16 know that, and it didn't get into this rule  
17 making yet.

18 MR. SULSKI: I just needed to make  
19 that clarification on municipal waste water  
20 treatment plants, which is what we had been  
21 getting information on.

22 MR. FORT: You didn't look at the  
23 industrial sources that would be providing  
24 nitrification pursuant to Illinois

1 regulations?

2 MR. SULSKI: You are asking me if I  
3 did or didn't? I didn't receive any  
4 information at the stakeholder's meetings  
5 that that was an issue.

6 MR. FORT: And you did not investigate  
7 it on your own?

8 MR. SULSKI: I didn't know it was an  
9 item that needed investigation.

10 MR. FORT: In light of the uses of the  
11 Chicago Sanitary and Ship Canal, what is the  
12 basis and the technical feasibility and  
13 economic reasonableness for including "period  
14 average" temperature as a water quality  
15 standard?

16 MR. TWAIT: That is based on the  
17 methodology of the technical person that  
18 wrote the MBI report.

19 MR. FORT: So that was a water quality  
20 based approach. You did not consider  
21 technical feasibility or economic  
22 reasonableness in making that proposal.

23 MR. TWAIT: Other than the fact that  
24 cooling towers are a technology that have

1           been used throughout the state.

2                   MR. FORT:  You did not look at any  
3           particular costs or particular scenarios  
4           other than the general notion there might,  
5           that cooling towers might apply?

6                   MR. TWAIT:  That is correct.

7                   MR. FORT:  Well, in light of the poor  
8           biological conditions such as we have talked  
9           about the Chicago Sanitary and Ship Canal  
10          what is the basis and technical feasibility  
11          and economic reasonableness for including the  
12          proposed temperature standards?

13                   MR. TWAIT:  To protect aquatic life.

14                   MR. FORT:  Assuming that aquatic life  
15          is there.

16                   MR. TWAIT:  I think that we know that  
17          aquatic life is there.

18                   MR. FORT:  Does the Agency have any  
19          particular -- I'm jumping now to No. 11 --  
20          does the Agency have any plan for achieving  
21          the proposed temperature conditions other  
22          than the possible shut down of the Midwest  
23          Generation plant as suggested in the  
24          Statement of Reasons?

1 MS. FRANZETTI: Just for the record,  
2 Midwest Gen would object to the shut down of  
3 its plants, less our silence be taken for  
4 acquiescence.

5 MR. TWAIT: I think the plan would be  
6 to achieve compliance with the proposed water  
7 quality standards.

8 MR. FORT: So you don't have a  
9 particular strategy on how to get to this  
10 temperature standard you are proposing?

11 MR. TWAIT: No.

12 MR. FORT: It struck me and you  
13 mentioned earlier, Mr. Twait, about a hundred  
14 degrees being too hot for aquatic life. Do  
15 you think that that the 93 degree temperature  
16 standard presently for secondary contact to  
17 be attained to be obtained 95 percent of the  
18 time is also too hot?

19 MR. TWAIT: In respect that we've  
20 proposed 90 degrees or 90.3 degrees for 98  
21 percent of the time, then yes.

22 MR. FORT: What's the basis for doing  
23 it 2 percent versus 5 percent?

24 MR. TWAIT: As I mentioned before, it

1 was a number that the Agency chose that was  
2 somewhere between the general use of 1  
3 percent and the secondary contact of  
4 5 percent.

5 MR. FORT: In terms of the difference  
6 between 93 degrees and 90.3 degrees for your  
7 daily max, what fish species are impacted by  
8 that difference in temperature, if any?

9 MR. FORT: I'm going to refer to page  
10 11.

11 MR. SULSKI: Of what?

12 MR. TWAIT: I'm going to refer to page  
13 11 of the pre-filed testimony of Chris Yoder.  
14 In there he has the statement, "The long-term  
15 survival values along with 50 percent of the  
16 representative aquatic species on my  
17 secondary contact RAS list would be protected  
18 by a standard of 93 degrees Fahrenheit."

19 MR. FORT: So 50 percent of the  
20 long-term criteria would be protected at 93  
21 degrees?

22 MR. TWAIT: And that would be of the  
23 eight species that we're using.

24 MR. FORT: Okay, thank you.

1 Mr. Twait, now I'm going to go back to how  
2 much heat are you trying to get out of the  
3 shipping canal. I don't know how to equate  
4 heat into gallons or things like that. I'm  
5 sure there is a physical way. But does the  
6 Agency have factual information or some  
7 general estimate of how many heat therms or  
8 whatever the unit is, joules -- J-O-U-L-E-S,  
9 I think it is -- are required to get out of  
10 the Sanitary and Ship Canal or the lower  
11 Des Plaines River for that matter in order to  
12 meet this standard that you've proposed?

13 MR. TWAIT: No.

14 MR. FORT: It would seem to me that  
15 the numbers is probably pretty big; would you  
16 agree?

17 MR. TWAIT: Possibly.

18 MR. FORT: Well, to get down from 93  
19 degrees just to 90.3, for example, 2.7  
20 degrees Farenheit, multiply it and then times  
21 the millions of gallons of water in the Ship  
22 Canal so that would give you some notion of  
23 how heat you've got to get out?

24 MR. ETTINGER: What do you mean, got

1 to out?

2 MR. FORT: To meet the standard.

3 MR. ETTINGER: In comparison with the  
4 existing condition? The temperature is not  
5 always 93 now.

6 MR. FORT: I accept that modification.  
7 So theoretical first.

8 MR. TWAIT: The Agency has not  
9 calculated that.

10 MR. FORT: How about the actual  
11 conditions over the last several years say or  
12 some period of time how much of a reduction  
13 is going to be required?

14 MR. TWAIT: It would all depend on  
15 where you are at.

16 MR. FORT: Can you elaborate on that?

17 MR. TWAIT: As I mentioned before, the  
18 nonsummer periods were based on a background  
19 of Route 83. So if you were right at Route  
20 83, the nonsummer months, I believe you would  
21 not need to remove any "heat" because they  
22 are based on the background temperatures.

23 MR. FORT: We'll get into that, but  
24 I'm not sure that's a safe assumption. We're



1           that was where the confusion was coming from.

2                       MR. SULSKI: May I ask a question of  
3 clarification. Is attainable in the sentence  
4 misplaced too? Because when we talk about  
5 attainable, we're talking about uses. Can we  
6 move that? If we move that word over to  
7 attainable uses?

8                       MR. FORT: No, this is a regulatory  
9 test of whether it's technically feasible and  
10 economically reasonable, that's the content  
11 of "attainable" as I intended.

12                      CHAIRMAN TIPSORD: Are the temperature  
13 standards attainable, the proposed  
14 temperature standards attainable?

15                      MR. TWAIT: I think they are  
16 attainable with modifications to dischargers.

17                      MR. FORT: And what are those  
18 modifications for dischargers?

19                      MR. TWAIT: Cooling towers would come  
20 to mind.

21                      MR. FORT: Okay. Anything else?

22                      MR. TWAIT: Depending on the size of  
23 the discharge, discharging into a cooling  
24 pond.

1                   MR. FORT: No. 13, what investigations  
2                   has the Agency done for the technical  
3                   feasibility for the concept of period average  
4                   for the nonsummer months?

5                   MS. WILLIAMS: Are you referring to  
6                   how it would be measured or whether it can be  
7                   met again? Can you clarify that?

8                   MR. FORT: I'm asking any  
9                   investigations. If you've done none, it's  
10                  okay. I just want to know what the answer  
11                  is.

12                  MR. TWAIT: I am not sure if you are  
13                  talking about the technical feasibility. I  
14                  am not sure how concept of period average --  
15                  are you talking about technical feasibility  
16                  for measuring the period average?

17                  MR. FORT: No, this is really more in  
18                  the context of is that attainable and usable  
19                  and can be done.

20                  MR. TWAIT: I don't know that the  
21                  Agency has done any investigations.

22                  MR. FORT: Thank you. No. 15, beyond  
23                  what the Agency has suggested for Midwest  
24                  Generation, what is the technical feasibility

1           and economic reasonableness for any  
2           discharger to meet the proposed temperature  
3           standards? Maybe you already answered that a  
4           few minutes ago. If you think you already  
5           answered that, I'm fine.

6                     MR. TWAIT: Which one is that?

7                     MR. FORT: I'm sorry, No. 15.

8                     MR. TWAIT: Yes, I think we just  
9           mentioned cooling towers and cooling ponds.

10                    MR. FORT: No. 16, what is the basis  
11           for selecting a temperature proposal which is  
12           100 percent protective and then adding a  
13           safety factor?

14                    MR. TWAIT: The temperature proposal  
15           is one hundred percent protective of the  
16           eight species that we chose. It does not  
17           necessarily mean that it is one hundred  
18           percent protective of everything that might  
19           be there. And as to adding a safety factor,  
20           I would just have to cite back -- I mean,  
21           that's how our contractor -- that's how Chris  
22           Yoder did his methodology.

23                    MR. FORT: If you took away the safety  
24           factor, do you know what the number would be

1 for the summer months for secondary contact  
2 or Use B waters?

3 MR. TWAIT: No, I am not sure offhand.

4 MR. FORT: Top of the next page,  
5 No. 17. Does the Agency expect -- we've had  
6 a lot of testimony so far or a lot of  
7 questions any way about mixing zones -- does  
8 the Agency presently expect any special rules  
9 on mixing zones to deal with temperature  
10 issues?

11 MR. TWAIT: Are you talking about  
12 overlapping mixing zones?

13 MR. FORT: Yes.

14 MR. TWAIT: As I mentioned previously,  
15 they can't incorporate more than 25 percent  
16 of the flow in combination.

17 MR. FORT: Well --

18 MR. TWAIT: Could you repeat the  
19 question? I don't think I've answered the  
20 question.

21 MR. FORT: Well, you've talked before  
22 about the existing regs on mixing zones and  
23 you've gone through that. My question is,  
24 and it's a little bit different than the one

1 I've asked here. Does the Agency have any  
2 expectation of any special rules on mixing  
3 zoning issues dealing with the thermal  
4 standard that you've proposed?

5 MR. TWAIT: We have not proposed any.

6 MR. FORT: And you haven't considered  
7 any of those so far?

8 MR. TWAIT: Correct. I don't think  
9 any of them have been brought up, either in  
10 these proceedings or elsewhere.

11 MR. FORT: That was good timing. I'm  
12 ready to skip over to page 12.

13 MR. ETTINGER: Could I just ask one  
14 clarification. When you responded to  
15 Mr. Fort's question regarding a safety  
16 factor, what specific provision were you  
17 talking about there?

18 MR. TWAIT: Chris Yoder used in  
19 Exhibit 15 a safety factor, and I know one of  
20 the safety factors that he used -- well, let  
21 me find it. One of the safety factors that  
22 he used is located on page 5 of Exhibit 15.  
23 It would be No. 3, when they use a critical  
24 thermal maximum, the CTM, based on the fast

1 heating method 0.5 to 1 degree Celsius per  
2 hour with an appropriate adjustment, IEA 2  
3 degree safety factor to account for the  
4 inherent overestimation of lethality.

5 MR. ETTINGER: Is that what you had in  
6 mind in answering Mr. Fort's question?

7 MR. TWAIT: Yes. I'm thinking there  
8 was another safety factor, but I'll see if I  
9 can find it.

10 MR. FORT: Anyway, Mr. Twait, you are  
11 relying upon the safety factors that  
12 Mr. Yoder included in his report?

13 CHAIRMAN TIPSORD: Dr. Girard?

14 MEMBER GIRARD: Let me ask one final  
15 clarifying question on the mixing zoning  
16 issue. So if we have two adjacent  
17 dischargers, and the discharger upstream has  
18 a mixing zone, but that mixing zone extends  
19 downstream past the outfall of the second  
20 discharger and at that point it's taking up  
21 about ten percent of the volume, that means  
22 the second discharger mixing zone can take up  
23 only 15 percent of the volume. So the  
24 additive is 25 percent; is that what you are

1 saying?

2 MR. TWAIT: Yes, I think that would be  
3 a good way to put it.

4 MEMBER GIRARD: So the second  
5 discharger, the one downstream could not take  
6 up 25 percent of the volume, so you have an  
7 additive 35 percent?

8 MR. TWAIT: Correct.

9 MR. ETTINGER: Could I just request  
10 after the break or something, I'm having a  
11 hard time finding the safety factors here.  
12 So if you could, if there is another one here  
13 that you are referring to, maybe I could at  
14 some point get you to add that. That's just  
15 a request.

16 MR. FORT: At the risk of asking one  
17 last question on the mixing zone --

18 MS. WILLIAMS: Let's see if we can  
19 answer that one.

20 MR. TWAIT: I will look for the safety  
21 factor to see if he mentions it anywhere else  
22 in his report, but basically it's -- since I  
23 can't find it offhand, I may just have to  
24 read the whole report again or wait until I

1 get back to the office and do a search for  
2 it.

3 MR. ETTINGER: Fine.

4 MR. FORT: Thank you. I have just one  
5 other question, and this probably isn't an  
6 overlapping mixing zone question, but if the  
7 temperature in the stream, even if it does  
8 not have a mixing zone that's overlapping and  
9 even if there's not another thermal point  
10 source -- and I am thinking of our facility  
11 which is down gradient from Route 83 and  
12 there are no other major thermal sources, the  
13 temperature is still over the standard, that  
14 means Citgo would not have a mixing zone,  
15 correct, as the rules are proposed here?

16 MR. TWAIT: In reference to mixing  
17 zones, that would be correct.

18 MR. FORT: Thank you. I think I  
19 have -- I'm going to try to move on. I've  
20 got one question maybe left on temperature,  
21 but I think to expedite this, maybe I can get  
22 through the rest of them and look at a break  
23 and see if I have anything left.

24 CHAIRMAN TIPSORD: Excuse me,

1 Mr. Dimond has a follow-up question.

2 MR. Dimond: I have a follow-up on  
3 Mr. Fort's last question. Let's use some  
4 arbitrary numbers to help talk about it.  
5 Suppose the water quality standard for a  
6 particular body of water is 70, and the water  
7 immediately upstream of the discharge point  
8 is coming in pretty consistently at 75.  
9 Yesterday you talked about a principle,  
10 Mr. Twait, at least I thought you did, where  
11 if somebody withdraws water from the stream,  
12 they can discharge it back in and if they are  
13 withdrawing 75 degree water, if they  
14 discharge 75 degree water, they are deemed  
15 not to be in noncompliance because even  
16 though their discharge is greater than the  
17 standard, they haven't added anything to it;  
18 was that a correct summation of your  
19 testimony?

20 MR. TWAIT: If you are withdrawing 75  
21 degree water and not adding heat and then  
22 turning around and discharging the same water  
23 without a heat addition, then yes.

24 MR. Dimond: So assume the same

1           situation a standard of 70, the temperature  
2           in the water body immediately upstream is 75,  
3           but now you have a got a discharger who  
4           doesn't withdraw from the stream, but let's  
5           say they've got a ground water source that  
6           they use for cooling water in their plant,  
7           and they are going to -- but they discharge  
8           to the stream, do they have to discharge at  
9           70 or can they discharge at 75, which is the  
10          ambient temperature in the stream?

11                       MR. TWAIT: I think that in that case  
12           they would have to discharge at 70 to meet  
13           the water quality standard. The provisions  
14           that I was talking about for facilities, for  
15           somebody that's withdrawing water and not  
16           adding heat to it and then discharging, there  
17           are specific provisions in the NPDS permit  
18           section that allow for that.

19                       MR. Dimond: And are those in the  
20           regulations or are they just sort of boiler  
21           plate permit terms in the standard conditions  
22           of the permit?

23                       MR. TWAIT: I don't know the answer to  
24           that.

1 MS. WILLIAMS: I believe it's in the  
2 reg. I'm looking for the cite now.

3 MR. Dimond: That's all. Thank you.

4 MS. WILLIAMS: 304.103, Background  
5 Concentrations.

6 MR. FORT: I'm going to move back to  
7 some of the earlier questions that we had  
8 pre-filed under our Roman II that goes to the  
9 uses, but these got into specific water  
10 quality materials, so therefore we haven't  
11 asked them so far, or haven't asked some of  
12 them so far. I'd like to start with question  
13 4, but make some modification to it because  
14 you've already answered the question about  
15 the basis for proposing general use water  
16 quality standards. And I'd like to rephrase  
17 it to focus upon with respect to these  
18 various parameters.

19 MR. TWAIT: Could you tell me where  
20 you are at now?

21 MR. FORT: Page 4, question 4.

22 Mr. Twait, I'm going to modify the  
23 question slightly because I think you've  
24 answered this one. Since I know what the

1 answer is going to be there's no sense  
2 wasting the time on that.

3 The question is this, in light of  
4 the uses that you've established, and I'm  
5 going to focus in on the Chicago Sanitary and  
6 Ship Canal and lower Des Plaines River, the  
7 Use B waters, probably just a subset of the  
8 Use B waters but we'll leave it at Use B  
9 waters for now. The question is, in light of  
10 the uses of those waters to what extent are  
11 the existing water quality standards for  
12 secondary contact waters, not protecting  
13 those Use B factors, and then I'd like to ask  
14 you that question specifically about each of  
15 the chemicals listed here?

16 MR. TWAIT: I'll start out by saying  
17 that most of the secondary contact water  
18 quality standards are based on effluent  
19 standards, and they were never based on  
20 protection of aquatic life. Arsenic is at  
21 1 milligram per liter, which is not  
22 protective of aquatic life.

23 MR. FORT: And that's based upon the  
24 general water quality standards that need to

1 be done?

2 MR. TWAIT: No, that's based on the  
3 national criteria document.

4 MR. FORT: Let me just short circuit  
5 there because I'm confused when you say  
6 something like that and then in the next  
7 paragraph or next question, if you will, at  
8 page 67 of the Statement of Reasons you have  
9 the statement, "Toxic metals do not appear to  
10 be a toxicity problem with the exception of  
11 cadmium (just upstream of the Brandon Road  
12 lock and damn depositional zone) page 67  
13 Statement of Reasons."

14 MR. TWAIT: Yes.

15 MR. FORT: I'm having trouble  
16 understanding how you made that statement  
17 that toxic metals are not a problem from a  
18 toxicity standpoint, yet you say that the  
19 arsenic standard is not strong enough?

20 MR. TWAIT: Well, the difference there  
21 is what is currently -- what concentrations  
22 are currently in the water and what the water  
23 quality standard is for that water. In this  
24 case we've looked at data, and the data

1 indicates that if we adopt the national  
2 criteria document which we've proposed, then  
3 the waters as they exist now will meet the  
4 national criteria document.

5 MR. FORT: The question was whether or  
6 not the existing standards and the existing  
7 conditions are protective of those same uses?

8 MR. TWAIT: I would say the existing  
9 standard is not protective. However, the  
10 existing conditions are protective.

11 MR. FORT: And that would be your  
12 answer for the rest of these materials that  
13 I've listed here? I know they are not all  
14 metals but --

15 MR. TWAIT: Well, I think my answer is  
16 correct. However, your question takes --  
17 your restatement of -- your question was  
18 referring to there not be a toxicity problem  
19 with the exception of cadmium, and further on  
20 in that statement it says, "In the 286-plus  
21 mile deposition zone" or "286-plus just  
22 upstream of the Brandon lock and damn  
23 depositional zone." So that statement was  
24 based on the sediment analysis that the

1 contractor did in attachment A on page 3-41.

2 MR. FORT: So your answer doesn't  
3 change -- so your answer doesn't change for  
4 these other chemicals that I listed here from  
5 what you just testified to with respect to  
6 arsenic?

7 MR. TWAIT: I believe that's accurate.

8 CHAIRMAN TIPSORD: For the record, I  
9 know you are trying to save time, but the  
10 pre-filed questions aren't in the record. So  
11 I do think we need to point out it's arsenic,  
12 cadmium, chromium, copper, cyanide, lead,  
13 Mercury, Nickel, total residual chlorine,  
14 Zinc, Benzene, Ethel Benzene, Tellurian and  
15 Xylene.

16 MR. FORT: Thank you.

17 CHAIRMAN TIPSORD: As an undergrad I  
18 couldn't have done that.

19 MR. FORT: If I can, I'd like to move  
20 on to question No. 6, which is, "In light of  
21 the fishing, from the lack of fishing from  
22 the Chicago Sanitary and Ship Canal -- and  
23 just stay with the Canal -- as reflected for  
24 Use B findings, what is the basis for

1 limiting Mercury and Benzine based on "fish  
2 consumption" and establishing the standard as  
3 "exactly the same as existing general use  
4 standards?" That's pages 72 and 73 of the  
5 Statement of Reasons.

6 MS. WILLIAMS: I have this crossed  
7 off.

8 CHAIRMAN TIPSORD: We initially  
9 crossed it off, but we agreed we could come  
10 back too it. I have it highlighted in pink  
11 which indicates we'd come back to it.

12 MR. FORT: I think that's a question  
13 that you said it was too specific so we'll  
14 get back to that later.

15 CHAIRMAN TIPSORD: I think it was with  
16 Mr. Yoder too and some of that stuff.

17 MR. TWAIT: We have Mercury and  
18 Benzine that are based on fish consumption.  
19 We believe that fish can migrate either  
20 upstream or downstream to places where  
21 fishing is practiced.

22 MR. FORT: Well, in terms of  
23 downstream from the Chicago Sanitary and Ship  
24 Canal segment that we've been talking about,

1 we have both the invasive species barrier and  
2 the Lockport lock and damn.

3 MR. TWAIT: Fish can move through  
4 locks, although I will grant that they should  
5 not be able to go through fish barriers.

6 MR. FORT: Assuming that the fish  
7 barrier is working, which we all hope it is,  
8 then what's the basis then for applying this  
9 regulatory criteria to the Chicago sanitary  
10 and Ship Canal as a water quality standard?

11 MR. TWAIT: Since the fish could move  
12 upstream either into the Cal Sag Channel or  
13 farther upstream.

14 MR. FORT: So it's really for the  
15 fishing in the Cal Sag Channel and the  
16 Chicago River upstream of the Chicago  
17 Sanitary and Ship Canal?

18 MR. TWAIT: Yes.

19 MR. FORT: And how much fishing is  
20 that?

21 MR. SULSKI: Wherever anybody wants to  
22 fish, including the Des Plaines River.

23 MR. FORT: Well, the Des Plaines River  
24 though is on the other side of the invasive

1 barrier, so we are back to that part. I'm  
2 asking how this relates to, this  
3 justification relates to the Chicago Sanitary  
4 and Ship Canal?

5 MR. SULSKI: I'm sorry, I thought you  
6 were talking about the lower Des Plaines  
7 River Brandon pool and the Sanitary Ship  
8 Canal.

9 MR. FORT: No, I'm keeping it up  
10 gradient of the invasive species barrier.

11 MR. TWAIT: The answer to that is they  
12 don't have to move. There's nothing stopping  
13 people from fishing in the Sanitary and  
14 Shipping Canal.

15 MR. FORT: Well, are we basing the  
16 standards on what people might do or based  
17 upon what the designated uses are?

18 MR. TWAIT: The designated uses are --

19 MR. FORT: Remember the designated  
20 uses here from a recreational standpoint are  
21 noncontact.

22 MR. ESSIG: I believe it protects the  
23 fish statewide.

24 CHAIRMAN TIPSORD: I am sorry,

1 Mr. Essig, didn't hear you.

2 MR. ESSIG: I believe the fishing  
3 consumption advisories that we have are  
4 statewide and effect all the waters for human  
5 health. I think that's why this is  
6 applicable here, in addition to what Scott  
7 said about the fish being able to migrate up  
8 the Cal Sag.

9 MR. FORT: So the justification for  
10 applying or proposing that the special rules  
11 on Mercury and Benzine is that we do it every  
12 place else in the state, and we're not really  
13 paying attention to what the uses that we've  
14 designated the Chicago Sanitary and Ship  
15 Canal are for?

16 MR. SULSKI: Well, this question did  
17 come up before, and I remember that there was  
18 a follow-up question, and the follow-up  
19 question was, do fish swim?

20 MR. FORT: And then my question is, do  
21 they swim through the invasive species  
22 barrier?

23 MR. SULSKI: Well, they are not  
24 supposed to. He answered that question.

1                   MR. FORT: Well, we are basing this on  
2                   what might happen, someday, somehow somebody  
3                   or is this based upon an orderly process of  
4                   saying here is the state resources, here is  
5                   how we're going to manage them, here is how  
6                   we are going to protect the environment.

7                   MR. SULSKI: We also had the testimony  
8                   of the fatalities of having boats in the  
9                   wrong place in the Ship Canal or even in the  
10                  lower Des Plaines or the upper Brandon pool.  
11                  I think maybe I just should go on.

12                  Number 9. In light of the Agency  
13                  recommendation to dissolve oxygen for the  
14                  Chicago Sanitary and Ship Canal waters allow  
15                  a daily minimum of 3.5 milligrams per liter  
16                  and a seven day mean of daily minimum of 4.0  
17                  milligrams per liter -- let me skip down --  
18                  will these DO levels have an effect on the  
19                  limited aquatic life in the Chicago Sanitary  
20                  and Ship Canal before any effect from the  
21                  other pollutants for which water quality  
22                  standards are proposed?

23                  MR. SMOGOR: I don't know.

24                  MR. ETTINGER: I guess I have a

1 follow-up question. These standards are set  
2 so that the life there won't be effected; is  
3 that correct?

4 MR. SULSKI: Correct.

5 MR. FORT: I thought that for the  
6 dissolved oxygen, we were not protecting  
7 early life stages with this dissolved oxygen  
8 standard in the Chicago Sanitary and Ship  
9 Canal?

10 MR. SMOGOR: My answer was based on --  
11 I assumed you were asking will not meeting  
12 these standards have an effect. Was that the  
13 intent of your question? I may have  
14 misunderstood your question.

15 MR. FORT: Let me go back and clarify.

16 MR. SMOGOR: Sorry.

17 MR. FORT: That's quite all right.  
18 The question is, given the decisions to have  
19 a dissolved oxygen standard of 3.5 milligrams  
20 per liter, and I believe the testimony was  
21 that's not protective of early life stages,  
22 but the question is assuming you are still  
23 within the 3.5 milligrams per liter of  
24 dissolved oxygen, will that have an effect on

1 species that you are trying to protect with  
2 the general chemical standards?

3 MR. SMOGOR: We believe that the  
4 dissolved oxygen criteria that we set for  
5 those waters will adequately protect for the  
6 proposed aquatic life use for those waters.

7 MR. FORT: But you are not trying to  
8 protect early life stages in that process?

9 MR. SMOGOR: The intent is not to  
10 protect all the early life stages, right.

11 MR. FORT: And do you -- well, never  
12 mind. Thank you.

13 I think the next one that we  
14 haven't done is over on page 7, and this is  
15 question No. 21.

16 MR. SULSKI: Page 7?

17 MR. FORT: Yes. Actually, I think we  
18 just covered No. 21 now that I look at it.  
19 Good clarification there, I guess.

20 CHAIRMAN TIPSORD: Good thinking  
21 ahead.

22 MR. FORT: But No. 22 though, why  
23 isn't the same consideration applied to other  
24 parameters for which revised water quality

1 standards are being proposed for the Chicago  
2 Sanitary and Ship Canal?

3 MR. TWAIT: When the Agency ran into a  
4 parameter that we could remove sensitive life  
5 species, the Agency did so. And in those  
6 cases -- I can think of two cases where we  
7 did -- and that was DO, ammonia. For the  
8 other parameters, the national criteria do  
9 not allow for or do not consider the  
10 protection of early life stages for toxic  
11 effects.

12 MR. FORT: What about the temperature  
13 standard that you are proposing, did they  
14 include early life stages as part of that  
15 analysis?

16 MR. TWAIT: For the most part as Chris  
17 Yoder testified, the adults are the most  
18 sensitive, are more sensitive than the, I  
19 believe they are called young of the year.

20 MR. FORT: But there are younger or  
21 early life stages results included in the  
22 data that you used to come up with the  
23 proposed temperature standards, correct?

24 MS. WILLIAMS: Could you repeat that?

1 I don't think I heard it.

2 MR. FORT: Can you read it back?

3 (Record read.)

4 MS. WILLIAMS: Earlier than what? You  
5 are saying older than young of year?

6 MR. FORT: I don't think it's that  
7 difficult a question. Let's let the witness  
8 answer it, and he can refine it if he needs  
9 to.

10 MS. WILLIAMS: Do you understand?

11 MR. TWAIT: In Appendix Table Z1 of  
12 Attachment 3 of Chris Yoder's pre-filed  
13 testimony --

14 CHAIRMAN TIPSORD: Which is Exhibit  
15 16.

16

17 MR. TWAIT: That data base does  
18 include juveniles and young of the year data.

19 MR. FORT: Thank you.

20 MR. TWAIT: And egg and larva data  
21 also.

22 MR. FORT: Thank you. Do you know if  
23 all that of that data was included to come up  
24 with the temperature standard or just a

1 subset of it?

2 MR. TWAIT: It was -- I think Chris  
3 Yoder went through pretty well how he came up  
4 with it. I believe for the most part because  
5 adults were most sensitive, he ended up using  
6 the data from the adults, but that does not  
7 mean -- I am not going to try to say that he  
8 didn't use data from young of the year or  
9 larvae.

10 MR. FORT: Well, Mr. Yoder certainly  
11 testified that he thought the juveniles were  
12 less sensitive. I'm not sure everybody has  
13 agreed with that, but that's not in the  
14 record yet so I'll move on.

15 MR. ETTINGER: What? He testified,  
16 but it's not in the record?

17 MR. FORT: No, no, the contrary view  
18 is not in the record.

19 CHAIRMAN TIPSORD: The disagreement is  
20 not in the record. Just for the record just  
21 so everyone knows, the Board does not view  
22 asides or statements made by attorneys, other  
23 than Ms. Williams who has been sworn, as  
24 sworn testimony or as evidence.

1                   MR. FORT: Thank you. Moving on to  
2                   No. 26. With respect to the statement that  
3                   the U.S. EPA's national criteria documents  
4                   were significantly lacking for temperature  
5                   and bacteria, I believe this is Mr. Smogor's  
6                   testimony, page two, in lack of that, lack of  
7                   U.S. EPA guidance why did IEPA believe it was  
8                   necessary to propose new standards for  
9                   temperature?

10                  MR. SMOGOR: Just for correction, I  
11                  don't think that was part of my testimony  
12                  because I don't think my testimony addressed  
13                  temperature and bacteria.

14                  CHAIRMAN TIPSORD: It's under  
15                  Mr. Twait's testimony.

16                  MR. FORT: It sounded like a Mr. Twait  
17                  statement but --

18                  MR. SMOGOR: You were scaring me  
19                  there.

20                  MR. TWAIT: I will first start out by  
21                  saying that no water quality standards for  
22                  bacteria are proposed. So that's an answer  
23                  to your question. And the reason that we  
24                  proposed temperature standards is because of

1 the thermal, the current thermal water  
2 quality standards for secondary contact are  
3 believed to be lethal.

4 MR. FORT: And you are talking about  
5 the 100 degree part or are you also talking  
6 about the 93.3, whatever that decimal point  
7 is?

8 MR. TWAIT: I'll just say the current  
9 standard.

10 MR. FORT: I think you testified that  
11 earlier that Mr. Yoder concluded that 50  
12 percent lethality at the existing secondary  
13 contact water quality standard for 95 percent  
14 of the time -- am I recalling your testimony  
15 correctly?

16 MR. TWAIT: At 93 degrees, yes.

17 MR. FORT: Thank you. Moving on. I  
18 hate to come back to a mixing zone question,  
19 but No. 31 on the top of page 8.

20 Now the question deals with  
21 excursions of the cad meum water quality  
22 standard, and I believe you pointed out that  
23 may be due to resuspension on of sediments or  
24 something of that nature. Assuming that the

1 execution of the cadmium water quality  
2 standard is due to resuspension of sediments,  
3 does that mean that a discharger of cadmium  
4 into that water body would not have a mixing  
5 zone?

6 MR. TWAIT: Let me clear something up.  
7 When we looked at cadmium the first time, the  
8 first cut, we were using the national  
9 criteria document, and the waterway could not  
10 meet the national criteria document. And we  
11 surmised it was because of sediment  
12 resuspension. In our proposal we proposed to  
13 base the cadmium standard on the general use  
14 water quality standard. To my knowledge, the  
15 cadmium standard that we've proposed which is  
16 based on general use can be met in the  
17 waterway.

18 MR. FORT: Well, indulge me then for a  
19 hypothetical question. That due to  
20 resuspension of sediments there is a  
21 violation of cadmium standard even now as you  
22 are proposing it. In that event, would that  
23 mean that a discharger of cadmium into that  
24 body of water not be eligible for a mixing

1 zone?

2 MR. TWAIT: If it was a one-time  
3 event, then I don't believe the Agency would  
4 look at that as problematic. If it got to  
5 the point that it was happening for weeks out  
6 of the year or that a lot of the monitoring,  
7 then, yes, if the water quality standard was  
8 not being met, we would not grant a mixing  
9 zone.

10 MR. FORT: Okay, well let's move on to  
11 chlorides then. And let's assume that  
12 there's data that would say that a chloride  
13 standard existing or as you've proposed is  
14 exceeded for two weeks out of the year, and  
15 it all happens to be associated with snow  
16 melt. Is that a condition that the mixing  
17 zone rule would prohibit a mixing zone  
18 allowed for a discharger that has chlorides  
19 in his discharge?

20 MS. WILLIAMS: Can you clarify whether  
21 you've moved on to one of our pre-filed  
22 questions under your next heading or are you  
23 asking follow-up?

24 MR. FORT: This is a follow-up that

1 leads into the next question.

2 MR. TWAIT: At those times during the  
3 snow melt when the water is being met for  
4 chloride, I don't believe the Agency would  
5 give a mixing zone for chloride.

6 MR. FORT: Limited to that period of  
7 time?

8 MR. TWAIT: That is certainly  
9 possible.

10 MR. FORT: And how will we know what  
11 we should be planning or doing or managing if  
12 it's an episode that isn't something that's  
13 within a discharger's control?

14 MR. TWAIT: We could just determine  
15 that that's for the winter season as a  
16 possibility.

17 MR. FORT: So in other words, there  
18 may be some room for negotiating and  
19 discussion and coming up with something  
20 that's practical?

21 MR. TWAIT: Yes.

22 MR. FORT: Okay, now I am moving on to  
23 the questions for chlorides.

24 CHAIRMAN TIPSORD: You know what,

1 let's go ahead and take about a ten minute  
2 break, and we'll come back about  
3 3:00 o'clock.

4 (Brief recess taken, after which  
5 the following proceedings were  
6 had:)

7 CHAIRMAN TIPSORD: Back on the record.

8 MR. FORT: Thank you. I'm continuing  
9 with the questions on chlorides. I'm on page  
10 8 of our pre-filed questions, and let me just  
11 start with No. 2 there. Was the Agency aware  
12 that levels of chloride in the Chicago  
13 Sanitary and Ship Canal already exceed 5  
14 milligrams per liter during snow melt  
15 conditions?

16 MR. TWAIT: Yes.

17 MR. FORT: And if so what's the  
18 technical feasibility and economic  
19 reasonableness to achieve the proposed  
20 standard?

21 MR. TWAIT: The Agency plans to  
22 continue to work with state and local  
23 governments to mitigate the harm to aquatic  
24 life from practices of road salt.

1                   MR. FORT: Is there anything else that  
2                   the Agency has as a strategy on the chloride  
3                   issue?

4                   MR. TWAIT: We are continuing to look  
5                   at the national criteria document and to see  
6                   if we have some room to make some adjustments  
7                   to our proposal.

8                   MR. FORT: Are you aware of any  
9                   sources of chlorides in the Use B waters  
10                  other than snow melt run-off which would  
11                  cause chloride levels to exceed the proposed  
12                  500 milligrams per liter standard?

13                  MR. TWAIT: When this rule making was  
14                  proposed, I was not aware of any. From my  
15                  understanding now, chlorides are discharged  
16                  by refineries in exceedance of 500 milligrams  
17                  per liter.

18                  MR. FORT: But if any of those  
19                  discharges that you understand causing water  
20                  quality -- putting aside -- I'll withdraw the  
21                  question.

22                  During times other than snow melt  
23                  run-off, are you aware of any other  
24                  exceedances of a proposed 500 milligram

1 standard for chlorides?

2 MR. TWAIT: I believe all the  
3 exceedances that we've seen in our data can  
4 be referenced back to snow melt.

5 MR. FORT: Thank you. What happens to  
6 mixing zones of industrial discharges if the  
7 500 milligram per liter standard for  
8 chlorides were to be adopted in light of the  
9 snow melt phenomenon and elevated chloride  
10 levels?

11 MR. TWAIT: I think we've mentioned  
12 this before, but mixing would not be allowed  
13 during those times that the water quality  
14 standards are exceeded.

15 MR. FORT: And do you have any ideas  
16 on what kind of strategies might be able to  
17 be employed to correlate exceedance due to  
18 snow melt with regular industrial discharges?

19 MR. TWAIT: I believe Citgo was  
20 looking at the feasibility of storing their  
21 effluent for periods of time when the TDS in  
22 the receiving stream was high, and their TDS  
23 was high also. I don't know the feasibility  
24 of that.

1                   CHAIRMAN TIPSORD: TDS is total  
2 dissolved solids?

3                   MR. TWAIT: Yes.

4                   MR. SULSKI: It's a major element and  
5 chloride is a major element in TDS or it can  
6 be.

7                   MR. FORT: Well, we won't get into me  
8 testifying about the feasibility of that, but  
9 the Board has before it the feasibility that  
10 talks about the difficulty in doing just  
11 that.

12                   Would there be any effect on zones  
13 of initial dilution with respect to the 500  
14 milligram per liter of chlorides?

15                   MR. TWAIT: Chloride is a number one  
16 standard, so the Agency applies mixing zones  
17 to one number standards, and not zones of  
18 initial dilution.

19                   CHAIRMAN TIPSORD: Can I ask a  
20 follow-up based on that, and this goes back  
21 to a question Mr. Fort asked and maybe  
22 perhaps I'm just not conceptualizing this.  
23 It goes back to his question about the impact  
24 of run-off on a mixing zone. If I have a

1 mixing zone and my effluent has 500  
2 milligrams per liter of chloride and I have a  
3 mixing zone that takes me under a bridge  
4 that's been salted like it's been salted this  
5 winter, are you saying that I lose that  
6 mixing zone, if that salt results in the  
7 water quality standard being above 500  
8 milligrams per liter?

9 MR. TWAIT: I think there's one  
10 misunderstanding here. You are saying that  
11 your discharge is 500 milligrams per liter.  
12 You don't need a mixing zone if you are  
13 discharging 500 milligrams per liter.  
14 However, if it was higher, 1000 milligrams  
15 per liter, the Agency will look at the  
16 receiving stream and if the receiving stream  
17 is already violating the water quality  
18 standard, we will not give a mixing zone.

19 CHAIRMAN TIPSORD: I understand that,  
20 but my question is that -- so in other words,  
21 if in March -- let's go to February -- you go  
22 out and do tests and underneath that bridge  
23 it's exceeding the water quality standard,  
24 500 milligrams per liter, I can't have a

1 mixing zone?

2 MR. TWAIT: Generally, until this  
3 chlorides and TDS issue came up, we would not  
4 allow mixing zones at all for a receiving  
5 stream that was exceeding the water quality  
6 standard for copper or another parameter. If  
7 we've got data that shows it's more than just  
8 a once a year episode -- if it was happening  
9 only once a year for a parameter to exceed  
10 the water quality standard, the Agency would  
11 probably not restrict your mixing zone. But  
12 if it's something that is happening every  
13 year for a period of time and we recognize  
14 that, then we would not grant a mixing zone.  
15 When the TDS and the chloride issue has come  
16 forward, we are now looking at possibly just  
17 allowing the mixing zone throughout the  
18 remainder of the year and not have a mixing  
19 zone when the water quality standard is  
20 exceeded. That is not something that we've  
21 normally done in the past.

22 CHAIRMAN TIPSORD: Okay, go ahead Mr.  
23 Fort.

24 MR. FORT: Thank you. If the

1 levels -- instead of talking about the bridge  
2 just down from the discharge -- let's talk  
3 about the bridge above the discharge. And  
4 let's say that the water intake, the levels  
5 are above 500 hundred, and let's just say  
6 it's 600 milligrams per liter, what is the  
7 discharger allowed to discharge in that  
8 scenario? I mean, is it 600 milligrams per  
9 liter or is it 500 or do they get a mixing  
10 zone because they didn't cause it in the  
11 first place?

12 MR. TWAIT: Well, the way the Agency  
13 currently does it, we would not give a mixing  
14 zone. If a discharger was withdrawing water  
15 out of the river and not adding chlorides and  
16 then discharging it back into the river, then  
17 it would be 600. If they were adding  
18 chlorides, I believe they would have to  
19 discharge at 500 milligrams per liter.

20 MR. FORT: And we are talking about  
21 chlorides at any level, even if it were 100  
22 milligrams per liter, almost literally table  
23 salt quantity?

24 MR. TWAIT: I don't know the answer to

1           that.

2                       MR. FORT:  So there might be some de  
3           minimus level that would make sense?

4                       MR. TWAIT:  I would have to refer back  
5           to 304.103.

6                               304.103, it does give a little bit  
7           of room, and it states, "However, it is not  
8           the intent of these regulations to require  
9           users to clean up contamination caused  
10          essentially by upstream sources or to require  
11          treatment when only trace, when only traces  
12          of contaminants are added to the background."

13                       MR. FORT:  In your experience do you  
14          know what traces of contaminants means?

15                       MR. TWAIT:  I don't know that it's  
16          defined in there.

17                       MR. FORT:  Any examples come to mind  
18          of how the Agency has applied traces of  
19          contaminants?

20                       MR. TWAIT:  The permitting section  
21          would have to answer that question to know  
22          how it's been applied.

23                       MR. FORT:  Moving on then, question  
24          No. 6, let me restate it because I think

1           you've touched on this. It is technically  
2           feasible to control chloride run-off from  
3           snow melt and surface transportation?

4                   MR. TWAIT: Yes. The Agency is  
5           currently working with stakeholders on the  
6           west branch of the DuPage River to control  
7           chloride run-off from snow melt. Also there  
8           is a product out there that I'm told is three  
9           times more expensive than chloride, and it's  
10          called CMA. However CMA would have a BOD  
11          component to it. So it's not something that  
12          could be used widely without studying the  
13          effects of the BOD component.

14                   MR. SULSKI: We worked with O'Hare  
15          airport for many years on alternative  
16          de-icing too.

17                   MR. FORT: I think I've covered 10.  
18          11, if the chloride levels exceed 500  
19          milligrams per liter, what's the formula to  
20          calculate sulfates? I don't think there is a  
21          formula proposed.

22                   MR. TWAIT: There is not.

23                   MR. FORT: So is there going to be a  
24          formula? Are you taking the general use

1 formula?

2 MR. TWAIT: As I mentioned before, the  
3 Agency is looking at -- well, no, strike  
4 that.

5 Currently there is no equation for  
6 determining the chloride standard when --  
7 there's no equation for determining the  
8 sulfate standard when chloride exceeds 500.  
9 The Agency would use section 302.410 to set  
10 water quality standards for any substance or  
11 combination of substances that are not  
12 specifically mentioned in the water quality  
13 standards. This would probably involve  
14 requiring the discharger to develop some type  
15 of data for sulfate toxicity when chloride  
16 levels are above 500.

17 MR. FORT: So even though we are  
18 proposing to delete sulfate or modify  
19 sulfate, it's going to come back in as some  
20 special calculation because we're going to  
21 have a chloride issue potentially?

22 MR. TWAIT: We're planning to  
23 eliminate TDS by putting in chloride and  
24 sulfate.

1                   MR. FORT: So the formula you are  
2 talking about though using 302.210 on sulfate  
3 will come in on the existing sulfate formulas  
4 that you proposed?

5                   MR. TWAIT: The sulfate formulas we  
6 proposed does not have an equation for when  
7 sulfate is above 500. When the sulfate  
8 standard was proposed for general use  
9 standards, they did not look at the toxicity  
10 of sulfate when chloride exceeded the water  
11 quality standard.

12                  CHAIRMAN TIPSORD: The Agency?

13                  MR. TWAIT: The Agency did not look at  
14 it.

15                  MR. FORT: Moving on to No. 12. Has  
16 the Agency evaluated the cost and effect of  
17 the proposed chloride standards on any  
18 dischargers other than you've mentioned  
19 working with municipalities and cities in an  
20 effort to reduce chloride run-off?

21                  MR. TWAIT: No, we have not. Until I  
22 read the pre-filed questions, I was not aware  
23 of the discharger that would be exceeding the  
24 chloride standard and would need mixing

1 zones.

2 MR. FORT: Moving on to No. 13.

3 Chloride --

4 MS. WILLIAMS: Did you say 15?

5 MR. FORT: 13. We didn't see any  
6 discussion about chlorides in the UAA and the  
7 proposal doesn't address any effect on the  
8 region. Will the adoption of a chloride  
9 standard result in no new road construction  
10 because of the impaired water designation  
11 that may follow from a chloride standard?

12 MR. SULSKI: I don't think so.

13 MR. FORT: Can you explain that?

14 MR. SULSKI: Stopping road  
15 construction? That's outside of our  
16 jurisdiction.

17 MR. FORT: And at the present point  
18 you are not permitting road construction or  
19 having any direct control on that activity?

20 MR. TWAIT: Correct.

21 MR. FORT: No. 14, will the chloride  
22 standard result in more traffic accidents or  
23 fatalities in the region due to the  
24 requirement to reduce salt usage in inclement

1 weather?

2 MR. TWAIT: I don't believe the Agency  
3 is going to propose that municipalities stop  
4 using road salt. I believe that we can work  
5 with them to make sure that best management  
6 practices are implemented.

7 MR. FORT: You are expecting that the  
8 BMP's will enable the chloride standard to be  
9 met?

10 MR. TWAIT: I'm hopeful.

11 MR. FORT: How confident are you?

12 MR. TWAIT: As I said before, we're  
13 looking into the national criteria document  
14 to see what type of wiggle room. I mean,  
15 we're trying to attack this issue from a  
16 couple perspectives.

17 MR. FORT: Let me direct you to  
18 No. 17. I think we've touched on the other  
19 ones in between, and this goes back to sort  
20 of the practicality of looking at water  
21 quality standards and being able to know in  
22 real time or quickly that anything has to be  
23 done. Has the Agency given any thought to  
24 the practicality of some sort of a period of

1 time, seasonal use cessation of activities or  
2 reduction in chloride discharges, beyond the  
3 BMP idea that we've talked about?

4 MR. TWAIT: The Agency has also talked  
5 about the idea of giving mixing zones during  
6 the times of the year that snow melt would  
7 not be an issue. Other than that, no.

8 MR. FORT: Will discharge of sulfates  
9 need to monitor chloride levels every day  
10 during periods of snow smelt to determine  
11 compliance?

12 MR. TWAIT: No. The Agency when it  
13 writes a permit for dischargers of sulfate  
14 will use the chloride levels along with the  
15 hardness levels to determine the NPDS permit  
16 limit for sulfate and the discharger will  
17 only be required to meet the NPDS permit.

18 MR. FORT: How did the IEPA decide  
19 that the major water quality constraints are  
20 temperature in dissolved oxygen but not  
21 chlorides?

22 MR. SULSKI: Well, when the  
23 contractors initially screened the waterways  
24 and we looked at subsequent data and compared

1           it against general use, chloride didn't pop  
2           out very often.  If it did, it was quite  
3           rare.  And then we really started to get into  
4           the issue when we had to revisit the national  
5           criteria.

6                     MR. FORT:  And simply now, just in  
7           terms of the major water quality issues  
8           because of your sampling you concluded that  
9           toxicity of heavy metals and other parameters  
10          were not a major problem in the streams now  
11          either?

12                    MR. SULSKI:  When we reviewed the  
13          existing data against our proposed standard,  
14          chloride came up, cadmium was another one  
15          that was mentioned.  Scott can fill in.  Were  
16          there any others that started to become an  
17          issue?

18                    MR. TWAIT:  I think that's it -- oh,  
19          I'm sorry.  Human health from Mercury would  
20          be an issue.  But we have that same issue  
21          throughout the state -- oh, and PH.

22                    MR. FORT:  Does the Agency expect to  
23          do anything different with the overlapping  
24          mixing zone issue when it comes to chlorides

1           than it has for -- we've already talked about  
2           for temperature or any other parameter?

3                     MR. TWAIT: I don't know that the  
4           Agency would take a different approach. We  
5           would still have to follow the mixing zone  
6           regulations.

7                     MR. FORT: Thank you. I think I'm  
8           done with chlorides.

9                     MR. Dimond: Could I ask one follow-up  
10          on chlorides?

11                    MR. FORT: Sure.

12                    MR. Dimond: Mr. Twait, what I didn't  
13          quite understand about your testimony, you  
14          talked about giving dischargers a mixing zone  
15          during non-snow melt periods.

16                    MR. TWAIT: Yes.

17                    MR. Dimond: What about the snow melt  
18          times? I mean, those are the times when one  
19          would expect the chlorides to be even higher?

20                    MR. TWAIT: Well, I understand that.  
21          But our mixing zone regulations do not allow  
22          mixing zones when the water quality standard  
23          is exceeded.

24                    MR. FORT: Mr. Twait, I have one left

1           on thermal. I hate to go back to thermal.

2           But page 14, it's question No. 59.

3                   MS. WILLIAMS: Which number again, I'm  
4           sorry?

5                   MR. FORT: It's the middle of the page  
6           on 14. Do you have it there?

7                   The question is, since the Agency  
8           acknowledges that thermal water quality  
9           standards were quite challenging, would it be  
10          prudent to further investigate and model  
11          before spending considerable amounts to  
12          attempt to change thermal characteristics  
13          which may or may not succeed and which may or  
14          may not bring about the intended results.

15                  MR. TWAIT: I think the Agency has  
16          spent a considerable amount of time with  
17          thermal issues, and we've got a proposal that  
18          protects aquatic life. So, no, I don't know  
19          that it would be prudent to continue to wait.

20                  MR. FORT: But you haven't proposed a  
21          specific schedule for meeting these water  
22          quality standards as I understand it?

23                  MR. TWAIT: Correct.

24                  MR. FORT: Okay. I'm going to skip

1 bacteria. I'm sure others will cover that  
2 very thoroughly. I'm going to move to page  
3 15, Roman VI, consideration of Section 27A  
4 Factors. I think these are Mr. Sulski's  
5 questions, but obviously anybody can answer.

6 The final paragraph of the  
7 testimony, page 20, in Mr. Sulski's pre-filed  
8 testimony references the economic  
9 reasonableness of rule making proposals.  
10 There is no reference here that we could find  
11 or any exhibit to the economic reasonableness  
12 of any of the Agency's proposals that they  
13 would apply to Citgo patrolling corporation,  
14 and its Lemont Refinery. Is there any that  
15 you can point out in the testimony?

16 MR. SULSKI: No, we don't mention  
17 Citgo Petroleum or the Lemont Refinery in the  
18 pre-filed testimony or the Statement of  
19 Reasons.

20 MS. WILLIAMS: Can I ask why not?

21 MR. SULSKI: Why not? Well, we went  
22 through the UAA and the standards proposal  
23 exercises in what we have here. We didn't  
24 know that it would get, that Citgo would have

1 a problem with any of these, any of this  
2 proposal.

3 MR. FORT: Well, we can cover that  
4 with our testimony. We thought we had.  
5 Obviously something didn't get communicated  
6 so -- and there's nothing then in the  
7 pre-filed exhibits in support of the petition  
8 on the economic reasonableness as applied to  
9 Citgo either, correct?

10 MS. WILLIAMS: Do you think there are  
11 some documents we didn't submit that should  
12 have been submitted?

13 MR. FORT: Can you please answer my  
14 question first?

15 (Record read.)

16 MR. FORT: Can you point to any  
17 statements in the petition -- I mean in the  
18 Statement of Reasons -- describing economic  
19 reasonableness of the proposed rules in any  
20 fashion as they may apply to Citgo?

21 MR. SULSKI: I can't.

22 MR. FORT: Are there any attachments  
23 that were submitted with the Statement of  
24 Reasons that would have information on

1 economic reasonableness as applied to Citgo?

2 MR. SULSKI: Not that I know of.

3 MR. FORT: Are there any exhibits in  
4 this proceeding before the Board that would  
5 have information on economic reasonableness  
6 as applied to Citgo?

7 MR. SULSKI: Not that I am aware of.

8 MR. FORT: And you would agree that  
9 none of the Agency pre-filed testimony also  
10 did not address economic reasonableness as  
11 applied to Citgo, correct?

12 MR. SULSKI: Not that I'm aware of,  
13 correct.

14 MS. DIERS: Can I ask a follow-up?  
15 I'd like to ask Mr. Laskowski and Mr. Schlade  
16 if they know if Mr. Sulski was an advisor of  
17 the Citgo advisory committee?

18 MR. FORT: I'm going to object. We're  
19 not trying to say that we gave you something  
20 that you didn't put in. I think you've -- I  
21 don't think what we did in the participation  
22 in the advisory committees or whatever it was  
23 is relevant. It's still something to be  
24 before the Board.

1                   CHAIRMAN TIPSORD:  Again, I have to  
2                   disagree.  We are still talking about the  
3                   economic thought process of the Agency, so  
4                   I'll let them answer the question.

5                   MR. TWAIT:  Yes, they were part of the  
6                   work group.

7                   MS. DIERS:  For lower Des Plaines?

8                   MR. TWAIT:  Yes, they did participate  
9                   in the lower Des Plaines UAA.

10                  MR. SULSKI:  I see that Matthew  
11                  Glickman was listed, and Bridgette Postal are  
12                  listed as participators at one time or  
13                  another in the CAWS UAA.

14                  MR. FORT:  And you don't know what the  
15                  topics that were on the table were being  
16                  discussed at anyone of those proceedings, do  
17                  you?

18                  MR. SULSKI:  I would have to go back  
19                  to the notes and which ones they participated  
20                  in.

21                  CHAIRMAN TIPSORD:  For the record, you  
22                  are looking at Attachment G for that  
23                  information?

24                  MS. DIERS:  And attachment F.

1                   CHAIRMAN TIPSORD: We have also in the  
2 record the minutes from the CAWS UAA  
3 stakeholder Advisory Committee?

4                   MR. SULSKI: Yes.

5                   CHAIRMAN TIPSORD: And that's the  
6 March 4th filing?

7                   MS. DIERS: Correct, the stakeholders  
8 minutes.

9                   CHAIRMAN TIPSORD: Let's go ahead  
10 since what happened with those is becoming  
11 part of this record. Let's enter those as an  
12 Exhibit. And I did speak to John Therialt  
13 (phonetic) today. He is double checking. He  
14 thinks what happened is because some of this  
15 is two-sided, he didn't get that all scanned.  
16 So we'll get that corrected. And it will be  
17 on as Exhibit 6 for both the minutes from  
18 lower Des Plaines and the CAWS.

19                  MR. FORT: Exhibit 6?

20                  CHAIRMAN TIPSORD: 36. If there's no  
21 objection? Seeing none, it's marked as  
22 Exhibit 36.

23                  MS. DIERS: So just to get into what  
24 the Hearing Officer was referring to, which

1 is information that went into the Agency's  
2 analysis with regard to the economic  
3 reasonableness of the rules, does anyone on  
4 the panel recall whether Citgo presented any  
5 information regarding problems they would  
6 have complying with any parts of the  
7 proposal?

8 MR. SULSKI: I don't recall any.

9 MR. TWAIT: I do not recall any  
10 either.

11 MS. DIERS: That's all.

12 MR. FORT: Well, I'm not sure how  
13 relevant it is to this proceeding, but I  
14 think guess we'll figure it out when  
15 Ms. Franzetti complains that stuff she was  
16 given, wasn't even read, and we thought we  
17 made comments, but anyway. It's not the  
18 Board proceeding so I don't think it could be  
19 equated.

20 However, let me go on to No. 3.  
21 The Agency claims that the lower Des Plaines  
22 and the Chicago Sanitary and Ship Canal in  
23 particular receive discharges from a large  
24 number of significant industrial facilities."

1 Reference to Statement of Reasons, page 103.  
2 Does the Agency have any information for  
3 industrial sources other than Midwest  
4 Generation on the technical feasibility and  
5 economic reasonableness of the proposed  
6 changes for those industrial sources? And I  
7 will just say parenthetically, assuming  
8 innuendo, that it is that kind of stuff for  
9 Midwest Generation.

10 MR. SULSKI: I guess the answer is no.

11 MR. FORT: Thank you.

12 Other than some information that's  
13 presented in the Statement of Reasons on  
14 Midwest Generation and the Metropolitan Water  
15 Reclamation District of Greater Chicago, has  
16 the Agency developed any information relating  
17 to technical feasibility or economic  
18 reasonableness on any of the dischargers  
19 listed on Exhibit TT?

20 CHAIRMAN TIPSORD: Exhibit TT to the  
21 proposal.

22 MR. FORT: Attachment TT.

23 CHAIRMAN TIPSORD: Attachment TT.

24 MR. TWAIT: I don't believe that any

1 other technical feasibility or economic  
2 reasonableness has come in from any  
3 discharger.

4 MR. FORT: And the Agency hasn't  
5 developed it on its own?

6 MR. TWAIT: No.

7 MR. FORT: How will the dischargers to  
8 the Chicago Sanitary and Ship Channel, and I  
9 am only talking about the Chicago Sanitary  
10 and Ship Canal here, be effected by the  
11 proposed water quality standards,  
12 particularly rule 302.407 and 302.410?

13 MR. TWAIT: They will be effected in  
14 as much that they discharge parameters above  
15 the water quality standard. The Agency would  
16 look at the data and determine if a mixing  
17 zone was available and put permit limits in  
18 the NPS permit as appropriate.

19 MR. FORT: Aren't they going to have  
20 to do more, such as do some of the analyses  
21 called for in those proposed rules?

22 MS. DIERS: Can you explain what  
23 analyses you are referring to?

24 MR. FORT: Whatever proposed 302.407

1 and 302.410 require.

2 MR. TWAIT: Usually the NPDS permit  
3 will require sampling based on the type of  
4 discharger. I don't know that the proposed  
5 water quality standard will have that much of  
6 an impact on -- I don't know how much of an  
7 impact it would have on which parameters  
8 would need to be monitored.

9 MR. SULSKI: Other than the  
10 information that's required in the NPDS  
11 permit application, I mean that's what you  
12 would be required to submit.

13 MR. FORT: Well, isn't the  
14 requirements of 302.410 new in terms at least  
15 of the detail that it requires?

16 MR. TWAIT: No. 302.410 is changing  
17 how derived criteria are derived.

18 MR. FORT: So isn't that an additional  
19 requirement?

20 MR. TWAIT: That is not an additional  
21 requirement on the discharger. That's an  
22 additional requirement for the Agency. The  
23 Agency will look at whatever data is  
24 generated from the discharger, and we will

1           apply 302.410 to determine if a parameter  
2           needs to be limited in the permit.

3                   MR. SULSKI: That's no different than  
4           an evaluation of a TLM 96 number, which is  
5           the original secondary contact number.

6                   MR. FORT: Well, aren't your  
7           requirements here a lot more significant and  
8           extensive than a 96 hour TLM?

9                   MR. SULSKI: I would agree with that.

10                   MR. FORT: It is more extensive?

11                   MR. TWAIT: The requirements for  
12           deriving the criteria are more extensive.  
13           However, the Agency derives those criteria  
14           and will apply them into a permit. The  
15           dischargers do not -- they can -- but  
16           typically they do not try to develop the  
17           criteria on their own.

18                   MR. FORT: So we're talking about  
19           developing a criteria and discussing a  
20           criteria I guess for acute aquatic toxicity  
21           criteria, correct?

22                   MR. TWAIT: And chronic, yes.

23                   MR. FORT: And then we also look at  
24           wild and domestic animal protection criteria?

1 MR. TWAIT: Yes.

2 MR. FORT: And how many of those wild  
3 and domestic animals do you think are in the  
4 presence of the Chicago Sanitary and Ship  
5 Canal?

6 MR. TWAIT: We've got birds and stuff,  
7 and ducks. I don't think we've got cats and  
8 dogs going down and getting into the Sanitary  
9 and Ship Canal to drink.

10 MR. SULSKI: We have a significant  
11 number of black crow.

12 MR. FORT: Of which?

13 MR. SULSKI: They are a state and  
14 Illinois endangered species.

15 MR. FORT: In the Chicago Sanitary and  
16 Ship Canal?

17 MR. SULSKI: One of the highest  
18 concentrations in the state.

19 MR. FORT: Gee, it must be doing well.  
20 They better keep it all the same.

21 CHAIRMAN TIPSORD: Mr. Harley, did you  
22 have a follow-up?

23 MR. HARLEY: On your map.

24 CHAIRMAN TIPSORD: Which map?

1                   MR. HARLEY: I was about to describe  
2                   it. On the map in which you describe the  
3                   different UAA segments which are subject to  
4                   this rule making. Many of the areas on the  
5                   map are, on all three maps that you presented  
6                   are designated in green. What do the green  
7                   areas indicate on these maps?

8                   CHAIRMAN TIPSORD: Excuse me, Mr.  
9                   Harley, you are looking at Exhibit 25?

10                  MR. HARLEY: 25.

11                  MR. SULSKI: What are the green areas  
12                  indicating?

13                  MR. HARLEY: Yes.

14                  MR. SULSKI: One of the green areas is  
15                  the Calumet River. Another green area is the  
16                  --

17                  MR. HARLEY: So I am referring to the  
18                  land area.

19                  MR. FORT: Excuse me, is this  
20                  clarification on my question?

21                  CHAIRMAN TIPSORD: Yes, it is,  
22                  Mr. Fort. Go ahead, Mr. Harley.

23                  MR. SULSKI: These are Forest Preserve  
24                  District properties and in some case they may

1 be nature preserves.

2 MR. HARLEY: Is it safe to say that so  
3 many of these Forest Preserves District  
4 properties are immediately adjacent to the  
5 Chicago Sanitary and Ship Canal?

6 MR. SULSKI: Yes.

7 MR. HARLEY: Thank you.

8 MR. FORT: I stand corrected. Thank  
9 you.

10 CHAIRMAN TIPSORD: I had a feeling  
11 where he was going.

12 MR. FORT: Continuing on with the few  
13 questions here on 302.410 and what's in this  
14 rule or proposed rule, who is going to answer  
15 the questions that I have about subparagraph  
16 E, "The Agency derived criteria may be  
17 challenged as follows:

18 MS. WILLIAMS: Where are you looking?

19 MR. FORT: I'm not looking at my  
20 questions. I'm looking at the proposed rule.

21 MS. WILLIAMS: So you are going to ask  
22 about -- I guess we need to hear the question  
23 first and then we can tell you who can  
24 answer.

1                   MR. FORT: I'm looking at 302.410 (E)  
2                   as proposed, and these are ways of  
3                   challenging the criteria that Mr. Twait has  
4                   said the Agency is going to calculate. The  
5                   first subsection says it can be challenged,  
6                   I'm looking at the third line, "Only at the  
7                   time such criterion is first applied in an  
8                   NPDS permit, or in an action under Title 8 of  
9                   the Act for violation of the Toxicity Water  
10                  quality Standard. And continuing on it says,  
11                  "Failure of a person to challenge the  
12                  validity of a criterion at that time of its  
13                  first application as a waiver of such  
14                  challenge in subsequent proceeding involving  
15                  application of criterion to that person." Do  
16                  you see that?

17                  MS. WILLIAMS: Yes.

18                  MR. FORT: I'm wondering what is the  
19                  technical justification for that?

20                  MR. TWAIT: I believe the technical  
21                  justification is if the Agency puts that into  
22                  an NPDS permit, that the permittee can  
23                  challenge that. However, five years or ten  
24                  years later they can't come back and

1 challenge it.

2 MR. FORT: Well, I understand that's  
3 rephrasing what it says. This strikes me as  
4 a very unusual term to say you've waived if  
5 you don't challenge it the first time.

6 MS. WILLIAMS: So I think, I mean just  
7 from the drafting -- I know you asked the  
8 technical, you said the technical  
9 justification, but I'm not sure it's a  
10 technical requirement. We took this language  
11 directly from what's in the general use. I  
12 believe there's some discussion in the Board  
13 opinion adopting that language about it, but  
14 I'm not an expert in how it's been  
15 interpreted. I'm not aware that it's ever --  
16 this provision has ever been used. So if you  
17 want more detail, we'd probably have to get  
18 back to you on that.

19 MR. FORT: And the similar  
20 justification is for the notion that one must  
21 do rule making to change the criterion?

22 MS. WILLIAMS: Which section are you  
23 looking at now?

24 MR. FORT: Well, let me withdraw that.

1 I'm sorry, so you placed the burden of proof  
2 on the petitioner in subparagraph two to  
3 demonstrate the criteria is not necessary?

4 MS. WILLIAMS: Yes, I believe that the  
5 language that's in caps there is taken  
6 directly from the statute. That's why it's  
7 all in caps, if that helps.

8 MR. FORT: Going back to the pre-filed  
9 questions -- actually, I think we've covered  
10 everything else here. I mean, I can ask the  
11 question a little bit differently, but I  
12 think we've covered the substance of it.

13 I think I've concluded my  
14 pre-filed questions. I reserve the  
15 opportunity to ask further questions for  
16 clarification or more information if it's  
17 submitted by the Agency.

18 CHAIRMAN TIPSORD: Thank you,  
19 Mr. Fort.

20 Mr. Harley?

21 MR. HARLEY: I have a very quick  
22 follow-up question, but I didn't want to  
23 break the line of questioning Mr. Fort was on  
24 regarding the sanitary Ship Canal.

1                   I wanted to turn your attention to  
2                   question 19 on page 9 of Mr. Fort's pre-filed  
3                   questions where he asks about Illinois EPA's  
4                   decision that major water quality constraints  
5                   are temperature and DO, and then inquires  
6                   about chlorides as well. And he was focusing  
7                   your attention to the Sanitary and Ship  
8                   Canal. I wanted to ask you this question on  
9                   the issue of chloride specifically. Are  
10                  there chloride impairments that exist in the  
11                  Calumets, that is the Calumet River, Grand  
12                  Cal, Little Cal, the Cal Sag Channel?

13                  MR. ESSIG: I currently do not know  
14                  because we don't assess those waters through  
15                  the general use standards, except for the  
16                  north shore channel upstream of the MWRD,  
17                  north side plant, the Chicago River and the  
18                  Calumet River which are general use. I don't  
19                  believe -- I'd have to take a look but I  
20                  don't recall there being any chloride  
21                  violations within those waters.

22                  MR. HARLEY: Because there's previous  
23                  testimony there are not temperature issues in  
24                  the Calumets, there are only short lived DO

1 issues in the Calumets, and your testimony is  
2 that the chloride issue may not be  
3 significant where it is measured; is that  
4 correct?

5 MR. ESSIG: As far as I know. I'd  
6 have to double check.

7 MR. HARLEY: I think my question is at  
8 what point in time did the Calumets become an  
9 example of good environmental quality?  
10 That's it. Strike that.

11 CHAIRMAN TIPSORD: Okay, I think we  
12 move on to Corn Products.

13 MR. SAFLEY: Madam Hearing Officer, we  
14 would prefer not to start our questions at  
15 4:00 o'clock on the last day of these three  
16 days of hearing. We'd like to hold off.  
17 We've got at least 15 pages of questions to  
18 ask.

19 CHAIRMAN TIPSORD: I knew you were  
20 going to say that.

21 MR. SAFLEY: With a five week break,  
22 we just feel like it will make for a better  
23 transcript and better questioning than if we  
24 say, well, remember five weeks ago when you

1 answered the last question.

2 CHAIRMAN TIPSORD: I have looked ahead  
3 and saw that Corn Products does have  
4 substantial number of questions, and I'm not  
5 sure there's anyone left. Environmental Law  
6 and Policy center you would probably be the  
7 next fewest.

8 MR. ETTINGER: I've got a few, why  
9 don't I do them.

10 CHAIRMAN TIPSORD: If no one has  
11 objection to moving them ahead, so we can use  
12 this time.

13 MR. ETTINGER: Mine are cute and  
14 little. I'll take notes on them.

15 CHAIRMAN TIPSORD: I don't know if we  
16 can handle any more cute today.

17 MR. ETTINGER: I've only got three  
18 questions left, and I hardly filed any.

19 MS. FRANZETTI: Are you looking for a  
20 gold star for that?

21 MR. ETTINGER: I think I could be  
22 compared favorably to some. However, some of  
23 this has been touched upon earlier by  
24 Franzetti's questioning, but some of these

1           although they are repetitive to some extent  
2           they have a slightly different twist on them  
3           that I do think we need to explore.

4                         With regard to our question No. 1,  
5           it says, "Regarding page 13 of the pre-filed  
6           Twait testimony, where the MWRDGC treatment  
7           plant temperatures used to set nonsummer  
8           average temperatures for the upper Dresden  
9           pool, instead of the route 83 temperatures?  
10          If so, why?

11                        MR. TWAIT:  Yes, they were, and it was  
12          basically because we believed that MWRDGC was  
13          the river.

14                        MR. ETTINGER:  Did you ever look at  
15          temperatures in the upper Dresden pool as  
16          opposed to the Sanitary and Ship Canal for  
17          setting the background temperatures?

18                        MR. TWAIT:  I don't know that we had  
19          any ambient stations that were not impacted  
20          by a thermal source in the Dresden island  
21          pool.

22                        MR. ETTINGER:  Well, did you, for  
23          example, look at the intake temperatures at  
24          the Joliet plants?

1 MR. TWAIT: No, I did not.

2 MR. ETTINGER: Going now to question  
3 5. I think we've -- I'm going to ask the  
4 beginning of the question, even though we've  
5 covered that because it's necessary to set  
6 the precedent for the second part of the  
7 question, which I don't think we've covered.  
8 No. 5, with regard to Twait testimony at page  
9 15, "Was the biological justification for  
10 allowing excursions up to two degrees  
11 centigrade or -- well, it's wrong, 3.6  
12 degrees Farenheit. Would this provision  
13 allow temperatures above 93 degrees Farenheit  
14 for seven straight days in the Dresden pool?"  
15 It's only, it's the second part of that that  
16 hasn't been answered. The first part has  
17 been answered, but I needed to say that. So  
18 could you just answer the second part here,  
19 "Would this provision allow temperatures  
20 above 93 degrees Farenheit for seven days  
21 straight in the Dresden pool?"

22 MR. TWAIT: If all of the, 2 percent  
23 of the hours were used all at one time, then  
24 yes.

1                   MR. ETTINGER:  Going now to question  
2                   6.  Were the temperatures that Chris Yoder  
3                   calculated as optimum growth, MWATT and  
4                   avoidance UAT used in any way in writing the  
5                   IEPA temperature proposals?  If so how?

6                   MR. TWAIT:  I do not believe those  
7                   were used.  We used short-term and long-term  
8                   survival.

9                   MR. ETTINGER:  I'm done.

10                  CHAIRMAN TIPSORD:  And I'm not sure  
11                  that anyone else had questions that we can  
12                  get finished in the next 40 minutes or so.

13                  MS. WILLIAMS:  Just so I'm clear, is  
14                  Exxon Mobil done?

15                  CHAIRMAN TIPSORD:  No, I do not  
16                  believe so.

17                  MR. SAFLEY:  We have some left, but I  
18                  prefer -- I think I'd be able to do it in a  
19                  lot more streamline basis if I had time to go  
20                  back over the transcripts, and I haven't been  
21                  able to do that in light of the questions  
22                  that were asked.  There will still be some,  
23                  but --

24                  CHAIRMAN TIPSORD:  Just so we are

1 clear, we will start on April 23rd with Corn  
2 Products International -- Chemical Industry  
3 Counsel actually -- it was pre-filed? You  
4 are done with your pre-file? I will take  
5 Chemical 4 and District Counsel off then. We  
6 will take Corn Products, then the District,  
7 Stepan and Exxon Mobil is who we have left  
8 with pre-filed questions. We will also go to  
9 any questions of any of the materials that  
10 were filed March 4th, and obviously any  
11 additional follow-ups after you've had a  
12 chance to look at transcripts and that sort  
13 of thing. Dr. Girard and I have been  
14 talking --

15 MS. FRANZETTI: Could I just, if this  
16 is a good time for it, in going back through  
17 the January hearing transcripts, there were  
18 some items that Mr. Yoder was asked to  
19 provide as to which he agreed to look for  
20 them, and I think if he found them or could  
21 figure it out, produce them, that have not  
22 been produced.

23 CHAIRMAN TIPSORD: Okay.

24 MS. FRANZETTI: Could I just make a

1 note of the ones I believe he agreed to look  
2 for, and haven't been produced yet through  
3 the Agency. So that if per chance the Agency  
4 could follow-up with Mr. Yoder between now  
5 and the next set of hearings and see if there  
6 is any more additional information available,  
7 it would be appreciated.

8 MS. WILLIAMS: Well, I think we also  
9 said we believe we have some stuff already at  
10 the office in the first day that we hadn't  
11 had time to prepare because it came in too  
12 late.

13 MS. FRANZETTI: The first one I noted  
14 were the field data sheets for the Attachment  
15 S data. He had also agreed to produce the  
16 field activities log, if it still existed.  
17 He was going to look into whether a detailed  
18 plan of study for the selection of the  
19 sampling sites was prepared per the CLAP. He  
20 was going to check whether he could find the  
21 inputs to the computer program to resolve  
22 issues regarding the totals on the QHEI  
23 sheets that didn't seem to match the sum of  
24 the individual category marks. This was in

1 response to Mr. Rao's questions. And then I  
2 think that -- and then finally I'm not -- I  
3 know he's produced the White Sucker article,  
4 and that's been marked as an Exhibit. He had  
5 also made mention about finding his notes and  
6 calculations with regard to the White Sucker  
7 values and what he ultimately used. So that  
8 was -- and that's the last that I had of  
9 outstanding information requests to  
10 Mr. Yoder.

11 MS. DIERS: I think Suzanne had  
12 everything on that list except maybe the  
13 input I just forgot. He sent some things  
14 right when we started.

15 MS. FRANZETTI: I thought it would be  
16 helpful to list off of for you what I thought  
17 was outstanding.

18 CHAIRMAN TIPSORD: And, Ms. Franzetti,  
19 weren't you going to get us a copy of the  
20 article?

21 MS. FRANZETTI: We're still trying to  
22 get a clean copy of that article.

23 MR. ETTINGER: Off the record for a  
24 second.

1 (Off the record.)

2 CHAIRMAN TIPSORD: Going back on the  
3 record, I want to personally thank all of  
4 you. I want to thank you for your  
5 cooperation and professionalism. I know it's  
6 been a long three days. We've gotten a lot  
7 of stuff on the record, and I really  
8 appreciate that. We will have our third  
9 group of hearings starting April 23rd at  
10 11:30 a.m. in Des Plaines, and we'll get the  
11 address and all of that information. I'll do  
12 a standard Hearing Officer Order that  
13 includes the address and the time that we're  
14 going to start and all of that information,  
15 and I will also include that we're going to  
16 have a prehearing meeting to discuss future  
17 hearings at 11:00 a.m. for anyone who wants  
18 to attend.

19 Again, I thank you very much. Dr.  
20 Girard, anything else?

21 MEMBER GIRARD: No, thank you all for  
22 your participation. It's been a great set of  
23 hearings, and we look forward to April.

24 CHAIRMAN TIPSORD: We're adjourned.

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1 STATE OF ILLINOIS )  
 ) SS.  
2 COUNTY OF C O O K )

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6 DENISE ANDRAS, being first duly sworn, on  
oath says that she is a Certified Shorthand Reporter  
7 doing business in the City of Des Plaines, County of  
8 Cook, and State of Illinois.

9

10 That she reported in shorthand the  
proceedings had at the foregoing hearing of the  
11 above-entitled cause.

12

13 And that the foregoing is a true and  
correct transcript of her shorthand notes so taken  
14 as aforesaid and contains all the proceedings had at  
15 the said trial.

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\_\_\_\_\_  
DENISE ANDRAS, CSR  
CSR NO. 084-003437

20

21 SUBSCRIBED AND SWORN TO  
before me this \_\_\_\_ day  
22 of \_\_\_\_\_, A.D., 2008.

23

24 \_\_\_\_\_  
Notary Public

