

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)
)
 SIERRA CLUB, ENVIRONMENTAL LAW)
 AND POLICY CENTER, PRAIRIE RIVERS)
 NETWORK, and CITIZENS AGAINST)
 RUINING THE ENVIRONMENT,)
)
 Complainants,)
)
 -vs-) PCB No. 2013-015
)
 MIDWEST GENERATION, LLC,)
)
 Respondent.)
 _____)

REPORT OF PROCEEDINGS, at the Hearing of the
 above-entitled matter held at the James R. Thompson
 Center, 100 West Randolph Street, Suite 9-040,
 Chicago, Illinois, on the 26th day of October, 2017,
 commencing at the hour of 9:00 a.m.

HEARING OFFICER:

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15 On behalf of the Complainants;

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22 On behalf of the Respondent.

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1 You may begin.

2 RICHARD GNAT,
3 having been first duly sworn, called as a witness
4 herein, was examined and testified as follows:

5 CROSS-EXAMINATION

6 BY MS. GALE:

7 Q. Good morning, Mr. Gnat.

8 A. Good morning.

9 Q. How are you?

10 A. Fine. Thank you.

11 Q. I want to go back to Exhibit 203, which is
12 located at MWG-13-15-45648.

13 That can go on the screen, please.

14 And these are the boring logs of mining wells
15 8 and 9 at the Waukegan station; isn't that correct?

16 A. Yes, it is.

17 Q. Let's look at the boring log for MW8 and the
18 layers. And, as you can see, there are various layers
19 here marked in as well; isn't that correct?

20 A. Yes.

21 Q. And looking at the first layer, first layer
22 is grass black clay topsoil. That's correct?

23 A. Yes.

24 Q. Second layer is fill gray silt with traces of

1 fine sand, very moist?

2 A. Yes.

3 Q. The third layer is fill brown silt with black
4 sandy slag layered?

5 A. Yes.

6 Q. The fourth layer is fill greenish-gray silty
7 sand thin slag layer?

8 A. Yes.

9 Q. And the fifth layer is black silt and clay
10 wet?

11 A. Yes.

12 Q. And there's about six inches of peat?

13 A. Correct.

14 Q. Then gray silty sand, fine to coarse grained,
15 wet?

16 A. Yes.

17 Q. And brown silty sand fine to medium grained?

18 A. Yes.

19 Q. And then at the end of boring.

20 Do you see that there?

21 A. Yes, I do.

22 Q. And you see that in the third layer, when it
23 says fill brown silt with black sandy slag layered,
24 does that mean to you that brown silt is the majority

1 substrate in that layer?

2 MR. WANNIER: Objection, foundation.

3 MS. GALE: Mr. Hearing Officer --

4 THE HEARING OFFICER: Overruled. You may
5 answer if you're able.

6 This is, again, a judicatory case and the
7 rules are a little more relaxed. So if we can keep it
8 moving, asked and answered, vague, it would be kind
9 of -- it's really irrelevant.

10 But anyway, you may answer if you're able.

11 THE WITNESS: Yes. The way our company does
12 boring logs is we do the description. The front part
13 of the description is generally the main part of the
14 matrix you're looking at, followed by smaller and
15 smaller parts of that matrix.

16 BY MS. GALE:

17 Q. And similarly on the fourth layer where it
18 says greenish-gray silty sand and just a thin slag
19 layer, you would apply the same statement?

20 A. Yes.

21 Q. That the greenish sand gray silty sand is the
22 majority substrate in that layer?

23 A. Yes.

24 Q. Looking at boring 9 on the opposite page,

1 45649, the complainants asked you about one layer,
2 which was the black slag layer. Do you recall that
3 testimony?

4 A. Yes, I do.

5 Q. There are other layers in this boring log,
6 aren't there?

7 A. Yes, there are.

8 Q. And those other layers don't show any slag,
9 do they?

10 A. No, they do not.

11 Q. And those other layers don't show any coal
12 ash, do they?

13 A. Not in the descriptions, no.

14 Q. Mr. Gnat, yesterday Complainant showed you
15 other specific boring logs. Do you recall that
16 testimony?

17 A. Yes, I do.

18 Q. Mr. Gnat, they did not show you all of the
19 logs in that exhibit, if you recall?

20 A. No, they did not.

21 Q. And some of the other borings in those
22 records did not contain any ash, do they?

23 A. I believe that's correct.

24 Q. In the borings that you looked at yesterday,

1 Complainants asked you to look at maybe one or two
2 layers. Do you recall that testimony?

3 A. Yes.

4 Q. And there are other layers in those boring
5 logs that do not contain ash?

6 A. That is correct.

7 Q. Yesterday you testified that KPRG conducted
8 some work for Midwest Generation so they could use
9 certain ash as structural fill. Do you recall that?

10 A. Yes.

11 Q. And you are aware that ash is used as
12 structural fill; isn't that correct?

13 A. That is correct.

14 Q. And it can be used as structural fill for a
15 road or a rail line or even a berm, correct?

16 A. Yes.

17 Q. So wouldn't you expect to see ash where the
18 ash is used as structure?

19 A. If it's used as structural fill, yes.

20 Q. Thank you. I'm finished with that exhibit.

21 Mr. Gnat, I want to turn to the CCR data
22 samples, which are Exhibits 204G through 209G, 210H
23 through 215H, 222J through 226J, and 236L
24 through 241L.

1 Mr. Gnat, I'll tell you, I'm not going to ask
2 for specific pages in those documents, so.

3 A. Thank you.

4 Q. I just wanted to read them off for the
5 record.

6 MS. GALE: And, Hearing Officer, we are not
7 waiving our objection to the introduction of this
8 evidence, but I'm going -- just want to make that
9 clear.

10 THE HEARING OFFICER: Understood.

11 MS. GALE: Thank you.

12 BY MS. GALE:

13 Q. Mr. Gnat, as you explained yesterday, this
14 data is collected pursuant to the new Federal Coal
15 Combustion Residual Rules, correct?

16 A. Correct.

17 Q. And we often shorthand those as CCR rules?

18 A. Yes.

19 Q. And one of your employees at KPRG collects
20 this data; isn't that correct?

21 A. Yes.

22 Q. And that employee also collects the data
23 pursuant to the Compliance Commitment Agreement,
24 correct?

1 A. Yes.

2 Q. And we often, in this proceeding, have been
3 calling those the CCAs?

4 A. Yes.

5 Q. Your employee at KPRG, he often collects this
6 CCR data and the CCA data on the same day; isn't that
7 correct?

8 A. Yes. If they're coming out of the same well,
9 yes.

10 Q. And at Joliet 29, the CCR data and the CCA
11 data is taken from the exact same wells, isn't it?

12 A. Yes.

13 Q. And at Powerton, the CCR data and the CCA
14 data is taken from wells -- Monitoring Wells 1
15 through 16; isn't that correct?

16 A. I believe so.

17 Q. And Waukegan CCR data and CCA data is taken
18 from monitoring wells 1 through 7; isn't that correct?

19 A. I believe so.

20 Q. And at Will County the CCR data and the CCA
21 data is taken from wells 1 through 10; isn't that
22 correct?

23 A. I'm sorry, can you repeat that again?

24 Q. Sure.

1 At Will County, the CCR data and the CCA data
2 is taken from wells 1 -- oh, you're right. I'm wrong.
3 It's not taken from wells 1 through 10. Good work.
4 I'll get back to that.

5 So when the samples are collected in the
6 field, there's only one step in the procedure that is
7 different, correct?

8 A. That is correct.

9 Q. And that one step is whether your employee
10 filters the groundwater when he collects the sample or
11 not, correct?

12 A. Correct.

13 Q. And for the CCA data, the groundwater is
14 filtered?

15 A. Yes.

16 Q. And the CCR data, the groundwater is not
17 filtered?

18 A. That's correct.

19 Q. And once the samples are at the laboratory
20 for analysis, the lab runs the CCR and CCA samples for
21 the same analysis, correct?

22 A. Yes.

23 Q. I want to ask you about the difference in
24 that analysis. We discussed that the only difference

1 is whether the samples are filtered.

2 The Class 1 standards that we have discussed
3 in this proceeding, they're based upon drinking water
4 standards; isn't that correct?

5 A. Yes.

6 Q. Do you have a knowledge how the drinking
7 water wells are screened?

8 A. Drinking water wells are constructed in
9 formations that can provide a sufficient body of water
10 for the purpose of that well for consumption. And the
11 sand packs around those wells are specifically
12 engineered to the matrix of the aquifer that the well
13 is going to be screened in. And those sand packs are
14 generally developed so that they're providing a
15 natural filter for the water coming in to naturally
16 try and filter out any of the finds in that unit.

17 So that's how the water well is constructed.

18 Q. Okay. So as you just said, there's a natural
19 filter in a drinking water well, isn't there?

20 A. Within that engineered sand pack, yes.

21 Q. And the monitoring wells, such as the ones
22 that are the subject of this matter, how are those
23 screened?

24 A. Well, monitoring wells often target zones

1 which a drinking water well would not target because
2 they just don't produce the volume of water that you
3 need; they're too fine-grained, they have a very heavy
4 silt load, sediment load.

5 And the sand pack that you put down around
6 the screen is generally -- it's not engineered. It's
7 just a fine to medium sand that you're putting around
8 the screen to provide a little bit of filtration
9 through however. Especially if these wells are
10 screened in non-potable aquifer, specifically silts or
11 clays, it's the first saturated unit which has to be
12 monitored. You often, even after development, have a
13 very sediment-laden sample.

14 Q. So, in other words, there's really no natural
15 filter?

16 A. Minimal just based on this sand pack that's
17 put down.

18 Q. The filtered groundwater sampling water
19 collected is more -- excuse me. Strike that.

20 The filtered groundwater sampling water is
21 more like the water from a drinking water well that
22 has a natural filter; isn't that correct?

23 A. That is correct.

24 Q. And that the filtered groundwater data

1 produced is more representative of a comparison to the
2 Class 1 standards; isn't that correct?

3 A. That's my belief, yes.

4 Q. I want to talk to you about the various data
5 packages that were presented to you yesterday where
6 you were asked about the accuracy of the information.
7 Do you recall that testimony?

8 A. Yes, I do.

9 Q. Isn't it true that there are some level of
10 inherent inaccuracies in that data, such as equipment
11 failure?

12 A. Yes, that is correct.

13 Q. And, in fact, in one of these instances,
14 there was an equipment failure of a pH meter, wasn't
15 there?

16 A. Yes, for some of the field readings.

17 Q. And that data is flagged along with -- which
18 disqualifies the data, doesn't it?

19 A. Well, the field data is not within the
20 analytical data package. That's within the field
21 notes, and we note that there was a problem with the
22 meter. So if there is an issue with the pH, you get
23 an understanding of how reliable that data is truly --
24 as basically a field screening parameter.

1 Q. But your field data is in your reports, isn't
2 it?

3 A. Yes, it's in the tables.

4 Q. And for the analytical data, when you look at
5 that data, you're assuming that the people at the lab
6 have done their job accurately, correct?

7 A. Correct.

8 Q. So with all of those qualifiers, the data is
9 accurate to you, isn't it?

10 A. Yes. When you look at a data package, it
11 will include qualifiers from the laboratory based on
12 their review. So we generally look at the qualifiers
13 to get a general understanding of what any issues may
14 have been in the lab. And the way the analyses are
15 run, in order to get certified, labs are given blanks,
16 various standards and so on, by the certifying agency,
17 and they have to run those analyses and come within a
18 certain statistical window of the analytical accuracy.
19 Once they can achieve that, they get their
20 certification.

21 So as they're running a batch, they have a
22 series of QAQC samples that they're running with that
23 batch, and sometimes if, for a parameter, there's an
24 issue one way or the other, that data gets flagged,

1 and so you just have to understand what the qualifier
2 within that data is.

3 And that does affect the accuracy. Since
4 it's not a hundred percent accurate, it may have a
5 qualifier on it. You just have to understand how that
6 may affect your data.

7 Q. All right, Mr. Gnat, I want to turn your
8 attention to Group Exhibit N, which are 248N
9 through 251N. I think you have them there.

10 A. Okay.

11 Q. These are your inspection reports of the area
12 to the northeast of the Joliet 29 station; isn't that
13 correct?

14 A. That's correct, yes.

15 Q. And you conduct these inspections described
16 in these reports on a regular basis?

17 A. Yes, I do.

18 Q. And, in fact, the inspections are conducted
19 pursuant to Joliet 29 station's storm water permit;
20 isn't that correct?

21 A. This is my understanding, yes.

22 Q. And that permit is with the Illinois EPA,
23 correct?

24 A. That's my understanding, yes.

1 Q. So, to your knowledge, Illinois EPA knows
2 about this area, correct?

3 A. To my understanding, yes.

4 Q. And, to your knowledge, the results of your
5 reports are reported to the Illinois EPA; isn't that
6 correct?

7 A. Yes.

8 Q. And, to your knowledge, Illinois EPA has not
9 found a problem with your inspections or your reports,
10 have they?

11 A. Not to my knowledge.

12 Q. And, to your knowledge, Illinois EPA has
13 never asked Midwest Generation to install groundwater
14 monitoring wells in this location, have they?

15 A. Not to my knowledge.

16 Q. And yesterday, Mr. Gnat, you were handed
17 these four reports. You prepared other reports
18 related to this inspection, didn't you?

19 A. Yes, I do.

20 Q. But they're not within group N, are they?

21 A. No, they're not.

22 MR. WANNIER: Objection, your Honor. The
23 other counsel objected to introduction of these
24 exhibits as a group exhibit. We withdrew it as a

1 group exhibit.

2 THE HEARING OFFICER: You're --

3 MR. WANNIER: They objected to the grouping
4 of these exhibits when we introduced them as
5 individual exhibits. So there is no group N on the
6 record.

7 MS. GALE: Oh, okay. Well, fair enough.

8 My objection, to be clear, was that my
9 understanding of the grouping was of a different set
10 of documents, and so I thought there would be more
11 documents in it. But that's all.

12 But now I understand they're not group N, I
13 will adjust my statements.

14 THE HEARING OFFICER: Thank you. Sustained.

15 BY MS. GALE:

16 Q. So you were handed these four documents?

17 A. Yes.

18 Q. And you were not handed other documents
19 related to your inspections of the area, the northeast
20 area of Joliet 29 station, correct?

21 A. Correct.

22 Q. So let's look at Exhibit 248 which starts at
23 19442.

24 A. Okay.

1 Q. This is the August 27, 2009 inspection
2 report; isn't that correct?

3 A. Yes.

4 Q. And in this report, you recommended six
5 repairs; isn't that correct?

6 A. Yes, I did.

7 Q. Let's look at Bates Page 19444, if you're
8 there?

9 A. Yes.

10 Q. The first unbulleted paragraph which begins
11 with KPRG, but let's hang on. Who is Allied
12 Landscaping?

13 A. Allied Landscaping is the contractor that we
14 use to repair these types of issues.

15 Q. And by "issues," do you mean the observations
16 and recommendations you made in this report, correct?

17 A. Correct.

18 Q. In this paragraph you state that you met with
19 Allied Landscaping at the site to show the areas of
20 required repair to facilitate a contractor cost
21 estimate. Correct?

22 A. Yes.

23 Q. And you state that, upon receipt of that
24 estimate, you will follow up, I presume with Midwest

1 Generation, with a separate estimate for the
2 implementation of the recommended repairs.

3 That's what it says there, isn't it?

4 A. Yes.

5 Q. Did you do that follow-up?

6 A. Yes, we did.

7 Q. And were the repairs conducted?

8 A. The repairs were conducted and I documented
9 those in a report to Midwest Generation.

10 Q. And approximately how soon after this
11 August 27, 2009 report were the repairs conducted?

12 A. The repairs are generally conducted within a
13 handful of weeks, two, maybe three, from the time of
14 my inspection.

15 Q. And you've stated that you prepared a report.
16 That report was given to Midwest Generation for their
17 records, correct?

18 A. Yes.

19 THE HEARING OFFICER: If I may interrupt for
20 a minute. Mr. Wannier, I have to get this exhibit
21 list kind of clear as well. So there is no Group N,
22 as in "Nancy," because originally you introduced Group
23 Exhibit N as in "Nancy" 248 to 252, and I know we took
24 them one by one. So we're not using alphabet N as in

1 "Nancy"?

2 MR. WANNIER: As I remember it, your Honor,
3 when we introduced this group, defense counsel
4 objected.

5 THE HEARING OFFICER: It was confusing.

6 MR. WANNIER: So we offered to introduce them
7 individually. In so doing, my understanding was that
8 that eliminated the group, but --

9 THE HEARING OFFICER: Because I remember
10 reading them into the record as N as in "Nancy".

11 MR. WANNIER: They were read in with the
12 letter N appended at the end because that's simply the
13 way we had labeled the exhibits. We're happy to --

14 MS. GALE: Shall I continue to call them N
15 simply to be consistent with the testimony yesterday?

16 THE HEARING OFFICER: I'm sorry. Go ahead.

17 MR. WANNIER: There is no overlap in the
18 numbers, so I think the record will remain clear.
19 It's up to your Honor whether you continue to use the
20 letter N.

21 THE HEARING OFFICER: So we have 248N, 249N,
22 250N, and 251N. And then you withdrew 252.

23 MR. WANNIER: Correct.

24 THE HEARING OFFICER: Perfect. Thank you so

1 much. You may continue.

2 MS. GALE: I'm sorry, sir. Are we using N or
3 not?

4 THE HEARING OFFICER: Yes, we are.

5 MS. GALE: Thank you.

6 BY MS. GALE:

7 Q. Let's turn to Exhibit 249N.

8 A. Okay.

9 Q. This is your August -- huh. You did it on
10 the same day -- August 27, 2010 inspection report;
11 isn't that correct.

12 A. Yes.

13 Q. And in this report you recommended five
14 repairs, correct?

15 A. Yes, I did.

16 Q. Looking at Bates Page 19457, the first
17 unbulleted paragraph, it states: "KPRG met with
18 Allied Landscaping at the site to show the areas of
19 required repair to facilitate a contractor cost
20 estimate. Upon receipt of Allied's estimate, KPRG
21 will follow up with a separate cost estimate for
22 implementation of the recommended repairs."

23 That's what you wrote there?

24 A. Yes.

1 Q. Did that happen?

2 A. Yes, it did. And we summarized the results
3 of the repairs in documentation to Midwest Generation.

4 Q. You skipped -- let's break that down.

5 So you knew the repairs were conducted?

6 A. Yes, they were.

7 Q. Approximately how soon after this report were
8 the repairs conducted?

9 A. The repairs are generally conducted within a
10 handful of weeks, two, maybe three.

11 Q. And you provided a report of those repairs to
12 Midwest -- excuse me.

13 You prepared a report of those repairs,
14 didn't you?

15 A. Yes, I did.

16 Q. And you provided a report of those repairs to
17 Midwest Generation for their records; isn't that
18 correct?

19 A. Yes.

20 Q. Let's move to Exhibit 250N.

21 A. Okay.

22 Q. This is your August 22, 2011 inspection
23 report; isn't that correct?

24 A. Yes.

1 Q. And here you recommended two repairs,
2 correct?

3 A. Yes, I did.

4 Q. Let's look at Bates Page 44154, the first
5 unbulleted paragraph.

6 There you state: "All other areas along the
7 cover that have undergone repair over the last three
8 years appear in good condition with no additional
9 detrimental erosion effects being displayed at this
10 time."

11 That's what you wrote?

12 A. Yes, I did.

13 Q. And that reflects what you saw?

14 A. Yes.

15 Q. And the next paragraph, again, you state that
16 you "met with Allied Landscaping at the site to show
17 the areas that required repair to facilitate a
18 contractor cost estimate. Upon receipt of Allied's
19 estimate, KPRG will follow up with a separate cost
20 estimate for implementation of the recommended
21 repairs."

22 That's what's written there?

23 A. Yes.

24 Q. And did that happen?

1 A. Yes, it did.

2 Q. And were the recommended repairs conducted?

3 A. Yes, they were.

4 Q. Approximately how soon after this report were
5 those repairs conducted?

6 A. We generally try and do them within a handful
7 of weeks.

8 Q. And by "handful" you mean like two or three?

9 A. Two or three weeks.

10 Q. And you prepared a report of those repairs?

11 A. Yes, I did.

12 Q. And you provided that report to Midwest
13 Generation for their records?

14 A. Yes, I did.

15 Q. Thank you.

16 Let's turn to 251N. Do you have it in front
17 of you?

18 A. Yes, I do.

19 Q. This is your September 19, 2012 inspection
20 report --

21 A. Yes.

22 Q. -- beginning on Bates 19470.

23 Here, you recommended four repairs; isn't
24 that correct?

1 A. Yes, I did.

2 Q. If you flip to 19471, look at the unbulleted
3 paragraph, there again you state: "All other areas
4 along the cover that have undergone repair over the
5 last four years appear in good condition with no
6 additional detrimental erosion effects being displayed
7 at this time."

8 That's what you wrote in your report?

9 A. Yes, I did.

10 Q. And further, below that, it's actually --
11 excuse me.

12 So the repairs you had recommended that were
13 conducted were working, correct?

14 A. Yes.

15 Q. And it appears in that paragraph below that
16 you had already met with Allied, as you have a cost
17 estimate right there. Do you see that there?

18 A. Yes, I do.

19 Q. If you flip to 19472, at the top is the cost
20 estimate and below are assumptions and a second
21 assumption, second bullet, is "a summary letter report
22 with photo documentation is assumed to be included in
23 this cost estimate." Isn't that true?

24 A. Yes, yes.

1 Q. And just below that you say: "Upon approval,
2 the work can be scheduled for the first part of next
3 week"?

4 A. That is correct.

5 Q. "And should take no more than 1.5 days to
6 complete." Correct?

7 A. Yes.

8 Q. Did Midwest Generation give you that
9 approval?

10 A. Yes, they did.

11 Q. And were those repairs conducted?

12 A. Yes, they were.

13 Q. And were they conducted approximately a week
14 later?

15 A. Yes, they were.

16 Q. And you prepared a report of those repairs,
17 didn't you?

18 A. Yes, I did.

19 Q. And you provided that report to Midwest
20 Generation for their records; isn't that correct?

21 A. Yes, I did.

22 Q. Mr. Gnat, I want you to just array these four
23 inspection reports which are Exhibits 248N, 249N,
24 250N, and 251N in front of you.

1 A. Okay.

2 Q. I want to direct your attention to the second
3 full paragraph in the first sentence. It appears that
4 that -- excuse me -- the first sentence of the second
5 full paragraph.

6 It appears that that sentence is the same in
7 each of these reports, doesn't it?

8 A. Yes, it is.

9 Q. So this could be described as an introductory
10 sentence for your reports?

11 A. That is correct. It's a general statement.

12 Q. And it doesn't imply any conclusions that are
13 under these reports, does it?

14 A. No.

15 Q. And it doesn't mean to suggest that there is
16 actually sheetwash erosion or rilling that has exposed
17 ash in these reports?

18 A. No. By area, it's described.

19 Q. Thank you.

20 Mr. Gnat, I want to place in front of you the
21 exhibit that was placed in front of you but withdrawn,
22 was identified simply for identification purposes,
23 Comp Exhibit 252N.

24 MR. WANNIER: Can you say that again,

1 Counsel?

2 MS. GALE: The Exhibit Number is 252N. I'm
3 only going to give it to him for -- identify it for
4 identification purposes. I have no intention on
5 introducing it into evidence.

6 MR. WANNIER: Okay. Your Honor, I think we
7 would object. This is improper.

8 THE HEARING OFFICER: I agree. Sustained.
9 It's withdrawn. I don't even have it anymore.

10 MS. GALE: Okay. Fair enough.

11 THE HEARING OFFICER: Thank you.

12 BY MS. GALE:

13 Q. Mr. Gnat, after 2012, you did another
14 inspection in 2013, didn't you?

15 A. Yes.

16 Q. Do you recall doing that inspection?

17 A. Yes, I do.

18 Q. And that inspection was done in approximately
19 August of 2013; isn't that correct?

20 A. They generally do them in that time frame,
21 August, September.

22 Q. And during that inspection, there was no
23 evidence of any erosion or rilling that occurred over
24 the last year, was there?

1 A. That is correct.

2 Q. And all areas of the previous repair were
3 closely inspected and the repairs have held up well
4 and did not require any redressing; is that correct?

5 A. That's my recollection.

6 Q. To your recollection, after this inspection,
7 KPRG did not propose or recommend any repair work for
8 that year, correct?

9 A. Correct.

10 Q. Mr. Gnat, did you conduct an inspection in
11 2014?

12 A. Yes, I did.

13 Q. And do you recall the results of that
14 inspection?

15 A. If I recall correctly, I did not identify any
16 areas that I felt required repair over that year.

17 Q. So you recall everything was good?

18 A. Correct. Not requiring repairs.

19 Q. Mr. Gnat, did you do an inspection in 2015?

20 A. Yes, I did.

21 Q. Do you recall that inspection?

22 A. Yes, I do.

23 Q. Do you recall the results of your inspection?

24 Strike that.

1 What were the results of your inspection?

2 A. Again, that there was no indication of any
3 erosional features that required additional repair. I
4 did go back and check on the areas that we had
5 repaired in the past and didn't find any additional
6 degradation in those areas.

7 Q. Mr. Gnat, did you do an inspection in 2016?

8 A. No -- yes. Yes, I did. 2016, yes.

9 Q. And do you recall your inspection in 2016?

10 A. That inspection also identified no areas that
11 I felt needed repairs over that year.

12 I believe there was one area by the fence
13 that I said that had some -- if I remember right --
14 maybe a down tree or something, and I said that we
15 should take a look at it again in the spring, which I
16 did.

17 Q. And what was your conclusion about looking at
18 it in the spring?

19 A. That did not change any, and I did not feel
20 it needed any redress.

21 Q. And 2017 are you scheduled to go out to this
22 area again for an inspection?

23 A. Yes. I haven't set the firm date yet, but it
24 will be in November, beginning of November.

1 Q. And throughout your time doing these
2 inspections, you've never seen ash flowing into the
3 river, have you?

4 A. I have never seen ash directly entering the
5 river, no.

6 Q. Mr. Gnat, I would like to go to Exhibit 242.
7 Do you need help finding it in that pile? This is
8 Exhibit 242, Bates Number 667 -- excuse me -- Bates
9 Number MWG-13-15_667.

10 A. Yes.

11 Q. Mr. Gnat, this is the Joliet 29 groundwater
12 management zone application, correct?

13 A. That is correct, yes.

14 Q. Let's look at Page 670.

15 A. Okay.

16 Q. Yesterday you stated that the area depicted
17 is that of the GMZ; isn't that correct?

18 A. That's our proposed GMZ, correct.

19 Q. And that proposed GMZ was approved by the
20 Illinois EPA, right?

21 A. This is my understanding, yes.

22 Q. And this GMZ was developed, as agreed upon,
23 with the Illinois EPA, correct?

24 A. That's my understanding, yes.

1 Q. And you testified yesterday it did not cover
2 the area to the northeast; isn't that correct?

3 A. Yes.

4 Q. As we just discussed, the Illinois EPA knows
5 about the area to the northeast, don't they?

6 A. Yes.

7 Q. And yet, when Illinois EPA agreed to the GMZ,
8 they did not ask to include the area to the northeast,
9 to your understanding; isn't that correct?

10 MR. WANNIER: Objection, foundation. He just
11 stated he wasn't -- he stated yesterday that he wasn't
12 part of the conversations with IEPA.

13 MS. GALE: May I respond?

14 THE HEARING OFFICER: Yes, you may.

15 MS. GALE: It's not the conversation. It's
16 the scope. And he just said earlier that this GMZ was
17 developed as agreed upon with Illinois EPA.

18 MR. WANNIER: But counsel is asking the
19 witness to testify as to what Illinois EPA asked or
20 didn't ask for in those conversations.

21 THE HEARING OFFICER: I'll allow a little
22 latitude. If he can answer, he may. Overruled.

23 THE WITNESS: To clarify, I was not part of
24 the discussions with Illinois EPA in identifying this

1 exact zone. I was contracted to assist in pulling
2 together the package, the submittal package
3 application for the GMZ, and was informed that this is
4 the area that was agreed upon.

5 BY MS. GALE:

6 Q. Thank you.

7 I want to flip to Page 690 of Exhibit 242.

8 A. Okay.

9 Q. And I can never remember how you describe
10 these, the block.

11 A. I describe them as an aerial photograph with
12 a box spot map of individual parameter concentrations
13 at a specific well.

14 Q. Thank you.

15 And in looking at the boxes, there is
16 chloride in each of these boxes; isn't that correct?

17 A. Yes.

18 Q. And there are levels of chloride, except for
19 in MW1, identified in 2, 3, 4, 5, 6, 7, 8, 9, 10, 11;
20 isn't that correct?

21 A. Yes.

22 Q. And, to your recollection, is chloride seen
23 often in these wells?

24 A. To my recollection --

1 MR. WANNIER: Objection, vague. I don't know
2 what "often" means.

3 THE HEARING OFFICER: Rephrase, please.

4 MS. GALE: Sure.

5 BY MS. GALE:

6 Q. Mr. Gnat, you reviewed the reports for these
7 wells on a regular basis?

8 A. Yes, I did.

9 Q. And in your review do you see chloride in
10 many quarters?

11 MR. WANNIER: Objection. I don't
12 understand -- can you explain what you mean by "many".

13 THE HEARING OFFICER: Sustained. Rephrase.

14 BY MS. GALE:

15 Q. Is chloride detected in many -- in quarters
16 that you review in these reports?

17 A. Yes, it's regularly detected.

18 Q. Thank you.

19 Mr. Gnat, let's go back looking at the map,
20 please. Just to the north of the ash ponds, do you
21 see that there, there is a road running along from the
22 west to the east?

23 A. Yes, that's Channahon Road and Highway 6.

24 Q. And that's a four-lane highway, isn't it?

1 A. Yes.

2 Q. And if you look on the northwest corner of
3 what's located as Ash Pond 1, there's another road
4 that goes north-south basically directly into the
5 station; isn't that correct?

6 A. Yes.

7 Q. And that is also a four-lane highway?

8 A. Yes, that's a four-lane road.

9 Q. Mr. Gnat, in the Chicagoland area, in the
10 winter, isn't salt commonly placed on the roads?

11 A. Yes, it is.

12 Q. Mr. Gnat, isn't chloride an element of salt?

13 A. Yes, it is.

14 Q. And, Mr. Gnat, in your reviews of these
15 reports, don't you generally see the chlorides on a
16 seasonal basis?

17 A. Without looking at the data right now, in
18 general, I often see seasonality within the chloride
19 levels, yes.

20 Q. Thank you.

21 Mr. Gnat, that seasonality, is that
22 consistent with the time periods that that road salt
23 is applied?

24 A. In general, yes, yes, it is.

1 Q. Thank you. I am finished with Exhibit 242.

2 I want to move on to Exhibit 293. I will
3 help you in finding it. It's actually over here.

4 This is Exhibit 293, which is at Bates Number
5 MWG-13-15_19576, and this is the complete CCB
6 Germination Support Report for Joliet 29; isn't that
7 correct.

8 A. Yes, it is.

9 Q. Let's turn to Page 19577, the bottom
10 paragraph.

11 A. Okay.

12 Q. Under Project Objective it states that:

13 "The project objective was to develop an expanded
14 dataset to further evaluate the potential for
15 classifying this material as CCB for beneficial reuse
16 relative to the regulatory criteria set forth in
17 415 IL -- it should be ILCS; there's a typo --
18 5/3.135 (formerly 415 ILCS 5/3.94) a-5(B) which states
19 that: "CCB shall not exceed Class 1 groundwater
20 standards for metals when tested utilizing test method
21 ASTM D3987-85. The sample or samples tested shall be
22 representative of the CCB being considered for use."

23 That is in the report prepared by KPRG?

24 A. Yes, it is.

1 Q. And that quotation is from the Illinois
2 Environmental Protection Act, isn't it?

3 A. Yes.

4 Q. So the Illinois Environmental Protection Act
5 specifically identifies the test method used to
6 determine whether the coal ash can be considered coal
7 combustion by-product, doesn't it?

8 A. Yes.

9 Q. And that test method described here as
10 ASTM D3987-85 is also called the neutral leach shade
11 extraction test, isn't it?

12 A. Yes, it is.

13 Q. And this is a method that is used to
14 determine the concentrations of metals that leach from
15 a material, isn't it?

16 A. Yes, it's one of the tests. Yes.

17 Q. So the lower the concentration, the less
18 metals are leaching; isn't that correct?

19 A. Correct.

20 Q. Let's flip to 19582. And I want to direct
21 your attention to the third bullet. This report
22 states -- and it's signed by you, so I may sometimes
23 say "you state": "The NLET metals data from the
24 remaining 16 sample locations indicate with a high

1 degree of statistical certainty that the criteria
2 established in 415 ILCS 5/3.135 (formerly 415 ILCS
3 5/3.94) a-5(B) are met and that material may be
4 considered CCB relative to this criterion."

5 That is the conclusions in this report, isn't
6 it?

7 A. That's one of them, yes.

8 Q. So that means that the material sampled in
9 this report is leaching less metals than the criteria
10 established under the Illinois Environmental
11 Protection Act; isn't that correct?

12 A. Yes.

13 Q. Moving on. Mr. Gnat, yesterday you discussed
14 other applications of GMZs and ELUCs, and I'm not
15 going to ask you to pull them out, but do you recall
16 that testimony?

17 A. Yes.

18 Q. And you discussed in Exhibit 253, which is
19 the Powerton ELUC application, correct? Do you
20 recall? Do you need to look at it?

21 A. I just happen to have it here.

22 Q. Oh, great.

23 A. Okay.

24 Q. That application was to the Illinois EPA,

1 wasn't it?

2 A. Yes, it was.

3 Q. To your knowledge, Illinois EPA approved this
4 application, didn't it?

5 A. To my knowledge, yes.

6 Q. And do you have -- yesterday we discussed
7 Exhibit 254, the Powerton GMZ application?

8 A. Yes.

9 Q. And that application was to the Illinois EPA;
10 is that correct?

11 A. That is correct.

12 Q. And Illinois EPA approved that application?

13 A. Yes.

14 MR. WANNIER: Your Honor, I apologize. Could
15 we just have a moment? This wasn't on the list of
16 exhibits that we received, so we need to locate 253.

17 THE HEARING OFFICER: Yes. We'll go off the
18 record.

19 (Whereupon, a discussion was had
20 off the record.)

21 THE HEARING OFFICER: We are back on the
22 record. Thank you.

23 MS. GALE: Can you read back what my last
24 question was. Thank you.

1 (Whereupon, the record was
2 read as requested.)

3 BY MS. GALE:

4 Q. And yesterday you discussed Exhibit 254,
5 which is the Powerton GMZ application. Do you recall
6 discussing that application?

7 A. Yes.

8 Q. That application was with the Illinois EPA,
9 correct?

10 A. Yes.

11 Q. To your knowledge, Illinois EPA approved that
12 application?

13 A. Yes.

14 Q. And yesterday you discussed Exhibit 263,
15 which is the Waukegan ELUC application. Do you recall
16 discussing that application?

17 A. Yes, I do.

18 Q. And that application was to the Illinois EPA?

19 A. Yes.

20 Q. And Illinois EPA approved that application?

21 A. Yes, they did.

22 Q. And you discussed Exhibit 276, which is the
23 Will County GMZ application. Do you recall discussing
24 that application?

1 A. Yes, I do.

2 Q. That application was to the Illinois EPA; is
3 that correct?

4 A. Yes.

5 Q. And the Illinois EPA approved that
6 application, didn't they?

7 A. Yes, they did.

8 Q. And, I'm sorry, there was one more that I
9 neglected to tell you about, I missed it.
10 Exhibit 277, which is the Will County ELUC
11 application, do you recall discussing that
12 application?

13 A. Yes, I do.

14 Q. That application was to Illinois EPA,
15 correct?

16 A. Yes, it was.

17 Q. And the EPA approved that application?

18 A. Yes, they did.

19 Q. And yesterday, when you were discussing these
20 applications, you also discussed the groundwater
21 elevations in the monitoring wells at the four
22 stations. Do you recall that testimony?

23 A. I'm sorry. Could you ask that again, please?

24 Q. Sure.

1 I believe yesterday there was some testimony
2 related to the groundwater elevations and the
3 monitoring wells at the four stations. Do you recall
4 that testimony?

5 A. Yes.

6 Q. And in particular you were asked how you used
7 those groundwater elevations to create the groundwater
8 flow maps. Do you recall that?

9 A. Yes.

10 Q. And later in the day you stated that when you
11 create the groundwater flow maps, you consider the
12 presence of the surface water. Do you recall stating
13 that later in the day?

14 A. Yes, I do.

15 Q. And that -- when you create -- do you do
16 that -- strike that.

17 Do you consider the presence of the surface
18 water every time you create a groundwater flow map?

19 MR. WANNIER: Objection. Sorry. I just
20 don't understand what it means to consider the
21 presence.

22 MS. GALE: Okay.

23 THE HEARING OFFICER: Rephrase. Thank you.

24

1 BY MS. GALE:

2 Q. Mr. Gnat, please explain what considering the
3 presence of a surface water means?

4 A. Well, if there is a main surface water body
5 in the area or even a smaller secondary surface water
6 body in the area, you do have to take a look at the
7 location of that water body to help in understanding
8 of how that affects the local flow conditions since
9 the surface water body is also -- could be a
10 reflection of the interface between groundwater and
11 surface water.

12 Q. And do you do that when you create a
13 groundwater flow map?

14 A. Yes.

15 Q. And I believe you said yesterday that the
16 absolute level of the surface water does not change
17 the information on the flow maps you create, correct?

18 A. That is correct.

19 Q. Can you explain what that means?

20 A. I don't need to have -- for example, at the
21 monitoring well, we have a physically measured water
22 level to develop the map for that sampling event.

23 We do not have a physical water elevation for
24 the surface water body that's in the area. We do not

1 have a physical elevation of that water body.

2 However, there's a general understanding of
3 that relative elevation of the water body relative to
4 our site, and that is considered in developing the
5 maps.

6 Q. And so what that means to you -- excuse me.
7 Strike that.

8 What that means is the level of the surface
9 water at a specific time does not change the
10 information of the flow map you create?

11 A. The maps that we've presented based on the
12 water level data presented on that map, I believe
13 those maps, for the most part, depict a good picture
14 of the flow conditions at the time based on those
15 wells.

16 Q. Mr. Gnat, when you consider the surface
17 water, was it relative to the four stations that are
18 subject -- excuse me. Strike that.

19 When you consider the surface water in
20 creating the flow maps, the four stations that are the
21 subject of this report, you considered that surface
22 water relative to the groundwater at those four
23 stations?

24 A. Yes.

1 Q. Mr. Gnat, yesterday do you recall discussing
2 a letter from you to Lynn Dunaway at the Illinois EPA
3 about installing MW16 at Powerton?

4 A. Yes, I do.

5 Q. There's no need to pull it out. I just want
6 to clarify something. You don't have any personal
7 knowledge of historical ash-related activities at the
8 power station, correct?

9 A. Correct. For any of the power stations, I do
10 not know how ash has been handled in the past.

11 Q. I want to flip to Exhibit 264. I'll help you
12 find it right here. I want to go to page number
13 MWG-13-15_14528.

14 MR. WANNIER: Which exhibit is this?

15 MS. GALE: 264.

16 THE WITNESS: Okay.

17 THE HEARING OFFICER: We can go off the
18 record.

19 (Whereupon, a discussion was had
20 off the record.)

21 THE HEARING OFFICER: We are back on the
22 record.

23 BY MS. GALE:

24 Q. We're looking at Page 14528.

1 A. Yes.

2 Q. And this is a 1961 aerial photo of the
3 Waukegan station; isn't that correct?

4 A. Yes, that's the title of the figure.

5 Q. And you see the Waukegan station on the top
6 part of this map?

7 A. A portion of it, yes. Most of it.

8 Q. And directly to the west it's labeled the
9 Former General Boiler Property. Do you see that
10 there?

11 A. Yes.

12 Q. And there are buildings in this picture.
13 Those buildings depict the general boiler property,
14 don't they?

15 A. That's my understanding, yes.

16 Q. And if you look to the northwest, it states
17 that's the former -- I hope I'm saying this right --
18 Griess-Pfleger Tannery. And I'm going to spell that
19 for you. G-r-i-e-s-s, P-f-l-e-g-e-r, T-a-n-n-e-r-y.

20 Mr. Gnat, you see that there?

21 A. Yes. I've always pronounced it
22 Griess-Pfleger Tannery.

23 Q. Thank you.

24 And in this picture from 1961, those are the

1 Tannery buildings depicted in this picture, correct?

2 A. Yes.

3 Q. I want to direct your attention to the
4 southwest -- more west than south -- and there is the
5 former North Shore Gas North Plant MGP. Do you see
6 that there?

7 A. Yes.

8 Q. And MGP stands for Manufactured Gas Plant,
9 doesn't it?

10 A. Yes, it does.

11 Q. Just looking below those words is a circular
12 object. What is that, to your knowledge?

13 A. That is probably -- being a former gas plant,
14 that's probably one of the old gas tanks, coke tanks.

15 Q. And looking directly south of the Waukegan
16 station is the North Shore Sanitation District
17 property. Do you see that there?

18 A. Yes.

19 Q. And that's still the North Shore Sanitation
20 District property today, isn't it?

21 A. I believe they changed their name, but, yes,
22 the operation is still there.

23 Q. And further south of the North Shore is the
24 former Johnson Motor site, correct?

1 A. Yes.

2 Q. And those words are on a building that is
3 the -- that, in 1961, was the Johnson Motor site?

4 A. Yes.

5 Q. And no longer using this exhibit.

6 To your knowledge, the property north,
7 directly north of the Waukegan station, is the Johns
8 Manville site, correct?

9 A. Yes. It's a super fund site.

10 Q. I'm going to move on to Exhibit 271.

11 MS. GALE: Mr. Hearing Officer, we do not
12 waive the admission of this document as duplicative.

13 THE HEARING OFFICER: So noted.

14 BY MS. GALE:

15 Q. This is Table II, Brown Water Data for the
16 Waukegan station, isn't it?

17 A. Yes, it is table. I'm not sure from which
18 report it is.

19 Q. And to clarify, this does not reflect CCR
20 data, does it?

21 A. I do not believe so. This looks like CCA
22 data.

23 Q. And you would know that because the dates.
24 It ends on August 2014, correct?

1 A. Correct.

2 Q. And the CCR sampling started --

3 A. I don't remember the exact date, but it was
4 after August of 2014.

5 Q. Thank you.

6 So all of these analyses are conducted as
7 filtered; isn't that correct?

8 A. That is correct, yes.

9 Q. And as you stated yesterday, this table is
10 likely reflected in one of the many reports given to
11 you yesterday, correct?

12 A. Yes. The way we usually report is the last
13 column on the right is the most recent sampling, and
14 then we provide, at least eight quarters prior to
15 that, to provide some perspective and some time skills
16 further back.

17 Q. Mr. Gnat, I'm done with that exhibit. I'd
18 like to turn to Exhibit 274.

19 A. Okay.

20 Q. This is Exhibit 274, Bates Number
21 MWG-13-15_12827.

22 This is a liner inspection of the west and
23 east ash ponds at the Waukegan station, correct?

24 A. Yes, it is.

1 Q. And you stated yesterday that Christopher
2 Swyers was the signatory on Page 12829 assisted you in
3 this inspection, correct?

4 A. That's correct, yes.

5 Q. And he assisted you because he had expertise
6 in the specifications and installations of geomembrane
7 liners such as HDPE, correct?

8 A. Yes.

9 Q. I want to look at Page 12828. In the second
10 paragraph, about midway through, it states: "Midwest
11 Generation requested an independent third-party review
12 of the current condition of the liner," correct?

13 A. Yes.

14 Q. That was the purpose of this report was to
15 provide an independent third-party review, correct?

16 A. Yes.

17 Q. So that means Midwest Generation wanted an
18 independent eyes to confirm that its liner system was
19 working, didn't they?

20 A. Yes, they wanted us to evaluate the liner.

21 Q. Thank you.

22 Let's first flip to 12832 under Conclusions
23 and Recommendations.

24 A. Okay.

1 Q. And the report states here: "As a whole,
2 with the exception of the area noted in Item Number 7
3 above, exposed liner material does not appear to have
4 suffered any tears and/or cracking, any separation or
5 damage. There was no evidence of displacement due to
6 gas and/or water below the liner. The liner appears
7 to have been installed correctly and in accordance
8 with the specifications and current industry
9 standard."

10 That is what is written in this report of the
11 inspection conducted by you and Mr. Swyers, correct?

12 A. Yes.

13 Q. Let's go to Item Number 7 first since it's
14 mentioned in this paragraph. Item Number 7 notes:
15 "A liner tear on the south side of the east ash pond
16 associated with materials handling in that area with
17 the construction equipment."

18 Do you see that there?

19 A. Yes.

20 Q. And you see that it states: "It is our
21 understanding that Midwest Generation is aware of this
22 liner breach and has a repair crew scheduled to
23 address the situation?

24 A. Yes.

1 Q. You have no reason to believe that that tear
2 was not repaired, correct?

3 A. No.

4 Q. Let's turn back to Page 12831, starting with
5 Number 1. This report states: "60 mil, m-i-l, HDPE
6 liner has been installed in accordance with the plans
7 and specifications. The liner resin and role
8 properties met those listed in the specification and
9 met typical industry standards (Section 02700
10 Geomembrane).

11 "The trial weld, destructive test, and
12 non-destructive test reports available met the project
13 specifications and typical industry standards.

14 "The HDPE panel layout also met the project
15 specifications and typical industry standards."

16 Those are the observations noted by you and
17 Mr. Swyers in this report, correct?

18 A. Those are primarily Mr. Swyers's
19 observations, yes. He's the expert.

20 Q. You're a signator of this report though,
21 right?

22 A. Yes, I am.

23 Q. And you participated in it, correct?

24 A. Yes, I did.

1 Q. Thank you.

2 Let's look at Number 2. The report states:
3 "The project plans show a 12-inch layer of sand on the
4 pond floors capped by six-inch layer of limestone
5 screening. Typically, a separation geotextile is
6 placed between a sand and aggregate layer to prevent
7 the migration of the aggregate down to the sands."

8 But I want to flip back to your conclusions
9 on Page 12382. The observation in Number 2 did not
10 affect the conclusions made that the liner was
11 installed in accordance with the specifications and
12 current industry standards. Correct?

13 A. Correct.

14 Q. Go back to Number 3 on Page 12831. The long
15 paragraph, because I'm not going to read the whole
16 thing, Number 3: "Some wrinkles were observed in the
17 liner."

18 But I want to direct your attention to the
19 third sentence which states: "The wrinkles associated
20 with the HDPE liner are an aesthetic issue only. A
21 liner that is installed without enough excess material
22 may result in tension across the liner seams which can
23 produce stress cracks at the seams or may pull the
24 liner away from mechanical attachment points or out of

1 the perimeter of the anchor trench.

2 "Based on our research and experience, the
3 liner wrinkles in the east and west pond liners are
4 consistent with similar projects using 60 mil
5 white-on-black HDPE liner."

6 Those are the conclusions made in your
7 report, correct?

8 A. Yes.

9 Q. So, again, this report concludes that the
10 liners were installed correctly and in accordance with
11 the specifications and industry standards, correct?

12 A. Yes.

13 Q. With your understanding that it's only
14 meant -- that these wrinkles were only meant as an
15 aesthetic issue, correct?

16 A. Yes.

17 Q. What does "aesthetic issue" mean?

18 A. Cosmetic. It just has an appearance but
19 doesn't affect the operation of the liner.

20 Q. And the performance of the liner?

21 A. Performance of the liner.

22 Q. Flip to Number 4. Number 4 of the report
23 states that "a new batten bar which anchors the liner
24 was not extended as far as it should have been."

1 And I'm paraphrasing.

2 Flip to the third paragraph on the next page
3 which states that: "At the sump structures, the new
4 batten, however, should have been extended below the
5 finish grade at the anchor trench."

6 Do you know what an anchor trench is?

7 A. Yes. An anchor trench is at the top of the
8 berm there is a trench in which the liner extends over
9 the top of the berm, then in through the trench and up
10 and then that trench is backfilled to help anchor the
11 liner.

12 Q. And by "anchor," what do you mean?

13 A. Hold the liner in place.

14 Q. Mr. Gnat, on that same page, bottom
15 paragraph, recommendation is: "To extend the vertical
16 battens near the structure below the anchor trenches."

17 Do you see that there?

18 A. At the bottom of Page 12832?

19 Q. Correct?

20 A. Yes.

21 Q. And is that in response to Number 4?

22 A. Yes, it is.

23 Q. And it states in that paragraph that it's
24 recommended to do that the above -- do this during the

1 above-noted liner repair?

2 A. Correct.

3 Q. Because, as we said before, Midwest
4 Generation had already scheduled a crew to come out?

5 A. Come out and repair the noted tear in Item 7.

6 Q. And you have no reason to believe that
7 Midwest Generation did not follow that recommendation?

8 A. No.

9 Q. So you believe that Midwest Generation
10 followed that recommendation?

11 A. To my knowledge, yes.

12 Q. And, again, that did not change the
13 conclusions at the bottom of 12832 in this report that
14 the liner system was installed correctly in accordance
15 with the specifications and industry standards,
16 correct?

17 A. Correct.

18 Q. I want to look at Number 5 on that same page.

19 A. Okay.

20 Q. It says in the first sentence that there is
21 some evidence that the anchor trenches may have
22 settled at the top of the slope and that the settling
23 appears more prevalent in the west pond anchor
24 trenches than in the east pond. And then it states:

1 "Currently the settling is aesthetic issue only and
2 may actually contribute to the wrinkles in the west
3 pond slopes."

4 What is your understanding of aesthetic issue
5 only?

6 A. Again, this is a cosmetic issue. It's
7 appearance and not -- affects appearance but not
8 function.

9 Q. You recommend here periodic visual -- by
10 "you," I mean you and Mr. Swyers who helped assist you
11 with this report -- recommended periodic visual
12 monitoring of the anchor trenches to ensure there's no
13 additional settling. Correct?

14 A. Correct.

15 Q. And, to your knowledge, monitoring of the ash
16 pond occurs at the station, right?

17 A. That is my understanding, yes.

18 Q. Number 6: "The report states that the
19 stability of the slope subgrade below the liner does
20 not appear to have suffered any major failures."

21 Do you see that there?

22 A. Yes.

23 Q. And it states: "The group of you who
24 conducted the inspection observed a slight bulge in

1 the liner on the west side of the pond," correct?

2 A. I'm sorry. Where are you reading from?

3 Q. I'm reading from -- I will start again.

4 Number 6 states: "Stability of the slope's subgrade
5 below the liner does not appear to have suffered any
6 major failures. The relative plain of every pond
7 slope appears to be intact."

8 What does "relative plain of a pond slope"
9 mean?

10 A. That's the angle of the slope, the face of
11 the slope of the pond.

12 Q. And what does the subgrade below liner mean?

13 A. The ground below the liner, the subgrade of
14 the liner.

15 Q. And then it continues to explain what would
16 happen if there were a failure?

17 A. Correct.

18 Q. Following that it states that "the group of
19 you who did this inspection observed a portion of the
20 slopes in the two ponds show a slight bulge in the
21 liner on the west side of the center berm."

22 Do you see that there?

23 A. Correct. Just to -- I believe you stated in
24 plural. I believe this is identifying only within the

1 two ponds, only one area in which this was observed.

2 Q. Thank you. You're right.

3 And you recommended that the slopes should be
4 visually monitored to ensure the slopes' upgrade
5 remain stable. Correct?

6 A. Correct.

7 Q. And, to your knowledge, the station monitors
8 the ash ponds at Waukegan, correct?

9 A. That's my understanding, correct.

10 Q. And these observations do not change the
11 conclusions of this report, at the bottom of the page,
12 that the liner appears to have been installed
13 correctly and in accordance with the specification and
14 current industry standard. Correct?

15 A. Correct.

16 Q. Number 7 we've already discussed that a crew
17 was scheduled. So we've already discussed Number 7.
18 I'm going to move on to Number 8.

19 Number 8: "A wedge weld pressure test seam
20 cut in the southwest corner of the west pond was not
21 patched. This does not constitute a breach of the
22 main portion of the liner, but should be addressed by
23 the repair crew when on-site to repair the liner
24 tear."

1 Do you see that there?

2 A. Yes. When you add it to repair liner tear,
3 that was, again, referring back to Item 7 and the crew
4 that they had scheduled to do that.

5 Q. Mr. Gnat, do you know what a wedge weld
6 pressure test seam is?

7 A. I personally do not know. This is one of the
8 observations from my colleague, Mr. Swyers.

9 Q. But your understanding is that his conclusion
10 was that there was not a breach of the main portion of
11 the liner?

12 A. That is correct, yes.

13 Q. And based on your experience with Midwest
14 Generation, you have no reason to believe that that
15 repair was not conducted, do you?

16 A. To my knowledge, that is correct, yes.

17 Q. So, to your knowledge, the repair was
18 conducted?

19 A. Yes, that is correct.

20 Q. Mr. Gnat, I would like to move on to
21 Exhibit 275. Exhibit 275 starts at MWG-13-15_594, and
22 this exhibit has the boring logs for monitoring wells
23 6 and 7 at Waukegan, correct?

24 A. Yes, it does.

1 Q. And briefly yesterday you discussed
2 monitoring well 6, which is on page MWG-13-15_597. Do
3 you recall that testimony?

4 A. Yes, I do.

5 Q. I just want to confirm, this boring log does
6 not show any ash in it, correct?

7 A. That is correct.

8 Q. Let's flip to boring log for MW7,
9 MWG-13-15_598. This boring log does not show any ash
10 in it, correct?

11 A. That is correct.

12 Q. I'd like to move on to Exhibit 284. This is
13 Exhibit 284, MWG13-15_49565. It's a CCB determination
14 support at Will County. Do you recall discussing this
15 report yesterday?

16 A. Yes, I do.

17 Q. Similar to your work at Joliet 29, KPRG was
18 asked to determine if the material could be used as
19 coal combustion by-product, correct?

20 A. Correct.

21 Q. Looking at the second full paragraph under
22 Project Objective, it states: "The project objective
23 was to develop a dataset to evaluate the potential for
24 classifying this material as CCB for beneficial reuse

1 relative to the regulatory criteria set forth in
2 415 ILCS 5/3.135 (formerly 415 ILCS 5/3.94) a-5(B),
3 which states that, "CCB shall not exceed Class 1
4 groundwater standards for metals when tested utilizing
5 test method ASTM D3987-85. The sample or samples
6 tested shall be representative of the CCB considered
7 for reuse."

8 That is what's written in this report?

9 A. That is correct.

10 Q. And you assisted in writing this report?

11 A. Yes.

12 Q. Again, 415 ILCS 5/3.135 is a section of the
13 Illinois Environmental Protection Act?

14 A. Yes.

15 Q. Let's flip to 49568 under your conclusions?

16 A. Okay.

17 Q. Look at bullet 3, "NLET metals data from the
18 20 sample locations indicate with a high degree of
19 statistical certainty that the criteria established in
20 415 ILCS 5/3.135 (formerly 415 ILCS 5/3.94) a-5(B) are
21 met and that the material may be considered CCB
22 relative to the criterion for engineering beneficial
23 reuse."

24 Those are your conclusions?

1 A. That's one of them, yes.

2 Q. And that applied to the coal ash identified
3 on figure 1 of this report located at 49569?

4 A. Yes.

5 Q. I'd like to move to Exhibit 286 which is
6 located at MWG-13-15_14744, and it's the Midland
7 Standards Engineering and Testing Incorporated sample
8 results.

9 A. Yes.

10 Q. This is a sampling analysis of a Poz-O-Pac
11 core, isn't it?

12 A. Yes.

13 Q. Mr. Gnat, I'm going to put in front of you a
14 demonstrative of Poz-O-Pac core. This is the sample
15 you took -- excuse me -- the core sample taken by you
16 or arranged by your firm?

17 A. It appears to be, yes.

18 MR. WANNIER: Objection, your Honor. I'm not
19 sure that there's a basis for him identifying this as
20 the exact core sample unless there's a chain of
21 custody.

22 MS. GALE: I'm using it as a demonstrative to
23 explain Exhibit 286, and considering he just said he
24 took this core sample and will be explaining how it

1 applies to 286.

2 THE HEARING OFFICER: I don't think he said
3 he took it. It appears like the kind they take.

4 MR. WANNIER: We're happy to accept it as an
5 example of the core sample.

6 THE HEARING OFFICER: I'll sustain. I'll
7 accept it as example to help aid anybody who's not
8 appearing. Thank you.

9 MS. GALE: Okay.

10 BY MS. GALE:

11 Q. So, Mr. Gnat, in observing this Poz-O-Pac
12 core sample, it's similar to concrete, isn't it?

13 A. Appears to be, yes.

14 Q. Appears to be.

15 Turning back to Exhibit 286, let's flip to
16 14785.

17 THE HEARING OFFICER: Ms. Gale, I think I'll
18 revisit it. I mean, it is a sample, demonstrative,
19 it's semantics. I think it would help aid the board
20 if, in fact, they chose to look at it in the
21 transcript. So we can treat it as a demonstrative.

22 MS. GALE: Thank you.

23 THE HEARING OFFICER: And the record will so
24 note. Thank you.

1 MS. GALE: I'll get to why it's important.

2 MR. WANNIER: Just to clarify, again, we have
3 no objection to treating this as a demonstrative of an
4 example of a Poz-O-Pac core sample, but we would
5 object to treating it as the exact core sample that is
6 referenced in the report she's asking the witness
7 questions about.

8 THE HEARING OFFICER: Okay.

9 MS. GALE: Well --

10 THE HEARING OFFICER: The record will so
11 note.

12 Again, I don't think I heard Mr. Gnat saying
13 this is the exact core sample he took.

14 Let's just move on. We'll so note for the
15 record Mr. Wannier's objection. The Board will so
16 note.

17 You may continue.

18 MS. GALE: Thank you.

19 BY MS. GALE:

20 Q. Turn back to Exhibit 286 and flip to 14745.

21 A. Okay.

22 Q. Do you recall being asked about the third
23 sentence in the middle of this page that states:

24 "Hairline cracks were noted in the ends of the

1 core"?

2 A. Correct.

3 Q. Mr. Gnat, do you recall, how are Poz-O-Pac
4 cores taken?

5 A. When we collected the Poz-O-Pac core, we
6 contracted a coring specialty company that set up
7 their coring unit over the liner and we cored the
8 liner at that point and pulled the core sample.

9 Q. What kind of equipment do you use?

10 A. It's a coring machine that basically has a
11 cutting head on it and cores down through the material
12 and similar to what you would use for coring a
13 concrete core and whatnot, then you pull the core of
14 that material out.

15 Q. It doesn't go all the way through the
16 material though, does it?

17 A. I don't believe we went all the way through
18 the bottom of the liner, no.

19 Q. When the equipment that you used is with
20 the -- I'm sorry. How did you describe the bit?

21 A. It's a coring bit.

22 Q. Coring bit to drill the core, wouldn't you
23 expect that when drilling into a substance such as
24 Poz-O-Pac, which is similar to concrete, that some

1 hairline cracks would be created simply by the -- on
2 the edges of the core simply by the action of the
3 drilling?

4 A. Yes. I mean, that's a by-product or an
5 effect that can occur when you're pulling a sample in
6 this manner, that you can provide some cracking or
7 damage to that sample on the edges.

8 And I believe that's also why we're looking
9 at doing triaxial permeability on this core.

10 Q. Okay. We'll get there yet. Hang on.

11 So that doesn't mean there were cracks in the
12 middle of the core, correct?

13 MR. WANNIER: Objection. Calls for
14 speculation.

15 THE HEARING OFFICER: Overruled. He can
16 answer if he's able.

17 THE WITNESS: My reading of this geotechnical
18 report is that it's stated that additionally, the
19 sample was inspected for signs of cracking and
20 discoloration. Hairline cracks were noted at the ends
21 of the core where I -- if there was any artificial
22 cracking, that's where I would anticipate it to be.

23 And then it says: No evidence of
24 discoloration through the length of the core was noted

1 in the sample after strength testing. So some
2 discoloration was noted at the top of the core sample.

3 Again, to me, looking at that, we're
4 isolating those things to the two ends of the core,
5 which, if anything, would be the ones impacted by
6 artificial processes from the sample collection.

7 Q. And you looked to no evidence of
8 discoloration through the length of the core. You
9 just stated no evidence of discoloration through the
10 length of the core was noted. What does that mean to
11 you?

12 A. When they're doing the test, again, I didn't
13 write that this is Midland's standard's report.

14 Q. Sure.

15 A. When they do it, again, they're looking --
16 they're recording their visual observations as well as
17 input. And to me, this suggests that they state they
18 did not see any discolorations through that core. And
19 I believe what this is suggesting is, if there were
20 some fractures, it would accommodate for some
21 discoloration that would make it apparent.

22 Q. And by "fractures" you mean cracks?

23 A. Correct.

24 Q. And this document gives no indication that

1 there were any other cracks in the Poz-O-Pac, correct?

2 A. Correct.

3 Q. Let's flip to MWG-13-15_14746, and that is
4 the Report of Permeability Testing. Do you see that
5 there?

6 A. Yes.

7 Q. And do you have a general understanding of
8 permeability?

9 A. Yes. The permeability testing that's done on
10 these types of materials is to provide the K value of
11 the coefficient permeability that has used centimeters
12 per second and --

13 THE COURT REPORTER: Can you repeat that,
14 please.

15 THE WITNESS: Permeability coefficient or K
16 value, which then is used to gain an understanding of
17 the permeability of the material.

18 BY MS. GALE:

19 Q. And so the lower the number, the less
20 permeable the material is, correct?

21 A. That is correct.

22 Q. And looking at the results here, it states
23 that the average K, which means permeability, was
24 3.12 capital E-05, correct?

1 A. Correct. 3.2 times 10 to the minus 5
2 centimeters per second.

3 Q. And that is considered a relatively low
4 permeability, isn't it?

5 A. That's a relatively low permeability, yes.

6 Q. I'm done with that document.

7 Mr. Gnat, I would like to turn to three
8 exhibits and I'd like you to look at them together.
9 They are Exhibits 261, 2580, and 2570.

10 THE HEARING OFFICER: Group 0?

11 MS. GALE: You're right.

12 THE WITNESS: 2580.

13 BY MS. GALE:

14 Q. 80.

15 A. 2580, 261, and I think you had a third one?

16 Q. 2570.

17 A. 2570. Okay.

18 Q. Do you have those out?

19 A. Yes.

20 Q. Exhibit 261 is Bates Number MWG-13-15_58588,
21 and this is the metals cleaning basin groundwater
22 sampling from January 24, 2017.

23 MS. GALE: Mr. Hearing Officer, we object to
24 the admission of this document, and we do not waive

1 our objection by discussing it today.

2 THE HEARING OFFICER: Understood. And the
3 record will reflect. Thank you.

4 BY MS. GALE:

5 Q. Exhibit 2570, MWG-13-15_49839, is the
6 quarterly groundwater monitoring report for the
7 Powerton station dated July 22, 2015.

8 A. Yes.

9 Q. And Exhibit 2580, MWG-13-15_58155, is the
10 annual and quarterly groundwater monitoring report for
11 the Powerton generating station?

12 A. Correct.

13 Q. Dated January 13, 2017?

14 A. Yes.

15 Q. On Exhibit 261, please turn to Page 58590.

16 A. Okay.

17 Q. These are the sample results for MW13,
18 correct?

19 A. Correct. For May -- yes, May 28th, for four
20 sampling events, yes.

21 Q. Can you please turn, on Exhibit 2570, to
22 Page MWG-13-15_49863?

23 A. Yes.

24 Q. Are you there?

1 A. Yes.

2 Q. And these are the tables of the ground
3 water sampling results in each of those reports,
4 aren't they?

5 A. Yes.

6 Q. Looking at the dates on these tables, do you
7 see that the first column on Exhibit 261 is dated
8 5-28-2014?

9 A. Yes.

10 Q. And you see that the fifth column on
11 Exhibit 2570 is also dated 5-28-2014?

12 A. Yes.

13 Q. And both of these tables are for MW13?

14 A. Yes.

15 Q. And both of these tables have analysis for
16 metals?

17 A. Yes.

18 Q. Okay.

19 And if you continue on looking at both of
20 these tables, it has the date 5-13-2015 on
21 Exhibit 261, the metal cleaning basin?

22 A. Yes.

23 Q. And if you look at the column to the furthest
24 right of Exhibit 2570 on Page 49863 --

1 A. Yes.

2 Q. -- it also says May 13, 2015?

3 A. Yes.

4 Q. So this appears -- on these two pages, the
5 data appears to be for metals analysis the same?

6 A. Yes. It's the same data.

7 Q. Staying with 261 -- never mind.

8 We're going to stay with 261 and 2570. I
9 want to turn to MW14, please. These are Bates
10 Pages 58591, and in Exhibit 2570, 58864. Both of
11 these tables are for MW14. Is that correct?

12 A. Yes.

13 Q. And both of these tables have the dates
14 5-28-14 and 5-13-2015, correct?

15 A. Yes.

16 Q. Both of these tables have metals analysis,
17 correct?

18 A. Yes.

19 Q. Let's flip to MW14. I'm sorry. Go back.

20 And the metals analysis for MW14 on
21 Page 49864 and Page 58591 are the same?

22 A. Yes. These are the same sample.

23 Q. Can you flip to, on both documents, MW15.

24 A. Okay.

1 Q. So on Exhibit 1261, which is the metals
2 cleaning basin, and we're looking at Page
3 MWG-13-15_58592, and on Exhibit 2570, we're looking at
4 Page MWG-13-15_49865, these are both tables of
5 Monitoring Well 15, correct?

6 A. Yes.

7 Q. And both of these tables contain data taken
8 on May 28, 2014, correct?

9 A. Yes.

10 Q. Both of these tables contain data taken on
11 May 14, 2015?

12 A. Correct.

13 Q. And both of these tables contain analysis of
14 metals; isn't that correct?

15 A. Yes.

16 Q. And the results of those analyses are the
17 exact same, correct?

18 A. Yes. These are the same sample.

19 Q. Thank you.

20 I'd like you to now look at, staying with
21 Exhibit 261, 2580.

22 When you're ready?

23 A. Yes.

24 Q. I'd like you to flip in 2580 to Page

1 MWG-13-15_58178.

2 A. Okay.

3 Q. And in 261, I'd like you to flip back to Page
4 MWG-13-15, 58590.

5 Both of these tables are for Monitoring
6 Well 13, correct?

7 A. Yes.

8 Q. And I want to direct your attention to -- on
9 Exhibit 261, the fourth column, which states May 19,
10 2016.

11 Do you see that there?

12 A. Yes.

13 Q. And looking at Exhibit 2580, at the column
14 the third from the right, it states May 19, 2016.

15 Do you see that there?

16 A. Yes.

17 Q. And those are the same dates?

18 A. Same dates, yes.

19 Q. And both of these tables analyze metals,
20 correct?

21 A. Correct.

22 Q. And the results for the metals in these
23 tables are the exact same, aren't they?

24 A. Yes, they're the same sample.

1 Q. Thank you.

2 And right next to that, both of those
3 columns, is the date August 18, 2016. Do you see that
4 on both of those tables?

5 A. Yes.

6 Q. And, again -- I just want to shorten this up.
7 And then right after that is the date
8 November 17, 2016. Do you see that on both those
9 tables?

10 A. Yes.

11 Q. So these samples were taken on the exact same
12 day?

13 A. Correct. They're the same sample.

14 Q. The same sample?

15 A. Yes.

16 Q. Meaning this is the result of only one
17 sample?

18 A. The sampling event of August 18, 2016, that's
19 one sample, and there's another sampling event
20 November 17, 2016.

21 What's on both tables reflects the same
22 sample, same results.

23 Q. Same sample, same results?

24 A. Correct. It's just duplicated from one table

1 to another.

2 Q. Thank you.

3 Let's flip to Monitoring Well 14 for both of
4 these analyses. And that is on Page MWG-13-15_58591
5 in Exhibit 261. Exhibit 261 is the metal cleaning
6 basin?

7 A. I'm lost in my paperwork here.

8 Got it.

9 Q. Okay. I'm sorry.

10 We're looking at Monitoring Well 14 on both
11 of these sample results. And, again, as you just
12 stated, for the results on May 19, 2016, August 18,
13 2016, and November 17, 2016, these are the sample
14 results taken from the same sample, correct?

15 MR. WANNIER: Your Honor?

16 THE COURT: Yes?

17 MR. WANNIER: I'm not objecting to the
18 question. Could I just ask that the Bates numbers be
19 highlighted on the screen?

20 MS. GALE: Sure.

21 MR. WANNIER: And would it be possible to
22 read these into the record?

23 MS. GALE: Oh, I thought I did, but I could
24 do it again.

1 MR. WANNIER: I might have missed.

2 THE HEARING OFFICER: Thank you.

3 MS. GALE: I'll do it again.

4 BY MS. GALE:

5 Q. Okay. We're looking at Monitoring Well 14,
6 which is on Bates Page MWG-13-15_58591, and that is
7 part of Exhibit 261. And we're looking at -- also
8 looking at Exhibit 2580, Monitoring Well 14, which is
9 located on Page Number MWG-13-15_58179.

10 And, Mr. Gnat, I believe you just stated
11 that -- I believe we just looked at that the dates are
12 May 19, 2016, August 18, 2016, and November 17, 2016,
13 are the same on both of these tables. Correct?

14 A. Correct.

15 Q. And the data in these reports are from the
16 same sampling analysis; isn't that correct?

17 A. Correct.

18 Q. And simply duplicated it in the Exhibit 261,
19 correct?

20 A. Correct.

21 Q. Let's flip to Monitoring Well 15 on
22 Exhibit 261, that's Page MWG-13-15_58592, and on
23 Exhibit 2580, that is Page MWG13-15_58180. These are
24 both the tables for Monitoring Well 15, correct?

1 A. Correct.

2 Q. And these tables also have the dates May 19,
3 2016, August 18, 2016, 11-17-2016, correct?

4 A. Correct.

5 Q. And the data in both of these tables is from
6 the same sample, correct?

7 A. Yes. I'm going through the metals data here
8 and they're identical.

9 Q. Thank you. We are done with those three
10 exhibits.

11 Mr. Gnat, I would like you to look at
12 Exhibit 268P.

13 A. Okay.

14 Q. This is the annual and quarterly groundwater
15 monitoring report for the Waukegan generating station
16 dated January 22, 2015, MWG-13-15_45328. Correct?

17 A. Correct.

18 Q. Please flip to MWG-13-15_45330.

19 A. Okay.

20 Q. These are your observations. Do you recall
21 discussing these yesterday?

22 A. Yes, I do.

23 Q. Let's look at the bullet -- fifth bullet
24 down. Here the report states that manganese -- strike

1 that.

2 Here the report states Wells MW5, MW6, and
3 MW7 were the only wells with detections of dissolved
4 manganese above the groundwater standard since the
5 third quarter 2011 sampling. Manganese concentrations
6 at all other locations appear fairly stable and are
7 generally below the comparison standard.

8 Do you see that observation made in this
9 report?

10 A. Yes.

11 Q. Let's turn to Page 45333. This is a map of
12 the Waukegan station site map?

13 A. Yes.

14 Q. This includes locations of all the monitoring
15 wells?

16 A. Of Monitoring Wells 1 through 7.

17 Q. Right. But those are for the CCA, correct?

18 A. Correct.

19 Q. Monitoring Well 6 is on the western edge of
20 Midwest Generation's property, correct?

21 A. Correct.

22 Q. Stay on this map.

23 And to confirm, this is a map prepared by
24 KPRG as a consultant of Midwest Generation, and this

1 map was prepared from Midwest Generation. Correct?

2 A. Yes.

3 Q. So looking at the area west of the ash ponds,
4 it appears in this map to be a grassy field. In your
5 experience visiting Waukegan, does it appear to be a
6 grassy field?

7 A. Yes, it is.

8 Q. And you have no personal knowledge of the
9 material beneath that grassy field, correct?

10 A. Correct.

11 THE HEARING OFFICER: May we go off the
12 record for a minute. Do you need a break?

13 (Whereupon, a discussion was had
14 off the record.)

15 THE COURT: We're back on the record.

16 BY MS. GALE:

17 Q. Mr. Gnat, I have one more question. Earlier
18 today I was identifying for you the CCA and CCR wells.
19 Do you recall that, when we were discussing --

20 A. Yes.

21 Q. -- both wells?

22 A. Yes.

23 Q. And we were discussing the Will County CCA
24 and CCR wells, and I made a representation that CCA

1 wells -- all the CCA wells at Will County were also
2 sampled at CCR, and you corrected me. Do you remember
3 that?

4 A. Yes.

5 Q. At Will County, the CCA wells and the CCR
6 wells, to your recollection, are both Monitoring Well
7 5, Monitoring Well 6, Monitoring Well 9, and
8 Monitoring Well 10. That's correct?

9 A. The overlap?

10 Q. The overlap between the two.

11 A. Can you run those again, please?

12 Q. Sure.

13 Monitoring Well 5, Monitoring Well 6,
14 Monitoring Well 9, and Monitoring Well 10.

15 A. I believe that's correct, yes.

16 MS. GALE: Can I have a minute?

17 THE HEARING OFFICER: Sure. Off the record.

18 (Whereupon, a discussion was had
19 off the record.)

20 THE HEARING OFFICER: We are back on the
21 record.

22 Ms. Gale, nothing further?

23 MS. GALE: Thank you. Nothing further.

24 THE HEARING OFFICER: Mr. Wannier, I assume

1 you're going to have questions?

2 MR. WANNIER: I'd like a short break if
3 possible.

4 THE COURT: I'll see you all back here at
5 11:20. Thank you.

6 MS. GALE: Thank you.

7 (Whereupon, at 11:08 a.m., a break
8 was taken, after which there was
9 a change of court reporters.)

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1 STATE OF ILLINOIS)
) SS:
2 COUNTY OF C O O K)

3
4 I, PAMELA L. COSENTINO, being first duly
5 sworn on oath says that she is a court reporter doing
6 business in the City of Chicago; that she reported in
7 shorthand the proceedings given at the taking of said
8 hearing and that the foregoing is a true and correct
9 transcript of her shorthand notes so taken as
10 aforesaid and contains all the proceedings given at
11 said hearing.

12 IN TESTIMONY WHEREOF: I have hereunto set my
13 verified digital signature this 2nd day of November,
14 2017.

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PAMELA L. COSENTINO, CSR

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