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DATE: Thursday, September 17, 2020

TIME: 2:30 P.M. - 5:31 P.M.

DOCKET NO.: E-7, Sub 1214

E-7, Sub 1213

E-7, Sub 1187

BEFORE: Chair Charlotte A. Mitchell, Presiding

Commissioner Tolola D. Brown-Bland

Commissioner Lyons Gray

Commissioner Daniel G. Clodfelter

Commissioner Kimberly W. Duffley

Commissioner Jeffrey A. Hughes

Commissioner Floyd B. McKissick, Jr.

IN THE MATTER OF:

DOCKET NO. E-7, SUB 1214

Application of Duke Energy Carolinas, LLC,
for Adjustment of Rates and Charges Applicable to
Electric Utility Service in North Carolina

DOCKET NO. E-7, SUB 1213

Petition of Duke Energy Carolinas, LLC,
for Approval of Prepaid Advantage Program

DOCKET NO. E-7, SUB 1187

Application of Duke Energy Carolinas, LLC,
for an Accounting Order to Defer Incremental Storm
Damage Expenses Incurred as a Result of Hurricanes
Florence and Michael and Winter Storm Diego

VOLUME 28

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P R O C E E D I N G S

CHAIR MITCHELL: All right. Let's go back on the record, please. We will proceed with cross examination by the Attorney General's Office. Ms. Townsend.

MS. TOWNSEND: Thank you, Chair Mitchell.

Whereupon,

JAMES WELLS AND MARCIA E. WILLIAMS, having previously been duly affirmed, were examined and continued testifying as follows:

CROSS EXAMINATION BY MS. TOWNSEND:

Q. Good afternoon, Mr. Wells, Ms. Williams. Welcome to the wonderful world of this hearing.

A. (James Wells) Thank you.

Q. You're welcome. Mr. Wells, I'm going to start with you.

A. All right.

Q. Okay. I assume you were listening to Ms. Bednarci k's testimony, right?

A. I did hear portions of it. I did not hear any of the confidential, I wasn't tied into that, but I did hear most of the rest of the testimony.

Q. All right. And you're aware that she

1 directed me to ask you certain questions pertaining to
2 the subject of wells; are you aware of that?

3 A. Sure. Yes, ma'am.

4 Q. Okay. So I'm going to be asking you
5 questions understanding that you are not a
6 hydrogeologist, correct?

7 A. So I do have responsibility for the
8 groundwater. So I'm not a hydrogeologist, but I -- in
9 my role, as you know, the EHS programs, I'm responsible
10 for all environmental programs, all environmental
11 compliance programs enterprise-wide, so that includes
12 groundwater, but also air water waste. So I rely on
13 any -- you know, each of those different disciplines, I
14 rely on expertise. And with -- you know, specific to
15 groundwater, I have a groundwater team that reports up
16 to me that has their geologists, engineers, and
17 environmental managers. And they also hire consultants
18 who are hydrogeos and geologists and other -- and we
19 also rely on university professors with some very niche
20 expertise.

21 So all of those type -- I rely on that
22 expertise to bring me the facts and assist with
23 informing decisions, and they're engaged with those --
24 that expertise in evaluating my decisions.

1 Q. Okay. First of all, I want to establish that
2 all North Carolina sites require a groundwater
3 monitoring program under CAMA; is that correct?

4 A. CAMA does require a groundwater monitoring
5 program; that is correct.

6 Q. Okay. And in going over the various sites
7 with Ms. Bednarcik, we talked about Allen. And that --
8 at Allen, the CAMA groundwater monitoring network
9 comprises a sampling of 136 wells, 33 quarterly, and
10 103 semiannually; does that sound correct?

11 A. It -- you know, I would -- subject to check,
12 I'm -- that sounds very --

13 Q. Okay.

14 A. Sounds reasonable. Sounds like consistent
15 with what I would expect, yes.

16 Q. Okay. And can you tell us when this network
17 requirement under CAMA began?

18 A. So groundwater assessments were required
19 under CAMA upon the enactment of CAMA in 2014.

20 Q. Okay.

21 A. All stations.

22 Q. All right. And so when were the -- when was
23 the well supposed to be in place and operating under
24 this requirement?

1 A. Did you say when were the wells required?

2 Q. Right. When were they supposed to be
3 operating and starting to give out data?

4 A. You know, I don't recall, specifically. I
5 remember the framework, generally, which is, you know,
6 to establish a groundwater -- a pond enactment CAMA.
7 It was a requirement to develop an assessment plan,
8 and -- which would include what you're referring to as
9 the groundwater monitoring network. And that would be
10 submitted to the state, and the state would have to
11 approve. And then that, I believe, would -- a day
12 would be triggered off of DEQ's approval. I don't know
13 that there's an express requirement there. But I do
14 know, with respect to corrective action, for instance,
15 we have to begin implementation of corrective action
16 within X days of DEQ's approval of the plan.

17 Q. All right. So was there an actual timetable
18 to establish the Allen network when it had to be
19 completed?

20 A. I think there was. I would have to pull CAMA
21 and look. It seems like there was a timetable.

22 Q. Okay.

23 A. But I would have to check that.

24 Q. Okay. And based on Allen's network, which

1 was 136 wells, how many monitoring wells were in place
2 that were able to be used as part of that network?

3 A. I don't know the exact numbers. I couldn't
4 tell you that.

5 Q. 1 percent, 10 percent, 20 percent?

6 A. Well, I mean, you know, first I'd like to
7 start with -- I mean, I probably want to give a little
8 more background to that, because I don't know the
9 percentage. I would have to -- I mean, to get some
10 specifics, I'd have to look at some records. But the
11 whole concept of groundwater monitoring is this --
12 honestly, it's this iterative approach. So, for
13 instance, if you look at the federal CCR rule, it sets
14 forth that beginning monitoring network of a minimum of
15 one up, three down, which you heard Ms. Williams refer
16 to.

17 So this is 2015 federal rule, one well
18 upstream, upgradient, three wells down. Those are the
19 minimum. Now, you do more to have additional
20 characterization, but that's the starting point. With
21 respect to Allen, obviously, we had the early wells,
22 which were -- we've already discussed in the '80s. But
23 with respect to Allen, we then had a voluntary network
24 that we established in the 2000 time frame. I think it

1 was 2004. That be -- and so there is a set of wells.
2 And then additional wells are installed around the 2010
3 time frame. And, again, you know, I'd have to have
4 documents for specifics, but the point is, more wells
5 go in then.

6 And then we're working with the state on all
7 those results. There's some various processes being
8 worked through. And, at some point, CAMA came along.
9 And then CAMA said do an additional -- a full
10 assessment. So now it's starting you down the
11 assessment path. So, normally, you do a
12 detection-level monitoring, you see what you have. If
13 you start to pick something up, then you move toward
14 assessment. And that's where we were at when CAMA came
15 along, moving toward assessment. And assessment then
16 means you do a full assessment to understand the full
17 extent of the impacts. And that's where we were at in
18 2014.

19 So then you see these additional wells in
20 place just for the assessment purpose, not that initial
21 detection monitoring network which is where we were at
22 prior to this.

23 Q. My question was, were you able to use any of
24 these prior wells that were established in the '80s, or

1 the '90s, or 2010, or whenever, or did you have to put
2 in an additional 136 wells?

3 A. There -- we would have used -- first of all,
4 all the data would have been informed. So all of it's
5 useful. And the wells that were installed would have
6 been useful, and I believe continued in use unless
7 there was something wrong with the well or for some
8 reason it wasn't providing accurate information. So I
9 believe all the wells, to the extent they were still
10 operable, would have been used in the development of
11 the assessment plan, which is the additional monitoring
12 network.

13 Q. Where would we find that information as to
14 how many wells were, in fact, still there and useful?

15 A. I believe there has been some discovery
16 responses. It's just a lot here. But I believe there
17 have been some responses with respect to when the wells
18 went in and when -- any that would have been abandoned
19 since then. And I don't know if it said why, but I
20 believe it showed the wells installed, and then the --
21 if any had been abandoned. Typically abandoned would
22 mean that it was no longer functional or was providing
23 some other issues. We had to re-drill a well, or who
24 knows what could be going on. But I filed a discovery

1 response that summarized all that.

2 Q. All right. Did Duke install these wells, or
3 were they -- the new additional wells, or were they
4 installed by a third party?

5 A. We would have managed third-party contractors
6 to install. We would have provided the oversight and
7 we would have provided the -- well, with -- I say we.
8 We would have hired -- we had consultants who assisted
9 us with developing the monitoring network. And then we
10 would have -- with respect to the drilling work,
11 actually installation, that would have been done by
12 drillers that we would have hired. And -- but Duke
13 would have done the oversight.

14 Q. And who determined the number and the
15 location of the wells in these networks?

16 A. So that is -- you know, I spoke earlier
17 about, you know, how the groundwater team works, but we
18 would have done that with our in-house subject matter
19 experts, expertise at each of the different sites, in
20 conjunction with consultants. We hired various
21 consultants to assist with this based on their
22 qualifications and experience in these areas. And then
23 as I say also, some university professors assisted
24 where we needed that.

1 And all of that -- so that may have been the
2 initial work. We also had other -- we would have had
3 other reviewers that we hired or engaged with at times
4 with specific expertise to review it to ensure -- you
5 know, often just seeking them to challenge, to ensure
6 we've got it right or we've got it technically as
7 strong as we can make it for its intended purposes.
8 And then all of that would have been submitted to the
9 state for their review.

10 And then there would have been back and forth
11 with the state on any concerns, questions,
12 recommendations. Out of them, would have made the
13 adjustments for that, and then ultimately implemented
14 what was approved with the state.

15 Q. So when you talked earlier about an
16 assessment plan that you submitted to the state, that
17 assessment plan would have indicated what Duke and/or
18 its third-party helpers would indicate thought how many
19 wells were needed at any particular site?

20 A. I don't remember specifically how it's laid
21 out, but in general, that's what it would be. It
22 wouldn't just be, hey, we need 20 wells. It would say
23 here's what we want to do, we want to evaluate --
24 here's what we know to date, you know, everything we

1 know about the geology, what we know about groundwater
2 flow, what we know from past data, what we know, and
3 given what we know, we wanted to move into an
4 assessment. So let's look to understand -- continue to
5 build on that.

6 So we needed to find a well network that's
7 going to provide some additional information, and
8 that's really a next step. Now, it doesn't stop
9 suspect at therefore, I want 40 wells all sentry lined
10 along this line. It looks at depth, it looks at what's
11 going on with the geology that might create different
12 formations with respect to the flow. It looks at a lot
13 of different technical factors as to how groundwater
14 might be flowing, and making sure that we're getting an
15 adequate characterization of what's going on using
16 wells in this very large area. You're just one --
17 you're dipping a straw in one spot versus -- but you
18 got a long area you're trying to cover. So you're
19 trying to cover a large area as effectively as you can.

20 And then that's just really the first step.
21 Again, groundwater assessment corrective action is
22 iterative. So we would have done the assessment plan.
23 And even since then, would have continued once we get
24 data back from that first set of wells we thought we

1 needed per the original assessment plan. That would
2 provide additional information, and potentially more
3 wells or different depths. And all of that would be --
4 continue to be an iterative process with the state.
5 End goal to understand the full picture of what's going
6 on with respect to groundwater and use that to inform
7 the corrective action plan.

8 Q. So if I'm understanding you correctly, then,
9 a number of wells that was used in this case, 136 at
10 Allen, was based on information supplied by DEC to DEQ;
11 is that correct?

12 A. So again, kind of the full picture. It would
13 have been -- there would have been back and forth with
14 DEQ. Certainly, we would have proposed, brought a lot
15 of data together, and then there would have been back
16 and forth with DEQ on whether -- what they thought.
17 You know, they may say, hey, I'd like -- I think this
18 well should be moved 30 feet this way, or I think you
19 need three more wells in this area because I've got
20 some questions about this. Those are the kind of back
21 and forth that would have gone on.

22 Q. But the base information, obviously, had to
23 be supplied by Duke, correct?

24 A. There would have been a starting point, I

1 believe, where we would have taken it to the state;
2 that's right, and then --

3 Q. Thank you.

4 A. -- and then get the conversation going.

5 Q. Okay. Allen also has a CCR groundwater
6 monitoring network consisting of 48 wells. Plus,
7 according to the CAMA report, there were an additional
8 24 monitoring wells voluntarily sampled.

9 First of all, when did the CCR groundwater
10 monitoring network requirement begin; when did that one
11 begin?

12 A. The CCR groundwater monitoring network would
13 have been a part of the CCR rule when it was finalized,
14 which I believe was 2015.

15 Q. All right. And was that network requirement
16 for all of the sites at the same time?

17 A. It would have set forth a groundwater
18 requirement in terms of a performance standard that we
19 need to demonstrate by a date certain. We either were
20 or were not meeting a perform standard by a date
21 certain. And then you had to have a number of
22 monitoring events in order to demonstrate that. So
23 that was the setup. And that would have applied to all
24 of the CCR units that were subject to the rule at the

1 time.

2 Q. So the performance standard --

3 A. (Marcia E. Williams) If I could just jump in
4 for one second. I think it was about 30 months.
5 Initially, EPA had proposed a year to get that
6 monitoring well system in, but I think it got changed
7 to two years from the effective date of the rule to get
8 the monitoring well system installed, the data
9 collected, and sampling and analysis provided to the --
10 provided. Which, of course, North Carolina chose to
11 engage on that. The rule, you know, was essentially
12 self-implementing at that point. But that's the rough
13 time frame.

14 Q. Thank you. Is there any overlap of the wells
15 that are used for sampling at the CAMA groundwater
16 network and the CCR groundwater network?

17 A. (James Wells) Yes.

18 Q. Okay. And my understanding is that the
19 original CCR GR -- groundwater monitoring network was
20 to provide what they call detection monitoring,
21 correct?

22 A. The CCR monitoring, did you say?

23 Q. Yes.

24 A. Okay. Yes. And that was the process I was

1 referring to. I mean, it's -- I'm referring to
2 generally groundwater, what I'm seeing over the years,
3 not just any specific state or federal, but a process
4 that looks like detection assessment, corrective
5 action. Those are common kind of different phases of
6 groundwater monitoring that we see.

7 Q. And the detection monitoring phase is what?

8 A. So the detection phase is I think what you
9 referred to in the CCR rule, is that you initially
10 install a detection monitoring network.

11 Q. Okay. And that would have been, for Allen,
12 the 48 wells, correct?

13 A. I don't know if the 48 included some
14 additional assessment wells. I don't know what the --
15 I don't know, without looking, you know, at all the
16 sites, there were various wells put in at different
17 times for different reasons. But in the federal rule,
18 2015, effective at the end of 2015, the CCR rule came
19 into play. It did set forth a requirement that we
20 begin doing some detection monitoring.

21 Q. Okay. And because of contaminants detected
22 at levels above applicable groundwater protection
23 standards at every site, the sites were all placed in
24 the CCR assessment monitoring program, correct?

1 A. Correct. Here's the one key point. The
2 CCR -- I mean, a big difference, I think, between when
3 you think about the 2L rule versus the CCR rule, the 2L
4 rule has always had this compliance boundary that
5 applied since '84 time frame. A compliance boundary
6 around the basin that was 500 feet from the baseline,
7 horizontal. Just strictly horizontal, nothing vertical
8 or anything of that nature.

9 So with respect to the stay, that's where
10 your compliance boundary lied, and you built a lot of
11 your assessment. And even your ongoing monitoring
12 through the years was premised on the idea that your
13 compliance is at that 500 feet from the waste boundary.
14 CCR came along, it's different. It works at the waste
15 boundary. So it established an attention network at
16 the waste boundary, and not the 500 feet, and installed
17 the wells there. And it did have some different
18 parameters to this.

19 But in any event, that's the -- the
20 detections went in there. So at the waste boundary, if
21 you have a detection above the standard that I was
22 referring to, the performance standard with respect to
23 detection monitoring, then you move to assessment. And
24 all of our -- I believe all of our units would have

1 exceeded -- had a detection above the detection limits
2 applicable at the waste boundary and moved us into
3 assessment monitoring at those facilities.

4 Q. And what additional requirements were imposed
5 for assessment monitoring versus detection monitoring?

6 A. It is a different set -- slightly different
7 set of parameters that it has you -- as I recall, you
8 look at as well as additional wells to determine. It
9 may drive some additional wells depending on what
10 you're seeing. I think it's -- it can vary depending
11 on what you're seeing and what the parameters are.

12 Q. Okay. The number of wells in the various
13 sites in the network groundwater monitoring system
14 varied both for the CAMA and for CCR.

15 Can you explain why, for instance, Cliffside,
16 which covers approximately 1,500 acres, as opposed to
17 Allen's 2,000 acres, required 253 wells, over twice as
18 many wells in the CAMA network, and an additional 70
19 wells in the CCR network in Allen? Can you explain the
20 difference?

21 A. Well, it can -- I mean, what drives the
22 number of wells is driven by a number of factors which
23 I think are some of the things I talked about. For
24 instance, the geology, the groundwater flow, the

1 conductivity. Various things can affect the way --
2 where you want wells in order to do an adequate
3 characterization.

4 The other thing is just the real estate,
5 meaning where are the units, waste units compared with
6 other waste units. You know, if you look at Allen, for
7 instance, they're all kind of in one spot. You've got
8 the active basin, the retired basin, they all sit
9 together. Cliffside, if you look at it, you've got one
10 unit on one side of the plant, one on the other side of
11 the plant, and another unit, you know, kind of offset.

12 So all of that would drive -- if you want to
13 characterize these units, it could require more wells
14 if they've got -- if they're separated apart further.
15 But there's also -- I mean, just describing, it kind of
16 really shows how this stuff can vary from professional
17 judgment as well. So we may see, for instance, working
18 with one -- you know, again it's a groundwater subject
19 matter expert with the state in one region may have a
20 different view on how they want to approach those sites
21 versus, you know, you may work in a different region
22 with a different person, and it could even -- so even
23 who you're working with at the state can drive, you
24 know, kind of differences of opinion on how -- where

1 things go and number of wells that are needed, all
2 those things to factor.

3 Q. So these assessment plans that you were
4 giving were given to the various regions; is that
5 correct, rather than to the DEQ -- the main DEQ
6 headquarters?

7 A. They went to both. So the whole structure in
8 DEQ, we do have -- they do have regional groundwater
9 folks with expertise in that area. And then they roll
10 up sort to a centralized oversight, particularly all --
11 with respect to all the groundwater, there's sort of a
12 couple of centralized folks that oversee all the
13 regions. Oversee in the sense that they help
14 coordinate the submittals, and the responses, and
15 comments, and, you know, talking through all the
16 technical issues and coordinating meetings. And
17 then -- and they're groundwater folks as well. I mean,
18 all that obviously ultimately rolls up to what I
19 consider headquarters, senior DEQ management.

20 But the regional hydrogeologists are -- I
21 mean, you know, they're there with -- they had the
22 authority, they are -- I mean, they're a big part of
23 understanding technically what is appropriate and
24 needed in light of what we -- you know, what's the

1 right level of assessment. So they have a big part of
2 it, but it's also joined centrally to keep -- try to,
3 you know, have some consistency.

4 Q. Could you tell us what the approximate cost
5 of a well for these network wells were?

6 A. I don't have that figure.

7 Q. You have no idea?

8 A. I do have -- I have an idea. I'm not -- I
9 think I'm not sure. I mean, it can vary so much. For
10 instance, a bedrock well can take a long time to drill.
11 You know, you may be -- I've seen drills that are
12 real -- you know, they only can get so much depth per
13 day because they're in bedrock. And when you've got a
14 drill that's parked on something like that, this deep
15 well that's in bedrock, that cost can be significant.

16 You may also -- you may have another well
17 that is relatively shallow and simple to put together
18 and develop. I mean, even after you drill the well,
19 then you have to do -- there's steps to make sure the
20 well is not only constructed properly, but then
21 developed and other things just to make sure it's
22 providing accurate data.

23 Q. So what would be an approximate range from
24 the shallow well to the much more complex deep well?

1 A. You know, I would really -- I would prefer to
2 have numbers for you with respect to that. And perhaps
3 there's a -- you know, on a break, if we're still
4 going, I could see what I can find on that. My sense
5 is it was -- you know, I'm reluctant to throw out a
6 number that I don't feel good at. But it was -- I
7 would -- if I had to put something out, I think it's
8 like the 10 to 40,000 range.

9 Q. Okay. All right. Turning to your --

10 A. I would like to -- just so the record is
11 clear, I would really like to -- you know, I wouldn't
12 rely on that number. That would be -- that would need
13 to be verified.

14 Q. Understood.

15 A. I just -- you know, there is a range here,
16 but maybe something close to that.

17 Q. I don't think you need to go to your
18 testimony, but on page 15 you say something to the
19 effect that the environmental regulatory regime has
20 involved the science knowledge, and regulatory
21 priorities have changed. Sound familiar?

22 A. Yes.

23 Q. Okay. However, one environmental regulatory
24 regime, the North Carolina 2L rules, haven't changed

1 since 1984 -- or -- yes, 1989 when it added its
2 corrective action provision, correct?

3 A. Well, 2L has changed. The rule which you're
4 referring to. I mean, there have been changes to it
5 over the years.

6 Q. Okay. It added the compliance boundary and
7 the corrective action program, correct?

8 A. Well, and additional parameters have been
9 added to the 2L list. I mean, I think it started with
10 something like -- and again, it all -- you'd have to
11 check, but I think in the early '80s maybe it was 17
12 parameters, and now there's probably 150, you know.
13 And what -- you know, and the concentrations associated
14 with different parameters would have changed with time.
15 And again, it's all part of that -- yeah, I think it is
16 representative of the evolution of environmental regs
17 as a whole.

18 Q. Okay. Basic premise against degradation of
19 the groundwater has stayed the same since 1979; has it
20 not?

21 A. Can you restate? I'm sorry.

22 Q. I said the basic premise of the 2L rules that
23 prohibits degradation of groundwater has stayed the
24 same since 1979; has it not?

1 A. When the -- I believe, when the 2L rule was
2 promulgated, it would have established standards with
3 the goal that you would not have exceedances beyond
4 those standards outside of the compliance boundary.
5 And I did include in my testimony, there's some
6 discussion about that that is applicable to ash basins
7 and historical sites that were built pre-2L and how
8 they would be handled.

9 And the recognition that there is some chance
10 that you already have these groundwater impacts when
11 this rule comes in, and that they will work with
12 permittees on that through the permit program to
13 establish the permit controls as needed, as
14 appropriate. And that did play out at some facilities
15 throughout the -- you know, that's what we -- we saw
16 some of the permitting come into place in the early
17 '90s.

18 Q. Okay. If we could go to AGO prefilled Cross
19 Exam Exhibit 15.

20 A. (Witness peruses document.)

21 Okay. I'm there.

22 Q. Waiting for Chair Mitchell.

23 MS. TOWNSEND: Are you with me? If we
24 could have that marked as AGO Wells/Williams

1 Rebuttal Cross Examination Exhibit Number 1,
2 please.

3 CHAIR MITCHELL: Just to --
4 Ms. Townsend, just to confirm, this is a -- this is
5 the document, it's a brief to the Supreme Court of
6 North Carolina?

7 MS. TOWNSEND: That's correct.

8 CHAIR MITCHELL: Okay. So this document
9 will be marked as AGO Wells/Williams Rebuttal Cross
10 Examination Exhibit Number 1.

11 MS. TOWNSEND: Thank you.

12 (AGO Wells/Williams Rebuttal Cross
13 Examination Exhibit Number 1 was marked
14 for identification.)

15 Q. And if you look at the front, you will see
16 that this is an amicus brief prepared by -- for DEQ,
17 correct?

18 A. (Witness peruses document.)

19 Q. If you look at the second page, it will tell
20 you.

21 A. Oh, I'm sorry, second page.

22 Q. Right across the front.

23 A. I do see that, yes.

24 Q. Okay. All right. And if you'll go to

1 page 13 of that document, you'll see that DEQ has made
2 its position on the subject of change unknown in this
3 brief on the 2L rules on page 13 that says -- let's
4 see. In the first full paragraph of -- fourth line, it
5 starts with "groundwater assessment and corrective
6 action"; are you there?

7 A. I am. I see that.

8 Q. "Are legal requirements that flow from the
9 existence of a violation of the 2L standards. They are
10 not, themselves, used to determine whether a violation
11 has occurred"; is that correct?

12 A. That's what that reads, yes.

13 Q. And then it says:

14 "It is irrelevant in this context that, as
15 the Utilities Commission noted, requirements changed
16 over time. The fact that any party may have failed to
17 conform itself to new standards once those standards
18 became enforceable does not negate any violations of
19 those new standards."

20 Is that accurately stated?

21 A. That is read accurately, yes.

22 Q. Okay. And if you'll go back a few pages to
23 page 10.

24 A. Okay.

1 Q. And the very first sentence, it says:

2 "Whether an enforcement agency chooses to
3 enforce immediately or to defer enforcement does not
4 inform whether a violation has occurred. It only
5 speaks to the agency's enforcement discretion, not its
6 authority."

7 Do you agree with that statement?

8 A. I agree that you read that accurately, yes.

9 Q. Okay. And in its brief, it also puts forth
10 its position on the difference between an exceedance
11 and a violation under the 2L rules, and that's on
12 page 9.

13 A. Okay. I see that.

14 Q. Okay. And it says -- well, let's read the
15 second full paragraph:

16 "Most tellingly, witness Wells incorrectly
17 restated critical language in the groundwater rules.
18 Witness Wells explained in the passage above that, upon
19 the detection of exceedance, the," quote,
20 "owner/operator must assess the extent of the
21 exceedance. That is inaccurate." Groundwater rules
22 mandate instead that, in such circumstances, the
23 owner/operator must assess the extent of the
24 violation."

1 Is that what it says?

2 A. I agree you read that accurately.

3 Q. Thank you.

4 MR. MARZO: I guess if that's the last
5 question, I probably don't have an objection. But,
6 Chair Mitchell, we'll stipulate the document says
7 what it says. If Mr. Wells is going to be asked
8 questions about it, it would be different.

9 CHAIR MITCHELL: Ms. Townsend?

10 MS. TOWNSEND: I have one last question
11 on it.

12 Q. If you'll go to page 10 again.

13 A. Okay.

14 Q. And it talks about noncompliance, which is
15 something you testified to about in your -- the last
16 hearing; is that correct, Mr. Wells?

17 A. I did, yes.

18 Q. Okay. And it states that:

19 "Noncompliance is not the result of a failed
20 corrective action, but is instead a necessary precursor
21 to the requirement to undertake corrective action"; is
22 that correct?

23 A. What are you reading?

24 Q. Right.

1 A. Can you direct me again? I'm sorry.

2 Q. Okay. Very last sentence --

3 A. Okay.

4 Q. -- on the page.

5 "Put another way, noncompliance, that is a
6 violation, is not the result of a failed corrective
7 action, it is instead a necessary precursor to the
8 requirement to undertake corrective action."

9 Is that what they state?

10 A. I do see that that says that.

11 Q. Okay. Thank you. And that's all the
12 questions I have.

13 A. All right. I do want to speak to this,
14 obviously.

15 Q. Mr. Wells, I'm sorry, go ahead.

16 A. I would like to speak to this.

17 Q. Sure. Go ahead.

18 A. Okay. Good. The -- so, I mean, this -- the
19 amicus brief here, I did get a chance to see that when
20 it's filed, and it's obvious I was -- testified in a
21 prior case on this very issue, there was a great deal
22 of discussion. I think there are a couple key points
23 that I want to make sure are clear in this instance.

24 One, there was a lot of discussion in the

1 past case about what's a violation, and what's an
2 exceedance, and what does it mean. And we did have
3 some discussion, and I've had it in the same case here,
4 that where we have groundwater impacts -- and I think
5 this is very clear, and amicus lays that out very
6 clearly as well -- where you have impacts to
7 groundwater, that is not a violation unless you are
8 outside of the compliance boundary and above the
9 standard. So in the last case, there was a lot of data
10 being thrown around that was inside the basin, at the
11 edge of the basin, but it was inside the compliance
12 boundary and the term was being used very loosely. So
13 there was an effort to have some clarity around that.

14 More specifically -- and this was in my
15 testimony, and this is ultimately what the Commission
16 also in its 2017 opinion, it also directed, as I
17 understood, in their ruling. Whether -- with respect
18 to a violation, if there is an activity -- if you
19 conduct an activity that causes an exceedance of the
20 concentration of ash-related constituents outside of
21 the compliance boundary to exceed the standard, then
22 that activity is a violation of the 2L standard. That
23 activity violates the standard.

24 Q. And where would we find that?

1 A. It's in the 2L rule. So this is the 2L rule.
2 I'm summarizing the 2L rule. We can pull it up if
3 you'd like. I think it's like 103(b), but we can look
4 at it specifically. I summarize it with respect to ash
5 basins, but we can quote the -- we can pull the rule up
6 and look at it.

7 So an activity -- because if you conduct an
8 activity that causes an exceedance of the 2L standards,
9 that activity is the violation. So that's the way the
10 2L structure, as I read them, and it's -- again, we
11 could pull the language up.

12 What -- with respect to the question before
13 the Commission -- so this is where in my last testimony
14 I indicated, that's the standard with respect to what's
15 a violation. But more importantly, that's not what's
16 in front of the Commission. What's in front of the
17 Commission is whether or not that is indicative of or
18 evidence of mismanagement, or wrongdoing, or fault.
19 And what I was indicating is that the violation of the
20 2L standard for these historical sites that were built
21 before the groundwater rules, before the Clean Water
22 Act, '50s, '60s, '70s time frame, that were designed,
23 constructed, operated not only consistent with the law
24 but consistent with industry standard and beyond. And

1 we even operated, in my mind, in some instances beyond
2 industry standard throughout those years.

3 So with respect to a basin that's been
4 operated -- built, constructed, and operated consistent
5 with laws and industry standard, now that we find the
6 groundwater exceedance that results in a violation of
7 the standard, that is not evidence of mismanagement,
8 and it shouldn't be used against the Company to punish
9 the Company. It's, instead, an indication of where we
10 are in that evolution of regs, and time, and the
11 science.

12 And with respect to discovery of this, the
13 expectation is we take the next steps. That is the
14 assessment; that is the corrective action; that is the
15 hundreds of wells that you referred to. And that that
16 is the appropriate action upon discovery of this.
17 Notify the state and then assess the extent of the
18 exceedance of the standard. And again, that activity
19 that exceeds the standard is a violation.

20 And that was a lot of discussion that went on
21 last time where I ultimate -- what I ultimately was
22 indicating is that it didn't matter what you call it.
23 The question before the Commission is whether or not
24 it's evidence of mismanagement. And the Commission

1 heard that, and if you read the opinion, they do state
2 that. That the seeps -- they heard all the things that
3 are being discussed here and the groundwater and found
4 that, even if whatever -- violation, or an exceedance
5 of the standard outside the boundary, whatever the
6 language is that gets used, it's not evidence of
7 mismanagement. And that was my point.

8 You know, the second point -- and there's a
9 lot of in this amicus brief about it -- is I was
10 referring to -- and you had me read this enforcement
11 language. When I talked about enforcement, it was in
12 the context of Duke, it was in the context of utility
13 basins. Not 2L as a whole. What this amicus is
14 discussing is enforcement as a whole, and the authority
15 to bring enforcement under 2L. And I have no objection
16 to that.

17 What I was referring to is that when Duke
18 went to the state in 2009, in 2010 and was saying
19 here's what we're seeing in our groundwater, and we
20 want to start moving toward the next steps, DEQ was
21 trying to figure out what 2L read, what it meant, what
22 the interpretations of the rule were. You may know
23 they had some back and forth with the Attorney
24 General's Office trying to get some interpretations of

1 the 2L rule. Ultimately culminated in the 2011 policy
2 memorandum, the Ted Bush policy. He was head of
3 aquifer protection. That I laid out a flow chart of how
4 the state would react upon these detections that
5 exceeded the 2L standard. And it had you walk through
6 assessment, corrective action, determination of
7 background.

8 So they built the flow chart specifically for
9 these historical sites, and unique to historical sites
10 that were properly operated up to that point, but now
11 have discoveries of these groundwater contaminations
12 outside compliance boundary. And -- and in it, it is
13 structured such that enforcement would not come absent
14 failure to take the assessment and corrective action
15 steps.

16 That -- so the 2011 memorandum, the policy of
17 DEQ is what I was relying on for that position. That's
18 further substantiated in the DEQ settlement, the Sutton
19 settlement, which refers to the policy and affirms it
20 was the policy. At the time, it was an accurate
21 policy. It further discusses the intent of the policy
22 was that penalties would not be -- upon a discovery, if
23 the flow chart is followed, assessment corrective
24 action and penalties, that that's the action that would

1 be appropriate in lieu of penalties. So that's set
2 forth in the Sutton settlement.

3 The other thing I'd mention is CAMA follows
4 the same structure. CAMA is enacted in 2014, it
5 supersedes the policy, and it too works the same way.
6 Detection, assessment, corrective action without an
7 enforcement provision with respect to that discovery.
8 And that's not inconsistent with other regulatory
9 regimes that are particularly remedial in nature like
10 this, where they act on almost a no-fault basis to
11 impose cleanup obligations consistent with public
12 policy, irrespective of whether or not the operator was
13 fully compliant with the law.

14 So 2L was consistent with that, the Sutton
15 policy, 2011 memo all support that that's the
16 interpretation that was being applied to Duke in this
17 light.

18 And the only other thing I'd mention is the
19 CCR rule works the same way. There are federal
20 statutes, regulatory statutes, remedial statutes work
21 the same way, and Ms. Williams has talked about some of
22 that.

23 Q. All right. I think we can agree to disagree,
24 Mr. Wells. Going to Ms. Williams.

1 Based on your discussion with Ms. Luhr, I
2 have a few questions for clarification, if I may.

3 First of all, the CCR rule ultimately
4 determined that coal ash would not be treated as a
5 hazardous waste; is that correct?

6 A. (Marcia E. Williams) At this point, it is
7 not treated as a hazardous waste, and EPA essentially
8 deferred its final decision on the bevel of intention.

9 Q. Thank you. And as you indicated, the EPA
10 gave the states control under RCRA to deal with solid
11 waste facilities, correct?

12 A. What EPA did was develop a set of minimum
13 standards nationally that defined what was a protective
14 solid waste facility. And it did that largely in
15 narrative form. And the enforcers of that were the
16 states or citizens, either one, who felt that any
17 individual facility was not meeting it, then they
18 could -- they could take action. So states were taking
19 actions. And in some cases there were citizen suits.
20 EPA did not have actual enforcement authority, but EPA
21 continued to provide guidance to the states on
22 interpretation of various issues.

23 Q. All right. So in North Carolina, it enacted
24 its Solid Waste Management Act in 1982 and has the

1 authority to enforce that act, correct?

2 A. I can't -- subject to check. I can't -- I
3 don't recall when North Carolina enacted its solid
4 waste law. But again, for impoundments -- coal ash
5 impoundments, they were regulating them under their
6 Clean Water Act as a waste water treatment system and
7 using the NPDES authority. I would say, you know, at
8 least about third of the states did it that way, and
9 other states did cover them under solid waste
10 regulations.

11 Q. Okay. And the EPA is not the entity that
12 legislated the 2L rules in 1979, was it?

13 A. No, they are not. Although they are the
14 entity that has included corrective action in the final
15 CCR rule. And as Mr. Wells said, that is set up to
16 require detection monitoring, moving to assessment
17 monitoring, moving to corrective action where necessary
18 to protect health or the environment. And so the
19 requirement is there. It's not a violation under the
20 federal rule. The only violation is if you don't do
21 those steps that are necessary to protect health and
22 the environment.

23 And that's the same way that EPA set it up
24 for its hazardous waste regulations. Everybody was

1 required to monitor groundwater in those rules, and
2 everybody was required to meet health protective
3 standards. But if you failed to meet the health
4 protective standards, EPA did not assume that there was
5 mismanagement. EPA said, well, now you got to clean it
6 up, basically. You got to assess it, you got to clean
7 it up. So there's no mismanagement or assumption of
8 bad behavior in the way the federal regs look at
9 necessary assessment and cleanup.

10 Q. All right. And if you would go to Hart
11 Number 10, Exhibit Number 10.

12 A. Is this directed at me or at Mr. Wells?

13 Q. At you, Ms. Williams. I'm talking to you
14 now.

15 A. (Witness peruses document.)

16 Okay. I have it.

17 Q. All right. And Hart Number 10 is the actual
18 1979 2L rules that were first -- when they were first
19 promulgated; is that correct?

20 A. Yes, that's what it looks to be.

21 Q. All right. And if you would -- well, let me
22 read to you what the General Assembly said about these
23 2L rules and why they were enacted, and tell me whether
24 or not that's your understanding. It says:

1 "Only in the very last few years has
2 pollution been recognized as a major threat to the
3 quality of the groundwaters of the state. The
4 increasing incidents and potential for pollution
5 results primarily from the change in the use of land
6 from principally agricultural and civil cultural
7 activities to residential, commercial, and industrial
8 activities.

9 "This change in land use has resulted in a
10 large and continuing increase in the amount of waste
11 disposed of on the land and in the number of other
12 sources of pollution, such as landfills, waste disposal
13 and processing facilities, chemical stockpiles,
14 chemical and hydrocarbon spills, and concentrations of
15 septic tanks.

16 "Although the land in such of the state is
17 capable of cycling many types of waste, unlimited and
18 uncontrolled pollution sources will result in not only
19 pollution of the groundwaters, but eventual pollution
20 of the surface waters as well. Poorly managed
21 groundwater development is having a significant impact
22 on the groundwater quality in some parts of the state."

23 Did I read that correctly?

24 A. Yes. Except I think one word which you may

1 have misread, but it's not important.

2 Q. Thank you. All right. Turning to your
3 testimony, pages 92 to 97, you distinguish between
4 various laws and regulations stating that:

5 "Some deal with compliance obligations
6 addressing facility and waste unit design and
7 operational obligations, while others, such as the
8 North Carolina 2L rules, are remedial in nature and
9 apparently" --

10 And I don't mean to overstep, but if I'm
11 reading your testimony correctly, it appears that you
12 consider the 2L rules to play a less important role?

13 A. I think you are reading it incorrectly.
14 That's not my intent at all. It's just there's two --
15 there's the kinds of requirements that get identified
16 up front as to what's necessary to be protective. And
17 those regulations and those permits are designed to
18 ensure that you end up with a protective outcome, not
19 only of groundwater but of soil, of sediments, of air,
20 et cetera.

21 And you have a different category of rules,
22 which I think when I mentioned it earlier I said you
23 could think of them as environmental performance
24 standards. In my report, I call them remedial or

1 response laws. They're very important laws, but
2 they're doing -- they're doing -- they're almost a
3 check on everything else. Because they're saying, if
4 you're doing all the things that is believed to be
5 appropriate proactively, but you still have an issue
6 that can be attributed to a particular activity, you
7 need to address that activity if it exceeds health and
8 environmental protective levels.

9 But it does go to the issue of the purpose of
10 those laws. Typically, the purpose of these kind of
11 laws is to make sure that you address anything that is
12 not being adequately addressed by the proactive
13 requirements the people believe will be sufficient to
14 protect the environment. So it's of kind of a circle,
15 but they are a different type of a regulation or a law,
16 and so that's what I was trying to explain in my
17 testimony.

18 Q. Okay. I would expect that the state
19 legislator expected those laws to be considered
20 important and to be complied with; would you agree with
21 that?

22 A. Well, I certainly would agree that I think
23 they're important. And I do believe that the reason
24 that EPA has taken so much time, which they did

1 initially during my tenure back in the '80s, to lay out
2 what that process should be to do the investigation,
3 and the detection, and then the assessment, and then a
4 whole lot of information on corrective action, which
5 EPA worked very closely with the states on in this
6 process, was to lay out a reasonable way to implement
7 these laws, which are very important laws.

8 But I think it goes to what Mr. Wells said,
9 and EPA has gone to great lengths to say you got to
10 clean this up. We don't like it. We don't want it
11 there. But knowledge is changing over time, and we
12 have to acknowledge, if knowledge is changing and what
13 we thought was protective historically is no longer
14 protective, then we need a process to get it assessed
15 and cleaned up. And that was really the purpose of --
16 I'm going to speak for federal. I'm not going to speak
17 for the State of North Carolina. I'm just telling you
18 that the 2L laws -- law looks very similar to a whole
19 raft of laws that exist both federally, including
20 Superfund, and exist in many other states.

21 And other states sometimes implemented the
22 way North Carolina does. I worked in many states
23 where, for example, they'll issue a groundwater permit
24 similar to an NPDES permit, but it controls what's

1 allowed to be discharged to groundwater. So states do
2 it differently, but I'm just trying to develop a
3 distinction between these proactive compliance
4 operational requirements, and what you do to check
5 whether they're good enough and what you do then if
6 they're not.

7 Q. Okay. On page 90 --

8 A. (James Wells) Ms. Townsend, I did -- I -- I
9 did -- I mean, if it's okay. Just to make -- I also
10 wanted to be clear. I think I was, but with respect to
11 the 2L, as I was discussing the application of that
12 rule to Duke, it was in context of historical sites,
13 not 2L on the whole. I have no opinion on that. I was
14 speaking to -- specific to historical sites as set
15 forth within the body of the 2011 policy. It talks
16 about its application, and that that flow chart and
17 that policy flow is specific to historical sites. And
18 the Sutton settlement is consistent with that, as is
19 CAMA. So I was -- I just want to make sure that's
20 clear. I'm speaking with reference to the Duke
21 historical ash management basins here, not broader.

22 Q. Okay. Thank you.

23 Ms. Williams, on page 97, you state:

24 "The parties who exceed the 2L standards are

1 responsible for remediating the release, but are not
2 typically punished or penalized for the exceedance,
3 itself"; is that correct?

4 A. (Marcia E. Williams) I'm just -- give me a
5 second to find the line number. I see it now.

6 Q. All right. If you would turn to AGO Cross
7 Exhibit Number 26, please. And this is the letter from
8 DENR, D-E-N-E-R -- D-E-N-R, to Duke Power dated
9 December 18, 1998.

10 A. Yes, I have it up.

11 Q. All right.

12 MS. TOWNSEND: And, Chair Mitchell, we
13 would like to have that marked as AGO
14 Wells/Williams Rebuttal Cross Examination Exhibit
15 Number 2, please.

16 CHAIR MITCHELL: All right. The
17 document will be marked AGO Wells/Williams Cross --
18 Rebuttal Cross Examination Exhibit Number 2.

19 MS. TOWNSEND: Thank you.

20 (AGO Wells/Williams Rebuttal Cross
21 Examination Exhibit Number 2 was marked
22 for identification.)

23 Q. And if you will look at the second
24 paragraph -- you're more than welcome to read the whole

1 letter if you want. I don't think it's necessary, but
2 that's your call. But if you'll look at the second
3 paragraph of the letter, it says:

4 "At this time, the section was to only
5 address whether or not the 2L standards are being
6 exceeded at the compliance boundary. If, indeed, it's
7 found that the landfill does cause an exceedance of the
8 2L standards, then the landfill will need to be
9 closed."

10 Is that what it says?

11 A. Yes, you've read it accurately.

12 Q. Okay. And then it goes into -- the third
13 paragraph talks about -- starting with the 2L standard,
14 which is the fourth -- in the fourth line there. Do
15 you see where I am? Okay.

16 "The 2L standard has been exceeded at well
17 MW3 for manganese and for pH consistently, according to
18 our records. The manganese has been recorded at three
19 times the 2L standard and seems to be increasing over
20 time."

21 Is that accurate?

22 A. Yes, you read that accurately.

23 Q. Okay. Then, at the very last paragraph, it
24 says:

1 "The intent of this letter is to make clear
2 some important issues which need immediate attention
3 before a final review of this can be completed."

4 Is that accurate?

5 A. Yes.

6 Q. It appears from this letter from the
7 regulator that they were ready to require closure of a
8 landfill for exceedance at -- exceedances at the
9 landfill, including one well that has exceedances three
10 times the manganese level of the standard for
11 manganese; is that correct?

12 A. Well, I think it would be perhaps more
13 appropriate to ask Mr. Wells about background of this
14 letter since I'm not familiar with the details. But
15 the letter clearly looks like they're at least
16 requesting some additional information and analysis,
17 and have said that it may be necessary to close the
18 landfill as a corrective action in this case, yes. I
19 mean, that's how I'm reading it.

20 Q. Okay. Thank you. And that's all the
21 questions I have. Thank you.

22 CHAIR MITCHELL: All right. Ms. Lee?

23 MS. LEE: Thank you, Chair Mitchell.

24 CROSS EXAMINATION BY MS. LEE:

1 Q. Good afternoon, Mr. Wells and Ms. Williams.
2 My name is Bridget Lee, and I'll be asking questions
3 today on behalf of the Sierra Club. Most of my
4 questions will be for Mr. Wells, and I'll have a few at
5 the end for Ms. Williams.

6 Now, appreciating that we've all been
7 together for some time, I've tried my best to frame my
8 questions to elicit yes or no answers. So if you'll do
9 your best to listen to the question that I ask and to
10 answer directly, I think we'll be able to make sure
11 that we don't need to come back together again
12 tomorrow. Okay?

13 A. (James Wells) Fair enough.

14 Q. Starting with you, Mr. Wells. You testified
15 that, quote:

16 Unlike ash basins or impoundments were the
17 accepted approach employed across the power industry at
18 the times when the basins were built"; is that right?
19 I'm looking at page 11, starting line 9 of your
20 rebuttal.

21 A. (Witness peruses document.)

22 That's correct.

23 Q. Okay. And in the 1980s, weren't some
24 utilities employing dry handling techniques for coal

1 ash?

2 A. 1980s, I believe there were probably some
3 that were -- I mean, there may have been some that went
4 to dry -- I mean, for instance, we went to dry ash
5 handling at Belews in the '80s.

6 Q. Okay.

7 A. We didn't build any basins after '82.

8 Q. Okay. So --

9 A. From there, I think it was a transfer to
10 landfills, and if there were opportunities or other
11 drivers to look at dry fly, I think that was things
12 that were looked at for planning purposes.

13 Q. Thank you. So while unlined ponds might have
14 been more common in the Southeast region, other options
15 were available and being employed in other parts of the
16 country; is that right?

17 A. I mean, I think it -- in other parts of the
18 country, I mean, even within Duke, you know, we
19 employed other options where --

20 Q. Okay.

21 A. -- it was appropriate.

22 Q. Okay. And speaking generally, not getting
23 into dollars and cents here, but would it be cheaper to
24 dump coal ash into a stream valley or other low-lying

1 area on the Company's property rather than build a
2 lined storage unit?

3 A. Well, I don't know what you mean by the term
4 "dump." I don't know what you mean by "stream." I
5 don't know what you mean by "low-lying area." I don't
6 know what you're implying.

7 Q. Okay. So by dump, I mean deposit, take the
8 bottom ash from the bottom of the boiler and sluice it
9 into an area. Stream valley. I believe a number of
10 Duke's power plants are of course located next to lakes
11 and rivers, so many of those properties have
12 tributaries to those lakes and rivers on them. Any of
13 the beds of those tributaries is what I mean by a
14 stream valley or other low-lying area.

15 A. And what's the question?

16 Q. Is it cheaper to put coal ash in those places
17 rather than build a lined storage unit?

18 A. I don't know what the cost in the '50s, or
19 the '60s, or the '70s would have looked like for a
20 comparison of that nature. I do know that the basins,
21 based on the design documents that I've seen, which are
22 published on our website, indicate that these were
23 engineered. They were -- the dams are engineered in a
24 manner to ensure appropriate safety features and that

1 there won't be a release.

2 The -- with respect to a low-lying area, it
3 was, in essence, an area that -- where a dam would have
4 been built near the lake for purposes of sluicing from
5 the boiler to this area to collect. From what I have
6 seen in the drawings, I don't know what they did with
7 respect to the flows, but it appears the flows were
8 redirected to -- out of the -- meaning natural
9 stormwater flows, redirected to ensure that, you know,
10 we weren't flowing into the basin there in a way that
11 would not meet the purposes of the basin, which was to
12 receive the sluiced ash.

13 So the cost of what they did, I would
14 imagine, was not insignificant. But I, obviously,
15 don't know what those costs were. And, you know, the
16 other piece I would add is '50s, '60s concepts of
17 liners, I'm not sure even what that would have looked
18 like. I'm almost sure it wouldn't have been a
19 discussion that even sounded anything like what we
20 would be talking about a liner today.

21 Q. Okay. But the Company did continue to build
22 or to deposit ash in unlined ponds up until the '80s;
23 is that right?

24 A. We continued to operate the basins consistent

1 with the permits that were issued. And -- you know,
2 every five years. And, of course, we also had the
3 additional studies that were progressing with time with
4 the development of this knowledge of what's going on
5 and the additional monitoring. So all of that is
6 playing a part, and in particular with our interaction
7 with the regulator on the things that we're seeing:
8 additional monitoring being added, exchange of
9 information, exchange of data, questions like what you
10 saw with respect to the past exhibit. You know, an
11 exchange between the regulator about what we were
12 seeing, which I think ultimately there it was
13 determined that it was not an issue. But in any event,
14 that was the exchange that went on.

15 Q. Okay. And you mentioned dams being
16 constructed at the Company's ponds.

17 Is it true that those dams were often
18 constructed out of coal ash itself?

19 A. At which facility?

20 Q. At any of the facilities.

21 A. Do you mean at the Duke facilities?

22 Q. Yes.

23 A. I don't -- what I saw from the drawings, it
24 looked to me like it was typically a bottom -- I mean,

1 I -- so I just looked at Allen a while back. I'll give
2 you an example. It shows a borrow area in the drawings
3 of where the soil was being borrowed from and
4 creating -- it would have been at least part of what I
5 think was intended for the dam.

6 So my understanding in what I've seen, and I
7 don't -- I -- without -- I'm not -- I am aware that
8 some utilities had times when they expanded used ash in
9 their dams, I don't know that that was a practice at
10 Duke.

11 Q. Okay. And, Mr. Wells, were you present
12 yesterday when my colleague and Ms. Bednarci k were
13 discussing the Company's timeline upon construction?

14 A. So vaguely remember that.

15 Q. Okay. Sure. So Ms. Bednarci k testified that
16 she did not have available to her details about the
17 design or engineering of the basins constructed between
18 1951 and 1972. Do you have details about that design
19 and engineering?

20 A. The details I would have are what are
21 available on the website. That's where I -- that's
22 what I've reviewed.

23 Q. Okay. So no additional homework looking at
24 historical documents, just what was submitted under the

1 CCR rule; is that correct?

2 A. The -- right. Which is the design and
3 construction documents. It's the drawings and relevant
4 documents with respect to how it was built.

5 Q. Okay.

6 A. That's correct.

7 Q. And were you also able to listen to the
8 testimony of Public Staff witness Junis earlier during
9 the hearing?

10 A. Yes.

11 Q. Okay. Did you hear him discuss with
12 Mr. Mehta the DE Progress Sutton site at which a
13 clay-lined pond was constructed in 1984?

14 A. I don't remember that specifically, but I'm
15 aware of that.

16 Q. Okay. And in 1984, constructing ponds with
17 liners was not required by either federal or state law,
18 was it?

19 A. That's correct.

20 Q. Okay. Do you know whether the Company was
21 able to recover the costs of constructing the 1984
22 Sutton pond?

23 A. I don't know the specifics there.

24 Q. Okay.

1 A. There were, though, some specific driver --
2 you're referring to the Sutton '84 pond?

3 Q. That's right.

4 A. There were some drivers there. And one of
5 the things that we've talk about in my testimony is
6 that when we did have -- you know, if you follow the
7 Company's logic on a lot of things. But when there was
8 an indication of a risk or a potential impact that was
9 beyond what we were seeing, we weren't seeing any
10 evidence of significant groundwater impacts or anything
11 that suggested, you know, we were working outside of --
12 we were migrating outside of the immediate vicinity of
13 the basin. At Sutton, that was an exception, which I'm
14 sure we'll discuss on the next case.

15 So there was -- where the Company saw a need
16 for additional action to ensure adequate protection of
17 the public health and environment, it took those steps,
18 and the Sutton '84 liner was --

19 Q. Thank you.

20 MS. LEE: Bless you, Terri. I think
21 you're unmuted.

22 MS. TOWNSEND: Thank you. I just
23 realized that. I apologize.

24 Q. Mr. Wells, you are aware, of course, are you

1 not, of the plea agreement into which the Company
2 entered with the federal government that includes
3 admissions of criminal negligence, violations of the
4 Clean Water Act with respect to coal ash handling?

5 A. The plea agreement, I'm very familiar with.
6 That was --

7 Q. Okay.

8 A. -- part of even my job over the last years,
9 and the -- you know, it was a big part of last case.
10 You know, we talked about it at length. And, you know,
11 obviously, in that case, the witness case, any of those
12 facts are part of -- in terms of the recovery, that's
13 relevant here. But I think what the plea does
14 represent is us very much cooperating with the federal
15 government, working toward resolution, finding some
16 common ground, and establishing a path forward.

17 And, in fact, you know, a lot of the facts,
18 the statement of facts that's been read here, I've read
19 a piece of it I think this morning, it's been read by
20 other witnesses. But, you know, obviously, those facts
21 speak for what they were in that given period of time
22 and aren't representative of the Company as a whole.
23 The Company took responsibility, entered the pleas,
24 cooperated.

1 The Commission, in the last case, considered
2 those facts and ultimately, you know, imposed a
3 management plea -- a management penalty, which I think,
4 in part, was based on that. So, you know, I understand
5 that, and also the -- I mean, I would just indicate,
6 you know, we have completed -- you know, that was
7 entered into five years ago, five-plus years ago.
8 We've completed probation, we completed all the
9 obligations there, and really we are in a very good
10 place moving forward here.

11 Q. Okay. Thank you. And understanding that
12 that document speaks for itself, I won't have us go
13 through paragraph by paragraph, but just a couple quick
14 questions about your understanding of it.

15 Is it your understanding that the Company
16 admitted to criminal violations that were not directly
17 related to the Dan River spill?

18 A. Criminal negligence on some other items
19 outside the Dan River spill, itself, that's correct.
20 And, you know, kind of everything we just discussed, in
21 terms of the contents in the past case.

22 Q. Okay. And for those specific actions to
23 which the Company did admit criminal negligence, would
24 you consider those actions consistent with applicable

1 regulatory requirements?

2 A. I -- if you could clarify. What do you mean
3 consistent with applicable requirements?

4 Q. Well, I believe it was -- pull the page in
5 your rebuttal testimony, you testified that DEC has
6 met -- quote:

7 DEC has managed CCR consistent with industry
8 standards and environmental regulations.

9 A. Yes.

10 Q. So even those instances where the Company
11 admitted criminal negligence, that was, in your
12 opinion, consistent with regulatory requirements?

13 A. I think you're referring to the River Bend
14 seep. I mean, perhaps that's what you're referring to.
15 That was one of the items that was included in the
16 statement of facts that supported the plea. And, you
17 know, I think my point here is we have tens of
18 thousands of compliance obligations on this fleet, and
19 with respect to the ash basins that I manage current
20 day. And that's just in a given time period. If you
21 look from the time of inception from the '50s to now, I
22 can't manage the number of compliance missteps that
23 exist.

24 On the whole, over that period, without

1 question, the management of our basins has been very
2 strong, very powerful, consistent with industry
3 standard, consistent with the regs. No doubt there
4 would -- if I looked back, I would find periods of time
5 where we had mishaps, we had instances where we had to
6 adjust. We thought we had it under whatever management
7 system, and then we find we aren't, and we need to make
8 a right adjustment, and that's what was done. So the
9 plea represents that period of time, snapshot in time
10 for that with respect to the entire, you know, 78-year
11 period. I think on the whole we've, I think, performed
12 very well, consistent with regs, consistent with the
13 law, and consistent with the standards.

14 Q. Okay. Thank you for that answer.

15 The Company was aware that unlined ponds had
16 the potential to impact groundwater and surface water
17 back in the '80s; is that right?

18 A. Yes, I think that's correct.

19 Q. Okay. Is it the Company's position that it
20 need only take action to prevent or mitigate impacts to
21 groundwater when those impacts represent significant
22 risk of environmental harm?

23 A. No. I don't think so.

24 Q. Okay.

1 A. I mean, here's why. I think you imply
2 through significant that there's something less than --
3 you know, something you take no action on. The
4 standards are set forth in the reg in terms of
5 standard. There are limits and the compliance
6 boundary. And if we find that we are outside of
7 compliance boundary and above the regs, then no doubt
8 that would drive action toward corrective action,
9 irrespective -- I mean, it's a regulatory requirement,
10 so that's regardless of if that's presenting a risk to
11 the public health. And that's what we're doing today.

12 So there are instances where there's not a
13 significant risk to the public health. Nevertheless,
14 you have a regulatory requirement that you're not
15 meeting, or you're at risk of not meeting. And even if
16 there's no risk to health, even if there's no risk to
17 the surface water, even if it's not hitting any wells,
18 that regulatory requirement to clean up because you're
19 outside that standard, that is something you do and
20 will do. And that's what we're doing now.

21 There are other instances where you may find
22 there is no significant risk of a regulatory risk, and
23 maybe even no significant risk to the public health as
24 you said. But as you review the data and review the

1 facts, there's a potential that could develop. And
2 maybe -- you know, there are instances I could point
3 you to where, as opposed to just investigating and
4 maybe proving a negative, or you may just take the
5 steps. You may support the steps just to provide that
6 certainty for people. Even if you don't believe
7 there's a risk there or you don't anticipate a risk,
8 but it would be an extensive work to demonstrate that.

9 We've done that with respect to waterlines in
10 some instances. You know, the risk isn't there, the
11 evident of an impact isn't there, but there's also an
12 issue there. So even though there's no significant
13 impact there, we're still taking proactive steps to
14 resolve an issue associated with it. We've done that
15 at other facilities in DEP, and we'll talk about it
16 when the time comes. But in any event, there are times
17 that there are so many different, I think, fact
18 patterns that can play, and they all got to be looked
19 at.

20 But on a whole, Duke is looking at meeting
21 regs minimum, then doing whatever else is needed to
22 manage the risk with respect to public health and the
23 environment or regulatory compliance issues. And then,
24 on top of that, you know, asking what is also the right

1 thing. And those are the steps that I saw the Company
2 taking from the '80s up until today.

3 Q. Okay. Thank you for that answer. I think
4 you might have just answered some of my upcoming
5 questions, so I'll just go through them real quick and
6 maybe just give me a quick yes/no.

7 Would you agree, Mr. Wells, that in addition
8 to the abatement of pollution and contamination, the
9 North Carolina 2L rules were also intended to prevent
10 pollution and contamination?

11 A. Well, I think it's as I've discussed. I
12 think it established limits which are performance
13 standard, and then establishes that you cannot conduct
14 an activity that would cause an exceedance of
15 constituents above the 2L concentrations outside the
16 compliance boundary. So, I mean, it's -- so it's
17 setting up that performance standard with an eye toward
18 things. Particularly if you were going to design a
19 basin today, a lot of requirements would be built in
20 into your -- even into your design, into the way you
21 engineer it with an eye toward ensuring you will meet
22 that performance standard in the coming years.

23 Q. Okay. And would you agree that those 2L
24 rules are also intended to maintain and preserve water

1 qual i ty?

2 A. I mean, the purpose of the 2L rules is to
3 ensure -- I mean, they're established there for all the
4 reasons that I think we've reviewed with respect to the
5 2L.

6 Q. Okay.

7 A. The language wi thin the rule.

8 Q. Okay. Shifting gears a little bit, have you
9 evaluated whether any groundwater impacts could have
10 been avoided or mitigated if the Company had ended its
11 storage of coal ash in wet ponds earlier?

12 A. Well, I mean, I think the first thing to make
13 sure you understand what you're talking about with
14 respect to storage of -- I think you said coal ash in
15 impoundments earlier, what that means, what that takes.
16 So you would -- these are all permitted for a number of
17 waste streams. Not just ash. And with respect to ash,
18 not just dry ash. It includes bottom ash. So all of
19 these are very big propositions that you're talking
20 about. So if you do make that conversion, you have to
21 find real estate for another retention basin to receive
22 these wastewaters. There's a large volume of water.

23 You have to convert to dry fly. You have to
24 convert to dry bottom. You have to divert all the

1 stormwater that flows that -- you know, there are sheet
2 flows still going in just as a result of the terrain.
3 Have you to find a way to divert that. You have to
4 establish alternative wastewater treatment systems that
5 don't exist, and build those in to manage the
6 additional wastewaters that are going in. I think
7 you're familiar with the low volume waste and other
8 things of that nature.

9 So once you build all that, then now you may
10 be in a position to move toward no longer sluicing to
11 the basin. And you may be able to move the basin
12 toward closure. And as you do that, you then look at
13 the groundwater, and whatever is there even at closure
14 is still there. So now you still have, at that time,
15 after you go through that action, you still have that
16 groundwater impact. And you still have whatever action
17 is needed at that time to remediate pursuant to the 2L
18 standard, which is where we're at today.

19 Q. The sooner you close, the fewer coal ash
20 constituents will enter the groundwater, right?

21 A. You know, not necessarily. And I say that
22 because -- and this is, I think, a bit of discussion.
23 Isn't this plume just growing? And I've indicated it's
24 not. And I say that because we've done model after

1 model. I mean, I have models submitted to the state,
2 very sophisticated groundwater models, and if I could
3 simplify it, if you were to look at the site, look at a
4 basin, you would see a plume, a yellow picture around
5 the basin where we have impacts. And in some areas it
6 exceeds -- you know, it's outside of the 500-foot
7 compliance boundary, which is those in the areas we're
8 moving toward corrective action.

9 But that is a very -- if you model that, five
10 years, 10 years, no action, meaning it just would
11 continue on, it looks the same. If you do it with
12 closure in place, closure through excavation, this
13 looks the same. It's when you move in and do that
14 corrective action that you -- I mean, not the exact
15 same. It begins to reduce over time. Let's say
16 50 years out you begin to -- but not in a substantial
17 way, right? Where you see the action is when you get
18 in there and do corrective action on the groundwater,
19 itself.

20 So depending on what the state of the impact
21 is at that time to restore all that at that time, which
22 could have been the '80s, '90s if that's that what
23 you're referring to, you would still be going in and
24 doing that level of effort to remove that groundwater.

1 Q. Okay.

2 A. Make Sense?

3 Q. Oh, sorry. Please finish.

4 A. I just -- I was asking if that was making
5 sense or not.

6 Q. It does make sense. But just to go back to
7 my original question of whether anyone has evaluated
8 that.

9 I guess from your answer I'm understanding
10 you describing that evaluation maybe as difficult, but
11 has anyone actually tried to conduct it?

12 A. Conduct specifically --

13 Q. Evaluating whether groundwater impacts, there
14 were any that could have been avoided or mitigated if
15 the Company had switched to dry handling sooner.

16 A. Well, I think that -- I mean, I think the
17 model here is that you have a groundwater impact at or
18 near the basin. And that that's -- as it flows away
19 from the basin, it's attenuated with the soil. So, I
20 mean, that was sort of what the premise of the
21 understanding of the '80s was. And that's -- you know,
22 we do see that that's still the case. You know, there
23 is attenuation going on. But now you do see the plume
24 where it is. We have much more -- wells studied. What

1 existed in the '90s, specifically to that, we didn't
2 have as -- what I would consider to be the same level
3 of monitoring that would present that picture to us.
4 So what was it back then, I don't know.

5 There were certainly impacts to the -- to
6 the -- at the basin early, it's just they weren't
7 expanding or migrating. I mean, when I say early,
8 meaning when we were looking in the '80s, that's what
9 you saw, right? You saw -- I mean, you guys -- I think
10 some of, you know, Hart knows and cited some wells
11 there that were inside the basin that indicated there
12 was groundwater impacts there.

13 But, you know, the question is was it
14 migrating. I think you'd have to understand when that
15 occurred, and I -- in the end of the day, I don't
16 believe that -- I think your corrective action would
17 have -- it would have looked similar in different time
18 frame. But to have been doing work to restore the
19 groundwater and gone in and done it. I don't believe
20 there's, like, it's worse, or it would have been worse
21 if we -- or less worse -- it would have been better if
22 we'd have moved earlier. I don't know that there's any
23 evidence to support that.

24 I just don't know. What we see today is, you

1 know, that impacted area is still at the basin and
2 still attenuates as it goes, but it is outside the
3 compliance boundary and warrants corrective action.

4 Q. Okay. Let me ask a slightly different
5 question.

6 Have you analyzed whether an earlier shift to
7 dry handling would have resulted in different closure
8 costs today?

9 A. I have not looked at --

10 Q. Has anyone at the Company?

11 A. I don't know. I don't know the answer to
12 that. Now, I mean, I would assume, if you had to look
13 at all that, you'd have to -- you have to look at all
14 the factors, right? I mean, running dry fly, now you
15 got to have landfills, and you got operating costs over
16 the time from that, in addition to just the capital
17 shift to go to dry fly. I mean, I'm sure there are
18 just many factors that, you know, both capital and O&M
19 versus -- it would be a part of that analysis, but --
20 and then anything that would suggest how that affects
21 closure, I think, would just be incredibly speculative.

22 Q. Okay.

23 A. Because the basins predated all of this, and
24 I think there's -- I mean, I think your organization,

1 for instance, has taken a very strong position that
2 those basins that -- where there's any groundwater
3 potentially flowing in a way that it might be impacted,
4 their only option is to excavate. And that -- so we
5 could have converted to dry fly in all sites in the
6 '80s, and that still wouldn't -- what I understood the
7 Sierra Club's position, still would have required the
8 level of closure we're looking at today.

9 Q. Okay. And an earlier switch to dry handling
10 of bottom ash would mean fewer tons in the ponds today,
11 would it not?

12 A. The -- remember the way that basins worked is
13 you -- ash was sluiced there, and then at times it was
14 dredged out. So what's the total -- you know, at times
15 things, I think, were dredged, or moved, or managed
16 differently, but -- so I can't say across the board
17 that's true.

18 Q. Understood. And between the prior rate case
19 and this one, the Company was ordered to excavate all
20 the ash from its ponds and has since agreed to do -- to
21 excavate most of the ash; is that right?

22 A. That's correct.

23 Q. Okay. And the excavation costs can be
24 measured in dollars per ton; is that right?

1 A. I think there are a lot of factors that drive
2 the costs, but I think there are some generalities
3 around, you know, cost per ton or cost per cubic foot
4 with respect to excavation. I think that's right.

5 Q. Okay. Thank you so much, Mr. Wells. Those
6 are all my questions for you. And now I just have a
7 few more for Ms. Williams.

8 A. (Marcia E. Williams) I wonder if before
9 you begin your questions, I just have a handful of
10 small points I wanted to supplement with what Mr. Wells
11 was saying on some of the questions you asked him. I
12 mean, they go to the topics you were asking him, so.

13 Q. I mean, you know what, if Duke counsel would
14 like to ask you those questions on redirect to clarify
15 for him --

16 MR. MARZO: Chair --

17 Q. -- I'm happy with the answers that Mr. Wells
18 has given to my questions, and they were directed
19 towards him.

20 MR. MARZO: Chair Mitchell, we typically
21 allow, when there are panels, for the other panel
22 member, if they have some information to provide,
23 to provide it. And Ms. Williams seems to have some
24 information that would be responsive to the

1 question. I just ask that she be allowed to
2 provide and summarize it now.

3 CHAIR MITCHELL: All right.

4 Ms. Williams, Mr. Wells, I would ask that, if
5 counsel asks the panel a question or asks a witness
6 a question that you feel you're better suited to
7 answer or you have something of material value to
8 add to your panelist's -- your co-panelist's
9 response, please do so at the time the question is
10 asked, just in the interests of facilitating,
11 understanding, and a clear record. And again,
12 hearing -- making the most efficient use of our
13 hearing time.

14 Ms. Williams, I'll allow you to proceed
15 and make the points that you need to make in
16 response to the questions that Ms. Lee has asked,
17 but I would ask -- just ask that you do so, please,
18 ma'am, in an efficient manner so that Ms. Lee can
19 get to the remainder of her questions and we can
20 move on with the hearing. Thank you.

21 THE WITNESS: I will. I apologize. I
22 thought about trying to intervene, but the question
23 flow was going so quickly, I thought it was better
24 to let it finish. I just have a handful of things

1 that I thought might be helpful.

2 One, the trend towards dry fly ash that
3 has been discussed here and was originally
4 discussed in the EPRI manual was largely because
5 EPA made a determination in 1982 that for new --
6 for new facilities, dry ash management was
7 necessary for fly ash, not for bottom ash. So that
8 was kind of what was driving that trend initially
9 in the early years. And because it was limited to
10 fly ash, even for new facilities that might have
11 gone to dry fly ash handling, they would still have
12 had to deal with wet bottom ash handling because
13 the technology was not evolved at the same time.

14 The second point I wanted to make is the
15 switch to landfills, which would have gone with dry
16 fly ash, would most likely, in that time frame,
17 have gone to unlined landfills, because at that
18 time there were not a lot of lined landfills being
19 built and operated. And, in fact, again, when EPA
20 looked in 1986, only 12.5 percent of industrial
21 landfills of any type were lined. So for the most
22 part, they were unlined.

23 And then the third point I was going to
24 mention is that you had asked a number of questions

1 about cost, Ms. Lee, in terms of the difference
2 between lined and unlined units, both lined and
3 unlined impoundments, and lined and unlined
4 landfills. And I was just going to point out that,
5 in the 1988 EPA report to Congress, as of that
6 date, there's a fair amount of information provided
7 with regard to cost -- information cost per ton.
8 And a lot of these are overlapping ranges, so you
9 can't really say that the cost per ton is
10 necessarily less expensive for an unlined unit or
11 for a landfill versus a surface impoundment. So
12 it's just Exhibit 6.6 in that document, and it is a
13 joint exhibit, and it does provide a number of the
14 costs. So that's all I wanted to supplement.

15 Q. Thank you for that. Moving on, I use a sort
16 of intro, but now that we've begun, I apologize for the
17 out of orderness of this.

18 But, Ms. Williams, you've never been employed
19 by Duke Energy, correct?

20 A. That is correct.

21 Q. Okay. And for the last 30 years, you've been
22 acting as a consultant primarily, correct?

23 A. Yes.

24 Q. Okay. Could you please turn to your résumé,

1 and that is Exhibit 1 of Williams' rebuttal. Just let
2 me know when you're there.

3 A. (Witness peruses document.)

4 Okay.

5 Q. Okay. I see you included a list of
6 proceedings in which you've offered expert testimony,
7 correct? It starts on page 8 of the résumé.

8 A. Yes.

9 Q. Okay. And it's a pretty long list. It
10 starts at page 8 and continues to page 12, and we
11 certainly don't need to talk through each of these, but
12 I did just want to ask you a very few questions about a
13 couple.

14 I'm looking at page 9 of the résumé, and the
15 fourth bullet from the bottom of the page identifies a
16 2003 Colorado case, Carol Antolovich vs. Brown Group
17 Retail; do you see that?

18 A. I do.

19 Q. Okay. This was a class action suit brought
20 by homeowners who live near a chemical storage facility
21 and where toxic chemicals were found in plaintiff's
22 groundwater, soil, and in the indoor air of their
23 homes, correct?

24 A. It was a manufacturing facility, it wasn't --

1 I mean, I don't know what you mean by chemical storage
2 facility, but it was a manufacturing facility.

3 Q. Were they storing chemicals on site?

4 A. Yes. They used chemicals on site. I don't
5 recall -- I don't recall that there was any
6 landfilling, but I think there was chemicals on site.

7 Q. Okay. Sure. And on whose behalf did you
8 offer testimony in that case?

9 A. I offered testimony on behalf of Brown Group
10 Retail.

11 Q. Okay. And that is the owner of the
12 manufacturing facility or the owner of the property?

13 A. Yes.

14 Q. Okay. Looking at the next page, this is
15 page 10 of the exhibit, the fourth bullet identifies a
16 2007 West Virginia case, Perrine vs. DuPont; do you see
17 that one, Ms. Williams?

18 A. Yes.

19 Q. This was also a class action, and it dealt
20 with homeowners' exposure to hazardous substances
21 released by DuPont from a zinc smelter in
22 West Virginia; does that sound about right?

23 A. That's my memory, yes.

24 Q. Okay. And --

1 A. At this point I don't have an -- I don't have
2 a -- there were a couple different related cases. I
3 don't have a completely distinct memory of the details
4 of those issues.

5 Q. Okay. This case is probably close to
6 20 years more recent than your work at EPA, though,
7 right?

8 A. Yes. I left EPA in 1988.

9 Q. Okay. And on whose behalf did you offer
10 testimony in the DuPont case?

11 A. My testimony was on behalf of DuPont.

12 Q. Okay. Thank you. And if we could turn to
13 the next page, this is page 11 of the exhibit. I'm
14 looking at the first bullet on that page which
15 identifies a 2010 Florida case, Nancy Sher vs. Raytheon
16 Company; do you see that one?

17 A. Yes.

18 Q. Okay. I believe this was another class
19 action brought by homeowners in Florida against
20 Raytheon for groundwater contamination emanating from
21 that company's storage of hazardous wastes; is that
22 correct?

23 A. The case -- as all these cases, in terms of
24 what I'm asked to testify on, is the evolution of

1 knowledge as to when certain practices were understood
2 to be related to groundwater contamination and other
3 standard of care or standard of practice issues.

4 Q. Okay. But -- sorry, just for the clarity of
5 the record, if you could answer my question.

6 Was this case about groundwater contamination
7 emanating from Raytheon's storage of hazardous waste?

8 MR. MARZO: Madam Chair, I'm going to
9 object just to relevance of this line of cross.
10 It's late in the day.

11 MS. LEE: Chair Mitchell, I am almost
12 done. And I believe this is quite relevant. The
13 Company has offered Ms. Williams as an expert on
14 environmental regulatory matters, and has directly
15 pointed to her consultant years.

16 CHAIR MITCHELL: All right. Ms. Lee,
17 I'm going to overrule the objection. Proceed with
18 the questions, the witness may answer it.

19 THE WITNESS: The issue involved with
20 the Raytheon case was a contaminant called
21 1,4-dioxane, which was a new contaminant that
22 hadn't been recognized until roughly in the time
23 frame of this case, and that's what this case was
24 dealing with. I would like to put on the record

1 that I have worked for many entities on both sides
2 of most issues -- most of these kinds of issues,
3 including environmental groups and homeowners. So
4 I don't think -- you're welcome to, obviously,
5 highlight the cases you want, but I have worked for
6 the government of the United States, the government
7 of Mexico, the government of Canada, and for
8 plaintiffs in suits.

9 Q. On this list of testimony, can you point to
10 any plaintiffs work you did?

11 A. Well, I've got -- a lot of what's on here is
12 plaintiffs work, but it's not plaintiffs work if you're
13 talking about neighbors. But yes, I -- the plaintiffs
14 work that I've done on behalf of -- well, one was
15 involving the port of Houston against a bunch of
16 chemical facilities. And once that I've done for
17 neighbors have generally settled before they've gotten
18 to either deposition or trial.

19 Q. I see. Okay. Last one. I'm looking at the
20 sixth bullet on the page we're looking at now, which
21 identifies a New York case, Doris Bai ty vs. General
22 Electric; do you see that, Ms. Williams?

23 A. Yes.

24 Q. Okay. I believe this was another toxic tort

1 class action brought by homeowners, this time against
2 GE for contamination emanating from waste disposal
3 activities. Does that sound about right?

4 A. The answer is it did involve that. But what
5 I -- as I recall, the issues were narrower than that in
6 terms of at least what I was dealing with. And at this
7 point, as I said, I can't --

8 Q. Okay.

9 A. -- give you the detailed discussion.

10 Q. Fair enough. Companies like DuPont, and
11 Raytheon, and GE wouldn't hire a consultant who might
12 conclude that their actions resulted in contamination
13 of environmental harm or who disagree with their
14 perspective on regulatory requirements, would they?

15 A. My testimony --

16 MR. MARZO: I'm going to object. Well,
17 I'll let Ms. Williams answer, but that calls for
18 speculation as to what DuPont would do and not do,
19 and they're not here testifying.

20 MS. LEE: That's fine. I'll withdraw
21 the question. I have nothing further,
22 Chair Mitchell. Thank you for your time,
23 Ms. Williams and Mr. Wells.

24 CHAIR MITCHELL: All right. We had

1 originally -- we were originally scheduled to end
2 at 4:30 today. We are close to 4:30. We have a
3 ways to go before we can -- we are in a position to
4 conclude the hearing. What I would like to do at
5 this point is take a break for our court reporter.
6 Let's take a 10-minute break. We will come back on
7 the record, and I would like to take us until 5:30
8 today. That should give us plenty of time to
9 finish up the remaining portions of this hearing.
10 But again, let's go off the record now. We will go
11 back on at 4:20.

12 (At this time, a recess was taken from
13 4:08 p.m. to 4:20 p.m.)

14 CHAIR MITCHELL: All right. Let's go
15 back on the record, please. Mr. Marzo, you're up
16 on redirect.

17 MR. MARZO: Chair Mitchell, I have no
18 redirect. I do want to let the Chair know, and I
19 know you mentioned a moment ago that you were
20 extending the hearing, that we have talked to the
21 witnesses, and they are here as long as the
22 Commission's pleasure is to question them.

23 CHAIR MITCHELL: All right. Thank you,
24 sir. All right.

1 We will move to questions by the
2 Commi ssi oners, begi nni ng wi th
3 Commi ssi oner Brown-Bland.

4 EXAMI NATION BY COMMI SSI ONER BROWN-BLAND:

5 Q. Good afternoon. And I think my questions
6 will start and be directed towards witness Wells.

7 A. (James Wells) Yes, ma'am.

8 Q. So just for my curiosity, as I believe the
9 first of these storage basins, I believe the
10 evidence is Duke constructed the first one in 1956.

11 And my question is, so between 1956 and, say,
12 1975, was there ever -- to your knowledge, in terms of
13 what you've reviewed, was there ever discussions about
14 whether there was any reason or value to dig up the
15 unlined basins and handle CCRs in a different manner?

16 A. There was not. Nothing that I've seen.

17 Q. And then if you break that up and say between
18 1975 and 2000, was there ever any discussion amongst
19 the folks at the Company as to any possibility of
20 digging up the storage ponds, impoundments?

21 A. I did not see anything specific to digging
22 up. I do recall seeing documents that discussed -- I
23 mean, I'll give you an example. I saw -- I recall in a
24 discussion about conversion and dry fly at Marshall

1 based on a commercial opportunity to recycle ash. So
2 I've seen things that look like that. Nothing that
3 would have been as specific as an analysis to excavate
4 a basin during that time period.

5 And I did see -- of course, post 2000 I saw
6 planning documents that I think we've talked about in a
7 case before, so I do recall seeing those as well.

8 Q. And so prior to 2000, as far as you know,
9 there was never, you know, any real thought given to
10 digging up a storage basin?

11 A. Well, I don't know -- I don't know that there
12 was a discussion about closure, generally, that I've
13 seen, and what that would entail, and what those
14 options would be. I don't know that there was
15 discussions along those lines. There was the concept
16 of taking a basin inactive, I believe, is more in line
17 of what that discussion or thought process was.

18 Inactive, meaning no longer sluicing to it. And
19 normally what that meant, at that time, was to allow it
20 to dewater and revegetate and no further action until
21 such time as closure -- there was clarity around
22 closure, which you start seeing in the 2002. 2010, you
23 know, once we got into the modern days is when you
24 start seeing some of that.

1 Q. When was the first time that you know of that
2 seriously considering digging up one of the basins or
3 ponds came up?

4 A. Well, I think from the time that closure was
5 beginning to get discussed in its -- in a way that
6 it -- there was real guidance and standards being
7 established. So you're into the, you know, development
8 of the CCR and into the modern days. I think when that
9 started, then the dialogue around, okay, does that --
10 what does that mean, closure. And in some instances
11 does it mean excavate; does it mean cap in place; does
12 it mean hybrid approaches? That's where all those, I
13 think, different options starting being looked at.

14 I believe from inception of that discussion,
15 there was a camp that viewed excavation as the
16 preferred option. Meaning camp, meaning there were
17 folks that that would have been their approach from the
18 beginning of that dialogue.

19 Q. All right. And then with regard to your
20 direct testimony and, you know, the testimony you've
21 given live today, is it your testimony and opinion that
22 it would not have been reasonable for Duke to believe
23 that the basins and ponds with CCRs in them would pose
24 any health or environmental harm at any point?

1 A. I think I need to -- I'm sorry, I had trouble
2 following that. Would it have been -- can you restate?
3 I'm sorry.

4 Q. In your opinion, is it -- are you saying that
5 it would not have been reasonable for Duke to believe,
6 at any point, that the basins and ponds would pose any
7 health or environmental harm?

8 A. I think my opinion was focused on the data
9 that was -- that -- what the data was telling the Duke
10 people with respect to decisions. And the fact that
11 the data was not indicating a risk to the public health
12 based on what they were evaluating, the analysis that
13 were done at that point. So there -- I was saying it
14 was reasonable, in my mind, that they would not be
15 seeing that based on the data this was in front of
16 them.

17 Q. And was it reasonable that -- to believe
18 that -- or did it -- or would it have not have been
19 reasonable to believe that the basins or ponds would
20 have leakages or seepage?

21 A. No. I think they did believe that the pond
22 was permeating through the bottom of the basin and
23 having a localized impact to the groundwater in or
24 around the vicinity of the basin. I think that --

1 that -- but the point was that that is an impact. I
2 mean, by definition, you're impacting the groundwater.
3 But there -- but that doesn't imply or doesn't mean
4 harm. That doesn't mean risk to the public health in
5 and of itself. It's meaning risk to the public health
6 in terms of the drinking water receptor or to a surface
7 water. And I think, in the '80s, that's what they were
8 evaluating.

9 So I think it was reasonable. I think what I
10 saw is they were concluding there was an impact, it was
11 localized, but it -- so it would have been -- I guess
12 to answer your question, it would have been reasonable.
13 And I think they did reasonably conclude that there was
14 some water from the basin that is permeating through
15 the surrounding soils in the immediate vicinity. But
16 any of the -- but they also went on to understand --
17 and what does that mean with respect to risk to public
18 health or the environment? And that's -- I think that
19 was the analysis that was ongoing.

20 Q. As opposed, I guess, from your testimony to
21 believing that there was a potential -- potential for
22 impact versus a likelihood of risk. And I guess that's
23 why I'm asking, would sort of the inverse be true, that
24 it would not have been reasonable for the Company to

1 believe -- are you saying the Company would have been
2 unreasonable in any belief that -- or any camp that
3 might have believed that the ponds would have caused
4 harm or would have leaked; is that what you mean by
5 impact?

6 A. Well, I think I was more indicating what
7 was -- what ended up being -- I mean, what was evident
8 from what the thinking was of the Company at the time
9 based on those studies and finding those reasonable. I
10 didn't see an alternative opinion. And my view on that
11 is, you know, I believe there would have been, you
12 know, some good analysis of the data, and ultimately a
13 decision going forward after that full analysis. And
14 so -- and again, I've already indicated, you kind of
15 view that holistically. There are a lot of factors
16 that come into play. By my indication, that's the
17 analysis, and I thought that was reasonable.

18 Q. So even as far back as 1996, having
19 groundwater samples in hand that show the presence of
20 CCRs related to contamination and possible seepages and
21 exceedance at Allen, Belews Creek, Dan River, Marshall,
22 and Lee, even having that made the -- made the
23 potential that you talk about in your testimony
24 significant enough that the Company put its

1 insurance -- insurer on notice of potential
2 environmental claims.

3 Do you agree with that?

4 A. They did. And you know, Commissioner, I
5 understand again, they were citing to those impacts
6 that I'm talking about. Impacts at the basin. And
7 then the next question is, is it creating a regulatory
8 issue with respect to a potential for migration beyond
9 the basin that could ultimately lead to a cleanup or
10 corrective action obligation. And I -- so I did read
11 that as providing the insurers on notice that we have
12 this. And there is some potential and we don't know,
13 and they need to file something because they're
14 solving -- they're settling a case or moving a case, a
15 different case, different set of facts, but absent
16 mentioning this now, which there is this potential --
17 there's a potential, then you could forego your rights,
18 right? So there has to be some reservation of rights,
19 so let's make sure we bring that in as we bring this
20 claim. Otherwise, we may be construed as waiving it.

21 But I didn't see they had evidence in front
22 of them suggesting there was anything what they --
23 different from what they were already seeing, which was
24 that localized impact, but not suggesting that this is

1 something that's migrating or creating a risk to the
2 public health.

3 Q. And you -- when you say impact or potential
4 for impact, it seems to me that the testimony was
5 driving at, and maybe I was reading this wrong, but it
6 was driving at that that potential for impact was
7 insignificant?

8 A. No. I just wanted to be clear what -- terms,
9 you know, can mean a lot of things. And, you know,
10 impacts -- you know, imagine any -- anything from the
11 basin that reaches groundwater is an impact. I mean,
12 it's just -- it could be directly beneath the basin.
13 And then before that impacted area migrates any further
14 where it would present a risk, say, to a surface water
15 1,000 feet away or a drinking water well in the event
16 that were in the path, if it attenuates, then we're --
17 while there was an impact, that impact does not appear
18 to be presenting a risk.

19 So wouldn't downplay the impact, but I would
20 be -- you know, what I am referring to is impact
21 doesn't mean either; one, harm, or risk to public
22 health in terms of receptors or surface water bodies in
23 the ecosystem as a whole; or two, a regulatory risk.

24 So in this sense, it's the fact that you may

1 have impact beneath the basin, if you have a compliance
2 boundary, your regulatory compliance is 500 feet out.
3 So it's not insignificant, but it's a consideration,
4 and then that leads to additional considerations as to
5 what that additional risk looks like and whether
6 there's additional action warranted based on what
7 you're seeing.

8 Q. All right. Would you agree or disagree that
9 the General Assembly required the Company to excavate
10 and move the CCRs from Dan River and River Bend into
11 lined basins based on a potential for impact resulting
12 from having the CCRs in the unlined basins?

13 A. I don't know the specific basis Dan River --
14 and I agree River Bend and Dan River were considered
15 sites that had to be excavated and placed in a lined --
16 what I would refer to as a modern some type of D-type
17 landfill requirements with liners. So there was a
18 requirement to dig and replace. Now, the basis for
19 that, I don't know. I do know they were located near
20 water bodies, and, you know, I do recall at the time
21 some consideration of concepts of, you know, being near
22 a water body presents a risk, similar to Dan River was
23 near the water body and resulted in a release.
24 Anything that's -- you know, if we're near the water

1 body, that's risk in and of itself in the event, for
2 instance, a dam were to fail or something to that
3 effect.

4 Q. So I'm trying to explore what it is you mean
5 for us to get out of your language there that a
6 potential impact versus a likelihood of significant
7 harm. Seems that, if it's a potential, you somehow
8 think that should curb what the Company might do to
9 rectify the situation?

10 A. No. I think that, if there's a potential,
11 then that is what the Company would evaluate to
12 understand whether they're realizing that risk. And
13 what I was referring to with the potential and the
14 significance of that is I've read the historical
15 documents. The '70s documents, and this is, you know,
16 Aragon, Los Alamos, others in that era, they speak to
17 these concepts of -- at a national level wastewater
18 treatment units like these are presenting a risk.
19 There is some potential for groundwater impacts. And
20 then the Company says, okay, we have a potential. I
21 think the Companies recognize that, and that's why they
22 initiated the analysis in 70 days of Allen. And I
23 think that's why they initiated the work with
24 A. D. Little. I mean, cooperated with the work with

1 A. D. Little. That was an EPA study.

2 And I think that's why they did the leachate
3 studies at all the sites. I think they were beginning
4 to say let's understand if this potential is real at
5 our sites. Because the guidance says this could be a
6 potential for your site, and you should consider it,
7 you know, that -- so that to me is what I was referring
8 to as potential. And the next steps are what the
9 Company did in the '80s based on that. And then they
10 realized, I mean, I think the data there was indicated
11 that there was an impact at the groundwater.

12 So there's potential, so we did the study.
13 We found localized in the vicinity of the basin, the
14 impact is showing. They asked is it migrating. So I
15 think the next step is, remember, you've got --
16 North Carolina today and, you know, is built around
17 this concept that you've got a basin and a compliance
18 boundary. So there's an anticipated and authorized
19 impact in this area.

20 So now you got -- you go back to this
21 analysis in the '80s, it's indicating there's an
22 impact, but it's in the localized area, so they're
23 asking is it migrating. And that was the conclusion,
24 which is saying you've got it here, but there's no

1 indication of migration, and we believe that it's not
2 migrating because of this attenuation. And they go
3 into a lot of discussion about how things were
4 attenuating before they go. And then predicting, you
5 know, future migration in the coming decades. Draw
6 some conclusions with respect to arsenic.

7 So that was where I was referring to is, you
8 know, potential analyzed to understand and then finding
9 yes, impact, now what does this mean in terms of
10 potential harm. Harm meaning impacts to the surface
11 water, to receptors, and then that regulatory risk.
12 You know, irrespective that, the compliance obligation
13 and the compliance boundary.

14 So that evaluation would support that that
15 was not -- those points weren't at risk. And then,
16 subsequently, similar concepts, similar, I think,
17 analysis in following that type of logic.

18 Q. But you think, based on your knowledge, that
19 DEQ's order of excavation at Allen, I think Belows,
20 Cliffside, and Marshall, that they would have ordered
21 that based on a likelihood of a significant risk, or do
22 you think it was merely on the potential for impact
23 that you discuss?

24 A. I think the order -- you know, I think it was

1 largely based on the idea that they viewed it as more
2 protective than a cap. There were just a lot of, I
3 think, comments from the public and, you know, at
4 the -- probably at the regulatory level, discussion
5 around a solution that was more protective than a cap.
6 And, ultimately, they believed excavation was that
7 solution.

8 Q. More protective based on --

9 A. I think it's any --

10 Q. -- impact or based on a likelihood of risk?

11 A. Right. I think -- I mean, I think you just
12 have to look at what was there. I mean, the
13 groundwater data was in front of them at that time,
14 exactly what we have. And you recognize what we have
15 there is impacted area at the basin, and in some areas
16 exceeding at the compliance boundary. You know, the
17 point was outside the compliance boundary, which means
18 that that activity is violating the 2L standards at
19 that point, and they're evaluating that. Now, with
20 respect to modeling of that plume, it's not indicating
21 that it's creating a public health risk. You know,
22 that it's not indicating that it's hitting surface
23 waters or that it's in a way that is impactful, meaning
24 create -- you know, having an impact on ecosystem or

1 water quality standards.

2 Nevertheless, it's there. From a regulatory
3 standpoint, there's an action required. So I think
4 they're evaluating that they have the groundwater, so
5 they know, and at the same time they've also, at this
6 point -- you know, the other question would be, well,
7 is there a receptor at risk. That would be a big deal
8 if we thought there was potential that impact could
9 begin to affect a receptor in terms of a drinking water
10 well. And the data, again, indicated to them that
11 that's not existing.

12 But, you know, I think ultimately they're
13 looking at this and saying, look, this is an old basin,
14 it does have these impacted areas, there are -- it is
15 ash, there is a river nearby, there are -- you know, it
16 is a dam. So risk isn't zero, regardless of what you
17 do here. So they chose to go the more protective path
18 given all of those risks. And, I mean, that's my view
19 of the decision point.

20 Q. But on the risk scale, I think in terms of
21 your rebuttal of some of the other witnesses: Junis,
22 Quarles, Hart -- on the risk scale, I read the
23 testimony and the use of the potential for impact to
24 suggest that wasn't enough to have the Company to act

1 on; is that what you're trying -- is that your
2 testimony?

3 A. No, no. I think the potential required
4 acting to understand that potential and determine if it
5 was, in fact, an issue. But then you have to do the
6 look-back to understand, well, what's that mean in that
7 era. So the way I might look at it today is different,
8 say, in 2020, you know, with the CCR rule, et cetera.
9 I may look at that -- and public understanding of
10 groundwater and what all that means, certainly would be
11 different.

12 But if you were to evaluate in a 1980s -- if
13 you could do that, then you put yourself in those shoes
14 and say there's a potential, then what action's
15 warranted. And that's where I see that very proactive
16 voluntary action at Allen is telling in the sense that
17 they're evaluating that potential. And then they're
18 drawing conclusions based on very, you know, scientific
19 data and real data, not just speculation, and using
20 that to drive decisions.

21 So I saw that as reasonable understanding of
22 trying to evaluate the potential. And then finding
23 some impact, but then trying to determine, now, does
24 that mean -- what does that mean with respect to our

1 risk and an obligation from either a regulatory
2 perspective or a risk to the public health, which would
3 be something we would want to act on very quickly.

4 So I think I was saying potential is can
5 drive action, and I think they did here, and the
6 action, as I saw it, was very appropriate for where
7 they landed.

8 Q. So you mentioned the Little report, and as I
9 understand it, Allen was used -- and the studies from
10 Allen were used as part of that Little report?

11 A. That's correct.

12 Q. Do you know why Allen was a chosen location
13 to assist with that report? Was that by Duke's choice,
14 or the folks who were in charge of the study, did they
15 request Allen? How did it come to be Allen?

16 A. I don't know the specifics. I know -- I
17 mean, on the face of the document, it indicates Allen
18 was the chosen site because they felt that it was
19 reflective of a common wastewater treatment unit, in
20 terms of what was in there, and how it was managed, and
21 what the waste streams were, and the fact that it was
22 located in the Piedmont region. So they felt it was
23 representative of a lot of the basins in the Southeast
24 along this -- you know, there were a lot of basins in

1 the Southeast and a lot of them in the Piedmont region.

2 So I think from the contract -- EPA contract
3 perspective, they thought it was a really good site to
4 bring a lot of information that would then be useful
5 for a broader analysis or conclusions based on what
6 they were seeing. So I think it fit well with a
7 representative site for them, for a good portion of the
8 industry.

9 And then I think, two, what I've typically
10 seen with these -- some of these studies is that
11 there's Duke involvement in the sense that -- I mean,
12 Duke volunteers and works with the study in order to
13 provide access, and data, and do what's necessary to
14 support the study. So on that, it would indicate to
15 me -- I mean, it wasn't like an EPA unilateral
16 authority come in, I'm going to begin sampling and done
17 the study; it would have been more common where Duke
18 may have been approached and it would have been a yes,
19 let's do this. And at that point, we were already
20 doing some internal groundwater study, and I understand
21 that was all shared with the A. D. Little team as you
22 look at the reports.

23 So I think it -- you know, my sense from all
24 that was that it would have been a very cooperative,

1 you know, collaborative work. And then, if you read
2 the A. D. Little report, there is on the front few
3 pages, there's acknowledgements to a lot of different
4 people for their participation and, you know, and Duke
5 is in that list.

6 Q. So in your answer, when you say "they,"
7 you're referring to the EPA as if you think the EPA
8 selected the site?

9 A. I am --

10 Q. Are you saying it was a cooperation between
11 the Company and EPA to kind of find the one, and they
12 agreed on Allen or?

13 A. (Marcia E. Williams) I think I could add a
14 little bit of perhaps perspective on this. EPA was
15 looking -- EPA, at the time, was looking for a small
16 number of sites that represented different situations
17 across the country. So they wanted some that were
18 unlined, you know, perhaps some that were lined. They
19 were looking for a variety of case summaries. And I
20 think they -- if I recall, I think we worked with EPRI
21 to get a list initially. And I think, if you look in
22 the report, there actually is a discussion of a much
23 larger set of sites that were originally looked at, and
24 then they screened the sites to try and find sites that

1 looked like they would be representative of these
2 different situations and conditions.

3 So I think that's how Allen ultimately got
4 chosen. It was ultimately A. D. Little and EPA that
5 made the decision on the sites.

6 Q. All right. Thank you for that.

7 Do we know why -- I mean, I'm just trying to
8 think through it -- why Allen as opposed to, say, River
9 Bend or another location; do we know, do we have any
10 insight?

11 A. The only thing that I could add on that, and
12 I'm not -- I believe this is correct, but I'm -- is
13 that because the site already had done monitoring
14 before this study started, that was a positive. And I
15 think the other thing is they were interested in the
16 fact that there was a variety -- there were several ash
17 ponds and so different ages of ash ponds were at that
18 facility are some of the things that come to mind.

19 Q. All right. Thank you. Mr. Wells, do you
20 think, in your opinion, the Company had a reasonable
21 belief, you know, throughout the '90s, throughout the
22 decade of the 2000s, and on up to 2015 that its method
23 of CCR storage treatment and handling using the unlined
24 facilities was going to be or would remain a permanent

1 solution and a permanent resting place for the CCRs?

2 A. (James Wells) I think they were reasonable
3 in the operation. I mean, based on my review and based
4 on the data that was in front of them, and in the
5 context of what the regulatory construct as well as
6 industry standard were at the time. I do believe that
7 they were reasonable in their operations of the basins
8 during that period.

9 With respect to sort of forever, I -- I
10 think, as you get into the 2000s and later, you are
11 beginning to talk about closure. And certainly as you
12 get closer to, say, 2010 and beyond, now there's a lot
13 of real decision going on about what is closure, and
14 what is the guidance, and how do you do this. And
15 because these -- I mean, it was just unique, they
16 didn't have a regulatory -- any regulatory guidance or
17 a regulatory requirement for closure.

18 But yes, I think they were reasonable to
19 operate up to that point, not to say we'll run them
20 forever, but to that point. You know, and a lot --

21 Q. What's that point, did you mean? What's that
22 point -- where you may not -- when the Company may have
23 come to realize these weren't going to be a permanent
24 solution, these basins?

1 A. Right. I think you're beginning to see in
2 the 2000 and beyond a discussion of, if we need
3 additional ash management, what are the real estate
4 needs for that. And at that point, you know, we hadn't
5 built a basin since '82. There was no -- they would
6 not -- based on the records I'm seeing, nobody's saying
7 we're going to go build another basin. But I think the
8 discussions at that point are, if we need more ash
9 management space, we need real estate and we need --
10 you know, we'll follow what we think is going to be the
11 future requirement, which is closer to lined
12 operations.

13 So, you know, they're mindful of that, and so
14 I think that's what you're seeing. And I think it was
15 reasonable up to that point. But now they also
16 realize -- when you say what is up to that point;
17 there's a lifetime to the pond. I mean, there is an
18 amount, a capacity of the pond that will, at a point,
19 drive it to closure. Question is, what's going to be
20 closure?

21 Q. When you say future, I take it you -- and
22 real estate needs, you're talking about subsequent
23 deposits of the ash. But with regard to the ash that
24 had already been in place in the unlined basins, at

1 what point was there a thought that those might not
2 remain the permanent -- the last place for that ash?

3 A. Well, as I can tell it, I think it's when you
4 start seeing that dialogue around closure.

5 Q. When is that?

6 A. I think -- again, I think you're beginning --
7 that -- you're starting to see that discussion, as I
8 can tell, in the 2010 and later time frame, and it's
9 ramping up even more with time. You know, that's when
10 the Company was working with DEQ to ask what do we do
11 for closure; how do you define closure; what does this
12 mean. And there was some -- I understand the state was
13 working on some guidance on closure. I understand the
14 Company was working for -- you know, with a draft
15 closure plan at that time, which they thought might be
16 a less complex one, one of the easier ones to see if
17 that could start to refine what the key points are that
18 would answer those questions. What is closure?

19 And it was recognized even then that that was
20 likely to be a very significant challenge. For
21 instance, if we were pursuing a cap, which is where
22 we're starting to have this discussion, I think, after
23 2010, it was a concept of a cap in place was being
24 pursued, or hybrid-type closures where you would move

1 some of the ash in small footprint and cap it. It was
2 anticipated that that was going to be challenged, and
3 guidance as it was developed was going to be
4 significant challenge.

5 So that's what I'm seeing in that 2011, 2012
6 time frame, 2013, a lot of starting to mature the
7 thinking there, beginning to work toward what is
8 closure, what's the long-term closure of these.
9 Working with the agency to get a sense of that, having
10 an eye on the CCR rule and its developments on -- you
11 know, you've already got a draft, we anticipate a final
12 very soon. And also recognizing that all of this is
13 very much a contentious issue with respect to the
14 environmental community, and a hard drive for them with
15 respect to what they believed was the appropriate
16 closure.

17 Q. So the Company, as part of the industry, was
18 involved in efforts with the EPA -- I mean, there's
19 been testimony about the evolving nature of the science
20 and so forth. But also the law was evolving and their
21 interests were seeking to define the CCRs as hazardous
22 or not, or other parts of that broader discussion.

23 The Company was involved in those discussions
24 at the federal, legislative, and regulatory levels; was

1 i t not?

2 A. We were -- I think -- I can't -- I don't know
3 the specific involvement. You mean with respect to
4 development of the regulations?

5 Q. Yes. And having influence on how those might
6 come out or what those might look like.

7 A. (Marcia E. Williams) One thing I could add
8 on this that might be helpful. EPA, between the
9 proposed rule when EPA asked for comments from all
10 interested parties, there was -- there were like
11 500,000 entities that commented. So EPA received a
12 huge number of comments. I mean, I believe that Duke
13 did submit comments, but it's one of the largest groups
14 of comments that I think the agency has received on any
15 of its rules that it was trying to, you know, sort
16 through and deal with between 2010 when it had
17 published three very different approaches to how EPA
18 might finalize the rule, both in terms of whether it
19 was hazardous or not, but what kind of closure
20 requirements would be put into place federally and what
21 kind of -- you know, whether or not excavation would be
22 needed. So EPA was trying to deal with all of that to
23 try and come to a conclusion, which it finally did, of
24 course, in early 2015.

1 A. (James Wells) And I do believe --
2 Commissioner, I believe we -- my recollection is Duke
3 did submit comments to the draft rule, and that is how
4 we would have engaged with respect to, you know, the
5 rulemaking. And also, we were members of industry
6 groups that would have also had some comment and likely
7 some dialogue with EPA on some of their issues as well
8 as other -- I know other industry groups would have
9 done the same. But I believe that would have been the
10 Duke involvement in that.

11 (Reporter interruption due to
12 Commissioner Brown-Bland's Webex feed
13 freezing.)

14 CHAIR MITCHELL: All right. Let's give
15 her a few seconds here. She's had intermittent --

16 COMMISSIONER BROWN-BLAND: I'm back.

17 CHAIR MITCHELL: She's back. All right.

18 Q. All right. And I could hear -- Mr. Wells, I
19 could hear you talking, but I couldn't hear your
20 answer, so if you could remember, could you clue me in?

21 A. I'll do my best. I think I was largely just
22 following up on Ms. Williams. I do believe Duke
23 submitted comments to that rule, and it -- I don't
24 specifically recall that, but I believe we did. And

1 that would have been, I believe, how we would have
2 interacted with EPA and what manner on that. Also we
3 would have been involved with utility groups that would
4 have had interaction with the EPA with respect to the
5 position of various utilities on the -- or the group
6 with respect to the rule, as did -- I'm sure other
7 trade groups did the same in terms of their
8 interaction.

9 Q. So I think those efforts are consistent with
10 your earlier testimony that around the 2011 time frame,
11 possibly 2010, but during that time frame, the Company
12 began to at least think about previously deposited ash
13 might have to be moved; is that in the back of --

14 A. I think they're thinking around that time
15 that closure guidance is beginning to -- we're starting
16 to refine the thinking as to what is the closure on
17 these basins. And we're beginning to see regulatory
18 clarity on that, both at the state and potentially the
19 federal level through this rule. Now, what that means
20 with respect to what is closure, if that meant this ash
21 is going to be here for the long-term, or does it mean
22 it is there but we put a permanent cap on it. You
23 know, a lined -- a liner over top and a cap, longer
24 term groundwater monitoring; you know, consolidate to a

1 smaller footprint. Various options of what that may
2 end up looking like. But definitely I believe that is
3 the time frame where some of that was starting to get
4 refined, and then you see even more of that in the '13,
5 '14 time frame.

6 Q. Was the Company expecting change, or were you
7 really expecting things to remain the same?

8 A. Well, in my mind, it's highly speculative at
9 that point. It's so wide. I mean, I'll just give you
10 an example, for instance. That -- I know we've talked
11 about the concept of hazardous waste, subtitle C. If
12 the rule landed on subtitle C, it is just unbelievable
13 how big that impact is for something to be managed --
14 to be considered a hazardous waste. Because it kicks
15 in, you know, these concepts of what they call
16 treatment storage disposal facility requirements under
17 RCRA, which is very big. So the impact would have just
18 been unbelievable.

19 Compare that to other options that are being
20 proposed, which one was subtitle D, which is almost
21 like a standard solid waste non-haz -- nonhazardous.
22 And then one subtitle D prime, and I can't remember
23 which one played. But one was basically do nothing.
24 You know, we continue to operate, and if you do close,

1 it may end up being potentially what we've done in the
2 past, which is dewater, de- -- you know, inactivate the
3 pond, dewater, and naturally vegetate, potentially a
4 cover. You know it's just hard. The range at that
5 point was just so wide and speculative.

6 But we were trying to get it to a point that
7 it was landing on something that provided that
8 certainty, and clarity, and coverage from the
9 regulatory standpoint. So that if we did get agreement
10 with the state, for instance, on what is the closure
11 and the closure plan, if we got that approved, now
12 you've got the certainty that -- and the confidence to
13 move forward to actually do it and not have to go back
14 and redo something and spend twice the money or find
15 that you didn't meet, you know, various nuanced
16 requirements within what the rule ended up being.

17 Q. Were steps taken in the interim, you know,
18 internally to be ready for a change?

19 A. Internally, there was -- I mean, I think
20 there was a lot of discussion about all the regs, and
21 part of the planning process. And I think you see it
22 in some of the planning documents that have been part
23 of the case, if you -- the ten-year planning. And
24 those -- even over time, I think we had some various

1 topics with respect to some of the coal ash discussion
2 out of -- I think it was the EHS coal management
3 concept. All of those reflect that. You know, the
4 Company's keeping an eye on this incredible uncertainty
5 that can go a lot of different ways, and is watching
6 and trying to work with it. And refining its planning
7 with an eye toward where we -- it looked like things
8 were going to land.

9 That's what it looked like to me. That
10 was -- I mean, you say are they getting ready; it
11 seemed like that's exactly what they were doing. They
12 had planning going on and had an eye on this
13 uncertainty. It was -- you know, with time, was
14 starting to -- you're getting some sense or some feel
15 of how this is starting to refine into what will
16 ultimately be the requirements. I think that's what
17 they were trying to do.

18 Q. And going back to your earlier testimony, in
19 your opinion that we were looking at a potential for a
20 likelihood of a significant risk, did you think it was
21 a wise decision for DEC to settle with DEQ to excavate
22 at Allen, Belows Creek, Cliffside, and Marshall?

23 A. In the final settlement of just recently,
24 you're referring to?

1 Q. Yes. Are we still talking about -- is it
2 still your opinion that it was still, even at that
3 point, just a potential for impact?

4 A. It's not my opinion that there was a
5 potential for impact there, no. I mean, at that point,
6 we're in 2020, 2019, 2018, the time period that all
7 this was current. We have a lot of groundwater
8 monitoring. I mean, you've seen the number of wells
9 we've done. We're into assessment under CAMA, we're
10 developing corrective action plans, there are a lot of
11 wells, we have a very clear picture of what's going on.
12 So we understand the impact there.

13 Now, I think what you may have been also --
14 maybe you're also referring to the potential for, is
15 this creating a risk to the public health, in terms of
16 is it impacting a well and surface water. And our
17 models say that it's not. So is it still wise for us
18 to -- you know, did I think it was appropriate for us
19 to go forward and settle? The answer to that is yes, I
20 do think it was very reasonable.

21 And I say this because the ultimate decision
22 on this is with the regulator. You know, it's just the
23 way it is. They drive what they believe is necessary
24 and adequately protective based on their review, and

1 they have incredible -- wide discretion to exercise
2 that. That's their duty. And we did present a lot of
3 technical cases of our position that we believe was
4 adequate. We made an incredible record on that. They
5 evaluated in fairness. They evaluated. They have a
6 lot of very highly qualified people, as do we. And in
7 the end, they felt it was more protective for the state
8 to move in this direction based on comment, public
9 comments, public hearings and everything else.

10 So they did their duty, and did what they
11 needed to do. We still have, you know, technical
12 arguments that would support what we believe. But in
13 the end, it's their authority. And they've decided
14 what is appropriate for the state, and at this point,
15 that's the cost for it -- that's the cost for us to do
16 business with the state and continue to be a utility.

17 So that -- in my mind, it was also important
18 to maintain this relationship with the state. So, I
19 mean, that was also a huge part for me, is we have a
20 very strong relationship with the state. Strong in the
21 sense of they -- we are -- we communicate, we exchange
22 tech -- we have good strong discussions on technical
23 debates. We find ways to resolve them, and we keep
24 things moving forward in a positive way. And I wanted

1 to keep that pattern now and in the future.

2 Q. I agree with that. We need to keep things
3 moving forward and working together. Did -- so you
4 would think that the General Assembly's requirement
5 that the Company provide the residents within a half
6 mile of the CCR base, connections to municipal or
7 county water systems or water treatment systems, you
8 would think that was based on a real significant risk?

9 A. Well, again, the risk wasn't -- didn't -- it
10 wasn't present in the well data. So, I mean, here --
11 at that point now we've got a -- we had done, you know,
12 receptor surveys to understand all the wells within a
13 half mile of any facility, all private wells. And we
14 sampled all those wells, and none of those wells are
15 indicating an impact to the basins. The data is there.
16 But -- you know, and I think we've talked a little
17 about this. It's almost -- there's -- it's almost more
18 challenging at times to have what we have here, which
19 is secondary -- naturally occurring standards as
20 opposed to, say, a dry cleaner that has a -- you know,
21 I need a perchloroethylene-type substance that's hit
22 groundwater. If you sample it and you find that, there
23 is a very clear source.

24 On the other hand, if you find what's

1 naturally occurring compounds or elements or
2 constituents, you begin to talk about, well, who did
3 this. And if it's iron and manganese, and a secondary
4 standard, then you begin to -- you're starting to
5 really -- you got to make sure you do a good analysis,
6 or you end up creating issues that aren't there. For
7 instance, cleaning up, you know, what is a naturally
8 occurring standard would be inappropriate, if it's
9 truly naturally occurring, at the ratepayer's expense.

10 With respect to the off-site wells, once you
11 make that move to sample wells, and you know you're
12 looking for constituents that are naturally occurring,
13 and you know they commonly fall high above the
14 published 2L standard, you know you also are getting
15 ready to concern neighbors. Because no matter -- I
16 mean, a lot of people know, they live near the basin,
17 and then they get a hit -- you know, vanadium, and then
18 they find out it's above standard, and they understand
19 vanadium is a constituent of ash, but it's also
20 naturally occurring. You're creating concern with
21 those neighbors.

22 Now, ultimately, all of that -- you know,
23 wasn't just analyzing -- I used the vanadium standard.
24 You can see a Duke University study did a full analysis

1 of all the wells for vanadium and determined it wasn't
2 associated with the basins. So the science supports
3 that there's nothing there. But it doesn't matter.
4 You've already concerned the neighbors. And, in fact,
5 in this case, DHHS, the Department of Human Health and
6 Services, sent letters from where those standards were
7 exceeding, irrespective of naturally occurring, because
8 they don't -- they're thinking about health, not
9 whether this was from the basins. They sent letters
10 that said do not drink, your well's not safe.

11 So now you have these well owners upset, you
12 know, naturally concerned. And then subsequently they
13 issue a letter that says, no, you're okay. They
14 rescind the do not drink. So there's a lot of
15 confusion at the neighbors' level. And I saw the
16 General Assembly's move as an opportunity to bring some
17 peace to those neighbors, build some confidence back
18 with the neighbors, you know, and take away any
19 concerns that they have with respect to what their well
20 is.

21 Q. But aren't you describing -- so if they were
22 dealing with something more --

23 CHAIR MITCHELL: Commissioner

24 Brown-Blair, we are losing -- we've lost connection

1 to you. Let's give her -- let's give her a few
2 seconds to come back.

3 (Pause.)

4 CHAIR MITCHELL: All right. Well, it
5 appears that we have lost Commissioner Brown-Bland,
6 so I would ask that -- all right.

7 Commissioner Gray, do you have any
8 questions for the witnesses?

9 COMMISSIONER GRAY: I do not have any
10 questions for the witnesses.

11 COMMISSIONER BROWN-BLAND: I'm back.

12 CHAIR MITCHELL: Commissioner
13 Brown-Bland. All right. Please proceed.

14 Q. So, Mr. Wells, I was just asking you, you
15 would agree that they were dealing with more than a
16 potential for impact in the water connection
17 requirements?

18 A. Well, I think my point was that we had
19 verified there was no impact there with respect to
20 impact to the off-site neighbors. And at that point,
21 my view of it was they were dealing with the neighbors'
22 concerns with what the results were telling them in the
23 do not drink letters from DHHS that were based on the
24 naturally occurring constituents in their wells being

1 above the 2L standards for various parameters.

2 Q. All right. Earlier we had some discussions
3 about the regulators. And we talked about perhaps the
4 DEQ had a soft approach, not really punitive, but
5 wanting to get correction done and working with the
6 parties to get the right -- so whether DEQ had a strict
7 enforcement approach or not, or perhaps based on a
8 recognition that DEQ's approach was a little softer,
9 wasn't it the Company's decision -- in not taking
10 actions to eliminate seeps, wasn't that really a
11 business decision to accept the risk of harm that might
12 result from any continuing seeps?

13 A. With respect to the -- okay. I understand
14 the question. So -- right. I think this is a
15 reflection of that evolution of, again, an
16 understanding of the seeps and that EPA began to say
17 these may be subject to the Clean Water Act. It wasn't
18 clear that it was. We did begin to look to DEQ to
19 assist with understanding that. And I understand your
20 question is, well, should you have taken additional
21 action. Well, that did occur. It took, you know, time
22 before we got there, but it did occur. And again, if
23 there's not an indication that these seeps are
24 presenting a risk to the surface waters, remember, the

1 surface waters are being sampled continuously. And,
2 you know, upstream, downstream for all water quality,
3 as well as the fishery studies, and everything else
4 that's going on. So it's not a -- for instance, a
5 public health risk. The question is whether these were
6 a regulatory risk again. You know, we got to make sure
7 we aren't creating a regulatory compliance risk.

8 So that's where we were trying to get the
9 permitting coverage. In some instances where we could,
10 in that interim period, we did install -- we took
11 actions while we were seeking that regulatory coverage
12 to find ways to collect or contain seeps. And in most
13 instances, it was pumping systems we would try to send
14 in -- you know, we would create -- we built
15 infrastructure to collect and try to send it back to
16 the basin until we got the regulatory clarity on how we
17 wanted to manage these going forward.

18 So those were built in various facilities
19 where it was appropriate. It is a significant effort
20 and -- you know, so those did take some time.

21 Q. All right. And we kind of touched on this
22 before, but just to be clear.

23 In your opinion, and based on your knowledge
24 and professional judgment, can you give us a date when

1 it was reasonably known to the Company that it would be
2 wise or prudent to dispose of CCRs by means other than
3 unlined basins?

4 A. Well, with respect to thinking going forward,
5 the -- I think moving -- you know, once we have a
6 federal rule that's beginning to set specific
7 requirements around the management of the basins, and
8 CAMA is established to provide similar guidance, and we
9 also are understanding where we're at on our
10 groundwater monitoring and the application of
11 corrective action to those, with all of that as a point
12 where you're shifting toward closure and an investment
13 of other infrastructure to manage this -- and very
14 significant investment, obviously, to manage. So in my
15 mind, we're there now, in terms of support of the
16 necessary investment to manage the ash in the time
17 manner that we are. So that all occurred with the
18 development of CAMA and CCR, definitely.

19 Q. So I understand that to mean that, not until
20 the CCR rule was final did you -- did you have the idea
21 that it would have been prudent to dispose of CCRs in a
22 way other than unlined basins; are you saying it took
23 up until 2015?

24 A. Right. So I think what I'm saying -- first

1 of all, for new operations, that's different, right? I
2 mean, we didn't build basins from the early '80s. The
3 question is whether you continue to operate what we
4 had. And through all those years we're doing all that
5 monitoring, all those things, there aren't any red
6 flags that are indicating there is something here that
7 is sufficient to justify or to take you that direction.
8 You watch, though, the evolution of the '80s '90s,
9 2000, 2010, that's where I think you're starting to see
10 it.

11 Now, if you even look at the CCR rule, for
12 instance, which is; one, federal EPA; but also it's
13 based in large part on the industry as a whole. It's
14 still supporting continued operation of basins where
15 they meet certain criteria. So there's still even a
16 concept there that was viewing continued operations.

17 Now, our sites, what we're seeing, our
18 groundwater impacts, and all that's developing, you
19 know, what we're really working the agency in the 2010,
20 '11 time frame, and understanding that groundwater
21 impact and what might be needed in terms of corrective
22 action. But the corrective action at that point,
23 we're -- could still be at just an MNA, meaning a
24 modern natural attenuation. There's still so many

1 options as to what that means. But, certainly, once
2 you get into CAMA and CCR space, now you're seeing --
3 you know, here's the clarity of exactly what is the
4 proper management of ash basins going forward. Sorry,
5 go ahead.

6 Q. When we got into CAMA after the Dan River
7 spill, I think, are we saying that it -- that it's at
8 the point where we have some action like that, that
9 it -- is that -- that -- does it take that -- is that a
10 missing element for the Company -- that the Company
11 needed in order to be able to think we need to do
12 something different?

13 A. No. I mean, I think it would have been
14 dependent on the facts. What I'm referring to is those
15 facts weren't present. So facts that would have
16 driven -- would have presented a risk to public health
17 without question would have been a point that would
18 have -- you know, likely that would have been a
19 site-specific driver. But that would have been a
20 strong basis not to continue to operate that basin at
21 that site.

22 If we were seeing something more widespread
23 in terms of a risk, it may make it even more universal
24 or a more broad determination. What I'm saying is that

1 didn't exist. I mean, now, at Belews, you know, '85 or
2 early '80s there was a shift, you know, and that shift
3 was based on seeing some impacts to surface water. So
4 what I was --

5 Q. That's -- well, I'll stop you right there,
6 because that's my next question. So you can
7 incorporate it as you continue to explain. But what
8 were the -- what were the facts that were known to the
9 Company that led to the -- that led the Company to
10 decide, in 1985, to convert to dry ash handling at
11 Belews Creek?

12 A. So there again, as I had indicated earlier,
13 surface waters would have been studied, they would have
14 been sampled, and -- for water quality, meaning, you
15 know, there are concentrations of parameters in surface
16 water bodies that are called the water quality
17 standards. And you look if you're discharging into
18 there, you monitor that water body, or we monitored
19 that water body to ensure we weren't seeing anything
20 approaching the water quality standards, or having an
21 impact in a way that could potentially exceed a water
22 quality standard.

23 So that's one standard we would have looked
24 at as an indicator for a possible action. This

1 probably warrants some action if we start to see an
2 impact of surface water. The other thing we did at
3 surface waters is we did fishery studies, you know, to
4 understand the reproduction of the capabilities of the
5 fishery. Maintaining a thriving fishery. So we
6 looked -- we would have taken various years' samples of
7 fish and determine -- you know, there's a scientific
8 approach that's beyond my abilities. But in essence,
9 studying the fishery and make sure it's healthy.

10 And at Belews, we began to see an impact
11 there of selenium. And it wasn't from groundwater, it
12 was from -- remember I referred to this pipe that comes
13 out of the basin, it goes straight to, and there it
14 went straight to Belews Lake. And one of the concerns
15 with a lake versus a river is it -- you know, it's a
16 very closed system. And the selenium we were
17 discharging, we would then suck it back in, and then
18 discharge it again. And ultimately you're kind of
19 cycling up selenium in that lake.

20 That started -- we started seeing that, and
21 we started detecting some impacts to the fishery as
22 well in terms of reproductive capability. And it's --
23 when that was discovered, then the Company took action
24 to remove that discharge to Belews Lake, move to some

1 dry fly, and find another way to manage its ash in a
2 way that was less impactful.

3 Q. But there was no legal requirement at that
4 time to convert to dry ash; that's just the way the
5 Company decided to handle --

6 A. They did, based on that risk that they were
7 seeing. And I guess it was my -- as opposed to we
8 weren't seeing elsewhere. We didn't see that with
9 respect to groundwater, or surface water, or fisheries.

10 Q. And did the Commission allow recovery of
11 costs associated with the conversion?

12 A. You know, I don't know. I don't know that
13 the Commission didn't. And I think it would have been
14 a very -- and I think, based on recognizing that risk,
15 based on our operation, that to me was a very
16 reasonable step for the Company to take.

17 Q. You would imagine that the Company just came
18 to the Commission and made its case for recovery, or
19 tried to make its case?

20 A. I don't -- I think so. I don't know the '80s
21 well or kind of rate cases general.

22 Q. All right. Were there studies, reports, or
23 cost-benefit analyses performed by the Company, other
24 than the 1985 study which was called the coal ash

1 disposal and water quality study? Were there other
2 studies prior to the decision to convert to dry ash
3 there at Belews?

4 A. You know, the only other thing I remember, I
5 thought, as I did see something in the record that
6 referred to they were very -- weighing various cost
7 options. In other words, there could have been --
8 there were other ways that they could manage the
9 selenium issue potentially versus dry fly, and they
10 were looking at what those options are. Regardless,
11 they were looking to address the environmental issue
12 they were seeing. And they had options to do it.

13 And one, I know they moved the outfall out of
14 the lake and moved it into the Dan River, which added
15 some value. But also, I think there was a market at
16 the time for some ash that was a factor that also
17 supported dry fly approach as opposed to, say, a
18 treatment system -- additional treatment at the
19 discharge. I remember seeing a document that is
20 weighing all of that and ultimately landed on the dry
21 fly.

22 Q. So there --

23 A. That may be the document you're referring to;
24 I'm not sure.

1 Q. So do you know if there were other documents
2 or that's --

3 A. I was -- I was saying the document I'm
4 referring to may be the one you're referring to. But
5 those are the factors I saw it considering. It was a
6 potential ash market, they have moved outfall to Dan
7 River. They were also evaluating other wastewater
8 treatment, and they were weighing those options. And I
9 think that may be the same document you're referring
10 to, but if so, that's the only one I'm aware of.

11 Q. Would you be -- would you have access to or
12 be able to look back if you had a little bit of time to
13 see if there were other studies or benefit analysis
14 during this time period that informed the decision to
15 convert to dry ash?

16 A. Yes. Yes, ma'am.

17 Q. And then similar set of questions with
18 respect to Marshall.

19 What were the facts that led to that
20 conversion, and were there other -- were there studies
21 and reports that helped inform that decision?

22 A. Yes.

23 Q. So --

24 A. Oh, you're asking if I'm aware of them. I'm

1 sorry.

2 Q. And what were the facts, yes.

3 A. I -- I believe witness Bednarci k had some of
4 this information. I wasn't as well versed on some of
5 that. I will tell you I understood the -- Marshall
6 was -- I mean, there were -- there was a market
7 available. And I'm kind of hesitant to -- my -- my
8 details are a little -- I don't have full confidence in
9 what I think are the facts there. I had a high degree
10 of confident what I think it was. I think it was a
11 market-driven opportunity, but.

12 Q. Well, so let me do this. I would ask you to
13 take a look and see if you find that there were other
14 studies, reports, or cost-benefit analyses that the
15 Company or those working on behalf of the Company
16 performed or had that helped to inform the decision
17 about converting to dry ash handling at Belews and
18 Marshall.

19 And I would follow that also with a request
20 for a late-filed exhibit, same type of information with
21 respect to whether there were similar studies, or
22 analyses, et cetera done on the prospect of converting
23 any of the coal-fired plants to a dry ash handling
24 process.

1 Let me see. And again, do you have any
2 knowledge that the Company was ever denied any of its
3 costs for disposing of CCRs?

4 A. I do not have -- I would not have looked at
5 that, and I have no knowledge of it.

6 Q. All right. Earlier when you were talking
7 with the Public Staff and we were talking about seeps,
8 and you were talking about some of the voluntary
9 actions that the Company had taken.

10 In 2014, was there -- did the -- what were
11 the reasons that the Company sought to have seeps
12 permitted in the NPDES permit?

13 A. I think the biggest reason was regulatory
14 clarity on this issue. I mean, if we -- I think there
15 was an open question: Are these subject to the Clean
16 Water Act, and if so, do they require permitting? And
17 that began with the 2010 handling memo out of EPA to
18 the states to evaluate that issue. And then when we
19 had gone to the state, you know, it was -- again, it
20 wasn't a priority for them, because they didn't see
21 that as a -- for all the reasons that were in my
22 testimony.

23 So in 2014, you know, at that point we still
24 have -- I mean, to the extent the state says we don't

1 want to permit it, we wanted clarity that either it
2 required permitting, in which case we would permit, or
3 take additional steps -- you know, make the investment
4 for additional steps, or get consideration, understand
5 that it does not require permitting, make a regulatory
6 determination one way or the other. And we had that
7 very broad set of, you know, areas of wetness that
8 weren't -- we didn't have that clarity.

9 And we needed that in order to ensure
10 compliance. You know, this is all hallmarks of a
11 strong environmental compliance program, which is what
12 we were driving to.

13 Q. But before you went to DEQ seeking to get the
14 seeps permitted, had there been -- was the Company
15 aware that the -- that there was citizen suits in the
16 offing, or had they been filed or threatened in federal
17 court?

18 A. I believe they would have been. I think
19 timing-wise, yes, I think they did precede that effort.

20 Q. And would that have had some impact on the
21 reason you might have gone to DEQ at that time?

22 A. I think it certainly would have been part of
23 the consideration. And again, the concept being this
24 is an area that we don't have clarity as to what the

1 regulatory requirements are, and there's exposure here
2 that we want to get resolved. And either want to do it
3 through a permit or through a regulatory determination.
4 And then we can rely -- once we have that, we can rely
5 on that to drive additional investments, if needed, or
6 other steps.

7 Q. And with regard to the -- I think we -- the
8 acronym is SOC, but that consent -- special order
9 consent --

10 A. Yes.

11 Q. -- in order to get that, didn't the Company
12 have to admit that it polluted the waters of the state
13 through the seeps from its coal ash impoundments and
14 pay a penalty?

15 A. Right. The -- I think I had some discussion
16 on this earlier. I think part of the authority for the
17 state to enter into that SOC was that there be a
18 discussion about the pollutants to waters of the state.
19 They needed -- either has to be -- I think a number of
20 things can trigger it in order to establish the
21 authority in the state, but one of those was that. So
22 if you imagine that, though, the waters of the state
23 are different than the waters of the U.S.

24 And the Clean Water Act and permitting is

1 tied to the waters of the U.S. and discharge these
2 navigable waters. When they say there's pollutants to
3 a water of the state, that can -- waters of the state
4 are nearly anything. You know, that's a different,
5 much broader definition. I mean, not everything. It's
6 like everything else. It has some interpretations.
7 But any -- again, any molecule of anything that might
8 be an ash contamination, that might reach an area that
9 the state deems the water of the state satisfies that.

10 So in terms of an admission, that is -- it
11 may be that it's sitting stationary and not affecting
12 anything with respect to navigable waters or waters of
13 the U.S., but nevertheless, it could still meet that
14 definition. And the state needed that in order to have
15 the authority to enter into the agreement, so we agreed
16 to it.

17 Q. All right. And then, Ms. Williams --

18 CHAIR MITCHELL: All right.

19 Commissioner Brown-Bland, I'm going to stop you
20 right there, please, ma'am. We've come to the end
21 of our day today. I was overly optimistic that
22 we --

23 COMMISSIONER BROWN-BLAND: I'm not too
24 far from done, but I hear you.

1 CHAIR MITCHELL: I was overly optimistic
2 that we'd cross the finish line, and we've got to
3 come back tomorrow regardless for the remaining
4 Commissioners and questions on Commissioners'
5 questions. So we will come back tomorrow morning
6 at 9:30, and we will cross the finish line
7 tomorrow.

8 All right. Thank you everybody for
9 hanging in longer this afternoon. A special thanks
10 to our court reporter. And we'll see you in the
11 morning at 9:30. We are adjourned.

12 (The hearing was adjourned at 5:31 p.m.
13 and set to reconvene at 9:30 a.m. on
14 Friday, September 18, 2020.)
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1 CERTIFICATE OF REPORTER

2
3 STATE OF NORTH CAROLINA)

4 COUNTY OF WAKE)

5
6 I, Joann Bunze, RPR, the officer before
7 whom the foregoing hearing was taken, do hereby certify
8 that the witnesses whose testimony appear in the
9 foregoing hearing were duly affirmed; that the
10 testimony of said witnesses were taken by me to the
11 best of my ability and thereafter reduced to
12 typewriting under my direction; that I am neither
13 counsel for, related to, nor employed by any of the
14 parties to the action in which this hearing was taken,
15 and further that I am not a relative or employee of any
16 attorney or counsel employed by the parties thereto,
17 nor financially or otherwise interested in the outcome
18 of the action.

19 This the 21st day of September, 2020.

20
21 
22

23 JOANN BUNZE, RPR

24 Notary Public #200707300112

