

ILLINOIS POLLUTION CONTROL BOARD

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IN RE: MIDWEST :

GENERATION, LLC : Case No. AS 21-3

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Hearing

Waukegan, Illinois

Wednesday, February 14, 2024

9:00 a.m.

Job No.: 1083500

Pages: 1 - 153

Reported By: Jessica Shines, CSR, RPR

1 Hearing held at:

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4 WAUKEGAN CITY HALL

5 100 North Martin Luther King Jr. Avenue

6 Waukegan, Illinois 60085

7 847-599-2500

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12 Pursuant to notice, before Jessica Shines,
13 CSR, RPR, Notary Public in and for the State of
14 Illinois.

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A P P E A R A N C E S

ON BEHALF OF THE ILLINOIS EPA:

CHARLES GUNNARSON, ESQUIRE

REBECCA STRAUSS, ESQUIRE

DIVISION OF LEGAL COUNSEL

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue

P.O. Box 19276

Springfield, Illinois 62794

217-782-5544

charles.gunnarson@illinois.gov

rebecca.strauss@illiois.gov

ON BEHALF OF MIDWEST:

KRISTEN L. GALE, ESQUIRE

GENEVIEVE J. ESSIG, ESQUIRE

NIJMAN FRANZETTI LLP

10 South LaSalle Street

Suite 3400

Chicago, Illinois 60603

312-251-5250

kg@nijmanfranzetti.com

ge@nijmanfranzetti.com

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A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

BRADLEY HALLORAN, HEARING OFFICER

VANESSA HORTON, ESQUIRE

JENNIFER VAN WIE, BOARD MEMBER

ESSENCE BROWN, TECHNICIAN

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

2 (On the record at 9:00 a.m.)

3 THE HEARING OFFICER: Good morning,
4 everybody. My name is Bradley Halloran. I'm
5 the hearing officer with the Illinois
6 Pollution Control Board. This is Adjusted
7 Standard 21-3. It's continued on record from
8 yesterday, February 13th, 2024. Happy
9 Valentine's Day, everybody.

10 And Ms. Gale, would you like to
11 introduce yourself and your crew, please?

12 MS. GALE: Yes. My name is Kristen
13 Gale. I'm sitting here with my co-counsel
14 Genevieve Essig and we're here on behalf of
15 Midwest Generation, LLC.

16 HEARING OFFICER: Perfect. Thank you.

17 Mr. Gunnarson?

18 MR. GUNNARSON: I'm Charles Gunnarson.
19 I'm counsel with Illinois EPA. I'm here with
20 co-counsel Rebecca Strauss on behalf of
21 Illinois EPA.

22 THE HEARING OFFICER: Thank you, sir.

23 Any administrative things we have
24 to address before we get to Ms. Gale's next

1 witness?

2 MS. GALE: Nothing from me, sir.

3 THE HEARING OFFICER: Okay. You may
4 proceed.

5 MS. GALE: Mr. Hearing Officer, we call
6 Mr. Tom Dehlin.

7 THE HEARING OFFICER: Raise your right
8 hand and Jessica will swear you in.

9 (Witness sworn.)

10 EXAMINATION BY COUNSEL FOR MIDWEST GENERATION

11 BY MS. GALE:

12 Q. Good morning.

13 A. Good morning.

14 Q. Could you please state your name and
15 spell your last name for the record?

16 A. My name is Tom Dehlin, D-E-L-H-I-N.

17 Q. And Mr. Dehlin, what -- oh, before we
18 begin, Mr. Dehlin --

19 MS. GALE: Mr. Hearing Officer, are we
20 being filmed today?

21 THE HEARING OFFICER: No. Are we?
22 Hold on, we'll check with the man behind the
23 curtain. I haven't seen him this morning.

24 There's no one back there,

1 Ms. Gale.

2 MS. GALE: Great. Thank you. And just
3 -- but for the record, are you comfortable
4 being filmed as you testify today?

5 THE WITNESS: No.

6 MS. GALE: Thank you.

7 BY MS. GALE:

8 Q. Mr. Dehlin, what is your educational
9 background?

10 A. I have a bachelor's and master's degree
11 in civil and environmental engineering from
12 University of Illinois at Urbana-Champaign.

13 Q. And what professional licensing do you
14 have?

15 A. I am a licensed professional engineer
16 in the states of Illinois, Kentucky, and Wyoming.

17 Q. And Mr. Dehlin, what does it take to
18 become a professional engineer?

19 A. You have to have degrees at an
20 ABET-accredited university. You have to take two
21 licensing exams. One's the FE, fundamentals of
22 engineering, exam. Second is your PE,
23 professional engineering, exam. And then you have
24 to have three to four years, depending on your

1 education, of work performed under the supervision
2 of a professional engineer.

3 Q. Mr. Dehlin, who do you work for?

4 A. I work for Sargent & Lundy, LLC.

5 Q. And how long -- how long have you
6 worked for Sargent & Lundy?

7 A. Just over 10 years.

8 Q. And can you briefly describe for me
9 what you do at Sargent & Lundy?

10 A. I'm a manager consultant at Sargent &
11 Lundy, so I -- in addition to managing engineers
12 that work in our civil engineering group. I also
13 do various civil engineering design. My primary
14 work is focused on coal combustion residuals
15 management, whether it be design, operation or
16 closure of coal combustion residual units.

17 Q. And what type of units are you talking
18 about?

19 A. Primarily surface impoundments.

20 Q. And -- well, where are those units
21 located.

22 A. I've done work for clients in Illinois,
23 Indiana, Wyoming, Ohio, to name a few. I've --
24 Kentucky. Several across the United States.

1 Q. And but the -- they're at -- the
2 surface impoundments, what kind of operations are
3 they for?

4 A. They're to receive sluice, primarily
5 bottom ash from coal fire power plants.

6 Q. And as part of your work at Sargent &
7 Lundy, do you look at engineering drawings or what
8 kind of drawings do you look at?

9 A. Yeah, I look at engineering design
10 drawings, whether it's proposed new designs for
11 retrofitting existing impoundments, building new
12 impoundments, closing existing impoundments.
13 Also, particularly when looking at closing
14 impoundments, I find it very helpful to look at
15 historical design drawings to understand how an
16 area was originally designed, how it was operated,
17 how it was maintained. That's very important to
18 understand when looking to close a surface
19 impoundment.

20 Q. And Mr. Dehlin, for more information on
21 your experience and background, where can the
22 board look?

23 A. My CV is attached to the back of my
24 report, which I believe is Midwest Generation

1 Exhibit 27. Yes.

2 MS. GALE: Mr. Hearing Officer, we move
3 to qualify Mr. Dehlin as an expert in coal
4 combustion residual management, including
5 historical practices of management, design,
6 and operation, and closure of CCR surface
7 impoundments.

8 THE HEARING OFFICER: Mr. Gunnarson?

9 MR. GUNNARSON: No objection.

10 THE HEARING OFFICER: Thank you.

11 So admitted. So granted.

12 BY MS. GALE:

13 Q. Mr. Dehlin, were you here yesterday
14 during the public comment period?

15 A. I was, yes.

16 Q. Do you recall a comment that the
17 Midwest Generation station has the potential to --
18 excuse me -- Midwest Generation Station
19 impoundments have the potential to flow into Lake
20 Michigan and cause offsite environmental impacts?

21 A. Yes, I recall a statement like that.

22 Q. And when you heard that comment, do you
23 know what document the commenter was referring to?

24 A. That would be referring to the 2023

1 Hazard Potential Classification Assessment.

2 Q. And what is a hazard potential
3 classification assessment?

4 A. It evaluates the consequences that
5 would occur if a dam -- dike in this case -- dike
6 for a CCR surface impoundments were to fail. It's
7 set up based on guidance provided by the Federal
8 Emergency Management Agency specifically for dams,
9 but extended in this case for CCR surface
10 impoundments.

11 Q. And so it's a hypothetical, if it were
12 to fail, right?

13 A. Correct. You look at a situation. If
14 the dike fails regardless of what its factor of
15 safety is, how well maintained it is, you -- your
16 starting point is this embankment has failed, what
17 happens.

18 Q. You're familiar with the Hoover Dam.

19 A. I am.

20 Q. How are you familiar with it?

21 A. I was recently there in August visiting
22 it. I've visited it a couple times.

23 Q. And what is it considered by the
24 engineering --

1 A. The American Society of Civil Engineers
2 has designated it as an ASCE landmark.

3 Q. And have you recently looked at its
4 hazard potential classification?

5 A. I have.

6 Q. What is it?

7 A. It is considered a high hazard
8 potential.

9 Q. And what does that mean?

10 A. That means if the Hoover Dam were to
11 fail, there would be a probable loss of human
12 life.

13 Q. Now, Mr. Dehlin, as a professional
14 expert and an expert here, do you think the Hoover
15 Dam will cause probable loss of life?

16 A. I do not think so. I was not involved
17 in the original design or any sort of maintenance
18 or inspection of the dam. However, it's been
19 there since I think the 1930s, and I understand it
20 to be continually inspected. And hundreds of
21 tourists -- I shouldn't say hundreds. Thousands
22 of tourists visit that site every year, so I do
23 not think there's any signs that that dam is going
24 to fail.

1 Q. So if someone is concerned with the
2 stability of the east pond and dike, where would
3 they look?

4 A. There's an annual safety factor
5 assessment that is prepared, which was prepared
6 last year at the same time the hazard potential
7 classification assessment was prepared.

8 Q. Who prepared this annual safety factor
9 assessment?

10 A. I did.

11 Q. And what does it say?

12 A. It says that the east dike is stable in
13 accordance with recognized engineering guidelines
14 promulgated by FEMA.

15 Q. Thank you.

16 I want to talk about another comment
17 from yesterday. Do you recall the testimony about
18 the ELPC Rising Waters study?

19 A. I do.

20 Q. And that testimony was related to
21 concern over the rising Lake Michigan levels,
22 right?

23 A. Correct.

24 Q. Have you had a chance to review that

1 report?

2 A. I've gone through it. I haven't
3 reviewed it in great detail, but I'm aware of it
4 and have gone through it.

5 Q. Was there a map of the Waukegan shore
6 included in that report?

7 A. Yes.

8 Q. And in that map, what did it include?

9 A. In that map, it showed various -- I
10 guess I would call it stages of flooding depending
11 on the level of -- the water level of Lake
12 Michigan. I believe it started at about Elevation
13 584, which was classified on that as a most likely
14 condition, and then up to Elevation 589, which was
15 classified on the map as a least likely condition.

16 Q. And did that map include the Midwest
17 Generation station?

18 A. Yes, it did.

19 Q. I should clarify. The Midwest
20 Generation station at Waukegan, right?

21 A. Yes.

22 Q. And what did the map show as it relates
23 to the Midwest Generation Waukegan station and the
24 CCR surface impoundments?

1 A. Notably, the east and west ash pond --
2 and I will extend it to the grassy field because
3 that's the subject of discussion today -- those
4 three areas were not flooded.

5 Q. And Mr. Dehlin, do you recall -- I
6 believe also there was comments about concerns
7 over the Lake Michigan drinking water from the
8 Waukegan intake, right?

9 A. Yes.

10 Q. And, in fact, board member Van Wie
11 asked about the Lake Michigan intake channel,
12 right?

13 A. Yes.

14 Q. When you were listening to that
15 testimony, did something come to mind?

16 A. Yes. I'm aware that the City of
17 Waukegan every year publishes water quality
18 reports and so I thought of the most recent water
19 quality report that was published by the city.

20 MS. GALE: And we're going to hand out
21 Midwest Gen Exhibit 44.

22 BY MS. GALE:

23 Q. Mr. Dehlin, what is Exhibit 44?

24 A. It's titled "City of Waukegan 2023

1 Annual Water Quality Report."

2 Q. And where is this document located?

3 Where did you retrieve it from?

4 A. The City of Waukegan's website.

5 Specifically, their water department.

6 Q. And -- well, generally speaking, what
7 is your understanding of this report? What's its
8 purpose?

9 A. Its purpose is to describe what the
10 quality of water is that the city of Waukegan uses
11 for drinking.

12 Q. And I want to turn to the right-hand
13 side, bottom last paragraph. Can you go to the
14 third sentence and can you read that into the
15 record, please?

16 A. Yes. It states: According to the
17 Source Water Assessment report, since the water
18 supply's intake is 6,200 feet into the lake, there
19 is low susceptibility to shoreline contaminants
20 due to mixing and dilution.

21 Q. So first of all, 6,200 feet into the
22 lake, how far is that?

23 A. More than a mile.

24 Q. And what's your takeaway from this

1 sentence? What do you -- what's the meaning of
2 low susceptibility to shoreline contaminants?

3 A. The risk posed by shoreline
4 contaminants -- i.e. Lake Michigan shoreline and
5 Waukegan -- poses little risk to the city's
6 drinking water supply.

7 Q. And does that include Midwest
8 Generation shoreline?

9 A. Yes, that would include it.

10 Q. And that means also the groundwater
11 that's coming off the Midwest Generation site?

12 A. Yes.

13 Q. Thank you. Mr. Dehlin, I want to turn
14 to your Exhibit 27 which is in the binder you have
15 in front of you. And I think you already
16 identified it, but what is Exhibit 27?

17 A. Exhibit 27 is my expert opinion that I
18 prepared on this matter.

19 BY MS. GALE:

20 Q. And in consideration of the grassy
21 field, what question were you answering?

22 A. Whether the grassy field is a CCR
23 surface impoundment as defined under the Illinois
24 Environmental Protection Act.

1 MS. GALE: Can we put the demonstration
2 on, also?

3 We'll get something on the screen
4 for you.

5 THE TECHNICIAN: The PowerPoint?

6 MS. GALE: The PowerPoint, yes.

7 BY MS. GALE:

8 Q. Mr. Dehlin, I want to turn to the
9 screen. What are we looking at here?

10 A. We're looking at two definitions.

11 Q. I'm sorry. What is the purpose of this
12 presentation?

13 A. Oh, this presentation summarizes my
14 expert opinion that I prepared and it specifically
15 highlights key points that I make in my evaluation
16 of determining whether the grassy field should be
17 considered a CCR surface impoundment under the
18 Illinois Environmental Protection Act.

19 Q. And who prepared this presentation?

20 A. I did.

21 Q. And Mr. Dehlin, if you flip to the last
22 tab in your binder, which is -- it should be Tab
23 41, what is that?

24 A. It looks like my presentation.

1 Q. So a copy of your presentation is
2 Exhibit 41 in this binder, right?

3 A. Yes.

4 Q. And where can someone look for the
5 basis of the information in these slides?

6 A. In my report, which is Midwest
7 Generation Exhibit 27.

8 Q. And I think you already answered this,
9 but we'll start again. What is shown on Slide 1
10 of your presentation?

11 A. Slide 1 shows two definitions that are
12 important to this matter. The first definition is
13 the definition for a CCR surface impoundment under
14 the Illinois Environmental Protection Act. The
15 second definition is the definition for an
16 inactive CCR surface impoundment as defined by
17 Part 845, which I'll call the Illinois CCR rule.

18 Q. And we will get into detail how you got
19 there, but in your expert opinion, is the grassy
20 field a CCR surface impoundment?

21 A. No.

22 Q. Is it an inactive CCR surface
23 impoundment?

24 A. No.

1 Q. What do you have to be to be an
2 inactive CCR surface impoundment?

3 A. So to be an inactive CCR surface
4 impoundment as defined under the Illinois CCR
5 rule, you have to first be a CCR surface
6 impoundment.

7 Q. Let's turn to the next slide, Slide 2,
8 please. Mr. Dehlin, what are we showing on this
9 slide?

10 A. This shows a 2022 area photograph of
11 the Waukegan Generating Station. This is figure
12 A-1 from my report.

13 Q. And what does the red -- do you see the
14 red line? It's kind of hard to see in the figure,
15 but the red line on the southern side of the --
16 red line -- or the red boundary on the southern
17 side of the diagram?

18 A. Yes. It is hard to make out, but
19 there's a red line that goes around the grassy
20 area, the west ash pond, and the east ash pond,
21 which as I'll explain later, I have defined as the
22 original slag field boundary.

23 Q. And for the record, where is this
24 picture also located?

1 A. Figure A-1 of my report.

2 Q. And it's in the binder sitting in front
3 of you on a large -- on a large piece of paper,
4 right?

5 A. Yes, it is.

6 Q. Yeah. So, generally speaking, on the
7 South Side of the station, what is located there?

8 A. South Side of the station, there's a
9 wastewater treatment plant.

10 Q. That's -- I meant -- I'm sorry. I was
11 pointing to -- right. South of the station is the
12 wastewater treatment plant. I'm looking at the
13 pond. Just to orient ourselves, what are the -- -

14 A. Yes. So the south portion of the
15 station's property, there are three entities going
16 from east to west. You have the east ash pond,
17 the west ash pond, and the grassy field. That
18 total area is about 40 acres. Each of them are
19 split about a third each. The east ash pond and
20 the west ash pond each, including their
21 embankments, are about 14 acres, which is what I
22 have labeled there. If you look at just the
23 impoundment area -- in other words, the area that
24 holds an accumulation of CCR and liquids -- each

1 pond is about 10 acres.

2 Q. And looking at Figure A-1, where is the
3 west -- approximately, where is the western
4 boundary of the Midwest Gen station on the
5 southern side of the station?

6 A. It's -- there's a parcel currently
7 owned by ComEd that's to the west of the station's
8 property line, which is represented by the red
9 north-south line running along the west edge,
10 right where it says "original slag field
11 boundary."

12 Q. And then where is -- I think you
13 already answered this, but what is the southern
14 boundary of the midwest generation station?

15 A. The southern boundary is represented by
16 the southern red line, which that's the property
17 line the station has with the wastewater treatment
18 plant to the south.

19 Q. Let's turn to the next slide, please.
20 Mr. Dehlin, the question that you posed earlier --
21 to answer that question, what was your
22 methodology? And I'll point you to page 3.1 of
23 your report.

24 A. So my methodology, as detailed in my

1 report, is to gather as many design inputs as
2 possible to assess the history of this site. So
3 when you're trying to build -- I'll call it a
4 "history of a construction," you want to rely on
5 -- design drawings are preferable because that
6 will detail engineering features. It'll call
7 things out. We also looked at the NPDES permit
8 records that were available in the Illinois EPA's
9 recommendation in this matter. And then of
10 course, historical area photographs. And we'll
11 use those to build a timeline, a history.

12 And then once you have your design
13 inputs gathered, the question we're trying to
14 answer is, is the grassy field a CCR surface
15 impoundment? And in order to be a CCR surface
16 impoundment, a given area needs to meet three
17 criteria, and those are per the Illinois
18 Environmental Protection Act: The area has to be
19 a natural topographic depression, a man-made
20 excavation, or diked area; it has to be designed to
21 hold an accumulation of CCR and liquids; and it
22 has to be used to treat store or dispose of CCR.
23 If it fails any one of those criteria, it is not a
24 CCR surface impoundment.

1 Q. All right. So I want to talk about
2 terms. Let's look at Part 2 or part -- Section B
3 of your methodology.

4 Is the term "groundwater" in the
5 definition?

6 A. No, it's not.

7 Q. And as the term "groundwater" is not in
8 the definition, what can you conclude?

9 A. The location of groundwater within an
10 area that you're trying to determine whether or
11 not is a CCR surface impoundment has no bearing on
12 whether that area is a CCR surface impoundment.

13 Q. And are the terms "pollution" or
14 "contamination" in the definition?

15 A. No.

16 Q. And based upon that, what can you
17 conclude?

18 A. The presence of pollution or
19 contamination in an area that you are trying to
20 determine is a CCR surface impoundment has no
21 bearing on whether that area is a CCR surface
22 impoundment.

23 Q. Let's talk about "accumulate." As a
24 professional engineer, what does that mean?

1 A. To increase in quantity of something.

2 Q. Is there some sort of temporal or time
3 element to it?

4 A. I think this was a discussion that was
5 brought up, as I recall, yesterday in several
6 witnesses, and I think the -- there has to be an
7 increase in volume, under the context of the CCR
8 surface impoundment, to allow for settling to
9 occur. That's what's going on here. You have to
10 have a volume of water that allows for
11 sedimentation.

12 Q. Would the next slide with your diagram
13 help you in this?

14 A. Yes.

15 MS. GALE: Can we move to the next
16 slide, please?

17 BY MS. GALE:

18 Q. So Mr. Dehlin, what are we showing on
19 Slide 4 of Exhibit 41?

20 A. So I'll focus on the left side this
21 slide because this ties into the definition of a
22 CCR surface impoundment and what the definition is
23 meant to represent. An accumulation of water is
24 important for a CCR surface impoundment because a

1 CCR surface impoundment is used as a settling
2 basin or sedimentation basin to promote the
3 settling of CCR particles in ash sluice water
4 within the pond area prior to that water being
5 discharged to some other place, whether it be a
6 water source or something else.

7 Q. So what is the difference between -- so
8 on the left-hand side where it says sedimentation,
9 is that also accumulation?

10 A. Yes, you're -- so what you have is an
11 accumulation of water that allows for CCR
12 particles to settle out. In order for CCR to
13 settle out in water, you need a certain height of
14 water and you need time to -- gravity and time.
15 That's what's required for sedimentation to occur.
16 And you can only have settling if you have an
17 accumulation of water that allows for ash
18 particles to be settled out.

19 Otherwise, what you will have, if you
20 look on the right-hand side, is infiltration where
21 you have ash sluice water going into an area with
22 -- this is permeable floor, uneven sandy floor,
23 which is what the original conditions were at the
24 slag field site at Waukegan. Or water will

1 infiltrate out through the permeable floor. And
2 that sand floor works as a filter it filters out
3 the ash as water infiltrates out through the
4 bottom.

5 Q. And I guess going back, to accumulate
6 water, what has to be at the basin -- the
7 bottom -- excuse me -- the bottom of the basin?

8 A. You need some sort of barrier.

9 Q. And for infiltration, what do you want
10 at the bottom of the basin?

11 A. You don't want a barrier. You want
12 something that's permeable that's going to allow
13 for water to infiltrate out, but that sand will
14 work as a filter to keep the ash on top.

15 Q. And to encourage movement through an
16 infiltration such as sand, in addition to sand,
17 what would a property do?

18 A. So if you don't just -- you can't rely
19 just primarily on the permeable floor, you can
20 excavate a ditch to get water out of an area.

21 Q. Let's talk about the term "design" and
22 I want to --

23 MS. GALE: If we can go back to
24 Slide 3, please.

1 BY MS. GALE:

2 Q. And we see at B-2 the term "designed."
3 As a professional engineer, what does the term
4 "designed" mean? And I can point you to either
5 your cover letter on your report or page 5.1.

6 A. Certainly. So the first thing that I
7 did was look to see if there was a definition for
8 "designed" either in the Illinois Environmental
9 Protection Act or Part 845, which I did not see
10 any. So for this matter, I went to Merriam
11 Webster's where I go if there's not a definition
12 in a statute or regulation. So I'd like to read
13 the definition that I found in Merriam Webster
14 into the record.

15 Merriam Webster offers two applicable
16 definitions for the verb "design." One, to
17 create, fashion, execute, or construct according
18 to plan; or two, to conceive and plan out in the
19 mind to have as a purpose or to devise for a
20 specific function or event.

21 Q. And what did you take away on that
22 definition?

23 A. To summarize, when you design
24 something, you intend it to have a specific

1 function. There's a common phrase, Form follows
2 function. The way that you design something to
3 be, to operate, it's for a specific purpose.
4 There's intent behind it.

5 Q. So as it relates to here, how does the
6 design -- as it relates to the definition of CCR
7 surface impoundments, how does the term "design"
8 function?

9 A. How I would read this is the area is
10 intended to hold an accumulation of CCR and
11 liquids. And to extend it further, going back to
12 the slide showing sedimentation --

13 MS. GALE: Can we go to the slide
14 showing sedimentation on Slide 4?

15 BY MS. GALE:

16 Q. There you go.

17 A. You are intending this area to hold an
18 accumulation of CCR and liquids to promote
19 sedimentation. That is the primary function of a
20 CCR surface impoundment.

21 BY MS. GALE:

22 Q. Let's turn to Slide 5. Well,
23 Mr. Dehlin, what does this map show?

24 A. This is a property plat that shows the

1 property lines for the Waukegan Generating Station
2 circa 1950. There's -- given the age of this
3 drawing and its quality, I don't have an exact
4 date for it, but it's circa 1950.

5 Q. And it it's in your report?

6 A. Yes, it is.

7 Q. And how did you use this map as part of
8 your overall opinion?

9 A. So what you'll -- even though it's
10 relatively poor quality, you can make out some
11 very specific features. One, you can see slag
12 field called out, probably in the middle of this
13 slide. Slag field then has four arrows pointing
14 out in it. You also see property lines and you
15 also see a fence line just above where the drawing
16 calls out slag field.

17 Why is this important? First thing
18 that we want to do when assessing an area is
19 define its boundaries. A good place to start when
20 defining boundaries for a station, specifically a
21 disposal site, is where are the property lines.
22 So that's what this map was used for.

23 MS. GALE: Let's turn to Slide 6,
24 please.

1 BY MS. GALE:

2 Q. And Slide 6, what are we seeing here?

3 A. This is a 1939 aerial photograph of the
4 site. This is Figure A-2 in my report and what
5 this shows is several features that are important
6 in defining the boundary for the original slag
7 field that predated the ash ponds and grassy
8 field. So what I'm trying to do here -- what I am
9 doing here is orienting us. I'm trying -- I'm
10 showing the original slag field boundary so that
11 we can go forward in time in several subsequent
12 aerial photographs and see how this area changes.

13 Going through and preparing this
14 report, there's a lot of documents to go through,
15 and although this presentation is chronological
16 and the report's chronological, what I did in
17 reviewing documents was identifying features that
18 are called out, particularly in the 1970s
19 documents, and focusing on aerial photographs and
20 seeing how specific features related to the
21 operation of this area -- either were developed,
22 changed over time -- trying to understand the
23 history of this site. So what this shows is the
24 original sand dunes of this site before slag was

1 sent out to the site, and the features that are
2 labeled on here are just meant to orient so that
3 the reader can focus on specific portions as they
4 move through the aerial photographs in Appendix A
5 of my report.

6 Q. And you mentioned the sand floor. So
7 they call out an original slag field. That
8 doesn't mean there's slag there right now, right?

9 A. Correct.

10 Q. Or excuse me. That doesn't mean
11 there's slag as it's shown in 1939?

12 A. Yes, correct.

13 Q. Thank you. But is this the sand floor?
14 When you were discussing infiltration, is this
15 what you were talking about?

16 A. Yes it is.

17 Q. And at the bottom you have a call-out
18 in blue. What is that?

19 MS. GALE: If we could blow that up so
20 everybody can see.

21 BY MS. GALE:

22 Q. What is that showing?

23 A. That is the south ditch. I took that
24 name from a circa 1970s NPDES permit document.

1 There's a sketch that we will show later in the
2 presentation that shows this area labeled as
3 "south ditch." So coming back to what I had said
4 previously, I take features that are identified on
5 the drawings or sketches and look at aerial
6 photographs and try to track the history of that
7 feature going backwards and forwards in time.

8 So this south ditch is particularly
9 important to the operation of this area as we'll
10 see throughout history, and here I'm identifying
11 its presence in 1939.

12 Q. And we already discussed the property
13 south of the property, but you said it's
14 particularly important. What is south of the
15 property that you -- south of the Midwest Gen
16 property here?

17 A. A wastewater treatment plant, which I
18 understand to have been present in 1939, so it
19 makes sense that the south ditch would follow the
20 southern property line for the station.

21 Q. Why does that make sense?

22 A. Because if -- as you'll see as we move
23 forward in time, if you're placing waste out into
24 this field, you'll want to ensure that waste does

1 not spill over onto the neighboring property.

2 Q. And we'll we're going to get into the
3 rest of your aerial photos. The drawings on these
4 aerial photos, who did those?

5 A. I did.

6 Q. Great.

7 MS. GALE: Let's turn to Slide 7.

8 BY MS. GALE:

9 Q. So what is Slide 7 showing?

10 A. This is a development plan that was
11 prepared circa 1950 for Units 6 and 7.
12 Specifically, what this shows is the planned
13 expansion of the station's coal pile to support
14 the two new units. Going back to the property
15 plat that we had showed on previous slides, this
16 focuses in on -- the northeast corner, I'll call
17 it, of the slag field, which you can see called
18 out on this drawing just below the boundary of the
19 proposed expansion for the coal yard.

20 Q. I want to talk about the term "slag
21 field." Well, you said earlier as part of your
22 job, you look at historic drawings for power
23 plants throughout the nation, right?

24 A. Yes.

1 Q. In your opinion, have you seen the term
2 "slag field" in any of those other drawings?

3 A. I have only ever seen "slag field"
4 called out specifically for the Waukegan
5 Generating Station.

6 Q. At other stations, what are they
7 called?

8 A. I've seen for an area receiving sluiced
9 ash, typically it's "pond basin," something like
10 that.

11 Q. What does that tell you?

12 A. That tells me that this area was not a
13 pond. This isn't certainly the only thing I used
14 to come to the conclusion that this area was not a
15 pond, but the fact that it is called a field and
16 not a pond tells me that a pond was not present
17 here. Otherwise, it would have been called a
18 pond.

19 Q. And who was drawing this drawing?

20 A. An engineer.

21 Q. And so it was the engineers who called
22 it a slag field, right?

23 A. Correct.

24 Q. Yeah. And just for the record, where

1 does this drawing come from?

2 A. This drawing came from the Waukegan
3 Generating Station.

4 Q. All right.

5 A. And there's one other feature I did
6 want to call out here --

7 Q. Oh, sure.

8 A. -- I apologize, that's important to
9 moving forward, two features that really helped
10 out in determining boundaries and understanding
11 the operation of this area. You see the fence
12 line that runs through the middle of the proposed
13 development for the coal pile. And then there's
14 -- starting in the middle top of the drawing
15 moving straight south, there's a slag line called
16 out that even though it doesn't show to be
17 continuing going into the slag field, presumably
18 it goes into the slag field. So those two
19 features were used to make adaptations on
20 subsequent aerial photographs that we'll see.

21 Q. Got it.

22 MS. GALE: Let's go to Slide 6. Oh,
23 wait. Slide 8, sorry.

24 BY MS. GALE:

1 Q. What are we depicting here?

2 A. This is a 1946 aerial photograph of the
3 site. This is Figure A-3 of my report. And at
4 this time looking at the difference between the
5 1946 aerial photograph and the 1939 aerial
6 photograph, you see black or gray color in 1946 in
7 the area that was previously white. And knowing
8 on that drawing that we just looked at where we
9 saw a slag line for the units 4 and 5 coming out
10 to this area, we understand this area around this
11 time is now being used to send sluice to slag to
12 this area. So the black that you see now over
13 this area of interest is slag.

14 Q. And let's go to Slide 9 because I think
15 that'll help in our conversation. So what are we
16 showing in Slide 9?

17 A. Slide 9 is an overlay of the drawing
18 that we looked at in Slide 7 and over the aerial
19 photograph shown in Slide 8. So this was helpful
20 to understand what the northern boundary would be
21 for the slag field, specifically the fence line
22 that's called out in the drawing represents the
23 northern boundary for the slag field. So doing
24 this overlay allowed us to identify what that

1 northern boundary would be.

2 Q. And the South Side of the property,
3 again, there's a blue feature. What is that?

4 A. That is the south ditch, as I said
5 previously, a feature that was identified in 1970s
6 documents. So we're tracking the -- what the
7 south ditch looks like as you go backwards and
8 forwards in time.

9 Notably for the south ditch, the reason
10 we can say that it's a ditch at this time is if
11 you look at the southeast corner of the original
12 slag field boundary outlined in red, you'll see
13 sort of a meandering path which is the natural
14 path the water would have taken when discharged
15 from the south ditch to get into Lake Michigan.

16 Q. And so for this slag field, what was
17 its purpose for the station at that time?

18 A. It's purpose was to receive -- the
19 station's trying to get CCR out of the station, so
20 they're sending it to the slag field. So the area
21 was meant to receive CCR, but it was also meant to
22 remove water as efficiently as possible, whether
23 that be through infiltration through the sandy
24 floor. Or if water was to make it to the southern

1 end of the property, it would be received by the
2 south ditch and would discharge into Lake
3 Michigan.

4 Q. So Mr. Dehlin, as a professional
5 engineer back in '46, was there a design here?

6 A. No, no.

7 Q. I mean, what do you mean by that?
8 Explain yourself.

9 A. I don't see any -- one, it's
10 interesting that there's no design features shown
11 on the historical design drawings that we have for
12 this area where it just calls out slag field. You
13 see a pipeline that's sent out to an area, which
14 tells me the station sent a pipeline out to the
15 sandy floor, understanding that this water was
16 going to infiltrate through the sand floor, the
17 sand would filter out the CCR, keep that on top.
18 They dug a ditch on the southern end to receive
19 any potential runoff that would make its way to
20 the southern end of the property and ensure you're
21 not putting wastewater onto the wastewater
22 treatment plant's property. But I don't see any
23 other design or intent to accumulate certain
24 liquids.

1 Q. In fact, what was likely the intent?

2 A. The intent was just to drain the
3 liquids as fast as possible out of this area.

4 Q. So, Mr. Dehlin, in your expert opinion
5 as a professional engineer, was the slag field
6 designed to hold an accumulation of CCR and
7 liquid?

8 A. No.

9 MS. GALE: Let's go to Slide 10,
10 please.

11 BY MS. GALE:

12 Q. What does this diagram show?

13 A. This shows a 1961 aerial photograph of
14 the site. This is figure A-4 of my report. The
15 notable feature that I want to call out in this
16 slide is the -- within the western area of the
17 original slag field, you see a ditch that has been
18 excavated starting in the northwest corner heading
19 about straight south for most of its run before
20 turning diagonally into the south ditch. So we
21 know the south ditch exists. We understand its
22 purpose. And going back through time, we see that
23 it is constantly, constantly present. I mean,
24 '39, '46, '61.

1 This feature that I've outlined in blue
2 would have been excavated to ensure water would
3 drain from the area that they're sluicing out to
4 the south ditch out on Lake Michigan.

5 Q. So you said there's a ditch that's
6 outlined in blue in the middle of the slag field,
7 right?

8 A. Correct.

9 Q. How do you know that's a ditch?

10 A. So we knew the south ditch is a ditch
11 and it's tied -- that feature is tied into the
12 south ditch and it's a very narrow path. Using
13 all of that evidence, it follows that that area is
14 a ditch -- or that feature is a ditch.

15 Q. Right. Because if they're tying into
16 the south ditch, what are they trying to do?

17 A. They're trying to drain water from the
18 north and anywhere I guess adjacent to that ditch
19 into the south ditch. You're trying to remove
20 water as efficiently as possible. That's what a
21 ditch is meant to do.

22 MS. GALE: Let's turn to Slide 11,
23 please.

24 Mr. Hearing Officer, can we take a

1 10-minute break, please.

2 THE HEARING OFFICER: Sure. Before we
3 go, though, I do want to note for the record
4 that again like yesterday, we have member
5 Jennifer Van Wie present. And we also have
6 staff attorney Vanessa Horton and technical
7 unit, Essence Brown.

8 MS. GALE: Thank you.

9 THE HEARING OFFICER: 10 minutes?

10 MS. GALE: Thank you.

11 THE HEARING OFFICER: Thank you. Off
12 the record.

13 (Whereupon, there was a recess
14 in the proceedings.)

15 THE HEARING OFFICER: We're back on the
16 record at approximately 9:50 a.m. You may
17 continue, Ms. Gale.

18 MS. GALE: Thank you, sir.

19 BY MS. GALE:

20 Q. Mr. Dehlin, we're looking at Slide 11
21 of your presentation, which is Exhibit 41. What
22 does this show?

23 A. This shows an aerial photograph of the
24 site from 1970. This is also Figure A-5 in my

1 report.

2 Q. What are the operations that you're
3 seeing in this photo?

4 A. So for the first time in this site's
5 history, we're seeing embankments constructed.

6 Q. Can I stop you right there?

7 MS. GALE: Can we blow-up that area so
8 we can more easily see it?

9 BY MS. GALE:

10 Q. So you said it's the first time we're
11 seeing embankments. Please continue.

12 A. Sure. So I'll start on the southeast
13 side of the original slag field boundary and work
14 my way around. So starting in the southeast
15 corner, what you see is white, which is the sand
16 that was excavated to make -- or is to make a
17 embankment, but as a result of excavating creates
18 what's labeled on this figure as "east ditch." So
19 sand material was excavated from that ditch and
20 used to create a embankment, and you can follow
21 the sand embankment starting in the southeast
22 corner, moving northeast, and then right when it
23 gets to the northern boundary of the original slag
24 field, it starts moving straight east. And then

1 you can follow the northern embankment further
2 west until about two-thirds of the solid -- or I'm
3 sorry, the slag field boundary, at which point
4 that embankment turns straight south heading south
5 towards south ditch. And then the embankment
6 continues -- curves right before it gets to south
7 ditch and meets up with the southeast corner of
8 the sand embankment.

9 So for the first time at this site, you
10 see a diked area has been constructed.

11 Q. And to the west, you said the boundary
12 line on the western side, the west embankment --
13 what's to the west of that?

14 A. That is what I refer to as the inactive
15 slag field. I refer to it as the inactive slag
16 field because at this time this station is
17 building its first ash pond to send sluice ash to.
18 So this western third of this original slag field
19 area is no longer going to be used for disposal of
20 CCR from the station.

21 Q. And we'll get to it later and we'll
22 touch upon it, but what -- look on the eastern
23 side of the inactive slag field. What can you
24 kind of see going on there?

1 A. The eastern side of the inactive slag
2 field, there's an embankment that is being
3 constructed to separate what I'd call the original
4 ash pond at the site from the inactive slag field.

5 Q. And so is that fully-diked area that is
6 for this new settling basin that you're
7 identifying here -- does that include what is now
8 known as the grassy field?

9 A. No, it does not. The grassy field
10 area, as we'll show later, occupies the area
11 that's labeled as inactive slag field in this
12 photograph.

13 Q. And the southern feature that's in
14 blue, what is there?

15 A. That's the south ditch that we've
16 discussed and shown in previous aerial
17 photographs, which maintains its same alignment,
18 follows that southern property line, and extends
19 to the western property line.

20 Q. And so it extends all the way to the
21 western property line. Again, what does that,
22 having that southern feature, the ditch there --
23 the western property line tell you?

24 A. Even though the inactive slag field is

1 now inactive and the station is no longer sending
2 ash to the western third of this area, you still
3 need to ensure there's not an accumulation of
4 liquids. So that's what's what the station is
5 doing. So by maintaining the south ditch -- and
6 we see this in the 1974 aerial photograph -- the
7 station strategically modified this area to ensure
8 that it would drain either predominantly south or
9 a little bit to the north as well, so avoided
10 accumulation of liquids.

11 Q. And I want to turn to Board Question
12 No. 2. And we kind of touched upon it, but was
13 the CCR from the western third of the old pond
14 removed before the construction of the grassy
15 field.

16 So first, what's your reaction to the
17 term "old pond"?

18 A. "Old pond," as I understand, is the
19 term the agency used to describe what I'm
20 referring to as the original slag field. The
21 original slag field was not a pond, so I
22 understand that this question focuses on what is
23 defined here as the inactive slag field, that
24 western third of the original slag field.

1 Q. And based upon this photograph and your
2 understanding, was -- well, was CCR removed?

3 A. Yes, some CCR was removed. You can see
4 in this photograph cuts that have been made within
5 the CCR that was placed there, but not all CCR was
6 removed.

7 Q. Let's turn to Slide 12. What do we see
8 here?

9 A. This is a sketch that appears in a, I
10 believe 1972 NPDES permit application. This
11 sketch is meant to show the sampling locations for
12 the two discharge locations that the station is
13 applying for to be allowed to discharge. One of
14 those discharge points is shown in the area that
15 has a line going around it that says slag field
16 and in parentheses, settlement basin. This, as I
17 understand it, will be outfall 02 which appears in
18 other NPDES permit applications in the record.

19 So what this sketch shows if we go back
20 to the -- we don't have to go back to the 1971
21 photograph, but if you recall that, this shows
22 that the original ash pond, that first diked area,
23 that would have been used at this time to receive
24 sluice ash, and as it's called out in this figure

1 to function as a settlement basin. This is the
2 first settlement basin that appears at the site.

3 And some notable features in addition
4 to the line that goes around the area are the
5 culverts. Culverts are used to discharge water
6 through otherwise solid objects, so that line that
7 goes around the slag field/settlement basin as
8 it's called out here, which I refer to as the
9 original ash pond. Are the culverts that would
10 have been used to discharge water that had been
11 treated. Two culverts flow into the north ditch
12 which then flows in the east ditch out to Lake
13 Michigan. And then there's a southern culvert
14 that flows into the south ditch which then goes
15 into Lake Michigan.

16 Q. And for the record, you have it marked
17 here on this slide, but where is this drawing
18 located?

19 A. Sure. This drawing is located in
20 Midwest Generation Exhibit 22 at 11 and Agency
21 Exhibit 32 at 17.

22 Q. And Board Question No. 3: Are there
23 better quality versions of the chart/diagrams on
24 page 9 through 10 of Exhibit 22? It's difficult

1 to decipher. Mr. Dehlin, where would we also -- I
2 mean, we can see right here. I don't know if
3 they're better, but perhaps clearer are Illinois
4 Exhibit 32, right?

5 A. Correct.

6 Q. And in answer to the board's question.
7 These are historic documents. They're -- you
8 know, they're the best we can do.

9 And Mr. Dehlin, is this sketch to
10 scale?

11 A. Absolutely not.

12 Q. And even not to scale and I think you
13 mentioned some key features, how is it important
14 and relevant to your opinion? Or is it useful for
15 your opinion?

16 A. It is useful to my opinion because even
17 though the sketch isn't drawn to scale, I can
18 understand what the person who drew the sketch was
19 trying to convey. The station sluiced via the
20 slag lines that are called out on the sketch ash
21 to a settlement basin that was used to settle out
22 ash before treated water was discharged in that
23 case with the NPDES permit that the station was
24 applying for.

1 Q. And on the south side of the station
2 what feature do you see?

3 A. The south ditch that was shown in
4 aerial photographs going back to 1939.

5 Q. And what is the location -- in a east/
6 west, what is the location of the south ditch?

7 A. Along the southern property line with
8 the wastewater treatment plant to the south, and
9 it extends to the western property line.

10 Q. And on the western side of that area,
11 what is not shown?

12 A. There is a space shown between the
13 settling basin and the western property line. And
14 although it is not labeled, it is notable that the
15 settling basin embankment doesn't extend all the
16 way to the western property line. So this blank
17 space based on that 1970 aerial photograph we just
18 looked at would be the inactive slag field, which
19 is the present-day grassy field.

20 Q. So I guess I'll ask this: Do you think
21 that space is intentional?

22 A. Yes.

23 Q. Slide 13. What is Slide 13,
24 Exhibit 41, depicting?

1 A. Slide 13 shows a 1974 aerial photograph
2 of the site, which is figure A-6 in my report.

3 Q. And what are we seeing on the eastern
4 side of Slide 14 -- excuse me, slide 13?

5 A. So recalling the 1970 aerial photograph
6 of the site, we saw an ash pond under
7 construction. Here in 1974 we see the settling
8 basin operating. If you recall the 1972 sketch
9 that we just looked at, this eastern two-thirds
10 area that I've labeled as original ash pond is the
11 settling basin that was called out in the 1972
12 sketch. You can see ash and you can see water
13 that has accumulated within the pond supporting
14 that this area is now operating, as we understand
15 it, as a CCR surface impoundment. And we'll show
16 later why we can say that this is -- we can
17 differentiate between ash and water that is in
18 this area. 1974 is actually the first time we
19 have a design drawing that calls out key features.

20 So we'll touch on that in a little bit,
21 but just to orient everyone, what we're seeing
22 here in the eastern two-thirds is the original ash
23 pond. I have called out the two discharge
24 culverts and the northern boundary of the original

1 ash pond that were called out on the sketch that
2 we just looked at. And you can see a peninsula --
3 or I guess I would call it an interior dike that
4 separates the ash sluice line, which is shown in
5 magenta, on the west side of the original ash pond
6 and the discharge culverts that I've just
7 discussed.

8 Q. And looking at Slide 13, which is your
9 Figure A-6, what is the distinguishing features
10 that lead you to your conclusion that the grassy
11 field is not part of this ash pond?

12 A. You have an embankment that -- the
13 western embankment that we discussed in the 1970
14 aerial photograph, that you can clearly
15 distinguish about two-thirds along the area that's
16 running straight north-south.

17 Q. And again, on the southern side in
18 blue, what is that feature?

19 A. The south ditch.

20 Q. And how -- again, how far does the
21 south ditch go?

22 A. To the western property line.

23 Q. And so when they -- well, if we have
24 this embankment on the west hand side of what

1 you've depicted as the original ash pond, what is
2 the intent then of the purpose of the embankment?

3 A. The intent is to hold an accumulation
4 of water within the original ash pond to allow for
5 settlement to occur. But also it functions as a
6 means of ensuring that water -- that sluice water
7 does not go into the inactive slag field area.

8 Q. Okay. Let's turn to slide 14.

9 Slide 14, what is depicted here?

10 A. This is an overlay of NUS Corporation
11 drawing -- I'll read the drawing number here --
12 5082-C-5005. NUS Corporation was the engineer of
13 record that designed the wastewater treatment
14 facilities for Waukegan in the late 1970s, which
15 included construction of the east and west ash
16 ponds. This is an overlay of the NUS Corporation
17 drawing onto the area that the drawing represents.
18 And I don't know if we're able to Zoom in to that
19 overlay.

20 Q. Yeah.

21 A. So what I want to point out here is for
22 the first time through this evaluation we not only
23 have an aerial photograph, but we have topographic
24 data that corresponds to an aerial photograph.

1 The aerial photograph in Figure 6 of my report is
2 from 1974. The drawing from NUS Corporation is
3 from the late 1970s, but the survey information
4 that's shown is also from 1974. There's two
5 topographic lines that are shown. The lighter
6 lines represent topographic data obtained in 1974
7 around the time that the aerial photograph was
8 taken.

9 Q. So yeah, just to be clear for the
10 record, the lighter lines -- there are dark lines
11 running north-south, right?

12 A. Correct.

13 Q. And so lighter, I guess almost beyond
14 that, what do you see? Are those the topographic
15 lines you're talking about?

16 A. Yes.

17 Q. Okay. And you gave the drawing number.
18 Where is this drawing located in your report?

19 A. In Appendix B. I should also note
20 going back to something that I previously said,
21 the reason that we're able to discern ash material
22 and water in the aerial photograph is because of
23 this drawing. If you look on the middle right of
24 the zoomed in area, you'll see some text. It's

1 hard to see on the screen, but if you look at
2 Appendix B of my report, you'll see that the
3 engineer labeled this area "ash pond water
4 elevation equals 4.1." So they have clearly
5 showed impounded water in this original ash pond
6 area. Notably, no water is shown in the inactive
7 slag field area.

8 Q. Thank you.

9 A. Yes.

10 Q. Let's turn to Slide 15, please. So
11 Slide 15, what does this show?

12 A. This shows a heat map that we prepared
13 using the NUS Corporation drawing, 5005. So what
14 we did is took the topographic information that
15 was provided on this drawing in 1974, imported it
16 into Autocad, and then created a surface that then
17 allowed us to show relative changes in elevation
18 to better visualize what this area looked like on
19 a 2D map.

20 So what this heat map shows is areas of
21 higher elevation are shown in warm colors, areas
22 of lower elevation are shown in cold colors, and
23 it follows the order of the rainbow. So red is
24 highest elevation, purple is lowest elevation.

1 Q. So looking at the heat map, the red,
2 what is the red showing?

3 A. It shows the embankment for the
4 original ash pond that was present there, which
5 makes sense. The embankment was going to be built
6 over existing land, so that's going to be the
7 highest elevation. And then a feature that we
8 have discussed several times today is the south
9 ditch. That's the low point meant to drain
10 everything out of this area. That shows up as
11 purple, which is logical.

12 And then looking at how the colors
13 change across the map, if you go west of the
14 embankment, you'll notice that the colors go from
15 red, orange, yellow, green, blue to purple. So
16 that means runoff. So a lot of runoff from that
17 area will drain primarily east to west and then
18 south -- although there is some area near the
19 north that will drain north into the north ditch
20 that's annotated on this slide.

21 Q. So based on this heat map, which is
22 based upon the topography from one of the original
23 drawings, what are you -- well, what was the
24 intent here?

1 A. The intent was to ensure that this area
2 did not accumulate liquids, that when rain fell in
3 this area it would drain predominantly south; or
4 if it fell in a northern area, it would drain
5 north.

6 Q. And just for my own edification,
7 there's that little red button coming off the...
8 what is that?

9 A. That's a mound of ash that if you
10 continue following that red button, you can see
11 that the colors change from orange to yellow to
12 green. So think of it as just a mound that would
13 have drained either to the south or to the north
14 when rainwater hit.

15 Q. On the northwest corner of the inactive
16 slag field, there's a not-colored area. What's
17 going on there?

18 A. So if you looking at the original NUS
19 Corporation drawing, that area is labeled "piles"
20 and there's a dashed line that makes up the
21 boundary of what these piles were. And you'll
22 notice that the topographic data, survey data
23 stops at these piles. That tells me that accurate
24 survey information was not attainable in this

1 area, so it's excluded from the heat map because
2 we don't have any topographic data.

3 But because it's labeled "piles," it
4 would be piles of ash that when water hit it,
5 would drain out. It's not like it was a
6 depression meant to collect water or anything.
7 It's piles of ash that are getting drained
8 probably in this area to the north. Or if it was
9 in the southern boundary, the piles would drain
10 south.

11 Q. And have you been to the Waukegan
12 station recently?

13 A. I have.

14 Q. Are there piles on that area to this
15 day?

16 A. No, there are no piles.

17 Q. This heat map, where is it located in
18 your report?

19 A. It is Figure 4-1 of my report.

20 Q. Let's turn to Slide 16, please.

21 Slide 16 shows current record documents. How did
22 these help in coming to your conclusion?

23 A. So these two specific exhibits from the
24 NPDES permit record for the station that was

1 included in the agency's recommendation refer to
2 how the original ash pond was split into the
3 present-day east and west ash ponds. Or maybe
4 what I should say more accurately, how the east
5 and west ash ponds were constructed within the
6 existing -- sorry -- within the footprint of the
7 original ash pond. And both of these exhibits
8 pertain to the same permit number, which is 1977
9 EB 3699.

10 Q. Let's turn to the next slide. And --
11 well, what are we looking at here?

12 A. Okay. So the picture that we see on
13 the slide shows now NUS Corporation proposed to
14 modify the ash settling basin at Waukegan as a
15 part of the wastewater treatment facilities
16 project that was constructed in the late 1970s.
17 Specifically, what we're looking at is two lined
18 ash ponds to be constructed within the existing --
19 I apologize -- within the footprint of the
20 original ash pond.

21 Q. And the drawing is -- I mean, the
22 reason we're correlating with the prior page is
23 the drawing -- they're both from the same permit
24 record, right?

1 A. Correct.

2 Q. Okay. And what do you have called out
3 under Exhibit -- IEPA Exhibit 33 at 23?

4 A. This is the engineer of records', NUS
5 Corporation's, description of the wastewater
6 treatment facility that was being constructed.
7 It's an excerpt from it specifically referring to
8 how bottom ash is going to be handled at the
9 station. And it states, The existing ash pond
10 will be modified to provide for easier and
11 redundant operation. The existing single pond
12 will be split into two separate ponds, each
13 approximately 10 acres.

14 Q. So I think earlier you stated that each
15 of the two current ponds would be 10 acres. And
16 this says each would be 10 acres. What does this
17 tell you?

18 A. So this tells me that what the engineer
19 is referring to is present day east and west ash
20 ponds.

21 Q. What does it show west of the west
22 pond? And I guess on this diagram it's called
23 "lined ash pond No. 1"?

24 A. West of lined ash pond No. 1?

1 Q. Yes, sir. I thank you.

2 A. That is -- the engineer is calling out
3 an area to be graded and seeded.

4 Q. And so that -- is that -- on that
5 overlay we had of topography, is that what they're
6 talking about here?

7 A. Yes. That drawing that we showed and
8 the heat map refers to the area that is to be
9 graded and seeded. The drawing showing the
10 thicker lines, those would have been the grade
11 that the contractor was instructed to slope this
12 area.

13 Q. And based upon the drawing and the
14 description, is the area west of lined ash pond
15 No. 1 part of the existing single pond?

16 A. No, it is not.

17 Q. And looking west to the west side of
18 the area to be seeded and graded -- well, I guess
19 the area to be seeded and graded, what do we call
20 that area now?

21 A. The grassy field.

22 Q. And looking to the west side of the
23 area to be seed and graded, which you now call the
24 grassy field, what do you see?

1 A. The modifications to be made to a ditch
2 that runs along the western property line of the
3 station, that ties into the south ditch, which --
4 excuse me -- is not referred to as the south ditch
5 in this figure, but you can see it on the southern
6 end or the bottom of this figure that "south ditch
7 shown."

8 Q. And what does that tell you about
9 having modifications to the ditch?

10 A. So the larger purpose of this project
11 was also to drain stormwater -- or control
12 stormwater runoff and ultimately drain it to the
13 south ditch. So this western ditch, one, was to
14 be modified to receive western stormwater runoff,
15 but two, continued to be used to receive
16 stormwater runoff from the grassy field after it
17 sloped to drain to this western ditch.

18 Q. And again, what's the purpose of a
19 ditch?

20 A. To convey water off of an area.

21 Q. Let's turn to Slide 18, please. Slide
22 18, what does this show?

23 A. This shows a survey of the site today,
24 dated 2015. So you can see the east ash pond on

1 the right, the west ash pond in the middle. And
2 it's not labeled, but you can see what we know
3 today to be the grassy field on the west. This
4 survey shows topographic data and consistent with
5 what NUS Corporation specified on their design
6 drawings from the 70s. This grassy field area
7 slopes from the east to the west to the western
8 ditch, which is not shown on this survey.

9 Q. But what's shown on the south on the
10 survey?

11 A. The south ditch.

12 Q. And to your recollection, where is this
13 diagram located?

14 A. In the history of construction, which
15 was included in the agency's recommendation, but I
16 forget the exact exhibit number.

17 Q. Does 45 sound familiar?

18 A. Yes.

19 Q. Thank you. Mr. Dehlin, based upon your
20 analysis of the historic drawings, historic aerial
21 photos, what is your conclusion about the grassy
22 field?

23 A. The grassy field is not a CCR surface
24 impoundment because it was never intended to

1 accumulate liquids. In fact, the exact opposite.
2 The station continually took measures to drain or
3 infiltrate water out of that area. It wasn't
4 until 1970 with the construction of the original
5 ash pond do we see the first intended use of an
6 area to accumulate liquids and CCR for purposes of
7 treating CCR sluice water.

8 Q. And the original ash pond you're
9 talking about is on the eastern two-thirds of that
10 property, right?

11 A. That's correct.

12 Q. What is the grassy field, in your
13 opinion?

14 A. Non-containerized CCR fill.

15 Q. As part of your role and your expertise
16 in CCR, do you pay attention to the rules that are
17 proposed by state or federal agencies?

18 A. Yes. It's part of my job.

19 Q. And recently in 2023, what rule did the
20 US EPA propose?

21 A. They proposed a rule that would
22 establish and regulate two -- I'll call them new
23 CCR units. Legacy CCR surface impoundments and
24 CCR management units or CCRMU as they're referred.

1 Q. Do you have an understanding of what a
2 legacy CCR surface impoundment unit is?

3 A. Yes. My understanding is it is an
4 inactive CCR surface impoundment and an inactive
5 electric utility.

6 Q. Does that definition apply to the
7 grassy field?

8 A. No, it does not, for two reasons. One,
9 the grassy field is not a CCR surface impoundment,
10 so, therefore, it cannot be an inactive CCR
11 surface impoundment. And two, Waukegan is an
12 active electric utility.

13 Q. Do you have an understanding of the
14 definition of a CCR management unit?

15 A. Yes. My understanding is a CCR
16 management unit is non-containerized CCR placed on
17 land.

18 Q. And could that also be called an
19 unconsolidated fill area?

20 A. Yes, I've seen that term used. I think
21 that would be applicable.

22 Q. Board question No. 4: If the grassy
23 field is or has been used for the storage of
24 quote, "unconsolidated fill," what is the status

1 of these piles?

2 So I guess, Mr. Dehlin, what is your
3 understanding of unconsolidated fill?

4 A. As it pertains to the grassy field, I
5 consider it to be non-containerized fill that's
6 been placed on land. This ash, for this area, it
7 is not exposed. I certainly wouldn't call it
8 piles. It's been graded and seeded and I'm
9 looking -- I mean, I've been to this station and
10 seen this area. I have not seen ash. And then I
11 know in Chris Lux's testimony yesterday,
12 photographs were shown of the area that further
13 demonstrate it's not piles of ash or ash that's
14 just been left. This ash was graded and provided
15 vegetative cover in the 1970s and has remained
16 that way since.

17 Q. So I think we -- to clarify, there
18 aren't any piles of CCR on the grassy field,
19 right?

20 A. No, there are no piles of CCR on the
21 grassy field.

22 Q. And so based upon your understanding of
23 the proposed definition of CCRMU, what is the
24 grassy field?

1 A. A CCRMU.

2 Q. Mr. Dehlin, in your expert opinion, if
3 the board were to call the grassy field a CCR
4 surface impoundment and the federal rule for CCRMU
5 passes in April of 2024 and it's a CCRMU under the
6 federal rule -- in your expert opinion, what do
7 you see happening?

8 A. That becomes a logistical nightmare.
9 You are trying to comply with regulations that
10 treat the same area differently. Even if you look
11 at the preamble to the proposed rule for CCRMUs,
12 the US EPA makes it clear that there are specific
13 regulations that do not apply to CCR management
14 units that do apply to CCR surface impoundments.

15 There are also time frame issues. If
16 the federal CCR rule when finalized for CCRMUs are
17 brought into the federal CCR rule, there's going
18 to be timelines established for doing certain
19 activities. I'm sure one of those is going to be
20 closure.

21 If this area is being treated as a CCR
22 surface impoundment and there's time frames that
23 accompany permitting for CCR -- addressing CCR
24 surface impoundments, operating to close CCR

1 surface impoundments, it is very possible that you
2 have a federal timeline and a state timeline that
3 do not match. And that's going to cause problems
4 for Midwest Generation.

5 Q. Mr. Dehlin, you were here yesterday for
6 the testimony?

7 A. Yes. Which testimony?

8 Q. All of the testimony.

9 A. Yes.

10 Q. And did you hear -- you were here for
11 Mr. Dunaway's testimony?

12 A. I did.

13 Q. And you heard that he stated that he
14 concluded the grassy field was an abandoned pond
15 in 2019. Do you recall that?

16 A. Yes, I do.

17 Q. And he based it on current to him at
18 the time 2000s aerial photographs and its
19 proximity to the current ponds?

20 A. Yes.

21 Q. Based on that description of the basis
22 of their conclusion the grassy field was an
23 abandoned pond, what can you conclude?

24 A. It seems like the agency's

1 recommendation that this area is an old pond is
2 not based on any evidence. It's just based on an
3 aerial photograph of an area that appears as a
4 grassy field and could have easily been a
5 landfill.

6 Q. I believe -- do you recall him
7 referring to Exhibit 37 of the agency's
8 recommendation?

9 A. Yes.

10 Q. And we can get the recommendation in
11 front of you if you need what it's described as.
12 Did you have a chance to take a look at Exhibit 37
13 last night?

14 A. I did. My understanding is Exhibit 37
15 is a series of NPDES permits that were issued for
16 Commonwealth Edison stations, which included
17 Waukegan, in 1977.

18 Q. Good memory. In your review of that
19 exhibit, does that support that it was a CCR
20 surface impoundment?

21 A. No, there's -- as I mentioned, that
22 exhibit shows several NPDES permits, including
23 Waukegan. One of those pages shows the discharge
24 limits that were approved for the Waukegan

1 Generating Station Outfall 02 in 1977, Outfall 02
2 being labeled as ash pond overflow.

3 Going back to my testimony I just gave,
4 in 1977 we know that the ash pond would have
5 referred to the ash pond that was operated in the
6 eastern two-thirds of the original slag field
7 area, so it predates the east and west ponds, that
8 single ash pond that was present in the 1970s.

9 Q. And so that single ash pond, did that
10 include the grassy field?

11 A. No, it did not.

12 Q. Based on what you heard from
13 Mr. Dunaway, and looking at the Exhibit 37, in
14 your expert opinion of the agency's
15 recommendation, where do you think the IEPA
16 started with?

17 A. I think they started with a conclusion,
18 and then looking through the evidence, looked at
19 what fit that conclusion.

20 Q. As a professional engineer, in your
21 opinion, is that the correct scientific method to
22 go about answering a question?

23 A. No. The method I always follow as an
24 engineer is starting with all the inputs,

1 outlining a methodology that is logical, and then
2 reaching a conclusion based on what the inputs and
3 the accepted methodology for whatever the problem
4 is leads me to.

5 Q. Mr. Dehlin, I want to turn to the
6 agency's recommendation.

7 MS. GALE: We passed it out to the
8 participants yesterday, so I want to make
9 sure everybody has it in front of them before
10 we get started.

11 THE HEARING OFFICER: I do. Thank you.

12 BY MS. GALE:

13 Q. Mr. Dehlin, do you have the agency's
14 recommendation in front of you?

15 A. I do.

16 Q. And to be clear for the record, it is
17 the recommendation, but it does not include the
18 attachments, right?

19 A. Correct.

20 Q. Only because they're over 1,300 pages.
21 Have you had a chance to review the
22 agency's recommendation?

23 A. I have.

24 Q. And what was their conclusion?

1 A. Their conclusion was that the grassy
2 field was an inactive CCR surface impoundment.

3 Q. And generally speaking, what do you
4 think of that conclusion?

5 A. I disagree with that conclusion.

6 Q. Why is that?

7 A. Because the grassy field is not a CCR
8 surface impoundment and, therefore, is not an
9 inactive CCR surface impoundment.

10 Q. And why is it not a CCR surface
11 impoundment?

12 A. Because it was not designed to
13 accumulate both liquids and CCR.

14 Q. Let's start -- let's look at the
15 agency's recommendation. Let's start on page 5
16 looking at paragraph 9. And looking at the second
17 photograph where the agency states: However, well
18 before the grassy field was graded and seeded --
19 citing Exhibit 33 -- a CCR surface impoundment, or
20 an old pond, existed and operated in this area.
21 And they cite to Exhibit 2. Do you see that
22 there?

23 A. I do.

24 MS. GALE: Can you put Exhibit 2 of the

1 agency's recommendation on the screen,
2 please?

3 BY MS. GALE:

4 Q. In your opinion, does this aerial photo
5 show, other than the description they inserted, an
6 old pond?

7 A. No, it does not. This figure shows the
8 aerial photograph of the site from 1946 that I
9 discussed previously in my testimony, which shows
10 the original slag field, which is not an old pond.

11 MS. GALE: And can we zoom in on the
12 old pond area, please?

13 BY MS. GALE:

14 Q. Okay. I want to show -- what are the
15 features that you used to determine this is not a
16 old pond?

17 A. The most notable is -- well, there's
18 two notable ones. Starting with the south ditch,
19 which you can see at the bottom of this zoomed-in
20 portion of the picture -- you can see the south
21 ditch was excavated along the southern property
22 line and was designed to discharge water that
23 would have made it to the southern line to Lake
24 Michigan.

1 The other feature is you can see on the
2 right sand. That's the white that's present
3 there. Although it's not shown in this
4 photograph, we did look at the 1939 photograph
5 that showed the original sand dunes here. So sand
6 being present underneath the ash shown in this
7 picture, ash sluice water that goes out to this
8 area is either going to infiltrate through the
9 sand floor; or if it does make it to the southern
10 end of the property, it's going to go to the south
11 ditch and be sent to Lake Michigan.

12 Q. The next sentence in paragraph 9 where
13 the agency states: This now inactive CCR surface
14 impoundment comprises the area of the grassy
15 field, east pond, and west pond, citing the Agency
16 Exhibit 5. Can we turn to Agency Exhibit 5,
17 please?

18 Mr. Dehlin, does the aerial photo show
19 an inactive CCR surface impoundment?

20 A. No, it does not.

21 Q. Why not?

22 A. It shows the present day grassy field,
23 west ash pond, and east ash pond, which is over
24 the area of the original slag field. But the

1 original slag field was not a CCR surface
2 impoundment and the grassy field is not a CCR
3 surface impoundment.

4 Q. Does Exhibit 5 even state inactive CCR
5 surface impoundment?

6 A. No, it does not.

7 Q. Okay. Let's turn back to the
8 recommendation going to paragraph 10. Are you
9 there?

10 A. Yes, I am.

11 Q. Okay. Where the agency states that,
12 The old pond has been referred to in various
13 permit documents as the "slag ash field" or
14 "settling basin" or "ash pond." And they cite to
15 Agency Exhibits 32, 33, 35, 36, 38, and 39, and
16 there's a footnote. Do you see that there?

17 A. Yes, I do.

18 Q. What's the problem with this paragraph
19 10?

20 A. So as we've established, the original
21 slag field was not an old pond, which is -- the
22 area that old pond is referring to is that entire
23 area currently occupied by the grassy field, west
24 pond, and east pond. So having that context, it

1 says that this area, referred to in various
2 documents as the slag ash field or settling basin
3 or ash pond, is incorrect. They use permit
4 documents when referring to this -- I'll just call
5 it settling basin or, as I refer to it in my
6 report, as the original ash pond, is only
7 concerning the eastern two-thirds of this area.
8 It does not include the grassy field area.

9 Q. And let's use an example. You see the
10 footnote on paragraph 10?

11 A. Yes.

12 Q. And the first citation of the footnote
13 is Exhibit 35?

14 A. Yes.

15 MS. GALE: Can we go to Exhibit 35?

16 BY MS. GALE:

17 Q. What is this Exhibit 35?

18 THE WITNESS: Can you move forward one
19 page?

20 MS. GALE: One more page? Yeah, thank
21 you.

22 THE WITNESS: This appears to be a
23 permit from November, if I'm reading that
24 correctly, 1974.

1 MS. GALE: Let's go to the next page.

2 There we go.

3 BY MS. GALE:

4 Q. And so in your analysis of the grassy
5 field, was the grassy field part of the ash pond?

6 MS. GALE: We can go to page 10, if we
7 can, on this. So three to seven more pages.
8 3, 4... 7. One more. One more. Oh. It's
9 on page 10 of this document. Nope, that's
10 not it. Never mind. All right.

11 BY MS. GALE:

12 Q. But in your analysis of the grassy
13 field, was the grassy field part of the ash pond
14 referenced in this document?

15 A. No. The agency exhibits, which
16 generally refer to NPDES permits or water
17 pollution control permits -- when this area is
18 referenced, it is referring to the eastern
19 two-thirds of the site, which excludes the grassy
20 field.

21 Q. And if you see in that footnote, they
22 cite to various agency documents that are in the
23 permitting record, right?

24 A. Yes.

1 Q. And to your recollection, what are the
2 earliest documents attached?

3 A. Earliest would be 1970, 1972.

4 Q. I think 1972 is right. And how is that
5 date relevant to your analysis?

6 A. So as we showed in the aerial
7 photograph from 1970, the station was constructing
8 the original ash pond within the eastern
9 two-thirds of the site. So the earliest document
10 being from 1972 when referencing "ash pond,"
11 "settling basin," would be referring to the
12 original ash pond that occupied the eastern
13 two-thirds of the site.

14 Q. Let's turn to paragraph 11 in the
15 agency's recommendation, first sentence where the
16 agency states, Based on measurements from aerial
17 photos, old pond originated as a 30-acre sand dune
18 field, off of the Lake Michigan shoreline. And
19 they cite to Exhibit 1.

20 MS. GALE: Can we post Exhibit 1 of the
21 agency's recommendation, please?

22 BY MS. GALE:

23 Q. Other than the term "old pond," which
24 we've stipulated the agency created on its own, do

1 you agree that Exhibit 1 supports the agency
2 statement?

3 A. Yes. This 1939 aerial photograph shows
4 the site as it would have been naturally, sand
5 dunes.

6 Q. And then continuing on in paragraph 11:
7 Over time liquid and CCR were deposited within the
8 entirety of the old --

9 MS. GALE: Let's leave it up there
10 still, please.

11 Q. -- entirety of the old pond. And "Id,"
12 meaning they cite to Exhibit 1. Now, does Exhibit
13 1 show that CCR was deposited within the entirety
14 of the old pond?

15 A. No. This aerial photograph predates
16 using the site to dispose of CCR.

17 Q. Okay. And looking through the rest of
18 paragraph 11 where they say that the old pond,
19 which we agree is a term they've created, was
20 modified and divided into three approximate
21 10-acre areas, citing an aerial, you know -- and
22 they continue on.

23 Generally speaking, for the rest of
24 paragraph 11, what is your opinion of the agency's

1 claims?

2 A. So outside of taking exception to
3 calling this area as an old pond, it does appear,
4 reading through the rest of paragraph 11, that it
5 identifies how this area was split up into the
6 entities that exist today: The grassy field being
7 the western third of this site, and the eastern
8 two-thirds being present day east and west ash
9 ponds.

10 Q. Let's turn to paragraph 18 of the
11 agency's recommendation. Last sentence where the
12 agency states "old pond is a settling pond" and
13 they cite to Exhibits 32 and 36. Do you agree
14 with that characterization? I'm sorry. 32, 36,
15 and 38. Do you agree with that characterization?

16 A. No, I do not agree with that
17 characterization. The mechanism that was
18 occurring in this area up until about 1970 was
19 infiltration, not settling.

20 Q. And I can actually hand you what I have
21 here. To your recollection, what are the -- we
22 just discussed the earliest dates in the agency's
23 exhibits, which are permit records. Do these
24 exhibits support that the original slag field was

1 a settling pond?

2 A. No. It -- the settling pond that
3 appears in the permit records in the agency's
4 exhibits is the original ash pond that occupied
5 the eastern two-thirds of this site, which
6 excludes the grassy field.

7 Q. Going to paragraph 19, I want to focus
8 on this second sentence where the agency states,
9 The water from the sluiced wastewater was treated
10 by settling out the solid CCR prior to discharge.
11 And they cite to Exhibit 2. Do you see that?

12 A. I do.

13 Q. So first, in your expert opinion, was
14 the station -- and Exhibit 2, if you recall, was
15 from 1946, right?

16 A. As I recall, yes.

17 Q. Okay. In your expert opinion, in 1946,
18 was the station treating sluiced wastewater?

19 A. No, it was not. It was sluicing
20 wastewater to the slag field, which would then --
21 the water would infiltrate through the sand floor,
22 leaving the CCR solid on the sand floor. Or if
23 water was to make it to the southern end of the
24 property, it would go into the south ditch and

1 then drain into Lake Michigan.

2 Q. Let's turn to the next sentence: As
3 the CCR sluiced water flowed into the depressions,
4 the naturally sandy conditions allowed the water
5 to slow down and infiltrate into the ground. Do
6 you see that there?

7 A. I do.

8 MS. GALE: Can we put that on the
9 screen, highlight that? Blow it up.

10 BY MS. GALE:

11 Q. So what is the agency describing in
12 this operation in this sentence in paragraph 19?

13 A. They're describing infiltration of
14 sluiced water through the sand dune floor for the
15 original slag field.

16 Q. And they don't have a citation here,
17 but do we think that they're relying upon
18 Exhibit 2?

19 A. Yes. That's the exhibit that's been
20 referenced twice in this paragraph, so I presume
21 that that is the exhibit being relied upon here.

22 Q. So in your opinion, I mean, at least,
23 are they -- is this description of the action that
24 is happening in this sentence, about infiltration

1 into the ground, is that accurate?

2 A. Yes. It's infiltration of water into
3 the ground.

4 MS. GALE: So can we turn back to his
5 PowerPoint presentation, Slide 4?

6 BY MS. GALE:

7 Q. I want to look back on your Slide 4 of
8 your Exhibit 41, which is your PowerPoint
9 presentation -- the diagram of sedimentation or
10 infiltration. If there was infiltration, what is
11 not occurring?

12 A. Accumulation of water.

13 Q. So if there's no accumulation of water,
14 what is the mistake the agency is making here?

15 A. The agency is incorrectly concluding
16 that ash sluice water being sent to this area
17 makes it a CCR surface impoundment. But because
18 we have infiltration and not accumulation --
19 specifically accumulation to allow for
20 sedimentation to occur -- this site is not being
21 operated, and certainly was not designed to
22 operate, as a CCR surface impoundment.

23 Q. And by that, do you mean designed --
24 what's in the definition, designed to do what?

1 A. To accumulate both CCR and liquids.

2 Q. Isn't the definition designed to hold
3 an accumulation?

4 A. Yes, it is.

5 Q. Of CCR and liquids?

6 A. Yes.

7 Q. Yesterday you heard me asking the
8 questions about pasta water. Do you recall that?

9 A. Yes.

10 Q. And so you've cooked pasta?

11 A. Yes.

12 Q. In water?

13 A. Yes.

14 Q. And have you used a sieve or a colander
15 to drain out?

16 A. Yeah, I have.

17 Q. In your expert opinion as a
18 professional engineer, is the sieve holding -- as
19 you are passing the water and pasta into the
20 sieve, is the sieve holding an accumulation of
21 liquid and pasta?

22 A. No. The whole purpose of a sieve, the
23 way it's designed is to get water out and keep the
24 cooked pasta in so you can transfer it to whatever

1 your next dish is.

2 Q. So, again, what is the mechanism that
3 the sieve is doing?

4 A. It's filtering. It's getting water out
5 and leaving pasta in the pot.

6 MS. GALE: Okay. Let's turn back to
7 the recommendation. Can we show Agency
8 Exhibit 4? I want to turn to Agency
9 paragraph 20.

10 BY MS. GALE:

11 Q. So the agency states: By 1974, the
12 design within the old pond was modified. Old pond
13 utilized designed man-made excavations and dikes
14 (berms) within the dune field to settle CCR from
15 sluiced water prior to discharge. And they cite
16 Agency Exhibit 4. Do you see that there?

17 A. Yes, I do.

18 Q. So what is your opinion of the agency's
19 description here?

20 A. It's -- the mechanism is correct.
21 However, by referencing old pond, they are saying
22 that the entire area was used to settle CCR from
23 sluiced water when, in fact, it was just the
24 eastern two-thirds that was a diked area that was

1 used to settle CCR from sluiced water.

2 Q. And looking at the agency's Exhibit 4,
3 does that support -- well, how does Agency
4 Exhibit 4 support what you're saying?

5 A. So if you look at Agency Exhibit 4 --
6 if we can zoom in on the area that's labeled, you
7 can see where the west pond and east pond are
8 labeled. You can see the embankment or diked --
9 or dike that goes around the eastern two-thirds of
10 the site. But specifically, the western
11 embankment for that original ash pond stops at the
12 grassy field and runs straight south. So only the
13 original two-thirds of this site is being used as
14 a settling basin. The grassy field is not being
15 used as a settling basin.

16 Q. And calling back to your presentation
17 where we had these overlays in the 1974 photo --

18 A. Yes.

19 Q. Is that the same photo that they have
20 here in their exhibit?

21 A. Yes, it is.

22 Q. So looking at that of the grassy field,
23 what can you see in this photo that is the purpose
24 of the grassy field?

1 A. The purpose of the grassy field is it's
2 been maintained to ensure that it drains primarily
3 to the south to south ditch. Some of the northern
4 edge drained north to the north ditch.

5 Q. And looking at paragraph 20 where the
6 agency -- agency's recommendation paragraph 20
7 where the agency also relies upon Exhibit 32 and
8 35. Do you see that?

9 A. I only see Exhibit 32 referenced.

10 Q. I'm sorry. Exhibit 32 at 5 and 17. My
11 bad. Do you see that?

12 A. Yes, I do.

13 Q. Do you have a recollection of what that
14 exhibit is?

15 A. I believe that's the sketch.

16 Q. And that's the sketch of the slag field
17 that was in your presentation?

18 A. Yes, the sketch from the 1972 NPDES
19 permit.

20 Q. And do you -- does that sketch support
21 the agency's statement here in paragraph 20?

22 A. No, it does not. That sketch shows a
23 line -- or enclosed line, loop, I guess -- that is
24 meant to represent the diked area that we see here

1 for the original ash pond, and specifically
2 excludes the grassy field area between the western
3 embankment of the original ash pond and the
4 western property line.

5 Q. Let's look at the agency paragraph 21.
6 And so the -- in paragraph 21, the agency
7 describes a pond as shown in Exhibit 4 and Exhibit
8 32. Do you see that in that whole paragraph?

9 A. Yes, I do.

10 MS. GALE: If we could get Exhibit 4 on
11 the screen. Oh, this is Exhibit 4.

12 BY MS. GALE:

13 Q. You relied on these same documents,
14 right?

15 A. Yes, I did.

16 Q. So here, does their discussion in
17 paragraph 21 support the classification of the
18 grassy field as a CCR surface impoundment?

19 A. No, it does not.

20 Q. Why not?

21 A. Because the berms that are being
22 referenced in this paragraph are referring to the
23 berms for the original ash pond, which I've shown
24 in my testimony only represents the eastern

1 two-thirds of the site. It does not include --
2 the berms does not encompass the grassy field.

3 Q. What is the agency trying to imply here
4 in paragraph 21?

5 MR. GUNNARSON: Objection. Calls for
6 speculation.

7 MS. GALE: He's an expert. He's
8 entitled to make --

9 THE HEARING OFFICER: I think I'll
10 allow him to give his opinion as an expert.
11 Overruled.

12 THE WITNESS: By continually referring
13 to this area as an old pond -- "old pond"
14 understanding that it's meant to represent
15 the grassy field, west pond, and east pond as
16 we know them today -- and describing the
17 berms that have been constructed and what
18 they're meant to do, it seems that the agency
19 is trying to imply that this entire area
20 functioned as an ash pond at this time, when
21 it did not.

22 BY MS. GALE:

23 Q. And right. This paragraph -- what is
24 this paragraph actually talking about?

1 A. It is talking about the original ash
2 pond that occupied the eastern two-thirds of this
3 site.

4 Q. Okay. Let's turn to paragraph 22.

5 A. Okay.

6 Q. The last sentence where the agency
7 states that the old pond received CCR that had
8 been sluiced, and they cited to Agency Exhibit 32
9 at 5. Well, again, what's your take away from
10 what the agency is saying in paragraph 22?

11 A. So looking at old pond as being the
12 original slag field, yes, it did receive sluiced
13 CCR. But this earlier paragraph stating how -- or
14 how CCR surface impoundments are to be used -- it
15 seems as if the agency is implying because an area
16 received sluiced CCR, it therefore must be a CCR
17 surface impoundment. But that is not part of the
18 statutory definition of a CCR surface impoundment.

19 Q. In fact, we heard the agency stipulate
20 that the definition of a CCR surface impoundment
21 does not include the term "sluice" or any
22 mechanism by which CCR would have reached the --
23 right?

24 A. Correct.

1 Q. So would you agree with that?

2 A. Agree with --

3 Q. With the stipulation.

4 A. Yes, I would.

5 Q. Let's look at paragraph -- oh. So
6 looking at paragraph 22 of the agency's
7 recommendation, in your opinion, how does this
8 paragraph address whether the grassy field is a
9 CCR surface impoundment?

10 A. It does not.

11 Q. In your opinion, is it important at
12 all?

13 A. No, it does not matter how the CCR got
14 to the area to determine whether or not the area
15 is a CCR surface impoundment.

16 Q. Similarly, let's look at paragraph 23.

17 A. Okay.

18 Q. So in by 1946 old pond was receiving
19 CCR that had been sluiced to the dune field,
20 citing Exhibit 2. And reading on throughout the
21 paragraph 23, does this paragraph support the
22 agency's contention that the grassy field or the
23 slag field in 1946 was a CCR surface impoundment?

24 A. No, it does not.

1 Q. Please explain.

2 A. So paragraph 23, the second sentence
3 states "as evidenced by photographs the presence
4 of what appears to be a delta from liquid
5 deposition -- so this delta being CCR that's been
6 deposited -- which allows liquids to flow into
7 depressions between the dune peaks indicates that
8 sluiced water containing CCR liquid was sent to
9 old pond. So a delta would represent CCR being
10 contained there, but promoting liquid flowing away
11 from the area into a sandy area -- or even if it
12 was to extend to the southern area, the south
13 ditch. That's showing a promotion of liquids away
14 from the area to either infiltrate to the sandy
15 floor, or if it gets to the south, as we know
16 would go into the south ditch, into Lake Michigan.
17 So this paragraph does not support that the
18 original slag field was designed to accumulate
19 liquids.

20 Q. Let's go to paragraph 24 of the
21 agency's recommendation. We see in paragraph 24
22 the agency is relying upon Exhibit 4 and Exhibit
23 36 by stating, In 1974 the old pond continued to
24 receive CCR that had been sluiced to the dune

1 field. And again, the second sentence: The 1974
2 NPDES permit application demonstrates that the old
3 pond received sluiced CCR. Do you see that there?

4 A. I do.

5 Q. And again, does that -- does the
6 information in paragraph 24 support the agency's
7 contention that the grassy field is a CCR surface
8 impoundment?

9 A. It does not because by 1974 the
10 original ash pond was operating in the eastern
11 two-thirds of the area, which would have been
12 receiving the sluiced CCR, which is what's
13 referred to in the 1974 NPDES permit application.

14 Q. And again, the agency's referring to
15 the action of sluicing here in '74, right?

16 A. Yes.

17 Q. Is that material at all to the
18 evaluation of whether the grassy field is a CCR
19 surface impoundment?

20 A. It is not because the method in which
21 CCR is placed into an area has no bearing on
22 whether that area is considered to be a CCR
23 surface impoundment.

24 Q. So the paragraph --

1 MS. GALE: You know, Mr. Hearing
2 Officer, is this a pretty good opportunity to
3 take a five-minute break?

4 THE HEARING OFFICER: Sure. Off the
5 record. Five-minute break.

6 (Whereupon there was a recess
7 in the proceedings.)

8 THE HEARING OFFICER: And Ms. Gale,
9 continue, please.

10 MS. GALE: Yes, thank you.

11 BY MS. GALE:

12 Q. Mr. Dehlin, I want to turn to paragraph
13 25 of the agency's recommendation. Are you there?

14 A. Yes.

15 Q. And do you see the agency is copying a
16 paragraph from the US EPA federal rule, right?

17 A. Yes.

18 Q. And then it's a quote from the federal
19 rule, right, for the US EPA's 2015 CCR surface
20 impoundment rule?

21 A. Yes, it is.

22 Q. And you see the first sentence after
23 the US EPA quote where the agency states, This
24 scenario is applicable because the old pond was a

1 settling pond receiving sluiced CCR from ComEd,
2 quote.

3 What's the flaw in that sentence?

4 A. The flaw is "old pond" refers to the
5 original slag field area, which includes grassy
6 field, present day west pond, present day east
7 pond. But as we've seen today, the settling pond
8 that predates the east pond and west pond only
9 occupied the eastern two-thirds of the site. It
10 did not include the grassy field.

11 Q. And again, in relation to the term
12 "sluice," what is the agency incorrectly implying
13 here?

14 A. That because an area receives sluiced
15 CCR, it therefore must be a CCR surface
16 impoundment.

17 Q. Let's go to the second sentence in
18 paragraph 25 where the agency states, old pond met
19 the definition of a CCR surface impoundment
20 because it utilized a natural topographic
21 depression design within a dune field to hold an
22 accumulation of CCR (directly sluiced CCR from
23 ComEd). Mr. Dehlin, what term is missing in the
24 agency's sentence?

1 A. The term "liquids." In order to meet
2 the definition of a CCR surface impoundment, the
3 dune field would have had to have held an
4 accumulation of CCR and liquids. This statement
5 only refers to holding an accumulation of CCR.

6 Q. And so what's not being accumulated?

7 A. Liquids.

8 Q. What does that mean to you?

9 A. That means that the original slag field
10 was not a CCR surface impoundment.

11 Q. Let's go to the third sentence in
12 paragraph 25 of the agency's recommendation.

13 It also engaged in the treatment of CCR
14 through its settling operation as a settling pond,
15 citing to Exhibit 2. Mr. Dehlin, we can put
16 Exhibit 2 back on the screen.

17 Do you agree that Exhibit 2 shows a
18 settling pond?

19 A. No, it does not. This exhibit shows
20 the aerial photograph of the site from 1946, at
21 which point the mechanism of separating ash from
22 water would have been through infiltration, not
23 sedimentation or settling.

24 Q. And by "infiltration," what was not

1 happening?

2 A. The accumulation of liquids.

3 Q. And so paragraph 25, final sentence
4 where they state, By 1961 and 1974, old pond
5 designed man-made excavations and dikes (berms)
6 within the dune field to settle CCR from sluice
7 water directly received from the electric company
8 prior to discharge. And they cite to Agency's
9 Exhibits 4 and 32. Do you see that there?

10 A. I do.

11 MS. GALE: First, can we look at
12 Exhibit 4?

13 BY MS. GALE:

14 Q. What date is Exhibit 4?

15 A. 1974.

16 Q. And looking at -- and you can look at
17 your -- the list of exhibits the agency has
18 attached to their -- for 32. What date is Agency
19 Exhibit 32?

20 A. 1974.

21 Q. So do either of the exhibits support
22 any conclusions about what was going on in 1961?

23 A. No, they do not.

24 Q. And looking at -- second, as earlier

1 discussed with Agency Exhibit 4, where are the
2 berms and dikes as discussed in this sentence --
3 paragraph 25, last sentence?

4 A. Within the eastern two-thirds of the
5 site, excluding the grassy field area.

6 Q. And to your recollection of Exhibit 32,
7 does that show berms in the grassy field?

8 A. No, it does not.

9 Q. And the agency cites to the entire
10 Exhibit 32. Where do we think they're looking at?

11 A. The sketch.

12 Q. Let's turn to paragraph 27. And
13 looking at the third sentence, second line down
14 where they state, ComEd was issued a permit
15 stating ComEd would construct and operate two
16 water pollution control facilities to replace the
17 single settling basin (old pond) that existed
18 previously. And they cite to Agency Exhibit 33 at
19 23. Do you see that?

20 A. I do.

21 MS. GALE: Can we go to Mr. Dehlin's
22 PowerPoint Slide 17?

23

24 BY MS. GALE:

1 Q. Okay. Is this in Slide 17, the
2 highlighted area? Is that what you think they're
3 talking about?

4 A. Yes.

5 Q. And do you agree with that sentence,
6 the third sentence in paragraph 27, and what
7 they're saying?

8 A. The sentence is accurate, but not
9 precise. And the reason I say that is the
10 term/statement referring to the single settling
11 basin in the old pond. The single settling basin
12 only occupied the eastern two-thirds of the site
13 whereas old pond being referred to here is meant
14 to also encompass the grassy field. But as we can
15 see here, the grassy field is not included in this
16 operation to split the single settling pond into
17 two water pollution control facilities.

18 Q. I want to go back to Agency -- keeping
19 this on the screen, looking at agency paragraph
20 27, the fourth sentence where they say, The permit
21 established that the east pond would occupy the
22 eastern one-third of the old pond; the west pond
23 would occupy the middle one-third of it --
24 actually, the middle one third; and the western

1 one-third of the old pond was the grassy field to
2 be graded and seeded. And they cite to Agency
3 Exhibit 45 at 13, right?

4 A. Yes.

5 Q. So -- well, what is the agency saying
6 here?

7 A. The agency is saying that the old pond
8 would be split into three.

9 Q. So, Mr. Dehlin, if you compared the
10 fourth sentence and the -- excuse me -- the third
11 sentence and the fourth sentence, how does that
12 math work?

13 A. It does not because the prior sentence
14 said old pond was going to be split into two and
15 then the following sentence we just looked at said
16 it was going to be split into three. So the math
17 does not agree there.

18 Q. So again, how did the agency get this
19 wrong? What's the mistake they're making here in
20 these two sentences?

21 A. The agency is indicating that the
22 settling basin that is referenced in the permit
23 record refers to the entire area: Grassy field,
24 present day east pond, present day west pond;

1 whereas we have demonstrated today the single
2 settling basin only occupied the eastern
3 two-thirds of the site. It did not include the
4 grassy field area.

5 MS. GALE: And just for the record, if
6 we could go to PDF page of the agency's
7 recommendation 984. This is, I'll state for
8 the record, Agency Exhibit 45, page 13.

9 BY MS. GALE:

10 Q. What is this drawing, generally?

11 A. This drawing shows the modifications
12 that were to be made to the site as part of the
13 wastewater treatment facilities project. If you
14 look at the right of the drawing, it shows the
15 area that we were just looking at on the previous
16 slide. It shows construction on the east pond,
17 the west pond, and how the grassy field was to be
18 graded and seeded.

19 Q. And keeping this -- bearing this back
20 in mind, can we go back -- keep this in your head,
21 but go back to your presentation slide 17.

22 How does the Agency Exhibit 45 page 13
23 compare to Agency Exhibit -- I'm sorry. Was it
24 45? Yes -- compare to Agency Exhibit 41 at 4?

1 A. They're essentially the same.

2 Q. Okay. So in your opinion, in looking
3 at the Agency Exhibit 33 at 23 where they're
4 talking about the existing single pond being split
5 into two separate ponds ten acres each, does that
6 include the grassy field?

7 A. It does not.

8 Q. So do either Agency Exhibit 33 or
9 Agency Exhibit 45 support the agency's contention
10 that the grassy field is a CCR surface
11 impoundment?

12 A. They do not.

13 Q. Why not?

14 A. Because the exhibits refer to how the
15 original ash pond, which only occupied the eastern
16 two-thirds of the site, was going to be split into
17 present day east and west ponds. The grassy field
18 was not part of that original settling basin.

19 Q. Let's go to paragraph 28, the second
20 sentence where the agency states that the grassy
21 field -- second sentence. I'm sorry. Third
22 sentence. Old pond was a depression or excavation
23 was designed to hold an accumulation of CCR and
24 liquid and the CCR surface impoundment stores or

1 disposes of CCR.

2 Do you see that there?

3 A. I do.

4 Q. Is there a citation for that sentence?

5 A. There is not.

6 Q. And based upon the documents and
7 paragraphs that we just discussed, is the agency
8 accurate that the slag field that they called the
9 old pond, which we know is a term created by them,
10 is a CCR surface impoundment?

11 A. No, their sentence is not correct. The
12 area was not designed to hold an accumulation of
13 CCR and liquids.

14 Q. So both paragraphs -- I want to turn to
15 paragraph 28. Keep that in mind, the design part,
16 and then looking at the paragraph 29 where they
17 also talk about "designed," the term "designed."
18 Do you see that?

19 A. I do.

20 Q. And have you had a chance to review
21 these paragraphs before today?

22 A. I have.

23 Q. So what do you think about the agency's
24 conclusions here about the term "designed"?

1 A. So what the agency is referring to in
2 paragraph 29, there's an excerpt from USWAG v.
3 EPA, specifically the decision from the DC court
4 of appeals on the 2018 case where the court parsed
5 what "is disposed of" means. And the agency
6 extended that to apply to what "is designed"
7 means. And the agency states similarly,
8 "designed" is the past tense of design, while "is"
9 allows the design to exist even if the initial
10 design was in the past.

11 So while I agree with that, what we've
12 shown is the original slag field was not designed
13 to accumulate liquids. So, therefore, using this
14 sentence to argue that the original slag field is
15 a CCR surface impoundment because its initial
16 design was to hold an accumulation of CCR and
17 liquids is not accurate.

18 Q. Let's turn to paragraph 30. So
19 paragraph 30, the agency -- we'll start with
20 they're describing the definition of the term
21 "hold," right?

22 A. Yes.

23 Q. Do you see -- let's go -- one two
24 three, four, five. Do you see the fifth line down

1 where they say the word "hold" in parentheses is a
2 verb defined as "to enclose or keep in a container
3 or within bounds or prevent from leaving or
4 getting away." Do you see that there?

5 A. I do.

6 Q. Now, let's go to the last sentence:
7 The extent to which liquids are held within a
8 impoundment is dependent upon several factors,
9 including its design, use, or permeability at the
10 bottom of the impoundment. I'm sorry. That was
11 not the last sentence.

12 The last sentence was, old pond was
13 never lined and is located on beach sand, allowing
14 rapid infiltration of liquids from the
15 impoundment. Do you see that?

16 A. I do.

17 Q. If there's a rapid infiltration of the
18 liquids, in your expert opinion as a professional
19 engineer, does that mean to enclose and keep in a
20 container or within bounds?

21 A. No, it does not.

22 Q. Please explain.

23 A. By infiltration, rapid infiltration,
24 water is leaving that area. You're not allowing

1 liquids to accumulate.

2 Q. And then I want to go back to page 11,
3 still on paragraph 30, third line from the bottom
4 where they say, The act of keeping or retaining
5 can be a temporary condition.

6 Do you see that there?

7 A. I do.

8 Q. What is your reaction to that
9 statement?

10 A. I disagree with it in the context of a
11 CCR surface impoundment. In order for a CCR
12 surface impoundment to operate, you have to have
13 that accumulation of both liquids -- that can be
14 referred to also as a hydraulic head that's
15 present -- which with that volume of water, that
16 depth of water allows for ash particles to settle
17 to the pond floor.

18 So yes, it can be a temporary
19 condition, but you need a -- you need a certain
20 quantity of water in order for a CCR surface
21 impoundment to function how it's designed to
22 function.

23 Q. And it can be a temporary condition,
24 but -- well, for infiltration, what is the very

1 nature of infiltration as it relates to this
2 condition?

3 A. You're not keeping or retaining any
4 water. Water's leaving out through the pond or
5 sand floor.

6 Q. And looking at their definition of
7 "hold," to enclose and to keep in a container
8 within bounds, in your opinion, as you consider
9 infiltration, how does that compare?

10 A. That's the opposite of infiltration.
11 You have a barrier. You have something that is
12 containing that water to that specific area. If
13 you have an opening anywhere in that container,
14 whether it be the sides or through the floor,
15 you're not holding anything. It's either
16 infiltrating out through the bottom -- even if you
17 just consider like one side of the container open,
18 it's -- the water's going to move out through that
19 open opening. It's a ditch, right? A ditch can
20 contain water within its area, but the purpose of
21 a ditch isn't to hold it, it's to convey it.

22 Q. Let's look at paragraphs 32 and 33 and
23 after you've had a chance to review them -- the
24 agency's talking about the permits they've

1 attached, right?

2 A. Yes.

3 Q. Yeah. And so -- but again, based upon
4 the dates, how are these permits related to your
5 analysis of the grassy field and the CCR surface
6 impoundment?

7 A. So these NPDES permits would, because
8 it's an NPDES permit, refer to discharges from an
9 ash pond. And we know going to the first one in
10 1972 you have the original ash pond that only
11 occupied the eastern two-thirds of the area, that
12 eventually that area became present day east and
13 west ash ponds. So in the context of the grassy
14 field, these NPDES permits have no applicability.

15 Q. Let's go to paragraph 35, the first
16 sentence where the agency states, Grassy field is
17 a CCR surface impoundment that stopped receiving
18 CCR by 1980 when east and west ponds were
19 constructed on top of the eastern two-thirds of
20 the old pond. And they cite to Exhibit 45 at 13
21 and Exhibit 5. Do you see that there?

22 A. I do.

23 Q. Again, what is your reaction to this
24 statement?

1 A. So there are a number of things to
2 correct based on my testimony today. First, the
3 grassy field is not a CCR surface impoundment.
4 The grassy field area when it was part of the
5 original slag field also stopped receiving CCR
6 about 1970 instead of 1980. And the east and west
7 ash ponds were constructed on top of the eastern
8 two-thirds of the original slag field, which did
9 not function as a pond. The original pond that
10 was there, which did occupy the eastern
11 two-thirds, did not include the grassy field.

12 MS. GALE: We're going to show Agency
13 Exhibit 45 at 13 again on the screen just so
14 everyone has an understanding.

15 THE TECHNICIAN: Say that again?
16 Sorry.

17 MS. GALE: Agency Exhibit 45 at page
18 13, which is PDF page 984.

19 BY MS. GALE:

20 Q. So does this support the agency
21 statement in paragraph 35?

22 A. It supports that the east and west
23 ponds were constructed on top of the eastern
24 two-thirds of what's called the original slag

1 field area. But it does not support the
2 contention that the grassy field is a CCR surface
3 impoundment.

4 Q. Let's go to Agency Exhibit 5 on the
5 screen again. Does this support the agency
6 statement in paragraph 35?

7 A. No, it does not.

8 Q. And tell me why.

9 A. The east and west ponds do occupy the
10 eastern two-thirds of the original slag field
11 area, but the grassy field is not a CCR surface
12 impoundment. This picture taken in 1980 is after
13 the area has been graded and seeded. And as we
14 saw in the records, design drawings, and in the
15 2015 survey, the grassy field was graded to drain
16 stormwater to the west.

17 Q. Let's turn to Agency paragraph 36. The
18 agency states in the first sentence, and I'll
19 paraphrase or go to the end, There's no mention or
20 documentation or other evidence that's been
21 presented to the agency showing that the old
22 pond -- which they have stated is a term they
23 created -- CCR materials were removed or covered
24 in a manner that would prevent infiltration. And

1 they continue to talk about closure.

2 Do you see that there?

3 A. I do.

4 Q. And the consideration of whether an
5 area was closed, is that related to whether the
6 area qualifies as a CCR surface impoundment under
7 the definition?

8 A. No.

9 Q. Why not? And we can go back to one of
10 your slides, if that's helpful.

11 A. Yes, please.

12 MS. GALE: Can we go to Slide 4,
13 please?

14 THE WITNESS: So for an area to be
15 considered a CCR surface impoundment, you
16 have to have an accumulation -- it has to be
17 designed to hold an accumulation of CCR and
18 water. The purpose for this requirement is
19 to promote sedimentation, which is shown on
20 the left. An area that is still allowing for
21 infiltration, regardless of whether or not
22 it's been closed, is not going to be
23 classified as a CCR surface impoundment under
24 the statutory definition.

1 BY MS. GALE:

2 Q. Now, you see in that first sentence,
3 the agency said that the agency states "a cover to
4 prevent infiltration," right?

5 A. Yes.

6 Q. And what kind of infiltration do we
7 think they're talking about there?

8 A. Rainwater.

9 Q. Precipitation?

10 A. Yes.

11 Q. And you were here when Ms. Shealey and
12 Mr. Dorgan testified?

13 A. Yes.

14 Q. And what's your understanding based
15 upon their testimony that Midwest Generation
16 proposed for the agency to do?

17 A. My understanding is that Midwest
18 Generation proposed to the agency to install an
19 engineered cover over this area of the grassy
20 field.

21 Q. And what would an engineered cover do?

22 A. It would preclude the infiltration of
23 rainwater into the CCR in that area.

24 Q. Thank you. Let's turn to paragraph 43

1 of the agency's recommendation. Let's look to the
2 last sentence. I'll read it, then we'll break it
3 down. "This characterization, as explained above,
4 is inaccurate as aerial photos from 1946, 1961,
5 and 1974, and the 1974 NPDES permit application
6 demonstrate that the grassy field received sluiced
7 CCR when it was part of the larger old pond." And
8 they cite to Exhibits 2 -- Agency Exhibits 2 and 3
9 and Agency Exhibit 36 and 28. Do you see that
10 there?

11 A. I do.

12 Q. So let's break this down starting with
13 the last part of that sentence, that it received
14 sluiced CCR. Now, we're going to sound like a
15 broken record, but, Mr. Dehlin, how is it -- or is
16 it relevant that any area received sluiced CCR as
17 a consideration of whether that's a CCR surface
18 impoundment?

19 A. An area receiving sluiced CCR or the
20 manner in which an area received CCR has no
21 bearing on whether the area is classified as a CCR
22 surface impoundment under the statutory
23 definition.

24 Q. And it's earlier in that sentence where

1 they say -- or excuse me, later -- at the end of
2 that sentence where they say, "when it was part of
3 the larger old pond."

4 Mr. Dehlin, in your expert opinion,
5 what are the mistakes in that phrase?

6 A. So understanding the larger old pond to
7 be the original slag field that I presented day,
8 it is accurate that the area received sluiced CCR
9 in 1946 and in 1961 when the original slag field
10 was operating. However, we know that by 1974, the
11 eastern two-thirds had been converted into an
12 original ash pond, the settling basin.

13 Q. Was the grassy field ever part of a old
14 pond?

15 A. No, it was not.

16 Q. Let's go to paragraph 44, second
17 sentence, where the agency states: The old pond
18 was operated in the same location as the west pond
19 and the east pond in addition to the 10-acre
20 grassy field area to the west of the west pond.
21 And they cite to Agency Exhibit 45 at 13 and
22 Agency Exhibit 33 at 23.

23 MS. GALE: And let's -- I want to look
24 at these documents again. Can we go back to

1 Agency Recommendation Exhibit 45, page 13,
2 which is PDF page 984?

3 BY MS. GALE:

4 Q. And we've seen this -- we've already
5 seen this before, right?

6 A. Yes.

7 Q. Okay. And now can we now turn to your
8 presentation slide 17? And that cites to Agency
9 Exhibit 33 at 23?

10 A. Yes.

11 Q. And that's what the agency is citing to
12 here in this sentence in paragraph 44?

13 A. Yes.

14 Q. And again, the second sentence on
15 Agency Exhibit 33 at 23, The existing single pond
16 will be split into two separate ponds, each
17 approximately 10 acres. Do you see that there?

18 A. I do.

19 Q. Again, Mr. Dehlin, does the math work?

20 A. No, it does not. The original pond --

21 Q. Please --

22 A. The original pond was only split into
23 two, the east pond and the west pond. The
24 original cash pond at this site did not include

1 the grassy field area.

2 Q. So looking at the sentence where -- I
3 mean, they said a third, a third, a third, right?
4 In the second sentence.

5 A. Paragraph 44?

6 Q. Of paragraph 44.

7 A. If doesn't specifically say a third, a
8 third, a third. But it does reference that the
9 old pond -- it does state the old pond occupied
10 all three areas.

11 Q. And -- well, right. So let's look lack
12 on Agency Exhibit 45 at 13, which is PDF page 984.
13 So does this support the agency's statement --
14 does this drawing support the agency's statement
15 in the second sentence of paragraph 44 that the
16 old pond comprised all three areas?

17 A. No, it does not. What this drawing
18 shows is that the original ash pond at the site
19 only occupied the area currently occupied by the
20 west pond and the east pond.

21 MS. GALE: Can we highlight the east
22 and west pond and the grassy field to be
23 closer?

24 BY MS. GALE:

1 Q. I think we discussed this earlier. You
2 see the drawing of the new ponds, right?

3 A. Yes.

4 Q. Do you see behind that drawing various
5 lines?

6 A. Yeah, there are dashed lines that are
7 shown that are lighter.

8 Q. What are those dashed lines that are
9 shown that are lighter?

10 A. Those represent existing features.
11 Specifically to this area, what we're looking at
12 are original outlines for the tops of the original
13 ash pond that existed in that area.

14 Q. And how does that inform your opinion
15 here?

16 A. What it shows is the extent of the
17 original ash pond only occupied the eastern
18 two-thirds of the original slag field area. The
19 east and the west ash pond were only constructed
20 within that eastern two-thirds area and excludes
21 the grassy field. The grassy field is not
22 included in the original ash pond boundary.

23 Q. Okay. Let's turn back to paragraph 45.
24 And again, second sentence where the agency says,

1 The agency has found no information indicating
2 that the bottom of the old pond was lined,
3 including the grassy field portion.

4 Do you see that there?

5 A. I do.

6 Q. What's the flaw in that sentence?

7 A. The grassy field was not part of the
8 original ash pond at this site.

9 Q. Okay. And then continuing on in that
10 paragraph 45, where the agency states that, The
11 grassy field -- last sentence. The grassy field
12 remains an unlined inactive CCR surface
13 impoundment as defined in 35 Ill ADM Code 845.120.
14 Do you see that there?

15 A. I do.

16 Q. And your opinion is it's not accurate?

17 A. It is not accurate because an inactive
18 CCR surface impoundment as defined by the
19 regulation that you just cited requires the area
20 to first be classified as a CCR surface
21 impoundment, which the grassy field is not.

22 Q. And then Paragraph 46, third sentence.
23 "As described, the grassy field originated from
24 the old pond." And they cite again to Agency

1 Exhibit 45. And again, Mr. Dehlin, in your expert
2 opinion, what is your reaction to that statement?

3 A. That it's inaccurate. The grassy field
4 was not part of the original ash pond that was
5 present at the site.

6 Q. And again, similarly, the next sentence
7 where the agency states, The old pond is an active
8 [sic] CCR surface impoundment. I know you just
9 said it. Please say it again. What is your
10 reaction to that statement?

11 A. The old pond cannot be considered an
12 inactive CCR surface impoundment if you're
13 referring to the original slag field area because
14 the original slag field area was not a CCR surface
15 impoundment.

16 Q. Ultimately, Mr. Dehlin, what is your
17 conclusion and recommendation here?

18 A. Ultimately, the grassy field is not an
19 inactive CCR surface impoundment because it is not
20 a CCR surface impoundment. Now, with that said, I
21 do that recommend that the grassy field be
22 addressed. My understanding sitting through
23 testimony yesterday is that there are avenues and
24 options for the area to be addressed. I do

1 understand with the proposed CCR management unit
2 rule being out there, it is important to -- when
3 that rule becomes finalized under the court order,
4 that Midwest Generation comply with those final
5 regulations and work through those to address this
6 grassy field area.

7 MS. GALE: I just need a minute,
8 Mr. Hearing Officer.

9 THE HEARING OFFICER: Okay. We're off
10 the record for a minute.

11 (Whereupon there was a recess
12 in the proceedings.)

13 THE HEARING OFFICER: You may proceed.

14 MS. GALE: Thank you.

15 BY MS. GALE:

16 Q. Mr. Dehlin, have your opinions today
17 been given with a reasonable degree of scientific
18 certainty?

19 A. Yes.

20 MS. GALE: We have nothing further for
21 now.

22 THE HEARING OFFICER: Okay. I think we
23 might have a question or two.

24 Member Van Wie, any questions?

1 MS. VAN WIE: No.

2 THE HEARING OFFICER: No?

3 Staff member Horton?

4 MS. HORTON: Yeah, I just had two quick
5 questions. Slide 11 of your presentation, it
6 was a 1970 photo of the area --

7 MS. GALE: We can put it on the screen.

8 THE WITNESS: Yes, please.

9 MS. HORTON: I'm just curious. In your
10 expert opinion, what is the activity
11 occurring in the grassy field area?

12 THE WITNESS: It looks like they are
13 excavating and then removing CCR. As you see
14 in the 1974 aerial photograph, that shows, I
15 believe, how the site was left before it was
16 to ultimately be graded and seeded. So here,
17 I think we see CCR being removed. And as we
18 see further in 1974, the area was
19 strategically maintained to ensure that it
20 would drain properly.

21 MS. HORTON: And has Midwest Generation
22 estimated the cost of complete removal of CCR
23 from the grassy field?

24 THE WITNESS: Not to my knowledge.

1 MS. HORTON: Those are my questions.

2 THE HEARING OFFICER: Ms. Brown, any
3 questions?

4 MS. BROWN: No, Mr. Hearing Officer.

5 THE HEARING OFFICER: All right. Thank
6 you.

7 Mr. Gunnarson, I assume you have
8 cross. I don't know how much, whether you
9 wanted to take an early lunch. It's entirely
10 up to you. It's about 11:45, so.

11 MR. GUNNARSON: Oh, no, I think we can
12 go forward --

13 THE HEARING OFFICER: Okay. All right.

14 MR. GUNNARSON: -- right now and see
15 where we're at. It shouldn't be long.

16 THE HEARING OFFICER: All right.
17 Perfect.

18 MR. GUNNARSON: Are you planning on any
19 other witnesses?

20 MS. GALE: I'm done.

21 MR. GUNNARSON: Okay.

22 THE HEARING OFFICER: All right. Thank
23 you. And Jessica, we have that on the record
24 hopefully.

1 Mr. Gunnarson, your witness.

2 EXAMINATION BY COUNSEL FOR THE ILLINOIS EPA
3 BY MR. GUNNARSON:

4 Q. Mr. Dehlin, besides your testimony
5 today, what, if any, roles did you play in
6 preparing MWG's petition and another petition for
7 our adjusted standard in this matter?

8 A. I prepared the report, which was
9 Midwest Generation Exhibit 27 -- which, to my
10 knowledge, is the extent of the role that I've
11 played.

12 Q. Okay. So you had no role in assisting
13 with the drafting of the original petition that
14 was filed back in 2021?

15 A. No, I did not help draft the original
16 petition that was filed in 2021.

17 Q. And any of the amended petitions that
18 were filed thereafter?

19 A. No.

20 Q. Okay. When did you first visit the
21 Midwest Gen Waukegan site?

22 A. It was late 2010s. I can't pinpoint
23 the exact area, but it was late 2010s.

24 Q. And you hadn't been there prior to that

1 point; correct?

2 A. I -- correct.

3 Q. Okay. And you've -- you've never seen
4 the site prior to the present state of grassy
5 field and the two existing east and west ponds?

6 A. Correct.

7 Q. Have you ever spoken with anybody who
8 was present at the site who viewed the site in its
9 state prior to the grassy field east and west pond
10 configuration?

11 A. I have not.

12 Q. Would you agree that a dune, like a
13 sand dune, is a mounding or a piling of sand or
14 other material?

15 A. Yes, that sounds reasonable.

16 Q. And would you call the low point of a
17 sand dune a swale?

18 A. Not necessarily because a swale is
19 analogous to a ditch where it's used to convey
20 water out. So depending on what the alignment
21 looks like for a sand dune, it may not be a swale.
22 It depends on what it looks like in plan.

23 Q. But there might be a -- there's a high
24 point and a depression, essentially, with a dune;

1 correct?

2 A. Yeah, there would be a high point and a
3 low point. Yes.

4 Q. And you're aware that -- I think you
5 testified earlier today that the station area
6 referred to as an ash slag field contained sand
7 dunes; correct?

8 A. Yes. The slag field -- the original
9 slag field area was over the original sand dunes.
10 Yes.

11 Q. And I believe, as you noted in your
12 Slide 8, your Figure A-3 of your Exhibit 27, which
13 is the '46 aerial photo of the site, there was ash
14 throughout the ash slag field?

15 A. Yes.

16 (Reporter clarification.)

17 BY MR. GUNNARSON:

18 Q. Did the low points in the sand dunes --
19 were the low points in the sand dunes a natural
20 topographic depression at the site, or depressions
21 at the site?

22 A. Yes, they would be.

23 Q. And as the facility sluiced ash over
24 the years to the sluice ash field, ash accumulated

1 in that ash field, you'd agree?

2 A. Yes.

3 Q. Okay. And through the process of
4 sluicing, you would agree that what happens
5 essentially is that water is added to a material,
6 like an ash, to help move it from Point A to Point
7 B?

8 A. Yes. It's mixed and then it would be
9 pumped out to the site.

10 Q. Okay. And so as that ash then deposits
11 into the site, the sluiced ash -- the ash goes
12 someplace, the water goes someplace. Correct?

13 A. Correct.

14 Q. And that is at a power plant. I'm
15 assuming since you worked at power plants before,
16 that's a rather continuous process.

17 A. What do you mean by "continuous"? Like
18 24/7 or --

19 Q. In the sense that a power plant is
20 probably operational the majority of days a year
21 and so it would, thus, be burning coal, thus, it
22 creates ash. So how often -- I mean, how often
23 does ash get sluiced.

24 A. It varies station to station. My

1 general understanding of a typical operation,
2 though, is it would be batched. So it's not going
3 to be sluicing for 24 hours, but it might be
4 sluiced for a certain period of time every
5 eight-hour shift, let's say. I don't have an
6 exact time. It varies from station to station.

7 Q. Fair enough. And you don't have any
8 information of how it was done at Waukegan
9 Station?

10 A. No, I don't know how it was done at
11 Waukegan Station.

12 Q. Okay. But you would agree that there
13 is a continuing periodic addition of ash and water
14 to the site that's ultimately receiving the ash
15 and water; correct?

16 A. Yes, they are continually sluicing ash
17 throughout the operation of the power plant.

18 Q. And have you studied the area where the
19 ash and sluice water was deposited at Waukegan
20 based on the geologic properties of the sand and
21 the soils there?

22 A. I've looked at boring logs through the
23 -- that have been taken throughout the site to
24 have an understanding of what was naturally there

1 and what has been since placed there, if that
2 answers your question.

3 Q. Okay. So you don't necessarily have an
4 opinion today as to when if ash and sluice water
5 would be deposited in the slag field, how quickly
6 that material would separate -- the water would
7 separate from the ash?

8 A. I couldn't put a specific time to it.
9 But understanding that that is a sandy material, I
10 would say it would go through relatively -- it
11 would infiltrate relatively quickly.

12 Q. And in your understanding -- Counsel
13 put up, I think, your exhibit. But basically,
14 there was the definition of a CCRSI and the act,
15 and basically, there's no time frame there related
16 to the consequent accumulation. Is that correct?

17 A. No, there is no time frame.

18 Q. Okay. And likewise, there is no
19 definition specifically related to the word
20 "hold." Is that correct?

21 A. There is no statutory or regulatory
22 definition for the word "hold" in my
23 understanding.

24 Q. Can a CCRSI discharge water?

1 A. Yes.

2 Q. And, in fact, there were -- the east
3 and west ponds at the site do discharge water;
4 correct?

5 A. Yes.

6 Q. Through an NPDES discharge?

7 A. Yes.

8 Q. Okay. Turning back to the '46 photo,
9 your Exhibit A-3, there's no evidence of any
10 ditches within the slag -- within the actual
11 interior of the slag field area; correct?

12 A. Not that I'm able to identify.

13 Q. Okay. And I think you noted earlier
14 that a ditch may be used to convey water from one
15 point to another; is that correct?

16 A. Yes. It's the primary function of a
17 ditch.

18 Q. Okay. And thus, it would be fair to
19 say that there was water accumulating within the
20 slag field out of time such that this ditch that
21 you indicated existed was constructed?

22 A. Are you referring to my 1961 aerial
23 photograph --

24 Q. Yes.

1 A. -- in this question?

2 Q. Yes.

3 A. Yes. So -- and I think you're asking
4 was this ditch constructed to convey any water
5 that would accumulate within the original slag
6 field area to the south ditch? Is that a correct
7 interpretation of your question?

8 Q. Generally, yes.

9 A. Yes, what was what that ditch would
10 have been excavated to do.

11 Q. Okay. So to move an accumulation of
12 water?

13 A. Yes.

14 Q. Turning to your Slide 12. Slide 12 was
15 in your Exhibit, MWG's Exhibit 22 at 11, IEPA 32
16 at 17.

17 A. I'm sorry. What slide was this?

18 Q. 12.

19 A. 12. Okay.

20 Q. Do you know who produced this slide --
21 or who produced this figure?

22 A. I don't know specifically who produced
23 this figure, but I do know it is referenced as
24 Figure 3 to correspondence related to the 1972

1 NPDES permit application.

2 Q. So fair to say you've never spoken with
3 the individual who created this drawing; correct?

4 A. Yes, that's correct.

5 Q. Okay. And you indicated there is no
6 scale to this drawing. Is that correct?

7 A. That is correct.

8 Q. So based on the fact there is no scale
9 to this drawing, there really isn't a way to
10 determine how far the person who drafted this
11 considered slag field to run on east/west across
12 the property; correct?

13 A. I would argue that if the slag field
14 went up to the west property line, because both
15 the property line and the slag field boundary are
16 shown, that whoever prepared this would have drawn
17 the settling basin extending to that west property
18 line.

19 MR. GUNNARSON: Nothing further, your
20 Honor.

21 THE HEARING OFFICER: Thank you,
22 Mr. Gunnarson.

23 Ms. Gale?

24 MS. GALE: Yes, just a few clarifying

1 questions.

2 RE-EXAMINATION BY COUNSEL FOR MIDWEST GENERATION
3 BY MS. GALE:

4 Q. He asked you about the documents you
5 prepared in support of Midwest Gen's
6 recommendation and you said your report, right?

7 A. Yes.

8 Q. Which is Exhibit 27?

9 A. Yes.

10 Q. What about Exhibit 41?

11 A. I apologize. Yes, I did prepare the
12 PowerPoint presentation.

13 Q. Okay. So you were asked about the
14 definition and not including a time frame. Do you
15 recall that?

16 A. Yes.

17 Q. And he also asked you about the
18 definition of "hold." Do you recall that?

19 A. Yes.

20 Q. And it's not in the definition, right?

21 A. Correct.

22 Q. Let's go back to the agency's
23 recommendation, paragraph 30.

24 A. Okay.

1 Q. Okay. What is the agency's definition
2 of "hold" in paragraph 30? And I can refer you to
3 -- one, two, three, four -- fifth line down, the
4 word "hold."

5 A. The word "hold" is a verb defined as,
6 to enclose and keep in a container or within
7 bounds or prevent from leaving or getting away.
8 Synonyms include keep or retain.

9 Q. Do you agree with that definition?

10 A. Yes.

11 Q. So in your expert opinion, even though
12 it's not defined in the Act, would you use that
13 definition for the definition of CCR surface
14 impoundment?

15 A. Yes.

16 Q. And so even though there's no time
17 frame in the word "hold," in your expert opinion,
18 does the term "hold" -- well, what is your
19 implication as it relates to time?

20 A. There's enough time to accumulate the
21 water that's required for a CCR surface
22 impoundment to function how it's intended to
23 function.

24 Q. Okay. And then Mr. Gunnarson asked you

1 about your 1946 photo, the 1946 aerial photo. I
2 want you to turn back to that.

3 A. Okay.

4 Q. And he asked you to identify whether
5 there were any ditches within the area. Do you
6 recall that?

7 A. Yes.

8 Q. And there was a ditch on the south end,
9 right?

10 A. Correct.

11 Q. And this was 1946, right? So -- well,
12 this was 1946, right?

13 A. Yes.

14 Q. As you went through these area photos
15 and you saw the progression of this area, in your
16 expert opinion, over time, what was needed
17 eventually but not needed here, and why?

18 A. So over time, ash is accumulating in
19 this area. So you have the original sand floor
20 that we see in 1939 and over time you're going to
21 see a build-up of ash. So initially, water's
22 going to infiltrate through, but as you have this
23 continued build-up of ash, you do have potential
24 for water to accumulate. So in order to drain

1 that out faster instead of just relying on the
2 original sand floor or even just infiltration
3 through the CCR that's been built up there, it is
4 likely a more efficient means of ensuring water
5 was removed from that area would be excavating a
6 ditch, which we see in the 1961 aerial photograph.

7 Q. So in 1946, in your expert opinion
8 based upon this, what you saw in 1961, was an
9 internal ditch needed?

10 A. It does not appear to have been needed.

11 Q. But does that mean that they were
12 accumulating liquid here?

13 A. No.

14 Q. Mr. Gunnarson asked you about if the
15 ditches were used to move an accumulation of
16 water. Do you recall that?

17 A. Yes.

18 Q. Now, does having an accumulation of
19 water, does that mean it's designed to hold an
20 accumulation of CCR and liquid?

21 A. No. As I said, a ditch is designed to
22 convey. It's not designed to hold. You keep it
23 within the boundaries of the ditch, but from the
24 starting end to the -- high end to the low end,

1 you're moving that water away from the area.

2 Q. And Mr. Gunnarson asked you about the
3 Slide 12, which is that hand drawing that is in
4 Agency Exhibit 33.

5 A. Yes.

6 Q. And he asked you about your
7 interpretation of what the -- well, this is
8 presumably drawn in the early 1970s, right?

9 A. Yes.

10 Q. Long before your time, right?

11 A. Long before.

12 Q. So but in your understanding, what kind
13 of professional drew this drawing?

14 A. I'm -- I would guess an engineer drew
15 it to convey the concept that they're trying to
16 show that was the subject of this NPDES permit,
17 which was-- specifically, what this figure
18 references is the sampling locations. The
19 sampling location, I apologize, for the settling
20 basin. I mean, as an engineer, when I've
21 interacted with regulatory agencies, sometimes it
22 is faster just to sketch something. I've
23 certainly drawn sketches, not to scale before, but
24 just to convey a message.

1 Q. And so in looking at this drawing,
2 again, what message are they conveying?

3 A. They are conveying that the settling
4 basin only occupies a certain area of the original
5 slag field, which went from the east ditch to the
6 west property line. But there is a clear break
7 between the settling basin boundary and the
8 western property boundary.

9 MS. GALE: Can I just get a minute,
10 sir?

11 THE HEARING OFFICER: Sure. Off the
12 record for a second.

13 (Whereupon, there was a recess
14 in the proceedings.)

15 MS. GALE: Nothing further for now.
16 Oh, sorry.

17 THE HEARING OFFICER: I'm sorry. We're
18 back on the record.

19 Mr. Gunnarson, any recross?

20 MR. GUNNARSON: Yeah, one re-cross.

21 RE-EXAMINATION BY COUNSEL FOR THE ILLINOIS EPA
22 BY MR. GUNNARSON:

23 Q. So based on your response to counsel's
24 question about what was going on in the ash slag

1 field from 1946, in the ditch, you'd agree that
2 there was a blinding of the sand material that was
3 in that slag field that was creating an
4 inefficiency in draining off water?

5 MS. GALE: I'm sorry. What was that
6 question again? There was a what.

7 MR. GUNNARSON: Blinding,
8 B-L-I-N-D-I-N-G.

9 THE WITNESS: Could you please define
10 "blinding"?

11 BY MR. GUNNARSON:

12 Q. Have you worked with filter systems
13 before?

14 A. Not specifically with water treatment
15 filter systems.

16 Q. Do you understand the term of when a
17 filter gets blinded?

18 A. No, I do not.

19 Q. Okay. We'll use a for instance. Do
20 you use a coffee filter?

21 A. Yes.

22 Q. When you brew coffee and the grounds
23 sort of fall through and then the liquid kind of
24 comes through, but it goes slower and lower

1 because the grounds build up in it.

2 A. Clogging the opening?

3 Q. Exactly, yes. That's what I'm talking
4 about.

5 A. Oh, yeah.

6 Q. The filter acts less and less
7 efficiently because the material being filtered --
8 or materials, it's building up too much and
9 doesn't allow the water or liquid or whatever's
10 there to work through.

11 A. Correct.

12 Q. So basically, the accumulation of ash
13 over the years there was causing a situation where
14 water was accumulating because it was acting less
15 efficiently; correct?

16 A. Based on what was done in 1961, there
17 appears to have been a need to excavate a ditch
18 through the original slag field to allow for water
19 to drain out more efficiently. So it is possible
20 that the buildup of ash precluded as much water to
21 infiltrate through the sand floor as was probably
22 present at the original condition. So they
23 excavated this ditch to intentionally ensure that
24 that accumulated water was not permitted to stand

1 there.

2 MR. GUNNARSON: I have nothing further.

3 THE HEARING OFFICER: Thank you.

4 Ms. Gale?

5 FURTHER EXAMINATION BY COUNSEL

6 FOR MIDWEST GENERATION

7 BY MS. GALE:

8 Q. So he asked you about -- yes, one final
9 question. He asked you about filterings and them
10 getting -- in my term, layman's term -- getting
11 plugged up was my understanding of what he was
12 saying. Right?

13 A. Yes.

14 Q. So in that incidence, in 1961 and 1946
15 and before, what were they designing the area to
16 do?

17 A. They were designing it to drain water
18 away, whether it be by infiltration or it be by
19 the ditch that we saw was excavated in '61.

20 Q. And was the water designed to hold an
21 accumulation of CCR and liquid?

22 A. No. The station took active measures
23 to ensure that the area would not hold an
24 accumulation of CCR and liquids.

1 MS. GALE: Thank you. Nothing further.

2 THE HEARING OFFICER: Mr. Gunnarson?

3 MR. GUNNARSON: No follow-up.

4 THE HEARING OFFICER: We have a
5 question from Ms. Horton.

6 MS. HORTON: I had one quick question.
7 You testified that the sand dunes would not
8 qualify as natural topographic depressions
9 under the definition of CCR surface
10 impoundments under the Act.

11 (Reporter clarification.)

12 MS. HORTON: CCR surface impoundments
13 under the Act.

14 So I'm just curious in your expert
15 opinion what examples would you give of a
16 natural topographic depression that would
17 qualify?

18 THE WITNESS: I do want to clarify it
19 could be a natural topographic depression.

20 MS. HORTON: A sand dune?

21 THE WITNESS: Yes.

22 MS. HORTON: Okay.

23 THE WITNESS: We'd have to understand
24 the topography better. So certainly, if

1 there's a depression within an area, that
2 would qualify as a natural topographic
3 depression. What I am testifying to is that
4 the area cannot be a considered a CCR surface
5 impoundment because it was not designed to
6 accumulate liquids and CCR. So it's that
7 second criteria for the CCR surface
8 impoundment definition that this area fails
9 to meet, and therefore, the area cannot be
10 considered a CCR surface impoundment.

11 MS. HORTON: In your expert opinion,
12 could you give me an example of a topographic
13 depression that would fit that definition?

14 THE WITNESS: Usually, what I have seen
15 for CCR surface impoundments that rely on a
16 natural topographic depression are -- here's
17 a good example -- surface lines. Power
18 plants love to be located near their fuel
19 source. And so a coal fire power plant that
20 has a surface line nearby, if you take the
21 coal out from the surface, you get left with
22 a valley. And a practice that I have seen is
23 the valley would be -- there would be a dike
24 that would be constructed just over the

1 opening of the valley and then that
2 topographic depression -- although I guess
3 not necessarily natural, but you could apply
4 it to a natural valley. You build an
5 embankment across the mouth of that valley
6 and that could be used to settle CCR -- or to
7 accumulate CCR and water so that CCR could
8 settle before it's discharged out the other
9 end.

10 Does that answer your question?

11 MS. HORTON: Yes, but there is a
12 man-made element to your example then.

13 THE WITNESS: Yes, yes. I suppose you
14 could use a natural lake that was nearby to
15 deposit CCR, which would allow for CCR to
16 settle and then be discharged out the other
17 way.

18 MS. HORTON: Okay. Thank you.

19 THE HEARING OFFICER: Anything further?
20 Exhibit 44. Petitioner --

21 MS. GALE: Well, I wanted to move our
22 exhibits into evidence, Mr. Hearing Officer.

23 THE HEARING OFFICER: Okay.

24 MS. GALE: So I was going to do them

1 all, but. So Midwest Generation moves to
2 admit its Exhibits 1, 17 through 23, 26
3 through 44.

4 THE HEARING OFFICER: All right. Back
5 up again, Ms. Gale.

6 MS. GALE: Sorry.

7 THE HEARING OFFICER: These are -- 17
8 to 23 are from where?

9 MS. GALE: 17 to 23 are attached to
10 petition. And if you look at the binder that
11 I gave you, at the front there's an index of
12 the exhibits.

13 THE HEARING OFFICER: Okay. In this
14 binder here?

15 MS. GALE: Yes.

16 THE HEARING OFFICER: 17 through 23.

17 Mr. --

18 MS. GALE: And Exhibit 1, sorry.

19 THE HEARING OFFICER: And Exhibit 1.
20 Okay.

21 Any objections, Mr. Gunnarson?

22 MR. GUNNARSON: No. I'm sorry. I
23 didn't know you were waiting. I'm sorry.

24 THE HEARING OFFICER: Okay.

1 And then go ahead.

2 MS. GALE: Yeah. And then exhibits 26
3 -- so if you turn the page, there's page 2 of
4 the index. 26 -- we'll say 26 through 38 are
5 the exhibits that have previously been
6 incorporated that we did under our motion for
7 incorporation.

8 I take that back. Exhibit 26 is
9 the potential CCR universe, Exhibit 27 is
10 Mr. Dehlin's expert opinion, and Exhibit 28
11 is the Illinois EPA invoice. And then
12 Exhibits 29 through 38 are the information
13 that we moved to incorporate from the Sierra
14 Club v. Midwest Generation matter.

15 THE HEARING OFFICER: I don't have my
16 order. Do you have that offhand?

17 MS. GALE: The order of what?

18 THE HEARING OFFICER: My order granting
19 your incorporation.

20 MS. GALE: Off the top of my head? No,
21 sir. But I can get -- it was last fall. It
22 was at the time -- I can tell you it was
23 based upon a status hearing. It was a status
24 hearing order that you made. Ms. Terranova

1 had no objection to the incorporation. As
2 part of your status hearing order, you said
3 it would be incorporated. I can get you the
4 date later.

5 THE HEARING OFFICER: Mr. Gunnarson?

6 MR. GUNNARSON: No objection.

7 THE COURT: No objection? And I will
8 like a list of exhibits, please.

9 MS. GALE: Yes. And then there was one
10 more motion and then the proposal --

11 THE HEARING OFFICER: Oh, I'm sorry.
12 The 44?

13 MS. GALE: Yes. We already, I think,
14 admitted -- we moved to admit Exhibit 39,
15 which is the proposed rule, and Exhibit 40,
16 which is the summary of the potential
17 universe of comments for legacy CCRMU. These
18 were discussed by Ms. Shealey yesterday. Any
19 objection? I'm sorry. I should wait.
20 Pausing.

21 MR. GUNNARSON: No objection.

22 THE HEARING OFFICER: Thank you.

23 MS. GALE: And then Exhibit 41, which
24 is Mr. Thomas Dehlin's expert presentation

1 that was just presented today.

2 MR. GUNNARSON: No objection.

3 MS. GALE: We moved and there was
4 offered as proof of Exhibit 42.

5 Exhibit 43 has already been
6 admitted, which is the Waukegan groundwater
7 data for the monitoring well response to
8 board question No. 5.

9 And then Exhibit 44, that was
10 presented today. We move for admission,
11 which is the City of Waukegan's 2023 annual
12 water quality report.

13 MR. GUNNARSON: No objection.

14 MR. HEARING OFFICER: Thank you. Yeah,
15 I'm going to definitely need a list.

16 MS. GALE: For sure.

17 THE HEARING OFFICER: Thank you so
18 much. Let's go off the record for a second.

19 MR. GUNNARSON: The agency would like
20 to enter into evidence the agency's
21 recommendation and the exhibits that were
22 filed on October 31, '22, and the exhibits
23 attached thereto.

24 THE HEARING OFFICER: I'm sorry. Your

1 recommendation --

2 MR. GUNNARSON: Yes.

3 THE HEARING OFFICER: -- exhibit is
4 Exhibit what? Just move it in?

5 MR. GUNNARSON: Yes, please.

6 MS. GALE: We object, Mr. Hearing
7 Officer.

8 THE HEARING OFFICER: I'm sorry?

9 MS. GALE: We have objection to certain
10 of the agency's exhibits.

11 MR. GUNNARSON: All the ones that we --

12 MS. GALE: Yeah.

13 THE HEARING OFFICER: You know what?
14 We're going to go off the record and figure
15 it out because this back and forth isn't
16 working for me. We're off the record.

17 (Whereupon there was a recess
18 in the proceedings.)

19 THE HEARING OFFICER: We were off
20 transcript for a bit just talking about a few
21 things. And one of the things is the
22 parties, regarding the post-hearing briefing
23 schedules, they're going to get back to me
24 within five to seven days. But I did set

1 March 15th, the due date for public comment.
2 We can email or mail the board. We figure
3 the transcript will be due February 29th. So
4 that's the parties' start date for the
5 post-hearing briefing schedule.

6 And I also wanted to address on
7 February 7th, Midwest filed a third amended
8 petition. And I talked to legal counsel for
9 the agency and they don't plan on filing an
10 amended recommendation. Is that correct
11 Mr. Gunnarson?

12 MR. GUNNARSON: That is correct.

13 THE HEARING OFFICER: Okay. And also,
14 the parties are going to reserve their
15 closing arguments for the post-hearing brief.
16 That's it. Did I miss anything? And
17 Ms. Gale is going to send me an exhibit list,
18 and Mr. Gunnarson as well, of what was
19 entered into evidence.

20 MS. GALE: You didn't move your
21 exhibits in.

22 MR. GUNNARSON: Well, I was going to
23 say -- well, let me make the revised motion
24 on mine.

1 THE HEARING OFFICER: Okay.

2 MR. GUNNARSON: Okay? Since we now
3 have that straightened out.

4 THE HEARING OFFICER: My bad.

5 MR. GUNNARSON: Yes, that's fine. We
6 would move into evidence the agency's
7 recommendation in this matter. And the
8 exhibits -- I guess I'll read them off. It
9 might be easier that way.

10 Exhibit 1. Exhibit 2. Exhibit 3.
11 Exhibit 4. Exhibit 5. Exhibit 13. Exhibit
12 14. Exhibit 15. Exhibit 16. Exhibit 17.
13 Exhibit 18. Exhibit 19. And Exhibit 20.
14 Exhibit 21. Exhibit 22. Exhibit 23.
15 Exhibit 24. Exhibit 25. Exhibit 26.
16 Exhibit 32. Exhibit 33. Exhibit 34.
17 Exhibit 35. Exhibit 36. Exhibit 38.
18 Exhibit 39. Exhibit 41. Exhibit 45.
19 Exhibit 46. Exhibit 47. Exhibit 48. And
20 Exhibit 49.

21 MS. GALE: No objection.

22 THE HEARING OFFICER: Thank you,
23 Ms. Gale. So admitted.

24 I think that's it, what we had to

1 say, and we can all go home. And I thank you
2 again for your civility and professionalism.
3 I think we got a lot accomplished in a day
4 and a half and I appreciate it. Safe
5 driving.

6 MS. GALE: Thank you.

7 MR. GUNNARSON: Thank you.

8 THE HEARING OFFICER: We're off the
9 record.

10 (Off the record at 12:24 p.m.)

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1 CERTIFICATE OF COURT REPORTER - NOTARY PUBLIC

2

3 I, Jessica Shines, the officer before whom the
4 foregoing deposition was taken, do hereby certify
5 that said proceedings were electronically recorded
6 by me; and that I am neither counsel for, related
7 to, nor employed by any of the parties to this
8 case and have no interest, financial or otherwise,
9 in its outcome.

10

11 IN WITNESS WHEREOF, I have hereunto set my hand
12 and affixed my notarial seal this 28th day of
13 June, 2024.

14

15 Notary Registration No.: 929934

16 My Commission Expires: 04/12/2025

17

18 *Jessica Shines*

19 Jessica Shines, Certified Shorthand Reporter,
20 Registered Professional Reporter, and Notary
21 Public for the State of Illinois

22

23

24

Magna

Key Contacts



Schedule a Deposition:

Scheduling@MagnaLS.com | 866-624-6221

Order a Transcript:

CustomerService@MagnaLS.com | 866-624-6221

General Billing Inquiries:

ARTeam@MagnaLS.com | 866-624-6221

Scheduling Operations Manager:

Patricia Gondor (E: PGondor@MagnaLS.com | C: 215-221-9566)

Customer Care:

Cari Hartley (E: CHartley@MagnaLS.com | C: 843-814-0841)

Director of Production Services:

Ron Hickman (E: RHickman@MagnaLS.com | C: 215-982-0810)

National Director of Discovery Support Services:

Carmella Mazza (E: CMazza@MagnaLS.com | C: 856-495-1920)

Billing Manager:

Maria Capetola (E: MCapetola@MagnaLS.com | C: 215-292-9603)

Director of Sales Operations:

Kristina Moukina (E: KMoukina@MagnaLS.com | C: 215-796-5028)

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